

# ACCOUNTABILITY REPORT 2014

Department of Anesthesia,  
Pain Management  
& Perioperative Medicine

OFFICE OF RESEARCH



DALHOUSIE  
UNIVERSITY

### Anesthesia, Pain Management and Perioperative Medicine Vision and Mission

#### **Vision**

A culture of excellence in anesthesia clinical practice and programs, research and education.

#### **Mission**

To deliver anesthesia services through up-to-date clinical care based on the latest evidence (research) and knowledge (education).

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## EXECUTIVE SUMMARY

The Department of Anesthesia, Pain Management & Perioperative Medicine **2014 Research Accountability Report** communicates the research-related achievements by research staff with respect to established targets and goals stated in the *Research Accountability Framework*. The information in this report highlights research productivity from January to December 2014 as well as data from previous years for comparative and trending purposes.

**In summary, targets that were met or partially met as well as those targets that were not met in 2014 are outlined below.**

### AREAS IN WHICH THE DEPARTMENT **MET ITS TARGETS** IN 2014:

- Eight *new* research projects were initiated in 2014.
- The number and value of grants and industry contract funded research are 71 and \$4.8M, respectively (**Figure 1** and **Table 1**).
- Eighty-five percent of researchers are at the rank of Associate Professor or higher (**Table 3**).
- One national research recognition award was conferred in 2014, which is similar to previous years.
- The proportion of collaborative projects and publications remains high at 85%.
- Eighty-three percent of action items from the 2014 strategic plan were successfully completed (**Table 7**).
- The majority of researchers (94.3%) are satisfied/very satisfied with the services provided by Office of Research.
- The total number of publications reached 138 in 2014 (**Figure 3**) with 93% of the publications peer reviewed.
- There were 76 abstracts accepted in 2014 with 38% of abstracts invited to present.
- Seventy-one percent of researchers supervise learners as the primary supervisor and 50% supervise graduate students.

### AREAS IN WHICH THE DEPARTMENT **PARTIALLY MET ITS TARGETS** IN 2014:

- Seventy-eight percent of researchers are members on research related administrative committees with 57%, 50% and 36% *serving on local, national and international committees, respectively* (**Table 6**). *The target is: 80% of all researchers are members of research related administrative committees: 50% local, 40% national and 10% international.*
- Fifty-seven percent of researchers were invited to present their work at 25 local, 22 national and 14 international invited presentations (**Figure 4**). *The target is to maintain the number of invited presentations from previous years; however, international presentations are notably fewer in 2014.*

AREAS IN WHICH THE DEPARTMENT **DID NOT MET ITS TARGETS** IN 2014:

- Sixty-four percent of researchers reviewed papers in 2014, whereas *the target is: 80% of researchers review journal papers for submission.*
- Eighty-six percent of all researchers presented an abstract in 2014. *The target is: 100% of researchers present an abstract annually.*

## INTRODUCTION

The annual **Research Accountability Report** reports on the department's research activities in relation to predetermined targets 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. Through it, the department attempted to recognize the value of the full scope of scholarly research activity, from engaging in the process of creativity to implementing research projects, communicating the results, and influencing clinical best practice.

The framework describes the need for an accountability framework in the context of our office of research; ties resources devoted to research to the outcomes; identifies the most appropriate indicators of research activity and productivity, our current targets, how to measure the indicators and how to report the results; and outlines an evaluation strategy.

This **Research Accountability Report (2014)** covers the time period from January to December 2014. It is the product of the Framework's *Measurement and Reporting Plan* in which key indicators and targets were identified in 2010 and revised in 2014 for subsequent measurement and reporting. The results of this report will be used in the implementation of the *Evaluation Strategy*. Consistent with the *Results Chain*, this report reflects the activity of research-oriented clinicians or other professional faculty with protected time (time funded by the department) for research.

The following outlines the 2014 research-related results for each predetermined target. In addition it provides a comparison to the data from previous years. This is done in graphical and table formats. Lists of currently held research grants/contracts and peer-reviewed publications are found in *Appendix B* and *C*, respectively.

### Engage in process of creativity

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

**TARGET:** At least 3 new research endeavors/projects annually

**RESULT:** **Eight (8) new research projects are underway**

Eight new research projects began in 2014. Four anesthesia residents, two undergraduate students and two research teams were involved in these projects. Airway management is the main topic of interest in five of the projects, with study designs including clinical trial, observation and retrospective database reviews. There was one project in pain management and the other in operating room efficiency.

The 2014 annual *Anesthesia Research Day* was successfully filled to capacity with research presentations from a variety of learners, including seven residents/fellows, five undergraduate and eight graduate/post doc students.

### Engage in the process of research

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

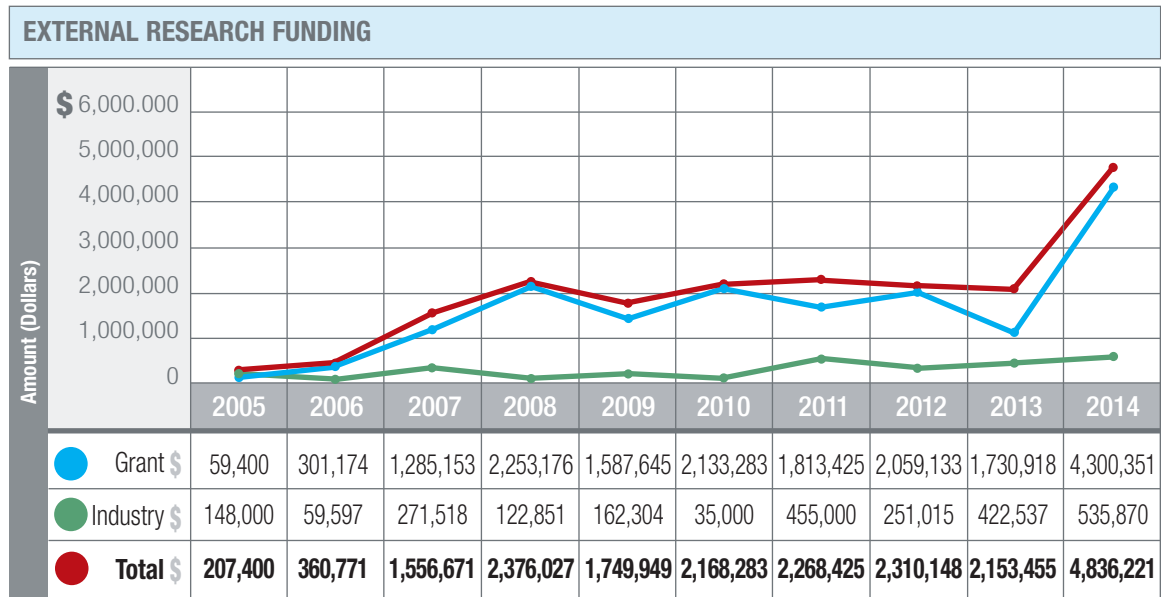
**TARGET:** Total external funding (\$) reflects maintenance or increase from previous year

**RESULT:** **71 externally funded projects totaling over \$4.8M**

Since January 2014, 71 ongoing and new grant/industry funded projects amount to over \$4.8M (**Figure 1** and **Table 1**). National and international funds make up approximately 31% of this total with 69% of funds from regional, institutional and department organizations. The amount of funding from granting agencies more than doubled in 2014 compared to previous years. Major contributors to this success are the availability of protected time (**Table 2**) as well as the support provided by the Office of Research.

Grant funded research underway in the department since January 2014 includes thirteen (13) projects funded by the Canadian Institutes of Health Research (CIHR), accounting for 37% of the total funds (\$1.8M). Eight (8) projects are funded by other national organizations, accounting for 25% (\$1.2M). A list of the grants is found in *Appendix B*.

**FIGURE 1: The amount (\$) in external research grant/industry contract funding received (2005-2014).**



Note: The value of research funding each year includes revenue from all research awards generating funds in that year (for multi-year awards, the revenue is reported in the year it is budgeted). All research projects in which a department researcher is a team member are included. Also, the number of grants received reflects the number of grants and contracts generating funds that year (which may be continuing from earlier years).

