

OFFICE OF RESEARCH

**2023 ACCOUNTABILITY REPORT**

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## Executive Summary

The Department of Anesthesia, Pain Management & Perioperative Medicine's **2023 Research Accountability Report** includes research-related achievements with respect to established targets and goals. The information in this report highlights research productivity from January to December 2023 except for funding which corresponds to the period of April 1, 2022– March 31, 2023. For comparative purposes data from previous four years are presented.

Targets that were met, or not met in 2023 are outlined below as a summary.

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### Areas in which the department *met its targets* in 2023:

- Seventy-five percent of researchers are at the rank of Associate Professor or higher.
- Thirty *new* research projects were initiated in 2023.
- The proportion of collaborative projects and publications remains high at 91%.
- Forty percent of researchers Chair research related committees with 25%, 5% and 15% serving on local, national, and international committees, respectively.
- Eight five percent of researchers are members on research related administrative committees with 75%, 50% and 20% serving on local, national, and international committees, respectively.
- Ninety five percent of researchers reviewed papers in 2023.
- Thirty percent of researchers perform editorial activities with 20% and 30% serving on national and international committees, respectively.
- The total number of publications reached is 101 in 2023, whereas 78 publications were published in 2022. All publications were peer reviewed.
- Seventy-one percent of researchers supervise learners as the primary supervisor and 14% supervise graduate students.
- There were 26 abstracts accepted in 2023, whereas 20 abstracts were accepted in 2022.
- Fifty percent of abstracts were presented as a podium.
- Eleven recognition awards were conferred in 2023.

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### Area in which the department *did not reach its targets* in 2023:

- The value of grants/contract funded research is \$3.9M in 2023 (Figure 1), whereas funding in 2022 was \$4.9M.
- Thirty percent of researchers reviewed funding applications in 2023, whereas 24% of researchers reviewed funding applications in 2022. *The target is 80%.*
- Sixty-eight percent of all researchers presented an abstract in 2023, whereas 65% of researchers presented an abstract in 2022. *The target is 100%.*
- Thirty percent of researchers were invited to present their work in 2023 as a keynote, plenary and symposium speaker. *The target is 50%.*

## Introduction

The Department of Anesthesia, Pain Management and Perioperative is a large clinical and academic department that provides patient care, delivers education, and conducts research. The Department receives most of its funding through the Clinical Academic Funding Plan (C/AFP), a multi-stakeholder contract which provides annual funding to the Department in exchange for clinical, education and research deliverables.

There are approximately 100 clinical faculty in the C/AFP and of these 20 are compensated with paid protected time to conduct research. The C/AFP contract requires the Department to have an accountability program that supports the transparent allocation of research protected time as well as the accurate tracking and reporting of research productivity.

As part of the Research Accountability Program (RAP), the annual Research Accountability Report reflects the aggregate research activity of physicians with research protected time in relation to predetermined indicators and targets as outlined in the Anesthesia, Pain Management & Perioperative Medicine Research Accountability Framework. The Research Accountability Framework was developed by a working group of departmental researchers and administrative staff in 2010 and revised in 2014.

The following outlines the 2023 research-related results for each predetermined target. It also provides a comparison to the data from the past five years. This is done in graphical and table formats. Lists of currently held, research grants/contracts and peer-reviewed publications are found in Appendix A, and B, respectively.

## Engaging in the academic process

In 2023, twenty (20) researchers are provided paid protected time (5.4 FTE) to engage in research activities across department sites (Table 1). Table 1 also shows the individual researcher’s h-index, defined as the number of their papers cited at least *h* times. While the metric may offer insight in research assessment, it does not account for variation in academic age, career breaks and individual contributions.

Table 2 shows the amount of research FTE allocated to department members for the past five years.

**Table 1:** Department researchers and their current h-index.

CZ – Adult	FTE	Pediatric	FTE	Women & Obstetrics	FTE
J. Bailey	0.30	T. Dumbarton	0.05	H. MacCormick	0.10
B. Dulong	0.10	A. Finley	0.36	A. Munro	0.30
J. Hashmi	1.00	A. Vlatten	0.05	A. Sjaus	0.25
O. Hung	0.20			V. Uppal	0.10
K. Kwofie	0.20				
A. Law	0.20				
C. Lehmann	0.50				
P. Livingston	0.30				
D. MacDonald	0.20				
J. McDougall	0.33				
A. Milne	0.20				
K. Mukhida	0.05				
V. Neira	0.20				
V. Uppal	0.35				
A. Vlatten	0.05				
<i>Total</i>	<b>4.18</b>		<b>0.46</b>		<b>0.75</b>

**Table 2:** Protected time (FTE) for research activities in the past 5-years.

	2019-20	2020-21	2021-2022	2022-2023	2023-2024
Protected Time	5.7	5.9	5.9	6.3	5.4

**Indicator:** Number of associate and full professors

**Target:** 75% of all researchers are associate professor or higher

**Result:** **75% of all researchers are ranked as associate professor or higher**

There are six full, nine associate and five assistant professors who receive protected time to conduct research in the Department of Anesthesia, Pain Management and Perioperative Medicine.

## Engaging in the process of creativity

**Indicator:** Number of new proposals that are developed into research endeavors

**Target:** New research projects reflects maintenance or increase from previous year (24 new projects in 2022)

**Result** Thirty (30) *new* research projects are underway (funded and unfunded)

Thirty new research projects began in 2023: 23 funded and 7 unfunded. The main research areas include airway (%), medical education (%), chronic pain (%), innovation (%) and perioperative research (%) projects – see list below. Seventy-three (73%) percent of new projects were led by a department member as the PI with the remaining projects including a department member as a co-investigator. (**Appendix B**).

### Airway Management research

- Our site is participating in two international multisite studies examining critical events in airway management for adult and pediatric populations.
- Two researchers are translating their expertise into airway training for confirmation of tracheal intubation and failed airway management.

### Medical education research

- Two medical education research projects included the introduction of The Vital Anesthesia Simulation Training (VAST) to stakeholders in Nepal as well as implemented the program in Mongolia. Another study examined the influence of context on delivery of the VAST's foundation year curriculum for anesthesia trainees.

### Chronic Pain research

- Three studies are focused on women's pain. One study is examining whether lidocaine infusions during breast cancer surgery can prevent persistent pain and another two studies are reporting on the incidence of pain during cesarean delivery using regional and general anesthesia approaches.
- One study is systematic reviewing the participant demographic data of phase 2-3 clinical trials that have tested new CGRP-targeting drugs for migraine related pain.
- Two clinical trials are exploring treatments for osteoarthritic pain. One study is exploring the central nervous pathways responsible for green light therapy-induced pain relief in osteoarthritis, and another is investigating the effectiveness of oral cannabis for osteoarthritic pain.
- One research team is Preparing for national consensus guideline that addresses treatment variability for Pediatric Complex Regional Pain Syndrome in Canada.
- Three fundamental science projects are exploring the role of cannabinoids in a variety of inflammatory conditions including bacterial cystitis, stroke, and acute lung injury.

### Perioperative research

- Two studies engage older adults in the research process. One study will assess the impact of the Palliative and Therapeutic Harmonization (PATH) program as part of the shared decision process for curative cancer surgery, while another study will gather information from older adults about what outcomes are important for them in the perioperative setting.
- One research team will systematically gather a wide range of research evidence for the use of point of care ultrasound in obstetric anesthesia and critical care. One implementation study will evaluate same day discharge after minimally invasive gynecologic oncology surgeries.
- One Health Canada regulated drug trial will examine the benefit of Aprepitant for PONV Prophylaxis in children undergoing scoliosis surgery.

### **Innovation**

- What does Space, artificial intelligence, intravenous fluid flow and chronic pain have in common? Innovative research at Dal's Anesthesia! One study is exploring the feasibility of regional anesthesia in simulated space-like environments while another study is probing the viability of ChatGPT artificial intelligence platform to answer commonly asked patient perioperative questions. A novel pocket-sized instrument that monitors intravenous fluid flow will be assessing whether it offers cost savings to the health care system. Supported by a philanthropist, the case is being made to develop a IWK Research Center focusing on Endometriosis and Chronic Pelvic Pain research.

The 2023 Anesthesia Research Day saw 19 research studies presented. These were generated by a variety of trainees, including nine residents/fellows: three graduate/post doc students and seven undergraduate students. The presentation topics were 95% clinical and 5% fundamental research.

