ANNUAL REPORT 2017

Department of Anesthesia & Perioperative Medicine
Schulich School of Medicine & Dentistry, Western University | London Health Sciences Centre | St. Joseph’s Health Care London | London, ON, CANADA
Our vision and mission, is to be an internationally acclaimed academic department in anesthesia, pain, and critical care.
Message from the Chair/Chief

Welcome to the Department of Anesthesia & Perioperative Medicine at the Schulich School of Medicine & Dentistry, Western University. It is with mixed emotions that I pen this message to my faculty, fellows, residents and staff. After serving for 16 years (2001-2017), the longest term as a Clinical Chair/Chief at Western and the London Teaching Hospitals, this will be my last Chair/Chief message to you in our Department Annual Report.

In 2001, when I accepted the challenges to lead and transform the Department, I must admit it took me 2 terms (10 years) to transform and consolidate a culture of academic excellence in our Department. I am fortunate also to have had the opportunity to work with a group of outstanding and committed faculty (particularly the Executives in all these years – Mary Lampe, Ian Herrick, Chris Harle, Wojciech Dobkowski, Neal Badner, John Parkin, John Fuller, Jim Watson, Ian McConachie, George Nicolaou, Bill Sischek, and Ramiro Arellano) with our administrative staff team (Lois Hayter). Together we worked toward a common vision and mission in stabilizing, transforming and excelling to build this department into one of the world’s top academic departments. In addition, I would like to sincerely thanks Dr. Marc St-Amand for his support; he has been instrumental in setting up our citywide academic practice plan.

Our Department now has gained tremendous credibility and respect, while contributing at the Medical School and Teaching Hospitals along with the 14 Clinical Departments. We have grown the Department from 40 to 90 faculty members, from 23 to 45 residents and from 2 to 20 clinical fellows.

We now deliver a spectrum of medical care from conducting preoperative anesthesia assessments to performing the most advanced life-supporting techniques in all perioperative settings such as ambulatory surgery, subspecialty surgery, obstetrics, pediatric care, out-of-OR interventional procedures (cardiology, neurology, electric convulsion therapy), acute and chronic pain management, blood conservation management, post-anesthetic care unit, cardiac surgery recovery unit, intensive care units and palliative medicine in acute care.

The scope of our work expanded further when two new Dental OR suites at the Schulich School of Medicine and Dentistry were opened, requiring our anesthesia services and teaching.

Of course, I have worn many scars over the past 16 years (stories for another time), but the successes, achievements and development in our faculty, trainees and staff are what I am most proud of and treasure in my tenure as the Chair/Chief of this world class Department. We are a citywide academic department with shared vision in an academic practice plan on a stable clinical and financial platform.

Our faculty have significant contributions and impact at Schulich (UGME, PGME, CPD, Simulation, Decanal levels), AMOSO, senior administrative posts in Hospitals, at provincial, and national levels (OMA, MOHLTC), our professional societies and organizations (CAS, SCA, IARS, WESA, WHO). Here, I salute all of you who have walked an extra mile and selflessly contributed to our Department’s success.

I would like to highlight a few of our faculty members’ impactful accomplishments. Dr. Pat Morley-Forster, along with others in our Department, led the establishment of the Pain Specialty Certification at the RCPSC, and we were the first Canadian anesthesia department to deliver a Pain Medicine Education Program. Our Centre for Medical Evidence, Decision Integrity, Clinical Impact (MEDICI) was selected as a World Health Organization (WHO) Collaborating Centre as a result of our study of Global Perioperative Surgery Care and Anesthesia. As a result, Western University became the first Canadian university to be named a WHO Collaborating Centre. Two of our faculty members were invited to pen White Papers: Valerie Schulz wrote a report to the Canadian Parliamentary Committee on Palliative and compassionate Care, and Janet Martin reported on Health Technology Assessment in Canada.
Often my colleagues and peers ask me what my pearls or secrets of success in transforming and leading an academic department are. I reflect to you the principles and philosophies – The 5 “C” (credibility, commitment, character, collaboration, coach); the 5 “I” (inspire, innovate, implement, integrate, impactful); and TEAM (Together Everyone Achieves More).

As a leader, you must have Insight, Oversight and Foresight. If you are in my office, you will notice the quotes on the wall... “Leadership is a Choice, not a Position” by Stephen Covey; “Some is not Number, Soon is not a Time, Hope is not a Strategy” by Don Berwick; “Knowing is not enough, we must Apply; Willing is not enough, we must Do” by Johann Von Goethe.