**TABLE 1: Number of grants and industry contracts received (2005-2014)**

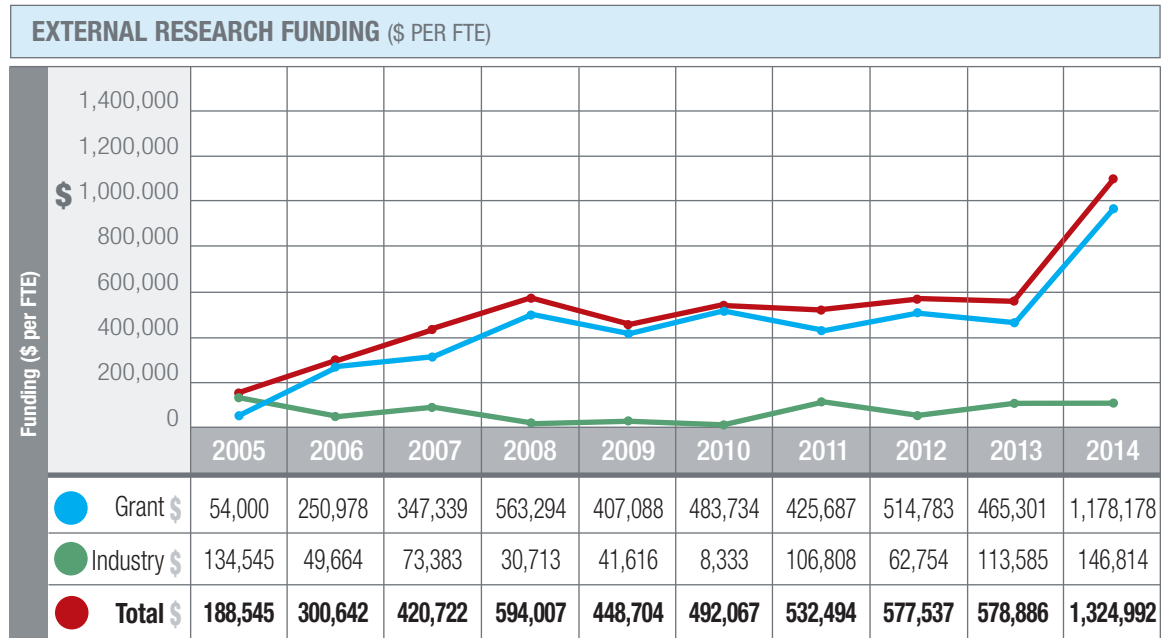
FUNDING GRANTS & INDUSTRY CONTRACTS										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Grant	2	5	10	23	17	24	27	31	29	60
Industry	2	3	4	3	2	1	6	7	9	11
<b>Total</b>	<b>4</b>	<b>8</b>	<b>14</b>	<b>26</b>	<b>19</b>	<b>25</b>	<b>33</b>	<b>38</b>	<b>38</b>	<b>71</b>

**TABLE 2: Protected time (FTE) for research activities (2005-2014)**

FTE PROTECTED TIME										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Protected Time	<b>1.4</b>	<b>1.5</b>	<b>3.8</b>	<b>4.2</b>	<b>4.2</b>	<b>4.2</b>	<b>4.26</b>	<b>4.0</b>	<b>3.7</b>	<b>3.7</b>



**FIGURE 2: Number of grants received relative to FTE (Table 2) of protected time for research**



Given that the FTE has remained relatively stable since 2009, the notable increase in the total dollar amount relative to the FTE indicates that researchers are more successful in funding within the same amount of protected time.

**INDICATOR:** Value (\$) of grants & industry contracts received for **principal investigators**

**TARGET:** External funding dollars obtained as a **principal investigator** reflects maintenance or increase from previous year

**RESULT:** **\$2.6M was obtained by principal investigators**

Ten out of 14 researchers (71%) with protected time were designated as principal investigators for at least one grant or contract totaling over \$2.6M.

## SCHOLARLY CURIOSITY (CONT'D.)

**INDICATOR:** Value (\$) of grants & industry contracts received for **co-investigators**

**TARGET:** External funding obtained as a **co-investigator** reflects maintenance or increase from previous year

**RESULT:** **\$2.2M was obtained by co- investigators**

An additional \$2.2M in external grants and contract funding was obtained by researchers with protected time designated as co-investigators.

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

**TARGET:** 75% of all researchers are associate or higher and 60% of research related promotions are successful.

**RESULT:** **85% of all researchers are associate or higher**

There were three successful promotions in 2014; one to the rank of associate professor and two to the rank of full professor. Eighty-five percent of researchers with protected time are at a rank of associate or professor.

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## SCHOLARLY CURIOSITY (CONT'D.)

**INDICATOR:** Number of recognition awards

**TARGET:** FTE reflects maintenance or increase of *recognition awards* from previous year

**RESULT:** **One (1) recognition award was conferred in 2014**

One National research recognition award was conveyed in 2014, similar to previous years (**Illustration1**).

**ILLUSTRATION 1:** 2014 Canadian Anesthesiologists' Society 2014 Research Recognition Award



Dr. Orlando Hung

**TABLE 4:** Number of recognition awards (2005-2014)

RECOGNITION AWARDS										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Awards	7	6	7	3	7	3	3	2	1	1

**TABLE 5:** Number of recognition awards relative to FTE of protected time for research (2005-2014)

RECOGNITION AWARDS RELATIVE TO FTE										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Awards	5.0	4.0	1.9	0.7	1.7	0.7	0.7	0.45	0.3	0.3

Actively seek collaborative opportunities with interdisciplinary colleagues

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

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

**RESULT:** **85% of all projects and publications are collaborative**

Of 138 publications, 131 have co-authors (95%). Of 71 funded grants and industry contracts, 47 have co-investigators (66%). Therefore, 178 out of 209 projects and publications are collaborative (85%). For collaborative projects and publications, there are 68% and 67% respectively that include other department members.

Members of scientific and organizing committees

**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:** **78% of all researchers are members of research related administrative committees: 57% local, 50% national and 36% international**

**TABLE 6:** Number and percentage of participating researchers in committee work

PARTICIPATING RESEARCHERS		
	Chair/Co-chair	Member
Local	4 (29%)	8 (57%)
National	5 (36%)	7 (50%)
International	2 (14%)	5 (36%)

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

**TARGET:** 80% review journal articles

**RESULT:** **64% of researchers review journal articles**

Nine (9) of 14 researchers were invited to review journal manuscripts (64%).

**Engage in the administrative process**

**INDICATOR:** Engage in planning activities to advance the research mission

**TARGET:** 80% of action items completed from strategic plan each year

**RESULT:** **83% of action items completed from the 2014 strategic plan**

**TABLE 7:** Action items status from the 2014 strategic plan. The strategic plan is reported based on the academic year (September 2014 to August 2015).

STATUS OF ACTIONS			
Status	# Action Items	% Acted Upon	
Completed	7	23%	<b>83%</b>
Ongoing (never completely done)	5	17%	
Progress underway	13	43%	
No progress	5	17%	<b>17%</b>
<b>TOTAL</b>	<b>30</b>		

The Office of Research updated its strategic plan on October 01, 2014. The specific strategic directions are shown in **Appendix D** and the five priority actions are identified below:

1. To integrate research inquiry in everyday experiences through the facilitation of clinical research questions, research communication and skill development.
2. To actively seek support, develop and implement a program for recognizing academic activities.
3. To develop a framework for perioperative outcomes research using Big Data approaches that formalizes leadership and support groups in the facilitation of investigator led perioperative outcomes research projects.
4. To cultivate interest and build capacity in PGME research skills to foster educational programs that are evidence based and attract high-quality learners.
5. Support the establishment of a Dalhousie University Pain Institute and Endowed Chair for Pain.

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**INDICATOR:** Researcher satisfaction with services provided by the Office of Research

**TARGET:** 90% researcher satisfaction rate with services provided by the Office of Research

**RESULT:** **94.3% researchers are satisfied/very satisfied with the services provided by the Office of Research**

Twelve department members completed the 2014 Office of Research Satisfaction Survey. The responses indicated that they were either Satisfied or Very Satisfied with knowledge/skill of staff (100%), communication (100%), leadership/innovation (100%), and strategic planning/organization (100%) categories. There were no unsatisfied or very unsatisfied responses. For an overall satisfaction rating, 50% of the members were satisfied and the other 50% reported they were very satisfied with the services provided by the Office of Research.

