Lower & Upper Canada Anesthesia Symposium, LUCAS

The Westin Hotel
February 3-5, 2017
www.lowerupperanesthesia.ca
On behalf of McGill Department of Anesthesia, Queen’s Department of Anesthesiology and Perioperative Medicine and the University of Ottawa, Departments of Anesthesiology & Pain Medicine, we are pleased to present the inaugural Lower & Upper Canada Anesthesia Symposium (LUCAS); 23rd Ottawa Winterlude Anesthesia Symposium and the 57th McGill Anesthesia Update.

We are very excited to announce that the Ottawa Winterlude Anesthesia Symposium and the McGill Anesthesia Update have been amalgamated into a single conference. Queen’s Anesthesia also has a strong history delivering a well-recognized conference in Whistler for a number of years and we welcome the new collaboration. This collaboration is designed to enhance the relationships between our three institutions and the continue our strong history delivering of an outstanding educational and collaborative experience. The conference will move between Ottawa and Montreal and continue to draw participants from across Canada and across the globe.

We welcome the ACUDA Department Chairs and the Perioperative Anesthesiology Clinical Trials (PACT) group who are hosting their winter meetings in conjunction with LUCAS.

**Highlights of LUCAS consist of:**

- Pre-conference hands-on workshops in Point-of-Care Ultrasound (POCUS) & Ultrasound-Guided Regional Anesthesia led by renowned expert faculty.
- Nationally recognized keynote speakers including Andre Picard, Dr. Ki Jinn Chin, Dr. Duminda Wijeysundera, Dr. Ali Jalai and Dr. Eric Jacobsohn.
- An inaugural Resident Grand Rounds Speaking Competition featuring the best talks from the partner departments condensed in to succinct TED style presentations.
- The Saturday evening Order of Canada Gala Dinner honouring the three anesthesiologists who are members of the Order of Canada featuring an engaging panel discussion with Drs. Joanne Douglas, C.M., Angela Enright, O.C., and J. Earl Wynands, O.C.
- A combination of plenary presentations and problem-based workshops featuring a range of anesthesiology topics such as perioperative risk and outcomes, point-of-care ultrasound, guideline updates, global health, obstetrical care, pain management and pediatrics.

Sincerely,

Dr. Paul Wieczorek  
*Co-Chair from McGill University, Department of Anesthesia*

Dr. Ryan Mahaffey  
*Co-Chair from Queen’s University, Department of Anesthesiology and Perioperative Medicine*

Dr. Jason McVicar  
*Co-Chair from University of Ottawa, Department of Anesthesiology and Pain Medicine*
Acknowledgements

We would like to thank our speakers, moderators and workshop instructors for sharing their insight and expertise. Our faculty are dedicated to excellence in clinical care, research and education.

The Department Chairs have provided the vision and support for this unique collaborative effort. We appreciate the efforts of Dr. Thomas Schricker, Dr. Joel Parlow and Dr. Colin McCartney to make this meeting happen.

We welcome the members of the Perioperative Anesthesia Clinical Trials Group and the ACUDA University Department Chairs for joining us again this year. We are grateful for the organizations that have held their winter meetings in conjunction with our conference.

We are grateful to our industry partners in recognition of their continued provision of unrestricted financial support. This form of ongoing support makes this symposium possible.

This weekend is the result of countless evening and weekend hours by the members of the LUCAS committee, as well as our administrative staff, in particular the work of Lynne McHardy and Vanessa Manning. We thank you for your support, guidance and dedication.

We would ask that you kindly complete the online evaluations as these are used to assess the current Symposium, as well as in the planning of future meetings.

We look forward to seeing you in Montreal February 2-4, 2018.
2016 Committee Members

Dr. Meghan Andrews
Dr. Robert Chen
Dr. Bernice Duan
Dr. Naveen Eipe
Dr. Kaitlin Duncan
Dr. Kristen Gadbois
Dr. Ryan Mahaffey
Dr. Brian Mahoney
Dr. Colin McCartney
Dr. Dan McIsaac
Dr. Jason McVicar
Dr. Robert Jee
Dr. Tarit Saha
Dr. J. Earl Wynands
Dr. Paul Wieczorek
Lynne McHardy
Vanessa Manning

Meeting Administration
Conference Planner
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Email: AnesCPD@toh.ca
Goals and Objectives for 2017 Lower & Upper Canada Anesthesia Symposium, LUCAS

Conference Objectives

The mandate of this conference is to focus on current perioperative challenges and controversies encountered by anesthesiologists.

