

# INTERDEPARTMENTAL DIVISION OF CRITICAL CARE

Department of Medicine, Surgery, Anaesthesia and Paediatrics



## 2013 Annual Report

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## MESSAGE FROM THE DIVISION DIRECTOR

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**Laurent Brochard, MD**

**D**ear Members of the Interdepartmental Division of Critical Care Medicine,  
I am pleased and proud to present the annual report for January 1 – December 31, 2013, for the Division.

As you all know, I arrived at the end of 2013 to take over the responsibility of Director of this prestigious Interdepartmental Division, a position which Dr. Arthur Slutsky assumed for more than ten years. I am really grateful to Art who accepted to stay as a member of the Executive Committee, because he did so much for the Division. His exceptional international stature has also been important for the local and international recognition of the Division. In the name of all members, I want to wholeheartedly thank Art for his work for the Division and look forward continuing to work with him.

The Division is highly successful and presents an impressive annual report. This represents the outstanding work and effort of all members of the Division, and it is an honor for me to present it. This report provides a summary of the academic and professional achievements of our Faculty. The different sites also present a detailed work-up of their own activities.

Research is extremely successful. This year's report is characterized by a substantial increase in the number of annual publications, more than ever, associated with an increased value of the impact factor compared to the last years. We highly value innovation, and our ultimate goal in research is to have a very significant impact on the science of Critical Care, and ultimately on patient's management. Congratulations to the Site Directors, Drs. Peter Laussen, Andrew Baker, Brian Cuthbertson and Niall Ferguson for leading such a successful research program.

Quality improvement programs and research in education are becoming more and more important in the Division and these aspects now take an important part in our research agenda.

Special thanks also and congratulations to Dr. Niall Ferguson, appointed as Head of Critical Care for UHN/MSH after an international search this year 2013.

Our education program is of the highest quality and we are always proud to congratulate our new colleagues, who successfully completed their training program and graduated in Critical Care. The teaching program is innovative, diverse and up-to-date. The Resident's day is a great example where education and research are combined within this program. Our Royal College residency program has successfully passed accreditation with a lot of positive appreciations. This is a very important goal for the Division and I want to congratulate those who made it happen. We are really grateful to Drs. Damon Scales, our Program Director and Simon Abrahamson, our Education Director for the outstanding work produced. Since several years, our international fellows follow almost the same educational track, and 2014 will be an important step in this regard. Together with a new Royal College residency program Director, we will launch an international fellowship program for Critical Care at the University of Toronto and recruit a Director as well.

The Canadian Critical Care Forum is a major annual event for the Division and is becoming year after year one of the best international Critical Care meetings. Held in November this year, it was a great success and represented a fantastic opportunity to meet the best world experts and participate in highly interactive sessions. I want to thank the organizing committee as well as all the members of the Division who contributed by their time, lectures, posters or all kinds of participation.

Several city-wide events are working really well and represent outstanding opportunities to learn and spend great time together, such as the monthly Visiting Professor events, and the Clinical Research in Progress sessions organized by Dr. Gordon Rubinfeld and Ms. Meredith Malloy. The Clinical Physiology rounds, initiated by Dr. Ewan Goligher, are also becoming a very attractive event for the members of the Division and beyond. A special thanks for the organization of these events, including to Louisa Matela, our new administrative assistant for the Division.

I have now the enjoyable task of leading this Division in the next years. This looks easy and challenging at the same time. Easy because of the highly successful achievements of the Division, and challenging almost for the same reason! The year 2014 will offer an important occasion to examine our current status through the strategic plan, and for deciding on a common vision for our future. Our Division has some unique features, gathering professionals from all departments, from the adult and pediatric worlds. All academic acute hospitals and research centers work together within the same University. The main force of our Division is our members, and I have no doubt that a very exciting time for the Division is coming.

Thank you.

Laurent Brochard, MD

Division Director, Interdepartmental Division of Critical Care Medicine

Department of Medicine, University of Toronto

## **MEMBERS OF THE EXECUTIVE COMMITTEE**

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### **Chair**

Dr. Laurent Brochard, St. Michael's Hospital

### **Department Heads**

Dr. Andrew Baker, St. Michael's Hospital

Dr. Peter Laussen, The Hospital for Sick Children

Dr. Niall Ferguson, University Health Network

Dr. Brian Cuthbertson, Sunnybrook Hospital

### **Members**

Dr. Arthur Slutsky, St. Michael's Hospital, Vice President of Research and Ex-chair

Dr. Damon Scales, Sunnybrook Hospital, Program Director Residency Training Program

Dr. Simon Abrahamson, St. Michael's Hospital, Education Director

Dr. John Marshall, St. Michael's Hospital, Research Director

Dr. Gordon Rubinfeld, Sunnybrook Hospital, Chief, Trauma, Emergency and Critical Care

Dr. Brian Kavanagh, The Hospital for Sick Children, Research Chair

Dr. Afrothite Kotsakis, The Hospital for Sick Children, Program Director

Dr. Christopher Parshuram, The Hospital for Sick Children, Paediatric Representative

## University of Toronto Residency Training Program

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Damon Scales, MD, PhD, FRCPC

The University of Toronto Adult Critical Care Medicine Residency Training Program continues to lead the country in producing the highest quality intensivists and leaders in Critical Care Medicine.

We congratulate last year's graduating class: Dr. Kali Barrett, Dr. Mohammed Bawazeer, Dr. Andrew Beckett, Dr. Preeti Dhar, Dr. Brooks Fallis, Dr. Keren Mandelzweig, Dr. Elliott Owen, Dr. Ian Randall, and Dr. Shankar Sivananthan. We look forward to following their continued career development and success.

We would also like to welcome those that joined our program in July 2014. We remain very fortunate in being able to attract some of the brightest candidates to our program, and we welcome Dr. Edmond Chau, Dr. Michael Kim, Dr. Andrew Kuhl, Dr. Jonathan Marhong, Dr. Ingrid Morgan, Dr. Marcello Schmidt, Dr. Kevin Shore, and Dr. Michael Tylee.

The residency program continues to offer novel educational opportunities to our trainees, thanks in large part to the innovation and dedication of the Program's Education Director, Dr. Simon Abrahamson. During the past academic year, we once again had a simulation series (Dr. Simon Abrahamson), National ACES course (Dr. Simon Abrahamson), bronchoscopy course (Dr. Simon Abrahamson), leadership course (Drs. Brooks Fallis and Simon Abrahamson), communication workshop (Dr. James Downar), and ethics series (Dr. Neil Lazar). Drs. Simon Abrahamson and Alberto Goffi provided an ultrasound and echocardiography course, and Dr. Eddy Fan organized the UofT Critical Care Journal Club series. Dr. Shelly Dev again coordinated and developed the annual in-training exam to help us assess the progress of our residents. We are very grateful to Meredith Malloy for her dedication and skill in overseeing the administrative aspects of the Residency Program and to Bernadette Slingerland for her expert coordination of the academic half-day program.

The recipients of the annual teaching awards were selected by the critical care residents to acknowledge outstanding faculty in the IDCCM. Dr. Simon Abrahamson once again received the John T. Granton Award for Outstanding Contributions to Teaching and Education (city-wide). The site winners for excellence in teaching were Dr. Michael Christian (Mount Sinai), Dr. Jan Friedrich (St. Michael's), Dr. Cameron Guest (Sunnybrook), Dr. Eddy Fan (Toronto General), Dr. Jeff Singh (Toronto Western), and Dr. Edgar Hockmann (UofT-affiliated community teaching hospitals, Toronto East General).

The Visiting Professor series, organized by Dr. Gordon Rubinfeld, continues to be a tremendous success by exposing our trainees to international leaders in critical care. The Clinical Research in Progress sessions also continue to be very well attended, and have been providing our residents with support and feedback for improving their scholarly projects. Finally, the Annual Residents' Day was again a major achievement, and featured Dr. Keith Walley as the Keynote Speaker. An impressive 50 abstracts were presented, and 9 of these were selected based on merit as oral presentations.

This was another outstanding year for the Residency Program. During the coming year, we will continue to improve our curriculum and continue our transition towards delivering competency-based medical education. We will be further enhancing our evaluation system, and improving the structure of the research component of the core residency program. Most importantly, we will continue to build on our strong reputation for training leaders in Critical Care Medicine.

## Critical Care Canada Forum (CCCF) 2013

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Niall Ferguson, MD, MSc, FRCPC

Critical Care Canada Forum (CCCF) is a 3-day conference organized by the Interdepartmental Division of Critical Care Medicine, which focuses on topics that are relevant to the individuals involved in the care of critically ill patients, wherever the patients are located. Internationally recognized, the Critical Care Canada Forum focuses on leading-edge science through informative and interactive sessions, dynamic speakers and numerous exhibitions. The CCCF is a place where doctors, nurses and respiratory therapists can collaborate on shared knowledge across disciplines, departments and institutions.

This year, Critical Care Canada Forum (CCCF) was held on November 9-12, continuing this year in its usual location at the Sheraton Centre Hotel & Convention Centre. The conference proper was preceded by several pre-congress courses, including the popular Residents' Day (co-sponsored by the Canadian Critical Care Society) and workshops on extra-corporeal life support as well as ultrasound in the ICU.

This year's conference was attended by over 1000 participants and featured 175 presentations covering many diverse topics including mechanical ventilation, sedation and analgesia strategies, and systems for improving quality and safety. As usual we had presentations of a number of important randomized trials –including studies on albumin in sepsis and septic shock, resident staffing, and treatment of thirst in the ICU.

In addition to the strong scientific programme, social aspects of the conference are also highly rated, including the Reception at the Top of the Sheraton. CCCF also has a number of affiliated meetings before and during conference period, including the Canadian Critical Care Society, the Canadian Critical Care Trials Group, and the Canadian Intensive Care Foundation.

The organizing committee for Critical Care Canada Forum consists of:

Brian Kavanagh (Chair, Organizing Committee); Niall Ferguson (Chair, Scientific Programme); Shelly Dev; Claudia Dos Santos; Rob Fowler; Stephen Lapinsky; John Marshall; Damon Scales; and Art Slutsky. The conference in 2013 was a huge success, and planning is already underway for the upcoming year October 29-November 1, 2014. More details are available at [www.criticalcarecanada.com](http://www.criticalcarecanada.com).

*The Critical Care Canada Forum is where Canada's intensivists put the latest science into practice.*



## Department of Critical Care Medicine, St. Michael's Hospital

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Andrew Baker, MD, FRCPC

The Department of Critical Care at St. Michael's Hospital continued to strive for success in all fields of activity actively pursued by its staff. With endeavors in the areas of education, research, and clinical activity, the successes of the Department's members have been recognized through the honours and awards they have received in the past year.

The St. Michael's Hospital Department of Critical Care Medicine welcomes Drs. Laurent Brochard and Sandro Rizoli as new members of the Department's faculty. More importantly, Dr. Brochard is the newly appointed Chair of Interdepartmental Critical Care Medicine at the University of Toronto and Dr. Rizoli was appointed the Chair in Trauma Research at St. Michael's Hospital.

Awards and honours received by physicians in the Department of Critical Care in the past year include:

Dr. Simon Abrahamson was presented with another Best CCM Fellow Teaching Award from St. Michael's Hospital. Dr. Andrew Baker received a Merit Award from the Department of Anesthesia, University of Toronto. In addition, Dr. Baker also received the 2013 Research Recognition Award from the Canadian Anesthesiologist's Society. Dr. Karen Burns received a research award for her study on "Weaning critically ill patients from mechanical ventilation". Dr. Claudia dos Santos was awarded the Best Poster Presentation at the Young Investigators Forum – CIHR. Dr. Chris Hayes received the Harkness Fellowship in Health Care Policy and Practice from the Commonwealth Fund. Dr. Patricia Houston was awarded the FitzGerald Academy Friends of the Academy Award, from the Faculty of Medicine at the University of Toronto and Jeffrey Lozon Leadership Award from St. Michael's. Dr. John Laffey received Translational Grant Award and Merit Award from the Department of Anesthesia, University of Toronto. Furthermore, Dr. John Marshall received the Jameel Ali Award for Continuing Medical Education from St. Michael's Hospital. Dr. Sandro Rizoli was presented with the RESCU Scholarship for his work as a graduate supervisor of his MSc candidate Precilla Veigas. Finally, Dr. Arthur Slutsky was awarded with entry into the Engineering Alumni Hall of Distinction from the Faculty of Applied Science and Engineering at the University of Toronto.

In education, Dr. Natalie Wong and Dr. Simon Abrahamson continue with their roles as the leaders of the Residency and Fellowship programs, respectively.

In research, the staff of the Department of Critical Care continued with their dedication to furthering knowledge in their various fields of expertise by publishing 146 articles in peer-reviewed journals in the past year. Some of this research was made possible by a total of 25 research grants awarded to physicians in the department. Special consideration should be



given to Dr. Warren Lee, whose grant award application, "Influenza and acute lung injury: priming, platelets and permeability" was ranked #1 by the CIHR Respiratory Panel. Dr. David Mazer received one of the largest grants in the CIHR grant cycle for his a 4 ½ year study for "Transfusion requirements in cardiac surgery III". Peer-reviewed grants were received by – Drs. Andrew Baker, Karen Burns, Claudia dos Santos, Chris Hayes, David Klein, John Laffey, Warren Lee, John Marshall, David Mazer, Natalie Wong, and Haibo Zhang.

Department faculty members have also actively participated in the presentation of their research findings not only locally, but on the national and international level as well. There were a total of 49 local, 18 national, and 118 international presentations by staff in the Department of Critical Care in the 2013.

## Department of Critical Care Medicine, The Hospital for Sick Children

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**Peter Laussen, MD, BS, FCICM**

**B**oth the Paediatric and Cardiac Intensive Care Divisions continue to be extremely busy with over 2,000 admissions for the past academic year. Outcomes remain excellent and comparable to any benchmark for mortality and quality. The quality and safety initiatives within the department continue to be amplified and successful. The rate of hospital acquired infection in both intensive care units is below the CDC benchmark, and with prolonged periods of time between infections (days between infection is used as a quality process indicator). In addition, other metrics including the frequency of cardiac arrest, inadvertent extubation and readmission rates are also tracked as quality metrics. A “Time-Out” checklist and team huddle was introduced, and has been effectively used across both Units prior to procedures. We are currently rolling out a standardized handover form, as well as continuing to monitor closely safety around medication delivery and specimen integrity. Over the last academic year we initiated a Nitric Oxide Stewardship program, setting indications for initiation of iNO based on physiologic criteria, established appropriate continuous variables to monitor the effect of nitric oxide, and reinforced the early weaning protocols. This stewardship program has been very effective with the number of hours of nitric oxide use decreased by 50% compared to the previous academic year, representing savings of nearly \$250,000. This has been a multidisciplinary approach to reduced practice variability, and at the same time we capture data so that we can modify our indications and management in an iterative process. The nitric oxide stewardship program was applied across all intensive care units (including the Neonatal Intensive Care Unit at SickKids) and we are using it as a springboard for other stewardship programs.

We were pleased to appoint two new staff over the past academic year. Dr. Corrine Balit completed training in pharmacology and critical care in Sydney, Australia and a Fellowship in Critical Care at SickKids and joined as Associate Faculty in October 2013. Dr. Gail Annich is currently the Director of the Paediatric Intensive Care Unit at C.S. Mott Children’s Hospital in Ann Arbor, Michigan and will be joining the faculty in the DCCM in July 2014, with responsibilities related to Quality, Safety and Resuscitation Programs. We have applied for additional AFP positions and are waiting to hear from the Ministry of Health.

The education mission has continued under the leadership of Drs. Afrothite Kotsakis and Briseida Mema. We continue to train Fellows from across the world and plan to continue our close relationship with trainees through our Alumni Association. Dr. Ben Sivarajan received the highest teaching score for faculty given by our Fellows over the last academic year. We also would like to acknowledge the presentation by the College of Physicians of Surgeons of Ontario of a prestigious Council Award honoring Dr. Anne-Marie Guerguerian.

Clinical research within the department continues to be active, led by Dr. Jamie Hutchison. Dr. Brian Kavanagh received CIHR funding for five years to investigate “Ventilator Induced Lung Injury: Linking Gene Activation, Physiology and Outcome”. Dr. Christopher Parshuram received CIHR funding for \$90,000 to investigate “Clinical Trial of Bedside PEWS with New Situational Awareness Tool and Remote Educational Module” as part of his work related to early warning systems. Dr. Laussen has applied for a CFI grant to develop an integrated hospital information network (CIA-KIDS). He has also applied to the Patient Centered Outcomes Research Institute (PCORI) as principal investigator at SickKids for a multi-institutional grant to develop a platform for data sharing and patient centered outcomes. Dr. Jamie Hutchison has submitted a proposal for a Brain Canada Platform Support Grant (PSG) to develop a national biobank and database for patients with traumatic brain injury. Dr. Anne-Marie Guerguerian has submitted a CIHR grant application for “Quantifying Brain Injury on Computed Tomography in Hospitalized Children: A Prospective Trial”.

The department continues to have a national and international impact with all staff speaking at national and international meetings. Dr. Peter Cox and Dr. Peter Laussen have been appointed as the Scientific Co-Chair and International Co-Chair respectively for the World Congress in Paediatric Critical Care to be held in Toronto in 2016.

## Department of Critical Care Medicine, University Health Network

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Niall Ferguson, MD, MSc, FRCPC

**T**he Critical Care programme at University Health Network and Mount Sinai Hospital is a complex structure involving the provision of intensive care across 4 physically separate geographic sites and 2 separate hospital organizations. We have over 20 intensivists working in our three Level-3 medical-surgical ICUs (our MSICU group), and also count on the involvement of our colleagues in the Peter Munk Cardiac Centre who provide care for patients in the Cardio-Vascular ICU (CVICU) and Coronary ICU (CICU) at Toronto General Hospital.

### Personnel

Following an international search Dr. Niall Ferguson was appointed as Head of Critical Care for UHN/MSH. He had served as interim director of critical care for previously. The leadership team for Critical Care at UHN/MSH remained otherwise unchanged in 2013. Drs. Neil Lazar, Jeff Singh, and Stephen Lapinsky serving as Site Directors for Toronto General, Toronto Western, and Mount Sinai, respectively. Our research leads are Drs. Margaret Herridge (UHN) and Geeta Mehta (MSH). Dr. Andrew Steel serves as the Director of our International Fellowship Programme.

### Research

This was another excellent year for our research group. Our grant and publications records were strong (see individual reports). We participated in numerous studies – some investigator-led from within our group, some investigator-initiated from other CCCTG collaborators, and some from industry.

### Education/Innovation

The International Fellowship Programme at UHN/MSH, under Dr. Andrew Steel's direction, continues to flourish, despite positions for 7 fellows per year we are fortunate to receive many more strong applications than we can accommodate. In addition we continue to evolve our resident education programme at UHN/MSH, including Intensive Care University – a primer on essentials of critical care for new residents beginning their rotation. Other areas of quality improvement include a focus on reducing CLI and VAP, and new quality initiatives targeting delirium and also early mobility.

## Department of Critical Care Medicine, Sunnybrook Hospital

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Brian Cuthbertson, MD, ChB, FRCA

The leadership team for Critical Care Medicine at Sunnybrook Health Sciences Centre remained unchanged in 2013. Dr. Brian Cuthbertson is the Chief of Critical Care Medicine, while Dr. Gordon Rubenfeld continues to serve as Chief of the Trauma, Emergency and Critical Care Program. Dr. Damon Scales remained the Program Director of the University of Toronto Adult Critical Medicine Training Program. Drs. Shelly Dev and Cameron Guest lead the education programme as our Residency Director and Co-Directors of the International Fellowship Program. Dr. Maude St-Onge was recruited as a Clinical Associate to our team.

### Research

In research the department enjoyed a number of notable academic accomplishments. Brian Cuthbertson was the senior author on the TRAC-MAN trial in JAMA and the OSCAR trial on high-frequency oscillatory ventilation in the NEJM while continuing the first phases of the SuDDICU research program evaluating selective decontamination of the digestive tract and the METS (Measurement of Exercise Tolerance before Surgery) Study, both funded by CIHR. He was also funded by CIHR for his work with Shannon Goddard in early rehabilitation in the ICU (the ICARuS study). Gordon Rubenfeld was awarded a Physicians' Services Inc. Foundation Health Research Grant for his collaborative work with Elizabeth Wilcox (UHN) on COGNITIVE outcomes and WELLness in survivors of critical illness (COGWELL).

Andre Amaral continues his focus on quality improvement with publications on patient "hand-offs" and sedation practices. Lorraine Tremblay is the Principal Investigator of the Implementation & Assessment of a Novel Multidisciplinary e-Discharge Summary to Improve Efficiency, Satisfaction, and Safety of Transfer of Care for Complex Patients. Damon Scales was an inaugural recipient of the Physicians' Services Incorporated Fellowship Award in Translational Medicine (2012-2015), the scientific officer for the CIHR Health Services Research Panel, principal investigator of the CIHR-funded ICE-PACS Randomized Controlled Trial and Premature Termination of Resuscitation in Survivors of Cardiac Arrest (PremaTOR) study, in addition to authoring 14 peer-reviewed publications. Neill Adhikari is a consultant to the World Health Organization Global Influenza Program critical care training courses, lecturing in Indonesia and Vietnam in addition to authoring 16 peer-reviewed publications. Rob Fowler completed a Commonwealth Fund Harkness Fellowship and began a Heart and Stroke Foundation Mid-Career Clinician Scientist award (2013-2017), initiating a research program focused on end-of-life care and funded by CIHR, TVN Network Center of Excellence, and the University of Toronto. Martin Chapman is the project lead for the Ontario Neurotrauma

Foundation-funded Knowledge Translation for Severe Traumatic Brain Injury (sTBI) Across Ontario and the Academic Health Sciences Centres Alternate Funding Plan Innovation Fund Transforming the Care Of Patients with Severe Traumatic Brain Injury (sTBI) In Toronto projects. Taz Sinuff authored numerous peer-reviewed publications on advance care planning, rationing in the ICU and quality improvement initiatives.

The Visiting Professorship Program organized by Dr. Gordon Rubinfeld and Meredith Malloy continues to be tremendously successful in bringing 9 international experts in Critical Care to Sunnybrook and the city-wide Interdepartmental Division of Critical Care. The Clinical Research in Progress sessions continue to provide a supportive environment where investigators can bring research projects for critical evaluation and discussion. This past year we had 16 presenters which included an assortment of both city-wide staff and fellows.

The Critical Care Research Department, lead by our Research Manager, Nicole Marinoff, RN continues to support the IDCCM with their participation in industry and academic trials. Several studies have completed enrollment and are currently under review and pending publication. In 2013, the department received 9 new Research Ethic Board approvals in addition to the 21 that remain open.

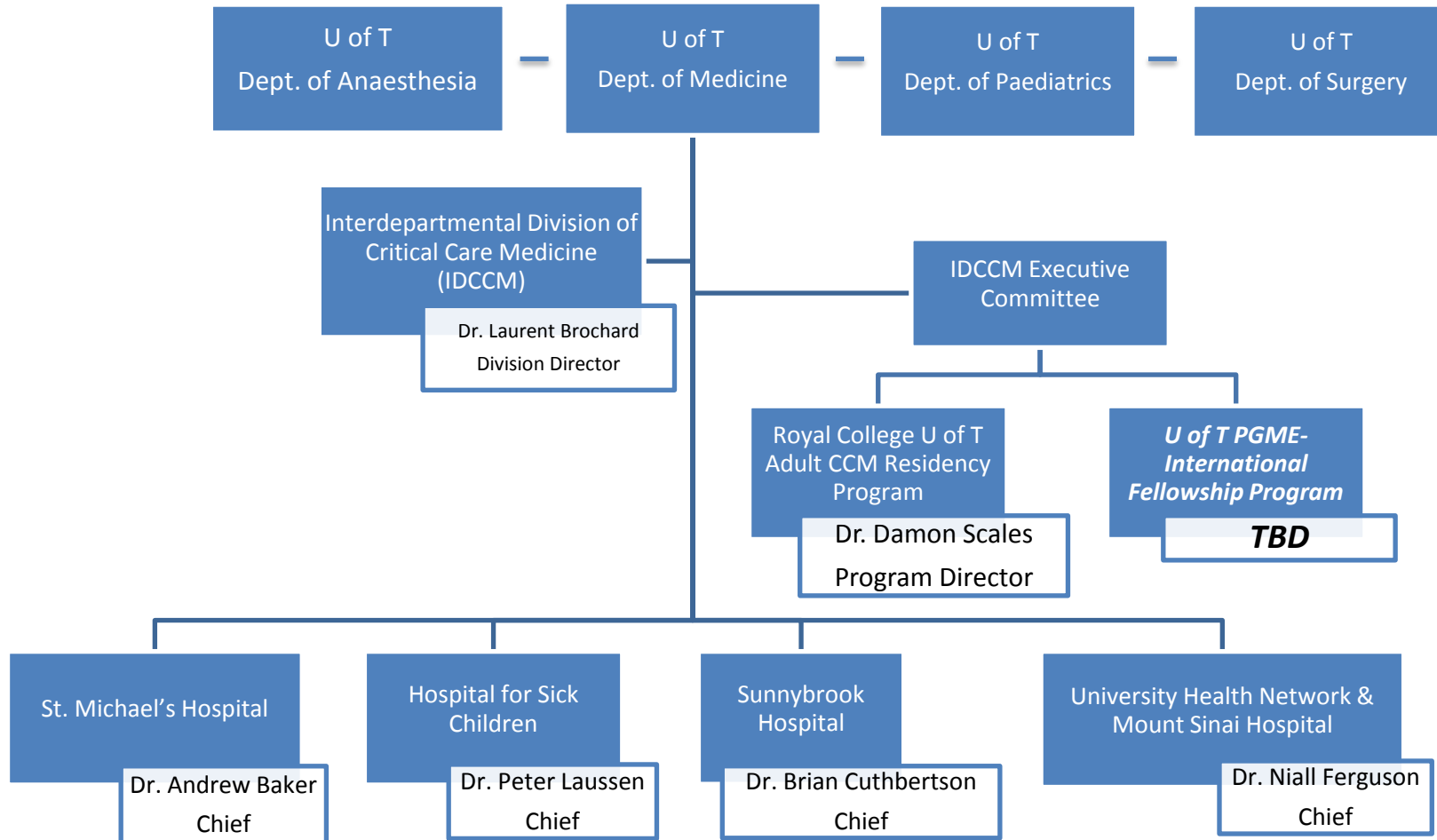
### **Education and Quality Improvement**

We pride ourselves on our high quality clinical teaching and in the 2013-2014 academic years the Department has continued to receive high scores for teaching assessments from both resident and fellowship training attachments.

We are also continuing to develop simulation teaching in technical skills based competencies with increased success. Dr. Shelly Dev continues to create the very popular educational video series around correct hand hygiene practices for Sunnybrook Health Sciences Centre. Her collaboration with colleagues in the Department of Medicine to develop a video series for educators to learn about giving effective feedback to trainees has been very successful.

In Quality Improvement, the Department continues to collect data on key quality indicators reflecting our performance. A Process of Care Database was developed and validated, which monitors the quality of care provided in the ICU for these select quality indicators. The results are published internally on-line on a quarterly basis. Led by Dr. Eddy Fan and Dr Gordon Rubinfeld and in collaboration with other academic ICUs a common database (iCORE) for ventilated patients was developed, and we will continue to measure and publish performance metrics with this new database. We have initiated activities to improve compliance with lung protective ventilation, early rehabilitation and to decrease blood work. We continue to present projects and share ideas in a biannual multi-professional quality meeting across all of critical care central with encouraging feedback. Dr. Andre Amaral continues to work on hand over and clinical communication as quality improvement ventures.

# ORGANIZATION CHART





# 2013 Impact Factor Publication Analysis

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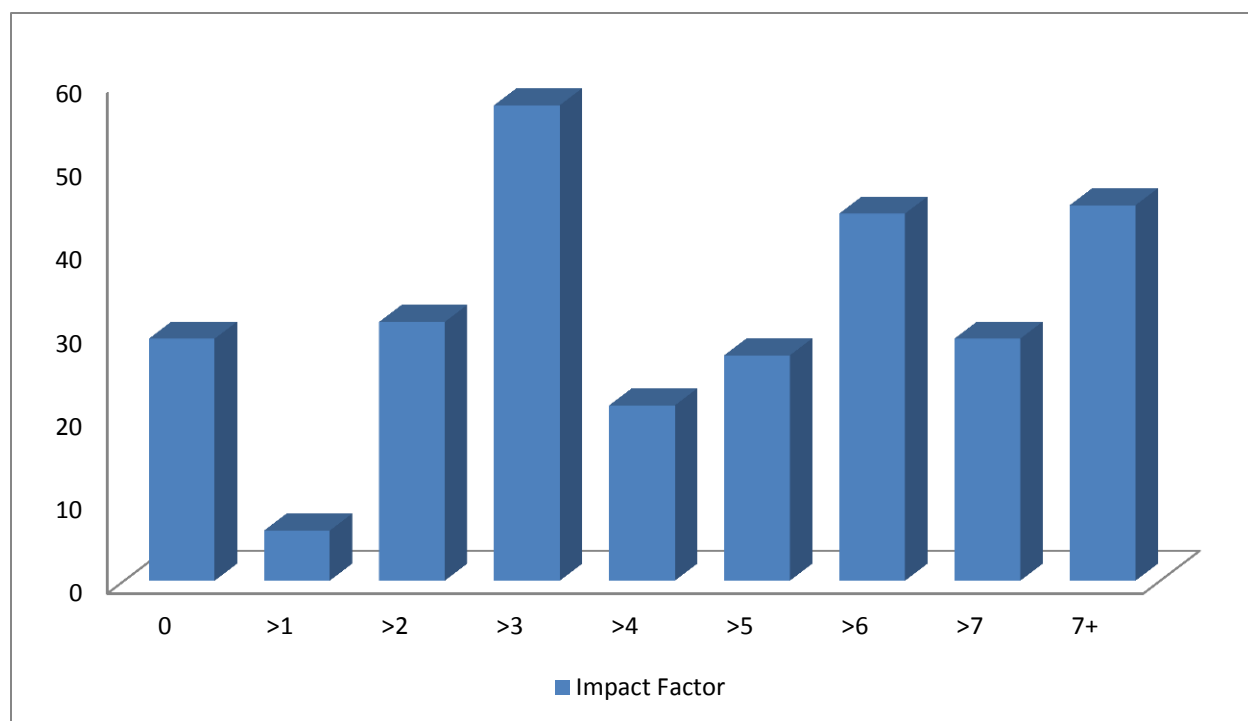
Number of publications: 289

Number of publications with impact factor: 260

Mean impact factor: 6.69

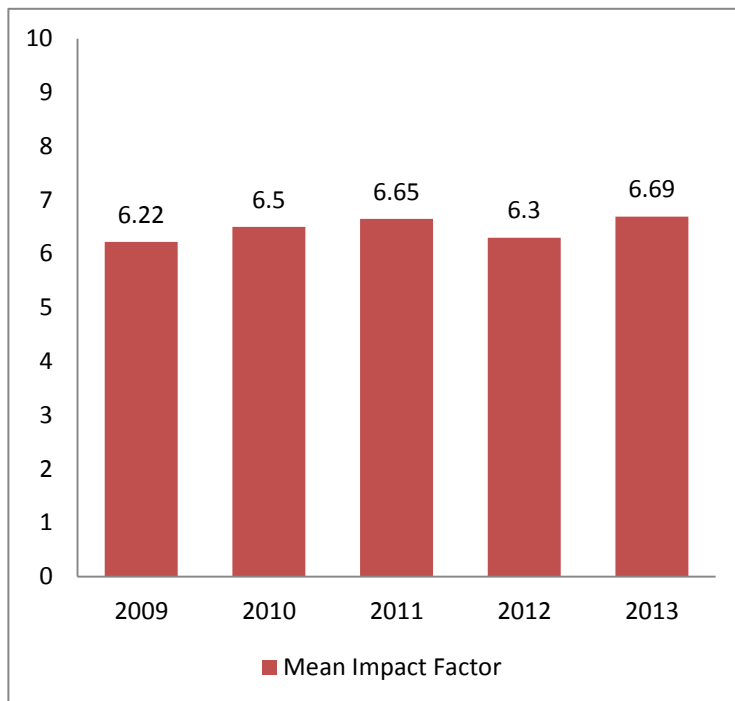
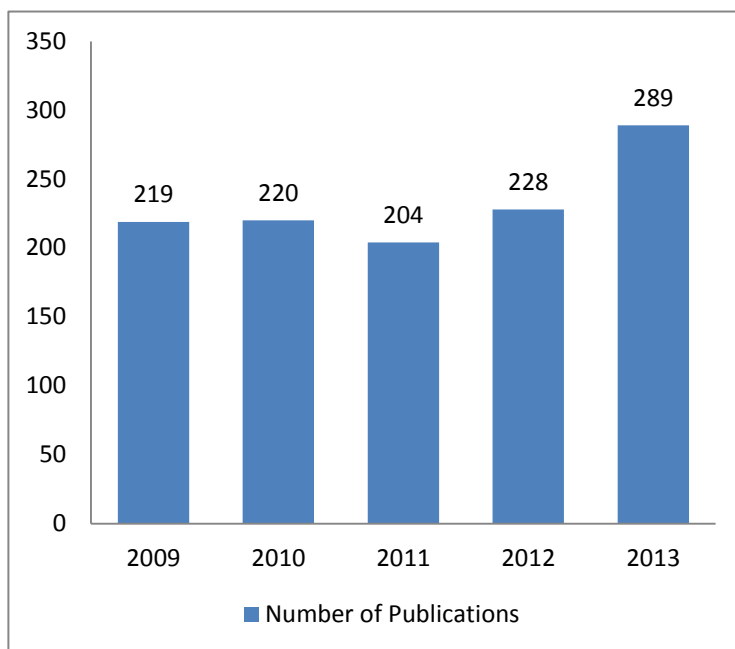
Median impact factor: 4.71

Percentage of publications with impact factor greater than 7: 15.6%



# 5 Year Impact Factor Publication Analysis

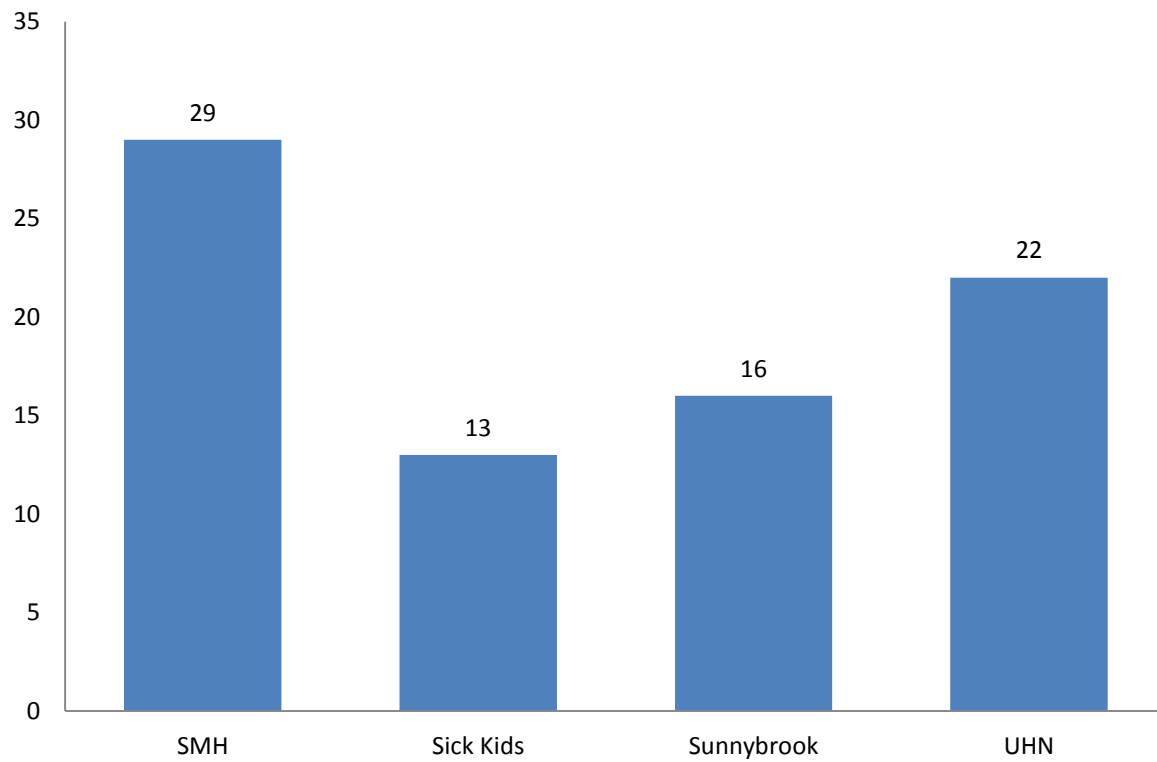
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# Overall Interdepartmental Summary

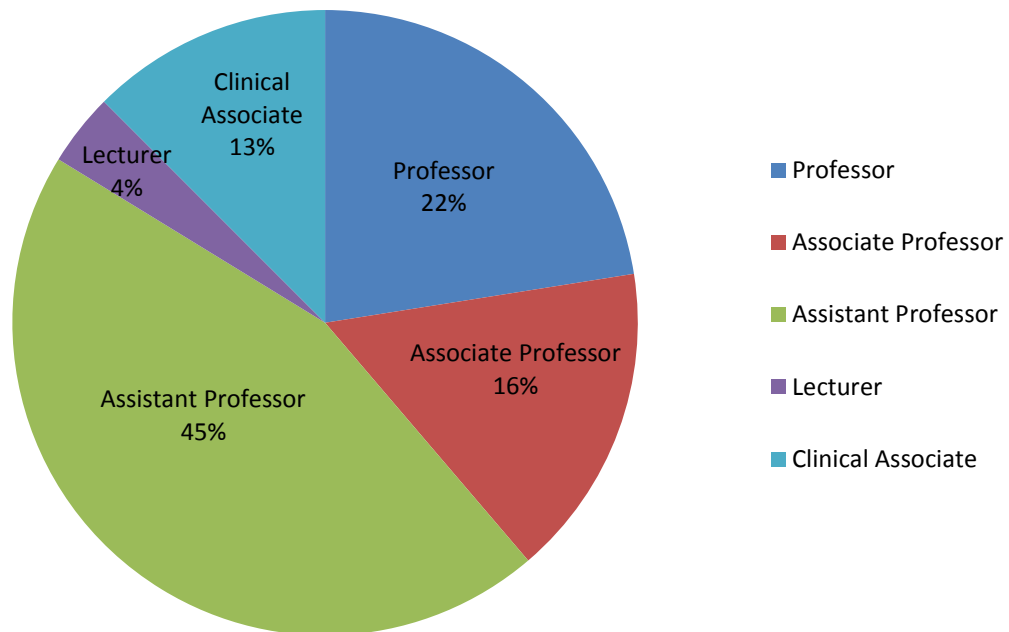
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Our faculty consists of 80 members.



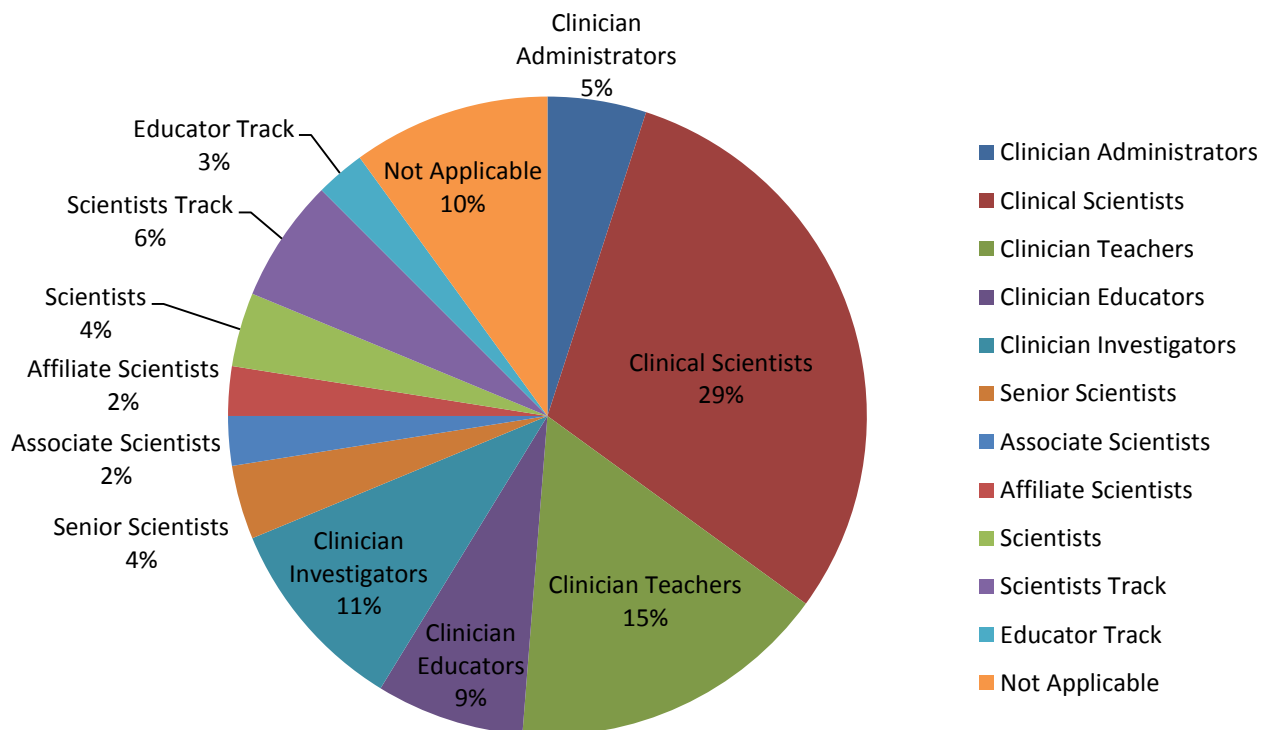
## University Rank Full-Time Faculty

Professor	18
Associate Professor	13
Assistant Professor	36
Lecturer	3
Clinical Associate	10



## Research Job Description Faculty

Clinician Administrator	4
Clinical Scientist	23
Clinician Teacher	12
Clinician Educator	7
Clinician Investigator	9
Senior Scientist	3
Associate Scientist	2
Affiliate Scientist	2
Scientist	3
Scientists Track	5
Educator Track	2
Not Applicable	8



# APPENDICES

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# Appendix I: Faculty List

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## St. Michael's Hospital

Name	University Rank	Research Rank
Abrahamson, Simon	Associate Professor	Clinician Educator
Ahmed, Najma	Associate Professor	Clinician Educator
Brochard, Laurent	Professor	Clinician Scientist
Baker, Andrew	Professor	Clinician Scientist
Burns, Karen	Assistant Professor	Clinician Scientist
Chen, Robert	Assistant Professor	Clinician Teacher
Darrah, William	Assistant Professor	Clinician Teacher
Dos Santos, Claudia	Assistant Professor	Clinician Scientist
Friedrich, Jan	Assistant Professor	Clinician Scientist
Gray, Sara	Assistant Professor	Clinician Teacher
Hall, David	Assistant Professor	Clinician Teacher
Hayes, Chris	Assistant Professor	Clinician Teacher
Houston, Patricia	Professor	Clinician Administrator
Kataoka, Mark	Assistant Professor	Clinician Teacher
Klein, David	Assistant Professor	Clinician Scientist
Laffey, John	Professor	Clinician Scientist
Lawless, Bernard	Assistant Professor	Clinician Teacher
Lee, Warren	Assistant Professor	Clinician Scientist



Levene, Richard	Assistant Professor	Clinician Teacher
Marshall, John	Professor	Clinician Scientist
Mazer, David	Professor	Clinician Scientist
Pronovost, Antoine	Assistant Professor	Clinician Teacher
Rigamonti, Andrea	Assistant Professor	Clinician Scientist
Rizoli, Sandro	Professor	Clinician Scientist
Sinderby, Christer	Assistant Professor	Clinician Scientist
Slutsky, Arthur	Professor	Clinician Scientist
Tousignant, Claude	Assistant Professor	Clinician Scientist
Wong, Natalie	Assistant Professor	Clinician Teacher
Zhang, Haibo	Professor	Clinician Scientist

## The Hospital for Sick Children

<b>Name</b>	<b>University Rank</b>	<b>Research Rank</b>
Cox, Peter	Professor	Clinician Administrator
Floh, Alejandro	Assistant Professor	-
Guerguerian, Anne-Marie	Assistant Professor	Clinician Scientist
Hutchison, Jamie	Professor	Clinician Scientist
Humpl, Tilman	Associate Professor	Clinician Investigator
Kavanagh, Brian	Professor	Clinician Scientist
Kotsakis, Afrothite	Assistant Professor	Clinician Educator
Laussen, Peter	Professor	Clinician Administrator
Mema, Briseida	Assistant Professor	Clinician Educator
Mohseni-Bod, Hadi	Assistant Professor	Clinician Educator
Parshuram, Christopher	Associate Professor	Clinician Scientist
Schwartz, Steven	Associate Professor	Clinician Investigator
Sivarajan, Ben	Assistant Professor	Clinician Investigator

## Sunnybrook Hospital

<b>Name</b>	<b>University Rank</b>	<b>Research Rank</b>
Adhikari, Neill	Lecturer	Associate Scientist
Amaral, Andre	Assistant Professor	Associate Scientist
Chapman, Martin	Assistant Professor	Affiliate Scientist
Cuthbertson, Brian	Professor	Senior Scientist
Dev, Shelly	Lecturer	-
Fowler, Rob	Associate Professor	Senior Scientist
Goddard, Shannon	Clinical Associate	-
Guest, Cameron	Associate Professor	-
McCredie, Victoria	Clinical Associate	-
Piquette, Dominique	Assistant Professor	Affiliate Scientist
Rubinfeld, Gordon	Professor	Senior Scientist
Scales, Damon	Associate Professor	Scientist
Sinuff, Tasnim	Assistant Professor	Scientist
Smith, Terry	Assistant Professor	-
St-Onge, Maude	Clinical Associate	-
Tremblay, Lorraine	Assistant Professor	-

## University Health Network & Mount Sinai Hospital

*(Toronto General Hospital & Toronto Western Hospital)*

<b>Name</b>	<b>University Rank</b>	<b>Research Rank</b>
Christian, Michael	Assistant Professor	Clinician Investigator
Demajo, Wilf	Assistant Professor	Clinician Teacher
Detsky, Michael	Clinical Associate	Scientist Track
Downar, James	Assistant Professor	Clinician Teacher
Fan, Eddy	Assistant Professor	Clinician Scientist
Ferguson, Niall	Associate Professor	Clinician Scientist
Goffi, Alberto	Clinical Associate	Educator Track
Golan, Eyal	Clinical Associate	Scientist Track
Goligher, Ewan	Clinical Associate	Scientist Track
Granton, John	Professor	Clinician Investigator
Hawryluck, Laura	Associate Professor	Clinician Educator
Herridge, Margaret	Professor	Clinician Scientist
Lapinsky, Stephen	Professor	Clinician Investigator
Lazar, Neil	Associate Professor	Clinician Administrator
Lee, Christie	Clinical Associate	Educator Track
Man, Jeffrey	Clinical Associate	Scientist Track
Mehta, Sangeeta	Associate Professor	Clinician Investigator
Munshi, Laveena	Clinical Associate	Scientist Track
Singh, Jeff	Assistant Professor	Clinician Investigator
Steel, Andrew	Assistant Professor	Clinician Educator
Stewart, Tom	Professor	Clinician Investigator
Wilcox, Elizabeth	Clinical Associate	Scientist Track

## Appendix II: Summary Activity Reports

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***Dr. Simon Abrahamson (St. Michael's Hospital)***

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**Invited Lecture and Presentation**

**National**

2013 Mar      Abrahamson's - Ultrasound curriculum in Toronto. National Critical Care US planning group meeting , Kelowna, BC

**Honours and Awards**

2013            Clinical Excellence Award, Department of Anesthesia, University of Toronto

**Peer-Reviewed Publication**

**Journal Article**

Imrie K1, Frank JR, **Ahmed N**, Gorman L, Harris KA. A new era for resident duty hours in surgery calls for greater emphasis on resident wellness. Can J Surg. 2013 Oct;56(5):295-6.

Zevin B, Bonrath E, **Ahmed N**, Aggarwal R, Dedy NJ, Grantcharov TP; ATLAS group. The Development, Feasibility, Validity and Reliability of a Scale for Objective Assessment of Operative Performance in Laparoscopic Gastric Bypass Surgery. J Am Coll Surg. 2013 May;216(5):955-965.e8; quiz 1029-31, 1033. doi: 10.1016/j.jamcollsurg.2013.01.003. Epub 2013 Mar 13.

**Invited Lectures and Presentations**

**International**

2013 Oct **Speaker.** Research Productivity and General Surgery Residency - Impact of Graduate Degree Training. American College of Surgeons. Washington, DC, United States. Presenter(s): Ahmed Kayssi. (Trainee Presentation).

**Provincial**

2013 Apr **Speaker.** Persuasive Writing Seminar to teach Advocacy Skills in Post Education. Canadian Conference on Medical Education. Ottawa, Canada. Presenter(s): Abner E, Ahmed N, Gold W, Scott F, Aber A.

**National**

2013 Sep 28 **Speaker.** Towards a pan-Canadian consensus on resident duty hours:final report and recommendations. International Congress on Residency Education. Calgary, Alberta, Canada. Presenter(s): Imrie K, Frank J, Ahmed N, Tepper J. Presentation and panel discussion.

**Local**

2013 Apr 20 **Speaker.** What is new with splenic trauma. University of Toronto CPD, Toronto, Ontario.



**Peer-Reviewed Fundings**

- 2013 - 2015      **Principal Investigator.** Does a key anesthetic contribute to cognitive deficits after traumatic brain injury? Department of Anesthesia, University of Toronto. Orser B, Park E, Wang D, Lecker I, AJ Baker. \$50,000/year x 2 years CAD. [Grant]
- 2013 - 2015      **Co-investigator.** (IARS) Mentored Research Award, International Anesthesia Research Society. Do anesthetics exacerbate memory deficits following traumatic brain injury? Avramescu S, Orser B, Baker AJ, Lecker I, Wang D. \$150,000 USD. [Grant]
- 2013 - 2014      **Principal investigator.** Development of Biomarker Profile and Rapid Screening Tool in mTBI due to Subclinical Primary Blast. Canadian Institutes of Health Research. \$99,927 CAD. [Grant]
- 2013 Jul      **Co-investigator.** Resuscitation in Motion 2014: Building networks of excellence to advance resuscitation science research, development and practice. Canadian Institutes of Health Research. Morrison L, Baker AJ, Dainty KN, Rotstein OD. \$24,600 CAD. [Grants]
- 2012-2015      **Principal investigator.** Clinical Evaluation of Blood Biomarkers for Discrimination of Posttraumatic Stress Disorder and Traumatic Brain Injury Comorbidity. National Defence Research and Development Canada. \$255,000 CAD.[Grant]
- 2012 Dec - 2013 Mar      **Principal investigator.** Proof of concept investigations into preconditioning against blast-induced neurotrauma. Canadian Institute for Military and Veteran Health Research. \$29,279.76 CAD.[Grant]

## Peer-Reviewed Publications

### Journal Articles

- Junger WG1, Rhind SG, Rizoli SB, Cuschieri J, **Baker AJ**, Shek PN, Hoyt DB, Bulger EM. Prehospital hypertonic saline resuscitation attenuates the activation and promotes apoptosis of neutrophils in patients with severe traumatic brain injury. *Shock*. 2013 Nov;40(5):366-74.
- Di Battista AP, Rhind SG, **Baker AJ**. Application of blood-based biomarkers in human mild traumatic brain injury. *Front Neurol*. 2013 May 1;4:44.
- Garavaglia M, Mak T, Cusimano MD, Rigamonti A, Crescini C, McCredie V, Romachin A, **Baker AJ**, Hare GMT. Body mass index as a risk factor for increased serum lactate during craniotomy. *Minerva Anestesiol*. 2013 Oct;79(10):1132-9.
- Lo, BW, Macdonald RL, **Baker AJ**, Levine MA. Clinical outcome prediction in aneurismal subarachnoid hemorrhage using bayesian neural networks with fuzzy logic inferences. *Comput Math Methods Med*. 2013;2013:904860. doi: 10.1155/2013/904860.
- Park E, Eisen R, Kinio A, **Baker AJ**. Electrophysiological white matter dysfunction and association with neurobehavioral deficits following low-level primary blast trauma. *Neurobiol Dis*. 2013 Apr;52:150-9.
- Hu T, W. Beattie WS, Mazer D, Leong-Poi H, Fuji H, Wilson DF, Tsui AKY, Liu E, Muhammad M, **Baker AJ**, Hare GMT. Treatment with a highly selective  $\beta 1$  antagonist causes dose-dependent impairment of cerebral perfusion after hemodilution in rats. *Anesth Analg*. 2013 Mar;116(3):649-62.
- Tsai JP, **Baker AJ**. Influenza – associated neurological complications. *Neurocrit Care*. 2013 Feb;18(1):118-30.

### Invited Lectures and Presentations

#### National

- 2013 Nov 10 **Speaker**. Where are We Now? Critical Care Canada Forum, Toronto, Ontario
- 2013 Nov 10 **Speaker**. Approach to Coma. Critical Care Canada Forum, Toronto, Ontario.
- 2013 Nov 10 **Speaker**. Why Mechanisms of Injury Matter? Critical Care Canada Forum, Toronto, Ontario.
- 2013 Nov 1 **Speaker**. ICU and Critical Care Management, Management Traumatic Brain & Spinal Cord Injuries. Toronto, Ontario.
- 2013 Jun 6 **Speaker**. Neurological Critical Care, 7th Annual Canadian Critical Care Review, Mississauga, Ontario.

2013 Sept 23 **Speaker.** Brain Resuscitation, Foundations in Resuscitation Science Research, Toronto, Ontario.

#### **Local**

2013 Apr 11 **Speaker.** Traumatic Brain Injury – it's deeper than you think. Popular Science Lectures. St. Michael's Hospital. Toronto, Ontario.

2013 Jan 23 **Speaker.** End of Life and Intensive Care, The Osgoode Certificate in Clinical Risk, Negligence and Claims Management in Health Care, Toronto, Ontario.

#### **Honours and Awards**

2013 - 2015 Merit Award. Department of Anesthesia, University of Toronto. Endothelial progenitor cells in mild traumatic brain injury: biomarker and mechanisms in recovery. \$40,000 CDN/year x 2 years.

2013 June 2013 Research Recognition Award. Canadian Anesthesiologists's Society. Toronto, Ontario.

### **Peer-Reviewed Fundings**

2013 Oct - 2016 Sep **Co-Investigator**. The Importance of Spontaneous Breathing Efforts in Mechanically Ventilated Patients with Acute Respiratory Distress Syndrome. CIHR. Operating Grant. PI: Fan, Eddy. Collaborator(s): **Brochard L**, Ferguson N, Rubenfeld G, Scales D, Slutsky A, Smith O. 213,508 CAD. [Grants]

2011 - 2013 Research project on PAV+. Covidien. 30,000 EUR. [Industrial Grants]

### **Peer-Reviewed Publications**

#### **Journal Articles**

Cordioli RL, Garelli V, Lyazidi A, Suppan L, Savary D, **Brochard L**, Richard JC.

[Cardiopulmonary resuscitation: risks and benefits of ventilation]. Rev Med Suisse. 2013 Dec 11;9(410):2318-23. **Coauthor or Collaborator**.

Richard JC, Lyazidi A, Akoumianaki E, Mortaza S, Cordioli RL, Lefebvre JC, Rey N, Piquilloud L, Sferrazza Papa GF, Mercat A, **Brochard L**. Potentially harmful effects of inspiratory synchronization during pressure preset ventilation. Intensive Care Med. 2013 Nov 1;39(11):2003-10. Erratum in Intensive Care Med. 2013 Dec;39(12):2241. Sferrazza-Papa, G F [corrected to Sferrazza Papa, G F]. **Coauthor or Collaborator**.