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# SCHOLARLY COMMUNICATIONS

## Write and publish

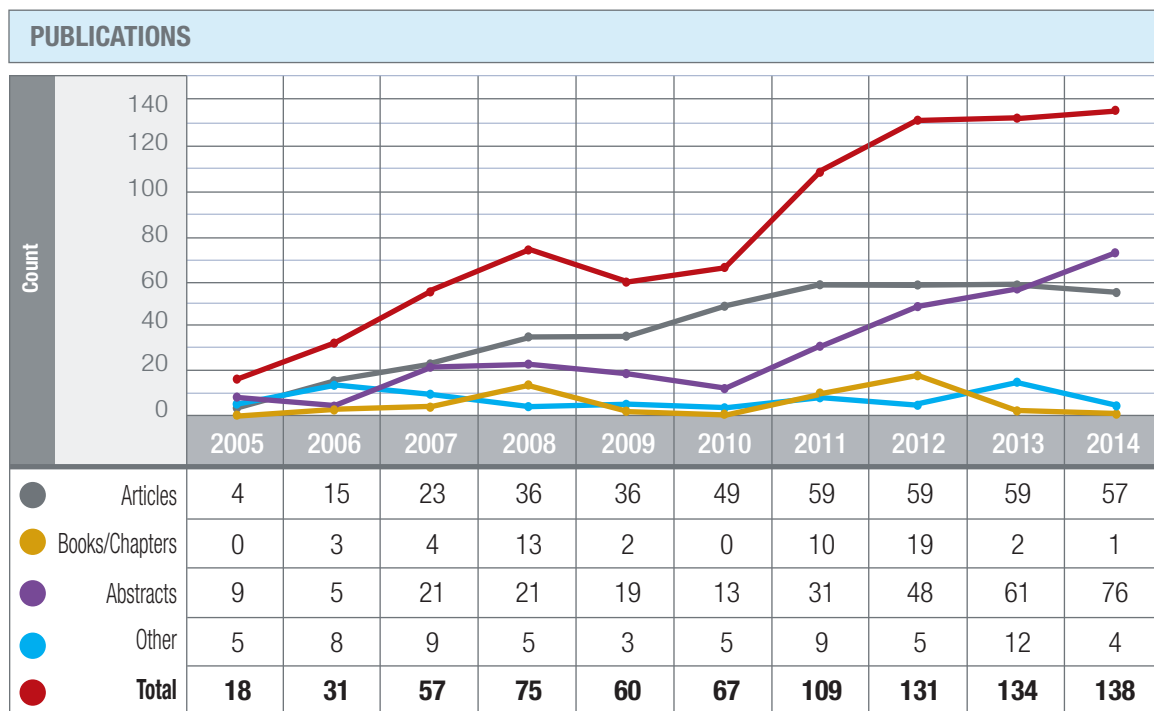
**INDICATOR:** Number of accepted and published publications (peer reviewed & non-peer reviewed)

**TARGET:** Trending of accepted and published peer and non-peer review papers reflects maintenance or increase from previous year

**RESULT:** **138 publications have been submitted and accepted**

Since January 138 publications have been submitted and accepted (**Figure 3**) with 50 peer-reviewed manuscripts published online (**Appendix C**). **Table 8** shows the relative to protected time with respect to number of publications.

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



**TABLE 8: Number of submitted and accepted publications (peer reviewed & non-peer reviewed) relative to FTE of protected time for research**

PUBLICATIONS PER FTE PROTECTED RESEARCH TIME										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Articles	4	13	6	9	9	11	14	13	16	16
Book/Chapters	0	3	1	3	1	0	2	4	1	0
Abstracts	8	4	6	5	5	3	7	11	16	21
Other	5	7	2	1	1	1	2	1	3	1
<b>Total</b>	<b>17</b>	<b>27</b>	<b>15</b>	<b>18</b>	<b>16</b>	<b>15</b>	<b>26</b>	<b>30</b>	<b>36</b>	<b>38</b>

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

**TARGET:** 90% of publications are peer-reviewed

**RESULT:** **93% of the publications are peer reviewed**

Of the peer (57) and non-peer review (4) papers, 93% were peer reviewed in 2014

**INDICATOR:** Number of accepted abstracts

**TARGET:** Trending of accepted abstracts reflects maintenance or increase from previous year

**RESULT:** **76 abstracts were accepted**

The number of accepted scientific abstracts has steadily increased since 2010. In 2014, there were 76 abstracts accepted to present at various scientific conferences.



**Prepare and deliver presentations**

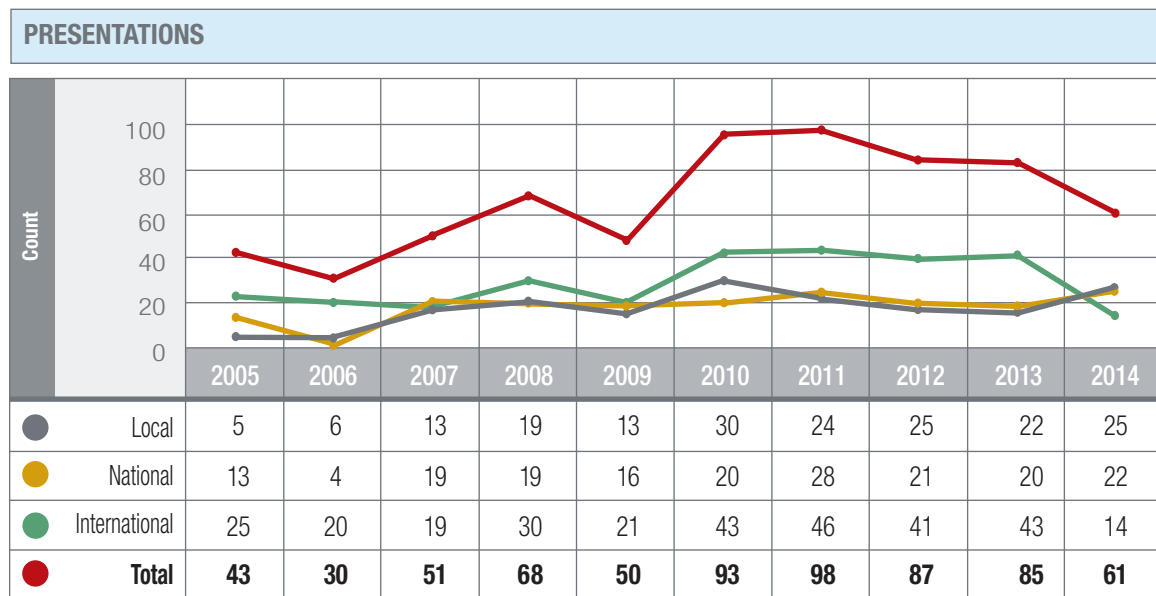
**INDICATOR:** Number of all presentations (local, national, international)

**TARGET:** Trending of presentations reflects maintenance or increase from previous year

**RESULT:** **25 local, 22 national and 14 international invited presentations**

The total number of presentations by researchers is found in **Figure 4** with adjustments relative to protected time for research shown in **Table 9**. While the number of local and national presentations relatively stayed the same, presentations at the International arena has notably decreased.

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



**TABLE 9: Presentations (count) for local, national and international audiences**

NUMBER OF PRESENTATIONS RELATIVE TO FTE PROTECTED TIME FOR RESEARCH										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Local	5	5	4	5	3	7	6	2	6	7
National	12	3	5	5	4	5	7	4	5	6
International	0	17	5	8	5	10	11	5	12	4
<b>Total</b>	<b>17</b>	<b>25</b>	<b>14</b>	<b>18</b>	<b>12</b>	<b>22</b>	<b>23</b>	<b>11</b>	<b>23</b>	<b>17</b>

**INDICATOR:** Number of **invited presentations**

**TARGET:** 50% of all researchers are invited to present (plenary, keynote or symposium)

**RESULT:** **57% of all researchers are invited to present**

Many researchers (57%) were invited to present their work in 2014; 25 local, 22 national and 14 international (**Figure 4**).