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**RESEARCH FUNDING**

## Applying for research funding

**Indicator:** Number & value (\$) of grants & industry contracts received

**Target:** Total annual funding (\$) reflects maintenance or increase from previous year (46 funded projects totaling \$4.9M in 2022-23)

**Result:** **49 funded projects totaling over \$3.9M annually**

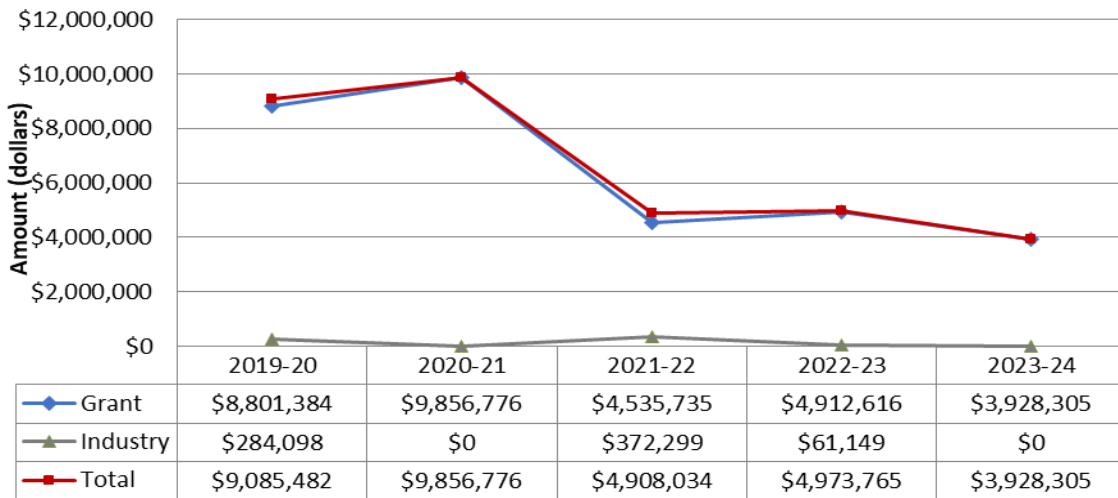
*The fiscal calendar (April 1, 2023 – March 31, 2024) is used for research funding only based on stakeholder requirements.*

There are 49 ongoing and new grant/industry funded projects with annual totals over \$3.9M. (**Figure 1** and **Table 3**).

Funding from the Department’s Anesthesia Research Fund (ARF) account for 22% of the number of funded projects whereas national and international funds make up approximately 55% of this total. Regional and institutional organizations fund the remaining projects (23%).

Tri-Council Agencies (CIHR, NSERC, SSERC Grant) fund 13 projects in the Department, accounting for 73% of the total funds. Two (3%) Tri-Council funded projects are led by department members totaling over \$544k (\$122k annually). A list of the grants is found in **Appendix A**.

### Peer Reviewed Research Funding



**Figure 1:** The amount (\$) in external research grant/industry contract funding received in the past 5-years.

*\*Note: The annual value of research funding includes all research awards generating funds in that year. All research projects in which a department researcher is a team member are included.*

**Table 3:** Tri-Council funding in for department PI in the past 5-years

	2019-20	2020-21	2021-2022	2022-2023	2023-2024
Number	15	12	11	11	13
Total Dollars	\$5,600,000	\$3,200,000	\$2,900,000	\$2,600,000	\$544,000
Dpt members	7	5	5	4	2

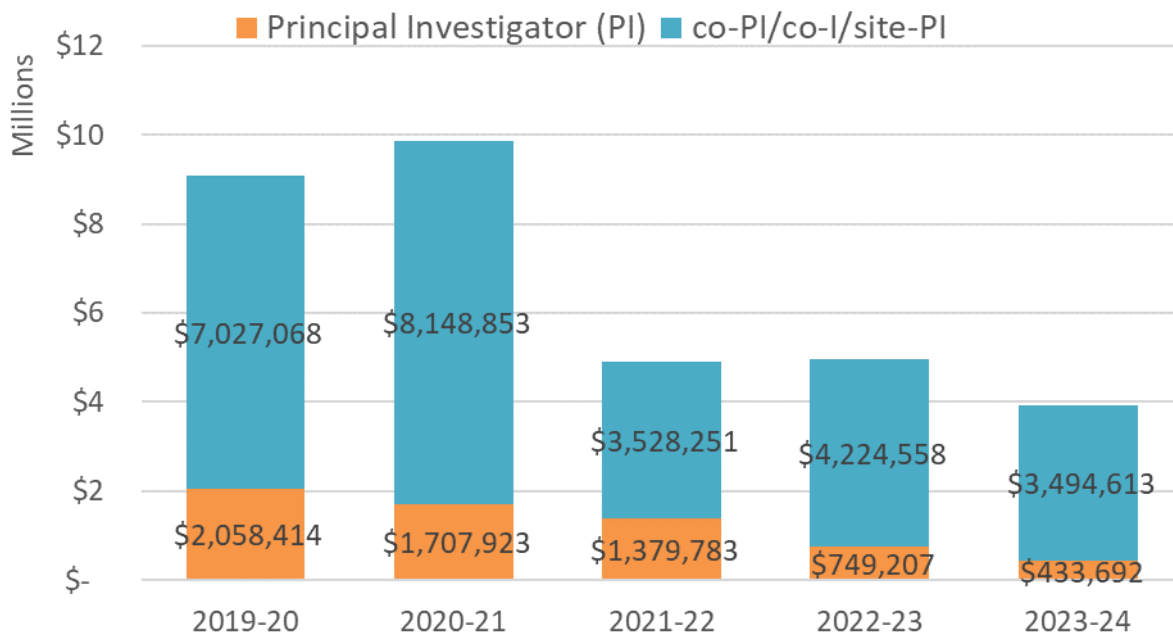


**Indicator:** Annual value (\$) of grants and industry contracts received by departmental principal investigators

**Target:** External funding dollars obtained as a *principal investigator* reflects maintenance or increase from previous year  
(\$749k was obtained by departmental principal investigators in 2022-23)

**Result:** **\$433k was obtained by departmental principal investigators**

Twelve of 20 researchers with protected time were designated as principal investigators for 25 grants/contracts totaling \$433k annually (**Figure 2**). Sixty-four percent of the awarded grants and contracts were less than \$25k. See **Appendix B** for a list of funding.



**Figure 2:** The annual amounts (\$) of grant and contract funding received for the past 5 years segmented by Principal Investigators (PI) and co-Investigator/coPI/site-PI.

**Indicator:** Annual value (\$) of grants & industry contracts received by departmental co-investigators

**Target:** External funding obtained as a *co-investigator* reflects maintenance or increase from previous year  
(\$4.2M was achieved by departmental co-investigators in 2022-23)

**Result:** **\$3.4M was achieved by departmental co-investigators**

There was an approximate decrease of \$700k in external grants and contract funding by researchers with protected time designated as co-investigators compared to 2022-23.

## SCHOLARLY CONTRIBUTIONS

### Engaging in research collaboration

**Indicator:** Number of collaborative projects and publications

**Target:** 80% of all projects and publications are collaborative

**Result:** **91% of all projects and publications are collaborative**

Of 101 publications, 95 have co-authors (94%). Of 49 funded grants and industry contracts, 41 have co-investigators (84%). Therefore, 150 out of 136 projects and publications are collaborative (91%).

### Contributing to research review and administration

**Indicator:** Number of researchers who Chair research related committees

**Target:** 25% chair research related committees

**Result:** **40% of researchers chair research related committees**

Eight of 20 researchers were invited to chair research related committees (40%): 25% local, 5% national and 15% international.

**Indicator:** Number of researchers who participate in research committee work

**Target:** 80% of all researchers are members of research related administrative committees: 50% local, 40% national and 10% international

**Result:** **85% of all researchers are members of research related administrative committees: 75% local, 50% national and 20% international**

Seventeen of 210 researchers are members of research related administrative committees (85%).

**Indicator:** Number of researchers who review journal articles

**Target:** 80% review journal articles

**Result:** **95% of researchers review journal articles**

Nineteen of 20 researchers were invited to review journal manuscripts (95%).

**Indicator:** Number of researchers who review funding applications

**Target:** 80% review funding applications: 10% at the local, 10% at national level and 5% at international level

**Result:** **30% review funding applications: 15% local, and 15% national**

Six of 20 researchers were invited to review funding applications (30%).

**Indicator:** Number of researchers who perform editorial activities

**Target:** 25% perform editorial activities

**Result:** **30% of researchers perform editorial activities: 20% national and 30% international**

Six of 20 researchers perform editorial activities (30%). Most of these researchers provide editorial services for more than one journal and three senior researchers have seven or more editorships.