The main conference objectives are to:

- Explain the current and historical political landscape at it pertains to the delivery of health care in Canada
- Outline core Perioperative Medicine principles such as patient risk stratification, outcome measurements and the management of direct acting oral anticoagulants
- Describe strategies to manage patients presenting with challenging pain issues
- Illustrate Canada’s role in the delivery perioperative care with partners in low and middle income countries
- Outline approaches to safely deliver obstetric and pediatric anesthesia and analgesia
- Identify risk factors and scenarios for awareness under anesthesia
Lower & Upper Canada Anesthesia Symposium,
LUCAS 2017 Faculty

Visiting Presenters
Dr. Ki Jinn Chin
Dr. Joanne Douglas
Dr. Angela Enright
Dr. Ali Jalali
Dr. Eric Jacobsohn
Andre Picard
Dr. Roanne Preston
Dr. Chris Ramnanan
Dr. Duminda Wijeysundera

Local Faculty
Dr. Alexander Amir Dr. Colin McCartney
Dr. Juan-Francisco Asenjo Dr. Peter McDougall
Dr. Joanne Bleakley Dr. Cyrus McEachern
Dr. Greg Bryson Dr. Dan McIsaac
Dr. Matt Cameron Dr. Asad Mir Ghassemi
Dr. Rob Chen Dr. Glenio Mizubuti
Dr. Ariane Clairoux Dr. Joel Parlow
Dr. Ioana Costache Dr. Desiree Persaud
Dr. Ted Crosby Dr. Dennis Reid
Dr. Michael Curran Dr. Tarit Saha
Dr. Laura deNeumann Dr. Hesham Talab
Dr. Pierre Fiset Dr. Rob Tanzola
Dr. Alison Froese Dr. Kim Turner
Dr. Kristin Gadbois Dr. Teresa Valois
Dr. Rejean Gareau Dr. Janet VanVlymen
Dr. Shawn Hicks Dr. Kathryn Wheeler
Dr. Shawn Hoffman Dr. Patrick Wong
Dr. Melanie Jaeger Dr. J. Earl Wynands
Dr. Manoj Lalu Dr. Murray Yazer
Declaration of Potential Conflict of Interest

Speakers are requested to disclose to the audience any real or apparent conflict(s) of interest that may have a direct bearing on the subject matter of this program.

Accreditation

LUCAS:

This event is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification program of the Royal College of Physicians and Surgeons of Canada for 11.0 hours. This program has been reviewed and approved by the University of Ottawa, Office of Continuing Professional Development.

Cette activité est une activité de formation collective agréée aux termes de la Section 1 du programme de Maintien du certificat du Collège royal des médecins et chirurgiens du Canada pour 11,0 heures. Ce programme a été révisé et approuvé par le Bureau de formation professionnelle continue de l’Université d’Ottawa.

This Group Learning program meets the certification criteria of the College of Family Physicians of Canada and has been certified by the University of Ottawa’s Office of Continuing Professional Development for up to 11.0 Mainpro+ credits.

Ce programme d’apprentissage en groupe répond aux critères de certification du Collège des médecins de famille du Canada et le Bureau de formation professionnelle continue de l’Université d’Ottawa lui accorde jusqu’à 11,0 crédits Mainpro+.

POCUS:

This is an Accredited Simulation Program (Section 3) as defined by the Maintenance of Certification Program of The Royal College of Physicians & Surgeons of Canada, and approved by University of Ottawa’s Office of Continuing Professional Development on the 14th of June 2016. This program expires in June 2019.

Remember to visit MAINPORT to record your learning and outcomes. You may claim a maximum of 6.25 hour(s) (credits are automatically calculated).
Note: The maximum accreditation period for self-assessment programs is 3 years, assuming the content has not changed. If the content changes significantly, it must be re-submitted at least for a partial review at the time any changes are made.

**Hands-on Workshop: Ultrasound-Guided Regional Anesthesia**

This activity is an Accredited Simulation Activity (Section 3) as defined by the Maintenance of Certification Program of The Royal College of Physicians & Surgeons of Canada, and approved by University of Ottawa’s Office of Continuing Professional Development on the 25th of November 2016 and expires November 2019.