Diehl JL, Coolen N, Faisy C, Osman D, Prat G, Sebbane M, Nieszkowska A, Gervais C, Richard JC, Richecoeur J, **Brochard L**, Mercat A, Guérot E, Borgel D. Growth-arrest-specific 6 (GAS6) protein in ARDS patients: determination of plasma levels and influence of PEEP setting. Respir Care. 2013 Nov 1;58(11):1886-91. **Coauthor or Collaborator**.

Maggiore SM, Lellouche F, Pignataro C, Girou E, Maitre B, Richard JC, Lemaire F, Brun-Buisson C, **Brochard L**. Decreasing the adverse effects of endotracheal suctioning during mechanical ventilation by changing practice. Respir Care. 2013 Oct 1;58(10):1588-97.

**Coauthor or Collaborator**.

Chousterman BG, Bouadma L, Moutereau S, Loric S, Alvarez-Gonzalez A, Mekontso-Dessap A, Laissy JP, Rahmouni A, Katsahian S, **Brochard L**, Schortgen F. Prevention of contrast-induced nephropathy by N-acetylcysteine in critically ill patients: different definitions, different results. J Crit Care. 2013 Oct 1;28(5):701-9. **Coauthor or Collaborator**.

Boissier F, Katsahian S, Razazi K, Thille AW, Roche-Campo F, Leon R, Vivier E, **Brochard L**, Vieillard-Baron A, Brun-Buisson C, Mekontso Dessap A. Prevalence and prognosis of cor pulmonale during protective ventilation for acute respiratory distress syndrome. *Intensive Care Med*. 2013 Oct 1;39(10):1725-33. **Coauthor or Collaborator**.

Esteban A, Frutos-Vivar F, Muriel A, Ferguson ND, Peñuelas O, Abaira V, Raymondos K, Rios F, Nin N, Apezteguía C, Violi DA, Thille AW, **Brochard L**, González M, Villagomez AJ, Hurtado J, Davies AR, Du B, Maggiore SM, Pelosi P, Soto L, Tomicic V, D'Empaire G, Matamis D, Abroug F, Moreno RP, Soares MA, Arabi Y, Sandi F, Jibaja M, Amin P, Koh Y, Kuiper MA, Bülow HH, Zeggwagh AA, Anzueto A. Evolution of mortality over time in patients receiving mechanical ventilation. *Am J Respir Crit Care Med*. 2013 Jul 15;188(2):220-30. **Coauthor or Collaborator**.

#### **Comment, Editorial**

Fan E, **Brochard L**. The old order changeth, yielding place to the new. *Ann Am Thorac Soc*. 2013 Aug 1;10(4):359-60. **Coauthor or Collaborator**.

#### **Comment, Letter to Editor**

Bridoux A, Thille AW, Quentin S, Lode-Kolz K, Stal V, Diaz V, **Brochard L**, Drouot X. Sleep in ICU: atypical sleep or atypical electroencephalography? *Crit Care Med*. 2014 Apr 1;42(4):e312-3. No abstract available. **Coauthor or Collaborator**.

Córdoba-Izquierdo A, **Brochard L**. The authors reply. *Crit Care Med*. 2013 Dec 1;41(12):e482. **Coauthor or Collaborator**.

#### **Journal Article, Multicenter Study**

Carteaux G, Mancebo J, Mercat A, Dellamonica J, Richard JC, Aguirre-Bermeo H, Kouatchet A, Beduneau G, Thille AW, **Brochard L**. Bedside adjustment of proportional assist ventilation to target a predefined range of respiratory effort. *Crit Care Med*. 2013 Sep 1;41(9):2125-32.

**Coauthor or Collaborator**.

#### **Journal Article, Randomized Controlled Trial**

Roche-Campo F, Thille AW, Drouot X, Galia F, Margarit L, Córdoba-Izquierdo A, Mancebo J, d'Ortho MP, **Brochard L**. Comparison of sleep quality with mechanical versus spontaneous ventilation during weaning of critically ill tracheostomized patients. *Crit Care Med*. 2013 Jul 1;41(7):1637-44. **Coauthor or Collaborator**.

## Journal Articles, Review

Akoumianaki E, Maggiore SM, Valenza F, Bellani G, Jubran A, Loring SH, Pelosi P, Talmor D, Grasso S, Chiumello D, Guérin C, Patroniti N, Ranieri VM, Gattinoni L, Nava S, Terragni PP, Pesenti A, Tobin M, Mancebo J, **Brochard L**. The application of esophageal pressure measurement in patients with respiratory failure. *Am J Respir Crit Care Med*. 2014 Mar 1;189(5):520-31. [Epub ahead of print]. **Coauthor or Collaborator**.

Perren A, **Brochard L**. Managing the apparent and hidden difficulties of weaning from mechanical ventilation. *Intensive Care Med*. 2013 Nov 1;39(11):1885-95. **Coauthor or Collaborator**.

## Letter to Editor, Multicenter Study

Beuret P, Roux C, Constan A, Mercat A, **Brochard L**. Discrepancy between guidelines and practice of tracheal suctioning in mechanically ventilated patients: a French multicenter observational study. *Intensive Care Med*. 2013 Jul 1;39(7):1335-6. **Coauthor or Collaborator**.

## Invited Lectures and Presentations

### International

- 2013 Dec 5 **Invited Speaker**. PaO<sub>2</sub>/FiO<sub>2</sub> in Clinical Practice. Nineteenth Postgraduate Refresher Course: Cardiovascular & Respiratory Physiology Applied to Intensive Care Medicine. Brussels, Belgium.
- 2013 Dec 4 **Invited Speaker**. Lung Protective Strategies: A Practical Approach. Nineteenth Postgraduate Refresher Course: Cardiovascular & Respiratory Physiology Applied to Intensive Care Medicine. Brussels, Belgium.
- 2013 Dec 4 **Invited Speaker**. Lung Protective Aspects of Mechanics. Nineteenth Postgraduate Refresher Course: Cardiovascular & Respiratory Physiology Applied to Intensive Care Medicine. Brussels, Belgium. Presenter(s): **Brochard, L.** & Pesenti, A.

### Local

- 2013 Nov 12 **Invited Speaker**. ARDS Revisted: Detecting Lung Recruitment. Critical Care Canada Forum. Toronto, Ontario, Canada.
- 2013 Nov 11 **Chair**. ARDS-Defining and Refining. Critical Care Canada Forum. Toronto, Ontario, Canada.
- 2013 Nov 11 **Invited Speaker**. Plenary RCT: Editorial Comment. Critical Care Canada Forum. Toronto, Ontario, Canada.

- 2013 Nov 11 **Invited Speaker.** AC Bryan Physiology Symposium: Interactions-Patients vs Ventilators. Critical Care Canada Forum. Toronto, Ontario, Canada.
- 2013 Nov 11 **Invited Speaker.** ECLS: ECMO - The French Experience. Critical Care Canada Forum. Toronto, Ontario, Canada.
- 2013 Nov 10 **Invited Speaker.** Ventilation-CNS & Transplummonary Pressure: CNS Impact-Reverse Triggering. Critical Care Canada Forum. Toronto, Ontario, Canada.
- 2013 Nov 10 **Invited Speaker.** Weaning & Work of Breathing: Work of Breathing-Managing with PAV. Critical Care Canada Forum. Toronto, Ontario, Canada.
- 2013 Nov 10 **Chair.** Plenary Debate-Who Should Run the (CV) Surgical ICU. Critical Care Canada Forum. Toronto, Ontario, Canada.
- 2013 Nov 9 **Invited Speaker.** Physiology Debates:Spontaneous Ventilation: Overlooked Advantages. Critical Care Canada Forum Residents' Day. Toronto, Ontario, Canada.



## **Peer-Reviewed Fundings**

- 2013 Jan - 2014 Dec **Principal Investigator.** Practices in End of Life Care and Mechanical Ventilation Discontinuation: A Nested Study Within an International Observational Study. 2013 Tech Value Net \$ 70,950.00. Co-investigators: Deborah Cook, Peter Dodek, Maureen Meade. 70,950 CAD.[Grant]
- 2013 **Co- Investigator.** Selection for and Timing to Start Renal Replacement in Critically Ill Older Patients with Acute Kidney Injury (OPTIMAL-AKI).Principal Investigator: Sean Bagshaw, Co-investigators: Wald R, Burns K, Friedrich J, Adhikari N. 384,087 CAD. [Grant]

## **Peer-Reviewed Publications**

### **Journal Articles**

- Burns KE**, Meade MO, Premji A, Adhikari NK. Noninvasive positive-pressure ventilation as a weaning strategy for intubated adults with respiratory failure. Cochrane Database Syst Rev. 2013 Dec 9;12:CD004127.
- Burns K**, Premji A, Meade MO, Adhikari NKJ. Weaning Critically Ill Adults with Noninvasive Positive Pressure Ventilation: An Updated Systematic Review and Meta-Analysis. Review. 2013 CMAJ December 9, 2013 First published December 9, 2013, doi: 10.1503/cmaj.130974.
- Lamontagne F, Martinez HQ, Adhikari N, Cook D, Koo K, Lauzier F, Turgeon A, Kho M, **Burns K**, Matte A, Chant C, Fowler R, Douglas I, Poulin Y, Choong K, Ferguson ND, Lesur O, Meade MO. Corticosteroid in the Intensive Care Unit: A Survey of Intensivists. Canadian Journal of Anesthesia. Can J Anaesth. 2013 Jul;60(7):652-659.
- Burns KE**, Meade MO, Lessard MR, Hand L, Keenan SP, Lellouche F. Wean Earlier and Automatically with New Technology: The WEAN Study. Am J Respir Crit Care Med. Am J Respir Crit Care Med. 2013 Jun 1;187(11):1203-11.
- Burns K**, Zubrinich C, Tan W, Raptis S, Xiong W, Smith O, McDonald E, Marshall JC, Saginur R, Helsegrave R, Rubinfeld G, Cook DJ. A Multicentre, Cross-Sectional Study of Research Recruitment Practices in Adult Canadian ICUs: The Consent Study: A Canadian Critical Care Trials Group Project. Am J Respiratory Crit Care Med. Am J Respir Crit Care Med. 2013 Jun 1;187(11):1212-8.

**Burns K**, Rizvi L, Tan W, Marshall JC, Pope K. Participation of ICUs in critical care pandemic research: a province wide, cross-sectional survey. *Crit Care Med*. 2013 Apr;41(4):1009-16.

Turgeon AF, Lauzier F, **Burns K**, Meade MO, Scales DC, Zarychanski R, Moore L, Zygun DA, McIntyre LA, Kanji S, Hébert PC, Murat V, Pagliarello G, Fergusson DA; Canadian Critical Care Trials Group. Determination of neurologic prognosis and clinical decision making in adult patients with severe traumatic brain injury: a survey of Canadian intensivists, neurosurgeons, and neurologists. *Crit Care Med*. 2013 Apr;41(4):1086-93.

Smith OM, McDonald E, Zytaruk N, Foster D, Matte A, Clarke F, Meade L, Godfrey N, Vallance S, Galt P, Rajbhandari D, Rocha M, Mehta S, Ferguson N, Hall R, Fowler R, **Burns K**, Qushmaq I, Ostermann M, Heels-Ansdell D, Cook D. Rates and determinants of Informed Consent: A Case Study of an International Thromboprophylaxis Trial. *Journal of Critical Care*. *J Crit Care*. 2013 Feb;28(1):28-39

Côte N, Turgeon AF, Lauzier F, Moore L, Scales DC, Bernard F, Zarychanski R, **Burns K**, Meade MO, Zygun D, Simard JF, Boutin A, Brochu JG, Fergusson DA. Factors associated with the withdrawal of life-sustaining therapies in patients with severe traumatic brain injury: a multicenter cohort study. *Neurocrit Care*. 2013 Feb;18(1):154-60.

## **Invited Lectures and Presentations**

### **National**

- 2013 Nov 13 A Randomized Trial of Once Daily Screening vs At least Twice Daily Screening in Mechanically Ventilated Critically Ill Adults. Canadian Critical Care Trials Group Meeting, Toronto, Ontario.
- 2013 Jun 18 A Randomized Trial of Once Daily Screening vs At least Twice Daily Screening in Mechanically Ventilated Critically Ill Adults. Canadian Critical Care Trials Group Meeting, Quebec City.

### **Provincial**

- 2013 Jan 30 Results of the Approach Trial. Canadian Critical Care Trials Group Meeting, Lake Louise, Alberta.

**Honours and Awards**

2012 - 2015    Research Award. Weaning Critically Ill Patients from Mechanical Ventilation.

2012 - 2013    St. Michael's Hospital Values in Action Award, Social Responsibility-Critical Care Response Team.

**Peer-Reviewed Publication**

**Journal Article**

Denault A, Fayad A, **Chen R**. Focused ultrasound is the next step in perioperative care. Can Anaesth. 2013 Aug;60(8):741-7.

**Invited Lectures and Presentations**

**Provincial**

2013 Oct 31 Anesthesia bedside ultrasound. North York General Hospital, Department of Anesthesia, Toronto, Ontario.

2013 Aug 24 Anesthesia bedside ultrasound. North York General Hospital, Department of Anesthesia, Toronto, Ontario.

2013 Feb 1-2 Anaesthesia Point of Care Ultrasound. Department of Anaesthesia, Memorial University of Newfoundland.

**Peer-Reviewed Fundings**

- 2013 Mar – 2014 Feb                      Mechanisms of protection and informed target discovery for gene and stem cell therapy in sepsis. Canadian Institutes of Health Research (CIHR). Bridge Funding. 126573. 100,000 CAD. [Grant]
- 2013-2014                                      **Principal Investigator.** Mechanisms of protection and informed target discovery for gene and stem cell therapy in sepsis. CIHR grant. \$190,000/yr CAD.[Grant]

**Peer-Reviewed Publications**

**Journal Articles**

- Maron-Gutierrez T, Silva JD, Asensi KD, Bakker-Abreu I, Shan Y, Diaz BL, Goldenberg RC, Mei SH, Stewart DJ, Morales MM, Rocco PR, **Dos Santos CC**. Effects of Mesenchymal Stem Cell Therapy on the Time Course of Pulmonary Remodeling Depend on the Etiology of Lung Injury in Mice. Crit Care Med. 2013 Nov;41(11):e319-33.
- Batt J, **Dos Santos C**, Herridge MS. Muscle injury during critical illness. JAMA. 2013 Oct 16;310(15):1569-70.
- Maron-Gutierrez T, Silva JD, Cruz FF, Alegria S, Xisto DG, Assis EF, Castro-Faria-Neto HC, **Dos Santos C**, Morales MM, Rocco PR. Insult-dependent effect of bone marrow cell therapy on inflammatory response in a murine model of extrapulmonary acute respiratory distress syndrome. Stem Cell Res Ther. 2013 Oct 13;4(5):123.
- A González-López, I López-Alonso, A Aguirre, L Amado-Rodríguez, E Batalla-Solís, A Astudillo, C Tomás-Zapico, A Fueyo, **C Dos Santos**, K. Talbot, Guillermo M. Albaiceta. Mechanical ventilation triggers hippocampal apoptosis by vagal and dopaminergic pathways. Am J Respir Crit Care Med. 2013 Sep 15;188(6):693-702.
- Khan MA1, Knox N, Prashar A, Alexander D, Abdel-Nour M, Duncan C, Tang P, Amatullah H, **Dos Santos C**, Tijet N, Low DE, Pourcel C, Van Domselaar G, Terebiznik M, Ensminger AW, Guyard C. Comparative Genomics Reveal That Host-Innate Immune Responses Influence the Clinical Prevalence of Legionella pneumophila Serogroups. PLoS One. 2013 Jun 27;8(6):e67298.

Batt J, **Dos Santos C**, Cameron JI, Herridge MS. Intensive care unit-acquired weakness: clinical phenotypes and molecular mechanisms. *Am J Respir Crit Care Med*. 2013 Feb 1;187(3):238-46.

Ichikawa A, Kuba K, Morita M, Chida S, Tezuka H, Hara H, Sasaki T, Ohteki T, Ranieri VM, **Dos Santos C**, Kawaoka Y, Akira S, Luster AD, Lu B, Penninger JM, Uhlig S, Slutsky AS, Imai Y. CXCL10-CXCR3 enhances the development of neutrophil-mediated fulminant lung injury of viral and nonviral origin. *Am J Respir Crit Care Med*. 2013 Jan;187(1):65-77.

## **Invited Lectures and Presentations**

### **International**

- 2013 Oct 7 **Speaker.** Informed miRNA Target Discovery for Gene and Stem Cell Therapy in Acute Lung Injury. ESICM. Paris, France.
- 2013 Oct 7 **Speaker.** Absence of DJ-1 attenuates morbidity and mortality in experimental sepsis through improved bacterial clearance. ESICM. Paris, France
- 2013 Oct 6 **Speaker.** Intensive Care Unit Acquired Weakness (ICUAW): Spectrum of disability in survivors of prolonged mechanical ventilation at 7 days and 6 months post-ICU discharge. ESICM. Paris, France.
- 2013 Nov 20 **Speaker.** 12th Annual Gene Therapy Symposium. Annual Gene Therapy Symposium for Heart, Lung, and Blood Diseases. National Institutes of Health. Davis University. California, United States.
- 2013 Aug 1 **Speaker.** Mechanisms of Protection and Informed Target Discovery for Gene and Stem Cell Therapy in Sepsis. Stem Cells and Cellular Therapies in Lung Biology and Lung Diseases Meeting. University of Vermont. Burlington, Vermont, United States.

### **Provincial**

- 2013 Mar 12 **Speaker.** Differential gene expression profiling in endothelial progenitor cells from patients with idiopathic and familial pulmonary hypertension. Cardiovascular Repair using Enhanced Stem Cell Therapy, Ottawa.
- 2013 Jan 29 **Speaker.** Molecular markers of ICUAW. Canadian Critical Care Trials Group, Lake Louise, Alberta.
- 2013 Jan 27 **Speaker.** Role of DJ-1 in experimental sepsis. Canadian Critical Care Translational Biology Group Meeting. Lake Louise, Alberta.

2013 Jan 26 **Speaker.** Molecular Mechanisms of ICUAW. CCCTBG. Lake Louise, Alberta.  
2013 **Speaker.** Differential expression in Embryonic derived Stem cells in Pulmonary Hypertension. CREST: Cardiovascular repair by Enhanced Stem Cell Technology. Ottawa, Ontario.

### **Honours and Awards**

2013 Young Investigator Forum, Best Poster Presentation, Canadian Institutes of Health Research, Canada.

## **Peer-Reviewed Fundings**

- 2013 Mar - 2015 Mar **Collaborator.** OPTIMAL Selection for and Timing to Start Renal Replacement Therapy in Critically Ill Older Patients with Acute Kidney Injury (OPTIMAL-AKI). Technology Evaluation in the Elderly Network. PI: Bagshaw, Sean and Wald, Ron. Collaborator(s): Adhikari NKJ, Burns KEA, Friedrich JO. 384,087 CAD. [Grant]
- 2011 Jul - 2013 Jun **Collaborator.** Standard versus Accelerated initiation of Renal Replacement Therapy in Acute Kidney Injury (STARRT-AKI). Canadian Institutes for Health Research (Operating Grants). PI: Wald, Ron. Collaborator(s): Adhikari NKJ, Burns KEA, Friedrich JO, Garg A, Hladunewich M, House A, Klein D, Lapinsky S, Pannu N, Smith OM, Thorpe KE. 198,323 CAD. [Grant]

## **Peer-Reviewed Publications**

### **Journal Articles**

- Verma S, Farkouh ME, Yanagawa B, Fitchett DH, Ahsan MR, Ruel M, Sud S, Gupta M, Singh S, Gupta N, Cheema AN, Leiter LA, Fedak PWM, Teoh H, Latter DA, Fuster V, **Friedrich JO.** A meta-analysis of randomised controlled trials comparing coronary artery bypass surgery to percutaneous coronary intervention in diabetes. *Lancet Diabetes and Endocrinology*. 2013 Dec 1;1(4):317-328.
- Chant C, Leung A, **Friedrich JO.** Optimal dosing of antibiotics in critically ill patients using continuous/extended infusions: a systematic review and meta-analysis. *Critical care (London, England)*. 2013 Nov 29;17(6):R279.
- Sinuff T, Muscedere J, Adhikari NK, Stelfox HT, Dodek P, Heyland DK, Rubenfeld GD, Cook DJ, Pinto R, Manoharan V, Currie J, Cahill N, **Friedrich JO,** Amaral A, Piquette D, Scales DC, Dhanani S, Garland A, KRITICAL Working Group, the Canadian Critical Care Trials Group, and the Canadian Critical Care Society. Knowledge translation interventions for critically ill patients: a systematic review\*. *Crit Care Med*. 2013 Nov;41(11):2627-40.



Williamson DR, Albert M, Heels-Ansdell D, Arnold DM, Lauzier F, Zarychanski R, Crowther M, Warkentin TE, Dodek P, Cade J, Lesur O, Lim W, Fowler R, Lamontagne F, Langevin S, Freitag A, Muscedere J, **Friedrich JO**, Geerts W, Burry L, Alhashemi J, Cook D, and the PROTECT collaborators, the Canadian Critical Care Trials Group, and the Australian and New Zealand Intensive Care Society Clinical Trials Group. Thrombocytopenia in Critically Ill Patients Receiving Thromboprophylaxis: Frequency, Risk Factors, and Outcomes. Chest. 2013 Oct 1;144(4):1207-1215.

Sud S, Sud M, **Friedrich JO**, Wunsch H, Meade MO, Ferguson ND, Adhikari NKJ. High-frequency ventilation versus conventional ventilation for treatment of acute lung injury and acute respiratory distress syndrome. Cochrane Database of Syst Rev 2013 Feb 28; Issue 2: CD004085.

### **Invited Lecture and Presentation**

#### **National**

2013 Jun 6     **Speaker.** Acute Renal Failure and Renal Replacement Therapy in ICU. Review of diagnosis and treatment of acute renal failure in critically ill patients for Canadian critical care fellow review course. Canadian Critical Care Review. Mississauga, Ontario.

### **Peer-Reviewed Funding**

2013 Jul – 2015 Jul **Co-Investigator.** A Novel Approach to the Assessment of Alcohol Withdrawal in the Emergency Department. MSH-UHN AMO Innovation Fund. 101,581 CAD. [Grant]

### **Peer-Reviewed Publication**

#### **Journal Article**

**Gray SH,** Ross JA, Green RS. How to safely extubate a patient in the emergency department: a user's guide to critical care. CJEM. 2013;1-4.

### **Invited Lectures and Presentations**

#### **Provincial**

- 2013 Jun 3 **Speaker.** ERP to the Resuscitation Bay STAT! Canadian Association of Emergency Physicians. Vancouver, British Columbia.
- 2013 Jun 3 **Speaker.** Resuscitation 2013: the most important articles published in the past year. Canadian Association of Emergency Physicians. Vancouver, British Columbia.
- 2013 Jun **Speaker.** CT scan versus Ultrasound for diagnosis of appendicitis: what is the impact on Emergency Department Length of Stay. Canadian Association of Emergency Physicians Conference. Vancouver, British Columbia.
- 2013 Feb 20 **Speaker.** Resuscitation cases in the Emergency Department. University of Toronto Continuing Education. Whistler, British Columbia.
- 2013 Feb 19 **Speaker.** Adult Emergency Medicine Panel. University of Toronto Continuing Education. Whistler, British Columbia.
- 2013 Feb 19 **Speaker.** The LFT's are high: now what? University of Toronto Continuing Education. Whistler, British Columbia.

**Peer-Reviewed Publication**

**Journal Article**

CC Smith, DR Prevots, J Adjemian, A Seitz, MLA Daniels, C Czaja, C Milla, **DA Hall**, SM Holland, MR Knowles, KN Olivier. Genetic Diseases of Mucociliary Clearance Consortium. Characterization Of Idiopathic Bronchiectasis In Patients With And Without Pulmonary Nontuberculous Mycobacterial Disease. Am J Respir Crit Care Med. 2013 May. Am J Respir Crit Care Med 187;2013:A4535. **Senior Responsible Author.**

**Invited Lectures and Presentations**

**Local**

- 2013 Nov **Speaker.** Adult and Ped Asthma. Family Health Team. Toronto, Ontario.
- 2013 May 22 **Speaker.** Clinical Utility of Molecular Genetic Analysis in the Diagnosis of Primary Ciliary Dyskinesia. Department of Pediatrics, University of Toronto. Toronto. Presenter(s): Raymond Kim, David Hall. Department of Pediatrics, University of Toronto Research Day. (Trainee Presentation)
- 2013 Mar 8 **Speaker.** Clinical Utility of Molecular Genetic Analysis in the Diagnosis of Primary Ciliary Dyskinesia. Hospital for Sick Children Division of Clinical and Metabolic Genetics. Toronto. Presenter(s): Raymond Kim, David Hall. Hospital for Sick Children Division of Clinical and Metabolic Genetics 2nd Annual Research Day. (Trainee Presentation)

## **Peer-Reviewed Publications**

### **Journal Articles**

Jefferis L, **Hayes C**, Smith O, Mamdani M, Nisenbaum R, Bell CM, McKernan P, Ferris E. The Effect of an Organizational Network for Patient Safety on Safety Event Reporting. *Eval Health Prof.* 2013 Jun 9. [Epub ahead of print].

Downar J, Rodin D, Barua R, Lejnieks B, Gudimella R, McCredie V, **Hayes C**, Steel A. Rapid response teams, do not resuscitate orders, and potential opportunities to improve end-of-life care: a multicentre retrospective study. *J Crit Care.* 2013 Aug;28(4):498-503. doi: 10.1016/j.jcrc.2012.10.002. Epub 2013 Jan 18.

Downar J, Barua R, Rodin D, Lejnieks B, Gudimella R, McCredie V, **Hayes C**, Steel A. Changes in end of life care 5 years after the introduction of a rapid response team: A multicentre retrospective study. *Resuscitation.* 2013 Mar15.pii:S0300-9572(13)00154-8.doi: 10.1016/j.resuscitation.2013 Mar 3. [Epub ahead of print].

### **Invited Lectures and Presentations**

#### **International**

2013 Apr 10 **Speaker.** Medication Reconciliation: A national strategy. National Guard Health Affairs. Riyadh, Saudi Arabia.

2013 Apr 9 **Speaker.** Leading a National Improvement Program. National Guard Health Affairs. Riyadh, Saudi Arabia.

2013 Apr 9 **Speaker.** Patient Safety Education: Increasing its delivery in medical training. National Guard Health Affairs. Riyadh, Saudi Arabia.

#### **Provincial**

2013 Apr 23 **Speaker.** Effective Physician Partnership. Canadian Healthcare Association. Ottawa, Ontario.

#### **Local**

2013 Jan 30 **Speaker.** Patient Safety at St. Michael's: An update. Department of Medicine Medical Grand Rounds, Toronto, Ontario.

**Honours and Awards**

2013 May – 2014 Aug     Harkness Fellowship in Health Care Policy and Practice, The Commonwealth Fund, Boston, Massachusetts, United States. (Fellowship Award). \$120,000 CAD.

**Peer-Reviewed Publication**

**Journal Article**

**Houston P**, Chisholm R. Water, water everywhere, but not a drop in sight: the impact of drug shortages on Canadian anesthesia care. Can J Anaesth. 2013 Jun;60(6):519-22. doi: 10.1007/s12630-013-9924-8.

**Invited Lectures and Presentations**

**National**

2013 April     **Speaker.** Professionalism in Undergraduate Medical Education. Canadian Conference on Medical Education. Canada. April 2013.

**Honours and Awards**

2013 July     Jeffrey Lozon Physician Leadership Award, St Michael's Hospital, Toronto.  
2013 June     The FitzGerald Academy Friends of the Academy Award, The FitzGerald Academy, Faculty of Medicine, University of Toronto, Ontario, Canada. (Distinction).

**Peer-Reviewed Funding**

2013 Apr – 2015 Mar      A Phase 2 Trial of Withania Somnifera in the Treatment of Patients with ALS. ALS Canada. PI: Zinman, L. \$500,000 CAD. [Grant]

**Peer-Reviewed Publications**

**Journal Articles**

Lam K, Hwang S, Dhalla IA, Thorpe K, Palda V, Hota S, Brown A, **Klein DJ**. Creating the Right Evidence for Policy Makers. Healthcare Quarterly. 2013 Oct;16(3):22-26. **Senior Responsible Author.**

Biagioni E, Venturelli C, **Klein DJ**, Buoncristiano M, Rumpianesi F, Busani S, Rinaldi L, Donati A, Girardis M. Endotoxin activity levels as a prediction tool for risk of deterioration in patients with sepsis not admitted to the intensive care unit: A pilot observational study. J Crit Care. 2013 Apr 16. pii: S0883-9441(13)00048-8. doi: 10.1016/j.jcrc.2013.02.005. [Epub ahead of print].

**Invited Lectures and Presentations**

**International**

2013 Feb      **Speaker.** Endotoxemia is Related to Sepsis. CRRT. San Diego, California, United States.

**National**

2013 Nov      **Speaker.** Safety and Purple Cows: The EUPHRATES Trial. Spectral Diagnostics. Ontario.

2013 Jun      **Speaker.** Measuring and Targeting Endotoxin in Septic Shock: The Road to EUPHRATES. Lakeridge Health Oshawa. Oshawa, Ontario.

## **Peer-Reviewed Publications**

### **Journal Articles**

Abdallah FW, **Laffey JG**, Halpern SH, Brull R. Duration of analgesic effectiveness following the posterior and lateral TAP block techniques for transverse lower abdominal incisions: A Meta-analysis. *Br J Anaesth*. 2013 Nov;111(5):721-35.

Alexiev V, Ochana A, McDonnell JG, **Laffey JG**. Comparison of the Baska□ mask to the single use Laryngeal Mask Airway in low risk female patients undergoing ambulatory surgery Anaesthesia. 2013 Oct;68(10):1026-32.

Curley GF, **Laffey JG**, Kavanagh BP. CrossTalk proposal: There is added benefit to providing permissive hypercapnia in the treatment of ARDS. *J Physiol*. 2013 Jun 1;591 (Pt 11):2763-5.

Devaney J, Curley GF, Hayes M, Masterson C, Ansari B, O'Brien T, O'Toole D, **Laffey JG**. Inhibition of pulmonary nuclear factor kappa-B decreases the severity of acute Escherichia coli pneumonia but worsens prolonged pneumonia. *Crit Care*. 2013 Apr 27;17(2):R82.

**Laffey JG**, Talmor D. Predicting the development of acute respiratory distress syndrome: searching for the "Troponin of ARDS". *Am J Respir Crit Care Med*. 2013 Apr 1;187(7):671-2.

Curley GF, Ansari B, Hayes M, Devaney J, Masterson C, Ryan A, Barry F, O'Brien T, Toole DO, **Laffey JG**. Effects of intratracheal mesenchymal stromal cell therapy during recovery and resolution after ventilator-induced lung injury. *Anesthesiology*. 2013 Apr;118(4):924-32.

Curley GF, **Laffey JG**. Cell therapy demonstrates promise for acute respiratory distress syndrome - but which cell is best? *Stem Cell Res Ther*. 2013 Mar 22;4(2):29.

### **Invited Lectures and Presentations**

#### **International**

2013 Oct 8 **Speaker**. Drug induced lung injury. European Society of Intensive Care Medicine Annual Conference, Paris.

2013 Oct 8 **Speaker**. What I'm learning about ALI in the laboratory. European Society of Intensive Care Medicine Annual Conference, Paris.

2013 Oct 8 **Speaker**. A nightmare: Acute brain injury and concomitant ARDS. European Society of Intensive Care Medicine Annual Conference, Paris.



- 2013 Oct 8 **Speaker.** Lung repair after ARDS. European Society of Intensive Care Medicine Annual Conference, Paris.
- 2013 Oct 7 **Speaker.** Cell-based therapy for acute lung injury. European Society of Intensive Care Medicine Annual Conference, Paris.
- 2013 Sep 19 **Speaker.** MSCs for ARDS – ready for Clinical Testing? Medical Grand Rounds, St Vincent's University Hospital, Dublin.
- 2013 Sept 18 **Speaker.** Wet Lungs – Current Treatment and Future Concepts. Association of Anaesthetists of Great Britain and Ireland Conference, Dublin.
- 2013 Sept 18 **Speaker.** Management of severe Hypoxemia. Association of Anaesthetists of Great Britain and Ireland Conference, Dublin.
- 2013 Jul 5 **Speaker.** Airway Management in the Critically Ill: Can we do Better? XIIth Annual conference on Mechanical Ventilation, Rio de Janeiro, Brazil.
- 2013 Jul 5 **Speaker.** Hypercapnic Acidosis: Role in Ventilation Induced Lung Injury. XIIth Annual conference on Mechanical Ventilation, Rio de Janeiro, Brazil.
- 2013 May 8 **Speaker.** Stem cell therapy for ARDS: a dream becoming true? SMART Conference, Milan.
- 2013 May 9 **Speaker.** The critically ill pregnant patient. SMART Conference, Milan.
- 2013 May 10 **Speaker.** Hypercapnia in ARDS: should we permit, avoid or remove? Milan.
- 2013 Mar 22 **Speaker.** Gene stem cell therapies. International Symposium on Intensive Care and Emergency Medicine (ISICEM) Conference, Brussels.
- 2013 Mar 21 **Speaker.** Role of hypercapnia in protective lung ventilation strategies. International Symposium on Intensive Care and Emergency Medicine (ISICEM) Conference, Brussels.
- 2013 Mar 21 **Speaker.** Hypercapnia: Benefit or harm? International Symposium on Intensive Care and Emergency Medicine (ISICEM) Conference, Brussels.
- 2013 Mar 20 **Speaker.** Basics of respiratory physiology. International Symposium on Intensive Care and Emergency Medicine (ISICEM) Conference, Brussels.
- 2013 Mar 20 **Speaker.** Novel laryngoscopes? International Symposium on Intensive Care and Emergency Medicine (ISICEM) Conference, Brussels.
- 2013 Mar 19 **Speaker.** Eclampsia and HELLP. International Symposium on Intensive Care and Emergency Medicine (ISICEM) Conference, Brussels.

## National

- 2013 Nov 10 **Speaker.** Hypocapnia: Benefit vs. Harm. Canadian Critical Care Forum Annual conference. Toronto, Ontario.
- 2013 Nov 10 **Speaker.** Mediators in Cardiac Surgery. Canadian Critical Care Forum Annual Conference, Toronto, Ontario.
- 2013 Nov 9 **Speaker.** Stem Cells for ALI/ARDS: Promise and Pitfalls. Canadian Critical Care Forum Annual Conference, Toronto, Ontario.
- 2013 Nov 9 **Speaker.** Hypercapnea: An important treatment, not a complication. Canadian Critical Care Forum Annual Conference (Residents Day), Toronto, Ontario.
- 2013 Apr 9-10 **Speaker.** MSCs for ARDS: Potential and Pitfalls. Anesthesia Grand Rounds, Beth Israel Hospital, Harvard, Boston.

## Honours and Awards

- 2013 Jul Department of Anesthesia Translational Grant Award
- 2013-2015 Department of Anesthesia Merit Award
- 2013 Appointed to Editorial Board for Intensive Care Medicine Experimental

**Peer-Reviewed Publications**

**Journal Articles**

- B. Lawless**, L. Kostrzewa, M. Giwa, et al. Provincial Life or Limb / Repatriation Policy. 2013 Dec 1. Available from:  
[http://www.health.gov.on.ca/en/pro/programs/criticalcare/docs/provincial\\_life\\_or\\_limb\\_policy.pdf](http://www.health.gov.on.ca/en/pro/programs/criticalcare/docs/provincial_life_or_limb_policy.pdf)
- B. Lawless**, L.Kostrzewa. Building Towards System Integration for Critical Care: The Ontario Experience. Hospital News. 2013 Aug;18-19.
- Long-Term Mechanical Ventilation: Toolkit for Adult Acute Care Providers. In: **B. Lawless**, editor(s). [www.criticalcareontario.ca](http://www.criticalcareontario.ca). Toronto (Canada): Critical Care Services Ontario; 2013. 45 p. Available from: [www.criticalcareontario.ca](http://www.criticalcareontario.ca)
- B. Lawless**, J. Muscedere, A. Baker, C. Martin, P. Chidwick, M. Patwalia. Critical Care Access and Consent: Toolkit for Healthcare Providers. In: Bernard Lawless, editor(s). [www.criticalcareontario.ca](http://www.criticalcareontario.ca). Toronto (Canada): Critical Care Services Ontario; 2013. 30 p. Available from: [www.criticalcareontario.ca](http://www.criticalcareontario.ca).
- N. Daneman, DC.Scales, **B. Lawless**, J. Muscedere, V. Blount, RA. Fowler. Infection prevention and control in the intensive care unit: open versus closed models of care. Infect Control Hosp Epidemiol. 2013 Aug;34(8):867-71.

**Invited Lectures and Presentations**

**International**

- 2013 May 22 **Speaker**. CCRT Impact on Cardiac Arrest Rates and Mortality Rates. American Thoracic Society Annual Scientific Meeting. Philadelphia, Pennsylvania, United States.

**Provincial**

- 2013 Apr 12 **Speaker**. Open Scientific Paper Session. Australasia and Canada Trauma Association Annual Scientific Meeting. Canada.
- 2013 Apr 11 **Speaker**. Organizing Trauma Systems in Ontario. Australasian and Canadian Trauma Association Annual Scientific Meeting. British Columbia, Canada.

## **National**

2013 Nov 10 **Speaker.** Patient Flow and Critical Care; Ontario's Life or Limb Policy. Canadian Critical Care Forum. Toronto, Ontario.

2013 Aug 29 **Speaker.** Ontario's Life or Limb Policy: Implications for Ontario Hospitals. Ontario Hospital Association. Toronto, Ontario.

## **Local**

2013 May 30 **Speaker.** A real time information system to inform policy development in Critical Care. University of Toronto Department of Surgery. Toronto, Ontario, Canada. Presenter(s): Azouz, Sol. (Trainee Presentation).

2013 May 30 **Speaker.** A survey tool to profile a critical care physician workforce. University of Toronto Department of Surgery. Toronto, Ontario, Canada. Presenter(s): D'Souza, Neil. (Trainee Presentation).

### **Peer-Reviewed Fundings**

- 2013 Jun – 2018 Sept      **Principal Investigator:** Influenza and acute lung injury: priming, platelets and permeability. Canadian Institutes of Health Research (CIHR). PI: Lee, Warren. \$480,000 CAD. [Grant]
- 2013 Jun – 2014 Sept      **Co-Investigator:** Macrophage lipotoxic inflammation: Its mechanism, impact on insulin delivery and interplay with muscle. Canadian Institutes of Health Research (CIHR). PI: Klip, Amira. \$750,000 CAD. [Grant]

### **Peer-Reviewed Publications**

#### **Journal Articles**

- Armstrong SM, Mubareka S, **Lee WL**. The lung microvascular endothelium as a therapeutic target in severe influenza. *Antiviral Res.* 2013 Aug;99(2):113-8.
- Armstrong SM1, Darwish I, **Lee WL**. Endothelial activation and dysfunction in the pathogenesis of influenza A virus infection. *Virulence.* 2013 Aug 15;4(6):537-42.
- Chaturvedi S, Yuen DA, Bajwa A, Huang YW, Sokollik C, Huang L, Lam GY, Tole S, Liu GY, Pan J, Chan L, Sokolsky Y, Puthia M, Godaly G, John R, Wang C, **Lee WL**, Brumell JH, Okusa MD, Robinson LA. Slit2 Prevents Neutrophil Recruitment and Renal Ischemia-Reperfusion Injury. *J Am Soc Nephrol.* 2013 Jul;24(8):1274-87.
- Lee WL**, Klip A. Shuttling glucose across brain microvessels, with a little help from GLUT1 and AMP kinase. Focus on "AMP kinase regulation of sugar transport in brain capillary endothelial cells during acute metabolic stress". *Am J Physiol Cell Physiol.* 2012 Oct 15;303(8):C803-5.

### **Invited Lectures and Presentations**

#### **International**

- 2013 Oct 9      **Speaker.** Influenza and acute lung injury: priming and endothelial permeability. Oklahoma State University. Stillwater, Oklahoma, United States. NIH Centers of Biomedical Research Excellence (CoBRE).
- 2013 May 21      **Speaker.** Influenza Primes Human Lung Microvascular Endothelium to Leak Upon Exposure to *Staphylococcus aureus*. Philadelphia, PA, United States.

## Local

- 2013 Nov 22 **Speaker.** Renal Rounds - University Health Network. University Health Network. Research Rounds for the Division of Nephrology. Toronto, Ontario.
- 2013 Jun 5 **Speaker.** How to mend a broken blood vessel: the lung endothelium as a novel therapeutic target for severe influenza. Respiriology Research Day, Division of Respiriology, University of Toronto. Toronto, Ontario.
- 2013 Apr 23 **Speaker.** Transcytosis of insulin across microvascular endothelium. Experimental Biology 2013. Toronto, Ontario.

**Peer-Reviewed Funding**

2013-2015     **Co-Investigator.** PROSPECT: Probiotics: Prevention of Severe Pneumonia and Endotracheal Colonization Trial (PROSPECT): A Pilot Trial. Canadian Institutes of Health Research. \$223,231 CAD. [Grant]

**Peer-Reviewed Publications**

**Journal Articles**

Aufderheide TP, Nolan JP, Jacobs IG, van Belle G, Bobrow BJ, **Marshall JC**, Finn J, Becker LB, Bottiger B, Cameron P, Drajer S, Jung JJ, Kloeck W, Koster RW, Huei-Ming Ma M, Shin SD, Sopko G, Taira BR, Timerman S, Eng Hock Ong M. Global health and emergency care: a resuscitation research agenda--part 1. Academic Emergency Medicine. 2013 Dec. 2013 Dec;20(12):1289-96. **Co-author or Collaborator.**

**Marshall JC.** The PIRO (predisposition, insult, response, organ dysfunction) model: Toward a staging system for acute illness. Virulence. 2013 Nov. 2014 Jan 1;5(1):27-35. Epub 2013 Nov.

**Principal Author.**

Trop S, **Marshall JC**, Mazer CD, Gupta M, Dumont D, Bourdeau A, Verma S. Perioperative cardiovascular system failure in South Asians undergoing cardiopulmonary bypass is associated with prolonged inflammation and increased Toll-like receptor signaling in inflammatory monocytes. The Journal of Surgical Research. 2013 Oct. 2014 Mar;187(1):43-52. Epub 2013 Oct 7. **Coauthor or Collaborator.**

Warkentin TE, Sheppard JA, Heels-Ansdell D, **Marshall JC**, McIntyre L, Rocha MG, Mehta S, Davies AR, Bersten AD, Crozier TM, Ernest D, Vlahakis NE, Hall RI, Wood GG, Poirier G, Crowther MA, Cook DJ. Heparin-induced thrombocytopenia in medical surgical critical illness. Chest. 2013 Sep. 2013 Sep;144(3):848-58. **Coauthor or Collaborator.**

Blinova E, Lau E, Bitnun A, Cox P, Schwartz S, Atenafu E, Yau Y, Streitenberger L, Parshuram CS, **Marshall JC**, Seto W. Point Prevalence Survey of Antimicrobial Utilization in the Cardiac and Pediatric Critical Care Unit. Pediatric Critical Care Medicine. 2013 Jul. 2013 Jul;14(6):e280-e288. **Coauthor or Collaborator.**

Burns KE, Zubrinich C, Tan W, Raptis S, Xiong W, Smith O, McDonald E, **Marshall JC**, Saginur R, Heslegrave R, Rubenfeld G, Cook DJ; Canadian Critical Care Trials Group. Research recruitment practices and critically ill patients. *Am J Respir Crit Care Med*. 2013 Jun 1;187(11):1212-8. **Coauthor or Collaborator**.

Vincent JL, Opal SM, **Marshall JC**, Tracey KJ. Sepsis definitions - Authors' reply. *Lancet*. 2013 Jun. 2013 Jun 29;381(9885):2250. **Coauthor or Collaborator**.

**Marshall JC**. The liver in sepsis: shedding light on the cellular basis of hepatocyte dysfunction. *Critical Care*. 2013 Jun. 17(3):153. [Epub ahead of print]. **Principal Author**.

Warkentin TE, Sheppard JA, Heels-Ansdell D, **Marshall JC**, McIntyre L, Rocha MG, Mehta S, Davies AR, Bersten AD, Crozier TM, Ernest D, Vlahakis NE, Hall RI, Wood GG, Poirier G, Crowther MA, Cook DJ. Heparin-induced thrombocytopenia in medical surgical critical illness. *Chest*. 2013 May 30. [Epub ahead of print]. **Coauthor or Collaborator**.

Kissoon N, **Marshall JC**. Research during pandemics: has the horse left the barn? *Critical Care Medicine*. 2013 May;41(5):1381-3. **Co-Principal Author**.

Burns KE, Rizvi L, Tan W, **Marshall JC**, Pope K. Participation of ICUs in Critical Care Pandemic Research: A Province Wide, Cross-Sectional Survey. *Critical Care Medicine*. 2013 pr;41(4):1009-1. **Coauthor or Collaborator**.

Vincent JL, Opal SM, **Marshall JC**, Tracey KJ. Sepsis definitions: time for change. *Lancet*. 2013 Mar;381(9868):774-5. **Coauthor or Collaborator**.

Ferguson ND, Scales DC, Pinto R, Wilcox ME, Cook DJ, Guyatt GH, Schünemann HJ, **Marshall JC**, Herridge MS, Meade MO; Canadian Critical Care Trials Group. Integrating Mortality and Morbidity Outcomes: Using Quality-adjusted Life Years in Critical Care Trials. *Am J Respir Crit Care Med*. 2013 Feb 1;187(3):256-61. Epub 2012 Nov 29. **Coauthor or Collaborator**.

Zarychanski R, Abou-Setta AM, Turgeon AF, Houston BL, McIntyre L, **Marshall JC**, Fergusson DA. Association of hydroxyethyl starch administration with mortality and acute kidney injury in critically ill patients requiring volume resuscitation: a systematic review and meta-analysis. *JAMA*. 2013 Feb;309(7):678-88. **Coauthor or Collaborator**.

Muscedere J, Ofner M, Kumar A, Long J, Lamontagne F, Cook D, McGeer A, Chant C, **Marshall JC**, Jouvett P, Fowler R. The occurrence and impact of bacterial organisms complicating critical care illness associated with influenza A (H1N1) infection. *Chest*. 2013 Feb;144(1):39-47. 2013 Feb 7. [Epub ahead of print]. **Coauthor or Collaborator**.



Cook D, McDonald E, Smith O, Zytaruk N, Heels-Ansdell D, Watpool I, McArdle T, Matte A, Clarke F, Vallance S, Finfer S, Galt P, Crozier T, Fowler R, Arabi Y, Woolfe C, Orford N, Hall R, Adhikari NK, Ferland MC, **Marshall JC**, Meade M; The PROTECT Research Coordinators; PROTECT Investigators; Canadian Critical Care Trials Group and the Australian and New Zealand Intensive Care Society Clinical Trials Group. Co-enrollment of critically ill patients into multiple studies: patterns, predictors and consequences. *Critical Care*. Crit Care. 2013 Jan 8;17(1):R1. [Epub ahead of print]. **Coauthor or Collaborator**.

Christian MD, Fowler R, Muller MP, Gomersall C, Sprung CL, Hupert N, Fisman D, Tillyard A, Zygun D, **Marshall JC**; PREEDICCT Study Group. Critical care resource allocation: trying to PREEDICCT outcomes without a crystal ball. *Critical Care*. 2013 Jan. an 23;17(1):107. [Epub ahead of print]. **Coauthor or Collaborator**.

**Marshall JC**. Sepsis: Systemic inflammation and organ dysfunction. In: Fry DE, editor(s). *Surgical Infections*. 1st Edition. London (United Kingdom): JP Medical Publishers; 2013. p. 275-290. **Principal Author**.

### **Book Chapter**

**Marshall JC**. Acute Pancreatitis. In: Parrillo JE, Dellinger RP, editor(s). *Critical Care Medicine: Principles of Diagnosis and Management in the Adult*. Fourth Edition. Philadelphia (United States): Elsevier Saunders; 2014. p. 1353-1362. **Principal Author**.

### **Invited Lectures and Presentations**

#### **International**

- |                |   |
|----------------|---|
| 2013 Dec 5     | <b>Speaker</b> . Plenary Address. Evolving concepts in the pathophysiology of sepsis. Annual Congress, British Society for Immunology. Liverpool, United Kingdom.   |
| 2013 Nov 7-9   | <b>Speaker</b> . Iatrogenesis in the ICU. 2. The global impact of investigator-led research in critical care. XVIII Annual Congress, Brazilian Society of Intensive Care Medicine. Rio de Janeiro, Brazil.                    |
| 2013 Nov 21-22 | <b>Speaker</b> . 1. Regulation of neutrophil survival in trauma and sepsis. 2. Sepsis trials: Where have we gone wrong? 3. Host-microbial interactions in critical illness. Asian Critical Care Conference. Hong Kong, China. |

- 2013 Nov 5-6 **Speaker.** Planning for the next pandemic. 2. Designing smarter Phase II trials 3. Novel devices in sepsis. 4. The Canadian Critical Care Trials Group: Current activities. International Sepsis Forum Sepsis 2013. Rio de Janeiro, Brazil.
- 2013 Oct 8 **Speaker.** Thinking big: Towards global collaboration in critical care research. European Society of Intensive Care Medicine 26th Annual Congress. Paris, France.
- 2013 Oct 7-9 **Speaker.** It is unsafe to resuscitate without SvCO<sub>2</sub>: Con. 2. Source control. 3. Complicated surgical wounds 4. Source control in less than 12 hours. European Society of Intensive Care Medicine 26th Annual Congress. Paris, France.
- 2013 Sept 12 **Speaker.** World Sepsis Day at 2: Successes and challenges. Houston Methodist Hospital. Houston, United States.
- 2013 Sept 4-6 **Speaker.** The role of biomarkers to guide treatment in sepsis. 2. PIRO: Sepsis diagnosis and stratification. 6th International Congress on Sepsis and Multiorgan Dysfunction. Weimar, Germany.
- 2013 Aug 28-Sept 1 **Speaker.** Should ICU admission be dictated by prediction tools? 2. The root cause of critical illness. 3. Surgical source control. 4. InFACT: Global collaboration in acute care research. 5. Lessons learned from failed sepsis trials. 11th Congress of the World Federation of Societies of Intensive and Critical Care Medicine. Durban, South Africa.
- 2013 Jul 14 **Speaker.** The Canadian Critical Care Trials Group and the International Forum for Acute Care Trialists (InFACT). Singapore ISARIC Roundtable Meeting. Singapore.
- 2013 Jul 12-14 **Speaker.** Building the evidence base of critical care: Global collaboration in investigator-led research. 2. Metaphor as syndrome: The Multiple Organ Dysfunction Syndrome in 2013. 3. Resuscitation and deresuscitation of the critically ill patient. 4. Host-microbial interactions in critical illness. 2nd Singapore-ANZICS Intensive Care Forum. Singapore.
- 2013 May 18-23 **Speaker.** Animal models of sepsis: Where have we gone wrong? American Thoracic Society 2013 International Conference, Philadelphia.

2013 May 11	<b>Speaker.</b> The Canadian Critical Care Trials Group and International Forum for Acute Care Trials (InFACT): Lessons learned. 1st meeting, Latin American Clinical Trials Investigators Network (LACTIN). Maipo, Chile.
2013 May 9-10	<b>Speaker.</b> Source control in the management of complex infections. 2. Cell biology for the intensivist. 3. Endotoxin in critical illness: Epidemiology and treatment options. 11th Simposio Internacional Emergencias Médicas y Paciente Crítico, Santiago, Chile.
2013 May 5-7	<b>Speaker.</b> Overview and objectives. International Forum for Acute Care Trials/International Sepsis Forum Outcome Measures Colloquium. Amsterdam, Netherlands.
2013 Apr 25-26	<b>Speaker.</b> The neutrophil in critical illness. 2. Pre-B Cell Colony Enhancing Factor (PBEF)/Nampt/Visfatin. 10th Critical Care Symposium, Manchester UK.
2013 Mar 19-22	<b>Speaker.</b> Is critical illness a disease? 2. The abdominal compartment syndrome: Is it relevant? 3. Why do good trials yield divergent results? 4. How does the host recognize danger? 5. Endotoxin plays an important role in sepsis. 6. Decision-making in multiple trauma. 33rd International Symposium of Intensive Care and Emergency Medicine. Brussels, Belgium.
2013 Feb 25-27	<b>Speaker.</b> InFACT: Global collaboration in acute care research. 11th ASM Biodefense and Emerging Diseases Research Meeting, Washington, DC.
2013 Jan 14-16.	<b>Speaker.</b> InFACT: A global acute care research initiative. International Influenza Networks Meeting, Scottsdale, Arizona.
<b>Provincial</b>	
2013 Jan 27	<b>Speaker.</b> The Canadian Critical Care Trials Group: Eight lessons learned. 2. Building an academic career. Canadian Critical Care Trials Group Residents Research Day, Lake Louise Alberta.
<b>National</b>	
2013 May 27-29	<b>Speaker.</b> Speaking science: New tools for a changing world. CIHR/ICRH Young Investigator Forum. Toronto, Ontario.
2013 May 27	<b>Speaker.</b> Speaking science: New tools for a changing world. Canadian Institutes of Health Research/Institute of Circulatory and Respiratory Health 2013 Young Investigators Forum. Toronto, Ontario.

### **Peer-Reviewed Fundings**

- 2013 - 2016      **Co-Applicant.** The METS (Measurement of Exercise Tolerance before Surgery) Study: An international multicentre prospective cohort study of cardiopulmonary exercise testing for improving preoperative risk stratification for major non-cardiac surgery. CIHR; Heart and Stroke Foundation of Canada.
- 2013 Oct - 2015 Mar      **Co-Principal.** Transfusion requirement in cardiac surgery III (TRICS III) Canadian Institutes of Health Research (CIHR)2013. \$3,323,110 CAD. [Grant].
- 2013 Jul - 2015 Jun      **Principal Investigator.** Reducing Adverse Outcomes in Cardiac Surgery Related to Tissue Hypoxia. University of Toronto. \$80,000 CAD. [Grant]
- 2013 Apr - 2014 Mar      **Principal Investigator.** Efficacy and safety of perioperative infusion of 6 % hydroxyethyl starch 130/0.4 in an isotonic electrolyte solution (Volulyte™) vs. 5% HSA as volume replacement therapy during cardiac surgery for adult patients.Fresenius-KabiGmbH. \$168,000 CAD. [Grant].
- 2013 - 2014      **Principal Investigator.** A randomized, multicenter, double-blind, placebo-controlled study of AC607 for the treatment of acute kidney injury in cardiac surgery subjects.AlloCure Inc. \$180,000 USD. [Grant]

### **Peer-Reviewed Publications**

#### **Journal Articles**

Darby PJ, Kim N, Hare GMT, Tsui A, Wang Z, Harrington A, **Mazer CD**. Anemia increases the risk of renal cortical and medullary hypoxia during cardiopulmonary bypass.Perfusion. 2013 Nov;28(6):504-11.

Ashes C, Judelman S, Wijeyesundera DN, Tait G, **Mazer CD**, Hare GM, Beattie WS. Selective  $\beta_1$ -antagonism with bisoprolol is associated with fewer postoperative strokes than atenolol or metoprolol: a single-center cohort study of 44,092 consecutive patients. *Anesthesiology*. 2013 Oct;119(4):777-87.