**SCHOLARLY PUBLICATIONS**

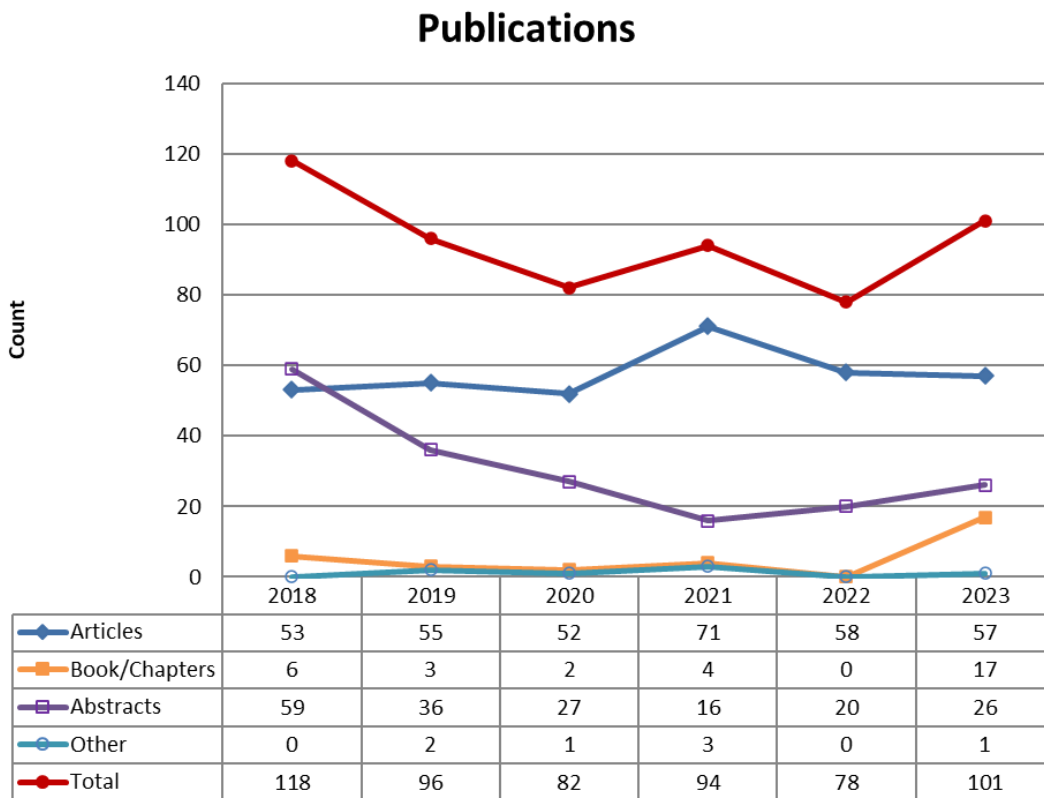
**Contributing to scientific knowledge**

**Indicator:** Number of accepted and published publications (peer reviewed & non-peer reviewed)

**Target:** Trending of accepted and published peer and non-peer review papers reflects maintenance or increase from previous year (78 publications in 2022)

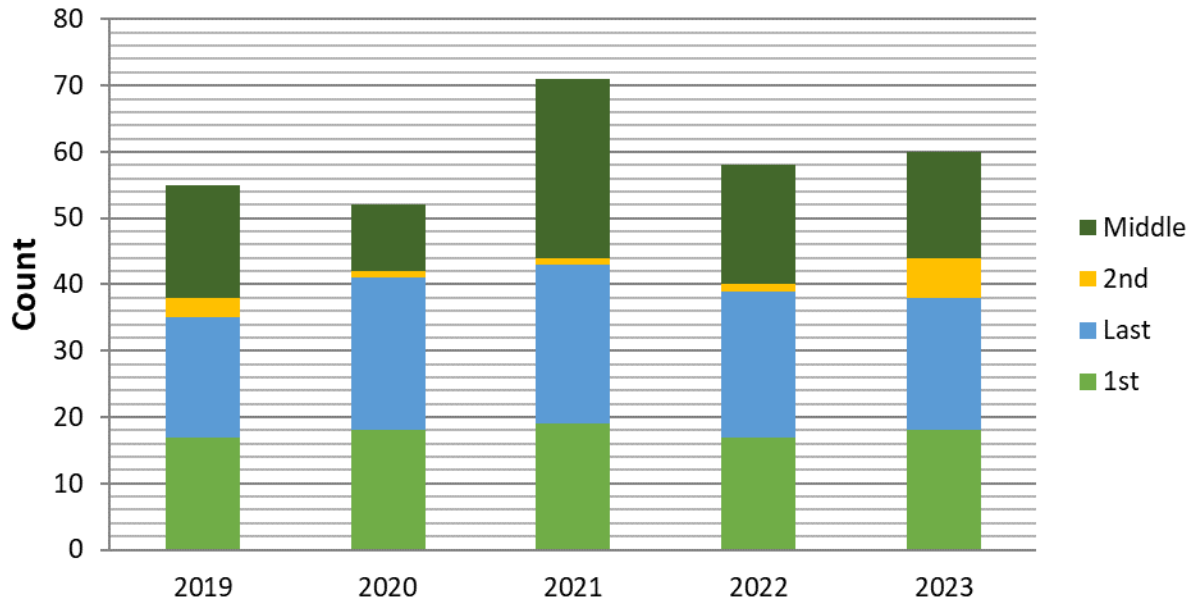
**Result:** **101 publications have been submitted and accepted**

In 2023, 101 publications have been submitted and accepted (**Figure 3**) with 57 peer-reviewed manuscripts published online (**Appendix B**). Note, there was a significant increase in published Book and Book Chapters in 2023.



**Figure 3:** Number of submitted and accepted publications (peer reviewed & non-peer reviewed)

A review of authorship for published peer reviewed journal articles for the past five years shows a consistently high first and last author order placement indicating a significant contribution to the research (Figure 3b).



**Figure 3b:** Authorship placement for the past five years.

**Indicator:** Number of peer-reviewed publications

**Target:** 90% of publications are peer-reviewed  
(100% publications were peer reviewed in 2022)

**Result:** **100% of the articles were peer reviewed. All researchers published at least one article in 2023.**

**Indicator:** Number of accepted abstracts

**Target:** Trending of accepted abstracts reflects maintenance or increase from previous year  
(20 abstracts accepted in 2022)

**Result:** **26 abstracts were accepted and authored by 60% of the researchers.**

## Engaging in mentoring, teaching and supervision

**Indicator:** Number of researchers supervising trainees (undergraduate, graduate, postgraduate students and research projects for residents and fellows)

**Target:** 50% of researchers supervise trainees as the primary supervisor (71% reported in 2022)

**Result:** **65% of researchers supervise trainees as the primary supervisor**

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**Indicator:** Number of researchers supervising graduate students (MSc and PhD)

**Target:** Number of graduate students reflects maintenance or increase (14% reported in 2022)

**Results:** **15% of researchers are supervising graduate students.**

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SCHOLARLY PRESENTATIONS

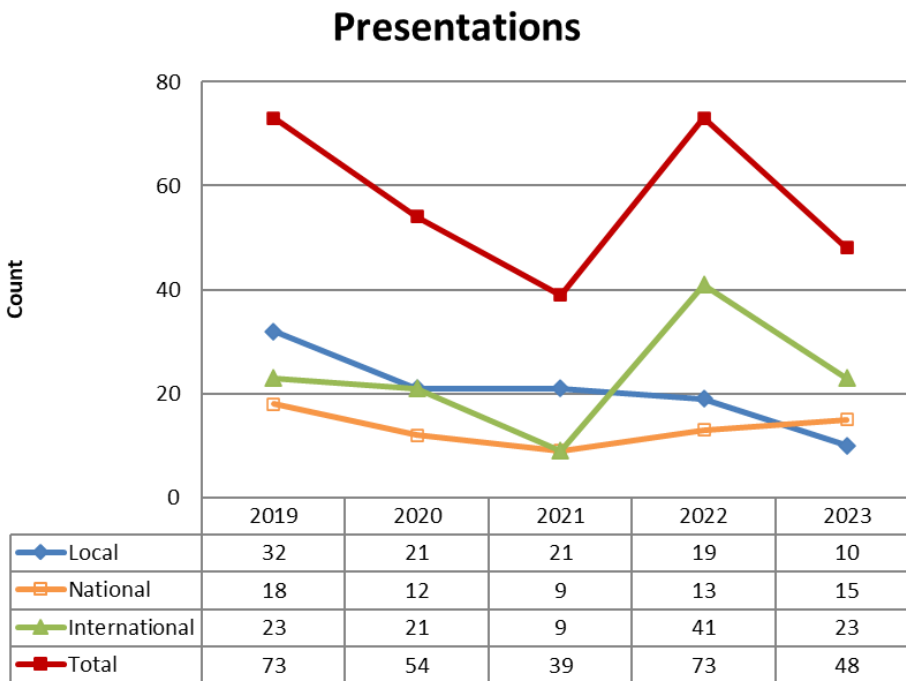
### Delivering presentations

**Indicator:** Number of all presentations (local, national, international)

**Target:** Trending of presentations reflects maintenance or increase from previous year (19 local, 13 national and 41 international invited presentations in 2022)

**Results:** 48 presentations; 10 local, 15 national and 23 international presentations

The total number of presentations by researchers from the past 5 years is found in **Figure 4**. While the number of national presentations reflects maintenance, local and international level presentations have notably decreased.