Remember to visit MAINPORT ([https://login.royalcollege.ca/oamlogin/login.jsp](https://login.royalcollege.ca/oamlogin/login.jsp)) to record your learning and outcomes. You may claim a maximum of 6.5 hour(s) (credits are automatically calculated).

**Note:** The maximum accreditation period for simulation programs is 3 years, assuming the content has not changed. If the content changes significantly, it must be re-submitted at least for a partial review at the time any changes are made.

**Feedback, Evaluation and Certificate of Attendance**

To improve our future programs, we have designed a web based survey that will allow delegates to evaluate the Lower & Upper Canada Anesthesia Symposium, LUCAS.


**Accessing Certificates – one week post event upon completion of survey**

To access your certificate please login - [https://eventscpd.med.uottawa.ca/](https://eventscpd.med.uottawa.ca/)
Click on the **History** tab and select **LUCAS**.
Click on **My Documents** to view your certificate.
## Program Schedule

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<tr>
<td>0800-1600h</td>
<td>Perioperative Anesthesia Clinical Trials Meeting</td>
<td>canadianpact.ca</td>
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<tr>
<td>0800-1600h</td>
<td>Ticketed Workshop: Point of Care Ultrasound (POCUS)</td>
<td>Lead Faculty: Rob Chen, Ottawa Heart Institute</td>
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<tr>
<td>0800-1600h</td>
<td>Ticketed Workshop: Ultrasound Guided Regional Anesthesia</td>
<td>Lead Faculty: Colin McCartney, University of Ottawa</td>
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<tr>
<td>1700-1830h</td>
<td>Skate the Historic Rideau Canal to the Pub Night at Craft Beer Market</td>
<td>Bring your skates for the 4.5km skate!</td>
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<tr>
<td>1830-2100h</td>
<td>Pub Night with Subspecialty Experts from McGill, Queen’s &amp; uOttawa</td>
<td>Location: Craft Beer Market, Lansdowne Park, 975 Bank Street, Ottawa</td>
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<td><em>(Ticketed Event $15.00)</em></td>
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<tr>
<td>0700-0750h</td>
<td>Registration &amp; Breakfast in the Exhibition Hall, Provinces Ballroom</td>
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<tr>
<td>0750-0800h</td>
<td>Welcome from LUCAS Co-Chairs: Drs. Wieczorek, Mahaffey &amp; McVicar</td>
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<tr>
<td>0800-0830h</td>
<td>Perioperative Medicine: Moderator Greg Bryson</td>
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<td>0800-0830h</td>
<td>Assessing Functional Capacity before Non-Cardiac Surgery:</td>
<td>Does It Matter and How Should We Do It?</td>
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<td>Duminda Wijeysundera, University of Toronto</td>
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<td>0830-0850h</td>
<td>2016 Cardiac Guidelines for Non-Cardiac Surgery</td>
<td>Joel Parlow, Queen’s University</td>
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<td>0850-0910h</td>
<td>Perioperative Frailty: Assessment, Risk Stratification and Then What?</td>
<td>Dan McIsaac, University of Ottawa</td>
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<td>0910-0925h</td>
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<td>0925-1030h</td>
<td>Pain Medicine &amp; Regional Anesthesia: Moderator Peter MacDougall</td>
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<td>0930-0955h</td>
<td>Ultrasound for Neuraxial Blockade: Past, Present and Future</td>
<td>Ki Jinn Chin, University of Toronto</td>
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<td>0955-1015h</td>
<td>Interventional Pain Medicine &amp; the Canadian Opioid Tragedy</td>
<td>Juan-Francisco Asenjo, McGill University</td>
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<td>Nutrition Break in the Exhibition Hall, Provinces Ballroom</td>
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<tr>
<td>1050-1125h</td>
<td>J. Earl Wynands Lecture: Moderator Pierre Fiset</td>
<td>The Canadian Perspective on Anesthesia in Global Health</td>
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<td>Angela Enright, University of British Columbia</td>
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<td>Time</td>
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| 1125-1210h | Meet the Expert - Concurrent Breakout Sessions  
(Delegates select one session) |                                                                        |
|        | 1. Perioperative Management of Long-Term Cardiovascular Medications                     | Duminda Wijeysundera, University of Toronto                             |
|        | 2. Refining Regional Anesthesia for Shoulder Surgery                                       | Ki Jinn Chin, University of Toronto                                     |
|        | 3. What Does The Lancet Commission on Global Surgery Mean to Anesthesiologists?          | Angela Enright, University of British Columbia                         |
|        | 4. A Dangerous Situation in Obstetrics                                                    | Joanne Douglas, University of British Columbia                         |
|        | 5. Pain Medicine                                                                         | Juan-Francisco Asenjo, McGill University                                |
| 1210-1255h | Lunch in Exhibition Hall, Provinces Ballroom                                             |                                                                        |
| 1255-1435h | Best of Resident Grand Rounds Speaking Competition                                       |                                                                        |
| 1300-1315h | Procedural Sedation – How, Where and Who?                                                 | Kathryn Wheeler, University of Ottawa                                   |
| 1315-1330h | Neuro-Monitoring For Spine Surgery                                                        | Alexander Amir, McGill University                                       |
| 1330-1345h | Management of Direct Oral Anticoagulants for Emergency Surgery                           | Jordan Leitch, Queen’s University                                       |
| 1355-1410h | An Anesthesiologist’s Nightmare: The Emergency Surgical Airway                           | Joanne Bleackley, University of Ottawa                                  |
| 1410-1425h | Indicators of Fluid Responsiveness: History and Current Evidence                          | Cyrus McEachern, McGill University                                      |
| 1415-1435h | Discussion                                                                              |                                                                        |
| 1435-1455h | Nutrition Break in the Exhibition Hall, Provinces Ballroom                               |                                                                        |
| 1455-1545h | The Great Echocardiography Debate: Moderator Matt Cameron                               | Is Transesophageal or Transthoracic Echocardiography A Mandatory Skill For  
Every Anesthesiologist?  
Rob Chen, University of Ottawa & Glenio Mizubuti, Queen’s University |
| 1545-1645h | LUCAS Keynote Address                                                                     |                                                                        |
| 1545-1615h | Navigating The Shifting Sands of Canadian Health Care                                     | Andre Picard, National Health Reporter for Globe & Mail                |
| 1615-1645h | Panel Discussion                                                                         | Ted Crosby, Roanne Preston & Pierre Fiset                              |
| 1700-1830h | LUCAS & Order of Canada Gala Gala Reception                                               |                                                                        |
| 1830-2100h | Order of Canada Gala Dinner (Ticketed Event $150)                                         | * Honouring Earl Wynands, O.C., Angela Enright, O.C., Joanne Douglas, C.M.  
* Fundraiser for Canadian Anesthesiologists’ Society International Education Foundation (CASIEF) |
# Sunday, February 5th, 2017