The Vision and Mission of the Department of Anesthesia & Perioperative Medicine, London Health Sciences Centre and St. Joseph’s Health Care London, Western University, “is to be an internationally acclaimed academic department in anesthesia, pain management and critical care. We strive to provide exemplary patient care and foster excellence in anesthesia delivery, research and education at the undergraduate and postgraduate levels, and in continuing medical education at regional, national and international levels”.

We still have work to do to excel and to sustain our capacity to achieve the best clinical, education and research outcomes as stated in the strategic directives and goals. We must continue to be guided by our departmental values of “student and patient focused, leadership, respectful, accountable, collaborative, innovative, inclusive, compassionate, and imaginative”.

I am most delighted that our Department is in great hands with Dr. Homer Yang who is one of the most seasoned academic clinician-administrators and was appointed as our Chair/Chief beginning in January 2018. I wish him the very best in leading our Department to a new level of success.

While I reflect on the continuing successes of our Department in delivering exemplary clinical and quality of care, expanding depth and breadth of our UGE and PGE education, advancing high impact multidisciplinary research, and the significant administrative contributions at the hospitals, University, OMA and MOHLTC, national, and international levels.

I wholeheartedly want to thank all of you who have contributed and worked along with me to make this the best job I have had in my professional career.

Best Regards,
Davy Cheng, MD MSc FRCPC FCAHS CCPE
Department Organization

2017 EXECUTIVE
Davy Cheng, Chair/Chief (Term ended: June 30, 2017)
Ramiro Arellano, Interim Chair/Chief (July 1 to December 31, 2017)
Miguel Arango, (Interim Site Chief: Aug 1 2017 - Dec 31 2017)

George Nicolau, Victoria Hospital Site Chief
William Sischek, St. Joseph’s Hospital Site Chief
Lois Hayter, Manager Administration & Finance

DEPARTMENT COUNCIL
Davy Cheng, Chair (January 1 to June 30, 2017)

ACHAL DHIR
Arif Al-Areib, Program Director
Anita Cave, Program Director as of December 1, 2017
Andreas Antoniou, Associate Director
Lori Dengler, Education Coordinator
Kristine Marmai, Site Coordinator - SJC
Hilda Alfaro, Site Coordinator - University Hospital
Stephen Morrison, Site Coordinator - Victoria Hospital
Jonathan Brookes, Resident Research Coordinator
Richard Cherry, Simulation and Information Technology Director
Jennifer Vergel de Dios, CBD Lead
Miguel Arango, Fellowship Director
Lukas Brown, Chief Resident Zach Davidson, Senior
Resident Representative
James Pius, Junior Resident Representative

UNDERGRADUATE EDUCATION
Michelle Gros, Director
Pravin Batohi, Jonathan Brookes
Charlotte Sikatori McLain

POSTGRADUATE EDUCATION
Arif Al-Areib, Program Director
Anita Cave, Program Director
Andreas Antoniou, Associate Director
Lori Dengler, Education Coordinator
Kristine Marmai, Site Coordinator - SJC
Hilda Alfaro, Site Coordinator - University Hospital
Jonathan Brookes, Resident Research Coordinator
Richard Cherry, Simulation and Information Technology Director
Jennifer Vergel de Dios, CBD Lead
Miguel Arango, Fellowship Director
Lukas Brown, Chief Resident Zach Davidson, Senior
Resident Representative
James Pius, Junior Resident Representative

POSTGRADUATE PAIN MEDICINE EDUCATION
Geoff Bellingham, Chair
Jonathan Brookes
Collin Clarke
Heather Getty
Andreas Antoniou
Eldon Loh
Dwight Moulin
Raju Poolacherla
Shiraz Malik
Charlotte Sikatori McLean
Colin Philips, Resident Representative

CONTINUING MEDICAL EDUCATION
Ian Herrick, Program Director
Lee-Anne Fochesato

FELLOWSHIP
Miguel Arango, Program Director
Andrea Fragassi, Program Coordinator
Achal Dhir, Liver Transplant
George Nicolau, Thoracic and Vascular
Indu Singh, Obstetric
Qutaiba Tawfic, Acute Pain
Hilda Alfaro, Cardiac
Ruediger Noppens, Neuro
Richard Cherry, Simulation
Shalini Dhir, Regional
Kevin Armstrong, Regional and Acute Pain