Garavaglia MM, Das S, Cusimano MD, Crescini C, **Mazer CD**, Hare GM, Rigamonti A. Anesthetic Approach to High-Risk Patients and Prolonged Awake Craniotomy Using Dexmedetomidine and Scalp Block. *J Neurosurg Anesthesiol*. 2013 Sep 21. [Epub ahead of print].

Fitchett D, **Mazer CD**, Eikelboom J, Verma S. Antiplatelet Therapy and Cardiac Surgery: Review of Recent Evidence and Clinical Implications. *Can J Cardiol*. 2013 Sep;29(9):1042-7.  
Tran S, Wolever TM, Errett LE, Ahn H, **Mazer CD**, Keith M. Preoperative carbohydrate loading in patients undergoing coronary artery bypass or spinal surgery. *Anesth Analg*. 2013 Aug;117(2):305-13.

Shehata N, Forster A, Li L, Rothwell DM, **Mazer CD**, Naglie G, Fowler R, Tu JV, Rubens FD, Hawken S, Wilson K. Does anemia impact hospital readmissions after coronary artery bypass surgery? *Transfusion*. 2013 Aug;53(8):1688-97; quiz 1687.

Yu J, Ramadeen A, Tsui AK, Hu X, Zou L, Wilson DF, Esipova TV, Vinogradov SA, Leong-Poi H, Zamiri N, **Mazer CD**, Dorian P, Hare GM. Quantitative assessment of brain microvascular and tissue oxygenation during cardiac arrest and resuscitation in pigs. *Anaesthesia*. 2013 Jul;68(7):723-35.

Beattie WS, Donati F, Cheng D, **Mazer D**, Miller DR. From concept to publication: celebrating mentorship and knowledge generation through research during postgraduate residency training. *Can J Anaesth*. 2013 Jul;60(7):625-9.

Zaffar N, Joseph A, **Mazer CD**, Nisenbaum R, Karkouti K, Tinmouth A, Peterson MD, Pavenski K, Callum J, Cserti-Gazdewich C, Shehata N. The rationale for platelet transfusion during cardiopulmonary bypass: an observational study. *Can J Anaesth*. 2013 Apr;60(4):345-54.

Hu T, Beattie WS, **Mazer CD**, Leong-Poi H, Fujii H, Wilson DF, Tsui AK, Liu E, Muhammad M, Baker AJ, Hare GM. Treatment with a highly selective  $\beta_1$  antagonist causes dose-dependent impairment of cerebral perfusion after hemodilution in rats. *Anesth Analg*. 2013.

Mar;116(3):649-62.

## Invited Lectures and Presentations

### International

- 2013 Oct 16 **Speaker.** Update on strategies for blood conservation and hemostasis in cardiac surgery. American Society of Anesthesiologists (ASA) annual meeting. San Francisco, California, USA.
- 2013 Oct 14 **Speaker.** Synthetic coagulant agents – fibrinogen and PCCs – Why not just replace blood products? ASA Annual Meeting, San Francisco California, USA.
- 2013 Oct 13 **Speaker.** Coagulation challenges in cardiovascular surgery (Moderator). ASA Annual Meeting. San Francisco, California, USA.
- 2013 Oct 4 **Speaker.** Antifibrinolytic therapy in the post aprotinin era: Efficacy and outcome. Association of Cardiac Anesthesiologists annual meeting, Washington, USA.
- 2013 Apr 9 **Speaker.** The intersection of blood conservation guidelines and real life care of cardiovascular surgery patients. Problem based learning discussions (PBCD). SCA Annual meeting, Miami, Florida, USA.
- 2013 Oct 5 **Speaker.** Risks and benefits of antifibrinolytic and hemostatic drugs. 10th meeting of Asian Society of Cardiothoracic Anesthesiologists, Singapore.
- 2013 Aug 11 **Speaker.** Update on best practices (Blood transfusion, HIT, and antifibrinolysis). (Moderator) International Forum of Cardiovascular Anesthesia (IFCA), the 8<sup>th</sup> International Chinese Cardiovascular Anesthesia Forum (ICCAF), China Heart Congress. Beijing, China.

### Provincial

- 2013 Dec 9 **Speaker.** Transfusion and blood conservation in cardiac surgery, University of British Columbia, Vancouver General Hospital Interdisciplinary Cardiac Journal Club Rounds, Vancouver, British Columbia.
- 2013 Nov 30 **Speaker.** The anticoagulated patient with coronary stents presenting for non-cardiac surgery, Toronto Interactive Anesthesia Symposium (PBLD), Toronto, Ontario.
- 2013 Oct 15 **Speaker.** Blood conservation in cardiac surgery. Patient Blood Management Symposium. Toronto, Ontario.

## **Local**

2013 Nov 22 **Speaker.** Seizure in the ICU patients, new drugs in the pipeline?", Inter-City Clinical Rounds, Sunnybrook Health Sciences Centre, Toronto, Ontario.

2013 Nov 9 **Speaker.** CV Surgery: Transfusion and blood conservation. Critical Care Canada Forum, Toronto.

2013 Oct 22 **Speaker.** Plagarism. Li Ka Shing Knowledge Institute Research Retreat, Toronto.

**Peer-Reviewed Publication**

**Journal Article**

Garavaglia MM, Das S, Cusimano MD, Crescini C, Mazer CD, Hare GM, **Rigamonti A.** Anesthetic Approach to High-Risk Patients and Prolonged Awake Craniotomy Using Dexmedetomidine and Scalp Block. *J Neurosurg Anesthesiol.* 2013 Sep 21. [Epub ahead of print].



## **Peer-Reviewed Publications**

### **Journal Articles**

Kelly JM, Callum JL, **Rizoli SB**. 1:1:1 - Warranted or wasteful? Even where appropriate, high ratio transfusion protocols are costly: early transition to individualized care benefits patients and transfusion services. *Expert Rev Hematol*. 2013 Dec;6(6):631-3. **SRI**

Junger WG, Rhind SG, **Rizoli SB**, Cuschieri J, Baker AJ, Shek PN, Hoyt DB, Bulger EM.

Prehospital hypertonic saline resuscitation attenuates the activation and promotes apoptosis of neutrophils in patients with severe traumatic brain injury. *Shock*. 2013 Nov;40(5):366-74. **CPA**

Nascimento B1, Callum J, Tien H, Rubenfeld G, Pinto R, Lin Y, **Rizoli SB**. Effect of a fixed-ratio (1:1:1) transfusion protocol versus laboratory-results-guided transfusion in patients with severe trauma: a randomized feasibility trial. *CMAJ*. 2013 Sep 3;185(12):E583-9. **SRI**

Reis LO, Kim FJ, Moore EE, Hirano ES, Fraga GP, Nascimento B, **Rizoli SB**. Update in the classification and treatment of complex renal injuries. *Rev Col Bras Cir*. 2013 Aug;40(4):347-350. **SRI**

Elterman J, Brasel K, Brown S, Bulger E, Christenson J, Kerby JD, Kannas D, Lin S, Minei JP, **Rizoli SB**, Tisherman S, Schreiber MA; the Resuscitation Outcomes Consortium Investigators: Transfusion of red blood cells in patients with a prehospital Glasgow Coma Scale score of 8 or less and no evidence of shock is associated with worse outcomes. *J Trauma Acute Care Surg*. 2013 Jul;75(1):8-14. **CPA**

Engels PT, Beckett AN, Rubenfeld GD, Kreder H, Finkelstein JA, da Costa L, Papia G, **Rizoli SB**, Tien H: Physical rehabilitation of the critically ill trauma patient in the ICU. *Crit Care Med*. 2013 Jul;41(7):1790-801.

Branco BC, Tang AL, Rhee P, Fraga GP, Nascimento B, **Rizoli SB**, O'Keeffe T. Selective nonoperative management of high grade splenic trauma. *Rev Col Bras Cir*. 2013 May-Jun;40(3):246-50. **CPA**

da Luz LT1, Nascimento B, **Rizoli SB**. Thromboelastography (TEG®): practical considerations on its clinical use trauma resuscitation. *Scand J Trauma Resusc Emerg Med*. 2013 Apr 16;21:29. **SRI**.

Kirkpatrick AW, **Rizoli SB**, Ouelett J-F, Sirois M, Xiao ZJ, Ball C, Roberts D, Meade M, Trottier V, Chagnon F, Tien H. Occult pneumothoraces in critical care: a prospective multi-centre randomized trial of pleural drainage for mechanically ventilated trauma patients with occult pneumothoraces. *J Trauma Acute Care Surg*. 2013 Mar;74(3):747-54; discussion 754-5. **CPA**

Ferreira F, Barbosa E, Guerreiro E, Fraga GP, Nascimento B, **Rizoli SB**. Sequential closure of the abdominal wall with continuous fascia traction (using mesh or sutures) and negative pressure therapy. Rev Col Bras Cir. February 2013; 40(1):85-89. **SRI**

## **Invited Lectures and Presentations**

### **Local**

2013 Oct 24 **Speaker**. Studying bleeding in trauma. St Michael's Hospital Foundation Tour. Toronto, Ontario.

2013 Oct 24 **Speaker**. Coagulopathy and Bleeding in trauma. St Michael's Hospital Medicine Grand Rounds, Toronto, Ontario.

2013 Apr 2 **Speaker**. What every surgeon should know about bleeding. St. Michael's Hospital. Toronto, Ontario.

## **Peer-Reviewed Publications**

### **Journal Articles**

**Sinderby C.** Neurally adjusted ventilatory assist: insufficient evidence of broad clinical outcomes. *Respir Care*. 2013 Nov;58(11):e153-4.

**Sinderby C,** Liu S, Colombo D, Camarotta G, Slutsky AS, Navalesi P, Beck J. An automated and standardized neural index to quantify patient-ventilator interaction. *Crit Care*. 2013 Oct 16;17(5):R239.

**Sinderby C,** Beck J. Neurally adjusted ventilatory assist in non-invasive ventilation. *Minerva Anesthesiol*. 2013 Aug;79(8):915-25.

## **Invited Lectures and Presentations**

### **International**

2013 Nov 17 **Speaker.** NAVA non-invasive. 11th Crit Care Forum Jiangsu, China.

2013 Nov 17 **Speaker.** NAVA Lung protection. 11th Crit Care Forum Jiangsu, China.

2013 Nov 16 **Speaker.** NAVA A Panacea. 11th Crit Care Forum Jiangsu, China.

2013 Nov 16 **Speaker.** NAVA improve patient-ventilator synchrony. 11th Crit Care Forum Jiangsu, China.

2013 Sept 18 **Speaker.** Neurally Adjusted Ventilatory Assist, Scientifical Rounds Anesthesiology and Critical Care, Vladivostok, Russia.

2013 Sept 15 **Speaker.** Neurally Adjusted Ventilatory Assist, International Congress for Respiratory Care, Krasnoyarsk, Russia.

2013 Feb 9 **Speaker.** Diaphragm electrical activity (Edi) and NAVA. Abu Dhabi.

### **National**

2013 Nov 10 **Speaker.** CNS: Impact on patient-ventilator interaction, Canada Critical Care Forum, Toronto, Ontario.

### **Provincial**

2013 Jan 18 **Speaker.** The Science and Clinic of NAVA. Critical Care Grand Rounds, London, Ontario.

### **Local**

2013 May **Speaker.** Endo-tracheal Through-flow. Critical Care Rounds, St. Michael's Hospital, Toronto, Ontario.

**Peer-Reviewed Publications**

**Journal Articles**

Ko HK, Yu WK, Lien TC, Wang JH, **Slutsky AS**, Zhang H, Kou YR. Intensive care unit-acquired bacteremia in mechanically ventilated patients: Clinical features and outcomes. *PLoS One*. 2013 Dec 23;8(12):e83298.

**Slutsky AS**, Ranieri VM. Ventilator-induced lung injury. *N Engl J Med*. 2013 Nov 28;369(22):2126-36 .

Goligher EC, Fan E, **Slutsky AS**. Year in review 2012: Critical Care - respiratory. *Crit Care*. 2013 Nov 22;17(6):249.

Del Sorbo L, Parotto M, **Slutsky A**. Increasing the number of lungs available for transplantation. *Minerva Anesthesiol*. 2013 Nov 26. (Epub ahead of print).

Terragni PP, Filippini C, **Slutsky AS**, Birocco A, Tenaglia T, Grasso S, Stripoli T, Pasero D, Urbino R, Fanelli V, Faggiano C, Mascia L, Ranieri VM. Accuracy of plateau pressure and stress index to identify injurious ventilation in patients with acute respiratory distress syndrome. *Anesthesiology*. 2013 Oct;119(4):880-9.

Sinderby C, Liu S, Colombo D, Camarotta G, **Slutsky AS**, Navalesi P, Beck J. An automated and standardized neural index to quantify patient-ventilator interaction. *Crit Care*. 2013 Oct 16;17(5):R239.

Tabuchi A, Styp-Rekowska B, **Slutsky AS**, Wagner PD, Pries AR, Kuebler WM. Precapillary oxygenation contributes relevantly to gas exchange in the intact lung. *Am J Respir Crit Care Med*. 2013 Aug 15;188(4):474-81.

Hess DR, Thompson BT, **Slutsky AS**. Pulmonary, Sleep, and Critical Care Updates: Update in acute respiratory distress syndrome and mechanical ventilation 2012. *Am J Respir Crit Care Med*. 2013 Aug 1;188(3):285-92.

Fan E, Villar J, **Slutsky AS**. Novel approaches to minimize ventilator-induced lung injury. *BMC Med*. 2013 Mar 28;11:85.

Fanelli V, Vlachou A, Ghannadian S, Simonetti U, **Slutsky AS**, Zhang H. Acute respiratory distress syndrome: New definition, current and future therapeutic options. *J Thorac Dis*. 2013 Jun;5(3):326-34.

Bein T, Weber-Carstens S, Goldmann A, Muller T, Staudinger T, Brederlau J, Muellenback R, Dembinski R, Graf BM, Wewalka M, Philipp A, Wernecke KD, Lubnow M, **Slutsky AS**. Lower tidal volume strategy (3 ml/kg) combined with extracorporeal CO(2) removal versus 'conventional' protective ventilation (6 ml/kg) in severe ARDS: The prospective randomized Xtravent-study. *Intensive Care Med*. 2013 May;39(5):847-56 -856.

Ichikawa A, Kuba K, Morita M, Chida S, Tezuka H, Hara H, Sasaki T, Ohteki T, Ranieri VM, Dos Santos CC, Kowaoka Y, Akira S, Luster AD, Lu B, Penninger JM, Uhlig S, **Slutsky AS**, Imai Y. CXCL10-CXCR3 enhances the development of neutrophil-mediated fulminant lung injury of viral and nonviral origin. *Am J Respir Crit Care Med*. 2013 Jan 1;187(1):65-77.

Ferguson ND, Cook DJ, Guyatt GH, Mehta S, Hand L, Austin P, Zhou Q, Matte A, Walter SD, Lamontagne F, Granton JT, Arabi YM, Arrolgia AC, Stewart TE, **Slutsky AS**, Meade MO, for the OSCILLATE Trial Investigators and the Canadian Critical Care Trials Group. High frequency oscillation in early acute respiratory distress syndrome. *N Engl J Med*. 2013 Feb 28;368(9):795-805.

## Invited Lectures and Presentations

### International

- |               |   |
|---------------|---|
| 2013 Nov 8-9  | <b>Speaker.</b> Ultraprotective ventilation. Philipps Universitat Marburg, Von Behring-Rontgen Symposium "Acute Lung Failure", Marburg, Germany.  |
| 2013 Oct 5-9  | <b>Speaker.</b> Ventilator induced lung injury, (2) So many potential therapies, so few proven successes. Why? (3) Fluid balance in ARDS. European Society of Intensive Care Medicine (ESICM), Paris, France. |
| 2013 Sep 8-11 | <b>Speaker.</b> ARDS and Ventilator-induced lung injury, (2) Mechanical Ventilation: Short and long-term consequences. European Respiratory Society, Barcelona, Spain.  |
| 2013 May 8-9  | <b>Speaker.</b> History of Mechanical Ventilation, (2) Biomarkers in ARDS. Simposio Mostra Anestesia Rianimazione e Terapia Intensiva (SMART), Milan, Italy.  |
| 2013 Apr 19   | <b>Speaker.</b> How important is lung failure for the outcome? Scientific Expert Symposium: ARDS - Boehringer Ingelheim, Biberach, Germany.   |

- 2013 Mar 19-21 **Speaker.** High frequency ventilation - Non-conventional modes of mechanical ventilation, (2) Physiological vignettes - Basic physiological concepts, (3) NAVA as a lung protective strategy in ARDS- Protecting the lungs.33rd International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium.
- 2013 Apr 19 **Speaker.** How important is lung failure for the outcome?Scientific Expert Symposium: ARDS - Boehringer Ingelheim, Biberach, Germany.
- 2013 Apr 2 **Speaker.** History of Mechanical Ventilation.University Hospital Case Medical Center - Medical Grand Rounds, Cleveland, Ohio.
- 2013 Feb 12 **Speaker.** History of mechanical ventilation.Draeger - Current Concepts in Critical Care Ventilation - 2013, Phoenix, Arizona.
- 2013 Apr 2 **Speaker.** History of Mechanical Ventilation.University Hospital Case Medical Center - Medical Grand Rounds, Cleveland, Ohio.

**Peer-Reviewed Publication**

**Journal Article**

Lambert AS, **Tousignant CP**. Anesthesia and ultrasound: riding the waves. Can J Anaesth. 2013 Jan;60(1):1-5.

**Peer-Reviewed Fundings**

- 2013 May - 2014 Jun      **Principal Investigator.** Mock Codes to Improve First Responder BLS at St. Michael's Hospital. SMH AFP. \$46,956.25 CAD. [Grant]
- 2012 Jul - 2013 Jun      **Principal Investigator.** Quality Improvement Fund. SMH QIF. \$ 21,000 CAD. [Grant]

**Peer-Reviewed Publications**

**Journal Article**

Allan KS, **Wong N**, Aves T, Dorian P. The benefits of a simplified method for CPR training of medical professionals: a randomized controlled study. Resuscitation. 2013 Aug;84(8):1119-24

**Invited Lectures and Presentations**

**National**

2013 Jan 29    **Speaker.** LEAD US SURVEY. Canadian Critical Care Society (CCCS). Toronto, Ontario.

**Local**

2013 Apr 22    **Speaker.** Career Talk to Medical Students at University of Toronto, University of Toronto. Toronto, Ontario.



**Peer-Reviewed Funding**

2013 Jan - 2015 Dec **Principal Investigator.** Mechanisms of acute lung injury. Chang-Jiang Scholar (Ministry of Education, China) \$473,870 CDN. [Grants]

**Peer-Reviewed Publications**

**Journal Articles**

Ko HK, Yu HK, Lien TC, Wang JH, Slutsky AS, **Zhang H.** Intensive care unit-acquired bacteremia in mechanically ventilated patients: clinical features and outcomes. PLOS One. 2013 Dec 23;8(12):1-10.

Fanelli V, Viachou A, Ghannadian S, Simonetti U, Slutsky AS, **Zhang H.** Acute respiratory distress syndrome: new definition, current and future therapeutic options. Journal of Thoracic Disease. 2013 Jun;5(3):326-334.

Zhang X, Zhang R, Zheng Y, Shen J, Xiao D, Li J, Shi X, Huang L, Tang H, Liu J, He J, **Zhang H.** Expression of gamma-aminobutyric acid receptors on neoplastic growth and prediction of prognosis in non-small cell lung cancer. J Transl Med. 2013 Apr 24;11:102.

Antonelli M, Bonten M, Cecconi M, Chastre J, Citerio G, Conti G, Curtis JR, Hedenstierna G, Joannidis M, Macrae D, Maggiore SM, Mancebo J, Mebazaa A, Preiser JC, Rocco P, Timsit JF, Wernerman J, **Zhang H.** Year in review in Intensive Care Medicine 2012: III. Noninvasive ventilation, monitoring and patient-ventilator interactions, acute respiratory distress syndrome, sedation, paediatrics and miscellanea. Intensive Care Med. 2013 Apr;39(4):543-57.

Antonelli M, Bonten M, Cecconi M, Chastre J, Citerio G, Conti G, Curtis JR, Hedenstierna G, Joannidis M, Macrae D, Maggiore SM, Mancebo J, Mebazaa A, Preiser JC, Rocco P, Timsit JF, Wernerman J, **Zhang H.** Year in review in Intensive Care Medicine 2012. II: Pneumonia and infection, sepsis, coagulation, hemodynamics, cardiovascular and microcirculation, critical care organization, imaging, ethics and legal issues. Intensive Care Med. 2013 Mar;39(3):345-64.

Shao W, Wang D, Chiang YT, Ip W, Zhu L, Xu F, Columbus J, Belsham DD, Irwin DM, **Zhang H,** Wen X, Wang Q, Jin T. The Wnt Signaling pathway effector TCF7L2 controls gut and brain proglucagon gene expression and glucose homeostasis. Diabetes. 2013 Mar;62(3):789-800.

Antonelli M, Bonten M, Cecconi M, Chastre J, Citerio G, Conti G, Curtis JR, Hedenstierna G, Joannidis M, Macrae D, Maggiore SM, Mancebo J, Mebazaa A, Preiser JC, Rocco P, Timsit JF, Wernerman J, **Zhang H**. Year in review in Intensive Care Medicine 2012: I. Neurology and neurointensive care, epidemiology and nephrology, biomarkers and inflammation, nutrition, experimentals. *Intensive Care Med*. 2013 Feb;39(2):232-46.

**Zhang H**, Villar J, Slutsky AS. Circulating histones: a novel target in acute respiratory syndrome? *Am J Respir Crit Care Med*. 2013 Jan 15;187(2):118-20.

## Invited Lectures and Presentations

### International

- |                |   |
|----------------|---|
| 2013 May 3-7   | <b>Speaker.</b> Human neutrophil peptides induce inflammatory atherosclerotic events. Immunology 2013™ American Association of Immunologists (AAI) Annual Meeting, Hawaii Convention Center, Honolulu, Hawaii, USA. |
| 2013 Mar 15-17 | <b>Speaker.</b> What have we learnt from sepsis trial? 6 <sup>th</sup> Symposium of Guangdong Society of Intensive Care Medicine, Fushan, China.  |
| 2013 Mar 1-3   | <b>Speaker.</b> Novel therapeutic target in endotoxic shock. International Shock - Sepsis Summit Forum, Chateau Star River, Guangzhou, China.   |
| 2013 Jan 7-9   | <b>Speaker.</b> New advances in sepsis research. International Symposium on Critical Care Medicine, Guangzhou Medical University. Guangzhou, China.   |

**Peer-reviewed Publications**

**Journal Articles**

Gassas, A, Dell, S, **Cox PN**, Schechter T, Doyle, J, Sung, L, Egeler, MJ, Palaniyar, N. Severe lung injury and lung biopsy in children post hematopoietic stem cell transplantation: The differences between allogeneic and autologous transplantation. *Pediatr Transplant*. 2013 May;17(3):278-84. **Co-author or Collaborator**

Blinova E, Lau E, Bitnun A, **Cox PN**, Schwartz S, Atenafu E, Yau Y, Streitenberger L, Parshuram CS, Marshall J, Seto W. Point prevalence survey of antimicrobial utilization in the cardiac and pediatric critical care unit. *Pediatr Crit Care Med*. 2013 Jul;14(6):e280-8. **Co-author or Collaborator**

**Invited Lectures and Presentations**

**International**

Nov 2013     **Invited Speaker.** Respiratory Support with Simulation.National Pediatric Critical Care Conference, Maharashtra India.

Nov 2013     **InvitedSpeaker.** Central line associated blood stream infection. National Pediatric Critical Care Conference, Maharashtra, India.

Nov 2013     **Invited Speaker.** Improving quality of Care.National Pediatric Critical Care Conference, Maharashtra, India.

Oct 2013     **Invited Speaker.** Is Oxygen harmful? Oriental Congress on Pediatrics, Shanghai, China.

Apr 2013     **Invited Speaker.** Is hypoxia really bad for you?Optimising Mechanical Ventilation. Durham, North Carolina

Apr 2013     **InvitedSpeaker.** Recruitment maneuvers: fact or fiction. Optimising Mechanical Ventilation. Durham, North Carolina.

**National**

Nov 2013     **Invited Speaker.** Meet the Professor (Paediatric Respiratory Failure)Canadian Critical Care Forum, Toronto, Canada.

**Peer-reviewed Publications**

**Journal Articles**

Murthy S, Macdonald C, Honjo O, **Floh AA**, Humpl T. Innominate artery aneurysm after cannulation for extracorporeal membrane oxygenation via the right carotid artery. *Intensive Care Med.* 2013 Nov;39(11):2038-2039. **Co-author or Collaborator**

**Floh AA**, La Rotta G, Wermelt JZ, Bastero-Minon P, Sivarajan VB, Humpl T Validation of a New Method Based on Ultrasound Velocity Dilution to Measure Cardiac Output in Paediatric Patients. *Intensive Care Med.* 2013 May;39(5):926-33. **Senior Responsible Author**

**Book Chapters**

**Floh AA**, Krawczeski CD, Schwartz SM. Peri-Operative Care of the Child with Congenital Heart Disease. In: Wheeler, D.S., Wong H.S., Shanley, T.P. (eds): *Pediatric Critical Care Medicine: Basic Science and Clinical Evidence* London: Springer-Verlag, (In Press).

Lieppman, K., **Floh, AA.**, Schwartz, S.M.: *Developing Techniques: The Future of Monitoring.* In: Cruz, E.d.; Dunbar-Davy, I., Hraska, V.; Jaggars, J. (eds): *Pediatric and Congenital Cardiology, Cardiac Surgery and Intensive Care.* London: Springer-Verlag Limited. (In Press).

**Abstracts**

2013 Eini ZM, **Floh AA**, Freedman SB, Humpl T, Schwartz SM, Sivarajan VB. Clinical Outcomes of Pediatric Myocarditis. Annual Scientific Sessions of the American Heart Association, Dallas, TX, USA.

2013 Jean-St-Michel E, Chetan D, Schwartz SM, Van Arsdell GS, **Floh AA**, Conway J. Clinical Outcomes in Patients With Persistent Ventricular Dysfunction After Stage I Palliation for Hypoplastic Left Heart Syndrome. Annual Scientific Sessions of the American Heart Association, Dallas, TX, USA.

2013 Chetan D, Kotani Y, **Floh AA**, Schwartz SM, Van Arsdell GS, Caldarone C, Honjo O. Salvage Hybrid Palliation for Critically-Ill Infants With Functionally Single-Ventricle Physiology. Annual Scientific Sessions of the American Heart Association, Dallas, TX, USA.

2013 **Floh AA**, Nakada M, La Rotta G, Mah K, Herridge JE, Schwartz SM. Systemic Inflammation Does Not Affect Energy Expenditure Following Pediatric Bypass Surgery. Pediatric Academic Societies Annual Meeting. Washington, DC, USA.

## **Invited Lectures and Presentations**

### **Local**

- 2013 Oct 23 **Invited Speaker.** Myocarditis. George-Brown Acute Interprofessional Cardiology Course. The Hospital for Sick Children. Toronto, Ontario.
- 2013 Jun 25 **Invited Speaker.** Hyperglycemia in Paediatric Critical Illness. University of Toronto Critical Care Medicine Residents' Day Program. Toronto, Ontario.
- 2013 Mar 6 **Invited Speaker.** Hypoplastic Left Heart Syndrome. George-Brown Acute Interprofessional Cardiology Course. The Hospital for Sick Children. Toronto, Ontario.

## **Peer-reviewed Publications**

### **Journal Articles**

Moghim S, Kushi A, **Guerguerian AM**, Chau T., A review of EEG-based brain- computer interfaces as access pathways for individuals with severe disabilities, Assist Technol. 2013 Summer;25(2):99-110. **Co-author or Collaborator**

Hutchison JS, **Guerguerian AM.**, Cooling of children with severe traumatic brain injury, Lancet Neurol., 12(6), 527-9. 2013. **Co-author or Collaborator**

MacLaren G, Dodge-Khatami A, Dalton HJ; Writing Committee, MacLaren G, Dodge-Khatami A, Dalton HJ, Adachi I, Almodovar M, Annich G, Bartlett R, Bronicki R, Browqn K, Butt W, Cooper D, Demuth M et al, Joint statement on mechanical circulatory support in children: a consensus review from the Pediatric Cardiac Intensive Care Society and Extracorporeal Life Support Organization, Pediatr Crit Care Med, 14(5 Suppl 1), S:102. 2013. **Co-author or Collaborator**  
**Guerguerian AM**, Ogino MT, Dalton HJ, Shekerdemian LS., Setup and maintenance of extracorporeal life support programs, Pediatr Crit Care Med, 14(5 Suppl 1), S85-93. 2013.

### **Principal author**

Kotany Y, Honjo O, Davey L, Chetan D, **Guerguerian AM**, Gruenwald C., Evolution of technology, establishment of program, and clinical outcomes in pediatric extracorporeal membrane oxygenation: the "sickkids" experience, Artif Organs, 37(1), 21-8.2013. **Co-author or Collaborator**

Kotani Y, Chetan D, Rodrigues W, Sivarajan VB, Gruenwald C, **Guerguerian AM**, Van Arsdell GS, Honjo O., Left atrial decompression during venoarterial extracorporeal membrane oxygenation for left ventricular failure in children: current strategy and clinical outcomes, Artif Organs, 37(1), 29-36. 2013. **Co-author or Collaborator**

## **Invited Lectures and Presentations**

### **National**

2013 Dec 03 **Invited Speaker.** Sodium and fluid in the pediatric neurosurgical patient, American Association of Neurological Surgeons and Congress of Neurological Surgeons, Ontario, Toronto.

2013 Nov 11 **Invited Speaker.** Pediatric TBI, Critical Care Canada Forum, Sheraton Centre Hotel & Conference Centre, November 9-12, 2013., Ontario, Toronto.

- 2013 Nov 11 **Invited Facilitator.** Brains - Monitoring and Stroke, Critical Care Canada Forum, Sheraton Centre Hotel & Conference Centre, November 9-12, 2013., Ontario, Toronto.
- 2013 Nov 11 **InvitedFacilitator.** eCPR - Resuscitation &Retrievals-Indications/Outcomes, Critical Care Canada Forum, Sheraton Centre Hotel & Conference Centre, November 9-12, 2013., Ontario, Toronto.
- 2013 April 23 **Invited Facilitator.** Tasker R., Latest updates in Neurocritical Care in the Pediatric Patient after Cardiac Arrest, World Shared Practices Forum, Ontario, Toronto.
- 2013 Mar 1 **InvitedFacilitator.**Tasker R., Traumatic Brain Injury - Open Pediatric Lecture, World Shared Practices Forum, Ontario, Toronto.
- 2013 Mar 1 **Invited Speaker.** Early stratification with CT in children with TBI - What's Next?, Symposium: Traumatic Brain Injury: Novel Mechanisms, Neuroimaging Techniques and Treatments, Ontario, Toronto.
- 2013 Feb 4 **Invited Speaker.** ECLS and ECPR in Pediatrics - Indications and Outcomes, University Health Network Extracorporeal Life Support Symposium, Ontario, Toronto.

## **Abstracts**

### **National**

- 2013 Nov **Invited Speaker.** Lau C, Singhal N, Eini M, Sehgal A, Kukreti V, Mak L, Gignac C, Guimond J, Goerz K, Macartney J, Stanisic A, Joseph S, Hyslop C, Niles E, **Guerguerian AM.**, "Optimizing the implementation of new technology into an ICU setting: Portable CT scanner", Poster presentation. Canadian Critical Care Forum -Sheraton Centre Hotel & Conference Centre, November 9-12, 2013., Canada, Ontario, Toronto.
- 2013 Nov **Invited Speaker.** Macartney J, Davidson L, Foreman C, Hamilton L, Humpl T, Campbell C, Sutton P, Da Silva Z, **Guerguerian AM.**, Evaluation of alternate staffing models forpatients supported with Extracorporeal Membrane Oxygenation in Pediatrics. Poster. Canadian Critical Care Forum - Sheraton Centre Toronto, November 9-12, 2013. Toronto, Canada.
- 2013 Nov **Invited Speaker.** Lau C, Singhal N, Sehgal A, Kukreti V, Mak L, Gignac C, Guimond J, Goerz K, Macartney J, Stanisic A, Joseph S, Hyslop C, Niles E, **Guerguerian AM**, Laughlin S, BenDavid G, Billanti C, Padfield N et al, "Optimizing the implementation of new technology into an ICU setting: Portable

CT scanner" Poster. Canadian Critical Care Forum - Sheraton Centre Toronto, November 9-12, 2013. Toronto, Canada.

**Local**

2013 Jul **Invited Speaker.** Sehgal A, Anand V, Fazari L, Dryden-Palmer K, Sivarajan VB, Honjo O, **Guerguerian AM.** Department of Critical Care Medicine, Hospital for SickChildren, The Labatt Family Heart Centre, "Venovenous ECMO cannulation practices, complication and outcomes at Sick kids" Poster Residents Day. Toronto, Canada.



**Peer-Reviewed Funding**

2013 – present      **Co-Investigator.** Long-term Cardio-Respiratory Outcomes of Extremely Pre-term Infants: A Workshop to Guide Development of a Current Canadian Study. \$24,973 CAD (Co-Principal Investigator, Principal investigator: Dr. Sherri Katz). [Grant]

**Peer-reviewed Publications**

**Journal Articles**

Beghetti M, Berger RMF, Schulze-Neick I, Raskob G, Day R, Pulido T, Feinstein J, Barst RJ, **Humpl T** for the TOPP registry investigators. Diagnostic evaluation of pediatric pulmonary hypertension in current clinical practice. Results from the first multinational registry Tracking Outcomes and Practice in Pediatric Pulmonary Hypertension (TOPP). ERJ. 2013 Sep; 42(3):689-700. **Senior Responsible Author**

Abman SH, Kinsella JP, Rosenzweig EB, Krishnan U, Kulik T, Mullen M, Wessel DL, Steinhorn R, Adatia I, Hanna B, Feinstein J, Fineman J, Raj U, **Humpl T**. Implications of the U.S. Food and Drug Administration warning against the use of Sildenafil for the treatment of pediatric pulmonary hypertension.; Pediatric Pulmonary Hypertension Network (PPHNet). Am J Respir Crit Care Med. 2013 Mar;187(6):572-5 **Senior Responsible Author**

Floh AA, LaRotta G, Wermelt JZ, Bastero-Minon P, Sivarajan V, **Humpl T**. Validation of a new method based on ultrasound velocity dilution to measure cardiac output in paediatric patients. Intensive Care Med. 2013 May;39(5):926-33 **Senior Responsible Author**

Almond CS, Morales DL, Blackstone EH, Turrentine M, Imamura M, Massicotte P, Jordan LC, Devaney E, Ravishankar C, Kanter K, Holman WL, Kroschwitz R, Tjossem C, Thuita L, Cohen G, Buchholz H, St. Louis JD, Nguyen K, Niebler RA, Walters H 3<sup>rd</sup>, Reemsten B, Wearden P, Reinhartz O, Guleserian KJ, Mitchell MB, Bleiweis MS, Canter C, **Humpl T**: The Berlin Heart EXCOR® Pediatric Ventricular Assist Device for Bridge to Heart Transplantation in US Children. Circulation. 2013 Apr;127(16):1702-11 **Senior Responsible Author**

Schechter T, Leucht S, Bouffet E, Cutz E, Gasses A, Huang A, Bartels U, **Humpl T**, Doyle J. Pulmonary arterial arteriopathy and pulmonary hypertension following tandem autologous transplants in pediatric patients with CNS tumors. Biol of Blood and Marrow Transplantation. 2013 Feb;19(2):235-9 **Co-author or Collaborator**

## In Preparation

Al Alem HA, Cox P, van Arsdell G, Gruenwald C, **Humpl T**. Who Survives the Second ECMO Run? **Senior Responsible Author**

## Abstracts

- 2013 Nov Eini ZM, Floh AA, Freedman SB, **Humpl T**, Schwartz SM, Sivarajan VB. Outcomes of Paediatric Myocarditis. AHA 2013, Dallas, Texas, USA. **Co-author or Collaborator**
- 2013 Nov Macartney J, Davidson L, Forman C, Hamilton L, **Humpl T**, Campbell C, Sutton P, Da Silva Z, Guerguerian AM. Evaluation of alternate staffing models for patients supported with Extracorporeal Membrane Oxygenation in Pediatrics. CCCF, Toronto, Ontario, Canada. **Co-author or Collaborator**
- 2013 Oct Morales DLS, Zafar F, Wearden PD, Rosenthal DN, Cabrerra AG, Rossano JW, **Humpl T**, Jefferies JL. LVAD vs BiVAD use across the USA: Understanding when a particular device strategy is chosen and its effect on outcomes. CHSS 2013 Annual Meeting, Chicago, Illinois, USA. **Co-author or Collaborator**
- 2013 Jun Gaitero R, Frndova H, **Humpl T**, Chiu P, Cox P. Prostaglandin E1 use in congenital diaphragmatic hernia (CDH): A 13 year review of outcomes (2000–2012) in a single tertiary paediatric academic health science centre. CDH Workshop, Rotterdam, The Netherlands. **Co-author or Collaborator**
- 2013 May **Humpl T**, Beghetti M, Berger RMF, Mallory G, Geiger R, Berger JT, Kronmal D, Schulze-Neick I, Barst R. Heart Catheterization (HC) complications in children with Pulmonary Hypertension (PH) as reported from the global TOPP Registry (Tracking Outcomes and Practice in Pediatric PH). 47<sup>th</sup> Annual meeting of the Association for European Paediatric Cardiology, London, UK. **Principal author**
- 2013 May Barst RJ, **Humpl T**, Schulze-Neick I, Jing ZC, Levy M, Ivy DD, Kronmal D, Beghetti M, Berger RMF. Outcomes of Pulmonary Hypertension (PH) In Childhood: Results From The Global TOPP Registry. American Thoracic Society International Conference, Philadelphia, Pennsylvania, USA. **Co-author or Collaborator**

- 2013 May Barst RJ, Beghetti M, Berger RMF, Mallory G, Geiger R, Berger JT, Kronmal D, Schulze-Neick I, **Humpl T**. Complications Related To Heart Catheterization (HC) In Children With Pulmonary Hypertension (PH): Factors Identified From The TOPP Registry (Tracking Outcomes And Practice In Pediatric PH). American Thoracic Society International Conference, Philadelphia, Pennsylvania, USA. **Senior Responsible Author**
- 2013 Apr Conway J, Manliot C, Dipchand AI, McCrindle B, **Humpl T**. Thromboembolic and bleeding complications in pediatric patients with a ventricular assist device. ISHLT 33<sup>rd</sup> Annual Meeting and Scientific Sessions, Montreal, Quebec, Canada. **Senior Responsible Author**
- 2013 Apr Jordan L, **Humpl T**, Reinhartz O, Pruthi S, Tjossem C, Ichord R, Rosenthal D. Neurological outcomes associated with use of the Berlin Heart EXCOR. ISHLT 33<sup>rd</sup> Annual Meeting and Scientific Sessions, Montreal, Quebec, Canada. **Co-author or Collaborator**
- 2013 Mar Sollazzo S, Lati J, **Humpl T**, Deliva R, Conway J. Physical Therapy in Pediatric Left Ventricular Assist Device. Canadian Society of Transplantation Annual Meeting, Lake Louise, Alberta, Canada. **Co-author or Collaborator**

## **Invited Lectures and Presentations**

### **International**

- 2013 Dec Ventricular assist with Berlin Heart EXCOR. Grand Rounds Fundacion Cardiovascular de Colombia. Bucaramanga, Columbia.
- 2013 Oct Mechanical support in 2013 and what are the hopes of the future? 27th EACTS (European Society for Cardio-Thoracic Surgery) Annual Meeting. Vienna, Austria.
- 2013 Oct Pulmonary hypertension in the paediatric and neonatal ICU setting. 1st European Conference: Neonatal and Paediatric Pulmonary Vascular Disease. Groningen, Netherlands.

2013 Sept      Symposium Pediatric Mechanical Circulatory Support.North American experience with the Berlin Heart EXCOR Pediatrics.5th Congress of the International Federation for Artificial Organs & 51st Annual Meeting of the Japanese Society for Artificial Organs. Yokohama, Japan.

**National**

2013 Nov      **Invited.**Customized ECLS.Critical Care Canada Forum. Toronto, Ontario, Canada.

2013 Oct      **Invited.** What's new in Pulmonary Hypertension, Report from the World Congress and Canadian Pediatric Pulmonary Hypertension Registry.Canadian Cardiovascular Society. Montreal, Quebec, Canada.

**Peer-Reviewed Funding**

2013 Jul - 2018 Jun **Co Investigator.** Approaches and decisions for Acute pediatric TBI (ADAPT) Principal Applicant: Bell, Michael Funding Sources NINDS National Institutes of Health (NIH) (USA) Total Funding: \$16,147,544 CAD. [Grant]

**Peer-reviewed Publications**

**Journal Articles**

**Hutchison JS**, Guerguerian AM, Cooling of children with severe traumatic brain injury., **2013** Lancet Neurol, 12(6), 527-529. **Senior Responsible Author**

Joffe AR, Shemie SD, Farrell C, **Hutchison J**, McCarthy-Tamblyn L, "Brain death in Canadian PICUs: demographics, timing, and irreversibility.", **2013** Pediatr Crit Care Med, 14(1), 1-9.

**Coauthor or Collaborator**

Ebrahim S, Singh S, **Hutchison JS**, Kulkarni AV, Sananes R, Bowman KW, Parshuram CS., "Adaptive behavior, functional outcomes, and quality of life outcomes of children requiring urgent ICU admission.", **2013** Pediatr Crit Care Med, 14(1), 10-18. **Coauthor or Collaborator**

**Abstracts**

2013 Dec **Invited Speaker.** Ide, K, Guerguerian, AM, et al., The association between serum biomarkers and functional outcome in children with traumatic brain injury (TBI). Abstract. 14th Joint Scientific Congress of JSICM and KSCCM. February 27- March 1, 2014., Japan, Kyoto.

2013 Nov **Invited Speaker.** Eric T. Payne, Xiu Yan Zhao, Helena Frndova, Kristin McBain, Rohit Sharma, **JS. Hutchison**, Cecil D. Hahn, Seizure burden is independently associated with outcome in critically ill children. (First prize, Oral Presentation) Poster Critical Care Canada Forum.

2013 Nov **Invited Speaker.** Ide, Kentaro; Kukreti, Vinay; Nickel, Cheri; Augstinavicius, Jura; **Hutchison, JS**; Guerguerian, Anne-Marie, "Biomarkers in mild traumatic brain injury: a systematic review." Abstract Canadian Critical Care Forum - Sheraton Centre Hotel & Conference Centre, November 9-12, 2013., Canada, Ontario, Toronto.

- 2013 Nov **Invited Speaker.** Choong, Karen; Fraser, Douglas; **Hutchison, JS**; Joffe, Ari; Jouvett, Philippe; Menon, Kusum; Pullenayegum, Eleanor; Ward, Roxanne, "Acute rehabilitation in critically ill children: a multi-centre observational study." Abstract. Canadian Critical Care Forum -Sheraton Centre Hotel & Conference Centre, November 9-12, 2013., Canada, Ontario, Toronto.
- 2013 Nov **Invited Speaker.** Sugiura, Asumi; Salewski, Ryan; Wang, Frank; Granton, John; Taylor, Paul; **Hutchison, JS**, Kallikrein-1 as a potential biomarker of global cerebral ischemia and neuroprotection in mice." Abstract Canadian Critical Care Forum -Sheraton Centre Hotel & Conference Centre, November 9-12, 2013., Canada, Ontario, Toronto.
- 2013 Nov **Invited Speaker.** Payne, Eric; Zhao, Xiu Yan; Frndova, Helena; McBain, Kristin; Sharma, Rohit; **Hutchison, JS**; Hahn, Cecil, "Increased electrographic seizure burden among critically ill children associated with a decline in neurologic function at hospital discharge." Abstract. Canadian Critical Care Forum - Sheraton Centre Hotel & Conference Centre, November 9-12, 2013., Canada, Ontario, Toronto.
- 2013 Jun **Invited Speaker.** Simic, Nevena, "Executive Functioning in the First Year Following Pediatric traumatic Brain Injury. University of Toronto Critical Care Medicine Residents' Day Oral Abstract Winner" Abstract Uof t Critical Care Medicine Residents' Day.

## **Invited Lectures and Presentations**

### **International**

- 2013 Sept **Invited Speaker.** Vasopressin in pediatric septic shock., 10th Chilean Pediatric Intensive Care Congress, Chile, Region Metropolitana de Santiago.
- 2013 Sept **Invited Speaker.** Hypothermia and neuroprotection., 10th Chilean Pediatric Intensive Care Congress, Chile, Region Metropolitana de Santiago
- 2013 Sept **Invited Speaker.** Multimodal neuromonitoring., 10th Chilean Pediatric intensive Care Congress, Chile, Region Metropolitana de Santiago.
- 2013 Sept **Invited Speaker.** Brain death in PICU., 10th Chilean Pediatric Intensive Care Congress, Chile, Region Metropolitana de Santiago.
- 2013 Sept **Invited Speaker.** Neurophysiology applied to pediatric brain injury management cerebral., 10<sup>th</sup> Chilean Pediatric Intensive Care Congress, Chile, Region Metropolitano de Santiago.

2013 Jun      **Invited Speaker.** Perspectives in hypothermia., XXIXth Rocourt Neonatology Meeting: PIC-NIC Shared Challenges, Belgium, Leige.

**National**

2013 Nov      **Invited Speaker.** TBI: Advanced Neuroimaging., Critical Care Canada Forum (CCCF), Canada, Ontario, Toronto.

**Provincial**

2013 Apr      **Invited Speaker.** Translational Investigation in Pediatric TBI: Outcome Monitoring in Pediatric Brain Injury, Grand Rounds, Alberta Children's Hospital, Canada, Alberta.

## **Peer-reviewed Publications**

### **Journal Articles**

AA Kroon, V Delriccio, I Tseu, **BP Kavanagh**, Post M. Mechanical ventilation-induced apoptosis in newborn rat lung is mediated via FasL/Fas pathway. American Journal of Physiology—Lung Cell Mol Physiol. 2013 Dec;305(11):L795-804. **Coauthor or Collaborator.**

T Yoshida, V Torsani, S Gomes, RRS Santiago, M Beraldo, MR Tucci, WA Zin, **BP Kavanagh**, MBP Amato. Spontaneous Effort Causes Occult Pendelluft During Mechanical Ventilation. American Journal of Respiratory and Critical Care Medicine. 2013 Dec;188(12):1420-7.

**Coauthor or Collaborator.**

M Cereda, Y Xin, K Emami, J Huang, J Rajaci, H Profka, B Han, P Mongkolwisetwara, S Kadlecsek, NN Kuzma, S Pickup, **BP Kavanagh**, CS Deutschman, RR Rizi. PEEP increments during anesthesia in normal lung result in hysteresis and greater numbers of smaller aerated airspaces. Anesthesiology. 2013 Dec;119(6):1402-9. **Coauthor or Collaborator.**

N de Prost, EL Costa, T Wellman, G Musch, MR Tucci, T Winkler, RS Harris, K Takahashi, JG Venegas, **BP Kavanagh**, MF Vidal Melo. Effects of ventilation strategy on distribution of lung inflammatory cell activity. Critical Care. 2013 Aug 15;17(4):R175. **Coauthor or Collaborator.**

M Cereda, K Emami, Y Xin, S Kadlecsek, NN Kuzma, P Mongkolwisetwara, H Profka, S Pickup, M Ishii, **BP Kavanagh**, CS Deutschman, RR Rizi. Imaging the interaction of atelectasis and overdistention in surfactant depleted lungs. Critical Care Medicine. 2013 Feb;41(2):527-35.

**Coauthor or Collaborator.**

S Uematsu, D Engelberts, V Peltekova, G Otulakowski, M Post, **BP Kavanagh**. Dissociation of inflammatory mediators and function: experimental lung injury in non-pulmonary sepsis. Critical Care Medicine. 2013 Jan;41(1):151-8. **Senior Responsible Author.**

### **Non-Peer-Reviewed Publications**

#### **Book Chapters**

F Grasso, **BP Kavanagh**. Negative-Pressure Ventilation. Pediatric and Neonatal Mechanical Ventilation. In Press. **Senior Responsible Author.**

T Jaecklin, **BP Kavanagh**. Mechanisms of Ventilator-Induced Lung Injury. Pediatric and Neonatal Mechanical Ventilation. In Press. **Senior Responsible Author.**



A. Kornecki, **BP Kavanagh**. Patient-Ventilator Interactions. Pediatric and Neonatal Mechanical Ventilation. In Press. **Senior Responsible Author**.

P Hassett, JG Laffey, **BP Kavanagh**. Hypercapnia. Pediatric and Neonatal Mechanical Ventilation. In Press. **Senior Responsible Author**.

**BP Kavanagh**, G Hedenstierna. Respiratory Physiology. In: RD Miller, LI Eriksson, LA Fleisher, JP Weiner-Kronish & WL Young, editor(s). Miller's Anesthesia. 7th Edition. Philadelphia (United States): Elsevier-Churchill Livingstone; 2013. In Press. **Senior Responsible Author**.

C Yildiz, N Palaniyar, G Otulakowski, M Post, W Kuebler, AK Tanswell, R Belcastro, A Masood, **BP Kavanagh**. Mechanical ventilation induces neutrophil extracellular trap formation. Submitted to: American Journal of Physiology - Lung Cell Mol Physiol (2013). **Senior Responsible Author**.

J Downer, T Bailey, R Sibbald, **BP Kavanagh**. Withdrawal and withholding care following the 2013 Supreme Court decision. Commissioned by: Canadian Medical Association Journal (2013). **Senior Responsible Author**.

T Jaecklin, J Duerr, H Huang, M Rafii, C Bear, F Ratjen, P Pencharz, **BP Kavanagh**, M Mall, H Grasemann. Lung arginase expression and activity is increased in cystic fibrosis mouse models. Submitted to: Journal of Applied Physiology (2014). **Senior Responsible Author**.

## **Invited Lectures and Presentations**

### **International**

2013 Nov **Invited Speaker**. Mechanisms of ventilator induced lung injury •CO<sub>2</sub>, the circulation and acute illness •Replacing the macrocirculation - issues with extracorporeal support •Effects and side effects of resuscitation. IPOK Rates 2013. Stellenbosch, South Africa.

2013 Oct **Invited Speaker**. Physiologic goals in the ICU. Society of Critical Care Anesthesiologists Meeting. San Francisco, California, United States.

2013 Oct **Invited Speaker**. We give too much fluid in the OR; Refresher Course lecture: "Challenges in guideline creation" (moderator). American Society of Anesthesiologists Meeting. San Francisco, California, United States.

- 2013 Aug **InvitedSpeaker.** Respiratory Support - What Should We Be Doing for Our Patients? (Chair) •...and CO2 is OK •Glucose control - is that the real goal, or have we missed the point? •Elimination of VAP - A Dream or a Real Possibility? Making Sense of it All (Panel) •Bundles are NOT what we need •How Do You Balance: Safety and Quality; Need for Increased Efficiency and Throughput; Coming within Budget? The Real Challenge Discussion (Panel). 11th Congress of the World Federation of Societies of Intensive & Critical Care Medicine. Durban, South Africa.
- 2013 Jun **InvitedSpeaker.** How ventilators injure lungs - one viewpoint •Testing therapies in ARDS - what happened to PEEP? •How good are your guidelines? Reasons for caution. 7th Alfred Advanced Mechanical Ventilation Conference (AAMVC). Melbourne, Australia.
- 2013 May **InvitedSpeaker.** Evidence based medicine: good and bad •VILI and circulating mediators: what do we know? 24th SMART Congress. Milano, Italy.
- 2013 May **InvitedSpeaker.** How valid are guidelines? •Tight glucose control may be a bad idea •Normalizing parameters can be a bad idea •How do mechanical ventilators injure lungs? •Are protocols useful? BiAnnual Controversies in Perioperative Medicine. Beaune, France.
- National**
- 2013 Nov **Invited Speaker.** Plenary RCT (co-moderator) •Debating (Sepsis) Guidelines: Doubts about bundles •Referring and Transporting our Sickest Patients (Co-Moderator) •Trial Registration Patterns in CCM •Obligations for End of Life Care in ICU (Co-Moderator). Critical Care Canada Forum 2013. Toronto, Canada.
- 2013 Feb **Invited Speaker.** Improving organ donation: the paediatric perspective. Organ & Tissue Donation and Transplantation for System Improvement. Toronto, Ontario, Canada.

### **Honours and Awards**

- 2013 Nov Desmond Bohn Researcher of the Year Award, The Hospital for Sick Children and The University of Toronto. (Distinction, Specialty: Critical Care)

**Invited Lectures and Presentations**

**National**

2013 Dec      **Invited Speaker.** Build it and they will come: Tools to develop an interprofessional simulation-based education program. SIM-one. Toronto, Ontario, Canada.

2013 Nov      **Invited Speaker.** Crisis Resource Management.Canadian Pediatric Anesthesia Society. Toronto, Canada.

**Local**

2013 Feb      **Invited Speaker.** ECMO Simulation - from Low to High - Customizing for experts by experts.Toronto General Hospital. Toronto, Ontario, Canada.

**Non-Peer-Reviewed Fundings**

- 2012 Jul - 2014 Jul      **Principal Investigator.** Risk Assessment Using Non-Invasive Measurements in Post-Operative Pediatric Patients. Boston Children's Hospital. Sterling Point Research LLC. NIH-SBIR 1R43HL117340-01.498,191 USD. [Grant]
- 2012 Feb - 2013 Jun      **Principal Investigator.** "Tracking, Trajectory & Trigger tool (T3)". Boston Children's Hospital.Provider-Payor Quality Initiative (PPQI).1,475,000 USD. [Grant]

**Peer-Reviewed Publications**

**Journal Articles**

Axelrod DM, Klugman D, Wright GE, Chang A, Bronicki R, Roth SJ; Board Members of the Pediatric Cardiac Intensive Care Society. One hundred useful references in pediatric cardiac intensive care: the 2012 update. *Pediatric Critical Care Medicine*. 2013 Oct;14(8):770-85.

**Coauthor or Collaborator**

Berg RA, Sutton RM, Holubkov R, Nicholson CE, Dean JM, Harrison R, Heidemann S, Meert K, Newth C, Moler F, Pollack M, Dalton H, Doctor A, Wessel D, Berger J, Shanley T, Carcillo J, Nadkarni VM; Eunice Kennedy Shriver National Institute of Child Health and Human Development Collaborative Pediatric Critical Care Research Network and for the American Heart Association's Get With the Guidelines-Resuscitation (formerly the National Registry of Cardiopulmonary Resuscitation) Investigators. Ratio of PICU versus ward cardiopulmonary resuscitation events is increasing. *Critical Care Medicine*. 2013 Oct;41(10):2292-7. **Coauthor or**

**Collaborator**

Smith AH, **Laussen PC**. Cardiac critical care: what really makes a difference.*Curr Opin Pediatr*.2013 Aug. Epub ahead of print. **Senior Responsible Author.**

Tabbutt S, **Laussen PC**. Off-label Drug Use in the Pediatric Cardiac Intensive Care Unit. *World J Ped Congen Heart Surg*. 2013 Jul;4(3):243-4. **Senior Responsible Author.**

Sivarajan BV, Almodovar MC, Rodefeld MD, **Laussen PC**. Pediatric extracorporeal life support in specialized situations.*Pediatric Critical Care Medicine*. 2013 Jun;14(5 Suppl 1):S51-61.