**INDICATOR:** Number of abstracts presented annually

**TARGET:** 100% of all researchers have an abstract presented annually

**RESULT:** **86% of all researchers presented an abstract in 2014**

**INDICATOR:** Number of abstract presented as a podium

**TARGET:** 20% of abstracts are invited to present a podium

**RESULT:** **38% of abstracts were invited to present a podium**

Eighty-six percent of all researchers presented an abstract in 2014. There were 76 abstracts accepted in 2014 with 38% of abstracts invited to present as a podium.

Mentoring, Teaching and Supervision

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

**TARGET:** Number of graduate students reflects maintenance or increase

**RESULT:** **50% of researchers are supervising graduate students**

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**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

**RESULT:** **71% of researchers supervise trainees as the primary supervisor**

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## APPENDICES

Appendix A - Protected time for research .....	<b>A1</b>
Appendix B - 2014 Research Projects .....	<b>B1</b>
Appendix C - 2014 Publications .....	<b>C1</b>
Appendix D - 2014-2015 Strategic Plan .....	<b>D1</b>

## APPENDIX A – PROTECTED TIME FOR RESEARCH

### 2014 PROTECTED TIME FOR RESEARCH (NOTE: THE FTES ARE DIRECTLY RELATED ONLY TO ANSI AFP.)

RESEARCHER	PROTECTED TIME
J Chorney	0.17
A. J. Clark	0.20
A. Finley	0.20
O. Hung	0.40
M. Kwapisz	0.05
K. Kwofie	0.20
C. Lehmann	0.60
M. Lynch	0.60
P. MacDougall	0.20
J. McDougall	0.33
A. Milne	0.20
M. Schmidt	0.40
A. Vlatten	0.10
<b>TOTAL PROTECTED TIME</b>	<b>3.65</b>

Individuals with protected time for anesthesia related research who work on national organizations also include **Drs. Richard Hall** (0.1) and **Adam Law** (0.2).

## APPENDIX B – 2014 RESEARCH PROJECTS

NOTE THAT THE BRACKETED DOLLAR AMOUNT IS THE TOTAL VALUE OF THE AWARD WHEREBY ANNUAL AMOUNTS ARE PROVIDED IN FIGURE 1.

### NEW FUNDED PROJECTS IN 2014

1. Chambers C, Campbell-Yeo M, Barwick M, Chorney J, Finley A, Latimer M, McGrath P, Witteman H. (2014-2015). 'It Doesn't Have to Hurt': Extending our Reach to Help Parents of Children [Grant] - NSHRF - \$10,000.
2. Chelation Partners Incorporated, Christian Lehmann, Maria Parquet, David Hoskin, Rusty Ritenour (2014 - 2016). Novel Iron Chelating Excipients (NICE) [Grant] - AIF - \$2,781,915.
3. Chorney J., d'Entremont C., Allen S., Smith I., Bird S., Latimer M., Martin C., Wright S. (2014 - 2015). Identifying ways to improve the perioperative experience for children with Autism Spectrum Disorders [Grant] - IWK - \$3,000.
4. Chorney J, Hong P, Curran J, McGrath P, Ritchie K, (2014 - 2017). Supporting Shared decisions in paediatric otolaryngology: Needs assessment and decision aid development [Grant] –NSHRF-RPP \$159,816.
5. Chorney J, Hong P, Curran J, McGrath P, Ritchie K (2014 - 2017). Supporting Shared decisions in paediatric otolaryngology: Needs assessment and decision aid development [Grant] - CIHR - \$159,816.
6. Clark AJ, Mumford K, George RB, Davis D, Milne D, Langille L, Hammond P, Yazbeck S, Sernyk S (2014 - 2015). The highly opioid tolerant patient - will a new paradigm of care improve outcomes? [Grant] - Translating Research into Care (TRIC) - \$3,000.
7. Curran J, Klassen T, Chorney J, Colwell J, Fitzpatrick E, Jabbour M, MacPhee S, Murphy A, Petrie D (2014 - 2017). Understanding discharge communication in the context of paediatric emergency care in regional and community emergency departments in Nova Scotia [Grant] - NSHRF - \$146,000.
8. Dumbarton T, Lehmann C (2014 - 2015). Tetrahydrobiopterin in the treatment of septic shock [Grant] - Department of Anesthesia, Pain Management and Perioperative Medicine - \$5,000.
9. George RB, Chambers C, MacDougall J, Clark AJ, Harman K (2014). 2014 Pain Research Day-Bringing People Together Grant [Grant] - IWK - \$1,000.
10. Hung OR (2014). Anesthesia procedures and vascular access [Grant] - McGraw-Hill Book Grant (Editor Grant) - \$3,000.
11. Hung O. (2014 - 2015) Intravenous Fluid Administration Monitor " IV Tag". Phase II Early Stage Commercialization Fund, Innovacorp, Nova Scotia (2014 - 2015) - \$44,500 [Industry]
12. Kelly M, Lynch ME (2014 - 2015). Novel formulation for ocular pain [Industry Contract] - InNOVAcorp (Nova Scotia) - \$50,000.
13. Kiberd M, Wright S, Chorney J (2014 - 2015). Aromatherapy in children for the treatment of PONV [In-Kind] - IWK.
14. Latimer MA, Rudderham SE, Hutt-McLeod D, Finley GA, Harman K (2014). Creating a culturally relevant mechanism for Aboriginal children and youth to convey their pain to clinicians [Grant] - Atlantic Aboriginal Health Research Program - \$15,000.
15. Latimer MA, Rudderham S, Finley GA, Harman K, Hutt-MacLeod D, MacKinnon A, Paul K, Perley-Dutcher L (2014 - 2017). Seeing Aboriginal children's pain - Weaving stories, art, and statistics to create ways to reduce the hurt and improve child well-being [Grant - Pending] - CIHR - \$439,183.
16. Lavigne GJ, Lynch ME, Boulanger A, Cooper L, Laliberte J (2014 - 2015). Prevention of opioid analgesic misuse in Canada: pragmatic and innovative strategies? [Grant] - Universite de Montreal - \$50,000.
17. Lehmann C, Fisher N, Zhou J, Szczesniak A, Kelly M, Tugwell B (2014 - 2015). Cannabidiol for prevention of type 1 diabetes – an experimental study on pancreatic inflammation [Grant] - Department of Anesthesia, Pain Management and Perioperative Medicine - \$5,000.
18. Lehmann C (2014 - 2015). Innovative Non-Invasive Point-of-Care Monitoring of Nutritional Status and Critical Health Conditions in Low-Resource Environments [Grant] - Grand Challenges Canada – Rising Stars in Global Health- \$113,000.
19. Lehmann C (2014 - 2015). Innovations in Microcirculatory Sepsis Research - Mechanisms of new anti-inflammatory strategies in the intestinal microcirculation [Grant] - CFI - \$5,000.
20. Lynch ME (2014 - 2015). Testing toxicity and photo-sensitivity of a novel topical agent for treatment of neuropathic pain [Grant] - Dalhousie - \$5,150.
21. Lynch ME (2014 - 2016). Randomized, double blind, placebo controlled trial with open label extension of Delivra joint health cream in the treatment of pain caused by osteoarthritis of the knee [Industry Contract] - LivCorp, Inc - \$300,000.
22. McDougall JJ (2014). Preclinical Assessment of Antibe Formulation in the Control of Osteoarthritic Pain [Industry Contract] - Antibe Therapeutics Inc. - \$10,610.
23. McDougall JJ, Marshall J, Bezuhly M, Legare JF, Lin TJ (2014 - 2019). Restitution Enhancement in Arthritis and Chronic Heart Disease [Grant] - CIHR - \$2,337,154.