CARDIAC SURGERY RECOVERY UNIT (CSRU) CONSULTANTS
Jeff Granton, Director
Ron Butler
Daniel Bainbridge
Scott Anderson
Davy Cheng
Dave Nagpal
Ahmed Hegazy
Vincent Lau
Raymond Kao
Rob Arntfield
Marat Slessarev

RESEARCH COMMITTEE
Daniel Bainbridge, Chair
Collin Clarke
Craig Raitton
Indu Singh
Janet Martin
John Murkin
Jonathan Brookes
Lee-Anne Fochesato
Miguel Arango
Philip Jones
Richard Cherry
Ronit Lavi
Timothy Turkstra

AAPP FINANCE MANAGEMENT COMMITTEE
Marc St-Amand, Chair
Davy Cheng
George Nicolau
Ian McConachie
Jason Hoogstra
Pravin Batohi
Ron Butler
David Sommerfreund
Chris Harle

Lois Hayter
Pauline Bessegato
ANESTHESIA QUALITY COMMITTEE, CITY-WIDE
Ian Herrick, Chair
Geoff Bellingham
Jon Brookes
Catalina Casas Lopez
Melissa Chin
Rudy Noppens
Raju Poolacherla
Indu Singh
Ramesh Vedagiri Sai
Ray Zhou
Deepti Vissa, QI Fellow
Bethany Oeming, Resident
Magda Terlecki, Resident
Brenda Maxwell, OR Leadership
Seetha Subramanian, Data Analyst
Lee-Anne Fochesato, Research/Quality Coordinator

SITE ROUNDS COORDINATORS
Peter Mack (UH)
Gary Simon (VH)
Paidirg Armstrong (SJHC)
Shalini Dhir (Regional)

EQUIPMENT
Jason Hoogstra

JOURNAL CLUB CONVENERS
Philip Jones
Timothy Turkstra

ADMINISTRATIVE SUPPORT STAFF
Andrea Fragassi
Brie McConnell
Cathy Pollard
Cathy Worsfold
Charlotte Sikatori
Christina White
Courtney Harper
Heather Pierce
Jessica Moodie
Kim Harrison
Jackie McAllister
Jayne Robbins
Lee-Anne Fochesato
Linda Szabo
Lori Dengler
Nicoie Moyer
Ola Bienkowski
Sarah Rayner
Sherry Gorog
Magda Spasic

CONSULTANTS

Department of Anesthesia & Perioperative Medicine

Lois Hayter
Pauline Bessegato
Our Faculty

Ahmad, Mohamad
Al-Areibi, Arif
Alfarra, Hilda
Antoniou, Andreas
Arango, Miguel
Arellano, Ramiro
Armstrong, Padrig
Bainbridge, Daniel
Banasch, Matthew
Batoji, Pravin
Bellingham, Geoff
Biswas, Abhijit
Block, Gary
Borger, Jon
Briskin, Alexander (Windsor)
Brookes, Jonathan
Bruni, Ida
Cave, Anita
Champion, Lois
Cheng, Davy
Cherry, Richard
Chin, Melissa
Chui, Jason
Church, Brian
Clarke, Collin
Connolly, Enda
Croen, Rosemary
Cuillier, Daniel
Dhir, Achal
Dhir, Shalini
Fantillo, Vanessa
Flier, Suzanne
Fuller, John
Giraldo, Mauricio
Gonzalez, Nelson
Gordon, Neil
Granton, Jeff
Gros, Michelle
Harie, Chris
 Hegazy, Ahmed
Herrick, Ian
Hoogstra, Jason
Iglesias, Ivan
John-Baptiste, Ava (Basic Sciences)
Jones, Philip
Katsiris, Sandra
Kumar, Kamal
Lavi, Ronit
Lin, Cheng (Bill)
Ludwig, Nathan
Mack, Peter
Marmai, Kristine
McCabe, Greg
McConachie, Ian
McKishnie, James
McNamara, Jeff
Martin, Janet (Basic Sciences)
Morrison, Stephen
Murkin, John
 Nagappa, Mahesh
Newton, Peter
 Nicolau, George
Noppens, Rudy
Ower, Katherine
Poolacherla, Raju
Puente, Wilfredo
Rachinsky, Maxim
Raiton, Craig
Rajarathinam, Manikandam
Schulz, Valerie
Sebbag, Ilana
Sehmbi, Herman
Shah, Ushma
Simon, Gary
Singh, Indu
Sischek, William
Smith, David
Sommerfreud, David
St-Amand, Marc
Taneja, Ravi
Tawfic, Qutaiba
Turkstra, Tim
Vannelli, Tony
Vedagiri Sai, Ramesh
Vergel de Dios, Jennifer
Watson, Jim
Zhou, Ray

In Memoriam:
Dr. Rooney Gverzdys

OFFICIAL LHSC COMMUNICATIONS BROADCAST:

Flags will be lowered to half-mast on Friday, Dec. 22, 2017, in honour of Dr. Rooney Gverzdys who passed away on Dec. 18, following a courageous and brave battle against cancer.