**Figure 4:** Presentations (count) for local, national and international audiences

**Indicator:** Number of **invited presentations**

**Target:** 50% of all researchers are invited to present (plenary, keynote or symposium) (43% of researchers were invited to present in 2022)

**Result:** 30% of all researchers are invited to present (plenary, keynote or symposium)

Six out of 20 researchers (30%) were invited to present their work in 2022 as a keynote, plenary or symposium speakers. Most were senior researchers and presented at international venues (48%). One researcher presented most of the keynote presentations (4).

**Indicator:** Number of abstracts presented annually  
**Target:** 100% of all researchers have an abstract presented annually  
(48% of all researchers presented an abstract in 2022)  
**Result:** **60% of all researchers presented an abstract in 2023**

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**Indicator:** Number of abstracts presented as a podium presentation  
**Target:** 20% of abstracts are invited to present a podium  
(65% of abstracts were podium presentations in 2022)  
**Result:** **50% of abstracts were invited to present a podium presentation**

Sixty percent of all researchers presented a podium abstract presentation in 2022. There were 26 abstracts accepted in 2023 with 50% of abstracts invited to present as a podium presentation.

**SCHOLARLY RECOGNITION**

## Recognizing Scholarly Contributions

**Indicator:** Number of recognition awards

**Target:** Maintenance or increase of research *recognition awards* from previous year  
(5 awards were received in 2022)

**Result:** **Eleven research recognition awards were conferred in 2023**

Members	Name	Type	Scope	Organization Name
Bailey JG	1st Place e-Poster Award in RA	Honorary Award	International	World Congress on Regional Anesthesia & Pain Medicine
Bailey JG	Clinical Teacher of the Year Nominee	Honorary Award	Department	Dalhousie Department of Anesthesia, Pain Management & Perioperative Medicine
Bailey JG	Dr. John Savage Memorial Award for Faculty Leadership in Global Health	Honorary Award	Regional	Dalhousie Office of Community Partnerships and Global Health
Livingston P	Recognition as one of anesthesia's female innovators, pioneers, and leaders	Honorary Award	International	World Federation of Societies of Anesthesiologists
MacDonald DBS	ITAR Award	Honorary Award	Department	Dalhousie Department of Anesthesia, Pain Management & Perioperative Medicine
MacDonald DBS	Dr. Tom Marrie Award (Leadership and Clinical Excellence)	Honorary Award	Department	Dalhousie Department of Anesthesia, Pain Management & Perioperative Medicine
Mukhida K	Top 10% of Med 1 Tutors and Med 2 Lecturers	Honorary Award	Organization	Dalhousie University
Uppal V	President's Choice Abstract	Honorary Award	International	American Society of Regional Anesthesia Pain Medicine
Uppal V	Presidents Choice Abstract	Honorary Award	International	American Society of Regional Anesthesia Pain Medicine
Vlatten A	Role Model of the year	Honorary Award	Department	Department of Anesthesia
Vlatten A	Award of Excellence	Honorary Award	Department	Department of Anesthesia



**Table 10:** Number of recognition awards in the past five years

2019	2020	2021	2022	2023
<b>0</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>11</b>

**Indicator:** Number of interviews provided to the media

**Target:** Number of media interviews reflects maintenance or increase  
(Five media interviews were provided in 2022)

**Result:** **Three media interviews were provided by researchers**

Members	Date	Type	Title	Scope
Bailey JG	2023-08-15	Print	How do you treat injuries in space? A Dal doctor is going under water to find out	Organization
Mukhida K	2023-01-26	Online	Invisible disabilities - portrayals in pop culture	International
Uppal V	2023-11-09	Online	November BJA Chat on Perioperative Medicine	International

## Appendix A – 2023-24 Research Projects

**Funded Projects:** Note that the dollar amount is the total value of the award whereby annual amounts are provided in Figure 1.

### NEW Funded Projects (23)

1. Baerg K, Tupper S, Cooke N, Finley GA (2023 - 2024). Addressing treatment variability for Pediatric Complex Regional Pain Syndrome in Canada: Preparing for national consensus guideline development [Grant] - Saskatchewan Health Research Foundation - \$9,775.
2. Bailey JB, Kiberd M, Brownbridge R, Mackin M, Barry G, Bird S (2023 - 2025). Feasibility of Regional Anesthesia in Microgravity: A Proof-of-concept Study [Grant] - Anesthesia Research Fund, APMPM - \$9,961.
3. Christian Lehmann (2022 - 2023). Bridge funding [Grant] - Anesthesia Research Fund, APMPM - \$20,000.
4. Christian Lehmann (2023 - 2024). Novel formulation for the adjuvant treatment of bacterial cystitis [Grant] - Early-Stage Commercialization Fund (ESCF) - \$50,000.
5. Christian Lehmann (2023 - 2025). Cannabis and cannabinoids in stroke – friends or foes? [Grant] - Anesthesia Research Fund, APMPM - \$24,970.
6. Christian Lehmann, Balwantray Chauhan, Michael Dunbar (2024). Faculty of Medicine Conference Grant Awards--2024 Combined Research Day [Grant] - Dalhousie - \$5,000.
7. Clarke H, Balneaves L, Fitzcharles M, Karkouti K, Kotra L, Ladha K, Abrahamyan L, Atrey A, Badii M, Bosma R, Di Renna T, Diep C, Duggan S, Ganty P, Hart A, Hill M, Kapoor M, Karanicolas P, Kelly L, Ladak S, Leroux T, Madden K, Miles S, Mukhida K, Owusu-Bempah A, Peel J, Peer M, Perez J, Rockel J, Shanthanna H, Tanzer M, Tomlinson G, Trang T, Wijeyesundera D (2023 - 2025). The effectiveness of oral cannabis extracts for osteoarthritic pain: an internal pilot, placebo controlled, blinded randomized trial [Grant] - CIHR - \$378,676.
8. Gower S, Mossenson A, Upadhye V, Mrutu S, Whynot S, Ram Shrestha R, Livingston P (2023). The Vital Anaesthesia Simulation Training (VAST) Foundation Year for anaesthesia trainees: case study research exploring the influence of context on curriculum delivery [Grant] - Curtin University School of Nursing - \$8,900.
9. Hung OR (2023). Difficult and Failed Airway videos [Grant] - McGraw-Hill Video Production - \$9,000.
10. Hung OR (2023). Health for the Project FIVAFLOW - an innovative pocket-sized instrument designed to monitor intravenous fluid flow [Grant] - Innovation Hub, NS Health - \$10,000.
11. Khan James S, Gilron Ian, Avramescu Sinziana, Brull Richard, Brulotte Veronique, Buckley David N, Busse Jason W, Choi Stephen, Clarke Hance A, Devereaux Philip J, Dillane Derek, Friedman Zeev, Hah Jennifer M, Hung Linda, Karkouti Keyvan, Ladha, Karim, Lim David W, Look Hong Nicole, MacDonell Su-Yin, Mackey Sean C, Miles Sarah, Paul, James E, Richebé Philippe G, Sessler, Daniel I, Shanthanna Harsha, Siddiqui Naveed T, Tomlinson George A, Turan Alparslan, Usichenko Taras, Wang, Li, Wright Frances C, Site PI [Munro A] (2023 - 2024). Prevention of persistent pain with Lidocaine infusions in breast cancer surgery (PLAN) Trial [Grant] - CIHR - \$1,285,200.
12. Kiberd MB, Dumbarton T, El-Hawary R, Orlik B (2023 - 2025). Aprepitant for PONV Prophylaxis in children undergoing scoliosis surgery: An RCT [Grant] - Anesthesia Research Fund, APMPM - \$24,967.
13. Livingston P, Mossenson A, Shrestha RR (2023). VAST Introduction to Nepal [Grant] - World Federation of Societies of Anaesthesiologist Small Project Grant - \$13,200.