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<tr>
<td>0700-0830h</td>
<td><strong>Continental Breakfast</strong></td>
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| 0830-0935h    | **Patient Safety:** Moderator Bill Splinter  
| 0830-0900h    | Are you Awake? Prevention & Responding to Anesthesia Awareness  
|               | Eric Jacobsohn, University of Manitoba     |
| 0900-0925     | The Difficult Pediatric Airway             
|               | Teresa Valois, McGill University           |
| 0925-0935h    | **Panel Discussion**                       |
| 0935-0950h    | **Break**                                  |
| 0950-1100h    | **Obstetric Anesthesia:** Moderator Paul Wieczorek)
| 0950-1020h    | Be Aware: Lessons Learned as an Obstetric Anesthesiologist  
|               | Joanne Douglas, University of British Columbia |
| 1020-1045h    | Current Concepts in Labour Analgesia       
|               | Shawn Hoffman, McGill University           |
| 1045-1100h    | **Panel Discussion**                       |
| 1100-1250h    | **Workshop Sessions by Local Expert Faculty** *(Delegates select two sessions)* |
| 1145-1205h    | **Break**                                  |
|               | 1. Professional Communication Through Social Media  
|               | Ali Jalali, University of Ottawa           |
|               | 2. Peer Assessment Present & Future         
|               | Dennis Reid & Michael Curran, University of Ottawa |
|               | 3. The LAST Story (Local Anesthetic Systemic Toxicity): Data Demystified From Lab Bench to Bedside.
|               | Manoj Lalu & Shawn Hicks, University of Ottawa |
|               | 4. Pulmonary Hypertension & RV Failure: Diagnosis, Risk Stratification & Perioperative Management  
|               | Eric Jacobsohn, University of Manitoba     |
|               | 5. Managing the Perioperative Patient on Direct Oral Anticoagulants  
|               | Janet Van Vlymen, Queen’s University       |
|               | 6. Pediatric Airway Management              
|               | Teresa Valois, McGill University           |
Our Sponsors

2017 has been made possible by the generous support in the form of an educational grant by the following sponsors:

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Saturday, February 4th, 2017

**Perioperative Medicine**

"Assessing Functional Capacity before Non-cardiac Surgery: Does It Matter and How Should We Do It?"