## APPENDIX B – 2014 RESEARCH PROJECTS (CONT'D.)

24. Pelland A, George RB (2014 - 2015). Sidestream dark field imaging of the sublingual microcirculation to assess microvascular dysfunction in the preeclamptic patient [Grant] - Department of Anesthesia, Pain Management and Perioperative Medicine - \$5,000.
25. Poole O, Hung OR, Vargo M (2014 - 2015). A comparison of three techniques for cricothyroidotomy in a manikin [Grant] - Dalhousie Department of Anesthesia - \$1,500.
26. Rosen N, George RB, Chorney J, Snelgrove-Clarke E, Pirece M, Andreou P, Binik Y (2014 - 2015). A prospective study of the trajectory and biopsychosocial determinants of postpartum genitopelvic pain [Grant] - NSHRF - \$145,000.
27. Rosen N, George RB, Chorney J, Snelgrove-Clarke E, Pirece M, Andreou P, Binik Y (2014 - 2017). A Prospective Study of the Trajectory and Biopsychosocial Determinants of Postpartum Genito-pelvic Pain [Grant] - CIHR-NSHRF RPP - \$227,364.
28. Schmidt M, Roach D, Wilfart F (2014 - 2015). Neuro-protection using noble gases [Grant] - Brain Repair Centre-Knowledge Translation (BRC-KT) grant, Faculty of Medicine, Dalhousie University - \$30,000.
29. Sproule B, Lynch K, Robeson P, Spitzig D, Ulan S, MacDougall P (2014 - 2015). Developing a Canadian Research Network to Evaluate Prescription Monitoring Programs in Preventing/Reducing the Non-Medical Use of Pharmaceutical Drugs [Grant] - CIHR - \$50,000.
30. Stinson J, Cafazzo J, Campbell F, Chorney J, Clark J, Dick B, Forgeron P, Gordon A, Jibb L, Lalloo C, McGillion M, Montgomery L, Palermo T, Rashiq S, Ruskin D, Simmonds M, Tupper S, Victor C, Ware M. (2014 - 2017). iCanCope: an Integrated Smartphone and Web Self-Management Program for Adolescents and Young Adults with Chronic Pain [Grant] - CIHR - \$383,884.

### NEW SCHOLARLY PROJECTS (UNFUNDED)

1. Law JA, Gu Y, Robert J, Hung O, Milne A, Morris I, MacQuarrie K, Kovacs G (2014 - 2015). Optimal laryngoscopic view to enable Glidescope-assisted tracheal intubation. A randomized clinical trial [Clinical]
2. Arora G, Brousseau P, Milne AD (2014). Determination of the minimum acceptable laryngoscope brightness [Clinical]
3. Brousseau C, Brousseau P, Milne AD (2014 - 2015). A Retrospective Review of Ventilation Settings Used During Laparoscopic Cholecystectomy Surgical Procedures [Clinical]
4. Clark AJ, George RB, Chambers C, McDougall J (2014 - 2015). DaIPAIN: A multidisciplinary approach to clinical care and research [Clinical]
5. Forbes S, Dobson G, Milne AD (2014). Following up the difficult airway: A retrospective study to evaluate patient understanding and awareness after receiving a difficult airway diagnosis [Database]
6. Gilchrist A, Brady J, Goodday R, Milne AD (2014). Effect of orthognathic surgery on airway grade. A retrospective review [Database]
7. Kwofie K, Philip G (2014 - 2015). A retrospective study of primary total knee arthroplasty and multimodal analgesic methods on postoperative opioid requirements and outcome [Clinical]
8. Tan E, Milne A (2014 - 2015). Impact of anesthesia residents on operating room times in a Canadian teaching hospital [Clinical]

### CONTINUING ONGOING FUNDED PROJECTS

1. Birnie KA, Chambers CT, McGrath PJ, Fernandez CV, Chorney J. Catastrophizing and parenting during parent-child interactions about pain and conflict. [Grant] Dalhousie University Department of Psychiatry Research Fund. Aug 2013. (\$10,000)
2. Chorney J (2011 - 2016). Pain in Children at Home Following Major Surgery: New Investigator Award [Grant] - CIHR - \$300,000.
3. Chorney J (2013 - 2014). Augmented reality MRI preparation game for kids [Industry Contract] - Springboard Atlantic Innovation Mobilization Program - \$13,347.
4. Chorney J, Andreou Pantelis, El-Hawary Ron, Finley GA, Howard Jason, McGrath Patrick JA, Valois Teresa (2010 - 2015). Pain at Home in Children following Major Surgery: Physical, Psychological, and Economic Consequences [Grant] - Canadian Institutes of Health Research - \$724,991.
5. Chorney J, Bird S, Bailey K (2013 - 2014). Preparing Parents to be Present at their Children's Anesthesia Induction [Grant] - IWK Health Centre - \$14,992.
6. Chorney J, Curren J, Hong P, McGrath P, Ritchie K (2013 - 2016). Understanding Shared Decisions in Pediatric Surgery [Grant] - NSHRF - \$147,246.

**CONTINUING ONGOING FUNDED PROJECTS (CONT'D)**

- 7.** Chorney J, Bailey K, Schmit P, Taylor B (2013 - 2014). Using a web-based motion tracking game and information pamphlet to prepare children and their parents for scheduled MRI: A Feasibility study [Grant] - IWK Health Centre - \$3,960.
- 8.** Chorney J. Establishment of the Child Health and Perioperative Care Laboratory [Grant] Canadian Foundation for Innovation (CFI). Jan 2012-2016. (\$312,177)
- 9.** Curran J, Chorney J, et al. Closing the loop in pediatric emergency care: A narrative review of best practice for providing discharge instructions to caregivers in the emergency department. [Grant] Canadian Institutes of Health Research (CIHR). Jan 2013. (\$99,339)
- 10.** Clark AJ, Lynch ME (2012 - 2014). National Neuropathic Pain Database - Extension [Grant] - CPS NeP SIG - \$6,000.
- 11.** Curran J, Chorney J, MacPhee S, Murphy A, Plint A, McGrath P. Identifying Essential Content for Discharge Instructions for Caregivers in Pediatric Emergency Care: A Delphi Study [Grant] Jan 2013. (\$14,516)
- 12.** Curran J, Chorney J. (2013 - 2014). Closing the loop in pediatric emergency care: A narrative review of best practice for providing discharge instructions to caregivers in the emergency department [Grant] - Canadian Institutes of Health Research (CIHR) - \$99,339.
- 13.** Curran J, Grimshaw J, McGrath P, Chorney J. (2013 - 2016). Understanding Discharge Instructions for Children and Caregivers in the Transition from Pediatric Emergency Care [Grant] - CIHR-NSHRF Regional Partnership Program Operating Grant - \$435,804.
- 14.** Forgeron P, Chorney J, Dick B, Carlson T. To befriend or not: Naturally developing friendships amongst a group of adolescents with chronic pain. [Grant] University of Ottawa, Faculty of Health Sciences Initiative Grant. Aug 2013. (\$4,085)
- 15.** George RB. Enhancing analgesia and anesthesia for women and high-risk pregnancies. [Grant] Canadian Anesthesiologists' Society. Jul 2012. (\$120,000)
- 16.** George RB, Abdo I, McKeen DM, Coolen J, Lehmann C (2013 - 2014). Maternal Microcirculation & SDF Imaging: A novel assessment of the microcirculation during cesarean delivery with spinal anesthesia and the impact of phenylephrine prophylaxis in preventing spinal anesthesia-induced hypotension [Grant] - IWK Health Centre Category B Grant - \$15,000.
- 17.** Hong P, Chorney J. Development of a Team to Study Decision Aids in Pediatric Otolaryngology [Grant] REDI Awards. Jan 2013. (\$9,952)
- 18.** Hung O (2013 - 2014). Intravenous fluid administration monitor [Industry Contract] - Innovacorp Early Stage Commercialization Fund - \$50,000.
- 19.** Kain ZN, Chorney J, Blount RL (2011 - 2016). Improving pain and anxiety in children undergoing surgery: Changing Healthcare Provider Behavior [Grant] - National Institutes of Health - \$2,730,034.
- 20.** Kwapisz M, Kent B, Mingo H, Poranek A. The use of Fibrinogen Concentrate in High-Risk Cardiac Surgery: A Prospective Double Blind Randomized Controlled Study [Grant] CSL Behring. Aug 2013. (\$453,674)
- 21.** Latimer M, Rudderham S, Finley GA, Inglis S, Hutt-McLeod D (2011 - 2014). Understanding pediatric pain in aboriginal communities: Children's project [Grant] - Nova Scotia Health Research Foundation - \$150,000.
- 22.** Latimer MA, Finley GA, Inglis S, Rudderham SE, Young S (2012 - 2014). Understanding pain in Aboriginal children: moving forward in Central and Eastern Canada [Grant] - CIHR - \$22,369.
- 23.** Lehmann C (2012 - 2014). Iron removal in vivo study (IRIS) [Industry Contract] - Mitacs - \$119,999.
- 24.** Lehmann C (2012 - 2015). Modulation of the immune response after stroke by manipulation of cannabinoid receptor 2 signaling [Grant] - Clinician Scientist Program (CS) - \$19,120.
- 25.** Lehmann C, Zhou J, Kelly Melanie (2013 - 2016). Manipulation of the Endocannabinoid System in Experimental Sepsis [Grant] - Nova Scotia Health Research Foundation - \$147,960.
- 26.** Lehmann C, Zhou J. Modulation of cannabinoid receptor 2 signaling - a new therapeutic approach in CNS injury-induced immune deficiency syndrome (CIDS) [Grant] CDHA Research Fund. Aug 2013. (\$14,881)
- 27.** Lehmann C (2010 - 2014). Innovations in Microcirculatory Sepsis Research - Mechanisms of new anti-inflammatory strategies in the intestinal microcirculation [Grant] - Canadian Foundation of Innovation, Leaders Opportunity Fund - \$416,361.
- 28.** Lehmann, C (2012 - 2014). Iron Removal Study in Vivo Study (IRIS) [Industry Contract] - Chelation Partners - \$39,444.
- 29.** Lynch ME, Clark AJ, Flowerdew G, Moulin D, Toth C. A double blind randomized controlled trial examining the efficacy of methadone in treatment of chronic neuropathic pain [Grant] CIHR NSHRF Dal. Oct 2010. (\$502,633)
- 30.** Lynch ME. Clinical Scholar Program, Matching Funds, Dalhousie Faculty of Medicine [Grant] Dalhousie University. Jan 2012. (\$82,949)
- 31.** Lynch ML, Clark, AJ, et al. Infrastructure Operating Fund (CFI): Canadian Pain Trials Network [Grant] CFI - IOF. Mar 2010. (\$105,580)