**Senior Responsible Author**

Christensen R, Voepel-Lewis T, Lewis I, Ramachandran SK, Malviya S; American Heart Association's Get With The Guidelines-Resuscitation (formerly the National Registry of Cardiopulmonary Resuscitation) investigators. Pediatric cardiopulmonary arrest in the postanesthesia care unit: analysis of data from the American Heart Association Get With The Guidelines-Resuscitation registry. *Paediatr Anaesth*. 2013 Jun;23(6):517-23. **Coauthor or Collaborator**

MacLaren G, Dodge-Khatami A, Dalton HJ; Writing Committee, MacLaren G, Dodge-Khatami A, Dalton HJ, Adachi I, Almodovar M, Annich G, Bartlett R, Bronicki R, Brown K, Butt W, Cooper D, Demuth M, D'Udekem Y, Fraser C, Guerguerian AM, Heard M, Horton S, Ichord R, Jaquiss R, **Laussen P**, Lequier L, Lou S, Marino B, McMullan M, Ogino M, Peek G, Pretre R, Rodefeld M, Schmidt A, Schwartz S, Shekerdemian L, Shime N, Sivarajan B, Stiller B, Thiagarajan R. Joint statement on mechanical circulatory support in children: a consensus review from the Pediatric Cardiac Intensive Care Society and Extracorporeal Life Support Organization. *Pediatric Critical Care Medicine*. 2013 Jun;14(5 Suppl 1):S1-2. **Coauthor or Collaborator**

Barrett CS, Jaggars JJ, Cook EF, Graham DA, Yarlagadda VV, Teele SA, Almond CS, Bratton SL, Seeger JD, Dalton HJ, Rycus PT, **Laussen PC**, Thiagarajan RR. Pediatric ECMO Outcomes: Comparison of Centrifugal Versus Roller Blood Pumps Using Propensity Score Matching. *ASAIO J*. 2013 Mar;59(2):145-51. **Coauthor or Collaborator**

Mazwi MJ, Brown DW, Marshall AC, Pigula FA, **Laussen PC**, Polito A, Wypij D, Costello JM. Unplanned re-intervention is associated with increased mortality in neonates with critical congenital heart disease. *J Thorac Cardiovasc Surg*. 2013 Mar;145(3):671-7. **Coauthor or Collaborator**

Gaies MG, Langer M, Alexander J, Steil G, Ware J, Wypij D, **Laussen PC**, Newburger J, Pigula F, Shukla A, Duggan C, Agus MSD, for the SPECS Study Group. Design and rationale of Safe Pediatric Euglycemia after Cardiac Surgery (SPECS): a randomized controlled trial of tight glycemic control after pediatric cardiac surgery. *Ped Crit Care Med*. 2013 Feb;14(2):148-56. **Coauthor or Collaborator**

Hasan BS, Bautista-Hernandez V, McElhinney DB, Salvin J, **Laussen PC**, Prakash A, Geggel RL, Pigula FA. Outcomes of transcatheter approach for initial treatment of pulmonary atresia with intact ventricular septum. *Catheter Cardiovasc Interv*. 2013 Jan;81(1):111-8. **Coauthor or Collaborator**

Girotra S, Spertus JA, Li Y, Berg RA, Nadkarni VM, Chan PS; American Heart Association Get With the Guidelines-Resuscitation Investigators. Survival trends in pediatric in-hospital cardiac

arrests: an analysis from Get With the Guidelines-Resuscitation. Circ Cardiovasc Qual Outcomes. 2013 Jan;6(1):42-9. **Coauthor or Collaborator**

### **Periodical Publications**

**Laussen PC** and Patricia Hickey MSN MBA, (Eds).“Heart Murmurs”.A bi-yearly publication for physicians and nurses about the Cardiovascular Program at Children’s Hospital, Boston.1998 to present.

### **Books (In Preparation)**

Goldman A, Hirst G, Carthey J, Giddings A, **Laussen PC**. Risky Business: lessons learned from high-risk industries to improve healthcare quality and safety.

Barach PR, Jacobs JP, **Laussen PC**, Lipshultz SE. Pediatric and Congenital Cardiac Disease: Outcomes Analysis, Quality Improvement, and Patient Safety.

### **Journal Articles (In Preparation)**

Bertolizi G, DiNardo JA, **Laussen PC**, Johnson V , Polito A, Pigula FA, Zurakowski D, Kussman B. Comparison of the effect of shunt type in the Norwood procedure on cerebral oxygenation and perfusion at the time of stage 2 reconstruction.

Cardiopulmonary Resuscitation in Infants and Children with Cardiac Disease. Marino BS, Co-Chair, Tabbutt S, Adatia I, Atkins D, Checchia P, DeCaen A, Fink EL, Hazinski M, Hoffman G, Jefferies J, Kleinman M, Krawczeski C, Licht DJ, Macrae D, MacLaren G, Ravishankar C, Samson RA,Thiagarajan RR, Toms R, Tweddell J, **Laussen PC**, Co-Chair.

Costello JM, Dunbar Masterson C, Allan CK, Gauvreau K, Newburger JW, McGowan FX, Wessel DL, Mayer Jr. JE, Salvin JW, Dionne ER, **Laussen PC**. Impact of Empiric Nesiritide or Milrinone Infusion on Early Postoperative Recovery following Fontan Surgery: A Randomized, Double-blind, Placebo-Controlled Trial.

### **Invited Lectures and Presentations**

#### **International**

2013 Nov 18 **Invited Speaker**. “Big Data in the Cardiac ICU: Overwhelming or Underappreciated”. American Heart Association Scientific Sessions 2013. Dallas, Texas, United States.

2013 Nov 18 **Session moderator**. “Palliative Care and Congenital Heart Disease: Not just the end of life”. American Heart Association Scientific Sessions 2013. Dallas, Texas, United States.

- 2013 Oct 25 **Invited Speaker.** “Single ventricle patients: management and outcomes stage 1 to stage 3”. Human Manpower Development Program, Visiting Expert in Paediatric Cardiac Intensive Care. Singapore.
- 2013 Oct 25 **Invited Speaker.** “Neonatal cardiac interventions and counselling for complex disease in critical care”. Human Manpower Development Program, Visiting Expert in Paediatric Cardiac Intensive Care. Singapore.
- 2013 Oct 25 **Invited Speaker.** “Modifiable Risk in Critical Care?”. National University Hospital, Hospital wide Grand Rounds. Singapore.
- 2013 Oct 24 **Invited Speaker.** “Neuro-monitoring during cardiac surgery”. Human Manpower Development Program, Visiting Expert in Paediatric Cardiac Intensive Care. Singapore.
- 2013 Oct 24 **Invited Speaker.** “Adults with congenital heart disease”. Human Manpower Development Program, Visiting Expert in Paediatric Cardiac Intensive Care. Singapore.
- 2013 Oct 24 **Invited Speaker.** “Advances in neurodevelopment assessment and outcomes in children with congenital heart disease”. Human Manpower Development Program, Visiting Expert in Paediatric Cardiac Intensive Care. Singapore.
- 2013 Oct 23 **Invited Speaker.** “Metabolism, Nutrition & stress response”. Human Manpower Development Program, Visiting Expert in Paediatric Cardiac Intensive Care. Singapore.
- 2013 Oct 23 **Invited Speaker.** “Challenges in cardiac resuscitation”. Human Manpower Development Program, Visiting Expert in Paediatric Cardiac Intensive Care. Singapore.
- 2013 Oct 23 **Invited Speaker.** “Cardiac Critical Care: Where is it going and what have we learned?”. PAME Grand Rounds, KK Women’s and Children’s Hospital. Singapore.
- 2013 Oct 23 **Invited Speaker.** “Cardiac Critical Care: Where is it going and what have we learned?”. National University Hospital, Department of Paediatrics Grand Rounds. Singapore.
- 2013 Oct 22 **Invited Speaker.** “Low Cardiac Output”. Human Manpower Development Program, Visiting Expert in Paediatric Cardiac Intensive Care. Singapore.
- 2013 Oct 21 **Invited Speaker.** “Pulmonary Hypertension”. Human Manpower Development Program, Visiting Expert in Paediatric Cardiac Intensive Care. Singapore.

- 2013 Oct 21 **Invited Speaker.** "ECMO Potpourri I & II".Human Manpower Development Program, Visiting Expert in Paediatric Cardiac Intensive Care. Singapore.
- 2013 Oct 21 **Invited Speaker.** "Quality improvement and safety in ICUs".Human Manpower Development Program, Visiting Expert in Paediatric Cardiac Intensive Care. Singapore.
- 2013 Oct 21 **Invited Speaker.** "Cardio-pulmonary interactions".Human Manpower Development Program, Visiting Expert in Paediatric Cardiac Intensive Care. Singapore.
- 2013 Oct **Invited Speaker.** "Can technology make PICU a safer place?".ANZICS / ACCN Intensive Care ASM 2013. Hobart, Tasmania, Australia.
- 2013 Oct **Invited Speaker.** "Improved survival in congenital heart disease: What next?".ANZICS / ACCN Intensive Care ASM 2013. Hobart, Tasmania, Australia.
- 2013 Oct **Invited Speaker.** "Lessons from the SVR trial".ANZICS / ACCN Intensive Care ASM 2013. Hobart, Tasmania, Australia.
- 2013 Oct **Invited Speaker.** "Boston and Toronto: Separate specialized PICU". ANZICS / ACCN Intensive Care ASM 2013. Hobart, Tasmania, Australia.
- 2013 Oct **Chair.**Paediatric medical free papers session.ANZICS / ACCN Intensive Care ASM 2013. Hobart, Tasmania, Australia.
- 2013 Feb 20 **Session co-moderator.** Perioperative Care: Quality and Safety (Co-Moderator with Chandra Ramamoorthy). 6th World Congress of Paediatric Cardiology & Cardiac Surgery. Cape Town, South Africa.
- 2013 Feb 19 **Invited Speaker.** "Infection control as a cost-saving investment".6th World Congress of Paediatric Cardiology & Cardiac Surgery. Cape Town, South Africa.
- 2013 Feb 19 **Invited Speaker.** "New approach to data capture and analysis in the ICU: T3" (Dinner symposium, Labatt Family Heart Centre, Hospital for Sick Children).6th World Congress of Paediatric Cardiology & Cardiac Surgery. Cape Town, South Africa.
- 2013 Feb 18 **Invited Speaker.** "The anaesthetist as intraoperative intensivist".6th World Congress of Paediatric Cardiology & Cardiac Surgery. Cape Town, South Africa.
- 2013 Feb 18 **Invited Speaker.** "Inotropes: current evidence for usage and future possibilities". 6th World Congress of Paediatric Cardiology & Cardiac Surgery. Cape Town, South Africa.



## **National**

- 2013 Nov 10 **Invited Speaker.** "CPR in congenital heart disease".Critical Care Canada Forum 2013. Toronto, Canada.
- 2013 Nov 10 **Invited Speaker.** "Performance Metrics: Valid or Not" WJ Sibbald Symposium. Critical Care Canada Forum 2013. Toronto, Canada.
- 2013 Nov 10 **Invited Speaker.** Meet the Professors-Intimate and Interactive. "Pediatric heart patients".Critical Care Canada Forum 2013. Toronto, Canada.
- 2013 Nov 9 **Invited Speaker.** "Modifiable Risk".SickKids Critical Care Alumni meeting. Toronto, Canada.

## **Local**

- 2013 Oct 10 **Invited Speaker.** "Recognizing clinical deterioration: The challenge of prospective regeneration".5th Annual University of Toronto Center for Quality Improvement and Patient Safety Symposium. Toronto, Canada.
- 2013 Jun 25 **Invited Speaker.** "Modifiable Risk....or Lack Thereof". University of Toronto Critical Care Medicine Residents' Day. Toronto, Canada.

## **National**

### **Abstracts**

- 2013 Nov 18 Impact of Empiric Nesiritide or Milrinone Infusion on Early Postoperative Recovery Following Fontan Surgery: A Randomized, Double-blind, Placebo-controlled Trial (oral presentation). American Heart Association Scientific Sessions 2013. Dallas, Texas. Costello JM, Dunbar-Masterson C, Allan CK, Gauvreau K, Newburger JW, McGowan Jr FX, Wessel DL, Mayer Jr JE, Salvin JS, Dionne RE, **Laussen PC.**
- 2013 Nov 18 Extracorporeal - Cardiopulmonary Resuscitation (E-CPR) Rescue Following Failed Pediatric In-hospital CPR. A Report from the American Heart Association Get With the Guidelines-Resuscitation Registry (GWTG-R) Pediatric Research Task Force (oral presentation). American Heart Association Scientific Sessions 2013. Dallas, Texas. Lasa J, Raymond T, Hammond R, Elci O, Gaies M, Thiagarajan R, **Laussen P,** Kilbaugh T, Berg RA, Nadkarni V, Topjian A.

## **Professional Educational Media Presentations**

### **International**

- 2013      **Invited Speaker.** “Low Cardiac Output State and Airway Management” (Adobe Air application).OPENPediatrics. Boston. (Continuing Education).
- 2013      **Invited Speaker.** “Identifying & Managing Low Cardiac Output” (Adobe Air application).OPENPediatrics. Boston. (Continuing Education).

**Peer-Reviewed Funding**

2013 - 2014    **Principal Investigator.** Post factum: What if you could change the terms. Initial experiences with U/S guided lines. Pediatric Consultant's Education Innovation Development Grant, The Hospital for Sick Children. \$2898.50 CAD. [Grant]

**Invited Lectures and Presentations**

**International**

2013            **Invited Speaker.** Crisis resource management principles. Pediatric Intensive Care Rounds, Hamad Medical Corporation, Doha, Qatar.

2013            **Invited Speaker.** "Post factum" – What if you could change the terms? Initial experiences of U/S guided lines AMEE 2013 - Colouring Outside the Lines, Prague, Czech Republic.

2013            **Invited Speaker.** In pursuit of optimal simulation training: Initial experiences with ultrasound guided line insertion. The Fourteenth Annual MHPE Summer Conference, Department of Medical Education, College of Medicine/University of Illinois at Chicago, USA.

**National**

2013            **Invited Speaker.** Post factum: What if you could change the terms. Initial experiences of novices with procedures Canadian Critical Care Trials Group.

2013            **Invited Speaker.** In search of the optimal bronchoscopy training platform: Developing a novel tool for training novice learners: Poster presentation. 2013 International Conference on Residency Education (ICRE), Calgary.

2013            **Invited Speaker.** "What have I gotten myself into?" General surgery blogs provide insight into the positive and negative realities of a surgical career: Poster presentation (Presenter(s): Knox A, Reddy S, Mema B, DeMoya M, Harris I.) International Conference on Residency Education (ICRE), Calgary.

2013            **Invited Speaker.** Post factum: What if you could change the terms? Initial experiences with ultrasound guideline. International Conference on Residency Education (ICRE), Calgary.

**Local**

- 2013      **Invited Speaker.** Transfer of Learning: Simulation to Bedside. Critical Care Research Rounds (Special Presentation on Education), Hospital for Sick Children, Toronto, Canada.
- 2013      **Invited Speaker.** Preparing a Dossier: Co presenter. Education Scholars Program, Centre for Faculty Development, University of Toronto, 2013

**Peer-reviewed Publication**

**Journal Article**

Alvise Tosoni, Anne Dipchand, **Hadi Mohseni-Bod**. "The use of levosimendan in children with cancer with severe acute cardiac dysfunction: case series and a review of the literature". Cardiology in the Young. May 2013; 10:1-4.[Epub ahead of print].(SRA). PMID: 23659288.

**Senior responsible author**

**Peer-Reviewed Funding**

2013 -2014    **Principal Investigator**. RESPECT: a tool to improve patient care quality and safety & facilitate team learning. Canadian Institutes of Health Research (CIHR). Collaborator(s): DRYDEN-PALMER, Karen D; MEMA, Briseida; NADKARNI, Vinay; TIJSSEN, Janice A (Co-applicants). \$90,821 CAD [Grant]

**Peer-reviewed Publications**

**Journal Articles**

Berg RA, Sutton RM, Holubkov R, Nicholson CE, Dean JM, Harrison R, Heidemann S, Meert K , Newth C, Moler F, Pollack M, Dalton H, Doctor A, Wessel D, Berger J, Shanley T, Carcillo J, Nadkarni VM. Ratio of PICU Versus Ward Cardiopulmonary Resuscitation Events Is Increasing, Crit Care Med. 2013 Oct;41(10):2292-7. **Co-author or Collaborator**

Parker MJ ,**Parshuram CS**, Sodium Bicarbonate Use in Shock and Cardiac Arrest: Attitudes of Pediatric Acute Care Physicians Crit Care Med. 2013 Sep;41(9):2188-95 **Senior Responsible Author**

Ebrahim S ,**Parshuram C**, Comparison of utility scores from the Visual Analog Scale and Health Utilities Index 3 in children following pediatric intensive care unit admission., Journal of child health care : for professionals working with children in the hospital and community, Aug 2013.

**Senior Responsible Author**

Blinova E , Lau E , Bitnun A , Cox P , Schwartz S , Atenafu E , Yau Y , Streitenberger L , **Parshuram CS** , Marshall J , Seto W, Point prevalence survey of antimicrobial utilization in the cardiac and pediatric critical care unit., Pediatr Crit Care Med. 2013 Jul;14(6):e280-8. **Co-author or Collaborator**

Christensen R , Voepel-Lewis T , Lewis I , Ramachandran SK , Malviya S , Pediatric cardiopulmonary arrest in the postanesthesia care unit: analysis of data from the American Heart Association Get With The Guidelines- Resuscitation registry.", Paediatr Anaesth. 2013 Jun;23(6):517-23. **Co-author or Collaborator**

Garcia Guerra G , Joffe AR , Senthilselvan A , Kutsogiannis DJ , **Parshuram CS**, Incidence of milrinone blood levels outside the therapeutic range and their relevance in children after cardiac surgery for congenital heart disease., Intensive Care Med. 2013 May;39(5):951-7. **Senior**

**Responsible Author**

Ebrahim S , Singh S , **Parshuram CS**, Parental satisfaction, involvement, and presence after pediatric intensive care unit admission., J Crit Care. 2013 Feb;28(1):40-5. **Senior Responsible**

**Author**

Ebrahim S , Singh S , Hutchison JS , Kulkarni AV , Sananes R , Bowman KW , **Parshuram CS**, Adaptive behavior, functional outcomes, and quality of life outcomes of children requiring urgent ICU admission., Pediatr Crit Care Med. 2013 Jan;14(1):10-8. **Senior Responsible Author**

Girotra S , Spertus JA , Li Y , Berg RA , Nadkarni VM , Chan PS , Survival trends in pediatric in-hospital cardiac arrests: an analysis from Get With the Guidelines-Resuscitation., Circ Cardiovasc Qual Outcomes. 2013 Jan 1;6(1):42-9. . **Co-author or Collaborator**

**Invited Lectures and Presentations**

**International**

2013 Apr **Invited.** BedsidePEWS a screening tool to prevent cardiac arrest in children.", King's College Hospital, United Kingdom, London.

2013 Apr **Invited.** Re-introducing BedsidePEWS a screening tool for daily use.", King's College Hospital, United Kingdom, London.

2013 Apr **Invited.** EPOCH and BedsidePEWS implementation.", King's College Hospital, United Kingdom, London.

2013 Apr **Invited.** EPOCH and BedsidePEWS Implementation.", St. Mary's Hospital, United Kingdom, London.

2013 Apr **Invited.** Improving care through recognition and response, Tauranga Hospital, New Zealand, Tauranga, Bay of Plenty

**Provincial**

2013 Jun **Invited.** Bedside Paediatric Early Warning System, Grand Rounds, McMaster Hospital, Canada, Ontario, Hamilton.

**Peer-Reviewed Funding**

2013-2014    **Co-Investigator.** (Canadian Anaesthesiologists' Society) – Improving Precision: Randomized Control Trial of Milrinone Therapeutic Drug Monitoring. (Principal Investigator: Katherine Taylor, Co-Investigator: Chris Parshuram) - \$20,000 CAD [Grant]

**Peer-reviewed Publications**

**Journal Articles**

**Schwartz SM**, Lu M, Ohye RG, Hill KD, Atz AM, Naim MY, Williams IA, Goldberg CS, Lewis A, Pigula F, Manning P, Pizarro C, Chai P, McCandless R, Dunbar-Masterson C, Kaltman JR, Kanter K, Sleeper LA, Schonbeck JV, Ghanayem N for the Pediatric Heart Network Investigators. Risk Factors for Prolonged Length of Stay Following the Stage II Procedure in the Single Ventricle Reconstruction Trial. *J Thorac Cardiovasc Surg.* 2013. In Press. **Principal Author/Senior Responsible Author**

Marwali E, Boom CE, Sakidjan I, Santoso A, Fakhri D, Kartini A, Kekalih A, **Schwartz SM**, Haas NA. Oral Triiodothyronine Normalizes T3 Levels After Surgery For Pediatric Congenital Heart Disease. *Pediatr Crit Care Med* 2013 Jul 9; [Epub ahead of print]. **Co- Principal Author.**

Blinova E, Lau E, Bitnun A, Cox P, **Schwartz SM**, Atenafu E, Yau Y, Streitenberger L, Parshuram C, Marshall J, Seto W. Point prevalence survey of antimicrobial utilization in the cardiac and pediatric critical care unit. *Pediatr Crit Care Med.* 2013 Jul;14(6):e280-e288. **Coauthor or Collaborator**

**Schwartz SM**, Schmidt A.: Medical and nursing care of the child on mechanical circulatory support. *Pediatr Crit Care Med.* 2013 Jun;14(5 Suppl 1):S43-50. **Principal Author/Senior Responsible Author**

MacLaren G, Dodge-Khatami A, Salton HJ, Writing Committee, MacLaren G, Dodge-Khata, IA, Dalton HJ, Adachi L, Almodovar M, Annich G, Bartlett R, Bronicki R, Brown K, Butt W, Cooper D, Demuth M, D'Udekem Y, Fraser C, Guerguerian AM, Heard M, Horton S, Ichord R, Jaquiss R, Laussen P, Leguier L, Lou S, Marino B, McMullen M, Ogino M, Peek G, Pretre R, Rodefeld M, Schmidt A, **Schwartz SM**, Shekerdemian L, Shime N, Sivarajan B, Stiller B, Thiagarajan R. Cardiothoracic Intensive Care Unit, National University Hospital, Singapore. Joint statement on mechanical circulatory support in children: a consensus review from



the Pediatric Cardiac Intensive Care Society and Extracorporeal Life Support Organization. *Pediatr Crit Care Med*. 2013 Jun;14(5 Suppl1):S1-2. **Coauthor or Collaborator**

Jacques F, Anand V, Hickey EJ, Kotani Y, Yadava M, Alghamdi A, Caldarone CA, Redington AR, **Schwartz SM**, Van Arsdel GS. Medical errors: The performance gap in hypoplastic left heart syndrome and physiologic equivalents? *J Thorac Cardiovasc Surg* 2013 Jun;145(6):1465-73; discussion 1473-5. Epub 2013 Feb 20. **Coauthor or Collaborator**

### **Editorials**

**Schwartz SM**. Life in the Fast Lane: Nighttime Extubation in the Pediatric Cardiac Critical Care Unit. *Pediatr Crit Care Med* 2013; In Press. **Principal Author**

**Schwartz SM**. Tattered and Torn: The Life of a Red Blood Cell on the ECMO Circuit. *Crit Care Med* 2013; In Press. **Principal Author**

**Schwartz SM**. We Can Safely and Effectively Implement Tight Glycemic Control in the Pediatric Cardiac ICU: But Should We? *Pediatr Crit Care Med* 2013;14:328-9. **Principal Author**

Chetan D, Magee D, Kotani Y, Floh A, **Schwartz SM**, Van Arsdel G, Caldarone C, Honjo O. Salvage hybrid palliation for critically ill infants with functionally single-ventricle physiology. *Circulation* 2013;128:A17145. **Coauthor or Collaborator**

Eini ZM, Floh AA, Freedman SB, Humpl T, **Schwartz SM**, Sivarajan VB. Clinical outcomes of pediatric myocarditis. *Circulation*. 2013;128:A13153. **Coauthor or Collaborator**

Jean-St.-Michel E, Chetan D, **Schwartz SM**, Van Arsdel G, Floh A, Honjo O, Conway J. Clinical outcomes in patients with persistent ventricular dysfunction after stage I palliation for hypoplastic left heart syndrome. *Circulation* 2013;128:A16983. **Coauthor or Collaborator**

### **Book Chapters**

Floh AA, Krawczeski CD, **Schwartz SM**. Peri-Operative Care of the Child with Congenital Heart Disease. In: Wheeler DS, Wong HS, Shanley TP. (eds): *Pediatric Critical Care Medicine: Basic Science and Clinical Evidence*, 2nd Edition/Volume 3: Peri-operative Care of the Critically Ill or Injured Child. London: Springer-Verlag, In Press. **Senior Responsible Author**

Gist KM, **Schwartz SM**, Krawczeski CD, Nelson DP, Sheeler DS. Single Ventricle Lesions. In: Wheeler DS, Wong HS, Shanley TP. (eds): *Pediatric Critical Care Medicine: Basic Science and Clinical Evidence*, 2nd Edition/Volume 3: Peri-operative Care of the Critically Ill or Injured Child. London: Springer-Verlag, In Press. **Co-Author/Collaborator**

Gaies M, Jeffries H, Wetzel R, **Schwartz SM**. Databases for Assessing the Outcomes of the Treatment of Patients with Congenital and Pediatric Cardiac Disease—the Perspective of Critical Care. In: Barach PR, Jacobs JP, Laussen PC, Lipshultz SE. (eds): Pediatric and Congenital Cardiac Disease: Outcomes Analysis, Quality Improvement, and Patient Safety. In Press. **Co-Author/Collaborator**

**Schwartz SM**, Slavik Z, Ho SY. Cardiac Anatomy. In: Nichols DG. (ed): Rogers' Textbook of Pediatric Intensive Care, 5th ed. Philadelphia: Lippincott, Williams and Wilkins, In Press.

#### **Senior Responsible Author**

Lieppman K, Floh A, **Schwartz SM**. Developing Techniques: The Future of Monitoring. In: Cruz E.D, Dunbar-Davy I, Hraska V, Jaggars J. (eds): Pediatric and Congenital Cardiology, Cardiac Surgery and Intensive Care. London: Springer-Verlag Limited. (In Press). **Senior Responsible Author**

#### **Abstracts**

- 2013 Nov **Trainee Presentation**. Eini ZM, Floh AA, The Hospital for Sick Children, Toronto, ON, Canada; Freedman SB, Alberta Children's Hospital, Calgary, AB, Canada; Humpl T, **Schwartz SM**, Sivarajan VB, The Hospital for Sick Children, Toronto, ON, Canada. Clinical Outcomes of Pediatric Myocarditis. Presented at the American Heart Association Scientific Sessions 2013. Dallas, TX.
- 2013 Nov **Trainee Presentation**. Chetan D, Magee D, Kotani Y, Floh A, **Schwartz S**, Van Arsdell G, Caldarone C, Honjo O. Salvage hybrid palliation for critically ill infants with functionally single-ventricle physiology. Presented at the American Heart Association Scientific Sessions 2013. Dallas, TX.
- 2013 Nov **Trainee Presentation**. Jean-St.-Michel E, Chetan D, **Schwartz S**, Van Arsdell G, Floh A, Honjo O, Conway J. Clinical outcomes in patients with persistent ventricular dysfunction after stage I palliation for hypoplastic left heart syndrome. Presented at the American Heart Association Scientific Sessions 2013. Dallas, TX.
- 2013 May **Trainee Presentation**. Floh A, Nakada M, La Rotta G, Mah K, Herridge JE, **Schwartz SM**. Systemic Inflammation Does Not Affect Energy Expenditure Following Pediatric Bypass Surgery. Presented at the Pediatric Academic Societies Annual Meeting. Washington, DC.

## Invited Lectures and Presentations

### International

- 2013 Dec **Visiting Professor.** King Faisal Specialist Hospital, Riyadh, Saudi Arabia.
- 2013 Dec **Invited Speaker.** Heart Center Grand Rounds: It's not just the inotropes: heart failure management in the ICU. King Faisal Specialist Hospital, Riyadh, Saudi Arabia.
- 2013 Dec **Invited Speaker.** Physiology in the Cardiac Critical Care Unit. King Faisal Specialist Hospital, Riyadh, Saudi Arabia.
- 2013 Oct **Invited Faculty.** Moderator: Session 3: Acute Heart Failure Syndromes (PartII): Optimizing Treatment. 2013 Pediatric Heart Failure Summit, Houston, Texas.
- 2013 Oct **Invited Speaker.** . Pulmonary Hypertension in Heart Failure. 2013 Pediatric Heart Failure Summit. Houston, Texas.
- 2013 Aug **Invited Speaker.** Hyperglycemia after pediatric cardiac surgery: does it matter? Children's Hospital of Philadelphia. Philadelphia, Pennsylvania.
- 2013 May **Visiting Professor.** Pain and sedation in the pediatric cardiac ICU. West China Hospital #1, Chengdu, China.

### Provincial

- 2014 Jun **Invited Faculty.** Chair: Complex Decisions in the Congenitally Malformed RV. The 3rd Toronto RV Symposium. Toronto, Ontario.
- 2014 Jun **Invited Speaker.** Postop SIRS – Can we avoid it? The 6th Cardiac Symposium: Non-Structural Heart Disease in Children. Toronto, Ontario.
- 2013 Apr **Invited Speaker.** Approach to diagnosis and initial stabilization of the newborn with heart disease. Annual Paediatric Update Conference, Toronto, Ontario.

## **Peer-Reviewed Publications**

### **Journal Articles**

Kotanyi Y, Chetan D, Rodrigues W, **Sivarajan VB**, Gruenwald C, Guerguerian AM, Van Arsdell GS, Honjo O.: Left atrial decompression during venoarterial extracorporeal membrane oxygenation for left ventricular failure in children: current strategy and clinical outcomes. *Artif Organs*. 2013 Jan;37(1):29-36. Epub 2012 Sep 30. **Coauthor or Collaborator**

Floh AA, La Rotta G, Wermelt JZ, Bastero-Miñón P, **Sivarajan VB**, Humpl T.: Validation of a new method based on ultrasound velocity dilution to measure cardiac output in paediatric patients. *Intensive Care Med*. 2013 May;39(5):926-33. Feb 22. **Coauthor or Collaborator**

**Sivarajan VB**, Almodovar MC, Rodefeld MD, Laussen PC.: Pediatric extracorporeal life support in specialized situations. *Pediatr Crit Care Med*. 2013 Jun;14(5 Suppl1):S51-61. **Principal**

### **Author**

MacLaren G, Dodge-Khatami A, Salton HJ, Writing Committee, MacLaren G, Dodge-Khata, I A, Dalton HJ, Adachi I, Almodovar M, Annich G, Bartlett R, Bronicki R, Brown K, Butt W, Cooper D, Demuth M, D'Udekem Y, Fraser C, Guerguerian AM, Heard M, Horton S, Ichord R, Jaquiss R, Laussen P, Leguier L, Lou S, Marino B, McMullen M, Ogino M, Peek G, Pretre R, Rodefeld M, Schmidt A, Schwartz SM, Shekerdemian L, Shime N, **Sivarajan VB**, Stiller B, Thiagarajan R. Cardiothoracic Intensive Care Unit, National University Hospital, Singapore. Joint statement on mechanical circulatory support in children: a consensus review from the Pediatric Cardiac Intensive Care society and Extracorporeal Life Support Organization. *Pediatr Crit Care Med*. 2013 Jun;14(5 Suppl 1):S1-2. **Coauthor or Collaborator**.

### **Abstracts**

2013 Nov      Clinical Outcomes of Pediatric Myocarditis. Presented as an oral abstract at the AHA Scientific Sessions 2013, Dallas, Texas. Eini ZM, Floh AA, The Hospital for Sick Children, Toronto, ON, Canada; Freedman SB, Alberta Children's Hospital, Calgary, AB, Canada; Humpl T, Schwartz SM, **Sivarajan VB**, The Hospital for Sick Children, Toronto, ON, Canada. (*Trainee presentation*)

## **Invited Lectures and Presentations**

### **International**

2013 Jul **Invited Attendee.** 2013 National Pediatric Organ Donation Summit for the Donation and Transplantation Community of Practice, Sheraton Fort Worth Hotel, Fort Worth, Texas, USA.

### **National**

2013 Oct **Invited Speaker.** Critical Paediatric Heart Disease in the Emergency Room. 10th Annual Paediatric Emergency Medicine Conference - Toronto Board of Trade, Toronto, Ontario, Canada, October 18-19, 2013.

### **Local**

2013 Sep 24 **Invited Speaker.** Organ Donation and Neurological Determination of Death. CCU Fellows Teaching.

2013 Sep 3 **Invited Speaker.** Living Related Donation in Context of Palliative Care, Bioethics Rounds.

2013 Sep 3 **Invited Speaker.** Cardiopulmonary Interactions II, CCU Fellows Teaching.

2013 Jul 23 **Invited Speaker.** Cardiopulmonary Interactions. CCU Fellows Teaching.

2013 Apr 9 **Invited Speaker.** Donation after Cardiac Death, Neurological Determination of Death and Organ Donation. CCU Fellows Teaching.

2013 Feb 20 **Invited Speaker.** What Determines How Many Ventricles the Patient Will Get? (1 or 2 or 1 1/2 Ventricular Repair). Interprofessional Acute Care Paediatric Cardiology Certificate - Level 2, Course Code: 4083, George Brown College & SickKids Labatt Family Heart Centre.

**Peer-Reviewed Fundings**

- 2013 Nov - 2014 Jul      **Knowledge User.** Antipsychotics for management of delirium — A systematic review. Technology Evaluation in the Elderly Network. 2013 Knowledge Synthesis Grant Program. KS 2013 – 10. PI: Burry, Lisa. 49,987 CAD. [Grant]
- 2013 Mar - 2015 Mar      **Co-Investigator.** OPTIMAL Selection for and Timing to Start Renal Replacement in Critically Ill Older Patients with Acute Kidney Injury (OPTIMAL-AKI). Technology Evaluation in the Elderly Network. 2013-RFP2012-15-06. PI: Bagshaw, S; Wald, R. 384,087 CAD. [Grant]
- 2012 Apr - 2013 Sep      **Co-Investigator.** One day Point Prevalence Study of Acute Rehabilitation in Ontario Intensive Care Units: Rates of, Barriers to and Facilitating Factors for Mobilization. Physicians' Services Incorporated Foundation. PI: Koo, Karen. 58,234.9 CAD. [Grant]
- 2012 Apr - 2013 Mar      **Co-Investigator.** One-day Point Prevalence of Acute Rehabilitation in Canadian Intensive Care Units: Rates of, Barriers to and Facilitating Factors for Mobilization. Academic Medical Organization of Southwestern Ontario AFP Innovation Fund. PI: Koo, Karen. 102,183.9 CAD. [Grant]
- 2011 Jul - 2013 Jun      **Co-Investigator.** STandard versus Accelerated initiation of Renal Replacement Therapy in Acute Kidney Injury (STARRT-AKI). Canadian Institutes of Health Research (CIHR). PI: Wald, Ron; Bagshaw, Sean. 276,360 CAD. [Grant]

## Peer-Reviewed Publications

### Journal Articles

Burns KE, Meade MO, Premji A, **Adhikari NK**. Noninvasive positive-pressure ventilation as a weaning strategy for intubated adults with respiratory failure. Cochrane database of systematic reviews. 2013 Dec 9;12:CD004127. **Senior Responsible Author**

Cook D, Arabi Y, Ferguson N, Heels-Ansdell D, Freitag A, McDonald E, Clarke F, Keenan S, Pagliarello G, Plaxton W, Herridge M, Karachi T, Vallance S, Cade J, Crozier T, Alves da Silva S, Costa Filho R, Brandao N, Watpool I, McArdle T, Hollinger G, Mandourah Y, Al-Hazmi M, Zytaruk N, **Adhikari NK**, PROTECT Research Coordinators, PROTECT Investigators, Canadian Critical Care Trials Group, Australian and New Zealand Intensive Care Society Clinical Trials Group. Physicians declining patient enrollment in a critical care trial: a case study in thromboprophylaxis. Intensive care medicine. 2013 Dec;39(12):2115-25. **Senior**

### Responsible Author

Wald R, Shariff SZ, **Adhikari NK**, Bagshaw SM, Burns KE, Friedrich JO, Garg AX, Harel Z, Kitchlu A, Ray JG. The Association Between Renal Replacement Therapy Modality and Long-Term Outcomes Among Critically Ill Adults With Acute Kidney Injury: A Retrospective Cohort Study. 2013 Nov 22. Crit Care Med 2013. **Coauthor or Collaborator**

Sinuff T, Muscedere J, **Adhikari NK**, Stelfox HT, Dodek P, Heyland DK, Rubenfeld GD, Cook DJ, Pinto R, Manoharan V, Currie J, Cahill N, Friedrich JO, Amaral A, Piquette D, Scales DC, Dhanani S, Garland A, KRITICAL Working Group, the Canadian Critical Care Trials Group, and the Canadian Critical Care Society. Knowledge translation interventions for critically ill patients: a systematic review. Critical care medicine. 2013 Nov;41(11):2627-40. **Coauthor or**

### Collaborator

Smith OM, Wald R, **Adhikari NK**, Pope K, Weir MA, Bagshaw SM, Canadian Critical Care Trials Group. Standard versus accelerated initiation of renal replacement therapy in acute kidney injury (STARRT-AKI): study protocol for a randomized controlled trial. Trials. 2013 Oct 5;14:320. **Coauthor or Collaborator**

Murthy S, **Adhikari NK**. Global health care of the critically ill in low-resource settings. Annals of the American Thoracic Society. 2013 Oct 1;10(5):509-13. **Senior Responsible Author**

Charbonney E, Tsang JL, Wassermann J, **Adhikari NK**. Acute refractory hypoxemia after chest trauma reversed by high-frequency oscillatory ventilation: a case report. Journal of medical case reports. 2013 Jul 15;7(1):186. **Senior Responsible Author**

Lamontagne F, Quiroz Martinez H, **Adhikari NK**, Cook DJ, Koo KK, Lauzier F, Turgeon AF, Kho ME, Burns KE, Chant C, Fowler R, Douglas I, Poulin Y, Choong K, Ferguson ND, Meade MO. Corticosteroid use in the intensive care unit: a survey of intensivists. Canadian Journal of Anaesthesia. 2013 Jul;60(7):652-9. **Coauthor or Collaborator**

Bagshaw SM, Sood MM, Long J, Fowler RA, **Adhikari NK**. Acute kidney injury among critically ill patients with pandemic H1N1 influenza A in Canada: cohort study. 2013 Jun 13. BMC Nephrol 2013 Jun 13;14(1):123. **Senior Responsible Author**

Golan E, Vasquez DN, Ferguson ND, **Adhikari NK\***, Scales DC\* (\*co-senior authors).

Prophylactic magnesium for improving neurologic outcome after aneurysmal subarachnoid hemorrhage: systematic review and meta-analysis. Journal of critical care. 2013 Apr;28(2):173-81 (Trainee publication, Golan, E.). **Co-Senior Author**

Sud S, Sud M, Friedrich JO, Wunsch H, Meade MO, Ferguson ND, **Adhikari NK**. High-frequency ventilation versus conventional ventilation for treatment of acute lung injury and acute respiratory distress syndrome. Cochrane database of systematic reviews. 2013 Feb 28;2:CD004085. **Senior Responsible Author**

Ferguson ND, Cook DJ, Guyatt GH, Mehta S, Hand L, Austin P, Zhou Q, Matte A, Walter SD, Lamontagne F, Granton JT, Arabi YM, Arroliga AC, Stewart TE, Slutsky AS, Meade MO, OSCILLATE Trial Investigators, Canadian Critical Care Trials Group. High-frequency oscillation in early acute respiratory distress syndrome. New England journal of medicine. 2013 Feb 28;368(9):795-805. **Coauthor or Collaborator**

Cook D, McDonald E, Smith O, Zytaruk N, Heels-Ansdell D, Watpool I, McArdle T, Matte A, Clarke F, Vallance S, Finfer S, Galt P, Crozier T, Fowler R, Arabi Y, Woolfe C, Orford N, Hall R, **Adhikari NK**, Ferland MC, Marshall J, Meade M, The PROTECT Research Coordinators, PROTECT Investigators, Canadian Critical Care Trials Group and the Australian and New Zealand Intensive Care Society Clinical Trials Group. Co-enrollment of critically ill patients into multiple studies: patterns, predictors and consequences. Critical care. 2013 Jan 8;17(1):R1.

**Coauthor or Collaborator**

## **Abstracts**

Kitchlu A, Burns KEA, Friedrich JO, Klein D, Richardson RM, **Adhikari NK**, Wald R. Sustained Low Efficiency Dialysis (SLED) versus Continuous Renal Replacement Therapy (CRRT) for AKI in Critically Ill Patients [abstract]. J Am Soc Nephrol. 2013 Nov;24:445A. **Coauthor or Collaborator**



Johnston BC, Bandayrel K, Friedrich JO, Akl EA, da Costa BR, Neumann I, **Adhikari NK**, Alonso-Coello P, Crawford MW, Mustafa RA, Svendrovski A, Thabane L, Tikkinen KAO, Vandvik PO, Guyatt GH. Presentation of continuous outcomes in meta-analysis: a survey of clinicians' understanding and preferences. 2013 Sep. Poster presented at Cochrane Colloquium, Quebec City, Quebec, Canada (19-23 September 2013). **Coauthor or Collaborator**

Mandelzweig K, Kumari R, Fowler R, **Adhikari NK**. Non-invasive Ventilation (NIV) in Low-Resource Settings: a Literature Review. 2013 Aug. Poster presented at 11th Congress of the World Federation of Societies of Intensive and Critical Care Medicine, Durban, South Africa (28-31 August 2013) (Trainee publication, Mandelzweig, K). **Senior Responsible Author**

Rewa O, Wald R, **Adhikari NK**, Hladunewich M, Lapinsky S, Muscedere J, Bagshaw S, Smith O, Klein DK. Neutrophil Gelatinase-Associated Lipocalin (NGAL) to Predict Adverse Events in Acute Kidney Injury. 2013 Jun. Presented at 31st International Vincenza Course on Critical Care Nephrology, 11-14 June 2013. **Coauthor or Collaborator**

Cameron JI, Chan L, Czerwonka A, Chu LM, Matte AL, Tomlinson G, Ferguson ND, Mehta S, Friedrich J, **Adhikari NK**, Fowler R, Lamontagne F, Rudkowski J, Meggison H, Ayas N, Skrobik Y, Batt J, Santos CD, Flannery J, Abbey S, Rubenfeld GD, Scales DC, Sinuff T, Cuthbertson B, Fan E, Slutsky A, Leung G, Lee C, Lo V, Mathur S, Tansey C, Wilcox ME, Marshall JC, Cook DJ, Tan A, Moody A, Levasseur M, Bayley M, Herridge MS. Long-Term Outcomes After Prolonged Mechanical Ventilation: Family Caregiver Outcomes From The Towards RECOVER Study. *Am J Respir Crit Care Med*. 2013 May;187:A4446. **Coauthor or Collaborator**

Herridge MS, Chu LM, Matte AL, Chan L, Tomlinson G, Ferguson ND, Mehta S, Friedrich J, **Adhikari NK**, Fowler R, Lamontagne F, Rudkowski JC, Meggison H, Ayas N, Skrobik Y, Batt J, Dos Santos C, Flannery J, Abbey S, Rubenfeld GD, Scales DC, Sinuff T, Cuthbertson B, Fan E, Slutsky AS, Leung G, Moody A, Levasseur M, Bayley M, Lee C, Lo V, Mathur S, Tan A, Tansey C, Wilcox ME, Marshall JC, Cook DJ, Cameron JI. Long-Term Patient Outcomes After Prolonged Mechanical Ventilation: The Towards RECOVER Study. *Am J Respir Crit Care Med*. 2013 May;187:A3623. **Coauthor or Collaborator**

Kojicic Vukoja M, Riviello E, Dunser M, **Adhikari NK**, Fowler R, Schultz M, Gong MN, Talmor D, Gajic O, Kilickaya O. The Survey On Critical Care Practices In Developing Countries. *Am J Respir Crit Care Med*. 2013 May;187:A1586. **Coauthor or Collaborator**

Burns KE, **Adhikari NK**, Premji A, Meade MO. Noninvasive Positive Pressure Ventilation As A Weaning Strategy For Intubated Adults With Respiratory Failure. *Am J Respir Crit Care Med*. 2013 May;187:A3034. **Coauthor or Collaborator**

Diaz JV, Lister P, Ortiz JR, Shindo N, **Adhikari NK**. Development of a severe influenza critical care curriculum and training materials for resource-limited settings [P499]. Critical Care. 2013 Mar 19;17(Suppl 2):S184. **Senior Responsible Author**

Silversides JA, Kuint R, Pinto R, Wald R, Hladunewich M, **Adhikari NK**. Fluid balance and renal outcomes in patients requiring renal replacement therapy in the intensive care unit (ICU) [P434]. Critical Care. 2013 Mar 19;17(Suppl 2):S161. **Senior Responsible Author**

Murthy S, Austin S, Wunsch H, **Adhikari NK**, Karir V, K Rowan K, Jacob ST, Salluh J, Bozza F, Du B, An Y, Lee B, Wu F, Oppong C, Venkataraman R, Velayutham V, Angus D. Variation in acute care burden and supply across diverse urban settings [P489]. Critical Care. 2013 Mar 19;17(Suppl 2):S181. **Coauthor or Collaborator**

### **Book Chapters**

**Adhikari NK**. Critical illness and long-term outcomes worldwide. In: Stevens RD, Hart N, Herridge MS, editor(s). Life after the ICU: from survival to recovery. Oxford (United Kingdom): Oxford University Press; 2013. In Press. **Principal Author**

Murthy S, Sayeed S, **Adhikari NK**. Critical care in low-resource settings. In: Rubenfeld GD, Scales DC, editor(s). The Organization of Critical Care: An Evidence-Based Approach to Improving Quality. New York (United States): Springer; 2013. In Press. **Senior Responsible Author**

### **Manuals**

WHO Global Influenza Programme Critical care training: Severe forms of influenza infection, including severe pneumonia, acute lung injury, severe sepsis, and septic shock. (Switzerland): WHO Press; 2013. **Principal author for 6 chapters; Editor of overall manual**

### **WHO interim guidance document**

World Health Organization. Clinical management of severe acute respiratory infections when novel coronavirus is suspected: What to do and what not to do. 2013 Feb 11. WHO Global Alert and Response coronavirus technical guidance (clinical). Available from:

[http://www.who.int/csr/disease/coronavirus\\_infections/en/](http://www.who.int/csr/disease/coronavirus_infections/en/). **Acknowledged in Publication (Not Author).**

## Abstract

Rewa O, Wald R, **Adhikari N**, Hladunewich M, Lapinsky S, Muscedere J, Bagshaw S, Smith O, Klein DK. Neutrophil Gelatinase-Associated Lipocalin (NGAL) to Predict Adverse Events in Acute Kidney Injury. **Coauthor or Collaborator**

## Letter to Editor

Golan E, Adhikari NK, Scales DC. Nimodipine in the current era of subarachnoid hemorrhage management: standard of care or primed for a definitive randomized trial? [letter]. Journal of critical care. 2013 Dec;28(6):1102. **Coauthor or Collaborator**

## Invited Lectures and Presentations

### International

- 2013 Aug 31 **Invited Speaker.** Role of telemedicine in critical care. World Federation of Societies of Intensive and Critical Care Medicine. Durban, South Africa. Presented in session “Administration: the influence of technology”.
- 2013 Aug 31 **Chair.** Session “Administration: the influence of technology”. World Federation of Societies of Intensive and Critical Care Medicine. Durban, South Africa.
- 2013 Aug 30 **Chair.** Debate: “Resources should dictate ICU admission”. World Federation of Societies of Intensive and Critical Care Medicine. Durban, South Africa.
- 2013 Aug 29 **Invited Speaker.** The Future Lies in the Creation of Specialist Centres (ECMO, cardiac arrest, obstetrics ICUs) to Optimise Care of the Critically Ill Patient: Con. World Federation of Societies of Intensive and Critical Care Medicine. Durban, South Africa.

### National

- 2013 Nov 11 **Invited Speaker.** Quality improvement in low-resource settings. Critical Care Canada Forum. Toronto, Ontario, Canada. Presented in session “International Critical Care”.
- 2013 Nov 11 **Invited Speaker.** Do physicians assist trial recruitment? Critical Care Canada Forum. Toronto, Ontario, Canada. Presented in session “Clinical research and Trials”.
- 2013 Nov 10 **Invited Speaker.** Plenary Debate: Who should run the (CV) surgical ICU - Outcomes best with intensivists. Critical Care Canada Forum. Toronto, Ontario, Canada.

**Local**

- 2013 Apr 17      **Invited Speaker.** Results of the OSCILLATE RCT. Critical Care Practice Council. Toronto, Ontario, Canada.
- 2013 Mar 15      **Invited Speaker.** Results of the OSCILLATE RCT. C-CLEAR Research Subcommittee. Toronto, Ontario, Canada.

**Peer-Reviewed Funding**

- 2013 Jul - 2015 Jul      **Co-Investigator.** Bridging the gap: Implementing a complex intervention to improve communication and collaboration between surgeons and intensivists in a closed Intensive Care Unit. AFP. PI: Nathens, Avery B. Collaborator(s): Cuthbertson, Brian H; Coburn, Natalie; Nusdorfer, Linda; Amaral, Andre C.; Gotlib Conn, Lesley; Betts, Martin; Haas, Barbara. 92,126 CAD. [Grants]
- 2012 Mar - 2014 Feb      **Co-Investigator.** Sepsis: Early antibiotics and resuscitation to control infected patients in Emergency Departments (SEARCHED Study). Association of Fundraising Professionals (AFP). PI: Hayes, Chris. Collaborator(s): Bandiera, Glen; Gray, Sara; Barratt, Lee; Gaunt, Karen; Baker, Andrew; Amaral, Andre C K B; Lee, Jacques. 82,455 CAD. [Grants]
- 2011 Jul - 2013 Jun      **Co-Investigator.** Problem-based learning for postgraduate critical care training: Implementation and dissemination of a new curriculum to promote CanMEDs roles. RCPSC. CanMEDs research and development grant. PI: Piquette, Dominique. Collaborator(s): Dev, Shelly; Amaral, Andre. 24,876 CAD. [Grants]

**Peer-Reviewed Publications**

**Journal Articles**

Ferreyro BL, Angriman F, Giunta D, Posadas-Martinez ML, Vazquez F, De Quiros FG, **Amaral A**, Scales DC. Predictive score for estimating cancer after venous thromboembolism: a cohort study. BMC Cancer. 2013 Jul 22. **Coauthor or Collaborator**

## **Abstract**

T. Sinuff1, A. Garland2, N. Adhikari1, T. Stelfox3, G. Rubenfeld1, P.M. Dodek4, D. Heyland5, R. Pinto1, D. Cook6, A. Amaral1, D. Piquette1, N. Cahill5, B. Lawless1, D.C. Scales1, J. Muscedere. Knowledge Translation Interventions For Critically Ill Patients: A Systematic Review. American Thoracic Society. Data collection, data analysis, abstract writing. **Coauthor or**

## **Collaborator**

**Amaral A**, Jeffs A, Kure L. A Quality Improvement Process To Increase Compliance With A Minimal Sedation Protocol. American Thoracic Society. Study design and concept, data collection, data analysis, abstract writing. **Principal Author**

**Amaral A**, Jeffs A, Kure L. Improvement In Compliance With Minimal Sedation Protocol Decreases Length Of Mechanical Ventilation. American Thoracic Society. Study design and concept, data collection, data analysis, abstract writing. **Principal Author**

D'Empaire P, **Amaral A**. Frequency And Quality Of Handover Between The Operating Room And The Intensive Care Unit. American Thoracic Society. Study design and concept, data collection, data analysis, abstract writing. **Senior Responsible Author**

Haas, Gotlib Conn, **Amaral**, Kitto, McCormick, McLeod, Scales, Rubenfeld, Ferguson, Rotstein, Nathens. It's parallel universes: an analysis of communication between surgeons and intensivists collaborating in the Intensive Care Unit. American Association for the Surgery of Trauma. Study design and concept, data analysis, abstract writing (Trainee publication).

## **Coauthor or Collaborator**

## **Online course**

**Amaral A**, Sud S, Eddleston J, Young K, Cuthbertson B. Quality assurance and cost-effectiveness. Patient Centred Acute Care Training (PACT) - European Society of Intensive Care Medicine. <http://pact.esicm.org/index.php?ipTested>=. Chapter outline, manuscript writing.

## **Principal Author**

## **Non-Peer-Reviewed Publication**

### **Journal Article**

**Amaral A.** The Venous saturation paradox: measure it early, but leave it alone afterword. Crit Care Med. 2013 Jun. **Principal Author**

### **Book Chapter**

**Amaral A,** Rubenfeld G. Measuring Quality. Principles of Critical Care. edited by Jesse Hall, MD and Gregory Schmidt, MD. Chapter outline, chapter writing and critical editing. In Press.

**Principal Author**

### **Editorials**

**Amaral A.** The venous saturation paradox: measure it early, but leave it alone afterwards. Crit Care Med. Review of original paper, editorial writing. In Press. **Principal Author.**

**Amaral A,** Wunsch H. Rapid response teams: a diagnostic dilemma. BMJ Qual & Safety. 21(3):177-178. Review of original manuscript, editorial writing. **Principal Author.**

**Amaral A.** A window of opportunity for collaboration between intensivists and oncologists. Journal of Critical Care. Review of original manuscript, editorial writing. **Principal Author.**

### **In Preparation**

**Amaral A,** Holder M. Assessment of patterns of antimicrobial administration in ventilator-associated pneumonia. Study design and concept, data collection, data analysis, manuscript writing. **Principal Author.**

## **Submitted Publications**

### **Journal Articles**

Barros B, MD1; Barros C, MD1; Pinto R, PhD (Stat)1; Rubenfeld G, MD, MSc1, 2; **Amaral A,** MD1, 2. The effects of weekday nighttime coverage on clinical decisions in critically ill patients. Intensive Care Medicine. Data collection, study concept and design, data analysis, manuscript writing. **Senior Responsible Author.**

Amaral A 1, Fowler R 1, Pinto R 1, Rubenfeld G 1, Ellis P 2, Bookatz B 3, Marshall J 4, Martinka G 5, Keenan S 6, Laporta D 7, Roberts D 8, Kumar A 8, and the Cooperative Antimicrobial Therapy of Septic Shock (CATSS) Database Research Group. Patient and organizational factors associated with delays in antimicrobial therapy for septic shock. Am J Respir Crit Care Med. Study concept and design, data analysis, manuscript writing. **Principal Author.**

Ferreyro, Bruno; Angriman, Federico; Giunta, Diego; Lourdes, María; Martínez, Posadas; Vazquez, Fernando; Fernán, Gonzalez Bernaldo de Quirós; **Amaral, Andre C.** K. B. Scales, Damon C. A predictive score for estimating cancer and death after venous thromboembolism. Chest. Study design and concept, data analysis, manuscript writing. **Coauthor or Collaborator.** Sinuff T, Muscedere J, Adhikari N, Stelfox T, Rubenfeld G, Dodek P, Heyland D, Cook D, Pinto R, **Amaral A**, Monaharan V, Garland A. Knowledge Translation Interventions for Critically Ill Patients: A Systematic Review. Crit Care Med. Data collection, data analysis, manuscript writing. **Coauthor or Collaborator**

### **Invited Lectures and Presentation**

#### **Local**

2013 May 2 **Invited Speaker.** Preventing Catheter Borne Infections. Department of Medicine, Hospital Medicine Education Rounds. Toronto, Ontario, Canada. Presenter(s): **Amaral A.** (Trainee Presentation).