Duminda Wijeysundera, University of Toronto

- Describe role that functional capacity plays in estimation of perioperative risk
- Discuss evidence supporting current clinical approach for evaluating functional capacity before surgery
- Describe evidence supporting potential alternatives, including formal exercise testing and biomarkers

**2016 Cardiac Guidelines for Non-Cardiac Surgery**

Joel Parlow, Queen’s University

- Describe the preoperative assessment modalities that are of value in predicting cardiac risk and when to order them.
- Explain what perioperative interventions have been shown to be effective in reducing risk.
- Determine when to order postoperative screening for cardiac events and how to interpret the results.

**Perioperative Frailty: Assessment, Risk Stratification and Then What?**

Dan McIsaac, University of Ottawa

- Describe the role of frailty on preoperative risk stratification
- Describe the epidemiology of perioperative frailty
- Illustrate strategies to improve quality of care and outcomes in frail patients
Pain Medicine & Regional Anesthesia

Ultrasound for Neuraxial Blockade: Past, Present and Future

Ki Jinn Chin, University of Toronto

- Describe the evolution of ultrasonography of the spine to the present day applications
- List the advantages and limitations of using ultrasound to guide neuraxial blockade
- Understand how to apply ultrasound in patients with challenging spinal anatomy.

INTRODUCTION

Over the last decade there has been an overwhelming increase in literature supporting ultrasound-guided peripheral nerve blocks. There is now also a growing base of evidence to support the use of ultrasound guidance for central neuraxial blocks [1,2]. The primary technical challenge in neuraxial blockade is accurate identification of a soft-tissue window into the vertebral canal. This is usually inferred from palpation of the spinous processes and tactile feedback from the needle as it is inserted. However if surface landmarks are obscured, altered, or absent, or if the interspinous and interlaminar spaces are narrowed by age-related changes, it can prove difficult to access the intrathecal or epidural space using the conventional technique. Technical difficulty and multiple needle insertion attempts are not only associated with patient discomfort, but also with serious complications including spinal hematoma and neurologic injury. Ultrasound guidance assists with identification of anatomy and target structures, which permits more accurate planning of needle insertion, trajectory and depth, and in turn improves ease of performance.

Interventional Pain Medicine & The Canadian Opioid Tragedy

Juan-Francisco Asenjo, McGill University

- Describe the risk of drug dependence and the overdose crisis in Canada
- Describe what the risks associated with interventional pain procedures
- Describe the new trends on the pain procedures for pain

Earl Wynands Lecture

The Canadian Perspective on Anesthesia in Global Health

Angela Enright, University of British Columbia

- define the role played by the CAS/CASIEF in the global health arena
- describe several of the programs in which CASIEF has been involved
- analyze these efforts in the context of global anesthesia and surgery determine if Canadian efforts are worthy of ongoing support

Meet the Expert

1. Perioperative Management of Long-Term Cardiovascular Medications

Duminda Wijeysundera, University of Toronto

- Discuss general framework for determining whether to continue or withhold long-term cardiovascular medications
- Discuss principles for determining whether to continue or withhold long-term therapy with aspirin, ACE inhibitors, angiotensin receptor antagonists or beta-blockers
2. Refining Regional Anesthesia for Shoulder Surgery

Ki Jinn Chin, University of Toronto

- Describe the anatomical considerations in performing regional anesthesia of the shoulder.
- List modifications and alternatives to ultrasound-guided interscalene block for shoulder surgery.
- Outline strategies for minimizing the risk of phrenic nerve palsy when providing regional anesthesia of the shoulder.