### CONTINUING ONGOING FUNDED PROJECTS (CONT'D)

32. MacDougall P, Brousseau P, Milne, A. The Relationship Between Hip and Knee Replacement Surgery and Opioid Prescribing: A COAP Dataset Review [Grant] CDHA. Feb 2013. (\$14,600)
33. McDougall J (2010 - 2014). Host-parasite interactions alter joint inflammation in mouse model systems [Grant] - Canadian Institutes of Health Research (CIHR) - \$424,248.
34. McDougall J (2011 - 2014). Therapeutic potential of lysophosphatidic acid antagonism to control OA pain [Industry Contract] - Canadian Arthritis Network/Eli Lilly & Company Industry Research Programme Grant - \$200,000.
35. McDougall J (2011 - 2016). The relationship between proteases, protease activated receptors and cytokines in mediating osteoarthritis pain [Grant] - Canadian Institutes of Health Research (CIHR) - \$601,280.
36. McDougall J (2012 - 2015). Effect of cannabinoids and opioids in the control of arthritis pain [Grant] - Nova Scotia Health Research Foundation (NSHRF) - \$149,790.
37. McGrath PJ, Craig KD, Finley GA, Grunau RE, Johnston C, Stevens BJ, von Baeyer CL, Chorney J (2009 - 2015). Pain in child health, an innovative, international, trans-disciplinary research training consortium - Phase II [Grant] - CIHR - \$1,950,000.
38. Milne AD, M dEntremont, OR Hung. Determination of the minimum light intensity required for lightwand intubation - a cadaveric study. Jan 2014. (\$2,500).
39. Nantais J, Lehmann C. Methylene Blue Therapy in Experimental Septic Shock [Grant] CDHA Research Fund. Aug 2013. (\$5,000)
40. Schmidt M. Commercialization of CO2 removal device for anesthesia circuits [Grant] Atlantic Canada Opportunities Agency. Jun 2012. (\$1,245,617)
41. Szerb J, M. Kwesi Kwofie. Histological Confirmation of Ultrasound-Guided Needle Placement in Regional Anesthesia Intraplexus Versus Periplexus Approach [Grant] CDHA. Aug 2013. (\$15,000)

### CONTINUING SCHOLARLY PROJECTS (UNFUNDED)

1. Christian Lehmann, Juan Zhou, James Pius (2013 - 2014). Modulation of the immune response after stroke [Clinical]
2. Forbes S, Dobson G, Milne AD (2014). Following up the difficult airway: A retrospective study to evaluate patient understanding and awareness after receiving a difficult airway diagnosis [Database]
3. Foss M, Lynch ME (2013 - 2017). Patient-Controlled Analgesia versus Continuous Opioid Infusion for the Treatment of Pain Caused by Oral Mucositis Following Myeloablative Chemotherapy for Hematopoietic Stem Cell Transplantation: A Retrospective Review [Clinical]
4. Juan Zhou, Christian Lehmann, Lizeth Orozco (2013-2014). Modulation of the immune response after stroke [Clinical]
5. Law JA, Milne A, Morris I, Brousseau P (2013 - present). A retrospective database review of methods used to achieve tracheal intubation in operative patients [Database]
6. Law JA, Morris I, Brousseau P, Milne A (2013 - 2014). The incidence, success rate and complications of awake tracheal intubation in 1554 patients over 12 years: an historical cohort study [Clinical]
7. Maguire E, Chorney J (2013 - 2017). How does perceived parental involvement and actual involvement in decisions concerning ENT surgery for their child contribute to parental decisional conflict? [Clinical]
8. Milne AD, Drapeau D (2010 - present). Design and Development of a Novel Blind Intubating Device [Clinical]
9. Milne AD, Pullela R, Valiant EM (2013 - 2014). Mechanical Strength Characteristics of Plastic Versus Metal Disposable Laryngoscope Blades [Clinical]
10. Pike M, Lynch ME (2013 - 2017). Observational Trial of Qigong as a Complementary Therapy in a Chronic Pain Clinic [Clinical]
11. Schep L, Chorney J (2013 - 2017). Child and parent involvement in decision-making for otolaryngology procedures [Clinical]
12. Schmidt M, Croll R, Wilfart F (2013 - 2014). Zebrafish learning as a model for investigating learning disabilities after exposure to toxic byproducts of anesthesia [Clinical]
13. Schmidt M, Croll R, Wilfart F (2013 - 2014). Zebrafish learning as a model for investigating learning disabilities after repeated anesthesia [Clinical]
14. Schmidt M, Nickerson P, Wilfart F (2013 - 2014). The mouse as model for the investigation of anaesthetics and its by-products on apoptosis and necrosis of the retina [Clinical]
15. Schmidt M, Stoyek M, Croll R, Wilfart F, Smith F (2013 - 2014). The isolated zebrafish heart as a model to investigate the basic mechanisms of cardiac side effects of modern anesthetics [Clinical]
16. Schmidt M, Stoyek M, Wilfart F, Croll R, Smith F (2013 - 2014). A zebrafish model to investigate the cardiac effects of noble gases [Clinical]

**CONTINUING SCHOLARLY PROJECTS (UNFUNDED) (CONT'D)**

- 17.** Schmidt M, Wilfart F, Nickerson P, Christie S (2013 - 2014). Spinal injury in the pig as model for investigating anesthesia strategies and neuro-protective substances [Clinical]
- 18.** Scott J, George RB, Bird S (2013 - 2017). A systematic review in Pediatric Anesthesia (specific topic TBD) [Database]
- 19.** Vargo M, Beauprie I, Chorney J (2013 - 2014). Evaluation of lumbar facet joint steroid injection in clinical practice, a retrospective cohort analysis [Clinical]
- 20.** Wafa K, Lehmann C (2013 - 2017). Cellular physiology of iron in inflammation and infection processes: novel Fe chelator responses in experimental model systems [Clinical]

## Appendix C – 2014 Publications

**Note that this list of publications only includes those *peer-reviewed* articles that are currently *published* and *accessible online* (50).**