**Peer-Reviewed Funding**

2012 Apr - 2014 Mar      **Co-Investigator.** The Multidisciplinary Tracheostomy Team: An Observational Before and After Cohort Study. Canada's Academic Health Sciences Centres (AHSC). Alternate Funding Plan Innovation Fund. \$99,788 CAD. [Grant]

**Peer-Reviewed Publication**

**Journal Article**

Lipsman N, Schwartz ML, Huang Y, Lee L, Sankar T, **Chapman MG**, Hynynen K, Lozano AM. MR-guided focused ultrasound thalamotomy for essential tremor: a proof-of-concept study. Lancet Neurology. 2013. 12(5):462-468. **Coauthor or Collaborator**

**Peer-Reviewed Funding**

2012 Apr - 2016 Mar      **Principal Investigator.** The METS (Measurement of Exercise Tolerance before Surgery) Study: An International Multicentre Prospective Cohort Study of Cardiopulmonary Exercise Testing For Improving Preoperative Risk Stratification for Major Non-Cardiac Surgery. Canadian Institutes of Health Research. Operating Grant. Collaborator(s): BEATTIE, William S; CHAN, Vincent W; CROAL, Bernard L; GRANTON, John T; HOCH, Jeffrey S; MAMDANI, Muhammad; MAZER, David; MCCARTNEY, Colin J; OH, Paul; PEARSE, Rupert; SMITH, Andrew J; THORPE, Kevin E; WIJEYSUNDERA, Harindra C. \$987,066 CAD. [Grant]

**Non-Peer-Reviewed Fundings**

2013 Oct - 2015 Mar      **Principal Investigator.** Intensive Care Rehabilitation Study (ICARuS): Barriers to Early Physical Rehabilitation in the ICU - A Delphi Study. Canadian Institutes of Health Research (CIHR). Operating Grant. \$84,627 CAD. [Grant]

2013 Jul - 2016 Jun      **Principal Investigator.** The METS ( Measurement of Exercise Tolerance before Surgery) Study: An International Multicentre Prospective Cohort Study of Cardiopulmonary Exercise Testing For Improving Preoperative Risk Stratification for Major Non-Cardiac Surgery. Heart and Stroke Foundation of Ontario (The) (HSFO). Grant in Aid. \$144,000 CAD. [Grant]

2012 Oct - 2013 Sep      **Co-Investigator.** A Systematic and Methodological Review of Neuromuscular Electrical Stimulation in the Intensive Care Unit. Canadian Institutes of Health Research (CIHR). Knowledge Synthesis Grant. \$99,996 CAD. [Grant]

## Peer-Reviewed Publications

### Journal Articles

Marshall AP, Weisbrodt L, Rose L, Duncan E, Prior M, Todd L, Wells E, Seppelt I, **Cuthbertson B**, Francis J. Implementing selective digestive tract decontamination in the intensive care unit: A qualitative analysis of nurse-identified considerations. *Heart Lung*. 2014 Jan;43(1):13-18. Epub 2013 Nov 14. **Coauthor or Collaborator**

**Cuthbertson BH**, Campbell MK, MacLennan G, Duncan EM, Marshall AP, Wells EC, Prior ME, Todd L, Rose L, Seppelt IM, Bellingan G, Francis JJ. Clinical stakeholders' opinions on the use of selective decontamination of the digestive tract in critically ill patients in intensive care units: an international Delphi study. *Crit Care*. 2013 Nov 8. 2013 Nov 8;17(6):R266. **Principal Author**  
Cooper K, Frampton G, Harris P, Jones J, Cooper T, Graves N, Cleland J, Shepherd J, Clegg A, **Cuthbertson BH**. Are educational interventions to prevent catheter-related bloodstream infections in intensive care unit cost-effective? *J Hosp Infect*. 2013 Sep 21. 2013 Sep 21. pii: S0195-6701(13)00319-8. **Senior Responsible Author**

Daneman N, Sarwar S, Fowler RA, **Cuthbertson BH**. Studies of selective decontamination - Authors' reply. *Lancet Infect Dis*. 2013 Sep 19. 2013 Sep;13(9):737-8. doi: 10.1016/S1473-3099(13)70219-6. **Senior Responsible Author**

Francis JJ, Duncan EM, Prior ME, MacLennan G, Marshall AP, Wells EC, Todd L, Rose L, Campbell MK, Webster F, Eccles MP, Bellingan G, Seppelt IM, Grimshaw JM, **Cuthbertson BH**, for the SuDDICU study groups. Comparison of four methods for assessing the importance of the attitudinal beliefs: An international Delphi study in intensive care settings. *British Journal of Health Psychology*. 2013 Aug 15. In Press. **Senior Responsible Author**

Griffiths J, Hatch RA, Bishop J, Morgan K, Jenkinson C, **Cuthbertson BH**, Brett SJ. An exploration of social and economic outcome and associated health-related quality of life after critical illness in general intensive care unit survivors: a 12-month follow up study. *Crit Care*. 2013 May 28. **Coauthor or Collaborator**

Young D, Harrison DA, **Cuthbertson BH**, Rowan K, TracMan Collaborators. Effect of early vs late tracheostomy placement on survival in patients receiving mechanical ventilation: the TracMan randomized trial. *JAMA*. 2013 May 22. **Coauthor or Collaborator**

Dombrowski SU, Prior ME, Duncan E, **Cuthbertson BH**, Bellingan G, Campbell MK, Rose L, Binning AR, Gordon AC, Wilson P, Shulman R, Francis JJ; the SuDDICU UK Study Group. Clinical components and associated behavioural aspects of a complex healthcare intervention: Multi-methods study of selective decontamination of the digestive tract in critical care. *Aust Crit Care*. 2013 May 13. **Coauthor or Collaborator**

**Cuthbertson BH**, Elders A, Hall S, Taylor J, MacLennan G, McKirdy F, Mackenzie SJ, Scttg and Sics SC. Mortality and quality of life in the five years after severe sepsis. Crit Care. 2013 Apr 16.

**Principal Author**

Daneman N, Sarwar S, Fowler RA, **Cuthbertson BH**, SuDDICU Canadian Study Group. Effect of selective decontamination on antimicrobial resistance in intensive care units: a systematic review and meta-analysis. Lancet Infect Dis. 2013 Apr. **Coauthor or Collaborator**

Hernandez RA, Jenkinson D, Vale L, **Cuthbertson BH**. Economic evaluation of nurse-led intensive care follow-up programmes compared with standard care: the PRaCTICaL Trial. Eur J Health Econ. 2013 Mar 28. **Senior Responsible Author**

Young D, Lamb SE, Shah S, MacKenzie I, Tunnicliffe W, Lall R, Rowan K, **Cuthbertson BH**; OSCAR Study Group. High-frequency oscillation for acute respiratory distress syndrome. N Engl J Med. 2013 Feb 28. **Coauthor or Collaborator**

**Cuthbertson BH**, Croal BL, Rae D, Harlid K, Gibson PH, Prescott GJ, Kengne AP, Hillis GS. N-terminal pro-B-type natriuretic peptide concentrations and long-term outcome after cardiac surgery: a prospective cohort study. Br J Anaesth. 2013 Feb. **Principal Author**

**Cuthbertson BH**. Goldilocks, elephants and surgical fluids. Br J Anaesth. 2013 Jan. **Principal Author**

**Abstract**

Seppelt I, Marshall A, Dan A, Cole L, Weisbrodt L, Glass P, Myburgh J, Finfer S, Lipman J, Paterson D, Francis J, **Cuthbertson BH**. An International DELPHI Study examining the perceived risks, benefits and barriers to the use of selective decontamination of the digestive tract (SDD) in Intensive Care. **Coauthor or Collaborator**

**Book Chapter**

Amaral, A; Sud, S; Eddleston, J; Waldmann, C; Young, K; **Cuthbertson, BH**. Critical Care informatics, management and outcome: Quality assurance and cost-effectiveness. PACT (Patient-centred Acute Care Training), a product of the European Society of Intensive Care Medicine (ESICM), is an up-to-date, on-line, modular curriculum for Intensive (Critical) Care Medicine. It is an educational resource aimed at advancing and harmonising the quality of Acute and Critical Care Medicine training and practice. **Coauthor or Collaborator**

Goddard S, **Cuthbertson BH**. Post-ICU follow up Clinics - The Legacy of Critical Care. Oxford University press in print. **Coauthor or Collaborator**

Reader T, Flin R, **Cuthbertson BH**. Factors affecting team communication in the intensive care unit. In Nemeth, C. Improving healthcare team communication: lessons from aviation. Ashgate. In Press. **Senior Responsible Author**

### **Other Publication**

Francis JJ, Duncan EM, Prior ME, MacLennan G, Marshall AP, Wells EC, Todd L, Rose L, Campbell MK, Webster F, Eccles MP, Bellingan G, Seppelt IM, Grimshaw JM, **Cuthbertson BH**; for the SuDDICU study groups. Comparison of four methods for assessing the importance of attitudinal beliefs: An international Delphi study in intensive care settings. Br J Health Psychol. Br J Health Psychol. 2013 Sep 23. doi: 10.1111/bjhp.12066. **Coauthor or Collaborator**

### **Invited Lectures and Presentation**

#### **Local**

2013 Apr 25 **Invited Speaker**. Team Work in the ICU, Research Rounds. Department of Critical Care Medicine at Sick Kids. Presenter(s): Cuthbertson B.

#### **International**

### **Abstracts and Other Papers**

2013 Jul 12 **Presenter**. Views about Selective Decontamination of the Digestive Tract: Delphi Study. NHMRC Knowledge Translation Conference. Australia. Presenter(s): Marshall A, Cuthbertson B on behalf of the SuDDICU collaboration.

**Peer-Reviewed Fundings**

- 2012 Jul - present      **Consultant/Producer.** Numbers and Narratives: Examining the effects of two types of structured feedback on internal medicine residents' recall and subsequent generation of learning goals after feedback. University of Toronto, Department of Medicine. Educational Scholarship & Research Competition. PI: Stroud, Lynfa. \$10,000 CAD. [Contracts]
- 2011 Mar - present      **Principal Investigator.** Is a Multimedia-Based Teaching Tool as Effective As Bedside Teaching? Proposal for a Validation Study. Education Development Fund, University of Toronto. Educational Development Fund Grant. Collaborator(s): Chow, Chi-Ming and Bandiera, Glenn. \$ 4,993 CAD. [Grant]
- 2010 Nov - present      **Co-Investigator.** Multimedia Teaching Tools: A Video Series on Splinting Techniques. Sunnybrook Health Sciences Centre. ACMS Fund. PI: **Dev, Shelly**& Stefan, A. \$10,000 CAD. [Grant]
- 2008 Mar - present      **Consultant/Producer.** Lung Injury Knowledge Network, Educational Website Development. National Heart, Lung, and Blood Institute (NHLBI) (USA). PI: Rubinfeld, Gordon D. \$1,500,000 USD. [Grant]

**Non-Peer-Reviewed Funding**

- 2012 Jul - present      **Consultant/Producer.** Just Wash Your Hands. Sunnybrook Health Sciences Centre. Infection Control. Collaborator(s): De Mendonca, Ben. \$30,000 CAD. [Contract]

## Non-Peer-Reviewed Publications

### Journal Articles

**SP Dev**, A Stefan, S Lee. Videos in Clinical Medicine: Intraosseous Needle Insertion in the Adult. N Engl J Med. In Review. In Press. **Principal Author**.

### Multimedia

**SP Dev**, A Stefan, S Lee. Videos in Clinical Medicine: Intraosseous Needle Insertion in the Adult. N Engl J Med. In Review. In Press. Principal Author.

Jonathan Ailon, Ophyr Mourad, Vincent Chien and **Shelly P. Dev**. Ultrasound-guided Arterial Line Insertion. New England Journal of Medicine. Senior Responsible Author.

Alexandra Stefan, Michael McKechnie and **Shelly P. Dev**. Splinting of a Distal Radial Fracture. New England Journal of Medicine. Senior Responsible Author.

## Invited Lectures and Presentations

### National

2013 Nov **Invited Speaker**. #whataretheytalkingabout?: Technology-Enhanced Learning and the Millennial ICU Trainee. Canada Critical Care Forum. Ontario, Canada.

2013 Nov **Facilitator**. Canada Critical Care Forum. Ontario, Canada.

### Local

2013 Oct **Invited Speaker**. Multimedia and the Millennial Learner. Department of Pharmacology, Sunnybrook Health Sciences Centre. Ontario, Canada.

2013 Jun **Invited Speaker**. What's New in Critical Care. Critical Care Department of Education Practice Council, Sunnybrook Health Sciences Centre. Toronto, Ontario, Canada. (Continuing Education).

2013 May **Invited Speaker**. Little Brother is Watching: Role Models, Professionalism and The Hidden Curriculum. Postgraduate Year 3 Academic Half Day, Department of Medicine, Faculty of Medicine, University of Toronto. Toronto, Ontario, Canada. (Trainee Presentation).

2013 Apr **Developer/Facilitator**. The Teaching Dossier: An Educator's Tale. Education Scholar's Program, Centre for Faculty Development, Faculty of Medicine, University of Toronto. Ontario, Canada. Presenter(s): **S Dev**, B Mema. A faculty-development workshop created to instruct faculty on how to begin the preparation of a teaching dossier.

**Peer-Reviewed Fundings**

- 2013 - 2015      **Co-Investigator.** Sex Differences in Admission to Intensive Care Units: The Role of Social Support Factors. Technology Evaluation in the Elderly National Centre of Excellence (NCE). Collaborator(s): Dodek P, **Fowler R**, Doupe M, Fransoo R, Wong H, Kozak J. \$125,807 CAD. [Grant]
- 2013 - 2015      **Primary Investigator.** Shinning a light on End-of-Life Care in Canada: Investigating Barriers, Testing Interventions, and Disseminating Integrated Solutions for Patients, Families and Healthcare Professionals. University of Toronto Integrating Challenge Grant. Collaborator(s): Gallagher R, Heyland D, Kryworuchko J, Skinner J, You J, Wunsch H. \$187,900 CAD. [Grant]
- 2013 - 2015      **Primary Investigator.** A National Comparison of Intensity of End-of-Life Care in Canada: Defining Changing Patterns, Risk Factors and Targets for Intervention. Collaborator(s): Kozak J-F, Rockwood K, Andrea Hill, Wunsch H, Skinner J, Rubinfeld G, Scales D, Heyland D, Stukel T. \$196,187 CAD. [Grant]
- 2013 - 2014      **Primary Investigator.** A Pilot Study to Ascertain the use of Intensive Care Units (ICU's) as an Option for the Surveillance of Severe Respiratory Illness (SRI) in Canada. Public Health Agency of Canada (PHAC). \$197,068.59 CAD. [Grant]
- 2012 - 2017      **Co-Investigator.** Technology evaluation in the elderly network (TECH VALUE NET). Networks of Centres of Excellence (NCE). Cash /in-kind contributions \$21,409,646 from other partners. Collaborator(s): Scientific Director: Heyland DK; Co-Investigators: 44 Network Investigators across Canada. \$23,888,157 CAD. [Grants]



2012 - 2014	<b>Co-Investigator.</b> Evaluation of a novel cardiopulmonary resuscitation (CPR) video decision aid to promote shared decision-making. Heart and Stroke Foundation of Canada (HSFC). PI: Kryworuchko, Jennifer. \$65,376 CAD. [Grant]
2012 - 2014	<b>Co-Investigator.</b> Pilot KT intervention to address gender differences in access to post arrest care. Canadian Institutes of Health Research (CIHR). PI: Rac, Valeria. Collaborator(s): Slutsky A, Abramson B, Dorian P, Bierman A, Parsons J, Scales DC, <b>Fowler R</b> , Gray S, Dainty K, Zwarenstein M, Kiss A. \$218,994 CAD. [Grant]
2012 - 2014	<b>Primary Investigator.</b> Regional and temporal variations in incidence, prevalence and outcomes of critical illness among pregnant and post-partum women and newborns in Canada. Canadian Institutes of Health Research (CIHR). Collaborator(s): Damon Scales, Stephen Lapinsky, Joel Ray, Ruxandra Pinto, Kazu Aoyama. \$41,325 CAD. [Grant]
2012 - 2014	<b>Co-Investigator.</b> DECision-making about goals of care for hospitalized meDical PatiEnts: a multicentre, mixed-methods study. The DECIDE Study. Canadian Institutes of Health Research (CIHR). Collaborator(s): Daren Heyland, John You, Martin Albert, Kevin Brazil, Andrew Day, James Downar, Roy Ilan, Dev Jayaraman, Jennifer Kryworuchko, Francois Lamontagne, Irene Ma, Anita Palepu, John Shik, Patricia Strachan. \$157,908 CAD. [Grant]
2012 - 2014 Jun	<b>Principal Investigator.</b> Optimizing duration of antibiotic therapy for bloodstream infections. Physicians Services Incorporated Foundation (The) (PSI). \$167,000. [Grant]

- 2011 Apr - 2014 Mar      **Co-Investigator.** Understanding Long-Term Mechanical Ventilation in Canada: A Programmatic Approach. Canadian Institutes of Health Research (CIHR). Collaborator(s): AMIN, Reshma; MAWDSLEY, Cathy; FAN, Eddy; FOWLER, Robert A; FRASER, Ian M; GOLDSTEIN, Roger S; KATZ, Sherri L; KING, Judith A; LEASA, David J; MCKIM, Douglas; NONOYAMA, Mika L; ROAD, Jeremy D; RUBENFELD, Gordon. \$349,863 CAD. [Grant]
- 2011 - 2013                **Principal Investigator.** Comparison of End-of-Life Care in Canada and the United States. The Commonwealth Fund.\$ 20,000 CAD. [Grant]
- 2011 - 2013                **Co-Investigator.** Council of Academic Hospitals of Ontario (CAHO) Implementation of Antimicrobial Stewardship Programs (ASP) in Intensive Care Units in Ontario Academic Hospitals. PI: Morris, Andrew. Collaborator(s): Bell C, **Fowler R**, Burry L, Daneman N, Dresser L, Elligsen M, Herridge M, Mehta S, Muller M. \$768,000 CAD. [Grant]
- 2011 - 2013                **Principal Investigator.** A National Comparison of Intensity of End-of-Life Care in Canada: Defining Changing Patterns, Risk Factors and Targets for Intervention. Canadian Institutes of Health Research. \$99,208 CAD. [Grant]

## Peer-Reviewed Publications

### Journal Articles

Daneman N, Sarwar S, **Fowler R**, Cuthbertson BH. Effect of Selective decontamination on antimicrobial resistance in intensive care units: a systematic review and meta-analysis. Lancet Infect Dis. (4):328-341. **Coauthor or Collaborator**

Muscedere J, Ofner M, Kumar A, Long J, Lamontagne F, Cook D, McGeer A, Chant C, Marshall J, Jouvett P, **Fowler R**. The Occurrence and Impact of Bacterial Organisms Complicating Critical Care Illness Associated with Influenza A (H1N1) infection. Chest. **Senior Responsible Author**

Smith OM, McDonald E, Zytaruk N, Foster D, Matte A, Clarke F, Meade L, O'Callaghan N, Vallance S, Galt P, Rajbhandari D, Rocha M, Mehta S, Ferguson ND, Hall R, **Fowler R**, Burns K, Qushmaq I, Ostermann M, Heels-Ansdell D, Cook DJ. Rates and Determinants of Informed Consent: A Case study of an International Thromboprophylaxis Trial. J Crit Care. 2013 Feb;28(1):28-39. **Coauthor or Collaborator**

Christian MD, **Fowler R**, Muller MP, Gomersall C, Sprung CL, Hupert N, Fisman D, Tillyard A, Zygun D, Marshal JC. Critical care resource allocation: trying to PREEDICCT outcomes without a crystal ball. Crit Care. 17(1):107. **Coauthor or Collaborator**

Cook D, McDonald E, Smith O Zytaruk N, Heels-Ansdell D, Watpool I, McArdle T, Matte A, Clarke F, Vallance S, Finfer S, Galt P, Crozier T, **Fowler R**, Arabi Y, Woolfe C, Orford N, Hall R, Adhikari NK, Ferland MC, Marshall J, Meade M. Coenrollment of critically ill patients into multiple studies: patterns, predictors and consequences. Crit Care. 17(1):R1. **Coauthor or Collaborator**

Ayas NT, Dodek PM, Wang H, **Fowler R**, Wong H, M Norena. Attributable Length of Stay and Mortality of Major Bleeding as a Complication of Therapeutic Anticoagulation in the Intensive Care Unit. Journal of Patient Safety. In Press. **Coauthor or Collaborator**

You J, **Fowler R**, Heyland DK. Just ask: a guide for conversations about goals of care with seriously ill hospitalized patients. CMAJ. In Press. **Coauthor or Collaborator**

Alali A, Kiss A, **Fowler R**, Scales D, Ray J, Mainprize T, de Mestral C, Nathens A. Intracranial Pressure Monitoring in Severe Traumatic Brain Injury: Results from the American College of Surgeons Trauma Quality Improvement Program. J Neurotrauma. 2013. In Press. **Coauthor or Collaborator**

Williamson D, Albert M, Heels-Ansdell D, Arnold D, Lauzier F, Zarychanski R, Crowther M, Warkentin T, Dodek P, Cade J, Lesur O, Lim W, **Fowler R**, Lamontagne F, Langevin S, Freitag A, Muscedere J, Friedrich J, Geerts W, Burry L, Alhashemi J, Cook D. Thrombocytopenia in critically ill patients receiving thromboprophylaxis: frequency, risk factors, and outcomes. Chest. 2013. In Press. **Coauthor or Collaborator**

**Fowler R**, Hammer M. End-of-Life Care in Canada. Clinical Investigative Medicine. In Press. **Principal Author**

Daneman N, Scales DC, Blount V, Lawless B, **Fowler R**. Infection Prevention and Control in the Intensive Care Unit: Open Versus Closed Models of Care. Infection Control and Hospital Epidemiology. In Press. **Senior Responsible Author**

Lamontagne F, Quiroz H, Adhikari N, Cook DJ, Koo K, Lauzier F, Turgeon A, Kho ME, Burns K, Chant C, **Fowler R**, Douglas I, Poulin Y, Choong K, Ferguson N, Meade M. Corticosteroid Use in the Intensive care unit - a survey of intensivists. Can J Anesthes. In Press. **Coauthor or Collaborator**

Shehata N, Forster A, Li L, Rothwell DM, Mazer CD, Naglie G, **Fowler R**, Tu JV, Rubens FD, Hawken S, Wilson K. Does anemia impact hospital readmissions after coronary artery bypass surgery? Transfusion. **Coauthor or Collaborator**

### **Non-Peer-Reviewed Publications**

#### **Journal Articles**

Lauzier F, Arnold DM, Rabbat C, Heels-Ansdell D, Zarychanski R, Dodek P, Ashley BJ, Albert M, Khwaja K, Ostermann M, Skrobik Y, **Fowler R**, McIntyre L, Nates JL, Karachi T, Lopes RD, Zytaruk N, Finfer S, Crowther M, Cook D. Risk factors and impact of major bleeding in critically ill patients receiving heparin thromboprophylaxis. Intensive Care Med. 2013 Aug 14. **Coauthor or Collaborator**

Bagshaw SM, Sood MM, Long J, **Fowler RA**, Adhikari NK, Canadian Critical Care Trials Group H1N1 Collaborative. Acute kidney injury among critically ill patients with pandemic H1N1 influenza A in Canada: cohort study. BMC Nephrol. 2013 Jun 13. **Coauthor or Collaborator**  
Hammer M, Melberg HO, **Fowler R**. International Variation in End-of Life Care. Handbook of Health Services Research. In Press. **Senior Responsible Author**

#### **Abstracts**

Guo R, Downar J, Dhalla I, Pinto R, **Fowler R**. Characterizing Research Involvement of the Inpatients at the University of Toronto. American Thoracic Society Annual Conference. 2013 May 21. **Senior Responsible Author**

Hill A, Pinto R, Nathens A, **Fowler R**. Access to Trauma Centre Care Following Severe Injury: Are Women at a Disadvantage? American Thoracic Society Annual Conference. 2013 May 21. **Senior Responsible Author**

Maraschiello M, Amaral A, Xiong W, Pinto R, **Fowler R**. Physicians order discrepancies during patient transfer from the intensive care unit to the Medical and Surgical Wards. American Thoracic Society Annual Conference. 2013 May 21. **Senior Responsible Author**

Kojicic Bukoja M, Riviello E, Dunser N, Adhikari N, **Fowler R**, Schultz M, Gong M, Talmor, Gajic O, Kilckaya O. The Survey on Critical Care Practices in Developing Countries. American Thoracic Society. 2013 May 19.

Alali A, Mainprize T, Scales D, **Fowler R**, Kiss A, Tien H, Nathens AB. ICP Monitoring in Severe TBI. **Coauthor or Collaborator**

Alali A, Kiss A, **Fowler R**, Scales DC, Mainprize T, Ray J, de Mestral C, Nathens A.

Tracheostomy timing in isolated traumatic brain injury. **Coauthor or Collaborator**

Sapir - Pichhadze R, Farrahoki F, Naimark D, **Fowler R**, Kim J. Older Living Donor Kidney Transplantation vs. Dialysis on the waiting list and standard Criteria Deceased Donor Kidney Transplantation: A Decision Analysis. **Coauthor or Collaborator**

### **Book Chapters**

Hammer M, **Fowler R**. International Variation on End of Life Care. In Press. **Senior**

### **Responsible Author**

**Fowler R**, Thirugnanam S, Sud S. Prophylaxis in the ICU. In Press. **Principal Author**.

Duggal A, **Fowler R**. Pandemic Management: Patient Care and ICU Management During Viral Respiratory Outbreaks and Pandemics. In Press. **Senior Responsible Author**

### **Invited Lectures and Presentations**

#### **International**

2013 May 22 **Invited Speaker**. Fowler RA. Creating the Evidence: Generating Tools and Developing Methodologies for Pulmonary and Critical Care Research. American Thoracic Society. Philadelphia, United States.

2013 May 21 **Invited Speaker**. Fowler RA. How will the Accountable Care Act Impact the Daily Lives of Clinicians in Pulmonary, Critical Care and Sleep Medicine? Lessons from Abroad. American Thoracic Society. Philadelphia, United States.

2013 May 21 **Invited Speaker**. Fowler RA. Choosing Wisely - Developing a Consensus for Interventions Not to Perform in Critical Care. American Thoracic Society International Conference. Philadelphia, United States.

2013 May 18 **Invited Speaker**. Hill A (Fowler RA) Access to Trauma Centre Care Following Severe Injury: Are Women at a Disadvantage? American Thoracic Society. Philadelphia, United States.

2013 May 11 **Invited Speaker**. Fowler RA. Establishing a Critical Care Research Network. Inaugural Meeting of the Latin American Clinical Trials Investigator Network (LACTIN). Santiago, Chile.

2013 May 10 **Invited Speaker**. Fowler RA. Cuidados del Paciente la Poblacion Durante Pandemias o Epidemias y Enfermedad Critica. 11th Simposio Internacional Emergencias Medicas y Paciente Critico. Santiago, Chile.

## **National**

- 2013 Jun 18 **Invited Lecturer.** Fowler RA. Severe Respiratory Illness Surveillance Systems in Canadian ICU's. Canadian Critical Care Trials Group. Quebec Clty, Quebec, Canada.
- 2013 May 3 **Invited Speaker.** Fowler RA. End of Life Care Agenda. Ontario Medical Association Annual Council. Toronto, Canada.

## **Local**

- 2013 Jun 19 **Invited Speaker.** Fowler RA. End of Life Care in Canada and the United States. University of Toronto Faculty of Medicine, Department of Medicine City-wide Grand Round. Toronto, Canada.
- 2013 Jun 4 **Invited Speaker.** Fowler RA. Sedation in the ICU. Sunnybrook Hospital Ross Tilley Burn Centre Day. Toronto.
- 2013 Apr 22 **Invited Speaker.** University of Toronto Internal Faculty of Medicine Interest Group Speaker Series. University of Toronto.
- 2013 Apr 3 **Invited Speaker.** Glucose Control for Critically Ill Patients. Sunnybrook Hospital Department of Critical Care Medicine Grand Rounds. Toronto, Ontario, Canada. Presenter(s): Fowler RA.
- 2013 Mar 27 **Invited Speaker.** End-of-Life Care in Ontario. Sunnybrook Hospital Department of Critical Care Medicine Grand Rounds. Toronto, Ontario, Canada. Presenter(s): Fowler RA.
- 2013 Mar 6 **Invited Speaker.** End-of-Life: Medico-Legal Perspective. University of Toronto Department of Medicine Senior Residents Academic Day. Toronto, Ontario, Canada. Presenter(s): Fowler RA.

**Peer-Reviewed Funding**

October 2013 – Present      **Co-Principal Investigator** (Mentored by B.H. Cuthbertson).  
Intensive Care Rehabilitation Study (ICARuS): Barriers to Early  
Physical Rehabilitation in the ICU - A Delphi Study. Canadian  
Institutes of Health Research (CIHR). CUTHBERTSON, Brian H.,  
GODDARD, Shannon, FAN, Eddy; FRANCIS, Jillian J;  
GODDARD, Shannon L; KHO, Michelle E; ROSE, Louise;  
RUBENFELD, Gordon. \$84627 CAD.[Grant]

**Non-Peer-Reviewed Publications**

**Journal Articles**

**Goddard SL.** Catheter Related Infections. In: Encyclopedia of Trauma Care. Invited chapter.  
In press.

**Goddard SL& Cuthbertson, BH.** Post ICU Follow-up Clinics. In: The legacy of critical illness. A  
textbook of post-ICU medicine. (*Invited chapter, in press*).

**Abstract**

Lee TC, Richardson S, **Goddard SL**, Sigler L, Gibas C, Castlebury L, Mohan S, Gharabaghi F,  
Gold W. Lessons from the soil: A subcutaneous fungal abscess caused by a yet unidentified  
coelomycete. International Journal of Antimicrobial Agents 34(s2): S116-117

**Invited Lectures and Presentations**

**National**

2013 Nov                      **Presenter**, Canadian Critical Care Forum – “Barriers to Early  
Rehabilitation in Mechanically Ventilated Patients”

**Local**

2013 Jun 25                **Presenter**, University of Toronto Critical Care Medicine Residents’ Day –  
“On Track to Mobilize Critically Ill Patients – What’s the Hurdle?”

2013 May 23                **Presenter**, University of Toronto General Internal Medicine PGY1  
Academic Half Day – “Your First Day on Call as a Senior Resident”

**Invited Lecture and Presentation**

**Local**

2013      **Invited Guest.** Transition to Practice - Tax and Incorporation. University of Toronto Anaesthesia residency training program.



## **Peer-Reviewed Publications**

### **Journal Articles**

**McCredie VA**, Airton L., Piva S., Rigamonti A., Hare G., Baker A. Observational Study of Cerebral Tissue Oxygen Saturation During Blood Transfusion in Traumatic Brain Injured Patients. *Neurocritical Care*, September 2013, Volume 19, Issue 1 Supplement, pp 1-331.

A. L. Manoel, **VA McCredie**, D. T. Parrella, A. Baker, S. Abrahamson, T. Marotta, A. Bharatha, J. Spears, A. Goffi, D. Sarma, A. Rigamonti, Z. Kardareli, A. Murphy, W. Montanera, R. L. Macdonald. St. Michael's Hospital Protocol for the Management of Patients Suffering from Subarachnoid Haemorrhage – a Quality Improvement Initiative. *Neurocritical Care*, September 2013, Volume 19, Issue 1 Supplement, pp 1-331.

Downar, J., Barua, R., Rodin, D., Lejnieks, B., Gudimella, R., **McCredie, VA.**, et al. Changes in End of Life Care 5 years after the Introduction of a Rapid Response Team: A multicentre retrospective study. *Resuscitation* 2013 Mar 15. pii: S0300-9572(13)00154-8.

L Zakrison, T., Leung, E., **McCredie, VA.**, B Nathens, A., Diez, C., Rizoli, S., & Namias, N. (2013). Canadian Traumatologists and the Recognition of Occult Shock: Results of a National Survey. *Panamerican Journal of Trauma, Critical Care & Emergency Surgery*, 2, 33–36.

Garavaglia M, Mak T, Cusimano, M, **McCredie VA**, Rigamonti A, Crescini, C, Romaschin A, Baker A, Hare G Body Mass Index as a Risk Factor for Increased Serum Lactate during Craniotomy *Minerva Anesthesiologica* 2013.

Aziz S. Alali, **Victoria McCredie**, Eyal Golan, Prakeshkumar S. Shah, Avery B.. Beta Blockers for Acute Traumatic Brain Injury: A Systematic Review and Meta-analysis *Neurocritical Care* 2013.

### **Abstracts & Posters**

M. Garavaglia, **VA. McCredie**, T. Mak, A. Rigamonti, M. Cusimano, A. Baker, C. Crescini, A. Romaschin, G. Hare. Hyperlactemia During Craniotomy: Evidence of Muscle Hypoperfusion? Canadian Anesthesiology Society, Calgary, Canada 2013.

**McCredie VA**, Ramachandran S, Lo B, Baker A, McDonald RL. The role of intra-aortic balloon counter-pulsation pumps in subarachnoid hemorrhage patients with refractory symptomatic vasospasm: a successful case report and review of the literature. *Canadian Neurological Sciences Foundation Montreal, Canada* 2013.

B.W. Lo, B J. Ja, **VA. McCredie**, J. Lim, J. Ramkumar, R. Takroni, N. Khezri, A. Louffat-Olivares, J. Spears, R. Macdonald. Health Related Quality of Life following Aneurysmal Subarachnoid Hemorrhage – A Qualitative Synthesis of Determinants and Measurement. Canadian Neurological Sciences Foundation, Montreal, Canada 2013.

**McCredie VA**, Airton L., Piva S., Rigamonti A., Hare G., Baker A. Observational Study of Cerebral Tissue Oxygen Saturation During Blood Transfusion in Traumatic Brain Injured Patients. Neurocritical Care Conference, Philadelphia, 2013.

A. L. Manoel, **VA McCredie**, D. T. Parrella, A. Baker, S. Abrahamson, T. Marotta, A. Bharatha, J. Spears, A. Goffi, D. Sarma, A. Rigamonti, Z. Kardareli, A. Murphy, W. Montanera, R. L. Macdonald. St. Michael's Hospital Protocol for the Management of Patients Suffering from Subarachnoid Haemorrhage – a Quality Improvement Initiative. Neurocritical Care Conference, Philadelphia, 2013.

A. L. Manoel, **VA McCredie**, D. T. Parrella, A. Baker, S. Abrahamson, T. Marotta, A. Bharatha, J. Spears, A. Goffi, D. Sarma, A. Rigamonti, Z. Kardareli, A. Murphy, W. Montanera, R. L. Macdonald. Evidence-based Protocol for the Management of Patients Suffering From Aneurysmal Subarachnoid Hemorrhage -The St. Michael's Hospital SAH protocol. Neurocritical Care Conference, Philadelphia, 2013.

**McCredie VA**, Airton L., Piva S., Rigamonti A., Hare G., Baker A. Non-invasive Measurement of Cerebral Tissue Oxygenation During a Blood Transfusion in Traumatic Brain Injured Patients. Canadian Critical Care Forum Canada 2013.

A.L. Manoel, D. Turkel-Parrella, A. Goffi, **VA McCredie**, D. Ben-Israel, J. Spears, T. R. Marotta, S. Abrahamson. Prediction of Outcome after High-grade Aneurysmal Subarachnoid Hemorrhage. Canadian Critical Care Forum Canada 2013.

### **Non-Peer-Reviewed Publications**

#### **Book Chapter**

The Legacy of Critical Illness. A Textbook of Post-ICU Medicine by Stevens, Hart and Herridge: Chapter IV: Neuromuscular and musculoskeletal disorders: Long term implications of ICU acquired weakness. Latronico N, Piva S, **McCredie VA**

#### **Manuscript**

Simone Piva, **Victoria A. McCredie**, Nicola Latronico. Neuroinflammation in sepsis: Sepsis Associated Delirium. Submitted to Cardiovascular & Hematological Disorders - Drug Targets 2013.

## **Work in Progress**

**McCredie VA**, Hare G. Role of Brain Tissue Hypoxia in Traumatic Brain Injury associated with poor outcome. (Manuscript in preparation)

## **Invited Lectures and Presentations**

### **National**

2013            Multimodal Monitoring in NeuroCritical Care: what's all the fuss about? Critical Care Challenges Conference 2013, Toronto, Ontario.

### **Provincial**

2013            Hyperlactemia During Craniotomy: Evidence of Muscle Hypoperfusion?  
Canadian Anesthesiology Society 2013 Annual Meeting Calgary, Canada.

### **Local**

2013            The Shattered Crystal Ball: Tackling Prognostic Problems in Severe Traumatic  
Brain Injury Annual Critical Care Residents Research Symposium 2013,  
University of Toronto Club, Toronto, Ontario.

### **Peer-Reviewed Funding**

2013 Jun      **Principal Investigator.** Developing a simulation scenario design process for the training and study of adaptive expertise. Principal Investigator: R Brydges, Co-investigators: M Mylopoulos, D Piquette, L Stroud, W Farhat, L Satterthwaite. Royal College/AMS CanMEDS Research and Development Grant. \$25000 CAD. [Grants]

### **Peer-Reviewed Publications**

#### **Journal Articles**

Sinuff T, Muscedere J, Adhikari NK, Stelfox HT, Dodek P, Heyland DK, Rubenfeld GD, Cook DJ, Pinto R, Manoharan V, Currie J, Cahill N, Friedrich JO, Amaral A, **Piquette D**, Scales DC, Dhanani S, Garland A; KRITICAL Working Group, the Canadian Critical Care Trials Group, and the Canadian Critical Care Society. Crit Care Med. 2013 Nov; 41(11): 2627-40.

**Piquette D**, Mylopoulos M, LeBlanc VR. How does clinical supervision affects patient care, resident participation, and resident learning: a qualitative study. Submitted to Medical Education, September 2013.

**Piquette D**, Tarshis J, Regehr G, Fowler R, Pinto R, LeBlanc, VR. Effects of Clinical Supervision on Patient Care and Resident Learning during Simulated ICU Scenarios. Crit Care Med. 2013 Aug 19. [Epub ahead of print].

**Piquette D**, Tarshis J, Fowler R, Sinuff T, Pinto R, LeBlanc, VR. Impact of Stress on Resident Simulated Performance. Accepted for publication in Teaching and Learning in Medicine, January 2013.

**Piquette D**, LeBlanc, V. La simulation comme outil de recherche. In: La simulation en santé: de la théorie à la pratique. Ed: Boët S, Savoldelli G, Granry JC. Springer-Verlag, France, 2013.

## **Invited Lectures and Presentations**

### **International**

- Aug 2013     **Invited Presenter.** The dual role towards patient care and learning assumed by medical trainees and their supervisors during clinical activities. Piquette D. Rogano Conference, Prague, August 2013. (Oral presentation)
- 2013 May     **Invited Presenter.** The shift from patient care to learning activities in critical care environments: An observational study. Piquette D, Moulton CA, LeBlanc V.ATS 2013, Philadelphia.

### **Local**

- 2013 Oct     **Invited Presenter.** Direct supervision and medical trainees' involvement in patient care: All is not lost. Piquette D, Mouton CA, LeBlanc VR. The Richard K. Reznick Wilson Centre, Research Day, Toronto.
- 2013 Oct     **Invited Presenter** Fostering learning while caring for critically-ill patients: different contexts, different strategies. Piquette D, Mouton CA, LeBlanc VR. The Richard K. Reznick Wilson Centre Research Day, Toronto.

**Peer-Reviewed Fundings**

2012 Oct - 2017 Sept	<b>Co-investigator.</b> Catecholamines as primary mediators of post-burn hypermetabolism: A clinical prospective trial. Principal Investigator : Jeschke, Marc. Canadian Institutes of Health Research (CIHR). \$851939 CAD. [Grant]
2013 Oct - 2015 Apr	<b>Co-investigator.</b> Intensive Care Rehabilitation Study (ICARuS): Barriers to Early Physical Rehabilitation in the ICU - A Delphi Study. Principal Investigator : Cuthbertson, Brian. Canadian Institutes of Health Research (CIHR). \$84627 CAD. [Grant]
2010 Apr - 2015 Mar	<b>Principal Investigator.</b> Trauma System Development in Canada: Overcoming the challenges of geography through an evaluation of structure and process. Principal Investigator : Nathens, Avery Strategic Teams in Applied Injury Research. Canadian Institutes of Health Research (CIHR). \$400000 CAD. [Grant]
2013 Mar - 2015 Mar	<b>Collaborator.</b> A National Comparison of Intensity of End-of-Life Care in Canada: Defining Changing Patterns, Risk Factors and Targets for Intervention. Principal Investigator : Fowler, Robert Technology Evaluation in the Elderly Network. \$196186 CAD. [Grant]
2013 Mar - 2015 Feb	<b>Co-investigator.</b> Shining a Light on End-of-Life Care in Canada: Investigating Barriers, Testing Interventions, and Disseminating Integrated Solutions for Patients, Families and Healthcare Professionals . Principal Investigator : Fowler, Robert. Dept of Medicine - Integrating Challenge Grant University of Toronto. \$187790 CAD. [Grant]

2011 Apr - 2014 Mar	<b>Co-investigator.</b> Understanding Long-Term Mechanical Ventilation in Canada: A Programmatic Approach. Principal Investigator : Rose, Louise. Partnerships for Health System Improvement (PHSI). Canadian Institutes of Health Research (CIHR). \$349863 CAD. [Grant]
2011 Oct - 2013 Sept	<b>Co-investigator.</b> A National Comparison of Intensity of End-of-Life Care in Canada: Defining Changing Patterns, Risk Factors and Targets for Intervention. Principal Investigator : Fowler, Robert A. Secondary Analysis of Databases Canadian Institutes of Health Research (CIHR). \$99208 CAD. [Grant]
2010 Oct - 2013 Sept	<b>Co-investigator.</b> Weaning and Variability Evaluation (WAVE)- a multicenter evaluation of altered heart rate and respiratory rate variability to predict extubation failure. Principal Investigator : Seely, Andrew. Canadian Institutes of Health Research (CIHR). \$536533 CAD. [Grant]
2009 Oct - 2013 Sept	<b>Co-investigator.</b> The RECOVER Program: Phase I Towards RECOVER - Outcomes and Needs Assessment in Survivors of Prolonged Mechanical Ventilation and Their Caregivers. Principal Investigator : Cameron, Jill; Herridge, Margaret S. Canadian Institutes of Health Research (CIHR). \$704367 CAD. [Grant]
2010 Jun – 2013 Aug	<b>Co-investigator.</b> A Randomized Phase II Trial of CMV Prevention in Acute Lung Injury. Principal Investigator : Boeckh, Michael. National Institutes of Health (NIH) (USA). \$1240314 CAD. [Grant]

2009 Mar – 2013 Apr

**Co-investigator.** Towards RECOVER - Evaluation of Clinical Outcomes, Patient and Caregiver Needs and the Biology of Muscle and Nerve Injury in Critically Ill Survivors of Prolonged Mechanical Ventilation. Principal Investigator : Cameron, J.; Herridge, M. Canadian Institutes of Health Research (CIHR) \$222260 CAD. [Grant]

## Peer-Reviewed Publications

### Journal Articles

Duggal A, **Rubenfeld GD**, "Year in review 2012: Critical Care -management.", Critical care (London, England), 17(6) 2013 Nov 22. 24438819.

Carson SS, Goss CH, Patel SR, Anzueto A, Au DH, Elborn S, Gerald JK , Gerald LB , Kahn JM Malhotra A, A Mularski R, A Riekert K, **Rubenfeld GD**, E Weaver T, Krishnan JA. The ATS Ad Hoc Comparative Effectiveness Research Working Group., "An official american thoracic society research statement: comparative effectiveness research in pulmonary, critical care, and sleep medicine.", American journal of respiratory and critical care medicine, 188(10). 2013 Nov 15. 24160906.

Botting MJ , Phan N , **Rubenfeld GD** , Speke AK , Chapman MG, "Using Barriers Analysis to Refine a Novel Model of Neurocritical Care.", Neurocritical Care. 2013 Oct 8. 24101105.

Gabler NB, Ratcliffe SJ, Wagner J, Asch DA, **Rubenfeld GD**, Angus DC, Halpern SD, "Mortality among Patients Admitted to Strained Intensive Care Units.", American journal of respiratory and critical care medicine, 188(7). 2013 Oct 1. 23992449.

Sinuff T, Muscedere J, Adhikari NK, Stelfox HT, Dodek P, Heyland DK, **Rubenfeld GD**, Cook DJ, Pinto R, Manoharan V, Currie J, Cahill N, Friedrich JO, Amaral A, Piquette D, Scales DC, Dhanani S, Garland A; for the KRITICAL Working Group, the Canadian Critical Care Trials Group, and the Canadian Critical Care Society., "Knowledge Translation Interventions for Critically Ill Patients: A Systematic Review.", Critical care medicine. 2013 aug 9. 23939356.

Wilcox ME, Chong CA, Niven DJ, **Rubenfeld GD**, Rowan KM, Wunsch H, Fan E., "Do Intensivist Staffing Patterns Influence Hospital Mortality Following ICU Admission? A Systematic Review and Meta-Analyses.", Critical care medicine. 2013 Aug 7. 23921275.



Nascimento B, Callum J, Tien H, **Rubenfeld G**, Pinto R, Lin Y, Rizoli S, "Effect of a fixed-ratio (1:1:1) transfusion protocol versus laboratory-resultsguided transfusion in patientswith severe trauma: a randomized feasibility trial.", CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne. 2013 July 15. 23857856.

Engels PT, Beckett AN, **Rubenfeld GD**, Kreder H, Finkelstein JA, da Costa L, Papia G, Rizoli SB, Tien HC, "Physical Rehabilitation of the Critically Ill Trauma Patient in the ICU.", Critical care medicine, 41(7). 2013 Jul 1. 23774338.

Burns KE, Zubrinich C, Tan W, Raptis S, Xiong W, Smith O, McDonald E, Marshall JC, Saginur R, Heslegrave R, **Rubenfeld GD**, Cook DJ. Canadian Critical Care Trials Group., "Research recruitment practices and critically ill patients. A multicenter, cross-sectional study (the Consent Study).", American journal of respiratory and critical care medicine, 187(11). 2013 Jun 1. 23525935.

Ranieri VM, **Rubenfeld GD**, Thompson BT, "Defining ARDS: do we need a mandatory waiting period?", Intensive care medicine, 39(4). 2013 Apr 1. 23370830.

Dellinger RP, Levy MM, Rhodes A, Annane D, Gerlach H, Opal SM, Sevransky JE, Sprung CL , Douglas IS , Jaeschke R , Osborn TM , Nunnally ME , Townsend SR , Reinhart K , Kleinpell RM, Angus DC, Deutschman CS, Machado FR, **Rubenfeld GD**, Webb S, Beale RJ , Vincent JL, Moreno R , Surviving Sepsis Campaign Guidelines Committee including The Pediatric Subgroup., "Surviving Sepsis Campaign: international guidelines for management of severe sepsis and septic shock, 2012.", Intensive care medicine, 39(2). 2013 Feb 1. 23361625.

Dellinger RP Levy MM, Rhodes A, Annane D, Gerlach H, Opal SM, Sevransky JE , Sprung CL , Douglas IS, Jaeschke R, Osborn TM, Nunnally ME, Townsend SR, Reinhart K, Kleinpell RM , Angus DC , Deutschman CS, Machado FR , **Rubenfeld GD** , Webb SA, Beale RJ, Vincent JL, Moreno R , Surviving Sepsis Campaign Guidelines Committee including the Pediatric Subgroup., "Surviving sepsis campaign: international guidelines for management of severe sepsis and septic shock: 2012.", Critical care medicine, 41(2). 2013 Feb 1. 23353941.

Gomez D, Haas B, Doumouras AG, Zagorski B, Ray J, **Rubenfeld GD**, McLellan BA , Boyes DM , Nathens AB, "A population-based analysis of the discrepancy between potential and realized access to trauma center care.", Annals of surgery, 257(1). 2013 Jan 1. 23235398.