3. What Does The Lancet Commission on Global Surgery Mean to Anesthesiologists?

Angela Enright, University of British Columbia

- Explain the role of anesthesia in global surgery
- List the goals of Lancet 2030
- Identify pathways by which anesthesia might meet those goals
- Estimate the likelihood of success in reaching those goals

4. A Dangerous Situation in Obstetrics

Joanne Douglas, University of British Columbia

- Review a case with the potential for serious morbidity/mortality
- Be familiar with the causes of maternal morbidity/mortality related to anesthesia
- Consider possible changes to their practice to prevent such events

5. Interventional Pain Medicine

Juan-Francisco Asenjo, McGill University

- Describe the benefits and limitations of with interventional pain procedures
- Describe the new trends on the pain procedures for pain

Best of Resident Grand Rounds Speaking Competition

Procedural sedation – How, Where, and Who?

Kathryn Wheeler, University of Ottawa

- Review best practice guidelines for provision of procedural sedation
- Review literature regarding patient outcomes based on procedure location and level of health care provider training
Neuro-Monitoring For Spine Surgery

Alexander Amir, McGill University

- Understand modern neuro monitoring techniques
- Develop appropriate anesthetic plan for surgery with neuro monitoring
- Troubleshooting and crisis management relating to neuro monitoring

Management of Direct Oral Anticoagulants for Emergency Surgery

Jordan Leitch, Queen’s University

- Review the mechanism of action of the direct oral anticoagulants (DOACs)
- Understand the limitations and most appropriate laboratory tests to assess the activity of DOACs
- Develop an approach to managing patients on DOACs to incorporate into your practice

**Purpose:** Patients are increasingly treated with direct oral anticoagulants (DOACs) for the prevention of stroke due to non-valvular atrial fibrillation and treatment of venous thromboembolism. When these patients present for urgent or emergent surgical procedures, they present a challenge to the anesthesiologist who must manage perioperative risk due to anticoagulation. This presentation will review the literature surrounding perioperative management of DOACs including the timing, laboratory monitoring and reversal agents available to optimize patients who require emergent surgery.

**Principal Findings:** Laboratory tests are not recommended for routine monitoring of DOACs since they do not correlate well with anticoagulant activity. Most widely-available laboratory tests lack sensitivity to detect anticoagulant effect at low plasma concentrations. However, a normal thrombin time for dabigatran excludes clinically significant drug levels. If the risk of bleeding is judged to be high because of a recent dose of DOAC, various options are available to mitigate bleeding. When possible, surgery should be delayed for at least 12 hours after the last dose of DOAC. Activated charcoal may mitigate the anticoagulant effect caused by DOACs if administered less than two hours after the drug was ingested. Four-Factor prothrombin complex concentrates (PCC) may be useful to reduce life-threatening bleeding associated with factor Xa inhibitors. Activated PCCs have been shown to reverse abnormal coagulation tests associated with all DOACs but there is no reported evidence of clinical benefit. Idarucizumab is a specific antidote and is effective for dabigatran reversal. Antidotes for rivaroxaban and apixaban (andexanet-α) as well as a universal antidote for all DOACs and heparin (PER977) are in clinical development.
**Conclusion:** Perioperative management of anticoagulation due to DOACs is of increasing concern as the number of patients prescribed these medications increases each year. With the appropriate considerations to timing, monitoring and reversal agents, these patients can be safely optimized for urgent or emergent surgery.

**An Anesthesiologist Nightmare: The Emergency Surgical Airway**

Joanne Bleackley, University of Ottawa

- Review guidelines for the approach to the unanticipated difficult airway
- Compare evidence for cannula versus scalpel based techniques for cricothyrotomy

Management of the unanticipated difficult airway is an area that causes most medical professionals much anxiety and the skills needed to secure a difficult airway in an emergency situation are essential to anesthesiologists. In particular emergency surgical airway techniques need to be taught and maintained so that they can be applied in these rare but very stressful situations. Recent evidence and guidelines have suggested that scalpel based techniques have higher first time success rates in all providers, including physicians, compared to cannula based cricothyrotomy techniques. The development and training in a simple standardized technique for scalpel based cricothyrotomy may help reduce the anxiety surrounding can't intubate, can't ventilate situations and improve patient morbidity/mortality.