14. MacDonald D, Bernard A, Chisholm J, McIntyre V, O'Brien M, Sweet V, (2024 - 2026). Implementation of Patient Reported Outcome Measures (PROMs) Data Collection for Older Adults in the Perioperative Setting [Grant] - Anesthesia Research Fund, APMPM - \$21,987.
15. MacDonald D, Bernard A, Chisholm J, McIntyre V, O'Brien M, Sweet V, (2024 - 2026). Implementation of Patient Reported Outcome Measures (PROMs) Data Collection for Older Adults in the Perioperative Setting [Grant] - NSHA - \$23,390.
16. McDougall J, Mukhida K, Hashmi J, O'Brien M, DeBow C (2024 - 2026). Analysis of the Central Pathways Responsible for Green Light Therapy-Induced Pain Relief in Osteoarthritis [Grant] - Arthritis Society - \$446,912.
17. Miró J, Wager J, Pogatzki-Zahn E, Wood C, Moscaritolo L, Lioffi C, Walker SM, Ståhl M, Fernandes AM, Ingelmo P, Finley GA, Mohair V, Dimiņa E, Goubert L, Koechlin H, Andersen RD, Jensen MP, Wicksell R, Lord SM, Reinoso-Barbero F, Cebrecos J, O'Keeffe M (2023 - 2025). International Network on Chronic Pain in Childhood – IN-ChildPain [Grant] - NEURON–Network of European Funding for Neuroscience Research, ERA-NET (European Commission) - \$71,000.
18. Mossenson A, Mongolian Society of Anesthesiologists, Livingston P (2024). Vital Anaesthesia Simulation Training (VAST) implementation in Mongolia [Grant] - Australia and New Zealand College of Anaesthetists 2024 Health Equity Project grant - \$18,000.
19. Munro A, Randle E, Pink L, McEachern L, Bates B, Yong P (2023 - 2024). IWK Research Centre Phase 1 - Development Grant: [Grant] - IWK - \$32,451.
20. Munro A, Randle E, West J (2023 - 2024). Creating and utilizing a clinical database to phenotype Endometriosis and Chronic Pelvic Pain (E&CPP) patients in an interdisciplinary tertiary care setting [Grant] - IWK - \$3,000.
21. Saciragic L, Findley R, MacDonald D, Pelletier N, Pittman E, Willows K (2023 - 2024). (G)ynecologic (O)ncology same day disc(H)arge after (M)inimally invasive surgery – (E)valuation and implementation Study [Grant] - Dalhousie - \$39,700.
22. Spencer R, French D, Knapp G, Kieser K, MacDonald D, Mallery L, Mason R, Neumann K, Shetty N (2023 - 2025). Application of the Palliative and Therapeutic Harmonization (PATH) program for shared-decision making for frail or cognitively impaired patients scheduled for curative cancer surgery: a randomized control trial [Grant] - Dalhousie - \$50,000.
23. Werry D, Uppal V, Bailey J, Barry G (2024 - 2025). Anesthesiologists' assessment of the correctness, completeness, and coherence of ChatGPT artificial intelligence platform's answers to common patient preoperative questions [Grant] - Anesthesia Research Fund, APMPM - \$5,000.

### **NEW Scholarly Projects (unfunded)**

1. Dumbarton TC, Kiberd KB (2023 - 2024). CRICKET - Critical Events during tracheal intubation in kids [Clinical]
2. Law JA, Driver B (2023). Confirmation of Tracheal Intubation [Medical Education or Training]
3. Law JA, Milne AD (2023). Stargate - International observational study on airway management in operating room and non-operating room anesthesia [Clinical]
4. Munro A, Wakeel A (2024). The incidence of intraoperative pain during cesarean delivery using regional anesthesia- a QI study [Clinical]
5. Munro A, Sjaus A, Courtney E (2023 - 2024). The incidence and predictors of general anesthesia during Cesarean Delivery- a Nova Scotian Cohort [Clinical]
6. O'Brien, MS, Dawe JA (2024). Systematic Review of Participant Demographics in Calcitonin Gene Related Peptide (CGRP) Clinical Trials [Clinical]
7. Sjaus A, Young VL (2023). Diagnostic point-of-care ultrasound in obstetric anesthesia and critical care: A scoping review [Clinical]

## CONTINUING Ongoing Funded Projects (26)

1. Bailey J, Nyirigira G, Mossenson A, Whynot S, Livingston P (2022 - 2024). The VAST Wellbeing Course for reducing burnout, anxiety and depression amongst healthcare providers working in resource-limited settings: a mixed methods study [Grant] - Anesthesia Research Fund, APMPM - \$16,844.
2. Calkin C, Friedman A, Hashmi J (2019 - 2023). Neuroanatomical and neurofunctional assessment in acquired brain injury [Grant] - Global Affairs Canada - \$3,600,000.
3. Chambers, CT & Maynard DJ (co-Directors), & Ali S, Barwick M, Campbell F, Campbell-Yeo M, Carter N, Finley GA, Jordan I, Larocque L, Mogil J, Noel M, Oberlander T, Stevens B, Stinson J, Taddio A (2019 - 2023). Solutions for Kids in Pain (SKIP) [Grant] - Networks of Centres of Excellence: Knowledge Mobilization initiative (NCE-KM) - \$1,600,000.
4. Chappe V, Lehmann C, Zhou, J (2022 - 2023). Structure-function study of the CFTR(ABCC7) chloride channel [Grant] - The Lung Association of Nova Scotia (LANS) Legacy Research Grant - \$50,000.
5. Christian Lehmann, Zhenyu Cheng (2022 - 2024). Role of iron in biofilm formation [Grant] - NSERC - \$44,184.
6. Forgeron PA, Birnie K, Dick BD, Finley GA, Jordan A, Qualter P, Stinson J (2022 - 2026). Lonelier Than Ever: Examining the experiences of Loneliness amongst adolescents with chronic pain in the context of COVID-19: A mixed methods study [Grant] - CIHR - \$239,226.
7. Fox-Robichaud A, Mark Ansermino, Catherine Cook, Kirsten Fiest, Patricia Fontela, Allan Garland, Michelle Kho, Paul Kubes, Manoj Lalu, Francois Lamontagne (Co-Director), Osama Loubani, Claudio Martin, Bradeon McDonald, Lauralyn McIntyre, Melissa Parker, Jeanna Parsons-Leigh, Jeff Perry, Bram Rochweg, Lisa Schwartz, Diana Sherifali, Orla Smith, Elizabeth Wilcox, Bryan Yipp, Lehmann C, Zhou J et al and the Canadian Sepsis Research Network (2020 - 2025). Canadian Sepsis Research Network: Improving care before, during and after sepsis [Grant] - CIHR - \$6,789,630.
8. Gower S, Mossenson A, Upadhye V, Elaibaid M, Mrutu S, Whynot S, Livingston P (2023). The Vital Anaesthesia Simulation Training (VAST) Foundation Year for anaesthesia trainees: case study research exploring the influence of context on curriculum delivery [Grant] - Curtin School of Nursing Strategic Funds Grant - \$9,300.
9. Gyambibi A, Bailey J, Uppal V (2021 - 2023). Patient Perspectives of Informed Consent for Regional Anesthesia for Ambulatory Surgery [Grant] - Dalhousie - \$4,470.
10. Hashmi JA (2016 - 2026). Canada Research Chair Tier II (Pain) [Grant] - CIHR - \$500,000.
11. Kelly L, Finley GA, Lacaze T, Oberlander T, Huntsman R, Alcorn J (2020 - 2024). Cannabis for chronic daily headaches in adolescents [Grant] - SickKids Foundation - \$293,335.
12. Kelly L, tJong, Moore, Hepburn, Alcorn, Finkelstein, Lacaze, Oberlander T, Rassekh, Tsang, Balneaves, Balshaw, Burns, Crooks B, Drogemoller, Dupuis, Dyson, Finley GA, et al (2020 - 2024). Cannabis for symptom management in children with cancer: a demonstration project by the Canadian Childhood Cannabinoid Clinical Trials (C4T) platform [Grant] - CIHR - \$1,499,000.
13. Khan James S, Gilron Ian, Avramescu Sinziana, Brull Richard, Brulotte Veronique, Buckley David N, Busse Jason W, Choi Stephen, Clarke Hance A, Devereaux Philip J, Dillane Derek, Friedman Zeev, Hah Jennifer M, Hung Linda, Karkouti Keyvan, Ladha, Karim, Lim David W, Look Hong Nicole, MacDonell Su-Yin, Mackey Sean C, Miles Sarah, Paul, James E, Richebé Philippe G, Sessler, Daniel I, Shanthanna Harsha, Siddiqui Naveed T, Tomlinson George A, Turan Alparslan, Usichenko Taras, Wang, Li, Wright Frances C, Site PI [Munro A] (2023 - 2024). Prevention of persistent pain with Lidocaine infusions in breast cancer surgery (PLAN) Trial [Grant] - CIHR - \$1,285,200.
14. MacDonald D, Banfield J, Panek I, Maguire M, Heggie C, Williams K, Bottomley T (2022 - 2024). Validation of a patient-centered questionnaire for assessing satisfaction with shared decision making in healthcare consultations [Grant] - Anesthesia Research Fund, APMPM - \$24,402.