1. Abdo I, George RB, Farrag M, Cerny V, Lehmann C. Microcirculation in pregnancy. *Physiol Res*. 2014 Sept 4;63(4):395-408. PubMed PMID: 24702490.
2. Al-Banna N, Pavlovic D, Sharawi N, Bac VH, Jaskulski M, Balzer C, Weber S, Nedeljkov V, Lehmann C. Combination of dehydroepiandrosterone and orthovanadate administration reduces intestinal leukocyte recruitment in models of experimental sepsis. *Microvasc Res*. 2014 Jul 30;95C:82-87. doi: 10.1016/j.mvr.2014.07.010. [Epub ahead of print] PubMed PMID: 25086183.
3. Birnie KA, Chambers CT, Fernandez CV, Forgeron PA, Latimer MA, McGrath PJ, Cummings EA, Finley GA. Hospitalized children continue to report under-treated and preventable pain. *Pain Res Manage* 2014; 19(4): 198-204.
4. Brousseau CA, Dobson G, Milne AD (2014). Airway Management in Patients with OSA and its Effects on Post-Anesthesia Care Unit Length of Stay. *Canadian Journal of Respiratory Therapy*, 50, 23-26.
5. Brousseau CA, Dobson G, Milne AD. A retrospective analysis of airway management in patients with obstructive sleep apnea and its effects on post-anesthesia care unit length of stay. *Canadian Journal of Respiratory Therapy*, 2014; 50 (1):23-26.
6. Cairns BE, Kolta A, Whitney E, Craig K, Rei N, Lam DK, Lynch ME, Sessie B, Lavigne G (2014). The use of opioid analgesics in the management of acute and chronic orofacial pain in Canada: the need for further research. *J Can Dental Assoc*, 80, e49.
7. Chorney, J., Meghan McMurtry, Christine Chambers, Roger Bakeman (2014). Developing and Modifying Behavioral Coding Schemes in Pediatric Psychology: A Practical Guide. *Journal of Pediatric Psychology*. DOI: [10.1093/jpepsy/jsu099](https://doi.org/10.1093/jpepsy/jsu099).
8. Chorney, J., Twycross, A., Mifflin, K., Archibald, K. (2014) Can we improve parents' management of the children's postoperative pain at home? *Pain Research and Management*, July/August, 18, 4, 115–123.
9. Clark AJ, Spanswick CC. Why anesthesiologists need to care about the way chronic pain is managed. *Can J Anesth*, 2014; 61:95-100 (Editorial). PubMed ID: [24198162](https://pubmed.ncbi.nlm.nih.gov/24198162/).
10. Curran, A. J., Murphy, A., Newton, M., Zemek, R., Hartling, L., Plint, A., Chorney, J., MacPhee, S., Campbell, S., Jabbour, M., Boliver, D., Petrie, D., Colwell, R., MacWilliams, K., Nolan, A. (2014) Discharge instructions for caregivers in the context of pediatric emergency care: a narrative synthesis protocol. *Journal of Systematic Reviews*, March 3:26, DOI 10.1186/2046-4053-3-26, URL: <http://www.systematicreviewsjournal.com/content/3/1/26> PMCID: PMC 3995555
11. Devereaux PJ, POISE-2 Investigators [Including George RB, McKeen DM] (2014). Rationale and design of the PeriOperative Schemic Evaluation-2 (POISE-2) trial: an international 2 × 2 factorial randomized controlled trial of acetyl-salicylic acid vs. placebo and clonidine vs. placebo in patients undergoing noncardiac surgery. *American Heart Journal*, 167(6), 804-809. e4. PubMed ID: [24890528](https://pubmed.ncbi.nlm.nih.gov/24890528/).
12. Fitzcharles MA, Ste-Marie PA, Clauw DJ, Jamal S, Karsh J, LeClercq S, McDougall JJ, Shir Y, Shojania K, Walsh Z. Rheumatologists lack confidence in their knowledge of cannabinoids pertaining to the management of rheumatic complaints. *BMC Musculoskelet Disord*. 2014 Jul 30;15:258. doi: 10.1186/1471-2474-15-258. PubMed PMID: 25080153.
13. George RB, McKeen DM, Boyd JC, Porter GA (2014). Pregabalin Confers No Added Benefit to a Non-steroid Anti-inflammatory Drug and Acetaminophen Regimen in Outpatient Breast Cancer Surgery: A Randomized Controlled Trial. *Journal of Anesthesia & Clinical Research*, 5(2), 1-7. DOI: [10.4172/2155-6148.1000383](https://doi.org/10.4172/2155-6148.1000383).
14. George RB, McKeen DM, Andreou P, Habib A (2014). A randomized, placebo-controlled trial of two doses of pregabalin for post-operative analgesia in women undergoing abdominal hysterectomy. *Canadian Journal of Anesthesia*, 61(6), 551-557. PubMed ID: [24668315](https://pubmed.ncbi.nlm.nih.gov/24668315/).
15. George RB, DesRoches J, Abdo I, Lehmann C. Maternal microcirculation and sidestream dark field imaging: A prospective assessment of the association between labour pain and analgesia on the microcirculation of pregnant women. *Clin Hemorheol Microcirc*. 2014 Jun 16. [Epub ahead of print] PubMed PMID: 24934438.
16. Glowacka, M., Rosen, N., Chorney, J., Snelgrove Clarke, E., George, R.B. (2014) Prevalence and Predictors of Genito-Pelvic Pain in Pregnancy and Postpartum: The Prospective Impact of Fear Avoidance. *Journal of Sexual Medicine*, August, DOI: [10.1111/jsm.12675](https://doi.org/10.1111/jsm.12675). PMID: 25124648
17. Hung O (2014). From the Journal archives: Early clinical evaluation of enflurane: the cost of progress. *Canadian Journal of Anesthesia*, 61(3), 269-72.
18. Hung O, Stewart R (2014). Remembering the famous and the forgotten in Medicine. *Anesth Analg*, 119(5), 1005-6. [Editorial].
19. Hung O. Mzungus in Rwanda. *Anesthesiology*, Mar 3, 2014. PubMed ID: [24595114](https://pubmed.ncbi.nlm.nih.gov/24595114/).
20. Jarosch S, Lehmann C. Physical restraint in the ICU - does it prevent device removal? A critical appraisal. *Minerva Anesthesiol*. 02014 Dec 12. [Epub ahead of print] PubMed PMID: 25501845.