Dr. Gverzdys was a highly respected and revered clinical teacher, physician, mentor and friend since he was first appointed as a Lecturer in the Department of Anesthesia and Perioperative Medicine in October 1992. Throughout his career, he was actively involved in the Department of Anesthesia and Perioperative Medicine Postgraduate Education Program. From 1998 to 2002, he was a Royal College Examiner. He was selected as the Resident Teacher of the Year in 2013.

Dr. Gverzdys was the St. Joseph’s and Victoria Hospital PGE Coordinator for many years, and contributed as a member of the PGE Committee.

Dr. Gverzdys was a loving husband and father of three boys and one daughter. Our thoughts and prayers are with his family during this difficult time. His presence will be missed in our operating rooms at LHSC and St. Joseph’s. It was an honour and privilege to have known him.

COMMUNICATION FROM DR. DAVY CHENG (DEC 2017):

I am so sorry to hear of this sad news of the passing of Rooney. Indeed Rooney was a wonderful colleague and friend. He contributed significantly to the growth of our education program. He devoted his passion in our patient care and the success of our residents and students.

Rooney will be missed by all of us...my thoughts are with his family...

Dr. Davy Cheng
New Faculty

Biswas, Abhijit
Subspeciality: Pediatric & Regional
Primary Site: Victoria Hospital (VH) & St. Joseph’s Health Care London (SJHC)

Cases Lopez, Catalina
Subspeciality: (Quality & Patient Safety)
Primary Site: University Hospital (UH)

Chin, Melissa
Subspeciality: (Quality & Patient Safety)
Primary Site: VH

Gonzalez, Nelson
Subspeciality: Transplant Anesthesia
Primary Site: UH

Lin, Cheng (Bill)
Subspeciality: Regional Anesthesia
Primary Site: VH

Ludwig, Nathan
Subspeciality: Thoracic & Vascular Anesthesia
Primary Site: VH

Rajarathinam, Manikandan (Mani)
Subspeciality: Chronic Pain
Primary Site: SJHC

Sehmbi, Herman
Subspeciality: Regional Anesthesia
Primary Site: UH

Shah, Ushma
Subspeciality: Pediatric Anesthesia
Primary Site: VH

LEARN MORE ABOUT ALL OF OUR INCREDIBLE FACULTY
Read their biographies and their research publications online
www.schulich.uwo.ca/anesthesia/people/faculty/
Site Reports

St. Joseph’s Health Care London

Dr. William Sischek, Site Chief

St. Joseph’s Health Care London continues to provide a key and vital environment for the delivery of healthcare in London. Working with St. Joseph’s as an innovative organization and a leader in ambulatory surgical services for the region, we continue to see growth and improved service to the patients of our community.

The Chronic Pain program, based out of SJHC, saw the retirement of Dr. Pat Morley-Forster, a long time member of the Department and exceptional contributor to the practice of Anesthesia and Chronic Pain Management, in 2017.

We subsequently expanded our staff numbers this past year to include Dr. Mani Rajarathinam. Dr. Rajarathinam joined us in London after completing his fellowship in Chronic Pain Management at McMaster University and has entered practice with us having a primary focus on his chronic pain practice. He joined Drs. Bellingham, Clarke, Ower, Tawfic and Watson from the Department in providing care to the patients served in our clinic.

In 2017 many new staff joined us at both the University and Victoria Hospitals. These new consultant staff bring a diversity of subspecialty clinical skills and interests to the Department. In the context of serving the Department of Anesthesia and Perioperative Medicine commitments to the surgical services at St. Joseph’s, this means the high quality of patient care provided for the patients we serve is ensured going forward. It also means that the Department remains committed to its system based responsibilities to the health care in our region.

We continue to care for over 11000 surgical patients in the main OR’s and support over 6000 gi endoscopy cases and approximately 4000 cataract patients per year.

University Hospital (LHSC)

Dr. Ramiro Arellano, Site Chief

2017 was an eventful year for Anesthesia and Perioperative Medicine faculty members at University Hospital.