**Indicators of Fluid Responsiveness: History and Current Evidence**

Cyrus McEachern, McGill University

- Review clinical evidence for traditional static indicators of volume responsiveness: CVP and PCWP
- Introduce physiology of modern dynamic indicators of volume responsiveness: SPV, PPV, SVV, PVI
- Review clinical evidence for SPV, PPV, SVV, PVI
The Great Echocardiography Debate

Is Transesophageal or Transthoracic Echocardiography A Mandatory Skill For Every Anesthesiologist?

Rob Chen, University of Ottawa
Glenio Mizubuti, Queen’s University

- Outline the evidence around transesophageal and transthoracic in improving perioperative management and patient outcomes
- To contrast the remarkable advantages of transesophageal and transthoracic in improving perioperative

Keynote Address & Panel Discussion

Navigating The Shifting Sands of Canadian Health Care

Andre Picard, National Health Reporter for Globe & Mail

Topics to be addressed include:

- Challenges in measuring quality and the value of patient care
- The perception of physicians and the nature of their relationships with patients, the public and provincial health care systems
- The impact of healthcare economics on the evolution of professional practice, autonomy and self-regulation
- The political realities of physician advocacy in the delivery of Canadian health care
Patient Safety

Are you Awake? Prevention & Responding to Anesthesia Awareness

Eric Jacobsohn, University of Manitoba

- Describe the incidence & risks factors associated with anesthesia awareness
- Understand consequence of awareness, including PTSD
- Critically assess the seminal studies on awareness; and be able to list the benefits and limitations of processed EEG monitoring.

Pediatric Anesthesia

The Difficult Pediatric Airway

Theresa Valois, McGill University

- Describe new anatomical concepts of pediatric airway
- Review current treatments for laryngospasm
- Discuss new pediatric difficult airway algorithms

Obstetric Anesthesia

Be Aware: Lessons learned as an Obstetric Anesthesiologist

Joanne Douglas, C.M., M.D., F.R.C.P.(C), University of British Columbia

After attending this lecture the participant will be able to:

- Describe the challenges that occur in the labor/delivery suite
- Evaluate ways to overcome those challenges
- Incorporate some of the suggestions in their practice.

This lecture will discuss some of the challenges that occur in the labor/delivery suite and suggest possible strategies to result in the best outcome for mothers and their babies. The importance of communication and being prepared are stressed.
Communication: One of the most important lessons that one can learn is the importance of communication. Many problems that arise are due to failure in communication with our colleagues (nurses, midwives, physicians) and with patients and their families. Good communication will identify potential problems allowing appropriate intervention.

Situational Awareness: Wikepedia defines this term as: "is the perception of environmental elements and events with respect to time or space, the comprehension of their meaning, and the projection of their status after some variable has changed, such as time, or some other variable, such as a predetermined event." Nowhere is it more important to be aware of your situation than in the labor/delivery suite. One has to be aware of antepartum, intrapartum and postpartum patients, their medical and obstetrical issues. This means continuous ongoing communication with your colleagues (including nurses) to identify problematic patients early.

Be Prepared: Not only does this involved situational awareness it also means detecting problems early. An important area in this regard is ensuring that a labor epidural is functioning well, long before one might need it for an emergency cesarean delivery. A failed epidural may result in the need for general anesthesia with its inherent risks while a patchy epidural may lead to an unhappy patient and possible litigation. One should also be prepared for the unexpected by ensuring that the obstetric OR is ready for an emergency delivery. There is nothing more disconcerting than arriving for a stat cesarean delivery and finding that there is no suction or emergency drugs.

Suggested Reading


Bauer ME, Mhyre JM. Active management of labor epidural analgesia is the key to successful conversion of epidural analgesia to cesarean delivery anesthesia. Anesth Analge 2016;123:1074-6.

Current Concepts in Labour Analgesia

Shawn Hoffman, McGill University

- Outline the available options for labor analgesia
- Evaluate the role of programmed intermittent bolus epidural analgesia
- Describe the evidence for the ideal epidural infusion mixture constituents
- Explain the approach to managing analgesia in challenging birth presentations

This presentation will discuss the use of neuraxial analgesia for laboring parturient. We will discuss historical trends, which lead up to current practices. Evidence for current practices will be discussed. The latter half of the presentation will go over novel approaches to neuraxial analgesia and potential applications.