15. McDougall J, Mukhida K (2022 - 2024). Management of Osteoarthritis Pain with Green Light Therapy [Grant] - Arthritis Society - \$99,652.
16. McIsaac D, Jerath A, Kidd G, Roberts D, Saha T, Taljaard M, Wijeyesundera D, Boet S, Bragg S, Bryson G, Carrier F, de Mestral C, Dubois D, Fergusson D, Flexman A, Grudzinski A, Kayssi A, Lalu M, Lee S, MacDonald D, McCartney C, McCluskey S, McKeen D, Nagpal S, Parotto M, Spence J, Thavorn K, Uppal V, van Walraven C (2022 - 2024). The Anesthesia for Lower limb revascularization to Optimize Functional Outcomes (ALOFT) Trial: a pilot multicenter randomized trial [Grant] - CIHR - \$202,725.
17. Mossenson A, Livingston P, Brown J (2023 - 2024). Developing a competency-based facilitation evaluation tool supporting health care simulation in resource-limited settings [Grant] - Australia and New Zealand College of Anaesthetists - \$115,715.
18. Mossenson A, Upadhye V, Livingston P, (2023). Implementation of VAST in Pune, India, including curriculum integration of the VAST [Grant] - ANZCA Health Equity Projects Fund - \$17,800.
19. Munro A, Kwofie MK (2022 - 2024). A randomized controlled trial evaluating the effect intravenous dexamethasone use has on the duration of spinal anesthesia as part of a multimodal antiemetic strategy for enhanced recovery after cesarean delivery [Grant] - IWK - \$25,000.
20. Neira V, Al-Faraj A, Thorleifson M, Duncan K, Doucet R (2021 - 2023). Procedural Skills Workplace Assessment of Internal Jugular Vein Catheterization: A Generalizability Study [Grant] - Anesthesia Research Fund, APMPM - \$7,861.
21. Parlow J, Gregory K, Johnson A, Bould D, Nyirigira G, Banguti P, Nizeyimana F, Bailey J, Jaeger M (2022 - 2025). Developing a Fellowship and Residency Modules in Knowledge Translation in Anesthesiology and Pain Management in Low- and Middle-Income Countries [Grant] - International Development, Aid and Collaboration Grant - Royal College International - \$90,000.
22. Puts M, Alibhai S, Haase K, MacDonald D, et al (2021 - 2025). A mixed methods study to evaluate functional recovery, care needs and caregiver needs in older adults undergoing surgery: The Frail sub-study of the Fit for Surgery study [Grant] - CIHR - \$424,575.
23. Ritchie CK, Sjaus A (2023 - 2024). Preparation for specialty examination is consolidation of routine and adaptive expertise acquired over the course of anesthesia residency: Or is it? [Grant] - Anesthesia Research Fund, APMPM - \$945.
24. Spence J, Connolly S, Lee S, Belley-Côté E, Cameron M, D'Aragon F, Deschamps A, Dulong B, Jacobsohn E, Mazer D, Pryor K, Rajamohan R, Whitlock R (2022 - 2023). Benzodiazepine-free cardiac anesthesia for reduction of postoperative delirium in the intensive care unit (B-Free): A multi-centre, randomized, cluster crossover trial [Grant] - CIHR - \$267,750.
25. Stinson J, Noel M, Birnie K, Laloo C, Nishat F, Ahola Kohut S, Baerg K, Barwick M, Battaglia M, Boerner K, Campbell F, Carreiro E, Cornish P, Dick B, Dore-Bergeron M, Findlay S, Finley A, Gill J, Hudspith M, Ingelmo P, Killackey T, Lamontagne C, Mohabir V, Oberlander T, Palermo P, Pham Q, Poolacherla R, Poulin P, Rash J, Rasic N, Soltani S, Beaudry H (2022 - 2026). Evaluating a virtual stepped care portal in youth awaiting tertiary chronic pain care: An Implementation-Effectiveness Hybrid Type III study [Grant] - CIHR - \$546,209.
26. Wijeyesundera DN, Juni P, Khadaroo R, MacDonald D, et al (2021 - 2025). FAST Walk (Functional Assessment for Surgery by a Timed Walk) study: A multicentre prospective cohort study of the six-minute walk test for improving preoperative risk stratification for major non-cardiac surgery [Grant] - CIHR - \$1,410,813.

### **CONTINUING Scholarly Projects (unfunded)**

1. Doherty J Tallantire V, Eltom N, Middleton S, Livingston P (2021 - 2023). Curriculum for refugee doctor adaption to practice in Scotland [Medical Education or Training]
2. Dumbarton TC, Kiberd KB (2023 - 2024). CRICKET - Critical Events during tracheal intubation in kids [Clinical]

3. Fakuade A, Mukhida K (2022 - 2023). The depiction of pain and addiction in contemporary Canadian hip hop and implications for medical education [Medical Education or Training]
4. Gower S, Mossenson A, Upadhye V, Elaibaid M, Mrutu S, Livingston P (2022 - 2024). The Vital Anaesthesia Simulation Training (VAST) Foundation Year for anaesthesia trainees: case study research exploring the influence of context on curriculum delivery [Medical Education or Training]
5. Gower S, Mossenson A, Upadhye V, Livingston P (2022 - 2023). Exploration of participants' experience following a global SIMposium focussed on peri-operative simulation in low-resource settings [Medical Education or Training]
6. Law JA, Driver B (2023). Confirmation of Tracheal Intubation [Medical Education or Training]
7. Law JA, Milne AD (2023). Stargate - International observational study on airway management in operating room and non-operating room anaesthesia [Clinical]
8. Lehmann C (2022 - 2024). CIDS [Pre-Clinical]
9. Mossenson A, Livingston P, Kemp S, Kelly M, Brown J (2023 - 2024). Delphi study exploring criteria for effective healthcare simulation facilitation in low-resource settings [Medical Education or Training]
10. Mossenson A, Livingston P, Kemp S, Kelly M, Brown J (2023 - 2024). Tools for evaluation of healthcare simulation facilitation or debriefing, with focus on utility in low-resource settings: A scoping review protocol [Medical Education or Training]
11. Munro A, Sjaus A, Courtney E (2023 - 2024). The incidence and predictors of general anaesthesia during Cesarean Delivery- a Nova Scotian Cohort [Clinical]
12. Munro A, Wakeel A (2024). The incidence of intraoperative pain during cesarean delivery using regional anaesthesia- a QI study [Clinical]
13. Oprea A, Mukhida K (2022 - 2023). Medical students' attitudes about supports for chronic pain management [Clinical]
14. Panzarasa J, Mukhida K (2022 - 2023). The depiction of female physicians in Hollywood films and implications for equity, diversity and inclusion [Clinical]
15. Sjaus A, Ash S (2023 - 2024). Consenting for publication of medical information in social media: Patients' attitudes and opinions [Pre-Clinical]
16. Sjaus A, Young VL (2023). Diagnostic point-of-care ultrasound in obstetric anaesthesia and critical care: A scoping review [Clinical]
17. Smith S, Tallentire V, Doverty J, Carney E, Livingston P (2022 - 2023). The social integration needs of refugee doctors: An integrative review [Medical Education or Training]
18. Vlatten A (2021 - 2024). Comparison of paediatric airway training and available airway equipment in EMS [Clinical]

## Appendix B – 2023 Publications

Note that this list of publications includes *peer-reviewed* articles that are currently *published* and accessible online by ALL members of the department (63).