## Invited Lectures and Presentations

### International

- 2013 Nov 6 **Chair.** Contemporary topics in clinical management Part II, 2013 Sepsis Rio - International Symposium, Brazil, Rio de Janeiro
- 2013 Nov 5 **Moderator.** Can Surviving Sepsis Campaign bundles help?, Sepsis 2013 Rio - International Symposium, Brazil, Rio de Janeiro
- 2013 Nov 5 **Moderator.** Respiratory end points of resuscitation, 2013 Sepsis Rio – International Symposium, Brazil, Rio de Janeiro
- 2013 Oct 22 **Speaker.** Long Term Outcomes after Critical Illness: How Bad? How Fixable?", Medical University of South Carolina Grand Rounds - John C. Mithoefer Visiting Professorship, United States, South Carolina, Charleston
- 2013 Sept 20 **Speaker.** Measuring parameters in the ICU", The Long Island Jewish Medical Center Divisional Grand Rounds, United States, New York, New Hyde Park
- 2013 Jul 5 **Speaker.** Pro/con debate: In austerity Britain, critical care research should focus on quality improvement rather than on basic science", UK Critical Care Research Forum, London United Kingdom
- 2013 Jul 4 **Speaker.** Selection criteria for ARDS trials: potential impact of recent changes. UK Critical Care Research Forum, United Kingdom, London
- 2013 Jul 3 **Speaker.** Observational studies I wish I'd done - and two that I did. UK Critical Care Research Forum - Post-Graduate Course in Observational Research in Critical Care, United Kingdom, London
- 2013 Jul 3 **Speaker.** Moving beyond mortality – generating helpful and important outcome Measures. UK Critical Care Research Forum - Post-Graduate Course in Observational Research in Critical Care, United Kingdom, London
- 2013 Jul 2 **Speaker.** Myths of evidence based medicine. Critical Care Visiting Professorship Lecture - Queen Elizabeth Hospital Birmingham, United Kingdom, Birmingham
- 2013 May 21 **Speaker.** ICU Organization And Systems", American Thoracic Society International Conference 2013, United States, Pennsylvania, Philadelphia
- 2013 May 21 **Speaker.** Are These Problems Unique To ICU Patients? American Thoracic Society Annual Conference 2013, United States, Pennsylvania, Philadelphia
- 2013 May 20 **Speaker.** So What? Implications For Cost And Quality. American Thoracic Society International Conference 2013, United States, Pennsylvania, Philadelphia

- 2013 May 17 **Speaker.** Incorporating Ultrasound and Echocardiography into ICU Practice. American Thoracic Society International Conference 2013 - Post-Graduate Course, United States, Pennsylvania, Philadelphia
- 2013 Apr 29 **Speaker.** Long-Term Outcomes after Critical Illness: How Bad? How Fixable? 20th Annual John Butler Lecture - University of Washington, United States, Washington, Seattle
- 2013 Apr 25 **Speaker.** If There are No Magic Bullets: System Improvements in Critical Care. University of Washington - Medicine Grand Rounds, United States, Washington, Seattle
- 2013 Mar 22 **Speaker.** Refractory hypoxemia - Salvage therapies in ARDS. International Symposium on Intensive Care and Emergency Medicine (ISICEM), Belgium, Brussels
- 2013 Mar 22 **Speaker.** ARDS: Challenging the Berlin criteria - Can we do better? International Symposium on Intensive Care and Emergency Medicine (ISICEM), Belgium, Brussels
- 2013 Mar 22 **Speaker.** End of life care: From bedside to courtroom. International Symposium on Intensive Care and Emergency Medicine (ISICEM), Belgium, Brussels
- 2013 Mar 21 **Speaker.** Are long-term outcomes any worse than for the rest of the hospital? International Symposium on Intensive Care and Emergency Medicine, Belgium, Brussels
- 2013 Mar 21 **Speaker.** Surviving the new Surviving Sepsis Guidelines". International Symposium on Intensive Care and Emergency Medicine (ISICEM), Belgium, Brussels
- 2013 Mar 20 **Speaker.** CMV reactivation: To treat or not to treat? International Symposium on Intensive Care and Emergency Medicine, Belgium, Brussels

#### **National**

- 2013 Nov 12 **Moderator.** Critical Care Systems - Supply & Demand, Critical Care Canada Forum, Toronto, Ontario
- 2013 Nov 11 **Moderator.** Clinical Research & Trials, Critical Care Canada Forum, Toronto, Ontario
- 2013 Nov 11 **Moderator.** End of Life and The Media, Critical Care Canada Forum 2013, Toronto, Ontario
- 2013 Nov 9 **Moderator.** How Berlin changed everything (or nothing...), CCCF/CCCS Residents' Day 2013, Canada, Ontario, Toronto

## **Provincial**

- 2013 Feb 21 **Speaker.** What We Have Here is a Failure to Communicate: End of Life Care in the ICU. 10th Annual Canadian Critical Care Conference, Canada, British Columbia, Whistler
- 2013 Feb 21 **Speaker.** Long-Term Outcomes After Critical Illness: Does the Hospital Make You Older Faster? 10th Annual Canadian Critical Care Conference, Canada, British Columbia, Whistler

## **Local**

- 2013 Jun 4 **Speaker.** ARDS: an Update. 1st Annual Sunnybrook Burn Symposium, Toronto, Ontario
- 2013 Jan 14 **Speaker.** Acute Lung Injury. Sunnybrook Health Sciences Centre - Dept of Critical Care Medicine - ICU Seminar, Toronto, Ontario

**Peer-Reviewed Fundings**

- 2013 Sep - 2016 Sep      **Co-Investigator.** Clinical outcomes and predictors of PITuitary disorders in patients with moderate and severe Traumatic Brain Injury: the PIT-TBI prospective multicenter pilot cohort study. Canadian Institutes of Health Research. 2527. PI: Lauzier, François. Collaborator(s): Archambault P; Bernard F; Boutin A; Cook D; Gagnon D; Griesdale D; Herridge M; Houde G; Lamontagne F; Mcintyre L; Menlon K; Moore L; Pagliarello G; Perron P; Rousseau F; Scales D; Turgeon A. \$278,469 CAD. [Grant]
- 2013 Sep - 2016 Sep      **Co-Investigator.** Assessing and improving the quality of care of patients with out-of-hospital cardiac arrest. Canadian Institutes of Health Research. 2527. PI: Ko, Dennis. Collaborator(s): Austin P; Cheskes S; Dorian P; Morrison L; Rac V; Scales D; Stukel T; Tu J; Verbeek P; Wijeyesundera H. \$443,000 CAD. [Grant]
- 2013 Sep - 2015 Sep      **Co-Investigator.** Blood conservation in cardiac surgery using a novel transfusion algorithm based on point-of-care testing: a stepped-wedge cluster randomized controlled trial. Canadian Institutes of Health Research. 2528. PI: Karkouti, Keyvan. Collaborator(s): Callum J; Crowther M; Grocott H; Rao V; Scales D; Wijeyesundera D. \$529,600 CAD. [Grant]
- 2013 Jul - 2014 Jun      **Co-Investigator.** Life After Death: a pilot study investigating whole-person recovery after out-of hospital cardiac arrest. Heart and Stroke Foundation of Canada (HSFC). PI: Cullen, Nora. \$53,884 CAD. [Grant]

2013 Jul - 2014 Jun	<b>Co-Investigator.</b> Identifying and Evaluating Intensive Care Unit Capacity Strain in Alberta. Alberta Innovates Health Solutions. Partnership for Research and Innovation in the Health System. PI: Bagshaw, Sean. Collaborator(s): Stelfox H; \$743,818 CAD. [Grant]
2013 Apr - 2015 Mar	<b>Co-Investigator.</b> Regional and temporal variations in incidence, prevalence and outcomes of critical illness among pregnant and post-partum women and newborns in Canada. Canadian Institutes of Health Research (CIHR). Operating Grant. PI: Fowler, Robert. \$41,325 CAD. [Grant]
2013 Mar - 2015 Mar	<b>Co-Investigator.</b> Shining a Light on End-of-Life Care in Canada: Investigating Barriers, Testing Interventions, and Disseminating Integrated Solutions for Patients, Families and Healthcare Professionals. University of Toronto. Dept of Medicine – Integrating Challenge Grant. PI: Fowler, Robert. \$187,790 CAD. [Grant]
2013 Mar - 2015 Mar	<b>Co-Investigator.</b> A National Comparison of Intensity of End-of-Life Care in Canada: Defining Changing Patterns, Risk Factors and Targets for Intervention. Technology Evaluation in the Elderly Network. PI: Fowler, Robert. \$196,186 CAD. [Grant]
2012 Oct - 2016 Sep	<b>Co-Investigator.</b> Early Determination of long-term Prognosis in critically ill patients with Severe Traumatic Brain Injury (TBI-Prognosis multicenter prospective study). Canadian Institutes of Health Research (CIHR). Operating Grant. PI: Turgeon, A. Collaborator(s): Lauzier F, Bernard F, Lamontagne F, Scales DC, Burns K, Rigamonti A, McIntyre L, Pagliarello J, Meade M. \$1,053,131 CAD. [Grant]

2012 Oct - 2014 Sep	<b>Co-Investigator.</b> Pilot KT intervention to address gender differences in access to post arrest care. Canadian Institutes of Health Research (CIHR). Operating Grant. PI: Morrison, LJ. Collaborator(s): Abramson BL, Bierman AS, Dainty KN, Dorian P, Fowler RA, Gray SH, Kiss AJ, Parsons JA, Valeria R, Scales DC, Slutsky AS, Zwarenstein MF. \$218,994 CAD. [Grant]
2012 Jul - 2015 Jun	<b>Co-Investigator.</b> Integrating the willing bystander with emergency medical dispatch: A novel Smartphone application to recruit bystanders to provide CPR and use AEDs for victims of out-of-hospital cardiac arrest. Heart and Stroke Foundation of Canada (HSFC). Grant-in-Aid. PI: Brooks, Steven. \$294,481 CAD. [Grant]
2012 Jul - 2014 Jun	<b>Principal Investigator.</b> Translating Evidence into Practice for Patients with Anoxic Brain Injury. Physicians Services Incorporated Foundation (The) (PSI). Fellowship in Translational Health Research. \$300,000 CAD. [Grant]
2012 Jun - 2015 May	<b>Co-Investigator.</b> Canadian Critical Care Knowledge Translation Network. Canadian Institutes of Health Research (CIHR). Network Catalyst - Knowledge Translation. PI: Muscedere, J. Collaborator(s): Gibney N, Keenan SP, Lawless B, Legare M, Patrick W, Paunovic B, Shaw S, Trpkovski J, Chant C, Cook DJ, Dodek PM, Heyland DK, Lacroix J, Martin CM, Reynolds SC, Scales DC, Sinuff T, Turgeon AF. \$599,611 CAD. [Grant]
2012 Jan - 2013 Dec	<b>Co-Investigator.</b> Therapeutic hypothermia: the impact of processes of care on outcomes after cardiac arrest. Physicians Services Incorporated Foundation (The) (PSI). Resident Grant. PI: Lin, Steve. \$20,000 CAD. [Grant]

- 2011 Oct - 2015 Sep      **Principal Investigator.** Initiation of Cooling by EMS to Promote the Adoption of in-hospital therapeutic hypothermia in Cardiac arrest Survivors -- ICE-PACS Randomized Controlled Trial. Canadian Institutes of Health Research (CIHR). Collaborator(s): Brooks SC, Cheskes S, Craig AM, Dainty KN, Darling S, Mamdani M, Morrison LJ, Perreira TA, Thorpe KE, Verbeek PR. \$760,947 CAD. [Grant]
- 2011 Oct - 2013 Sep      **Co-Investigator.** A National Comparison of Intensity of End-of-Life Care in Canada: Defining Changing Patterns, Risk Factors and Targets for Intervention. Canadian Institutes of Health Research (CIHR). Operating Grant: Secondary Analysis of Databases. PI: Fowler, Robert A. Collaborator(s): Kozak JF, Rockwood K, Heyland DK, Rubenfeld G, Scales DC, Stukel TA, Wunsch H. 99,208 \$CAD. [Grant]
- 2010 Dec - 2014 Dec      **Principal Investigator.** Premature Termination of Resuscitation in Survivors of Cardiac Arrest (PremaTOR). Heart and Stroke Foundation of Canada & Canadian Institutes of Health Research. Resuscitation and Knowledge Transfer and Exchange 2010. Collaborator(s): Morrison L, Young GB, Brooks S, Golan E, Zwarenstein M. \$197,000 CAD. [Grant].
- 2010 Dec - 2012 Nov      **Co-Investigator.** The impact of a Post Cardiac Arrest Consult Team (PACT) on process and clinical outcomes in patients resuscitated from out-of-hospital cardiac arrest. Heart and Stroke Foundation of Canada (HSFC). Resuscitation and Knowledge Transfer and Exchange 2010. PI: Brooks, Steven. Collaborator(s): Szadkowski LM, Morrison L, Scales DC, Rubenfeld G, Jeffs LP, Madan M, Gray S, Friedrich J, Fam N, Dorian P, Dainty KN, Crystal E, Chapman M. \$198,722 CAD. [Grant]



- 2010 Oct - 2013 Sep **Co-Investigator.** Weaning and Variability Evaluation (WAVE) - a multicenter evaluation of altered heart rate and respiratory rate variability to predict extubation failure. Canadian Institutes of Health Research (CIHR). Operating Grant. PI: Seely, Andrew.  
Collaborator(s): Ferguson ND, Fergusson DA, Hooper J, Lelouche F, Marshall JC, Maziak DE, McIntyre LL, Ramsay TO, Rubenfeld G, Scales DC, Wilkes P, Zarychanski R. \$563,533 CAD. [Grant]
- 2010 Feb - 2016 Feb **Co-Investigator.** From Bench to Bedside to Curbside. Clinical Research Consortium to improve Resuscitation Outcomes. National Institutes of Health, Heart and Stroke Foundation of Canada, CIHR. PI: Slutsky, Arthur. Collaborator(s): Black SE, Davis D, Dorian P, Hutchison JS, Lavery J, Morrison LJ, Redelmeier DA, Rotstein OD, Sibbald W, Young Investigator: Scales DC. \$3,100,000 CAD. [Grant]
- 2009 Dec - 2015 Nov **Co-Investigator.** Resuscitation Outcomes Consortium (ROC) Regional Clinical Center-Toronto Regional Coordinating Centre. Canadian Institutes of Health Research (CIHR). Resuscitation Outcomes Consortium. PI: Morrison, Laurie. Collaborator(s): Craig A, Baker A, Slutsky A, Nathens A, Scales DC, Redelmeier D, Hutchison J, Spence J, Morrison L, Feldman M, Rotstein OD, Dorian P, Verbeek R, MacDonald R, Rizoli S, Cheskes S, Brooks S. \$1,002,000 CAD. [Grant]
- 2009 Oct - 2015 Oct **Co-Investigator.** Toronto regional resuscitation research out of hospital network. Heart and Stroke Foundation of Canada (HSFC). Resuscitation Outcomes Consortium. PI: Morrison, Laurie. Collaborator(s): Craig A, Baker A, Slutsky A, Nathens A, Scales DC, Redelmeier D, Hutchison J, Spence J, Morrison L, Feldman M, Rotstein OD, Dorian P, Verbeek R, MacDonald R, Rizoli S, Cheskes S, Brooks S. \$1,500,000 CAD. [Grant]

- 2009 Jul - 2014 Jun      **Principal Investigator.** The Impact of an Aging Population on the Delivery of Critical Care Services in Canada. Canadian Institutes of Health Research (CIHR). \$300,000 CAD. [Grant]
- 2009 Mar - 2013 Feb      **Co-Investigator.** Towards RECOVER: Long-term Clinical Outcomes and Needs Assessment in ICU Survivors of Prolonged Mechanical Ventilation and their Caregivers. Canadian Institutes of Health Research (CIHR). PI: Herridge, M; Cameron, J. Collaborator(s): Abbey SE, Adhikari NK, Batt JAE, Cook DJ, Dos Santos CC, Ferguson ND, Flannery JF, Fowler RA, Friedrich J, Leung G, Marshall JC, Matte AL, Meggison HE, Mehta S, Moody AR, Rubenfeld G, Rudkowski JC, Scales DC, Sinuff T, Slutsky AS, Tansey CM, Tomlinson GA. \$654,368 CAD. [Grant]

## Peer-Reviewed Publications

### Journal Articles

- Sinuff T, Muscedere J, Adhikari NK, Stelfox HT, Dodek P, Heyland DK, Rubenfeld GD, Cook DJ, Pinto R, Manoharan V, Currie J, Cahill N, Friedrich JO, Amaral A, Piquette D, **Scales DC**, Dhanani S, Garland A; for the KRITICAL Working Group, the Canadian Critical Care Trials Group, and the Canadian Critical Care Society. Knowledge Translation Interventions for Critically Ill Patients: A Systematic Review. Crit Care Med. 2013 Aug 9. In Press. **Coauthor or Collaborator.**
- Daneman N, **Scales DC**, Lawless B, Muscedere J, Blount V, Fowler RA. Infection Prevention and Control in the Intensive Care Unit: Open versus Closed Models of Care. Infect Control Hosp Epidemiol. 2013 Aug. **Coauthor or Collaborator.**
- Li AH, Kim SJ, Rangrej J, **Scales DC**, Shariff S, Redelmeier DA, Knoll G, Young A, Garg AX. Validity of physician billing claims to identify deceased organ donors in large healthcare databases. PLoS One. 2013 Aug;8(8):e70825. **Coauthor or Collaborator.**
- Ferreyro B, Angriman F, Giunta D, Posadas-Martinez M.L. Vazquez F, Amaral A.C.B, **Scales DC**. A Clinical Predictive Rule to Estimate One-Year Cancer And Mortality Risk Among Adult Patients with VTE. BMC Cancer. 2013 Jul 22(13):352. **Senior Responsible Author.**

Alali AS, Fowler RA, Mainprize TG, **Scales DC**, Kiss A, de Mestral C, Ray JG, Nathens AB. Intracranial Pressure Monitoring in Severe Traumatic Brain Injury: Results from the American College of Surgeons Trauma Quality Improvement Program. J Neurotrauma. 2013 Jul 11.

**Coauthor or Collaborator.**

**Scales DC.** What's new with tracheostomy? Intensive Care Med. 2013 Jun. 39(6):1005-8.

**Principal Author.**

Redelmeier DA, Markel F, **Scales DC.** Organ donation after death in Ontario: a population-based cohort study. CMAJ. 2013 May 14. 185(8):E337-44. **Senior Responsible Author.**

Turgeon AF, Lauzier F, Burns KE, Meade MO, **Scales DC**, Zarychanski R, Moore L, Zygun DA, McIntyre LA, Kanji S, Hebert PC, Murat V, Pagliarello G, Fergusson DA, Canadian Critical Care Trials Group. Determination of Neurologic and clinical decision making in adult patients with severe traumatic brain injury: a survey of Canadian Intensivists, Neurosurgeons, and Neurologists. Crit Care Med. 2013 Apr. 41(4):1086-93. **Coauthor or Collaborator.**

Dainty KN, **Scales DC**, Sinuff T, Zwarenstein M. Competition in collaborative clothing; a qualitative case study of influences on collaborative quality improvement in the ICU. BMJ Qual Saf. 2013 Apr. 22(4):317-23. **Coauthor or Collaborator.**

Cooper AB, Sibbald R, **Scales DC**, Rozmovits L, Sinuff T. Scarcity: The Context of Rationing in an Ontario ICU. Crit Care Med. 2013 Mar 7. **Coauthor or Collaborator.**

Watson SR, **Scales DC.** Improving intensive care unit quality using collaborative networks. Crit Care Clin. 2013 Jan;29(1):77-89. **Senior Responsible Author.**

## **Abstracts**

Cameron JI, Chan L, Czerwonka A, Chu LM, Matte AL, Tomlinson G, Ferguson ND, Mehta S, Friedrich J, Adhikari N, Fowler R, Lamontagne F, Rudkowski J, Meggison H, Ayas N, Skrobik, Batt J, Santos CD, Flannery J, Abbey S, Rubenfeld GD, **Scales DC**, Sinuff T, Cuthbertson B, Fan E, Slutsky A, Leung G, Lee C, Lo V, Mathur S, Tansey C, Wilcox ME, Marshall JC, Cook DJ, Tan A, Moody A, Levasseur M, Bayley M, Herridge MS. Long-Term Outcomes After Prolonged Mechanical Ventilation: Family Caregiver Outcomes From the Towards RECOVER Study. Am J Respir Crit Care Med. 2013. **Coauthor or Collaborator.**

Herridge MS, Chu LM, Matte AL, Chan L, Tomlinson G, Ferguson ND, Mehta S, Friedrich J, Adhikari N, Fowler R, Lamontagne F, Rudkowski JC, Meggison H, Ayas N, Skrobik Y, Blatt J, Dos Santos, C Flannery J, Abbey S, Rubenfeld GD, **Scales DC**, Sinuff T, Cuthbertson B, Fan E, Slutsky AS, Leung G, Moody A, Levasseur M, Bayley M, Lee C, Lo V, Mathur S, Tan A, Tansey C, Wilcox ME, Marshall JC, Cook DJ, Cameron JI. Long-Term Patient Outcomes After Prolonged Mechanical Ventilation: The Towards RECOVER Study. Am J Respir Crit Care Med. 2013. **Coauthor or Collaborator**. Book Chapters

Doyle, J, **Scales, DC**. Tracheostomy in the ICU. Principles of critical Care. 4th edition. Editors Hall JB, Schmidt GA, Wood LDH. McGraw-Hill, Chicago.

Role: Wrote manuscript, supervised principle author. In Press. **Senior Responsible Author**.

### **Editorials**

Golan E, Adhikari NK, **Scales DC**. Nimodipine in the current era of subarachnoid hemorrhage management: standard of care or primed for a definitive randomized trial? J Crit Care. 2013 Dec;28(6):1102. **Senior Responsible Author**.

**Scales DC**, Ferguson ND. Reply: Quality-adjusted Life Years or Composite Outcomes? Am J Respir Crit Care Med. 2013 Sep 1;188(5):622-3. **Principal Author**.

**Scales DC**. Research to inform the consent-to-research process. Intensive Care Med. 2013 Aug. **Principal Author**.

### **Invited Lectures and Presentations**

#### **International**

2013 Dec 6 **Invited Speaker**. Learning from our own mistakes. American Thoracic Society. Kusadasi, Turkey. Presenter(s): **Scales DC**. Methods in Epidemiological, Clinical and Operational Research (MECOR).

2013 Dec 5 **Invited Speaker**. Survival analysis. American Thoracic Society. Kusadasi, Turkey. Presenter(s): **Scales DC**. Methods in Epidemiological, Clinical and Operational Research (MECOR).

2013 Dec 3 **Invited Speaker**. Sample Size and Power. American Thoracic Society. Kusadasi, Turkey. Presenter(s): **Scales DC**. Methods in Epidemiological, Clinical and Operational Research (MECOR).

2013 Dec 2 **Invited Speaker**. Overview of study designs. SOPs, Registration, Reporting of Results. American Thoracic Society. Kusadasi, Turkey. Presenter(s): **Scales DC**. Methods in Epidemiological, Clinical and Operational Research (MECOR).

- 2013 Dec 2 **Invited Speaker.** Bias, confounding, chance. American Thoracic Society. Kusadasi, Turkey. Presenter(s): **Scales DC.** Methods in Epidemiological, Clinical and Operational Research (MECOR).
- 2013 Nov 12 **Moderator.** Quality of Care in ICU. Critical Care Canada Forum. Toronto, Ontario, Canada. Presenter(s): **Scales DC.** Plenary Address.
- 2013 Nov 11 **Moderator.** End of life in ICU session. Critical Care Canada Forum. Toronto, Ontario, Canada. Presenter(s): **Scales DC.**
- 2013 Nov 10 **Invited Speaker.** Should QI be research? Critical Care Canada Forum. Toronto, Ontario, Canada. Presenter(s): **Scales DC.** Research Forum.
- 2013 Sep 24 **Invited Speaker.** How to write a manuscript. Canadian Critical Care Trials Group Fellows Network. Ontario, Canada. Presenter(s): **Scales DC.**
- 2013 Aug 22 **Visiting Professor.** Improving post-resuscitation care for cardiac arrest survivors. University of Edinburgh. Scotland, Edinburgh, City of, United Kingdom. Presenter(s): **Scales DC.** Critical Care Grand Rounds.
- 2013 Jul 4 **Invited Speaker.** Research when the target is the ICU: quality improvement as a case study. UK Critical Care Research Forum. England, London, City of, United Kingdom. Presenter(s): **Scales DC.** Research Conference.
- 2013 Jul 4 **Invited Speaker.** “Don’t Just do it, study it!”. UK Critical Care Research Forum. England, London, City of, United Kingdom. Presenter(s): **Scales DC.** Research Conference.
- 2013 Jul 3 **Invited Speaker.** Forming a research question. UK Critical Care Research Forum. England, London, City of, United Kingdom. Presenter(s): **Scales DC.** Post Graduate Course in Observational Research in Critical Care.
- 2013 Jul 3 **Invited Speaker.** Evaluating diagnostic tests. UK Critical Care Research Forum. England, London, City of, United Kingdom. Presenter(s): **Scales DC.** Post Graduate Course in Observational Research in Critical Care.
- 2013 Jun 14 **Visiting Professor.** Studying Interventions to Improve Critical Care Quality Across Multiple Hospitals. Columbia University. New York, New York, United States. Presenter(s): **Scales DC.** Grand Rounds.
- 2013 Jun 13 **Invited Speaker.** Scales DC Critical Care Grand Rounds “Don’t Just do it, prove it! Studying Interventions to improve Critical Care Quality. Columbia University, Division of Critical Care. New York, New York, United States. (Continuing Education).

- 2013 May 19 **Facilitator**. Thematic Poster Session, ICU Outcomes. ATS Conference Pennsylvania. Pennsylvania, United States.
- 2013 May 19 **Facilitator**. A46-ICU OUTCOMES. ATS Conference Philadelphia. Philadelphia, Pennsylvania, United States. Presenter(s): **Scales DC**. Thematic poster session. Posters J60-J67.
- 2013 May 18 **Invited Speaker**. Scales DC Performance Measures and Quality Improvement. ATS Conference Philadelphia. Pennsylvania, United States.
- 2013 May 18 **Moderator**. Incorporating Quality Improvement Goals into Guidelines. ATS Conference Philadelphia. Philadelphia, Pennsylvania, United States. Presenter(s): **Scales DC**. Mechanical Ventilation Guideline Workshop.
- 2013 May 1 **Visiting Professor**. Large scales ICU quality improvement Interventions. University of Pittsburgh Medical Centre. Pittsburgh, Pennsylvania, United States. Presenter(s): **Scales DC**. Critical Care Grand Rounds.
- 2013 May 1 **Invited Speaker**. Scales DC CCM/Pulm Grand Rounds “Don’t Just do it, prove it! Studying Interventions to improve Critical Care Quality. UPMC Grand Rounds. Canada. (Continuing Education).
- 2013 Apr 30 **Invited Speaker**. Scales DC Research conference”Saving Lives or QALYs”. UPMC Grand Rounds. Canada. (Continuing Education).
- 2013 Apr 30 **Visiting Professor**. Saving Lives or QALYs? University of Pittsburgh Medical Centre. Pittsburgh, Pennsylvania, United States. Presenter(s): **Scales DC**. Critical Care Research Series.
- 2013 Feb 21 **Invited Speaker**. Scales DC CCEB Seminar Series “Saving Lives or QALYs”. Center for Clinical Epidemiology and Biostatistics (CCEB), Perelman School of Medicine, University of Pennsylvania. Philadelphia, Pennsylvania, United States. (Continuing Education).
- 2013 Feb 20 **Visiting Professor**. Don’t just do it, prove it! Studying interventions to improve critical care quality across multiple hospitals. University of Pennsylvania. Philadelphia, Pennsylvania, United States. Presenter(s): **Scales DC**. Pulmonary and Critical Care Grand Rounds.
- 2013 Jan 22 **Invited Speaker**. Scales DC University of Alberta Fellows half day “Prognostication after Cardiac Arrest”. University of Alberta. Edmonton, Alberta, Canada. (Continuing Education).

2013 Jan 21 **Invited Speaker.** Scales DC Grand Rounds talk - Improving quality of ICU Care across multiple hospitals. University of Alberta. Edmonton, Alberta, Canada. (Continuing Education).

### **Provincial**

2013 May 30 **Invited Speaker.** When do we know when to stop? The Toronto Health Economics and Technology Assessment (THETA) Collaborative. Toronto, Ontario, Canada. Presenter(s): **Scales DC.** 6th Annual Symposium on End-of-Life Care.

2013 Apr 24 **Invited Speaker.** Translating Evidence Into Practice for Patients with Anoxic Brain Injury. Physicians' Services Incorporated Foundation. Toronto, Ontario, Canada. Presenter(s): **Scales DC.** Presented at the Physicians' Services Incorporated Foundation Annual Meeting.

### **National**

2013 Jan 26 **Invited Speaker.** Tracheostomy timing and extubation failure. Alberta Critical Care Society. Lake Louise, Alberta, Canada. Presenter(s): **Scales DC.**

2013 Jan 26 **Invited Speaker.** Unintended consequences of ICU admission: medication discontinuation and continuations. Alberta Critical Care Society. Lake Louise, Alberta, Canada. Presenter(s): **Scales DC.**

2013 Jan 23 **Visiting Professor.** Prognostication after cardiac arrest. University of Alberta. Edmonton, Alberta, Canada. Presenter(s): **Scales DC.** Critical Care Academic Half Day.

2013 Jan 22 **Invited Speaker.** Improving quality of ICU across multiple hospitals. University of Alberta Critical Care Grand Rounds. Edmonton, Alberta, Canada. Presenter(s): **Scales DC.**

### **Local**

2013 Jul 26 **Invited Speaker.** Predicting neurological outcome after cardiac arrest, and the PremaTOR study. Critical Care Research Rounds, Dept of Critical Care Medicine, St. Michael's Hospital. Toronto, Ontario, Canada. Presenter(s): **Scales DC.**

2013 Jun 4 **Invited Speaker.** Use of Sedation Interruption: Yes! These should be part of standard practice. 1st Annual National Burn Symposium, Ross Tilley Burn Centre, Sunnybrook Health Sciences Centre. Toronto, Ontario, Canada. Presenter(s): **Scales, DC.**

- 2013 May 23 **Invited Speaker.** Improving Post Resuscitation Care. William Osler Annual Critical Care Conference. Brampton, Ontario, Canada. Presenter(s): **Scales DC.**
- 2013 Apr 22 **Invited Speaker.** Outcomes after anoxic brain injury. Credit Valley Hospital. Toronto, Ontario, Canada. Presenter(s): **Scales DC.** Department of Critical Care Grand Rounds.
- 2013 Apr 11 **Invited Lecturer.** Improving Science through Pre-hospital Research. Toronto EMS headquarters. Toronto, Ontario, Canada. Presenter(s): **Scales DC.** Presentation to Toronto Emergency Medical Services Supervisors.
- 2013 Feb 27 **Invited Speaker.** The PremaTOR Study. Scarborough General Hospital. Toronto, Ontario, Canada. Presenter(s): **Scales DC.** Department of Critical Care Grand Rounds.
- 2013 Feb 12 **Invited Speaker.** Improving neuroprognostication for survivors of cardiac arrest: the PremaTOR Study. North York General Hospital. Toronto, Ontario, Canada. Presenter(s): **Scales DC.** Department of Critical Care Grand Rounds. (Continuing Education).

### **Abstracts and Other Papers**

- 2013 Oct **Presenter.** Long-term patient outcomes after prolonged mechanical ventilation: The Towards Recover Study. ESICM. Paris, France. Presenter(s): M. Herridge L.M. Chu, A.L. Matte, L. Chan, G. Tomlinson, N.D. Ferguson, S. Mehta, J. Friedrich, N. Adhikari, R. Fowler, F. Lamontagne, J.C. Rudkowski, H. Meggison, N. Ayas, Y. Skrobik, C. Thomas, J. Batt, C. dos Santos, J. Flannery, S. Abbey, G.D. Rubenfeld, **D. Scales**, T. Sinuff, B. Cuthbertson, E. Fan, A.S. Slutsky, G. Leung, A. Moody, M. Levasseur, M. Bayley, C.M. Lee, V. Lo, S. Mathur, A. Tan, M.E. Wilcox, J.C. Mars. Annual Conference.
- 2013 Oct **Presenter.** Long-term outcomes after prolonged mechanical ventilation: Family Caregiver outcomes from the Towards Recover Study. ESICM. Paris, France. Presenter(s): J.I. Cameron, L. Chan, A. Czerwonka, L.M. Chu, A.L. Matte, G. Tomlinson, N.D. Ferguson, S. Mehta, J. Friedrich, N. Adhikari, R. Fowler, F. Lamontagne, J.C. Rudkowski, H. Meggison, N. Ayas, Y. Skrobik, J. Batt, C. dos Santos, J. Flannery, S. Abbey, G.D. Rubenfeld, **D. Scales**, T. Sinuff, B. Cuthbertson, E. Fan, A.S. Slutsky, G. Leung, A. Moody, C.M. Lee, V. Lo, S. Mathur, M.E. Wilcox, C. Thomas, A. Tan, M. Levasseur, M. Bayley. Annual Conference.



- 2013 Sep 18 **Presenter.** Tracheostomy timing in isolated traumatic brain injury: Propensity-matched cohort from the American College of Surgeons Trauma Quality Improvement Program. 72nd Annual Meeting of AAST and Clinical Congress of Acute Care Surgery. San Francisco, California, United States.
- 2013 May 19 **Presenter.** A clinical predictive rule to estimate one year cancer and mortality risk among adult patients with VTE. American Thoracic Society. Philadelphia, Pennsylvania, United States. Presenter(s): Bruno L Ferreyro MD, Federico Angriman MD, Diego Giunta MD, Maria L Posadas Gimenez MD, Fernando J Vazquez MD PhD, Andre C.K.B Amaral MD, **Damon C. Scales** MD PhD. Annual Conference. (Trainee Presentation).
- 2013 Apr 27 **Presenter.** ICP Monitoring in Severe TBI: Results from the American College of Surgeons Trauma Quality Improvement Program. American Association of Neurological Surgeons. New Orleans, Louisiana, United States. Presenter(s): Aziz Alali, Todd Mainprize, **Damon Scales**, Robert Fowler, Alexander Kiss, Homer Tien, Avery B. Nathens. The 81st American Association of Neurological Surgeons Annual Scientific Meeting. (Trainee Presentation).
- 2013 Apr 27 **Presenter.** ICP Monitoring in Severe TBI: Results from the American College of Surgeons Trauma Quality Improvement Program. The 81st American Association of Neurological Surgeons Annual Scientific Meeting. New Orleans, Louisiana, United States. Presenter(s): Alali A; Mainprize T; **Scales D**; Fowler R; Kiss A; Tien H; Nathens AB. (Trainee Presentation).
- 2013 **Presenter.** Gender Differences in Access to Post-Arrest Care: A SPARC network cohort study. AHA meeting. Dallas, Texas, United States. Presenter(s): Abamson B; Bierman AS; Cheskes S; Dainty K; Dorian P; Fowler R; Gaudio M; Gray S; Kiss A; Morrison L; Parsons J; Rac VE, Racz E; **Scales D**; Slutsky A; Zwarenstein M. (Trainee Presentation).
- 2013 **Presenter.** A clinical predictive rule to estimate one year cancer and mortality risk among adult patients with VTE. American Thoracic Society (ATS 2013). Philadelphia, Pennsylvania, United States. Presenter(s): Bruno L Ferreyro, Federico Angriman, Diego Giunta, Maria L Posadas Gimenez, Fernando J Vazquez, Andre C.K.B Amaral, **Damon C. Scales**. (Trainee Presentation).

**Peer-Reviewed Fundings**

- 2009 Mar - present      **Co-Investigator.** Towards RECOVER - Evaluation of Clinical Outcomes, Patient and Caregiver Needs and the Biology of Muscle and Nerve Injury in Critically Ill Survivors of Prolonged Mechanical Ventilation. Canadian Institutes of Health Research (CIHR). PI: M. Herridge, J. Cameron. Collaborator(s): Abbey S, Adhikari N, Batt J, Cook D, Dos Santos C, Ferguson N, Flannery J, Fowler R, Friedrich J, Leung G, Marshall J, Meggison H, Moody A, Mehta S, Rudkowski J, Rubenfeld G, Scales D, Slutsky A. \$1,256,750 CAD. [Grant]
- 2013 Oct - 2014 Oct      **Co-Investigator.** Development and Planning of a Theory-based Implementation of a National Wiki-based Reminder System Promoting Best Practices in Trauma Care. Canadian Institutes of Health Research (CIHR). Planning Grant. 309271. PI: Archambault P. Collaborator(s): Belt T, Eysenbach G, Gagnon M, Lang E, Lauzier F, Legare F, Moore L, Rizoli S, **Sinuff T**, Stelfox H, Turgeon A, Witterman H. \$24,956 CAD. [Grant]
- 2013 Oct - 2014 Oct      **Co-Investigator.** Improving Decision-making about Goals of Care for Hospitalized, Elderly Patients: A Multicentre, Interventional Study. Canadian Institutes of Health Research (CIHR). Planning Grant. 309097. PI: Heyland DK, You J. Collaborator(s): Barwich D, Day A, Fowler R, Sargious P, Sawatzky R, Simon J, **Sinuff T**, Stajduhar K. \$24,998 CAD. [Grant]
- 2012 Oct - 2015 Sep      **Co-Investigator.** Canadian Critical Care Knowledge Translation Network. Canadian Institutes of Health Research. Network Catalyst - Knowledge Translation. PI: Muscedere J. Collaborator(s): Gibney N, Keenan SP, Lawless B, Legare M, Patrick W, Paunovic B, Shaw S, Trpkovski J, Chant C, Cook DJ, Dodek PM, Heyland DK, Lacroix J, Martin CM, Reynolds SC, Scales DC, **Sinuff T**, Turgeon AF. \$599,611 CAD. [Grant]

2012 Apr - 2013 Mar	<b>Co-Investigator.</b> The Intensive Care Environment as the Social Context for Decision-making for Patients with Chronic Critical Illness: A Critical Realist Review. University of Toronto. Connaught Grant. PI: Leung, Doris. \$10,000 CAD. [Grant]
2012 Mar - 2013 Sep	<b>Co-Investigator.</b> One-day Point Prevalence of Acute Rehabilitation in Ontario Intensive Care Units: Rates of f, Barriers to and Facilitating Factors for Mobilization. Physicians' Services Incorporated. PI: Koo,Karen. Collaborator(s): Meade M, Cook D, Herridge M, Lo V, Mehta S, Burns K, Adhikari N, Lamontagne F, Anderson C, <b>Sinuff T</b> , Fan E, Muscedere J, Seeley A, Turgeon_Fournier A, Dodek P, Bagshaw S, Sheppard S, Olafson K, Green K, Green R, Campbell E. \$58,000 CAD. [Grant]
2012 Jan - 2013 Jan	<b>Co-Investigator.</b> One-day Point Prevalence of Acute Rehabilitation in Canadian intensive Care Units: rates of, Barriers to and Facilitating Factors for Mobilization. AHSC AFP Innovation Fund. The Academic Medical Organization of Southwestern Ontario. PI: Koo,Karen. \$102,183.9 CAD. [Grant]
2011 Dec - 2017 Dec	<b>Co-Investigator.</b> Technology Evaluation in the Elderly Network (TECH VALUE NET). Networks of Centres of Excellence (NCE). Network Grant. PI: Heyland, Daren. \$23,888,157 CAD. [Grant]
2011 Apr - 2014 Apr	<b>Co-Investigator.</b> Advance Care Planning Evaluation in Hospitalized Elderly Patients: A multicenter, prospective study: The ACCEPT Study. Canadian Institutes of Health Research (CIHR). Operating Grant. PI: Barwich, Doris Berta; Heyland, Daren Keith. \$333,418 CAD. [Grant]

2009 Oct - 2013 Sep      **Co-Investigator.** The RECOVER Program: Phase I Towards RECOVER - Outcomes and Needs Assessment in Survivors of Prolonged Mechanical Ventilation and Their Caregivers. Canadian Institutes of Health Research (CIHR). PI: HERRIDGE, Margaret S; CAMERON, Jill I. Collaborator(s): Abbey SE, Adhikari NK, Batt JAE, Cook, DJ, Dos Santos CC, Ferguson ND, Flannery JF, Fowler RA, Friedrich J, Leung G, Marshall JC, Matte AL, Meggison HE, Mehta SA, Moody AR, Rubenfeld G, Rudkowski JC; Scales DC, **Sinuff T**, Slutsky AS, Tansey CM, Tomlinson GA. \$704,367 CAD. [Grant]

## Peer-Reviewed Publications

### Journal Articles

Muscedere J, **Sinuff T**, Heyland DK, Dodek PM, Keenan SP, Wood G, Jiang X, Day AG, Laporta D, Klompas M, Canadian Critical Care Trials Group. The clinical impact and preventability of ventilator-associated conditions in critically ill patients who are mechanically ventilated. CHEST. 2013 Nov;144(5):1453-60. **Coauthor or Collaborator.**

**Sinuff T**, Muscedere J, Adhikari NK, Stelfox HT, Dodek P, Heyland DK, Rubenfeld GD, Cook DJ, Pinto R, Manoharan V, Currie J, Cahill N, Friedrich JO, Amaral A, Piquette D, Scales DC, Dhanani S, Garland A; for the KRITICAL Working Group, the Canadian Critical Care Trials Group, and the Canadian Critical Care Society. Knowledge Translation Interventions for Critically Ill Patients: A Systematic Review. Crit Care Med. 2013 Nov;41(11):2627-40. **Principal Author.**

Duggal A, Perez P, Golan E, Tremblay L, **Sinuff T**. The safety and efficacy of noninvasive ventilation in patients with blunt chest trauma: a systematic review. Crit Care. 2013 Jul 22;17(4):R142. **Senior Responsible Author.**

Cooper AB, Sibbald R, Scales DC, Rozmovits L, **Sinuff T**. Scarcity: the context of rationing in an Ontario ICU. Crit Care Med. 2013 Jun;41(6):1476-82. **Senior Responsible Author.**

Heyland DK, Barwich D, Pichora D, Dodek P, Lamontagne F, You JJ, Taylor C, Porterfield P, **Sinuff T**, Simon J: ACCEPT (Advance Care Planning Evaluation in elderly Patients) Study Team: Canadian Researchers at the End of Life Network (CARENET). Failure to engage hospitalized elderly patients and thier families in advance care planning. JAMA Intern Med. 2013 May 13;173(9):778-87. **Coauthor or Collaborator.**

Dainty KN, Scales DC, **Sinuff T**, Zwarenstein M. Competition in collaborative clothing: a qualitative case study of influences on collaborative quality improvement in the ICU. *BMJ Qual Saf.* 2013 Apr;22(4):317-23. **Coauthor or Collaborator.**

Ferguson ND, Cook DJ, Guyatt GH, Mehta S, Hand L, Austin P, Zhou Q, Matte A, Walter SD, Lamontagne F, Granton JT, Arabi YM, Arroliga AC, Stewart TE, Slutsky AS, Meade MO; OCILLATE Trial Investigators; Canadian Critical Care Trials Group. High-frequency oscillation in early acute respiratory distress syndrome. *N Engl J Med.* 2013 Feb 28;368(9):795-805. **Co-Author, Group Publication.**

Horton R, Rocker G, Dale A, Young J, Hernandez P, **Sinuff T**. Implementing a Palliative Care Trial in Advanced COPD: A Feasibility Assessment (The COPD IMPACT Study). *J Palliat Med.* 2013 Jan;16(1):67-73. **Senior Responsible Author.**

**Sinuff T**, Muscedere J, Cook DJ, Dodek PM, Anderson W, Keenan SP, Wood G, Tan R, Haupt MT, Miletin M, Bouali R, Jiang X, Day AG, Overvelde J, Heyland DK, Canadian Critical Care Trials Group. Implementation of clinical practice guidelines for ventilator - associated pneumonia: a multicenter prospective study. *Crit Care Med.* 2013 Jan;41(1):15-23. **Principal Author.**

#### **In Preparation**

**Sinuff T**, Scales D, Pinto R, Muscedere J. Audit and Feedback in the Intensive Care Unit: A Survey of ICU Clinicians. **Principal Author.**

**Sinuff T**, Garland A, Adhikari NK, Stelfox T, Dodek PM, Heyland DK, Pinto R, Manoharan V, Muscedere J. The Quality of Knowledge Translations in Critical Care. **Principal Author.**

**Sinuff T**, Pinto R, Manoharan V, Muscedere J. The Prevalence of Best Practices in Ontario Intensive Care Units. **Principal Author.**

**Sinuff T**, Teixeira A, You J, Dodek PD, Heyland DK. For the ACCEPT Study Team and the Canadian Researchers at the End of Life Network (CARENET). Development of a Score to Assess Advance Care Planning: A modified Delphi Study (The ACCEPT Score). **Principal Author.**

You J, Dodek PD, **Sinuff T**, Korol J, Lamontagne F, Downar J, Jiang X, Day AD, Heyland DK. For the ACCEPT Study Team and the Canadian Researchers at the End of Life Network (CARENET). Improving the Process of Goals of Care Determination for Seriously Ill Hospitalized Patients and their Families. **Coauthor or Collaborator.**

#### **Non-Peer-Reviewed Publications**

##### **Journal Articles**

**Sinuff T**, Muscedere J, Adhikari NK, Stelfox HT, Dodek P, Heyland DK, Rubenfeld GD, Cook DJ, Pinto R, Manoharan V, Currie J, Cahill N, Friedrich JO, Amaral A, Piquette D, Scales DC, Dhanani S, Garland A; for the KRITICAL Working Group, the Canadian Critical Care Trials Group, and the Canadian Critical Care Society. Knowledge Translation Interventions for Critically Ill Patients: A Systematic Review. Crit Care Med. 2013 Nov;41(11):2627-40. **Principal Author.**

**Sinuff T**, Muscedere J, Cook DJ, Dodek PM, Anderson W, Keenan SP, Wood G, Tan R, Haupt MT, Miletin M, Bouali R, Jiang X, Day AG, Overvelde J, Heyland DK, Canadian Critical Care Trials Group. Implementation of clinical practice guidelines for ventilator - associated pneumonia: a multicenter prospective study. Crit Care Med. 2013 Jan;41(1):15-23. **Principal Author.**

**Sinuff T**, Muscedere J, Rozmovits L, Scales DC. For the Canadian Critical Care Trials Group. Broken Communication: Audit and Feedback in the ICU. Critical Care. 2013. **Principal Author.** Matta R, **Sinuff T**, Heyland DK, Cook DJ, Dodek PM, Keenan SP, Wood G, Messenger D, Jiang X, Day AG, Muscedere J for the Canadian Critical Care Trials Group. The Microbiology of Nosocomial Infections in Mechanically Ventilated patients in Canadian Intensive Care Units. Canadian Journal of Respiratory. 2013. **Coauthor or Collaborator.**

Lauzier F, Muscedere J, Deland E, Kutsogiannis DJ, Jacka M, Heels-Ansdell D, Crowther M, Cartin-Ceba R, Cox M, Zytaruk N, Foster D, **Sinuff T**, Clarke F, Thompson P, Hanna S, Cook D. For the CONECCKT-T (Co-operative Network of Critical Care Knowledge Translation for Thromboprophylaxis) Investigators and the Canadian Critical Care Trials Group. Thromboprophylaxis Patterns and Determinants in Critically Ill Patients: A Multicenter Audit. Critical Care Medicine. 2013. **Coauthor or Collaborator.**

Cook D, Duffett M, Lauzier F, Ye C, Dodek P, Paunovic B, Fowler R, Kho KE, Foster D, Stelfox H, **Sinuff T**, Zytaruk N, Clarke F, Wood G, Cox M, Kutsogiannis J, Kumar H, Guyatt G. For the CONECCKT-T (Co-operative Network of Critical Care Knowledge Translation for Thromboprophylaxis) Investigators and the Canadian Critical Care Trials Group. Barriers and Facilitators of Thromboprophylaxis for Medical-Surgical ICU Patients: A Multicenter Survey. Critical Care Medicine. 2013. **Coauthor or Collaborator.**

## Abstracts

J.I. Cameron; L. Chan; A. Czerwonka; L.M. Chu; A.L. Matte; G. Tomlinson; N.D. Ferguson; S. Mehta; J. Friedrich; N. Adhikari; R. Fowler; F. Lamontagne; J. Rudkowski; H. Meggison; N. Ayas; Y. Skrobik; J. Batt; C.D. Santos; J. Flannery; S. Abbey; G.D. Rubenfeld; D.C. Scales; **T. Sinuff**; B. Cuthbertson; E. Fan; A. Slutsky; G. Leung; C. Lee; V. Lo; S. Mathur; C. Tansey; M.E. Wilcox; J.C. Marshall; D.J. Cook; A. Tan; A. Moody; M. Levasseur; M. Bayley; M.S. Herridge, MD. Long-Term Outcomes After Prolonged Mechanical Ventilation: Family Caregiver Outcomes From The Towards RECOVER Study. Am J Respir Crit Care Med. 2013;187:A4446. **Coauthor or Collaborator.**

M.S. Herridge; L.M. Chu; A.L. Matte; L. Chan; G. Tomlinson; N. Ferguson; S. Mehta; J. Friedrich; N. Adhikari; R. Fowler; F. Lamontagne; J.C. Rudkowski; H. Meggison; N. Ayas; Y. Skrobik; J. Batt; C. Dos Santos; J. Flannery; S. Abbey; G.D. Rubenfeld; D.C. Scales; **T. Sinuff**; B. Cuthbertson; E. Fan; A.S. Slutsky; G. Leung; A. Moody; M. Levasseur; M. Bayley; C. Lee; V. Lo; S. Mathur; A. Tan; C. Tansey; M.E. Wilcox; J.C. Marshall; D.J. Cook; J.I. Cameron. Long-Term Patient Outcomes After Prolonged Mechanical Ventilation: The Towards RECOVER Study. Am J Respir Crit Care Med. 2013;187:A3623. **Coauthor or Collaborator.**

## Invited Lecture and Presentation

### National

2013 Nov 12 Invited Speaker. Communication with Families: Still Struggling? Critical Care Canada Forum. Toronto, Ontario, Canada. Presenter(s): Sinuff T. Symptoms of Patients & Families Session.

**Peer-Reviewed Fundings**

2013-present      **PrimaryInvestigator.** Retrospective burden of illness analysis of massively transfused trauma patients. Novo Nordisk Canada. Manuscript in preparation. \$20000 CDN. [Grant]

2013- present      **Co-Investigator.**Pharmacoeconomic analysis of burden of illness of massively transfused trauma patients. Manuscript in preparation. \$40000 CDN. [Grant]



## **Peer-Reviewed Publications**

### **Journal Articles**

**St-Onge M**, Dubé PA, Gosselin S, Guimont C, Godwin J, Archambault P, Chauny JM, Frenette AJ, Darveau M, LeSage N, Poitras J, Provencher J, Juurlink D, Blais R, Treatment of calcium channel blocker poisoning: a systematic review, submitted to Clinical Toxicology.

**St-Onge M**, Chun-Po SF, Blais R, Impact of training and practice setting on the physician's opinion regarding the treatment of calcium channel blocker poisonings, submitted to the Int J Emerg Med.

**St-Onge M**, Mandelzweig K, Marshall J, Scales DC, Granton J, Critical care trainees career goals and needs: a Canadian survey, accepted to the Can Resp J.

### **Books and Monographs**

Furger P, **St-Onge M**, Bergeron AC, Deneault E, Herman-Lemelin A, Lizotte J, Blais R, Intoxi-Med Guide Thérapeutique Lignes Directrices, Published by D&F Editions, Jan 2013. 106pp.

**St-Onge M**, Chapter: calcium channel blocker poisoning in the book "Hantson & Mégarbane, Poisonings with cardiotoxicants" to be published by Springer in 2013.

## **Invited Lectures and Presentations**

### **International**

2013 Sept     **Speaker.** Metabolic acidosis in unstable poisoned patients, NACCT conference, Atlanta.

2013 Mar     **Speaker.** Chun-Po SF, Blais R, Impact of training and practice setting on the physician's opinion regarding the treatment of calcium channel blocker poisonings, Poster presented at the American College of Medical Toxicology Conference, Puerto Rico.

## **Provincial**

- 2013 Nov **Speaker.** Vasopressors and inotropes: principles and evidences, Quebec Emergency Physicians Association Conference, Québec.
- 2013 Nov **Speaker.** The management of the poisoned patient in shock, Quebec Emergency Physicians Association Conference, Québec.
- 2013 Nov **Speaker.** Research at University of Toronto, Provincial Emergency Medicine Research Day, Québec.

## **National**

- 2013 Nov **Speaker.** Treatment of calcium channel blocker poisoning: a systematic review. St-Onge M, Dubé PA., Gosselin S, Guimont C, Godwin J, Archambault P, Chauny JM, Frenette AJ, Darveau M, LeSage N, Poitras J, Provencher J, Juurlink D, Blais R. Canadian Critical Care Forum, Toronto, Ontario.

**Peer-Reviewed Fundings**

- 2012 May - present      **Co-Investigator.** The impact of an institutional multidisciplinary tracheostomy team on patient care and clinical outcomes: An observational before and after cohort study. Sunnybrook AFP Association. AFP Innovation Funding. PI: Chu, Peter; Chapman, Martin. Collaborator(s): Tien, Homer; Tremblay, Lorraine. \$10,000 CAD. [Grant]
- 2011 Jul - present      **Principal Site Investigator.** Implementation and assessment of a novel multidisciplinary e-discharge summary to improve efficiency, satisfaction and safety of transfer of care for complex patients. Sunnybrook AFP Association. AFP Innovation Funding. PI: Tremblay, Lorraine. Collaborator(s): Edward Etchells, Katie Chan, Liz Farquharson. \$71,342 CAD. [Grant]
- 2011 Jul - 2013 Jun      **Principal Investigator.** Implementation & Assessment of a Novel Multidisciplinary e-Discharge Summary to Improve Efficiency, Satisfaction, and Safety of Transfer of Care for Complex Patients. AHSC AFP Innovation Fund 2010-2011. Collaborator(s): E. Etchells, P. Engels, K. Chan, L. Farquharson. \$71,342 CAD. [Grant]

**Peer-Reviewed Publications**

**Journal Articles**

- Ali J, Sorvari A, Henry S, Kortbeek J, **Tremblay L.** Advanced trauma operative management (ATOM) course - A 2-student to 1 faculty model. Journal of Surgical Research. **Coauthor or Collaborator.**
- Duggal A, Perez P, Golan E, **Tremblay L,** Sinuff T. The safety and efficacy of noninvasive ventilation in patients with blunt chest trauma: a systematic review. Critical Care. 2013;17(4):R142. **Coauthor or Collaborator.**

## Abstracts

Duggal A, Perez P, **Tremblay L**, Sinuff T. Non-invasive ventilation (NPPV/CPAP) in patients with chest trauma: A systematic review. Intensive Care Medicine. In Press. **Coauthor or Collaborator**.

J. Ali, A. Sorvari, S. Henry, J. Kortbeek, **L. Tremblay**. Effectiveness of a 2:1 student to faculty model for teaching the Advanced Trauma Operative Management (ATOM) Course. Journal of the ACS. **Coauthor or Collaborator**.

## Invited Lectures and Presentations

### International

2013 Apr 12 **Chair**. Injury Science Session. Trauma Association of Canada and Australasian Trauma Society. Whistler, Canada. Presenter(s): Dr. Russell L. Gruen; Dr. Bartolomeu Nascimento; Dr. Ernest (Gene) Moore. (Continuing Education).

## Abstracts and Other Papers

2013 Feb Advanced trauma operative management course - A 2 student to 1 faculty model. Academic Surgical Congress of the Association for Academic Surgery. New Orleans, Louisiana, United States. Presenter(s): J Ali, A. Sorvari, S. Henry, J. Kortbeek, **L. Tremblay**.

**Non-Peer-Reviewed Funding**

2010 Jan - present    **Co-Investigator.** A Phase III International, Randomized, Double-Blind, Double-Dummy Study to Evaluate the Efficacy and Safety of 300mg or 600mg of Intravenous Zanamivir Twice Daily Compared to 75 mg of Oral Oseltamivir Twice Daily in the Treatment of Hospitalized Adults and Adolescents with Influenza (Protocol NAI11373). GlaxoSmithKline. PI: Dr. Allison McGeer. [Clinical Trials]

**Peer-Reviewed Publications**

**Journal Articles**

**Christian MD.** Biowarfare and Bioterrorism. Critical Care Clinics. 2013 Jul;29(3):717-56.

**Principal Author.**

**Book Chapters**

McCann DGC, **Christian M**, Schwartz B, Kollek D. Chapter 4: IMS and Communications. In: Kollek D, editor(s). Disaster Preparedness for Health Care Facilities. 2013. p. 143-160. **Co-Principal Author.**

Srinivas M, Henry B, **Christian M**. Chapter 11: Infectious Diseases Following Disasters. In: Kollek D, editor(s). Disaster Preparedness for Health Care Facilities. 2013. p. 290-305. **Senior Responsible Author.**

**Editorials**

**Christian MD**, Fowler R, Muller MP, Gomersall C, Sprung CL, Hupert N, Fisman D, Tillyard A, Zygun D, Marshall JC on behalf of the PREEDICCT Study Group. Critical Care Resource Allocation: Trying to PREEDICCT Outcomes Without a Crystal Ball. Critical Care. 2013 Jan 23;17(1):107. **Principal Author.**

## Invited Lectures and Presentations

### Abstracts and Other Papers

2013 Nov **Senior Responsible Author.** INTRA ARTERIAL CATHETERISATION - A quality improvement project comparing two styles of catheters. Critical Care Canada Forum. Toronto, Quebec, Canada. Presenter(s): Vagia T Campbell, RRT, Subhash Acharya MD, Maj Michael Christian MD.

### International

2013 Oct 29 **Moderator.** Patient Safety. American College of Chest Physicians. Chicago, Illinois, United States.

2013 Oct 26 **Participant.** Physician Leadership Development Seminar. American College of Chest Physicians. Chicago, Illinois, United States. icine. Puerto Rico, United States.

### Provincial

2013 Aug 19 **Instructor.** Simulation Workshop. Advanced Military Trauma Resuscitation Program - Canadian Forces Trauma Training. Montreal, Quebec, Canada. August 19-23, 2013. (Continuing Education).

2013 Jun 26 **Instructor.** Teaching Trauma. Canadian Armed Forces Physician Assistant Course. Jun 24-26, 2013. (Continuing Education).

2013 Jun 25 **Instructor.** Teaching Trauma. Canadian Armed Forces Physician Assistant Course. Jun 24-26, 2013. (Continuing Education).

2013 Jun 24 **Instructor.** Teaching Trauma. Canadian Armed Forces Physician Assistant Course. Jun 24-26, 2013. (Continuing Education).

2013 Jun 19 **Instructor.** Teaching Trauma. Canadian Armed Forces Physician Assistant Course. (Continuing Education).

2013 Jun 18 **Instructor.** Teaching Trauma. Canadian Armed Forces Physician Assistant Course. (Continuing Education).

2013 Apr 29 **Instructor.** Simulation Workshop. Advanced Military Trauma Resuscitation Program - Canadian Forces Trauma Training. Montreal, Quebec, Canada. April 29-May 3, 2013. (Continuing Education).

2013 Apr 28 **Instructor.** Simulation Workshop. Advanced Military Trauma Resuscitation Program - Canadian Forces Trauma Training. Montreal, Quebec, Canada. (Continuing Education).

- 2013 Mar 8 **Instructor.** Advanced Military Trauma Resuscitation Program. Canadian Forces Trauma Training. Vancouver, British Columbia, Canada. (Continuing Education).
- 2013 Mar 7 **Instructor.** Simulation Workshop. Advanced Military Trauma Resuscitation Program - Canadian Forces Trauma Training. Vancouver, British Columbia, Canada. (Continuing Education).
- 2013 Feb 8 **Instructor.** Advanced Military Trauma Resuscitation Program - Disaster Medicine. Canadian Forces Trauma Training. Vancouver, British Columbia, Canada. (Continuing Education).
- 2013 Feb 8 **Instructor.** Advanced Military Trauma Resuscitation Program - Hypothermia. Canadian Forces Trauma Training. Vancouver, British Columbia, Canada. (Continuing Education).
- 2013 Feb 4 **Instructor.** Teaching Neurology. Canadian Armed Forces Physician Assistant Course. Feb 4-7, 2013. (Continuing Education).
- 2013 Jan 23 **Instructor.** Disaster Management. Advanced Military Trauma Resuscitation Program - Canadian Forces Trauma Training. Montreal, Quebec, Canada. Jan 21-25, 2013. (Continuing Education).
- 2013 Jan 23 **Instructor.** Neuro Trauma. Advanced Military Trauma Resuscitation Program - Canadian Forces Trauma Training. Montreal, Quebec, Canada. Jan 21-25, 2013. (Continuing Education).
- 2013 Jan 21 **Instructor.** Scenario 4 Abdominal/Pelvic/Massive Transfusion. Advanced Military Trauma Resuscitation Program - Canadian Forces Trauma Training. Montreal, Quebec, Canada. Jan 21-25, 2013. (Continuing Education).
- 2013 Jan 21 **Instructor.** The Team Approach/Dynamics. Advanced Military Trauma Resuscitation Program - Canadian Forces Trauma Training. Montreal, Quebec, Canada. Jan 21-25, 2013. (Continuing Education).
- 2013 Jan 21 **Instructor.** Scenario 1 PEA. Advanced Military Trauma Resuscitation Program - Canadian Forces Trauma Training. Montreal, Quebec, Canada. Jan 21-25, 2013. (Continuing Education).
- 2013 Jan 18 **Course Instructor.** Fundamental Disaster Management. Society of Critical Care Med Professional Development.

**Peer-Reviewed Fundings**

- 2014 Jul - 2015 Jun      **Principal Investigator.** DECision---making about goals of care for hospitalized medical patiEnts 2: a COMMUNICATion intErvention --- Patient Data Collection and Feedback Pilot. National Centres of Excellence. TechValueNet. Collaborator(s): Macdonald, John; Hartwick, Michael; Roze des Ordons, Amanda; Myers, Jeff; Pereira, Jose; Simon, Jessica; Hamstra, Stan. \$79,675 CAD. [Grants]
- 2014 Jul - 2015 Jun      **Co-Investigator.** Therapeutic alliance in the intensive care unit: enhanced information to facilitate decision-making. Ontario Ministry of Health and Long-Term Care. Alternate Funding Plan Innovation Grant. PI: Amaral, Andre. Collaborator(s): Conn, Lesley; Piquette, Dominique; Downar, James; Dev, Shelly. \$99,860 CAD. [Grant]
- 2013 Jul - 2015 Jun      **Co-Investigator.** Shining a Light on End-of-Life Care in Canada: Investigating Barriers, Testing Interventions, and Disseminating Integrated Solutions for Patients, Families and Healthcare Professionals. University of Toronto. Department of Medicine Integrating Challenge Grant. PI: Fowler, Robert. Collaborator(s): Dev S, Berry S, Downar J, Gandhi S, La Delfa I, Laupacis A, Myers J, Ross H, Rubinfeld G, Scales D, Sinha S, Stukel T, Zimmermann C, Gallagher R, Heyland D, Kryworuchko J, Skinner J, You J, Wunsch H. \$187,790 CAD. [Grant]



2013 Apr - 2014 Mar	<b>Principal Investigator.</b> Developing A Bereavement Screening and Support Program for ICU Family Members at Risk of Complicated Grief. Ontario Ministry of Health and Long-Term Care. AHSC AFP Innovation Fund. Collaborator(s): Sinuff, Tasnim; Strachan, Derek; MacKinnon, Christopher; Siber, Klara; Hales, Sarah. \$99,926 CAD. [Grant]
2012 Jul - 2014 Jun	<b>Principal Investigator.</b> Are standardized patient simulation sessions more effective than didactic teaching alone for improving the skill and comfort level of medical residents when discussing goals of care and resuscitation? Royal College of Physicians and Surgeons of Canada (The). Royal College/AMS CanMEDS Research and Development Grant. Collaborator(s): Knickle, Kerry McNaughton, Nancy McDonald-Blumer, Heather. \$22,642.5 CAD. [Grant]
2012 Jul - 2013 Jun	<b>Principal Investigator.</b> Are standardized patient simulation sessions more effective than didactic teaching alone for improving the skill and comfort level of medical residents when discussing goals of care and resuscitation? University of Toronto. Education Development Fund. Collaborator(s): Knickle, Kerry McNaughton, Nancy McDonald-Blumer, Heather. \$12,971.26 CAD. [Grant]
2012 Jul - 2013 Jun	<b>Co-Investigator.</b> DECISION-making about goals of care for hospitalized medical patients: A multicentre, mixed-methods study. The DECIDE Study. Canadian Institutes of Health Research (CIHR). PI: Heyland, Daren. Collaborator(s): Dr. J. You, Dr. M. Alabert, Dr. J. Downar, Dr. D. Jayaraman, Dr. I. Ma, Dr. J. Shik, Dr. K. Brazil, Dr. R. Fowler, Mrs. J. Kryworuchko, Dr. A. Palepu, Dr. P. Strachan, Mr. A. Day, Dr. R. Ilan, Dr. F. Lamontagne, Dr. D. Roberts. \$157,908 CAD. [Grant]

## Peer-Reviewed Publications

### Journal Articles

**Downar J**, Barua R, Rodin D, Lejnieks B, Gudimella R, McCredie V, Hayes C, Steel A. Changes in End of Life Care 5 years after the Introduction of a Rapid Response Team: A multicentre retrospective study. *Resuscitation*. 2013 Mar. **Principal Author**.