Workshop Sessions by Local Experts from Queen’s, McGill & uOttawa

1. Professional Communication Through Social Media

Ali Jalali, University of Ottawa

- Describe how various social media (Facebook, Twitter, LinkedIn) are used in health care
- Summarize the advantages and perils of these tools for physician leaders: administration, research, and education
- Discuss appropriate professional behaviour in the digital world at the personal and institutional levels

2. Peer Assessment Present & Future

Dennis Reid & Michael Curran, University of Ottawa

- Review the anticipated changes to Anesthesia Peer Assessment in Ontario
- Describe an approach to prepare for a peer assessment by the provincial college
- Outline how to effectively rationalize preferred practice to a peer assessor
- Describe how to receive feedback on your practice

Presentation on Peer Assessment

Peer assessment is a process whereby one’s clinical practice is reviewed by a member of your own discipline.
Currently these assessments are:

- Age related
- Random selection
- For cause.

These have usually taken the form of a chart review. However other assessment modalities such as multi-source feedback from colleagues and direct observation in the operating room are also used and will probably become more prevalent.

My co-presenter will talk about future initiatives in peer assessment, but my presentation will focus on:

- How to prepare for a peer assessment
- What your peer assessor is reviewing in your charts, multi-source feedback and the direct observation of your practice.
- Common failings in my experience
- Debatable issues with some electronic medical records.
- Grading- “Appropriate” “Appropriate with Recommendations or Concerns”.
- Outcomes positive and negative (The Spanish Inquisition).

3. The LAST Story (Local Anesthetic Systemic Toxicity): Data Demystified From Lab Bench to Bedside.

Manoj Lalu & Shawn Hicks, University of Ottawa

- Review common issues that interfere with translating preclinical findings into your clinical practice
- Review how preclinical work has influenced clinical guidelines for the treatment of local anesthetic systemic toxicity (LAST)
- Outline a practical framework to appraise a specific preclinical study of LAST

4. A Rational Approach to Right Heart Failure

Eric Jacobsohn, University of Manitoba

- Describe the physiology of the pulmonary vasculature and right heart function
- Explore the causes of perioperative pulmonary hypertension and RV shock
- Explain the risk factors for perioperative RV shock
- Describe the diagnosis and management of perioperative pulmonary hypertension and RV shock
5. Managing the Perioperative Patient on Direct Oral Anticoagulants

Janet Van Vlymen, Queen’s University

- Review the mechanism of action of the direct oral anticoagulants (DOACs)
- Understand the limitations and most appropriate laboratory tests to assess the activity of DOACs
- Develop an approach to managing patients on DOACs to incorporate into your practice

Patients are increasingly treated with direct oral anticoagulants (DOACs) for the prevention of stroke due to non-valvular atrial fibrillation and treatment of venous thromboembolism. When these patients present for urgent or emergent surgical procedures, they present a challenge to the anesthesiologist who must manage perioperative risk due to anticoagulation. The timing, laboratory monitoring and reversal agents available to optimize patients who are anticoagulated with DOACs and who require emergent surgery are important considerations.

Laboratory tests are not recommended for routine monitoring of DOACs since they do not correlate well with anticoagulant activity. Most widely-available laboratory tests lack sensitivity to detect anticoagulant effect at low plasma concentrations. However, a normal thrombin time for dabigatran excludes clinically significant drug levels. If the risk of bleeding is judged to be high because of a recent dose of DOAC, various options are available to mitigate bleeding. When possible, surgery should be delayed for at least 12 hours after the last dose of DOAC. Activated charcoal and tranexamic acid are options to mitigate the anticoagulant effect caused by DOACs. 4-Factor prothrombin complex concentrates (PCC) may be useful to reduce life-threatening bleeding associated with factor Xa inhibitors. Activated PCCs have been shown to reverse abnormal coagulation tests associated with all DOACs but there is no reported evidence of clinical benefit. Idarucizumab is a specific antidote and is effective for dabigatran reversal. Antidotes for rivaroxaban and apixaban (andexanet-α) as well as a universal antidote for all DOACs and heparin (PER977) are in clinical development.

Perioperative management of anticoagulation due to DOACs is of increasing concern as the number of patients prescribed these medications increases each year. With the appropriate considerations to timing, monitoring and reversal agents, these patients can safely be optimized for urgent or emergent surgery.

6. Pediatric Airway Management

Theresa Valois, McGill University

- Describe new anatomical concepts of the pediatric airway
- Review current treatments for laryngospasm
- Discuss new pediatric difficult airway algorithms available