1. Ammar H, Sharawy N, Lehmann C (2023). Remodeling in cardiometabolic diseases: Towards biomarker characterization, target therapy identification, and drug delivery strategies. *Front Physiol.*, 14, 1161720. [Editorial - Published] PubMed ID: 36935748.
2. Astapenko D, Hyspler R, Tich A, Tomasova A, Navratil P, Zrzavecky M, Byreddy B, Sedlacek P, Radochova V, Skulec R, Hahn RG, Lehmann C, Malbrain MLNG, Cerny V (2023). Protection of the endothelium and endothelial glycocalyx by hydrogen against ischaemia-reperfusion injury in a porcine model of cardiac arrest. *Clinical hemorheology and microcirculation*, 1-12. [Published] PubMed ID: 37694356.
3. Astapenko D, Zrzavecky M, Gorskaja D, Hyspler R, Ticha A, Radochova V, Lehmann C, Malbrain MLNG, Cerny V, Hahn RG (2023). Modulation of the capillary leakage by exogenous albumin in a rat model of endothelial glycocalyx damage. *Clinical hemorheology and microcirculation*. [Published] PubMed ID: 38073383.
4. Bailey J, Uppal V (2023). The erector spinae plane block: silver bullet or over-hyped? *Canadian Journal of Anesthesia*. [Editorial - Published] PubMed ID: 37957437.
5. Barry G, Sehmbi H, Retter S, Bailey JG, Tablante R, Uppal V (2023). Comparative efficacy and safety of non-neuraxial analgesic techniques for midline laparotomy: a systematic review and frequentist network meta-analysis of randomised controlled trials. *British journal of anaesthesia*. [Published] PubMed ID: 37770254.
6. Bietar B, Tanner S, Lehmann C (2023). Neuroprotection and Beyond: The Central Role of CB1 and CB2 Receptors in Stroke Recovery. *International journal of molecular sciences*, 24(23). [Scoping Review - Published] PubMed ID: 38069049.
7. Burcheri A, Coutin A, Bigham BL, Kruse MI, Lien K, Lim R, MacCormick H, Morris J, Ng V, Primani N, Odorizzi S, Poirier V, Upadhye S, Primavesi R (2023). Exploring a case for education about sexual and gender minorities in postgraduate emergency medicine training: forming recommendations for change. *Postgraduate Medicine*, 135(6), 623-632. [Editorial - Published] PubMed ID: 37310186.
8. Cheung C, MacCormick H, Munro A, George RB (2023). Sexual and gender minorities curricular content in Canadian anesthesia residency programs. *Canadian Journal of Anesthesia*, 70(6), 1100-1102. [Letter to the Editor - Published] PubMed ID: 37193864.
9. Cohen A, Wisseman L, Al Faraj A, Andreu P, Hall RI, Neira VM (2023). Use of liquid chromatography-tandem mass spectrometry method to assess the concentration of epinephrine, norepinephrine, and phenylephrine stored in plastic syringes. *Pharm Technol Hosp Pharm*, 8(1), 1-8. [Published] DOI: 1-.1515/pthp-2022-0010.
10. Coppens S, Hoogma DF, Uppal V, Kalagari H, Herman M, Rex S (2023). Erector spinae plane block: the ultimate 'Plan A' block? Comment on *Br J Anaesth* 2023; 130: 497-502. *British journal of anaesthesia*. [Letter to the Editor - Published] PubMed ID: 37225536.
11. de Jager P, Aleman D, Baxter N, Bell C, Bodur M, Calzavara A, Campbell R, Carter M, Emerson S, Gagliardi A, Irish J, Martin D, Lee S, Saxe-Braithwaite M, Seyedi P, Takata J, Yang S, Zanchetta C, Urbach D (2023). Social determinants of access to timely elective surgery in Ontario, Canada: a cross-sectional population level study. *CMAJ open*, 11(6), E1164-E1180. [Published] PubMed ID: 38114259.
12. Deane AM, Alhazzani W, Guyatt G, Finfer S, Marshall JC, Myburgh J, Zytaruk N, Hardie M, Saunders L, Knowles S, Lauzier F, Chapman MJ, English S, Muscedere J, Arabi Y, Ostermann M, Venkatesh B, Young P, Thabane L, Billot L, Heels-Ansdell D, Al-Fares AA, Hammond NE, Hall R, Rajbhandari D, Poole A, Johnson D, Iqbal M, Reis G, Xie F, Cook DJ, *Canadian Critical Care Trials*

- Group and the Australian and New Zealand Intensive Care Society Clinical Trials Group (2023). REVISE: re-evaluating the inhibition of stress erosions in the ICU-statistical analysis plan for a randomized trial. *BMJ open*, 13(11), e075588. [Statistical Analysis Plan - Published] PubMed ID: 37968012.
13. Dickson K, Scott C, White H, Zhou J, Kelly M, Lehmann C (2023). Antibacterial and Analgesic Properties of Beta-Caryophyllene in a Murine Urinary Tract Infection Model. *Molecules*, 28(10), 4144. [Published] PubMed ID: 37241885.
  14. Dobson G, Chau A, Denomme J, Fuda G, McDonnell C, McIntyre I, Milne AD, Milkovich R, Sparrow K, Wang Y, Young C (2023). Correction: Guidelines to the Practice of Anesthesia: Revised Edition 2023. *Canadian journal of anaesthesia = Journal canadien d'anesthesie*. [Letter to the Editor - Published] PubMed ID: 36810674.
  15. Dobson GR, Chau A, Denomme J, Fuda G, McDonnell C, McIntyre I, Milne AD, Milkovich A, Sparrow K, Wang Y, Young C (2023). Guidelines to the Practice of Anesthesia - Revised Edition 2023. *Canadian Journal of Anesthesia*, 70(1), 16-55. [Published] PubMed ID: PMID: 36690905.
  16. Dumbarton TC (2023). Regional anesthesia in complex pediatric patients: advances in opioid-sparing analgesia. *Canadian journal of anaesthesia = Journal canadien d'anesthesie*. [Editorial - Published] PubMed ID: 37884770.
  17. El-Boghdady K, Albrecht E, Wolmarans M, Mariano ER, Kopp S, Perlas A, Thottungal A, Gadsden J, Tulgar S, Adhikary S, Aguirre J, Agur AMR, Altıparmak B, Barrington MJ, Bedforth N, Blanco R, Bloc S, Boretsky K, Bowness J, Breebaart M, Burckett-St Laurent D, Carvalho B, Chelly JE, Chin KJ, Chuan A, Coppens S, Costache I, Dam M, Desmet M, Dhir S, Egeler C, Elsharkawy H, Bendtsen TF, Fox B, Franco CD, Gautier PE, Grant SA, Grape S, Guheen C, Harbell MW, Hebbard P, Hernandez N, Hogg RMG, Holtz M, Ihnatsenka B, Ilfeld BM, Ip VHY, Johnson RL, Kalagara H, Kessler P, Kwofie MK, Le-Wendling L, Lirk P, Lobo C, Ludwin D, Macfarlane AJR, Makris A, McCartney C, McDonnell J, McLeod GA, Memtsoudis SG, Merjavy P, Moran EML, Nader A, Neal JM, Niazi AU, Njathi-Ori C, O'Donnell BD, Oldman M, Orebaugh SL, Parras T, Pawa A, Peng P, Porter S, Pulos BP, Sala-Blanch X, Saporito A, Sauter AR, Schwenk ES, Sebastian MP, Sidhu N, Sinha SK, Soffin EM, Stimpson J, Tang R, Tsui BCH, Turbitt L, Uppal V, van Geffen GJ, Vermeylen K, Vlassakov K, Volk T, Xu JL, Elkassabany NM (2023). Standardizing nomenclature in regional anesthesia: an ASRA-ESRA Delphi consensus study of upper and lower limb nerve blocks. *Regional anesthesia and pain medicine*. [Published] PubMed ID: 38050174.
  18. Greene A, Wood L, Champion P, Castonguay M, Scheffler M, Deshaies C, Wood J, French D (2023). Resection of a Large Growing Mediastinal Germ Cell Tumor Using a Multidisciplinary Approach. *Current oncology (Toronto, Ont.)*, 31(1), 42-49. [Case Report - Published] PubMed ID: 38275829.
  19. Hall S, Faridi S, Trivedi P, Castonguay M, Kelly M, Zhou J, Lehmann C (2023). Cannabidiol Reduces Systemic Immune Activation in Experimental Acute Lung Injury. *Cannabis and cannabinoid research*. [Published] PubMed ID: 37815809.
  20. Hanly JG, Robertson JW, Legge A, Kamintsky L, Aristi G, Friedman A, Beyea SD, Fisk JD, Omisade A, Calkin C, Bardouille T, Bowen C, Matheson K, Hashmi JA (2023). Resting state functional connectivity in SLE patients and association with cognitive impairment and blood-brain barrier permeability. *Rheumatology (Oxford, England)*, 62(2), 685-695. [Published] PubMed ID: 35699463.
  21. Hansel J, Law JA, Chrimes N, Higgs A, Cook TM (2023). Clinical tests for confirming tracheal intubation or excluding oesophageal intubation: a diagnostic test accuracy systematic review and meta-analysis. *Anaesthesia*. [Systematic Review - Published] DOI: 10.1111/anaes.16059.
  22. Heels-Ansdell D, Billot L, Thabane L, Alhazzani W, Deane A, Guyatt G, Finfer S, Lauzier F, Myburgh J, Young P, Arabi Y, Marshall J, English S, Muscedere J, Ostermann M, Venkatesh B, Zytaruk N, Hardie M, Hammond N, Knowles S, Saunders L, Poole A, Al-Fares A, Xie F, Hall R, Cook D (2023). REVISE: re-evaluating the inhibition of stress erosions in the ICU-statistical analysis plan for a randomized trial. *Trials*, 24(1), 796. [Trial Protocol - Published] PubMed ID: 38057875.