Ma G, **Downar J**. Non-comfort medication use in acute care inpatients co-managed by palliative care specialists near the end of life: A cohort study. *American Journal of Hospice and Palliative Medicine*. 2013 Sep. In Press. **Senior Responsible Author**.

Weiss A, **Downar J**. Ontario Hospitals Are Not Using Palliative Care Performance Indicators in Their Balanced Scorecards. *Journal of Pain and Symptom Management*. 2013 Aug;46(2):e1-5 (Trainee publication). **Senior Responsible Author**.

**Downar J**, Rodin D, Barua R, Lejnieks B, Gudimella R, McCredie V, Hayes C, Steel A. Rapid Response Teams, Do Not Resuscitate Orders, and Potential Opportunities to Improve End-of-Life Care: A Multicentre Retrospective Study. *Journal of Critical Care*. 2013 Aug;28(4):498-503. epub Jan 18, 2013. **Principal Author**.

Heyland DK, Barwich D, Pichora D, Dodek P, Lamontagne F, You JJ, Tayler C, Porterfield P, Sinuff T, Simon J; ACCEPT (Advance Care Planning Evaluation in Elderly Patients) Study Team; Canadian Researchers at the End of Life Network (CARENET). Failure to engage hospitalized elderly patients and their families in advance care planning. *JAMA Internal Medicine*. 2013 May;173(9):778-87. **Coauthor or Collaborator**.

**Downar J**, Barua R, Rodin D, Lejnieks B, Gudimella R, McCredie V, Hayes C, Steel A. Changes in End of Life Care 5 years after the Introduction of a Rapid Response Team: A multicentre retrospective study. *Resuscitation*. 2013 Mar. **Principal Author**.

**Downar J**. Kritek PA. Family presence during resuscitation. *New England Journal of Medicine*. 2013 Mar;368(11):1060-2. **Principal Author**.

## Invited Lectures and Presentations

### International

- 2013 Nov 28 **Invited Speaker.** Breaking bad news in Kuwait. Oncology Teaching Rounds, Kuwait Cancer Control Centre. Kuwait City. Kuwait. (Continuing Education).
- 2013 Nov 27 **Invited Speaker.** Conflict resolution in oncology. Oncology Teaching Rounds, Kuwait Cancer Control Centre. Kuwait City. Kuwait. (Continuing Education).
- 2013 Nov 26 **Invited Speaker.** Dyspnea in patients with advanced cancer. Oncology Teaching Rounds, Kuwait Cancer Control Centre. Kuwait City. Kuwait. (Continuing Education).
- 2013 Nov 26 **Facilitator.** Communication with Cancer Patients. Kuwait Cancer Control Centre. Kuwait City. Kuwait. (Continuing Education).
- 2013 Nov 24 **Facilitator.** Communication with Cancer Patients. Kuwait Cancer Control Centre. Kuwait City. Kuwait. (Continuing Education).
- 2013 Oct 28 **Presenter.** Palliative Care for Idiopathic Pulmonary Fibrosis. CHEST 2013- American College of Chest Physicians. Chicago, Illinois, United States.

### National

- 2013 Nov 13 **Presenter.** Non-Cancer Illness Webinar Series: End-stage Lung Disease. Canadian Hospice and Palliative Care Association. Canada. Presenter(s): J. Downar, R. Colman. (Continuing Education).
- 2013 Nov 11 **Speaker.** Protocolized Withdrawal of Life Support. Critical Care Canada Forum 2013. Toronto, Ontario, Canada. (Continuing Education).
- 2013 Oct 4 **Presenter.** Palliative Care, Quality, and everything that lies between.... Canadian Society of Internal Medicine Annual Meeting. Toronto, Ontario, Canada. Presenter(s): J. Downar. (Continuing Education).
- 2013 Oct 3 **Presenter.** Non-Cancer Illness Webinar Series: Congestive Heart Failure. Canadian Hospice and Palliative Care Association. Canada. Presenter(s): J. Downar, H. Ross, L. Steinberg. (Continuing Education).
- 2013 May 30 **Invited Speaker.** "Palliative Care, Quality, and everything that lies between...". Health PEI- 3rd Annual Prince Edward Island Palliative Care Conference. Summerside, Prince Edward Island, Canada.

- 2013 Apr 26 **Keynote Speaker.** City-Wide Advance Practice Nurse/ Nurse Practitioner Clinical Conference Day. “Advance Care Planning: How Can I Help?”. Toronto, Ontario, Canada.
- 2013 Mar **Presenter.** Palliative Care Referral and Outcomes in Lung Transplant Candidates. International Society of Heart and Lung Transplantation 33rd Annual Meeting. Montreal, Quebec, Canada. Presenter(s): Colman, RE; Singer, LG; Barua, R; Downar, J. Senior author (Trainee Presentation).
- 2013 Jan 8 **Invited Speaker.** Palliative Care, Quality, and everything that lies between. Grand Rounds, Institute for Clinical Evaluative Sciences. Toronto, Ontario, Canada. Learning objectives: Appreciate how the quality “agenda” can worsen end-of-life care.
- Provincial**
- 2013 Nov 9 **Presenter.** Deliberate Practice: Simulated families help meet communications outcomes. Royal College of Physicians and Surgeons of Canada - Simulation Summit. Vancouver, British Columbia, Canada. Presenter(s): James Downar. (Continuing Education).
- 2013 May 23 **Invited Speaker.** National Health Law Summit. “Euthanasia and Assisted Suicide”. The Canadian Bar Association. Halifax, Nova Scotia, Canada. Presenter(s): James Downar, Jocelyn Downie, Catherine Ferrier, Margaret Somerville.
- 2013 Jun 14 **Presenter.** Therapeutic Doublethink. Canadian Society of Palliative Care Physicians, Annual Conference. Vancouver, British Columbia, Canada. Presenter(s): Irene Ying, James Downar. Won National Resident Merit Award (2013). (Trainee Presentation).
- 2013 Jun 13 **Presenter.** Developing a Palliative Care Service model for Muslim Middle Eastern countries. Canadian Society of Palliative Care Physicians, Annual Conference. Vancouver, British Columbia, Canada. Presenter(s): Ahmed AlAwamer, James Downar. Won National Resident Research Award (2013). (Trainee Presentation).

## Local

- 2013 Oct 30 **Speaker.** Acute Presentation of Lung Cancer: Clinical Pathological Correlation. University Health Network Grand Medical Rounds. Toronto, Ontario, Canada. Presenter(s): K. Czarnecka, J. Downar.
- 2013 Sep 10 **Presenter.** Bereavement and Support for Complicated Grief. UHN MSICU Interprofessional Rounds. Toronto, Ontario, Canada.
- 2013 Jun 27 **Invited Speaker.** "Compassion in Medicine". Toronto General Hospital Foundation: Sopman Humanitarian Awards. Toronto, Ontario, Canada.
- 2013 May 31 **Invited Lecturer.** When words get in the way. Barrie Rose Educational Conference- Palliative Care for the Nonspecialist, University Health Network. Toronto, Ontario, Canada. (Continuing Education).
- 2013 May 31 **Invited Speaker.** Interactive Panel Discussion: Ethical Issues Around Goals of Care. Barrie Rose Educational Conference- Palliative Care for the Nonspecialist, University Health Network. Toronto, Ontario, Canada. (Continuing Education).
- 2013 May 26 **Invited Speaker.** St. Joseph's HealthCare ICU Rounds. "Palliative Care, Quality and everything that lies in between...". Toronto, Ontario, Canada.
- 2013 Apr 24 **Speaker.** UHN Congenital Cardiac Centre- Academic Teaching Rounds. Toronto, Ontario, Canada.
- 2013 Mar 7 **Presenter.** CICC Innovation Rounds: Advance Care Planning at UHN. Toronto, Ontario, Canada. (Continuing Education).
- 2013 Feb 15 **Lecturer.** Psychosocial Oncology and Palliative Care Grand Rounds- "Palliative Care and the Quality Agenda". Department of Psychosocial Oncology and Palliative Care. Toronto, Ontario, Canada. (Continuing Education).
- 2013 Feb 13 **Speaker.** Pediatric Palliative Care Academic Rounds- "Palliative Care in the Critically Ill". Division of Palliative Care, Hospital for Sick Children. Toronto, Ontario, Canada. Monthly Palliative Care Team Rounds at HSC.

## Media Appearances

- 2013 Dec 16 **Speaker.** "What's the right way to withdraw life support?". Interviewer: Sharon Kirkey. Multiple. Postmedia News. Canada. Article describing attempts to generate guidelines for the withdrawal of life sustaining measures. Available from:

<http://www.canada.com/health/Canadian+doctors+developing+guidelines+right+withdraw+life+support/9289190/story.html>.

- 2013 Nov 25      **Speaker.** “Last Right- Assisted Suicide in Canada. Documentary Three: Sandy Trunzer’s Story.”. Interviewer: Lynn Burgess. The National. Canadian Broadcasting Corporation. Toronto, Ontario, Canada. Documentary about end-of-life experiences by three Canadians. Available from: <http://www.cbc.ca/thenational/indepthanalysis/lastright/index.html>.
- 2013 Oct 19      **Speaker.** Withdrawal of Life Support and Rasouli v. Cuthbertson. Interviewer: Roy Green. The Roy Green Show. Corus. Canada.
- 2013 Oct 18      **Speaker.** Supreme Court Decision on Rasouli v. Cuthbertson. The National. Canadian Broadcasting Corporation. Canada.
- 2013 Oct 12      **Speaker.** Physician-Assisted Suicide and Carter v. Canada. Interviewer: Roy Green. The Roy Green Show. Corus. Canada.
- 2013 Feb 18      **Interviewed Expert.** “Death is as precious as life”. Bestendings.com. Toronto, Ontario, Canada. Presenter(s): Kathy Kastner. Blog about end of life care.

**Peer-Reviewed Fundings**

2014 Apr - 2016 Mar	<b>Principal Investigator.</b> The Importance of Spontaneous Breathing Efforts in Mechanically Ventilated Patients with Acute Respiratory Distress Syndrome. Physician Services Incorporated (PSI) Foundation. \$170,000 CAD. [Grant]
2014 Apr - 2015 Oct	<b>Co-Investigator.</b> Intensive Care Rehabilitation Study (ICURuS): Barriers to Early Physical Rehabilitation in the ICU – A Delphi Study. Canadian Institutes of Health Research (CIHR). PI: Cuthbertson B. \$88,438 CAD. [Grant]
2013 Dec - 2015 Nov	<b>Principal Investigator.</b> Strategies for Optimal Lung Ventilation in ECMO for ARDS: The SOLVE ARDS Study. Physician Services Incorporated (PSI) Foundation. \$57,500 CAD. [Grant]
2013 Jan - 2014 Dec	<b>Principal Investigator.</b> Clinical Practice Guideline for Mechanical Ventilation in Adults with ARDS. American Thoracic Society. \$70,000 USD. [Grant]
2012 Mar - 2013 Jul	<b>Co-Investigator.</b> One Day Point Prevalence Study of Barriers to Acute Rehabilitation in Ontario Intensive Care Units. Physician Services Incorporated (PSI) Foundation. PI: Koo KKY. \$58,234.9 CAD. [Grant]
2012 Mar - 2013 Feb	<b>Co-Investigator.</b> One Day Point Prevalence Study of Barriers to Acute Rehabilitation in Ontario Intensive Care Units. Academic Health Sciences Centre AFP Innovation Fund. Academic Medical Organization of Southwestern Ontario -AMOSO. PI: Koo KKY. \$102,183.9 CAD. [Grant]

2012 Jan - 2013 Dec      **Principal Investigator.** Understanding Barriers to Early Rehabilitation in the Intensive Care Unit Using the Toronto ICU Registry (TICUR) Project. University of Toronto. Department of Medicine Strategic Planning Innovation Fund. \$75,000 CAD. [Grant]

2011 Apr - 2014 Mar      **Co-Investigator.** Understanding Long-Term Mechanical Ventilation in Canada: A Programmatic Approach. Canadian Institutes of Health Research (CIHR). Partnerships for Health Systems Improvement (PHSI). PI: Rose, L. \$349,863 CAD. [Grant]

### **Non-Peer-Reviewed Fundings**

2013 Oct - 2016 Sep      **Principal Investigator.** Prospective Evaluation of the Vision Alpha in Adults with Acute Lung Injury. Nihon Kohden Corporation. \$297,000. [Industrial Grant]

2013 May - 2014 Apr      **Principal Investigator.** Implementing Real-Time Monitoring of Mechanical Ventilation in the Intensive Care Unit Using Electrical Impedance Tomography. Mount Sinai Hospital Department of Medicine Physician Campaign. \$41,000 CAD. [Industrial Grant]

### **Peer-Reviewed Publications**

#### **Journal Articles**

Del Sorbo L, Cypel M, **Fan E.** Extracorporeal life support for adults with severe acute respiratory failure. Lancet Resp Med. 2013. In Press. **Senior Responsible Author.**

**Fan E,** Villar J, Slutsky A. Novel approaches to minimize ventilator-induced lung injury. BMC Medicine. 2013(11):85. **Coauthor or Collaborator.**

Goligher EC, Fan E, Slutsky AS. Year in review 2012: critical care – respirology. Crit Care. 2013(17):249. **Coauthor or Collaborator.**

Rahimi RA, Skrzat J, Reddy DR, Zanni JM, Fan E, Stephens RS, Needham DM. Physical rehabilitation of intensive care patients requiring extracorporeal membrane oxygenation: a small case series. Phys Ther. 2013(93):248-255. **Coauthor or Collaborator.**



Wilcox ME, Chong CAKY, Niven DJ, Rubenfeld GD, Rowan KM, Wunsch H, Fan E. Do intensivist staffing patterns influence hospital mortality following ICU admission? A systematic review and meta-analysis. *Critical Care Medicine*. 2013(41):2253-2274. **Senior Responsible Author.**

Koo KKY, Fan E. ICU-acquired weakness and early rehabilitation in the critically ill: prioritizing the awake, calm, cooperative, and mobile ICU patient. *Journal of Clinical Outcomes Management*. 2013(20):223-231

### **Abstracts**

**Fan E.** Long-term physical outcomes after extracorporeal membrane oxygenation (ECMO): The Towards RECOVER Study. *American Journal of Respiratory and Critical Care Medicine*. 2013. 2013, in press. In Press. **Principal Author.**

Cypel M, Paraghamian A, Azad S, Yasufuku K, de Perrot M, Pierre A, Arce C, Serick C, Ferguson ND, Waddell TK, **Fan E**, Keshavjee S. Ten years experience with extracorporeal life support for adult respiratory failure: evolution of indications, techniques and outcomes. *Journal of Thoracic and Cardiovascular Surgery*. 2013. 2013, in press. In Press. **Coauthor or Collaborator.**

**Fan E**, Reda L, Chu LM, Matte AL, Chan L, Tomlinson G, Ferguson ND, Chaparro C, Singer LG, Cypel M, Keshavjee S, Cameron JI, Herridge MS. Long-term physical outcomes after extracorporeal membrane oxygenation (ECMO): The Towards RECOVER Study. *American Journal of Respiratory and Critical Care Medicine*. 2013(187):A4480. **Principal Author.**

Telesnicki T, Munshi L, **Fan E**. Extracorporeal membrane oxygenation for adult patients with acute respiratory failure: a systematic review and meta-analysis. *American Journal of Respiratory and Critical Care Medicine*. *American Journal of Respiratory and Critical Care Medicine*. 2013(187):A3957. **Senior Responsible Author.**

Penuelas O, Frutos Vivar F, **Fan E**, Ferguson ND, Thille AW, Rios F, Maggiore SM, Villagomez A, Gonzalez M, Nin N, Anzueto A, Esteban A. Incidence and outcome of patients diagnosed with ICU-acquired weakness. *American Journal of Respiratory and Critical Care Medicine*. 2013(187):A3628. **Co-Principal Author.**

### **Editorials**

Munshi L, **Fan E**, Del Sorbo L. Prone positioning during ECMO: A turn of events? *Minerva Aneste*. 2013. In Press. **Senior Responsible Author.**

Goddard SL, **Fan E**. “. Only few find the way, some don’t recognize it when they do...” – can we “observe” causality? *Critical Care Medicine*. 2013. In Press. **Senior Responsible Author.**

**Fan E**, Brochard L. "The old order changeth, yielding place to the new...". Annals of the American Thoracic Society. 2013(10:):359-360. **Co-Principal Author.**

Hodgson C, **Fan E**. A step up for ECMO: active rehabilitation. Respiratory Care. 2013(58):1388-13. **Principal Author.**

**Fan E**. A "moving proposition" for the silver day and bronze week in trauma patients. Critical Care Medicine. 2013(41):1826-1827. **Principal Author.**

#### **Non-Peer-Reviewed Publications**

##### **Journal Articles**

**Fan E**. Health Quality Ontario and Ministry of Health and Long-Term Care. Quality-based procedures: Clinical handbook for chronic obstructive pulmonary disease. 2013 Jan. Available at [http://health.gov.on.ca/en/pro/programs/ecfa/docs/qbp\\_copd.pdf](http://health.gov.on.ca/en/pro/programs/ecfa/docs/qbp_copd.pdf). **Principal Author.**

**Fan E**, Dowdy DW, Colantuoni E, Mendez-Tellez PA, Sevransky JE, Shanholtz C, Himmelfarb CRD, Desai SV, Ciesla N, Herridge MS, Pronovost PJ, Needham DM. Physical complications in acute lung injury survivors: a 2-year longitudinal prospective study. Am J Respir Crit Care Med. 2013. In Press. **Principal Author.**

##### **Submitted Publications**

##### **Journal Articles**

**Fan E**, Dowdy DW, Colantuoni E, Mendez-Tellez PA, Sevransky JE, Shanholtz C, Himmelfarb CRD, Desai SV, Ciesla N, Herridge MS, Pronovost PJ, Needham DM. Physical complications in acute lung injury survivors: a 2-year longitudinal prospective study. Crit Care Med. 2013.

##### **Coauthor or Collaborator.**

**Fan E**, Brower R, Cheek F, Chlan L, Gosselink R, Hart N, Herridge MS, Hopkins R, Hough T, Kress JP, Latronico N, Moss M, Needham D, Rich M, Stevens R, Winkleman C, Zochodne D, Ali N, on behalf of the ATS Consensus Panel on Definitions and Assessments for ICU-Acquired Weakness. An Official ATS Clinical Practice Guideline: The diagnosis of intensive care unit acquired weakness. Am J Respir Crit Care Med. 2013. **Principal Author.**

## **Invited Lectures and Presentations**

### **International**

- 2013 Nov 16 **Invited Speaker.** Year in Review – Invasive Mechanical Ventilation. 59th Annual American Association for Respiratory Care (AARC) Congress. Anaheim, California, United States.
- 2013 Nov 16 **Invited Speaker.** Hypocapnia and Hypercapnia. 59th Annual American Association for Respiratory Care (AARC) Congress. Anaheim, California, United States.
- 2013 Oct 28 **Invited Speaker.** High Frequency Oscillatory Ventilation: Which Patients? American College of Chest Physicians Annual Meeting. Chicago, Illinois, United States.
- 2013 Oct 11 **Invited Speaker.** Extracorporeal Life Support for Acute Respiratory Failure. 26th Annual Meeting and Critical Care Update, Society of Critical Care Anesthesiologists. San Francisco, California, United States.
- 2013 Sep 22 **Invited Speaker.** Paralysis and Proning in Severe ARDS: Why Do We Need ECMO? 26th Annual ELSO Conference. Philadelphia, Pennsylvania, United States.
- 2013 May 21 **Invited Speaker.** Year in Review – Mechanical Ventilation. American Thoracic Society International Meeting. Philadelphia, Pennsylvania, United States.
- 2013 May 20 **Facilitator.** Neurocognitive and Neuromuscular Issues in the ICU Thematic Poster Session. American Thoracic Society International Meeting. Philadelphia, Pennsylvania, United States.

### **Provincial**

- 2013 Sep 25 **Invited Speaker.** Improving Outcomes After Critical Illness – The Awake, Calm, Cooperative, and Mobile ICU Patient. Interior BC Network ICU Rounds. Kelowna, British Columbia, Canada.

### **National**

- 2013 Jul 5 **Invited Speaker.** ECLS as a Bridge to Lung Transplant – When to Start? When to Stop? 17th Annual Research Days. Toronto Lung Transplant Program. Cambridge, Ontario, Canada.
- 2013 Apr 13 **Invited Speaker.** Improving Outcomes After Critical Illness – The Awake, Calm, Cooperative, and Mobile ICU Patient. Cardiorespiratory Physical Therapy and Early Mobility Skills in Acute Care. Toronto, Ontario, Canada.

2013 Mar 5 **Invited Speaker.** Pain, Agitation, and Delirium: The Awake, Calm, Cooperative and Mobile ICU Patient. Oakville-Trafalgar Hospital ICU Rounds. Oakville, Ontario, Canada. .

#### **Local**

2013 Jun 28 **Invited Speaker.** Mechanical Ventilation: Maximizing Lung Protection and ECMO. Perfusion Department, Toronto General Hospital. Toronto, Ontario, Canada.

2013 Jun 13 **Invited Speaker.** Physical Complications in Survivors of Acute Lung Injury: A 2-Year Prospective Longitudinal Study. Hospital for Sick Children, Department of Critical Care Research Rounds. Toronto, Ontario, Canada.

#### **Abstracts and Other Papers**

2013 May 21 **Presenter.** Extracorporeal membrane oxygenation for adult patients with acute respiratory failure: a systematic review and meta-analysis. American Thoracic Society International Meeting. Philadelphia, Pennsylvania, United States.

**Peer-Reviewed Fundings**

- 2013 - 2015 Strategies for Optimal Lung Ventilation for ECMO in ARDS: The SOLVE ARDS Study. **Principal Investigators:** ND Ferguson and E Fan. Co-investigators: A Goffi, L Del Sorbo, EC Goligher, M Cypel, S Keshavje, M Meineri, L Brochard, A Pesenti, A Slutsky. Physicians Services Incorporated Foundation. \$57,500 CAD.[Grant]
- 2013 - 2015 Diaphragm Monitoring for Muscle-Protective Mechanical Ventilation. **Principal Investigator:** ND Ferguson. Co-investigator: EC Goligher. MSH-UHN AMO Innovation Fund. \$69,749 CAD. [Grant]
- 2013 - 2018 Linking Ventilator-Induced Diaphragm Dysfunction and Weaning Failure due to Diaphragm Inactivity During Mechanical Ventilation. Principal Investigator: Goligher EC. **Supervisors:** ND Ferguson, BP Kavanagh. Canadian Institutes of Health Research Postdoctoral Fellowship. \$275,000 CAD. [Grant]
- 2013 - 2015 Weaning and Variability Evaluation (WAVE) – a validation study of altered heart rate and respiratory variability to predict extubation failure. Principal Investigator: AJSeely. **Co-investigators:** ND Ferguson, D Fergusson, J Hooper, F Lellouche, JC Marshall, L MacIntyre, T Ramsay, GD Rubenfeld, P Wilkes. Canadian Institutes of Health Research. \$756,148 CAD.[Grant]
- 2013 - 2015 Diaphragm Monitoring Techniques for Muscle-Protective Mechanical Ventilation: Evaluating validity, reliability, and feasibility. **Co-Principal Investigators:** EC Goligher, ND Ferguson. Co-investigators:BP Kavanagh, F Laghi, GR Rubenfeld. The Physicians' Services Incorporated Foundation. \$119,500 CAD. [Grant]
- 2012 - 2013 Acute Lung Injury in the ICU: Scope of the Problem and Focus on Prevention. **Co-Principal Investigators:** I Galvin, ND Ferguson. Co-investigators: JM Singh, AC Steel, SE Lapinsky. The Physicians' Services Incorporated Foundation. \$39,595 CAD. [Grant]

- 2012 - 2013 A Phase 1 Study: The Determination of the Maximum Tolerable Dosage of Sodium Nitroprusside in Adult Acute Lung Injury. Principal Investigators: T Ip, S Mehta. **Co-investigators:** ND Ferguson, L Burry, J Trail, C Harris. The Physicians' Services Incorporated Foundation. \$20,000 CAD. [Grant]
- 2012 - 2014 Understanding Barriers to Early Rehabilitation in the ICU Using the Toronto ICU Registry (TICUR) Project. Principal Investigator: E Fan. **Co-Investigators:** ND Ferguson, DC Scales, GR Rubenfeld. University of Toronto – Department of Medicine Strategic Innovation Fund. \$75,000 CAD. [Grant]
- 2008 - 2013 New Investigator - The OSCILLation for ARDS Treated Early (OSCILLATE) Trial. **Principal Investigator:** ND Ferguson. Co-investigators: MO Meade, DJ Cook, S Mehta, TE Stewart, GH Guyatt, AS Slutsky, NK Adhikari, JO Friedrich, SP Keenan, M Jacka, O Lesur M Lessard, J Ronco, D Dorscheid, S Gottfried, P Hébert. Canadian Institutes of Health Research, New Investigator Award Program. \$300,000 CAD. [Grant]

## Peer-Reviewed Publications

### Journal Articles

Galvin IM, Steel A, Pinto R, **Ferguson ND**, Davies MW. Partial Liquid Ventilation for Preventing Death and Morbidity in Adults with Acute Lung Injury and Acute Respiratory Distress Syndrome. Cochrane Database of Systematic Reviews. 2013; 7:CD003707. Co-principal author.

Esteban A, Frutos Vivar F, Muriel A, **Ferguson ND**, Peñuelas O, Abaira V, Raymonds K, Ríos F, Nin N, Apezteguía C, Violi DA, Thille AW, Brochard L, González M, Villagomez AJ, Hurtado J, Davies AR, Du B, Maggiore SM, Pelosi P, Soto L, Tomicic V, D'Empaire G, Matamis D, Abroug F, Moreno RP, Soares MA, Arabi Y, Sandi F, Jibaja M, Amin P, Koh Y, Kuiper MA, Bulow HH, Zeggwagh AA, and Anzueto A for the Ventila Group. Evolution of Mortality over Time in Patients Receiving Mechanical Ventilation. American Journal of Respiratory & Critical Care Medicine. 2013; 188:220-230. Co-principal author

Sud S, Sud M, Friedrich JO, Wunsch H, Meade MO, **Ferguson ND**, Adhikari NK. High Frequency Ventilation versus Conventional Ventilation for Treatment of Acute Lung Injury and Acute Respiratory Distress Syndrome. Cochrane Database of Systematic Reviews. 2013; 2:CD004085. Co-principal author.

Lamontagne F, Quiroz H, Adhikari NK, Koo K, Lauzier F, Turgeon A, Kho M, Burns KE, Chant C, Fowler RA, Douglas I, Poulin Y, Choong K, **Ferguson ND**, Meade MO. Corticosteroid Use in the Intensive Care Unit – a survey of intensivists. *Canadian Journal of Anaesthesia*. 2013; 60:652-9. Co-principal author.

**Ferguson ND**, Cook DJ, Guyatt GH, Mehta S, Hand L, Austin P, Zhou Q, Matte A, Walter SD, Lamontagne F, Granton JT, Arabi YM, Arroliga AC, Stewart TE, Slutsky AS, Meade MO, for the OSCILLATE Investigators and The Canadian Critical Care Trials Group. High Frequency Oscillation for Early Acute Respiratory Distress Syndrome. *New England Journal of Medicine*. 2013; 368:795-805. Principal Author.

**Ferguson ND**, Scales DC, Pinto R, Wilcox EM, Cook DJ, Guyatt G, Schunemann HJ, Marshall JC, Herridge MH, Meade MO. Integrating Mortality and Morbidity Outcomes: Using Quality-Adjusted Life Years (QALYs) in Critical Care Trials. *American Journal of Respiratory & Critical Care Medicine*. 2013; 187:256-261. Principal Author.

Arias-Rivera S, Sánchez-Sánchez MM, Fraile-Gamo MP, Patiño-Freire S, Pinto-Rodríguez V, Conde-Alonso MP, **Ferguson ND**, Frutos-Vivar F. Transcultural adaptation into Spanish of the Nursing Activities Score. *Enfermera Intensiva*. 2013; 24:12-22. Co-author

### **Contributions to Original Research – Group Authorship**

Daneman N, Sarwar S, Fowler RA, Cuthbertson BH on behalf of **The SuDDICU Canadian Study Group**. Effect of Selective Digestive Decontamination on Antimicrobial Resistance in Intensive Care Units: a systematic review and meta-analysis. *Lancet Infectious Disease*. 2013; 13:328-341. Co-Investigator.

### **Review Articles, Letters and Editorials**

Khemani RG, Wilson DF, Estaban A, **Ferguson ND**. Evaluating the Berlin Definition in Pediatric ARDS. *Intensive Care Medicine* 2013; 39:2213-2216. Editorial. Senior responsible author

Scales DC, **Ferguson ND**. Quality-Adjusted Life Years or Composite Outcomes? *American Journal of Respiratory & Critical Care Medicine* 2013; 188:622-3. Letter – authors' reply. Senior responsible author

**Ferguson ND**, Slutsky AS, Meade MO. High-Frequency Oscillation for ARDS. *New England Journal of Medicine* 2013; 368:2233-2234. Letter – authors' reply. Principal author

Silversides JA, **Ferguson ND**. Clinical Review: Acute Respiratory Distress Syndrome – clinical ventilator management and adjunct therapy. *Critical Care* 2013; 17:225. Narrative Review. Senior responsible author

Goligher EC, **Ferguson ND**. Re-evaluating High Frequency Oscillation for ARDS: Would a Targeted Approach be More Successful? *Critical Care* 2013; 17:133. Editorial. Senior responsible author

### **Original Investigations**

Sakr Y, Moreira CL, Rhodes A, **Ferguson ND**, Kleinpell R, Pickkers P, Kuiper M, Lipman J, Vincent JL for the EPIC II Investigators. The Impact of Hospital and Intensive Care Unit Organizational Factors on Outcome in Critically Ill Patients: Results from the EPIC II Study. Submitted 2013. Co-principal author.

### **Book Chapters**

Froese AB, **Ferguson ND**. High-Frequency Ventilation. In: Tobin MJ (Ed) *Mechanical Ventilation* (3rd Edition). McGraw-Hill, New York, 2013, pp 495-516. Principal Author

### **Abstracts**

EC Goligher, F Laghi, **ND Ferguson**. A Window into Diaphragm Kinetics: feasibility, precision, and physiological meaning of diaphragm thickness. *Critical Care* 2013; 17(suppl2);P145.  
M Cypel, A Paraghamian, M de Perrot, K Yasufuku, A Pierre, C Arce, S Azad, C Serick, **ND Ferguson**, TK Waddell, E Fan, S Keshavjee. Ten Years Experience with Extra Corporeal Life Support for Adult Respiratory Failure: Evolution of Indications, Techniques and Outcomes. *Journal of Thoracic and Cardiovascular Surgery*. 2013; In Press.

### **Invited Lectures and Presentations**

#### **International**

- 2013 Oct 19 **Speaker**. The Future of Critical Care Medicine – Challenges & Opportunities. 4th Shanghai Oriental Respiratory Forum, Chinese Association for Bronchology & Interventional Pulmonology, Shanghai, China.
- 2013 Oct 19 **Speaker**. Patient-Ventilator Interactions. 4th Shanghai Oriental Respiratory Forum, Chinese Association for Bronchology & Interventional Pulmonology, Shanghai, China
- 2013 Oct 18 **Speaker**. Lung-Protective Ventilation – How to set tidal volume & PEEP. 4th Shanghai Oriental Respiratory Forum, Chinese Association for Bronchology & Interventional Pulmonology, Shanghai, China.



- 2013 Oct 9 **Speaker.** High-Frequency Oscillatory Ventilation in ARDS. European Society of Intensive Care Medicine Annual Congress, Paris, France
- 2013 Oct 9 **Speaker.** Mechanical Ventilation in Cystic Fibrosis. European Society of Intensive Care Medicine Annual Congress, Paris, France
- 2013 Oct 8 **Speaker.** How Do I Manage Hypoxemia. European Society of Intensive Care Medicine Annual Congress, Paris, France
- 2013 Oct 7 **Speaker.** Meade MO, Taneja R, Hand L, Jimenez E, Arroliga A, Sanchez J, Ferguson ND, for the OSCILLATE Investigators. Evolution of Practice Patterns in the Management of ARDS. European Society of Intensive Care Medicine Annual Congress, Paris, France, October 7, 2013.
- 2013 Aug 31 **Speaker.** Understanding Discordant Results in Clinical Trials: HFO & OSCILLATE. World Federation of Societies of Intensive and Critical Care Medicine, World Congress, Durban, South Africa
- 2013 Aug 31 **Speaker.** Airway Pressure Release Ventilation: Friend or Foe? World Federation of Societies of Intensive and Critical Care Medicine, World Congress, Durban, South Africa
- 2013 Aug 31 **Speaker.** HFOV in ARDS: Is There Still a Role? World Federation of Societies of Intensive and Critical Care Medicine, World Congress, Durban, South Africa
- 2013 Aug 29 **Speaker.** How to Give an Effective Talk. World Federation of Societies of Intensive and Critical Care Medicine, World Congress, Durban, South Africa
- 2013 Jul 5 **Speaker.** RCTs are Absolutely Necessary, but Not Necessarily Absolute. Closing Plenary Session, UK Critical Care Research Forum, King's College London, London, UK
- 2013 Jul 4 **Speaker.** Dealing with (Respiratory) Failure – Research in the Aftermath of OSCILLATE. Opening Plenary Session, UK Critical Care Research Forum, King's College London, London, UK
- 2013 Jul 3 **Speaker.** Determining Prognosis and Creating Decision Rules. Postgraduate Course in Observational Research in Critical Care. UK Critical Care Research Forum, King's College London, London, UK
- 2013 Jul 3 **Speaker.** Forming a Research Question. Postgraduate Course in Observational Research in Critical Care. UK Critical Care Research Forum, King's College London, London, UK

2013 Jun 14 **Speaker.** Ventilator-Induced Lung Injury & ARDS: New Insights from the OSCILLATE Trial. Pulmonary & Critical Care Grand Rounds, North Shore Medical Centre, New York, USA

#### **National**

2013 Nov 25 **Speaker.** Research Team Management and Coordination for Clinical Trials. CCCTG School, by teleconference, Toronto, Ontario

2013 Nov 12 **Speaker.** ARDS Revisited: Reflections on the HFO Trials. Critical Care Canada Forum, Toronto, Ontario.

2013 Jun 6 **Speaker.** Weaning from Mechanical Ventilation. Canadian Critical Care Review – Canadian Critical Care Society RCPSC Critical Care National Exam Review Course, Mississauga, Ontario

#### **Local**

2013 Mar 5 High-Frequency Oscillatory Ventilation for Early Acute Respiratory Distress Syndrome. Department of Critical Care Medicine Grand Rounds, St. Joseph's Hospital, University of Toronto, Toronto, Ontario

2013 Mar 1 High-Frequency Oscillatory Ventilation for Early Acute Respiratory Distress Syndrome. Department of Critical Care Medicine Grand Rounds, St. Michael's Hospital, University of Toronto, Toronto, Ontario

2013 Jan 9 High-Frequency Oscillatory Ventilation for ARDS – Results of the OSCILLATE Trial. Department of Medicine Grand Rounds, University Health Network & Mount Sinai Hospital, University of Toronto, Toronto, Ontario

**Peer-Reviewed Fundings**

2013 Jul - 2016 Jun	<b>Co-Investigator.</b> Measurement of exercise tolerance before surgery. Canadian Institutes of Health Research (CIHR). PI: Wijeyesundera, Duminda. Collaborator(s): Brian Cuthbertson; C McCartney; David Mazer; H Wijeyesundera; K Thorpe; Muhamad Mamdani; R Brull; Scott Beattie. \$144,000 CAD. [Grant]
2012 Sep - 2015 Aug	<b>Principal Applicant.</b> RePo1. Randomized, controlled trial of sildenafil in patients with portal pulmonary hypertension. Canadian Institutes of Health Research (CIHR). PI: Granton, John. Collaborator(s): Mehta S, Provencher S, Swiston J, Langleben D, Renner E, Tomlinson G, Johnson S, Lien D, Bishouty Z. \$188,289 CAD. [Grant]
2012 Mar - 2016 Feb	<b>Co-Investigator.</b> Measuring Exercise Tolerance for Surgery (METS). Canadian Institutes of Health Research (CIHR). Cardiovascular. PI: Wijesundera, Duminda. \$987,066 CAD. [Grant]
2012 Mar - 2014 Feb	<b>Co-Investigator.</b> Cellular Immunotherapy for Septic Shock (CISS): A Phase I trial. Canadian Institutes of Health Research (CIHR). Circulatory Physiology. PI: McIntyre, Lauralyn. Collaborator(s): Duncan Stewart, Keith Walley, John Marshall, Brent Winston, M Lau, S Mei, D Courtman, Dean Ferguson. \$366,812 CAD. [Grant]
2012 Jan - 2014 Dec	<b>Co-Principal Investigator.</b> Development of a Smoking Cessation Collaborative. U of T Department of Medicine. PI: Granton, John. Collaborator(s): Peter Selby. \$71,750 CAD. [Grant]

2011 Apr - 2014 Mar      **Co-Investigator.** Screening for dysphagia in patients following prolonged intubation. Canadian Institutes of Health Research (CIHR). PI: Martino, Rosemary. Collaborator(s): Martino, Rosemary, Terry Yeo. Stacy Skortez (PhD Candidate). \$212,077 CAD. [Grant]

**Non-Peer-Reviewed Funding**

2012 Dec - 2014 Jun      **Co-Investigator.** A Phase 2, Placebo Controlled Double-Blind, Randomized, Clinical Study to Determine Safety, Tolerability and Efficacy of Pulsed, Inhaled Nitric Oxide (iNO) Verses Placebo as Add-On Therapy in Symptomatic Subjects with Pulmonary Arterial Hypertension (PAH). Protocol IK-7001-PAH-201. Ikaria. PI: Brahm Goldstein. [Clinical Trials]

2011 Jan - 2015 Dec      **Principal Site Investigator.** AMBITION. A randomized multicenter study comparing the effect on time to clinical failure of initial combination therapy (ambrisentan and tadalafil) and initial monotherapy (ambrisentan or tadalafil) in subjects with pulmonary arterial hypertension. Glaxo Smith Kline. \$150,000 CAD. [Industrial Grants]

2011 Jan - 2013 Dec      **Principal Applicant.** RePo1. Randomized, controlled trial of sildenafil in patients with portal pulmonary hypertension. Pfizer Canada Inc. \$400,000 CAD. [Grant]

2010 Aug - 2015 Dec      **Principal Site Investigator.** GRIPHON. Long-term, single-arm, open-label Phase 3 study, to evaluate the safety and tolerability of ACT-293987 in patients with pulmonary arterial hypertension. Actelion Pharmaceuticals Canada Inc. \$150,000 CAD. [Industrial Grants]

2010 Aug - 2014 Dec	<b>Principal Site Investigator.</b> GRIPHON. A multicenter, double-blind, placebo-controlled Phase 3 study to demonstrate the efficacy and safety of ACT-293987 in patients with pulmonary arterial hypertension. Actelion Pharmaceuticals Canada Inc. \$150,000 CAD. [Industrial Grants]
2010 Jul - 2014 Dec	<b>Principal Site Investigator.</b> EPITOME-2. Extension. A multicenter, single-arm, open-label, Phase 3b study to assess the effects of switching from Flolan® to ACT-385781A in patients with pulmonary arterial hypertension. Actelion Pharmaceuticals Canada Inc. \$2,639 CAD. [Industrial Grants]

## Peer-Reviewed Publications

### Journal Articles

Khan IY, Singer LG, de Perrot M, **Granton JT**, Keshavjee S, Chau C, Kron A and Johnson SR. Survival after lung transplantation in systemic sclerosis. A systematic review. *Respir Med.* 2013 Dec. 2013 Dec;107(12):2081-7. doi: 10.1016/j.rmed.2013.09.015. Epub 2013 Sep 26. (Trainee publication, Respiriology Trainee). **Coauthor or Collaborator.**

Nayyar D, Man HS, **Granton J** and Gupta S. Defining and characterizing severe hypoxemia after liver transplantation in hepatopulmonary syndrome. *Liver Transpl.* 2013 Oct 18. 2013 Oct 18. doi: 10.1002/lt.23776. (Trainee publication, Dr. Nayyar is a resident in internal medicine).

**Coauthor or Collaborator.**

**Granton J**, Mercier O and De Perrot M. Management of severe pulmonary arterial hypertension. *Semin Respir Crit Care Med.* 2013 Oct. 2013 Oct;34(5):700-13. doi: 10.1055/s-0033-1356460. Epub 2013 Sep 13. **Co-Principal Author.**

Batt J, Shadly Ahmed S, Correa J, Bain A and **Granton J**. Skeletal Muscle Dysfunction in Idiopathic Pulmonary Arterial Hypertension. *Am J Respir Cell Mol Biol.* 2013 Aug 23. 2013 Aug 23. (Trainee publication, Dr. Shadly is our pulmonary hypertension fellow). **Senior Responsible Author.**

Mehta S, **Granton J**, Gordon AC, Cook DJ, Lapinsky S, Newton G, Bandayrel K, Little A, Siau C, Ayers D, Singer J, Lee TC, Walley KR, Storms M, Cooper JD, Holmes CL, Hebert P, Presneill J and Russell JA. Cardiac ischemia in patients with septic shock randomized to vasopressin or norepinephrine. *Crit Care.* 2013 Jun 20;17(3):1-27. **Co-Principal Author.**

Ferguson ND, Cook DJ, Guyatt GH, Mehta S, Hand L, Austin P, Zhou Q, Matte A, Walter SD, Lamontagne F, **Granton JT**, Arabi YM, Arroliga AC, Stewart TE, Slutsky AS, Meade MO, the

OSCILLATE Trial Investigators and the Canadian Critical Care Trials Group. High- Frequency Oscillation in Early Acute Respiratory Distress Syndrome. N Engl J Med. 2013 Feb 28;368(9):795-805. **Coauthor or Collaborator.**

Chan W, Woldeyohannes M, Colman R, Arand P, Michaels AD, Parker JD, **Granton JT** and Mak S. Haemodynamic and structural correlates of the first and second heart sounds in pulmonary arterial hypertension: an acoustic cardiography cohort study. BMJ Open. 2013;3(4):1-10. **Coauthor or Collaborator.**

### **Editorials**

**Granton JT.** The times they are a changin'. Canadian Resp J. 2013 Feb;18:127. **Principal Author.**

### **Non-Peer-Reviewed Publications**

#### **Journal Articles**

Katsios C, Donadini M, Meade M, Mehta S, Hall R, **Granton J**, Kutsogiannis J, Dodek P, Heels-Ansdell D, McIntyre L, Vlahakis N, Muscedere J, Friedrich J, Fowler R, Skrobik Y, Albert M, Cox M, Klinger J, Nates J, Bersten A, Doig C, Zytaruk N, Crowther M and Cook DJ. Prediction scores do not correlate with clinically adjudicated categories of pulmonary embolism in critically ill patients. Can Respir J. 2013 Sep 30. 2013 Sep 30. pii: 15784. **Coauthor or Collaborator.**

#### **Book Chapters**

Munshi L, Scales D, **Granton JT.** Care of the critically ill transplant patient. In: Hall JB, Schmidt GA, Wood LDH. McGraw-Hill Inc, editor(s). Principles of Critical Care. (Canada); 2013. In Press (Trainee publication, Dr. Munshi is a critical care medicine resident at the University of Toronto).

#### **Senior Responsible Author.**

**Granton JT,** Fanelli V, Slutsky AS. Ventilator induced lung injury. In: Hall JB, Schmidt GA, Wood LDH. McGraw-Hill Inc. New York. editor(s). Principles of Critical Care. (Canada); 2013. In Press (Trainee publication, Dr. Fanelli is a critical care fellow from Italy.). **Principal Author**

## Invited Lectures and Presentations

### International

- 2013 Nov 8 **Invited Speaker.** Advanced pulmonary hypertension - managing right ventricular failure. Spanish Pulmonary Hypertension Society. Madrid, Spain. National Spanish pulmonary hypertension meeting.
- 2013 Apr 6 **Invited Speaker.** Treatment of pulmonary arterial hypertension. Annual Thoracic Anesthesia Symposium. Miami, Florida, United States.
- 2013 Apr 4 **Invited Speaker.** High Frequency Oscillation in Adults HF Oh No! Results of the OSCILLATE STUDY. Intermountain Healthcare Continuing Medical Education. Salt Lake City, Utah, United States. 30th Conference on High Frequency Ventilation of Infants, Children and Adults conference.

### Provincial

- 2013 Feb 21 **Visiting Professor.** Results of the OSCILLATE study. Why the RV matters. University of Alberta, Division of Respiriology. Alberta, Canada.

### National

- 2013 Apr **Invited Speaker.** Medical treatment of right ventricular failure in pulmonary hypertension. international Society of Heart - Lung Transplantation (ISHLT). Montreal, Quebec, Canada. This is a plenary session at the ISHLT. It represents the first plenary session on pulmonary hypertension at the ISHLT.
- 2013 Nov 11 **Invited Speaker.** Salvaging the right ventricle. Canadian Critical Care Forum. Ontario, Canada. (Continuing Education).
- 2013 Nov 11 **Invited Speaker.** Auto PEEP. Canadian Critical Care Forum. Ontario, Canada. Presenter(s): Magder and Granton. Tutorial. (Continuing Education).
- 2013 Nov 10 **Invited Speaker.** How I determine volume status. Canadian Critical Care Forum. Ontario, Canada. (Continuing Education).

**Peer-Reviewed Fundings**

- 2012 Sep - present      **Co-Investigator.** Nighttime discharges from ICU: outcomes and patient safety. Registered Nurses' Association of Ontario (RNAO). PI: McKie Anthea. [Research Fellowships]
- 2009 - present      **Co-Investigator.** The impact of pre-operative intubation and ventilation on post-transplant outcome in patients undergoing liver transplantation. PI: David Grant, Markus Selzner. REB number: 08-1012-AE. [Grants]
- 2011 Apr - 2014 Apr      **Co-Investigator.** Ethics and Values in Health Policy: improving care transitions for Ontario patients across the continuum of care. PHSI/ CIHR. PI: Gibson J. \$336,947 CAD. [Grants]

**Peer-Reviewed Publications**

**Abstracts**

Ingrid Daley, A Doyle, **Hawryluck L.** The Challenges of off-service patients: exploring patterns of utilization of Critical care response teams. 2013 May 13. **Co-Principal Author.**

**Non-Peer-Reviewed Publications**

**Journal Articles**

R.Sibbald, P.Chidwick, **L.Hawryluck.** Op ed on the Supreme Court's Decision on Rasouli. (1): 22-7; 2013 Feb. CMAJ. 2013 Dec. In Press. **Senior Responsible Author.**

**Hawryluck L,** Sibbald, Robert; Chidwick P. The Standard of Care and conflicts at the End of Life in critical care: Lessons from medical-legal crossroads and the role of a quasi-judicial tribunal in decision-making. Laura Hawryluck, Robert Sibbald, Paula Chidwick. (1): 22-7; 2013 Feb. Journal of critical care J Crit Care. 2013 Dec;28(6):1055-61. 2013 Dec. **Senior Responsible Author.**

**L.Hawryluck,** Bouali R. The First Doctorate of Medicine in Critical Care in Nepal in collaboration with the Institute of Medicine Tribhuvan University and the Royal College of Physicians and Surgeons of Canada. A new day has come....(1):22-7;2013 Feb. 2013 Sep. **Principal Author.**



Chidwick, Paula; Sibbald, Robert; **Hawryluck, Laura**. Best interests at end of life: an updated review of decisions made by the Consent and Capacity Board of Ontario. (1):22-7; 2013 Feb. Journal of critical care. 28 (1): 22-7; 2013 Feb. 2013 Feb. **Senior Responsible Author.**

### **Abstracts**

F Patry, Bouali R, **Hawryluck L**. Spirituality and its role in treating burn patients. 2013 Nov 4. **Senior Responsible Author.**

R Bouali, **L Hawryluck**, A Moghazy. Coaching from a distance: how best to communicate. 2013 Nov 4. **Coauthor or Collaborator.**

### **Books**

**L.Hawryluck**, A Faith LLB Polley Faith LLB. Acute Care Law. (1):22-7; 2013 Feb. Carswell, editor(s). (Canada); 2013. In Press. **Senior Responsible Author.**

### **Submitted Publications**

#### **Clinical Care Guidelines**

Colangelo J, **Hawryluck L**. Invited Submissions to Ontario Justice Wheeler: MLST submissions on Meet and Confer Protocol for Expert Medical Witnesses. (1): 22-7;2013 Feb. 2013 Dec. Senior Responsible Author.

Jarvis D, Baker A, Kovacs J, Korte C, Faith A, **Hawryluck L**. Invited Submissions to CPSO as it prepares revisions to its healthcare policies: MLST submissions on CPSO's Consent to Treatment Policy (1): 22-7; 2013 Feb. (Canada); 2013 Nov. **Senior Responsible Author.**

Jarvis D, Baker A, Kovacs J, Korte C, Faith A, **Hawryluck L**. Invited Submissions to CPSO as it prepares revisions to its healthcare policies: MLST submissions on CPSO's End of Life Decision-Making. (1): 22-7; 2013 Feb. 2013 Nov. **Senior Responsible Author.**

### **Presentations and Specials Lectures**

#### **Invited Lectures and Presentations**

#### **International**

2013 Nov **Distinguished Speaker.** Importance of Health law: From UDHR to Canadian Law. Health Law Conference with NCCDF/ Astitwa Foundation. Nepal.

2013 Nov **Distinguished Speaker.** Use of echo in ICU setting. Critical Care team TUTH Tribhuvan University KTM Nepal. Nepal.

2013 Nov **Distinguished Speaker.** Antibiotic Stewardship. Critical Care team TUTH Tribhuvan University KTM Nepal. Nepal. Presenter(s): Hawryluck L, Trotter A MD (Infectious Diseases).

- 2013 Nov **Distinguished Speaker.** Ethical Codes of Conduct. Nepal Medical Council. Nepal.
- 2013 Nov **Distinguished Speaker.** TRREAAT Decision-Making algorithm. Critical Care team TUTH Tribhuvan University KTM Nepal.
- 2013 Nov **Distinguished Speaker.** Shock. TUTH Tribhuvan University KTM Nepal. Nepal.
- 2013 Nov **Distinguished Speaker.** Acute Ischemic neurological injury and critical care. Critical Care team TUTH Tribhuvan University KTM Nepal. Nepal.
- 2013 Nov **Distinguished Speaker.** Management of ICP. Critical Care team TUTH Tribhuvan University KTM Nepal. Nepal.
- 2013 Jan **Distinguished Speaker.** Trauma and ICU care. TUTH Tribhuvan University KTM Nepal.
- 2013 Jan **Distinguished Speaker.** Post Cardiac arrest care. TUTH Tribhuvan University KTM Nepal. Nepal.
- 2013 Jan **Distinguished Speaker.** Refractory Hypoxemia. Nepali Anesthesia Society. Nepal.
- 2013 Jan **Distinguished Speaker.** Ethics in decision-making in critical care. Nepali Critical Care Society. Nepal.

### **Media Appearances**

- 2013 Nov 26 **Speaker.** Healthcare law: lessons from UDHR to Canadian Law. Interviewer: Journalist from Kathmandu's daily newspaper. Coverage of speech during Health law conference. Nepal.
- 2013 Oct 18 **Speaker.** Rasouli: Inside a comatose mind -- background information on critical care. Interviewer: Kate Lunau. MacLean's. Canada.

### **Provincial**

#### **Media Appearances**

- 2013 Dec 16 **Speaker.** Incidental findings-- ethical implications re disclosure to patients. Interviewer: Philip Till. CKNW radio Vancouver. Canada.
- 2013 Jan **Speaker.** Humanitarian work: the burn project in Cote d'Ivoire. Interviewer: RCCI-- Royal College of Physicians and Surgeons of Canada. Canada.

### **National**

- 2013 Feb 25 **Distinguished Speaker.** Advising the Elderly Client. Osgoode Professional Development. Ontario, Canada. Decision-making regarding resuscitation for the elderly-- advice for lawyers.