21. Krustev E, Reid A, McDougall JJ (2014). Tapping into the endocannabinoid system to ameliorate acute inflammatory flares and associated pain in mouse knee joints. *Arthritis Research & Therapy*, 437-449. PubMed ID: [25260980](#).
22. Latimer M, Finley GA, Rudderham S, Inglis SH, Francis J, Young SA, Hutt-McLeod D. Expression of pain in Mi'kmaq children from one Atlantic Canadian community: A qualitative study. *CMAJ Open* 2014; 2(3): E133-E138 [doi: [10.9778/cmajo.20130086](#)]
23. Latimer M, Simandl D, Finley GA, Rudderham S, Harman K, Young SA, MacLeod E, Hutt-McLeod D, Francis J. Understanding the impact of the pain experience on Aboriginal Children's wellbeing: Viewing through a Two-Eyed Seeing lens. *First Nations Child Family Review* 2014; 9(1): 22-37
24. Lehmann C, Burkovskiy I, Kuethe J, Zhou J, Caldwell C, Kelly ME. Inhibition of the cannabinoid 2 receptor in CNS-injury induced immunodeficiency syndrome. *Medical Hypotheses*, 82(6) 2014; 736-9. PubMed ID: [24702836](#). [doi: [10.1016/j.mehy.2014.03.015](#)].
25. Lehmann C, Sharawi N, Al-Banna N, Corbett N, Kuethe JW, Caldwell CC. Novel approaches to the development of anti-sepsis drugs. *Expert Opin Drug Discov*, 82(6) 2014; 736-9. PubMed ID: [24697209](#).
26. Lehmann C, Zhou J, Schuster L, Goetz F, Wegner A, Cerny V, Pavlovic D, Robertson GS (2014). Effect of Deletion of cIAP2 on Intestinal Microcirculation in Mouse Endotoxemia and Poly-bacterial Sepsis. *Shock*, 41(5), 454-7. PubMed ID: [24667612](#).
27. Linhares MBM, Oliveira NCAC, Doca FNP, Martinez FE, Carlotti APP, Finley GA. Assessment and management of pediatric pain based on the opinions of health professionals. *Psychology and Neuroscience*, 2014; 7(1):43-53.[doi: [10.3922/j.pnsns.2014.1.07](#)].
28. McKeen DM, George RB, Boyd JC, Allen V, Pink A (2014). Transversus abdominis plane block does not improve early or late pain outcomes after cesarean delivery: a randomized controlled trial. *Canadian Journal of Anesthesia*, 61(7), 631-640. PubMed ID: [24764186](#).
29. Milne AD, Brousseau PA, Brousseau CA (2014). Effects of laryngoscope handle light source on the light intensity from disposable laryngoscope blades. *Anaesthesia*, 1331-6. PubMed ID: [25040627](#).
30. Moulin DE, Boulanger A, Clark AJ, Clarke H, Dao T, Finley GA, et al (2014). Pharmacological management of chronic neuropathic pain: Revised consensus statement from the Canadian Pain Society. *Pain Res Manag*, 19(6), 328-35. PubMed ID: [25479151](#).
31. Nantais J, Dumbarton TC, Farah N, Maxan A, Zhou J, Minor S, Lehmann C. Impact of methylene blue in addition to norepinephrine on the intestinal microcirculation in experimental septic shock. *Clin Hemorheol Microcirc*. 2014;58(1):97-105. doi: [10.3233/CH-141874](#). PubMed PMID: 25227191.
32. Papsin Emily, Rebecca Haworth, Jill Chorney, Michael Bezuhyly, Paul Hong (2014). Pediatric otoplasty and informed consent: Do information handouts improve parental risk recall? *International Journal of Pediatric Otorhinolaryngology*, 78(12), 2528-2261. DOI: [10.1016/j.ijporl.2014.10.028](#).
33. Pavlovic D, Taras I, Usichenko, Christian Lehmann (2014). The last bite was deadly – About responsibility in scientific publishing. *Clinical Hemorheology and Microcirculation*. PubMed ID: [24595128](#).
34. Pavlovic D, Usichenko T, Lehmann C. Clash of confidence and responsibility in scientific publishing. *Dalhousie Medical Journal DMJ* 2014,40(2):30-32.
35. Sardinha J, Kelly ME, Zhou J, Lehmann C. Experimental cannabinoid 2 receptor-mediated immune modulation in sepsis. *Mediators Inflamm*. 2014;2014:978678. doi: [10.1155/2014/978678](#). Epub 2014 Apr 3. PubMed PMID: 24803745; PubMed Central PMCID: PMC3997158.
36. Saveland C, Hawker L, Miedema B, MacDougall P. Abuse of family physician by patients seeking controlled substances. *Can Fam Physician*, 2014; 60(2):e131-6. PubMed ID: [24522691](#).
37. Sawynok J, Lynch ME. Qualitative analysis of a controlled trial of qigong for fibromyalgia: advancing understanding of an emerging health practice. *J Altern Complement Med*, 2014;20(8): 606-617.
38. Sawynok J, Lynch ME. Qigong and fibromyalgia: randomized controlled trials and beyond. *Evidence-Based Complementary and Alternative Medicine*, 2014: Article ID 379715 <http://www.hindawi.com/journals/ecam/2014/379715/>
39. Stevens BJ, Yamada J, Estabrooks CA, Stinson J, Campbell F, Scott SD, Cummings G, Finley GA, and the CIHR Team in Children's Pain. Pain in hospitalized children: Effect of a multidimensional knowledge translation strategy on pain process and clinical outcomes. *PAIN*, 2014; 155:60-68. PubMed ID: [24021861](#).
40. Stevens B, Yamada J, Promislow S, Stinson J, Harrison D, Victor JC, CIHR Team in Children's Pain [Including Finley GA]. Implementation of multidimensional knowledge translation strategies to improve procedural pain in hospitalized children. *Implementation Science* 2014; 9: 120
41. Tamburin S, Borg K, Caro XJ, Jann S, Clark AJ, Magrinelli F, Sobue G, Werhagen L, Zanette G, Koike H, Spath PJ, Vincent A, Goebel A. Immunoglobulin G for the treatment of chronic pain. Report of an expert workshop. *Pain Medicine*, 2014; 15(7):1072-82. PubMed ID: [24422915](#). [doi: DOI: [10.1111/pme.12319](#)].

42. Troche SJ, Houlihan ME, Connolly JF, Dick BD, McGrath PJ, Finley GA, Stroink G. The effect of pain in involuntary and voluntary capture of attention. *Eur J Pain* 2014 Jul 23. [doi: 10.1002/ejp.553 – epub before print]
43. Twycross AM, Williams AM, Finley GA. Surgeons' aims and pain assessment strategies when managing paediatric postoperative pain: A qualitative study. *J Child Health Care* 2014 [doi: 10.1186/2051-5960-1-64 – <http://chc.sagepub.com/content/early/2014/04/09/1367493514527022>]
44. Vargo M, Tan E, Hung O, Dobson G, Lehmann C. Unanticipated expanding neck mass under general anesthesia. *Can J Anesth*, 2014; 61(7):678-9. PubMed ID: [24740311](#).
45. von Baeyer CL, Stevens BJ, Chambers CT, Craig KD, Finley GA, Grunau RE, Johnston CC, Pillai Riddell R, Stinson JN, Dol J, Campbell-Yeo M, McGrath PJ. Training highly qualified health research personnel: The Pain in Child Health consortium. *Pain Res Manage* 2014; 19(5): 267-74
46. Wafa K, Herrmann A, Kuhnert T, Wegner A, Gründling M, Pavlovic D, Lehmann C. Short time impact of different hydroxyethyl starch solutions on the mesenteric microcirculation in experimental sepsis in rats. *Microvasc Res.* 2014 Aug 5;95C:88-93. doi: 10.1016/j.mvr.2014.07.012. [Epub ahead of print] PubMed PMID: 25107457.
47. Wright KD, Stewart SH, Finley GA, Raazi M. A sequential examination of parent-child interactions at anesthetic induction. *J Clin Psychol Med Settings* 2014; 21(4): 374-385
48. Zaphiratos V, McKeen DM, Macaulay B, George RB (2014). Persistent paralysis after spinal anesthesia for cesarean delivery. *Journal of Clinical Anesthesia*, 27(1), 68-72. [Case Report] Epub 2014 Nov 26. PubMed ID: [25433726](#), doi: 10.1016/j.jclinane.2014.08.003.
49. Zhang J, Lamb A, Hung O, Hung C, Hung D (2014). Blind nasal intubation - teaching a dying art. *Can J Anesth*, 60(11), 1089-1118.
50. Zhou J, Katrin Zimmermann, Thomas Krieg, Marieke Soltow, Dragan Pavlovic, Vladimir Cerny, Lehmann C. Adenosine receptor activation improves microcirculation in experimental intestinal ischemia/reperfusion. *Clin Hemorheol Microcirc*, 2014. PubMed ID: [24889778](#).

## Appendix D – 2014-15 Strategic Directions

DIRECTION 1	DIRECTION 2	DIRECTION 3
Foster a culture of research in the department	Establish perioperative anesthesia outcomes research using Big Data approaches	Advance capacity in postgraduate medical education research
▼	▼	▼
OBJECTIVES	OBJECTIVES	OBJECTIVES
Faculty, learners and administration staff participate in research	Infrastructure that supports collaboration in big data perioperative outcomes research, patient safety and quality improvement	Educational research expertise and skills increase contributing to impactful and relevant projects and programs of research
▼	▼	▼
Major Initiatives	Major Initiatives	Major Initiatives
<ol style="list-style-type: none"> <li>1. Provide opportunities for faculty and staff to engage in collaborative research projects</li> <li>.....</li> <li>2. Proactively seek support, develop and implement a potential program for recognizing academic activities</li> <li>.....</li> <li>3. Develop the infrastructure that engages new members to become involved in research</li> </ol>	<ol style="list-style-type: none"> <li>1. Create an infrastructure that supports big data research projects</li> <li>.....</li> <li>2. Foster and strengthen research partnerships for sustainable relationships</li> <li>.....</li> <li>3. Foster Innovative research programs and partnerships that are strong and numerous</li> </ol>	<ol style="list-style-type: none"> <li>1. Cultivate PGME research champions that pursue development of research projects and programs</li> <li>.....</li> <li>2. Build PGME research skill set that fosters collaboration among Education and Research Offices</li> </ol>





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Perioperative Medicine