23. Holbein BE, Lehmann C (2023). Dysregulated Iron Homeostasis as Common Disease Etiology and Promising Therapeutic Target. *Antioxidants (Basel, Switzerland)*, 12(3). [Scoping Review - Published] PubMed ID: 36978919.
24. Hung O, Coonan T (2023). In reply: Artificial intelligence in anesthesia: an uphill but inevitable road. *Canadian journal of anaesthesia = Journal canadien d'anesthesie*, 70(10), 1705-1706. [Letter to the Editor - Published] PubMed ID: 37704898.
25. Hung OR, Coonan T (2023). Artificial Intelligence versus Art of Anesthesia: A long and winding road ahead. *Canadian Journal of Anesthesia*, 70(10), 1422-1424. [Editorial - Published] PubMed ID: 37085659.
26. Huntsman RJ, Elliott J, Lewis E, Moore-Hepburn C, Alcorn J, Mansell H, Appendino JP, Bélanger RE, Corley S, Crooks B, Denny AM, Finkelstein Y, Finley A, Fung R, Gilpin A, Litalien C, Jacobs J, Oberlander TF, Palm A, Palm J, Polewicz M, Quinn D, Rassekh SR, Repetski A, Rieder MJ, Robson-McKay A, Seifert B, Shackelford A, Siden H, Szafron M, 't Jong G, Kelly LE (2023). Removing barriers to accessing medical cannabis for paediatric patients. *Paediatrics and Child Health*, pxac129. [Published] DOI: 10.1093/pch/pxac129.
27. Jin S, Munro A, George RB (2023). The association between labour epidural analgesia and postpartum depression in primiparous patients: a historical cohort study. *Canadian journal of anaesthesia = Journal canadien d'anesthesie*, 70(12), 1909-1916. [Published] PubMed ID: 37726496.
28. Jung F, Connes P, Lehmann C (2023). A.L. Copley Best Paper Prize 2022. Clinical hemorheology and microcirculation, 85(4), 323-324. [Published] PubMed ID: 38160350.
29. Khaled M, Youssef N, Choi S, Uppal V, Chui J, Marcucci M, Madden K, Shanthanna H (2023). Preoperative assessment of postoperative delirium: a cross-sectional study of patients and anesthesiologists in Canada. *Canadian journal of anaesthesia = Journal canadien d'anesthesie*. [Published] PubMed ID: 37606836.
30. Kiberd MB, Dumbarton T (2023). In reply: Increasing the success rate of large and small intravenous access. *Canadian journal of anaesthesia = Journal canadien d'anesthesie*. [Letter to the Editor - Published] PubMed ID: 37280456.
31. Kukreja P, Uppal V, Kofskey AM, Feinstein J, Northern T, Davis C, Morgan CJ, Kalagara H (2023). Quality of recovery after pericapsular nerve group (PENG) block for primary total hip arthroplasty under spinal anaesthesia: a randomised controlled observer-blinded trial. *British journal of anaesthesia*. [Published] PubMed ID: 36964012.
32. Law JA, Thana A, Milne AD (2023). In reply: Awake tracheal intubation: what can be done to maintain the skill? *Canadian journal of anaesthesia = Journal canadien d'anesthesie*. [Letter to the Editor - Published] PubMed ID: 37138152.
33. MacCormick H, Burchell D (2023). Promoting inclusion of transgender and nonbinary people in the Journal by using gender-neutral language. *Canadian Journal of Anesthesia*, 70(6), 1090-1091. [Letter to the Editor - Published] PubMed ID: 37165127.
34. MacDonald David, Mackin MJ (2023). Intraoperative glucose management: when to monitor and who to treat? *Canadian journal of anaesthesia = Journal canadien d'anesthesie*, 70(2), 177-182. [Editorial - Published] PubMed ID: 36450942.
35. MacKenzie NE, Tutelman PR, Chambers CT, Parker JA, Boland L, Lipstein E, Jordan I, Jordan Z, Finley GA, Toupin April K, Witteman H, Birnie KA (2023). Can Sharing Improve Caring? A Call to Prioritize Shared Decision Making in Pediatric Pain Management. *Clinical Practice in Pediatric Psychology*, 11(3), 253-261. [Published] DOI: 10.1037/cpp0000488.
36. MacLean E, Garber G, Barbosa K, Liu R, Verge A, Mukhida K (2023). Lessons learned from examination of Canadian medico-legal cases related to interventional therapies for chronic pain management. *Canadian Journal of Anesthesia*. [Published] PubMed ID: 37523142.
37. McKay, Madeleine BSSc, Brown, Ryan MPH, MBA, FRSPH, Mallam, Katie BA, BPR, MPR1, MacDonald Green, Amanda, MD, CCFP1, Bernard, Andre, MD, MSc, FRCPC (2023). Engaging the collective voice of physicians: Optimizing participation in research and policy development in the

- context of COVID-19 and physician burnout. Canadian College of Health Leaders, Healthcare Management Forum, 1-4. [Systematic Review - Published] DOI: 10.1177/08404704231199083.
38. Miller F, Wood S, Livingston P (2023). The lived experience of competence by design: Canadian resident physicians' perspectives. *Canadian Journal of Anesthesia*, 71, 254-263. [Published] PubMed ID: 38133715.
  39. Mossenson A, Ocholi D, Gower S, Livingston P (2023). Skill translation following the Vital Anaesthesia Simulation Training (VAST) Facilitator Course: a qualitative study. *Anesthesia & Analgesia*. [Published] PubMed ID: 37043403.
  40. Mossenson A, Upadhye V, Livingston P (2023). Developing simulation educator skills globally through the Vital Anaesthesia Simulation Training (VAST) Community of Practice. *British Journal of Anaesthesia*, 131(6), e190-e192. [Letter to the Editor - Published] PubMed ID: PMID: 37858480.
  41. Mottiar M, Burchell D, MacCormick H (2023). Equity, Diversity, and Inclusion in anesthesiology: a primer. *Canadian journal of anaesthesia = Journal canadien d'anesthesie*, 70(6), 1075-1089. [Editorial - Published] PubMed ID: 37341898.
  42. Munro A, Sjaus A (2023). General anesthesia for Cesarean delivery: can interinstitutional variation in practice offer deeper insights into our choice of anesthetic modality? *Canadian Journal of Anesthesia*. [Editorial - Published] DOI: doi.org/10.1007/s12630-023-02634-9.
  43. Neira Agonh D, Scott C, Trivedi P, Dickson K, White H, Zhou J, Lehmann C (2023). The immune response to systemically administered endotoxin in the murine intestinal microcirculation under pentobarbital versus isoflurane anesthesia. *Clinical hemorheology and microcirculation*. [Published] PubMed ID: 37980655.
  44. Nourouzpour N, Jen TTH, Bailey J, Jobin PG, Sutherland JM, Ho CM, Prabhakar C, Ke JXC (2023). Association between anesthesia technique and death after hip fracture repair for patients with COVID-19. *Canadian journal of anaesthesia = Journal canadien d'anesthesie*. [Published] PubMed ID: 38129357.
  45. Onyeka T, de la Vega R, Fisher E, Finley GA (2023). Editorial: Highlights in Pediatric Pain 2021/2022. *Frontiers in Pain Research*, 4. [Editorial - Published] DOI: 10.3389/fpain.2023.1152194.
  46. Pak V, Hashmi JA (2023). Top-down threat bias in pain perception is predicted by higher segregation between resting-state networks. *Network neuroscience (Cambridge, Mass.)*, 7(4), 1248-1265. [Published] PubMed ID: 38144683.
  47. Patel A, MacCormick H, Elise Graham M (2023). Supporting breastfeeding and lactation in surgical patients. *CMAJ: Canadian Medical Association journal = journal de l'Association medicale canadienne*, 195(25), E879. [Letter to the Editor - Published] PubMed ID: 37364913.
  48. Ramlogan R, Uppal V (2023). Hip fracture analgesia: how far ahead are we? *Canadian journal of anaesthesia = Journal canadien d'anesthesie*. [Editorial - Published] PubMed ID: 38097816.
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