**Peer-Reviewed Fundings**

2013 Sep - 2014 Sep	<b>Co-Investigator.</b> Clinical outcomes and predictors of PITuitary disorders in patients with moderate and severe Traumatic Brain Injury: the PIT-TBI prospective multicenter pilot cohort study. Canadian Institutes of Health Research (CIHR). \$159,000 CAD. [Grant]
2013 Jul - 2014 Jun	<b>Co-Investigator.</b> TryCYCLE (Critical Care Cycling to Improve Lower Extremity Strength): A Single-Center, Prospective Pilot Study of the Safety and Feasibility of Early Rehabilitation using Cycle Ergometry in Mechanically Ventilated Patients. Canadian Institutes of Health Research (CIHR). \$99,000 CAD. [Clinical Trials]
2013 Jul - 2014 Jun	<b>Co-Investigator.</b> Functional Recovery in Critically Ill Children: The “Wee-Cover” Longitudinal Cohort Study. HAHSO Innovation Grant competition. HAHSO Innovation Grant competition. \$198,000 CAD. [Clinical Trials]
2013 Jul - 2014 Jun	<b>Co-Investigator.</b> COGWELL: Cognitive Outcomes and Wellness in Survivors of Critical Illness. Physicians Services Incorporated Foundation (The) (PSI). \$139,000 CAD. [Clinical Trials]
2013 Jan - 2015 Jan	<b>Co-Investigator.</b> Towards RECOVER: Interdisciplinary and molecular characterization of functional disability after critical illness and development of a family-centred rehabilitation program. Alternate Funding Plan. PI: Cameron, Jill. \$198,000 CAD. [Grant]

2012 Oct - 2013 Sep	<b>Co-Investigator.</b> A Systematic and Methodological Review of Neuromuscular Electrical Stimulation in the Intensive Care Unit. Canadian Institutes of Health Research. Canadian Institutes of Health Research (CIHR). PI: Cook, Deborah. \$99,996 CAD. [Grants]
2012 Jul - 2014 Jun	<b>Co-Principal Investigator.</b> Towards RECOVER: Interdisciplinary and molecular characterization of functional disability after critical illness and development of a family-centred rehabilitation program. AFP Innovation Fund. AFP Innovation Fund. \$196,000 CAD. [Clinical Trials]
2012 Jul - 2013 Jul	<b>Co-Investigator.</b> One-Day Point Prevalence for ICU early Mobility. Academic Health Science Centre AFP Innovation Fund. AFP Innovation Fund. PI: Karen Koo. \$102,103 CAD. [Grant]
2012 Jul - 2013 Jul	<b>Co-Investigator.</b> One-day point prevalence of ICU early mobility across Canada. Physician Services Incorporated Health Research Grant. \$58,234 CAD. [Grant]
2011 Jul - 2013 Jun	<b>Co-Investigator.</b> Muscle Outcomes after Critical Illness. Physicians Services Incorporation Foundation (The) (PSI). PI: Batt, Jane. \$80,000 CAD. [Grant]
<b>Non-Peer-Reviewed Funding</b>	
2013 Dec - 2015 Nov	<b>Co-Principal Investigator.</b> RECOVER Program for Survivors of Complex Critical Illness and their Family Caregivers. PI: Herridge, Margaret. \$250,000 CAD. [Donations]

## Peer-Reviewed Publications

### Journal Articles

Cook DJ, Arabi Y, Ferguson ND, Heels-Ansdell D, Freitag A, McDonald E, Clarke F, Keenan S, Pagliarello G, Plaxton W, **Herridge M**, Karachi T, Vallance S, Cade J, Crozier T, Alves da Silva S, Costa Filho R, Brandao N, Watpool I, McArdle T, Hollinger G, Mandourah Y, Al-Hazmi M, Zytaruk N, Adhikari NKJ. Physicians Declining Patient Enrolment in a Critical Care Trial: A Case Study in Thromboprophylaxis. *Intensive Care Med* 2013 (in press). 2013 Aug. In Press.

### Coauthor or Collaborator.

Pearmain L, **Herridge MS**. Outcomes after ARDS: a distinct group in the spectrum of disability after complex and protracted critical illness. *Minerva Anesthesiol*. 2013 Jul 7;79(7):793-803.

### Senior Responsible Author.

Ferguson ND, Scales DC, Pinto R, Wilcox ME, Cook DJ, Guyatt GH, Schünemann HJ, Marshall JC, **Herridge MS**, Meade MO; for the Canadian Critical Care Trials Group. Integrating Mortality and Morbidity Outcomes: Using Quality-Adjusted Life Years in Critical Care Trials. *Am J Resp Crit Care Med*. 2013 Feb;187(3):256-61. **Coauthor or Collaborator.**

Batt J, Dos Santos CC, Cameron JI, **Herridge MS**. Intensive-Care Unit Acquired Weakness (ICUAW): Clinical Phenotypes and Molecular Mechanisms. *Am J Respir Crit Care Med*. 2013 Feb;187(3):238-46. **Senior Responsible Author.**

**Herridge MS**. Lung Injured Patients Do Not Need a Specialized Rehabilitation Program: ICUAW as a Case Study. *Sem Resp Crit Care Med*. In Press. In Press. **Principal Author.**

Fan E, Dowdy DW, Colantuoni E, Mendez-Tellez PA, Sevransky JE, Shanholtz C, Himmelfarb CRD, Desai SV, Ciesla N, **Herridge MS**, Pronovost PJ, Needham DM. Physical complications in acute lung injury survivors: a 2-year longitudinal prospective study. *Crit Care Med*. 2013. In Press. **Coauthor or Collaborator.**

### Abstracts

Cameron, Jill; Chan, Linda; Czerwonka, Anna; Chu, Leslie; Matte, Andrea; Tomlinson, George; Ferguson, Niall; Mehta, Sangeeta; Friedrich, Jan; Adhikari, Neill; Fowler, Robert; Lamontagne, François; Rudkowski, Jill; Meggison, Hilary; Ayas, Najib; Skrobik, Yoanna; Batt, Jane; dos Santos, Claudia; Flannery, John; Abbey, Susan; Rubenfeld, Gordon; Scales, Damon; Sinuff, Tasnim; Cuthbertson, Brian; Fan, Eddy; Slutsky, Arthur; Leung, General; Moody, Alan; Levasseur, Melanie; Marshall, John; Cook, Deborah; **Herridge, Margaret**. Long-Term Outcomes after Prolonged Mechanical Ventilation: Family Caregiver Outcomes from the Towards RECOVER Study. *Critical Care Canada Forum*. 2013 Nov. In Press. **Co-Principal Author.**

**Margaret S. Herridge**, Leslie M. Chu, Andrea L. Matte, Linda Chan, George Tomlinson, Niall D. Ferguson, Sangeeta Mehta, Jan Friedrich, Neill Adhikari, Robert Fowler, Francois Lamontagne, Jill C. Rudkowski, Hilary Meggison, Najib Ayas, Yoanna Skrobik, Jane Batt, Claudia Dos Santos, John Flannery, Susan Abbey, Gordon D. Rubenfeld, Damon C. Scales, Tasnim Sinuff, Brian Cuthbertson, Eddy Fan, Arthur S. Slutsky, General Leung, Alan Moody, Melanie Levasseur, Mark Bayley, Christie Lee, Vincent Lo, Sunita Mathur, Adrienne Tan, Cathy Tansey, Mary E. Wilcox, John C. Marshall, Deborah J. Cook, Jill I. Cameron. Long-Term Patient Outcomes After Prolonged Mechanical Ventilation: The Towards RECOVER Study. Critical Care Canada Forum. 2013 Nov. In Press. **Co-Principal Author.**

**M. Herridge**, L.M. Chu, A.L. Matte, L. Chan, G. Tomlinson, N.D. Ferguson, S. Mehta, J. Friedrich, N. Adhikari, R. Fowler, F. Lamontagne, J.C. Rudkowski, H. Meggison, N. Ayas, Y. Skrobik, C. Thomas, J. Batt, C. dos Santos, J. Flannery, S. Abbey, G.D. Rubenfeld, D. Scales, T. Sinuff, B. Cuthbertson, E. Fan, A.S. Slutsky, G. Leung, A. Moody, M. Levasseur, M. Bayley, C.M. Lee, V. Lo, S. Mathur, A. Tan, M.E. Wilcox, J.C. Marshall, D.J. Cook, J.I. Cameron, Canadian Critical Care Trials Group & The RECOVER Investigators. Long-Term Patient Outcomes After Prolonged Mechanical Ventilation: The Towards RECOVER Study. European Society of Intensive Care Medicine Conference. 2013 Oct. In Press. **Co-Principal Author.** Jeevaka Kiriella, Tamara Araujo, Martin Vergara, William Gage, Jill I. Cameron, **Margaret S. Herridge**, Sunita Mathur. Quantitative Evaluation Of Muscle Function, Gait And Postural Control In Patients Following Critical Illness. Am. J. Respir. Crit. Care Med. 2013 May;187:A3636.

**Coauthor or Collaborator.**

Andrea L. Matte, Leslie M. Chu, Mary E. Wilcox, Linda Chan, George Tomlinson, Jill I. Cameron, **Margaret S. Herridge**. Home Visit Follow-Up For Long-Stay ICU Patients And Their Families: Insights From The RECOVER Program. Am. J. Respir. Crit. Care Med. 2013 May;187:A4452. **Senior Responsible Author.**

Leslie M. Chu, **Margaret S. Herridge**, Andrea L. Matte, Jill I. Cameron, Linda Chan, George Tomlinson. Retention Strategies From The Towards RECOVER Study: Retention Of Patients With And Without Family Caregivers. Am. J. Respir. Crit. Care Med. 2013 May;187:A4445.

**Coauthor or Collaborator.**

Eddy Fan, Luke Reda, Leslie M. Chu, Andrea L. Matte, Linda Chan, George Tomlinson, Niall D. Ferguson, Cecilia Chaparro, Lianne G. Singer, Marcelo Cypel, Shaf Keshavjee, Jill I. Cameron, **Margaret S. Herridge**. Long-Term Physical Outcomes After Extracorporeal Membrane Oxygenation (ECMO): The Towards RECOVER Study. Am. J. Respir. Crit. Care Med. 2013 May;187:A4480. **Coauthor or Collaborator.**

**Margaret S. Herridge**, Leslie M. Chu, Andrea L. Matte, Linda Chan, George Tomlinson, Niall D. Ferguson, Sangeeta Mehta, Jan Friedrich, Neill Adhikari, Robert Fowler, Francois Lamontagne, Jill C. Rudkowski, Hilary Meggison, Najib Ayas, Yoanna Skrobik, Jane Batt, Claudia Dos Santos, John Flannery, Susan Abbey, Gordon D. Rubenfeld, Damon C. Scales, Tasnim Sinuff, Brian Cuthbertson, Eddy Fan, Arthur S. Slutsky, General Leung, Alan Moody, Melanie Levasseur, Mark Bayley, Christie Lee, Vincent Lo, Sunita Mathur, Adrienne Tan, Cathy Tansey, Mary E. Wilcox, John C. Marshall, Deborah J. Cook, Jill I. Cameron. Long-Term Patient Outcomes After Prolonged Mechanical Ventilation: The Towards RECOVER Study. Am. J. Respir. Crit. Care Med. 2013 May(187):A3623. **Co-Principal Author.**

Jill I. Cameron, Linda Chan, A. Czerwonka, Leslie M. Chu, Andrea L. Matte, George Tomlinson, Niall D. Ferguson, Sangeeta Mehta, Jan Friedrich, Neill Adhikari, Robert Fowler, Francois Lamontagne, Jill Rudkowski, Hilary Meggison, Najib Ayas, Yoanna Skrobik, Jane Batt, Claudia D. Santos, John Flannery, Susan Abbey, Gordon D. Rubenfeld, Damon C. Scales, Tasnim Sinuff, Brian Cuthbertson, Eddy Fan, Arthur Slutsky, General Leung, Christie Lee, Vince Lo, Sunita Mathur, Catherine Tansey, Mary E. Wilcox, John C. Marshall, Deborah J. Cook, Adrienne Tan, Alan Moody, Melanie Levasseur, Mark Bayley, **Margaret S. Herridge**. Long-Term Outcomes After Prolonged Mechanical Ventilation: Family Caregiver Outcomes From The Towards RECOVER Study. Am. J. Respir. Crit. Care Med. 2013 May;187:A4446. **Co-Principal Author.**

### **Book**

Legacy of Critical Illness: A textbook of Post ICU Medicine. In Press. **Editor.**

### **Book Edited**

Robert Stevens, Nicolas Hart and Margaret Herridge, editor(s). Legacy of Critical Illness: The textbook of Post-ICU Medicine. First Edition. (Germany): Springer; 2013. In Press. **Editor.**

### **Book Chapters**

**Herridge MS**, Cameron JI, Hopkins RO. Long-term Outcomes after Critical Illness. In: Principles of Critical Care. (United States); 2013. In Press. **Principal Author.**

**Herridge MS**, Cameron JI, Dos Santos C, Batt J. Physical Consequences of Critical Illness. In: Oxford Textbook of Critical Care. (United Kingdom); 2013. In Press. **Principal Author.**

Haas B and **Herridge MS**. Intensive Care Unit Acquired Weakness. Textbook of Trauma and Critical Care. In Press (Trainee publication). **Senior Responsible Author.**

**Herridge MS.** Models of Rehabilitative Care after Critical Illness. IN The Legacy of Critical Illness: A text book of Post ICU Medicine. In Press. **Co-Principal Author.**

### **Editorials**

Batt J, Dos Santos CC, **Herridge MS.** Muscle injury during critical illness. JAMA. 2013 Oct. JAMA. 2013 Oct;310:1569-70. Co-Principal Author.

**Herridge MS** and Cameron JI. Disability after Critical Illness. New England Journal of Medicine. 2013 Oct;369:1367-1369. **Co-Principal Author.**

### **Manuscripts in Preparation**

Tansey C, Cheung AM, Matte-Martyn A, Diaz-Granados N, **Herridge MS.** Five-year Respiratory Outcomes in survivors of ARDS. Planned submission to Crit Care Med. (Trainee publication, C. Tansey). **Senior Responsible Author.**

### **Non-Peer-Reviewed Publications**

#### **Abstracts**

**Herridge MS,** de Hoyos A, Chaparro C, Winton T, Keston S, Maurer J. Pleural Complications in Lung Transplant Recipients. Presented at the Great Lakes Lung Conference. Niagara-On-the-Lake, Ontario. **Principal Author.**

### **Submitted Publications**

#### **Journal Articles**

Mobilization of Critically Ill Adults: Survey of Knowledge, Perspectives and Practices of Canadian Physicians and Physiotherapists. Koo K, Chhong K, Cook D, **Herridge MS,** Newman A, Lo V, Priestap F, Campbell E, Burns K, Lamontagne F, Meade M. On behalf of the Canadian Critical Care Trials Group. Crit Care Med. **Coauthor or Collaborator.**

Batt J, Dos Santos C, Cameron JI, **Herridge MS.** Intensive Care Acquired Weakness: Clinical Phenotypes, Spectrum of Disability and Pathophysiology. Am J Resp Crit Care Med. under revision. **Senior Responsible Author.**

Fan E, Brower R, Cheek F, Chlan L, Gosselink R, Hart N, **Herridge MS,** Hopkins RO, Hough CL, Kress JP, Latronico N, Moss M, Needham D, Rich M, Stevens R, Winkelman C, Zochodne D, Ali N. AN OFFICIAL ATS CLINICAL PRACTICE GUIDELINE: THE DIAGNOSIS OF INTENSIVE CARE UNIT ACQUIRED WEAKNESS. Am J Resp Crit Care Med. **Coauthor or Collaborator.**

Pearmain L, **Herridge MS.** Patient and Caregiver Outcomes after Acute Respiratory Distress Syndrome. Minerva Anesthesiologica (Trainee publication, Critical care clinical fellow). **Senior Responsible Author.**



## Invited Lectures and Presentations

### International

- 2013 Oct **Invited Lecturer.** Long-term Outcome from Sepsis. European Society of Intensive Care Medicine. Paris, France.
- 2013 Oct **Invited Lecturer.** Changing ICU Practice to impact Long-term outcome. European Society of Intensive care Medicine. Paris, France.
- 2013 Oct **Chair.** The Life-Priority Session. European Society of Intensive Care Medicine. Paris, France.
- 2013 Oct **Chair.** Surviving Intensive Care. European Society of Intensive Care Medicine. Paris, France.
- 2013 Oct **Chair.** Intensive Care Medicine: Year in Review. European Society of Intensive Care Medicine. Paris, France.
- 2013 May **Invited Speaker.** Looking to the Future of ARDS Clinical Trials: We Need To Focus on Longer-Term Outcomes. American Thoracic Society. San Francisco, California, United States.
- 2013 May **Invited Lecturer.** Meeting the Needs of the Family Members of Critically Ill Patients and Survivors. American Thoracic Society. San Francisco, California, United States.
- 2013 Apr **Visiting Professor.** Outcomes after Critical Illness: Clinical Phenotypes, Molecular Mechanisms and Risk Modifiers. Harvard Medical School- Brigham and Women's Hospital. Boston, Massachusetts, United States.

### National

- 2013 Nov **Invited Lecturer.** Future Trials need better outcomes (for patients. Canada Critical care Forum. Toronto, Ontario, Canada. (Trainee Presentation).
- 2013 Apr **Invited Speaker.** The RECOVER Program of Research: Evaluating Long-term outcomes after prolonged mechanical ventilation in patients and family caregivers. Physician Services Incorporated. Toronto, Ontario, Canada.

## **Provincial**

2013 Apr     **Visiting Professor.** The RECOVER Program of Research: Evaluating Long-term outcomes after prolonged mechanical ventilation in patients and family caregivers. University of Sherbrooke. Sherbrooke, Quebec, Canada.

## **Local**

2013 Nov     **Keynote Speaker.** ICU Acquired Weakness: Clinical Phenotypes and Molecular Mechanisms. St. Michael's Hospital Research Day. Toronto, Ontario, Canada.  
Presenter(s): Margaret Herridge and Jane Batt.

### **Peer-Reviewed Fundings**

2011 Jul - 2013 Jun **Co-Investigator**. Standard versus Accelerated initiation of Renal Replacement Therapy in Acute Kidney Injury (STARRT-AKI). Canadian Institutes of Health Research (CIHR). PI: Wald, Ron. \$227,720 CAD. [Clinical Trials].

2011 Jul - 2013 Jun **Co-Investigator**. Clinical prediction models for critically ill pregnant women: MEOWS and CIPHER. Canadian Institutes of Health Research (CIHR). Maternal Health Catalyst Grant. PI: Peter von Dadelszen. \$100,000 CAD. [Clinical Trials].

2008 - 2013 Natural Sciences and Engineering Research Council of Canada (NSERC). NSERC Strategic Network: Healthcare support through information technology enhancements. PI: Dr. D. Plant. Collaborator. \$5,000,000. [Grants].

### **Peer-Reviewed Publications**

#### **Journal Articles**

**Lapinsky SE**. Obstetric infections. Crit Care Clin. 2013;29:509-20

Little A, Tung D, Truong C, **Lapinsky S**, Burry L. Colchicine overdose with coingestion of nonsteroidal antiinflammatory drugs. CJEM. 2013;15(0):1-5.

Mehta S, Granton J, Gordon AC, Cook DJ, **Lapinsky S**, Newton G, Bandayrel K, Little A, Siau C, Ayers D, Singer J, Lee TC, Walley KR, Storms M, Cooper JD, Holmes CL, Hebert P, Presneill J, Russell JA. Cardiac ischemia in patients with septic shock randomized to vasopressin or norepinephrine. Crit Care. 2013;17(3):R117

Kethireddy S, Light RB, Miranejad Y, Maki D, Arabi Y, **Lapinsky S**, Simon D, Kumar A, Parrillo JE, Kumar A. Mycobacterium tuberculosis Septic Shock. Chest. 2013 Feb 21.

#### **Non-Peer-Reviewed Publications**

#### **Journal Articles**

**Lapinsky SE**. Cardiopulmonary complications in pregnancy. International Journal of Intensive Care. (Principal Author) (*In press*)

Fan E, Golan E, **Lapinsky SE**. Recruitment maneuvers in acute lung injury and acute respiratory distress syndrome. *International Respiratory Care Clinics and Technology. (In press)* (Senior Responsible Author) (Trainee publication).

### **Abstracts**

Shore K, Randall I, Walker S, **Lapinsky SE**. Complications of intubation in the intensive care unit. U fo T Crit Care Research Day, 2013.

### **Book Chapters**

**Lapinsky SE**, Price LC, Nelson-Piercy C. Respiratory disease. In: *Maternal Critical Care – a multidisciplinary approach*. Van der Velde M, Scholefield H, Plante L (Eds), Cambridge University Press, New York, 2013.

### **Electronic media**

**Lapinsky SE**. Double trouble – obstetric emergencies in Critical Care. Podcast. Crit-IQ, July 2013. Available at: <http://crit-iq.com/index.php/Podcast>

**Lapinsky SE**, Mehta S, Wax R, Burry L, Stewart TE. Principal Author. Sepsis Care Guide. Available from [iqsync.infiniq.com/SepsisCG/](http://iqsync.infiniq.com/SepsisCG/)

**Lapinsky SE**. Principal Author. SARS for physicians. Available from [www.handango.com](http://www.handango.com).

**Lapinsky SE**. Principal Author. Mechanical Ventilation. Available from [www.handango.com](http://www.handango.com).

**Lapinsky SE**, Mehta S, Wax R, Stewart TE. Principal Author. Bayer Critical Care Guide. Available from [www.medtau.org/research/bayer.htm](http://www.medtau.org/research/bayer.htm).

### **Thesis**

Lapinsky SE. Principal Author. Reticuloendothelial ferritin messenger RNA in inflammatory states. MSc (Med) Thesis, University of Witwatersrand, Johannesburg.

### **Submitted Publications**

**Lapinsky SE**, Nelson-Piercy C. The lungs in obstetric and gynaecologic disease. In: Murray and Nadel, *Textbook of Respiratory Medicine*. 6th Ed, Elsevier, Philadelphia (in press)

**Lapinsky SE**. Computers in Intensive Care. In: Rubenfeld G, Scales D (eds). *The Organization of Critical Care: An Evidence-Based Approach to Improving Quality*. Springer, (in press)

**Lapinsky SE**. Sepsis due to nonobstetric causes in the pregnant patient. In: *Terapia Intensiva*, 5th Ed, Sociedad Argentina De Terapia Intensiva, submitted

**Lapinsky SE**. Tetanus. In: Papadakos P, Gestring M (eds). *Encyclopedia of Trauma Care*. Springer, (in press)

**Lapinsky SE**. Auto-PEEP. In: Papadakos P, Gestring M (eds). *Encyclopedia of Trauma Care*. Springer, (in press)

**Lapinsky SE**. Pregnancy. In: Papadakos P, Gestring M (eds). *Encyclopedia of Trauma Care*.

Springer, (in press)

**Lapinsky SE.** Information technology in Critical Care. In: Romano E (Ed), Il Malato Critico, UTET Scienze Mediche. (in press)

**Lapinsky SE.** Pulmonary manifestations of systemic conditions: Pregnancy, In: Albert, Silvestri and Agusti (eds), Clinical Respiratory Medicine, 4th Ed, Elsevier, (in press)

## **Invited Lectures and Presentations**

### **International**

#### **Scientific Presentation**

2013 October Society for Maternal Fetal Medicine, Washington (Webcast presentation)

“Respiratory diseases in pregnancy”

2013 Sept World Federation of Societies of Intensive and Critical Care Medicine, Durban, South Africa, “ Liver dysfunction in the critically ill obstetric patient”, “ Foetal protection in the critically ill obstetric patient”

2013 May Postgraduate Course: Respiratory Physiology Master Class

“Respiratory Physiology In Special Patient Populations: Pregnancy” American Thoracic Society meeting 2013, Philadelphia

**Peer-Reviewed Fundings**

2009 - present	<b>Co-Investigator.</b> OSCILLation for ARDS Treated Early (OSCILLATE) Trial. Canadian Institutes of Health Research (CIHR). PI: Meade, M and Ferguson, N. \$3,792,489.99 CAD. [Grant]
2013 - 2014	<b>Co-Principal Investigator.</b> Predictors of Restraint use in a Multicenter Randomized Trial comparing Protocolized Sedation with Daily Sedation Interruption versus Protocolized Sedation Alone. Canadian Association of Critical Care Nurses (CACCN). Collaborator(s): Rose, Louise, RN, PhD. \$2,500 CAD. [Grant]
2013 - 2014	<b>Principal Investigator.</b> Predictors of restraint use in a multicenter randomized trial comparing protocolized sedation with daily sedation Interruption versus protocolized sedation alone. Mount Sinai Hospital Department of Medicine Clinical Research Support Program. \$4,500 CAD.[Grant]
2013 - 2014	<b>Co-Investigator.</b> Restraint use within the SLEAP Trial. 2013 Sigma Theta Tau International Lambda Pi-At-Large Research Seed Grant. PI: Elena Luk, RN. \$1,000 CAD.[Grant]
2013 - 2014	<b>Co-Investigator.</b> Antipsychotics for management of delirium – A systematic review. Technology Evaluation in the Elderly Network. PI: Burry, Lisa, PharmD. \$49,987 CAD.[Grant]
2013 - 2014	<b>Principal Investigator.</b> Diurnal sedative/analgesic changes in a multicenter randomized trial comparing protocolized sedation with daily sedation interruption versus protocolized sedation alone. Mount Sinai Hospital Department of Medicine Clinical Research Support Program. Department of Medicine Clinical Research Support Program. \$4,800 CAD.[Grant]

- 2013                      **Principal Investigator.** Retrospective review of acute leukemics admitted to ICU. Mount Sinai Hospital Department of Medicine Awards Program. Mount Sinai Hospital Department of Medicine Awards Program. Collaborator(s): Alan Kraguljac MSc. \$2,500 CAD. [Grant]
- 2013                      **Principal Investigator.** Nutrition delivery in critically ill elderly patients. Technology Evaluation in the Elderly Network (TVN) Summer Student Award 2013. Collaborator(s): Samir Sinha, M.D. \$6,000 CAD.[Grant]
- 2012 - 2013            **Principal Investigator.** Phase 1 Study: The determination the maximum tolerable dosage of nebulized Sodium Nitroprusside in adult Acute Lung Injury. Physicians' Services Incorporated Foundation. Resident Research Grant competition. \$20,000 CAD.[Grant]
- 2012 - 2013            **Co-Investigator.** One-day Point Prevalence of Acute Rehabilitation in Ontario Intensive Care Units: Rates of, Barriers to and Facilitating Factors for Mobilization. The Academic Medical Organization of Southwestern Ontario (AMOSO). AHSC AFP Innovation Fund. PI: Koo, Karen, M.D. \$102,183 CAD.[Grant]
- 2012 - 2013            **Co-Investigator.** One-day Point Prevalence of Acute Rehabilitation in Ontario Intensive Care Units: Rates of, Barriers to and Facilitating Factors for Mobilization. Physicians' Services Incorporated Foundation. PI: Koo, Karen, M.D. \$58,000 CAD.[Grant]

## **Peer-Reviewed Publications**

### **Submitted Publications**

**Mehta S**, Granton J, Gordon AC, Cook DJ, Lapinsky S, Newton G, Bandayrel K, Little A, Siau C, Ayers D, Singer J, Lee TCK, Walley KR, Storms M, Cooper, DF, Holmes CL, Hebert P, Presneill J, Russell JA, for the Vasopressin and Septic Shock Trial (VASST) Investigators. Cardiac ischemia in patients with septic shock randomized to vasopressin or norepinephrine. Critical Care. 2013. 17:R117 Accompanying editorial: Ilse Gradwohl-Matis and Martin W Dünser. On sepsis, troponin and vasopressin: the bitter truth. Critical Care 2013, 17:1002.

**Principal Author.**

Day A, Haj-Bakri S, Lubchansky S, **Mehta S**. Sleep, anxiety, and fatigue in family members of patients admitted to the Intensive Care Unit: A questionnaire study. *Critical Care*. 2013. 17:R91. Accompanying editorial: Matthieu Schmidt and Eli Azoulay. Sleepless nights in the ICU: the awaken family. *Critical Care*, 17:1003. **Principal Author.**

#### **Journal Articles**

Rose L, Kenny L, Tait G, **Mehta S**. Ventilator settings and monitoring parameter targets for initiation of continuous mandatory ventilation: A questionnaire study. *Critical Care*. 2014 Feb. 29(1):123-7. doi: 10.1016/j.jcrrc.2013.10.018. Epub 2013 Oct 29. **Coauthor or Collaborator.**

Arabi Y, Haddad S, Al-Dawood A, Al-Dorzi H, Tamim HM, Jones G, McIntyre L, **Mehta S**, Solaiman O, Sadat M, Afesh L, Sami B. The impact of permissive underfeeding versus target enteral feeding on mortality and morbidity in adult critically ill patients: Study protocol for a multicenter randomized controlled trial. *Trials*. 2013:191. doi: 10.1186/1745-6215-13-191.

**Coauthor or Collaborator.**

Day A, Haj-Bakri S, Lubchansky S, b. Sleep, anxiety, and fatigue in family members of patients admitted to the Intensive Care Unit: A questionnaire study. *Critical Care*. 2013 May 24;17:R91.

**Senior Responsible Author.**

Smith OM, McDonald E, Zytaruk N, Foster D, Matte A, Clarke F, Meade L, Godfrey N, Vallance S, Galt P, Rajbhandari D, Rocha M, **Mehta S**, Ferguson N, Hall R, Fowler R, Burns K, Qushmaq I, Ostermann M, Heels-Ansdell D, Cook D, for the PROTECT Research Coordinators, PROTECT Investigators, Canadian Critical Care Trials Group, and the Australian and New Zealand Intensive Care Society Clinical Trials Group. Rates and determinants of informed consent: a case study of an international thromboprophylaxis trial. *Critical Care*. 2013 Feb 28(1):28-39. doi: 10.1016/j.jcrrc.2012.08.005. Epub 2012 Oct 22. **Coauthor or Collaborator.**

Dellinger RP, Levy MM, Rhodes A, Annane D, Gerlach H, Opal SM, Sevransky JE, Sprung CL, Douglas IS, Jaeschke R, Osborn TM, Nunnally ME, Townsend SR, Reinhart K, Kleinpell RM, Angus DC, Deutschman CS, Machado FR, Rubenfeld GD, Webb S, Beale RJ, Vincent JL, Moreno R; Surviving Sepsis Campaign Guidelines Committee including The Pediatric Subgroup. Surviving Sepsis Campaign: international guidelines for management of severe sepsis and septic shock, 2012. *Intensive Care Med*. 2013 Feb. 39(2):165-228. **Coauthor or Collaborator.**

Dellinger RP, Levy MM, Rhodes A, Annane D, Gerlach H, Opal SM, Sevransky JE, Sprung CL, Douglas IS, Jaeschke R, Osborn TM, Nunnally ME, Townsend SR, Reinhart K, Kleinpell RM, Angus DC, Deutschman CS, Machado FR, Rubenfeld GD, Webb SA, Beale RJ, Vincent JL, Moreno R; Surviving Sepsis Campaign Guidelines Committee including the Pediatric Subgroup.



Surviving sepsis campaign: international guidelines for management of severe sepsis and septic shock. *Critical Care Medicine*. 2013 Feb. 41(2):580-637. **Coauthor or Collaborator.**

Burry L, Little A, Hallett D, **Mehta S**. Detection of Critical Illness-Related Corticosteroid Insufficiency Using 1 µg Adrenocorticotrophic Hormone Test. *Shock*. 2013 Feb;39(2):144-148.

**Senior Responsible Author.**

Ferguson ND, Cook DJ, Guyatt GH, **Mehta S**, Hand LE, Austin, P, Zhou Q, Matte A, Walter F, Lamontagne F, Granton JT, Arabi Y, Arroliga A, Stewart TE, Slutsky AS, Meade MO, for the OSCILLATE Trial Investigators and the Canadian Critical Care Trials Group. Early High-Frequency Oscillation for patients with Acute Respiratory Distress Syndrome: A Randomized Controlled Trial. *NEJM*. 2013;368:795-805. DOI: 10.1056/NEJMoa1215554. **Coauthor or Collaborator.**

Warkentin TE, Sheppard JI, Heels-Ansdell D, Marshall JC, McIntyre L, Rocha MG, **Mehta S**, Davies AR, Bersten AD, Crozier TM, Ernest D, Vlahakis NE, Hall RI, Wood GG, Poirier G, Crowther MA, Cook DJ. Heparin-induced thrombocytopenia in the PROTECT trial. *CHEST*. 2013;144(3):848-858. **Coauthor or Collaborator.**

Shehabi Y, Bellomo R, **Mehta S**, Riker R, Takala J. Intensive care sedation: the past, present and the future. *Critical Care*. 2013;17:322. **Coauthor or Collaborator.**

**Mehta S**, Granton J, Gordon AC, Cook DJ, Lapinsky S, Newton G, Bandayrel K, Little A, Siau C, Ayers D, Singer J, Lee TCK, Walley KR, Storms M, Cooper, DF, Holmes CL, Hebert P, Presneill J, Russell JA. Cardiac ischemia in patients with septic shock randomized to vasopressin or norepinephrine. *Critical Care*. 2013. 17:R117. **Principal Author.**

Burry L, Seto K, Rose L, Lapinsky SC, **Mehta S**. Use of sedation and neuromuscular blockade in critically ill adults receiving High-Frequency Oscillatory Ventilation. *Annals of Pharmacotherapy*. 2013;47(9):1122-1129. **Senior Responsible Author.**

Williamson DR, Albert M, Heels-Ansdell D, Arnold DM, Lauzier F, Zarychanski R, Crowther M, Warkentin TE, Dodek P, Cade J, Lesur O, Lim W, Fowler R, Lamontagne F, Langevin S, Freitag A, Muscedere J, Friedrich JO, Geerts W, Burry L, Alhashemi J, Cook D; PROTECT collaborators; Canadian Critical Care Trials Group; Australian and New Zealand Intensive Care Society Clinical Trials Group. Thrombocytopenia in critically ill patients receiving thromboprophylaxis: frequency, risk factors, and outcomes. *Chest*. 2013;144(4):1207-1215. **Coauthor or Collaborator.**

**Mehta S**, Granton J, Gordon AC, Cook DJ, Lapinsky S, Newton G, Bandayrel K, Little A, Siau C, Ayers D, Singer J, Lee TCK, Walley KR, Storms M, Cooper, DF, Holmes CL, Hebert P, Presneill J, Russell JA, for the Vasopressin and Septic Shock Trial (VASST) Investigators.

Cardiac ischemia in patients with septic shock randomized to vasopressin or norepinephrine. Critical Care. 2013. 17:R117. Accompanying editorial: Ilse Gradwohl-Matis and Martin W Dünser. On sepsis, troponin and vasopressin: the bitter truth. Critical Care 2013, 17:1002.

**Principal Author.**

Day A, Haj-Bakri S, Lubchansky S, **Mehta S**. Sleep, anxiety, and fatigue in family members of patients admitted to the Intensive Care Unit: A questionnaire study. Critical Care. 2013. 17:R91Accompanying editorial: Matthieu Schmidt and Eli Azoulay. Sleepless nights in the ICU: the awoken family. Critical Care, 17:1003. **Principal Author.**

**Abstracts**

**Mehta S**, Cook D, Meade M, Mallick R, Fergusson D, Steinberg M, Herridge M, Granton J, Ferguson N, Devlin J, Tanios M, Dodek P, Fowler R, Burns K, Jacka M, Olafson K, Keenan S, Reynolds S, Skrobik Y, Burry L, for the SLEAP Investigators and the Canadian Critical Care Trials Group. Recall of Intensive Care Unit stay in mechanically ventilated patients managed with a sedation protocol or a sedation protocol with daily interruption: Results of the SLEAP multicenter randomized trial. Intensive Care Medicine. 2013;39(2):S468. **Principal Author.**

Herridge M, Chu LM, Matte AL, Chan L, Tomlinson G, Ferguson ND, Mehta S, Friedrich J, Adhikari N, Fowler R, Lamontagne F, Rudkowski JC, Meggison H, Aya N, Skrobik Y, Thomas C, Batt J, dos Santos C, Flannery J, Abbey S, Rubenfeld GD, Scales D, Sinuff T, Cuthbertson B, Fan E, Slutsky AS, Leung G, Moody A, Levasseur M, Bayley M, Lee CM, Lo V, Mathur S, Tan A, Wilcox ME, Marshal JC, Cook DJ, Cameron JI, Canadian Critical Care Trials Group & The RECOVER Investigators. Long-term patient outcomes after prolonged mechanical ventilation: the Towards RECOVER study. Intensive Care Medicine. 2013. 2013;39(2):S501. **Coauthor or Collaborator.**

Luk E, Sneyers B, Perreault M, Williamson D, Rose L, **Mehta S**, Burry L. Factors influencing the use of physical restraints in Canadian Intensive Care Units. Critical Care 2013. 2013. 17 (Suppl 2):P394 (19 March 2013). **Coauthor or Collaborator.**

Sadat M, Afesh L, Brown M, Watpool I, Reddie S, Sohail M, Al Moammar T, Jones G, **Mehta S**, McIntyre L, Sulaiman O, Haddad S, Arabi YM. Informed Consent in multicenter Randomized Controlled Trial on nutrition in critically ill patients. Am J Respir Crit Care Med. 2013. 187:A4455. **Coauthor or Collaborator.**

Ferguson ND, Cook DJ, Guyatt GH, Mehta S, Hand L, Austin P, Zhou Q, Matte AL, Walter SD, Lamontagne F, Granton JT, Arabi YM, Arroliga AC, Stewart TE, Slutsky, AS, Meade MO for the OSCILLATE Trial Investigators and the Canadian Critical Care Trials Group. Early High-

Frequency Oscillation for adults with Acute Respiratory Distress Syndrome: A Randomized Controlled Trial. *Am J Respir Crit Care Med*. 2013. 187:A5961. **Coauthor or Collaborator.**

Herridge MS, Chu LM, Matte AL, Chan L, Tomlinson G, Ferguson ND, **Mehta S**, Friedrich J, Adhikari N, Fowler R, Lamontagne F, Rudkowski JC, Meggison H, Ayas N, Skrobik Y, Batt J, dos Santos C, Flannery J, Abbey SE, Rubenfeld GD, Scales DC, Sinuff T, Cuthbertson B, Fan E, Slutsky AS, Leung G, Moody AR, Levasseur M, Bayley M, Lee C, Lo V, Mathur S, Tan A, Tansey C, Wilcox ME, Marshall JC, Cook DJ, Cameron J, Canadian Critical Care Trials Group. Long-Term Patient Outcomes After Prolonged Mechanical Ventilation: The Towards RECOVER Study. *Am J Respir Crit Care Med*. 2013. 187: A3623. **Coauthor or Collaborator.**

Cameron J, Chu LM, Czerwonka A, Matte AL, Tomlinson G, Ferguson ND, **Mehta S**, Friedrich J, Adhikari N, R Fowler, Lamontagne F, Rudkowski JC, Meggison H, Ayas N, Skrobik Y, Batt J, dos Santos C, Flannery J, Abbey SE, Rubenfeld GD, Scales DC, Sinuff T, Cuthbertson B, Fan E, Slutsky AS, Leung G, Lee C, Lo V, Mathur S, Tansey C, Wilcox ME, Marshall JC, Cook DJ, Tan A, Moody A, Levasseur M, Bayley M, Herridge MS, Canadian Critical Care Trials Group. Long-Term Outcomes After Prolonged Mechanical Ventilation: Family Caregiver Outcomes From The Towards RECOVER Study. *Am J Respir Crit Care Med*. 2013. 187: A4446. **Coauthor or Collaborator.**

Herridge M, Chu LM, Matte AL, Chan L, Tomlinson G, Ferguson ND, **Mehta S**, Friedrich J, Adhikari N, Fowler R, Lamontagne F, Rudkowski JC, Meggison H, Ayas N, Skrobik Y, Thomas C, Batt J, dos Santos C, Flannery J, Abbey S, Rubenfeld GD, Scales D, Sinuff T, Cuthbertson B, Fan E, Slutsky AS, Leung G, Moody A, Levasseur M, Bayley M, Lee CM, Lo V, Mathur S, Tan A, Wilcox ME, Marshall JC, Cook DJ, Cameron JI, Canadian Critical Care Trials Group & The RECOVER Investigators. Long-term patient outcomes after prolonged mechanical ventilation: the Towards RECOVER study. *Intensive Care Medicine*. 2013. 39(2):S501. **Coauthor or Collaborator.**

#### **Letter to Editor**

**Mehta, S**, Burry L, Cook D for the SLEAP Investigators. Sedation Interruption for Mechanically Ventilated patients - Reply. *JAMA*. 2013;309(10):982-983. Principal Author.

## Invited Lectures and Presentations

### International

- 2013 Oct 8 **Invited Speaker.** Optimal sedation to minimize delirium. European Society of Intensive Care Medicine (ESICM) LIVES 2013, 26th Annual Congress. Paris, France.
- 2013 Oct 8 **Invited Speaker.** Alternative agents in neurocritical care sedation. European Society of Intensive Care Medicine (ESICM) LIVES 2013, 26th Annual Congress. Paris, France.
- 2013 Oct 7 **Invited Speaker.** Acute and chronic metabolic effects of sedation. European Society of Intensive Care Medicine (ESICM) LIVES 2013, 26th Annual Congress. Paris, France.
- 2013 Oct **Distinguished Speaker.** 15th Annual International Meeting of Respiratory Care Indonesia (Respina). Jakarta Raya, Indonesia. Declined.
- 2013 Sep **Distinguished Speaker.** China Critical Care Conference 2013. Shanghai, China. Declined.
- 2013 Mar 7 **Distinguished Speaker.** Sedation in the Critically Ill. Medical Ground Rounds, Norwalk Hospital. Norwalk, Connecticut, United States.

### National

- 2013 Nov 12 **Co-chair.** Antimicrobial Stewardship. Critical Care Canada Forum. Toronto, Ontario
- 2013 Nov 11 **Invited Speaker.** Delirium in the Intensive Care Unit: Lessons from the SLEAP trial. Critical Care Canada Forum. Toronto, Ontario
- 2013 Nov 10 **Invited Speaker.** Troponin elevations in the critically ill. Critical Care Canada Forum. Toronto, Ontario
- 2013 Nov **Invited Speaker.** Recall of Intensive Care Unit stay in mechanically ventilated patients managed with a sedation protocol or a sedation protocol with daily interruption: Results of the SLEAP multicenter randomized trial. Critical Care Canada Forum. Toronto, Ontario, Canada. Presenter(s): L Burry, D Cook, M Meade, R Mallick, D Fergusson, M Steinberg, M Herridge, J Granton, N Ferguson, J Devlin, M Tanios, P Dodek, R Fowler, K Burns, M Jacka, K Olafson, S Keenan, S Reynolds, Y Skrobik, S Mehta, for the SLEAP Investigators and the Canadian Critical Care Trials Group. Session co-chair.

## Abstracts and Other Papers

2013 Nov Recall of Intensive Care Unit stay in mechanically ventilated patients managed with a sedation protocol or a sedation protocol with daily interruption: Results of the SLEAP multicenter randomized trial. Poster Presentation. Critical Care Canada Forum. Toronto, Ontario, Canada. Presenter(s): Burry L, Cook D, Meade M, Mallick R, Fergusson D, Steinberg M, Granton J, Ferguson N, Devlin J, Tanios M, Dodek P, Fowler R, Burns K, Jacka M, Olafson K, Keenan S, Reynolds S, Skrobik Y, Mehta S for SLEAP Investigators and Canadian Critical Care Trials Group.

### National

2013 Mar 21 **Invited Speaker.** Chest Radiographs - A Basic Approach to Interpretation. Intensive Care Unit ACCESS Retreat. Toronto, Ontario, Canada.

2013 Feb 14 **Invited Speaker.** Sedation and Delirium in Intensive Care Unit Patients. 1st Annual Advanced Nursing Education ICU Day 2013. Toronto, Ontario, Canada.

### Provincial

2013 Oct **Keynote Speaker.** The OSCILLATE Trial. Respiratory Therapy Society of Ontario Annual Educational Inspire Forum. Toronto, Ontario

### Local

2013 Nov 18 **Invited Speaker.** The basics of chest X-ray interpretation. Critical Care Nurses Education Day, Mount Sinai Hospital. Toronto, Ontario

2013 Nov 5 **Invited Speaker.** The basics of chest X-ray interpretation. Critical Care Nurses Education Day, Mount Sinai Hospital. Toronto, Ontario

2013 Sep 6 **Lecturer.** Chest X-ray interpretation. Department of Medicine Subspecialty noon rounds. Mount Sinai Hospital. Toronto, Ontario

2013 May 6 **Invited Speaker.** The Basics of Chest X-ray Interpretation. Respiratory Therapy Education Day, Mount Sinai Hospital. Toronto, Ontario, Canada.

2013 Apr 5 **Invited Speaker.** Chest X-ray Interpretation. Respiratory Education Day, Mount Sinai Hospital. Toronto, Ontario, Canada.

2013 Mar 1 **Invited Speaker.** Recall of Intensive Care Unit Patients. Province-Wide Sleep Rounds: Sleep and Medical Disorders University Health Network - Toronto Western Hospital. Toronto, Ontario

2013 Feb 7    **Invited Speaker.** Sedation Interruption vs. Sedation Algorithm: Results of the SLEAP Trial. University Health Network-Toronto Western Hospital Interdisciplinary Critical Care Rounds. Toronto, Ontario, Canada.

### **Media Appearances**

2013 Jan      Featured in Sinai Scene Newsletter. Toronto, Canada. Sinai Scene, January 2013. Dr. Mehta recognized in “Best of the Best” for recent presentation at European Society of Intensive Care Medicine (ESICM) meeting in Lisbon, Portugal with concurrent JAMA publication.

### **Abstracts and Other Papers**

2013 Jun 25   Outcome of critically ill patients managed with High Frequency Oscillatory Ventilation. University of Toronto Critical Care Medicine Residents’ Day. Poster presentation. Presenter(s): Sugiura A, Lapinsky S, Laksman Z, Mehta S.

2013 Jun 25   Clinicians’ perspectives on the use of a sedation protocol alone or sedation protocol plus daily interruption of sedation in mechanically ventilated patients enrolled in a multi-centre sedation trial. University of Toronto Critical Care Medicine Residents’ Day. Oral presentation. Presenter(s): Fitzgerald E, Burry L, Rose L, Steinberg M, Kim S, Devlin J, Ashley BJ, Dodek P, Smith O, Poretta K, Lee Y, Burns K, Harvey J, Skrobik Y, Brown M, Ferguson D, Meade M, Cook D, Mehta S for the SLEAP Investigators and the Canadian Critical Care Trials Group.

### **Honours and Awards**

2013 Nov      2014 Presidential Citation, Society of Critical Care Medicine (SCCM)  
*This award honours members who have contributed to the SCCM in a meaningful way.*

### **Peer-Reviewed Funding**

2013 Aug - 2015 Aug      **Principal Site Investigator.** EUPHRATES - Evaluation of the use of Polymixin B Hemoperfusion in a Randomized Controlled Trial of Adults Treated for Endotoxemia and Septic Shock. Spectral Diagnostics. \$37,000 CAD. [Clinical Trials]

### **Salary Support and Other Funding**

2008 Apr - 2013 Mar      Scientist Salary Support. Ornge Transport Medicine - Department of Research & Development. \$250,000 CAD. Ontario, Canada. (Specialty: Transport Medicine).

### **Peer-Reviewed Publications**

#### **Journal Articles**

Solaiman O, **Singh JM**. Hypocapnia in Aneurysmal Subarachnoid Hemorrhage: Incidence and Association with Poor Clinical Outcomes. Journal of Neurosurgical Anesthesiology. 2013 Jul;25(3):254-61 (Trainee publication, Neurocritical Care Fellow). **Senior Responsible Author.**

Go SL, **Singh JM**. Pro/con debate: Should PaCO<sub>2</sub> be tightly controlled in all patients with acute brain injuries? Crit Care (Trainee publication, Resident Publication (Internal Medicine)).

Muscedere J, Ofner M, Kumar A, Long J, Lamontagne F, Cook D, McGeer A, Chant C, Marshall J, Jouvett P and Fowler R. The occurrence and impact of bacterial organisms complicating critical care illness associated with 2009 influenza A(H1N1) infection. Chest. 2013 Jul;144(1):39-47. **Coauthor or Collaborator.**

Bagshaw SM, Sood MM, Long J, Fowler RA and Adhikari NK. Acute kidney injury among critically ill patients with pandemic H1N1 influenza A in Canada: cohort study. BMC Nephrol. 2013 Jun 13;14:123. **Coauthor or Collaborator.**

Jaja BN, Cusimano MD, Etminan N, Hanggi D, Hasan D, Ilodigwe D, Lantigua H, LeRoux P, Lo B, Louffat-Olivares A, Mayer S, Molyneux A, Quinn A, Schweizer TA, Schenk T, Spears J, Todd M, Torner J, Vergouwen MD, Wong GK, Singh J, Macdonald RL. Clinical prediction models for aneurysmal subarachnoid hemorrhage: a systematic review. Neurocritical Care. 2013 Feb 18;18(1):143-53. **Coauthor or Collaborator.**

#### **In Preparation**

Wang S, **Singh JM**, Fehlings MG. Medical Management of Spinal Cord Injury in Yeoman's Textbook of Neurosurgery. 2013 Nov. **Coauthor or Collaborator**.

## **Invited Lectures and Presentations**

### **International**

- 2014 Oct 20 **Visiting Professor**. Neuroventilation. University Hospital of Basel. Basel, Switzerland.
- 2013 Oct 4 **Invited Speaker**. Neurocritical Care Issues Affecting Mechanical Ventilation. Neurocritical Care Society Meeting. Philadelphia, Pennsylvania, United States. Mechanical Ventilation Workshop.
- 2013 Oct 4 **Invited Speaker**. Emergencies in Mechanical Ventilation. Neurocritical Care Society Meeting. Philadelphia, Pennsylvania, United States. Mechanical Ventilation Workshop.
- 2013 Jul 12 **Invited Speaker**. Mechanical ventilation in the brain injured patient. Sixteenth International Forum of Critical Care Medicine. Mexico City, México, Mexico.
- 2013 Jul 11 **Invited Speaker**. Intracranial Emergencies. Sixteenth International Forum of Critical Care Medicine. Mexico City, México, Mexico.
- 2013 Jul 11 **Invited Speaker**. Update in Intracerebral Hemorrhage. Sixteenth International Forum of Critical Care Medicine. Mexico City, México, Mexico.

### **Provincial**

- 2013 Apr **Visiting Professor**. Strategies for Improving Neurologic and Functional Outcomes of Mechanically-Ventilated Patients in the ICU: An Interactive Workshop. Vancouver General Hospital. Montreal, Quebec, Canada.

### **National**

- 2013 Nov 12 **Invited Speaker**. Mobilizing the ICU: A Roadmap. Critical Care Canada Forum 2013. Toronto, Ontario, Canada.
- 2013 Nov 10 **Invited Speaker**. ICH:Contemporary Management. Critical Care Canada Forum 2013. Toronto, Ontario, Canada.
- 2013 Apr 25 **Invited Speaker**. National Organ and Tissue Donation Awareness Week - UHN Donation State of the Union. MultiOrgan Transplant Program. Toronto, Ontario, Canada.



## **Local**

- 2013 Oct 10 **Invited Speaker.** Studying Quality Improvement in the ICU: The highs and lows of improving sedation practices. Hospital for Sick Children - Department of Critical Care Medicine. Toronto, Ontario, Canada.
- 2013 Jan 30 **Invited Lecturer.** Neurocritical Care Review. Mount Sinai Hospital Division of Emergency Medicine. Toronto, Ontario, Canada.

## **Honours and Awards**

- 2012 Jul - 2013 Jun Award for Teaching Excellence - Toronto Western Hospital, Critical Care Medicine, Faculty of Medicine, University of Toronto.  
(Postgraduate MD, Subspecialty)

### **Peer-Reviewed Fundings**

- 2013 - present      **Co-Investigator.** VALTS - Use of Volatile Anesthetics for Long-term Sedation in Critically Ill Patients. University of Toronto. Collaborator(s): Dr. Angela Jerath, Dr. Marcin Wasowicz, Dr. Niall Ferguson, Dr. David Mazer, Dr. Duminda Wijeyesundera.
- 2009 - 2013      **Co-Investigator.** Ratio of units of packed red blood cells to fresh frozen plasma in severely injured patients undergoing massive transfusion. St. Michael's Hospital. Collaborator(s): Drs. Barbara Haas and Avery Nathens.

### **Peer-Reviewed Publications**

#### **Journal Article**

Downar J, Rodin D, Barua R, Lejnieks B, Gudimella R, McCredie V, Hayes C, and **Steel AC.** Changes in End of Life Care 5 years after the Introduction of a Rapid Response Team: A multicentre retrospective study. Resuscitation. 2013 Mar 18. In Press. **Senior Responsible Author.**

#### **Book Chapter**

Casas-Lopez C, **Steel AC.** Haemodynamic monitoring. In: Peter Papadakos and Mark Gestring, editor(s). Encyclopedia of Trauma Care. Springer; 2013. In Press. **Co-Principal Author.**

### **Invited Lectures and Presentations**

#### **International**

2013 Apr 5      **Invited Lecturer.** Post-thoracotomy ICU management. Society of Cardiovascular Anesthesiologists. Miami, Florida, United States. Presenter(s): **Steel AC.** Thoracic Anesthesia Symposium.

#### **Provincial**

2013 Apr 18      **Invited Lecturer.** Anesthesia beyond the operating department. Michener Institute for Applied Health Sciences. Toronto, Ontario, Canada. Presenter(s): **Steel AC.** Ontario Anesthesia Assistant Program.

2013 Mar 27 **Invited Speaker.** Perioperative shock and resuscitation. Southlake Hospital, Department of Anesthesiology. Newmarket, Canada. Presenter(s): **Steel AC.** Departmental CPD meeting.

#### **Local**

#### **Abstract and Other Paper**

2013 Nov 12 **Presenter.** Critical Care training programmes around the World. Canadian Critical Care Society. Toronto, Ontario, Canada.

## **Peer-Reviewed Publications**

### **Journal Articles**

Ferguson ND, Cook DJ, Guyatt GH, Mehta S, Hand L, Austin P, Zhou Q, Matte A, Walter SD, Lamontagne F, Granton JT, Arabi YM, Arroliga AC, **Stewart TE**, Slutsky AS, Mead MO. High-frequency oscillation in early acute respiratory distress syndrome. *N.Engl J Med* 2013.

DOI:10.1056/NEJMoa1215554. **Coauthor or Collaborator.**

### **Journal Blog**

Kwan JL, Bell CM, Morgan MW, **Stewart TE**. Inpatient Patient Navigator Program Reduces Length of Stay. *Harvard Business Review Blog Network*. **Coauthor or Collaborator**

### **Manuscript**

Lau D, Livshits O, **Stewart T**, Shandling M, Morgan M, Snider J, Bell C. The MSH Effective and Efficient Utilization Committee: A Team Approach to Improving Care Quality, Value and Patient Experience. **Coauthor or Collaborator.**

### **Book Chapters**

Chou Liang Mah, Niall D. Ferguson, **Thomas E. Stewart**, Sangeeta Mehta. Chapter 69 – High Frequency Ventilation. **Coauthor or Collaborator.**

Christian MD, **Stewart TE**, Lapinsky SE. Critical Care Pandemic Preparedness Primer. In 2007 Yearbook of Intensive Care and Emergency Medicine. Springer, pp 999-1010, Springer-Verlag, Heidelberg-New York, edited by J.L. Vincent.

### **Manuscripts in Press**

Lau, D, Livshits O, **Stewart T**, Shandling M, Morgan M, Snider J, Bell C. The MSH Effective and Efficient Utilization Committee: A Team Approach to Improving Care Quality, Value and Patient Experience. **Coauthor or Collaborator.**

### **Submitted Publications**

#### **Journal Articles**

Singh, JM, Ferguson, ND, MacDonald RD, **Stewart TE**, Schull MJ. Ventilation practices and critical events during transport of ventilated patients outside of hospital: a retrospective cohort study. *Prehosp Emerg Care*. 2009 Jul-Sep;13(3):316-23. **Coauthor or Collaborator.**

Chan K, Barrett KA, Demajo W, **Stewart TE**, Ferguson ND. Rate and Predictors of Extubation Failure In Acutely Brain-injured Patients: A Systematic Review. *Critical Care Medicine*.

## **Book Chapters**

Christian, MD, **Stewart TE**, Lapinsky TE. Critical Care and Biological Disasters: Lessons Learned from SARS and Pandemic Influenza Planning.

## **Editorials**

**Stewart TE**, MacLeod H, Bell RS. The Upside of SARS; A redesigned Critical Care System in Ontario, Canada. International Journal of Intensive Care Medicine. **Coauthor or Collaborator.**

## **Invited Lectures and Presentations**

### **National**

2013 Nov **Facilitator.** Critical Care Canada Forum. Toronto, Ontario, Canada. Annual Critical Care Canada Conference.

### **Local**

2013 Nov **Invited Speaker.** Engaging the Frontlines in Utilization; Experience from Mount Sinai and UHN. Canadian Society of Clinical Chemists. Toronto, Ontario, Canada. 2013 CSCC Traveling Lectureship and Mini Symposium  
The Hospital for Sick Children, Peter Gilgan Centre for Research and Learning.

## **Honours and Awards**

2013 Jun University of Toronto Critical Care Medicine - "Best Teacher Award", Critical Care Medicine, Faculty of Medicine, Mount Sinai Hospital/University of Toronto.  
(Postgraduate MD)