There were several personnel changes, with Dr. Bernie Mezon and Dr. Fiona Ralley both retiring in 2017. However, we also welcomed three new faculty members to our site: Dr. Catalina Casas Lopez joined Quality and Patient Safety, Dr. Nelson Gonzalez joined Transplant, and Dr. Herman Sehmbi joined Regional Anesthesia.

In 2017 we successfully implemented new QA initiatives on handover of care in the Cardiac Surgery Recovery unit (CRSU) and the Post Anesthesia Care Unit (PACU).

Dr. Miguel Arango was again involved with Operation Walk, an initiative that began in 2006 and has provided nearly 800 free hip and knee replacement surgeries since then to patients suffering from debilitating bone and joint disease in Guatemala and Ecuador. Dr. Arango, who serves as the Anesthesia Director of the program, as well as sitting on the board of directors, has visited each country annually to perform approximately 40 surgeries in one week. In 2017, two residents accompanied him on these trips: Dr. Bethany Oeming (PGY4) went to Ecuador and Dr. Daniel Szoke (PGY3) went to Guatemala. The department continues to support Operation Walk missions, and upcoming in April 2018, Dr. Arango will also be involved in the first Operation Walk mission in Colombia as Co-Director.

We hosted the second annual Basic Transesophageal and Critical Care Ultrasound training course at University Hospital in November, which was organized by Dr. Ahmed Hegazy. Participants learned to demonstrate the ability to obtain focused transesophageal echocardiography views, in addition to ultrasound views of the lungs, pleura, and airway for utilization in the perioperative setting. Other course objectives included learning to identify anatomical structures on ultrasound images, demonstrate techniques for optimizing image acquisition, and lastly to distinguish between focused perioperative ultrasound findings that are normal and pathological.

Looking forward, planning has been underway for a new type of surgery that we will begin performing at University Hospital, allowing us to purchase new, advanced airway, and ultrasound equipment. The Bariatric Surgery program is set to begin in the first quarter of 2018.
Victoria Hospital
(LHSC)

Dr. George Nicolaou, Site Chief

The Department of Anesthesia and Perioperative Medicine at the Victoria Hospital, provides clinical service for vascular, thoracic, orthopaedic (trauma and spine), plastic (including craniofacial), ENT, urologic, oncologic, general surgical, robotic, and pediatric (ENT, general, thoracic, urologic, neurosurgical and plastic) surgery. We have a well-established palliative, acute, and chronic pain service. In addition, we provide anesthetic services for ‘out-of-OR’ procedures such as endoscopy/colonoscopy, MRIs, CT scans, interventional radiology, diagnostic/therapeutic lumbar punctures, bone marrow aspirates, kidney biopsies, bronchoscopies, and any other ‘out-of-OR’ procedures that might require sedation. Victoria Hospital also provides anesthesia services for all obstetrical and pediatric patients in the city of London. The site’s emphasis is the clinical teaching of residents, medical students, fellows, and allied health professionals. This includes the use of a well-established anesthesia simulator program. The operating suites at Victoria Hospital have undergone major renovations and reconstruction. We now have eighteen, state of the art operating suites equipped with the latest anesthesia and surgical technological advances.

ANESTHESIA OPERATING ROOM RESOURCES

Anesthesia resources include a transesophageal echocardiography machine with 3D capabilities, two transthoracic echocardiography machines, multiple ultrasound machines for vascular access, and for regional anesthesia and state of the art airway equipment. Furthermore, Victoria Hospital is increasing its ability to provide SSEP monitoring for complicated adult and pediatric patients. In the upcoming year, we are looking forward to the long awaited implementation of an electronic intraoperative anesthesia record.

THORACIC/VASCULAR ANESTHESIA

Both thoracic and vascular subspecialties have flourished and remain popular as resident rotations and fellowship training programs. Vascular surgery at Victoria Hospital has become a world leader in the endovascular management of thoracic aortic disease. Thoracic Surgery has also become a world leader and boasts one of the largest series in Video Assisted Thoracic Surgical procedures. Several recent clinical research projects in these subspecialties have been completed, and others involving Video Assisted Thoracic Surgery (VATS) and pressure-limited one-lung ventilation are underway. Preliminary results have shown that spinal oximetry detects decreases in spinal cord blood flow early, allowing for the early initiation of preventive treatment spinal cord protection strategies. A previous project led to a change in the postoperative epidural analgesia solution utilized.

PEDIATRIC ANESTHESIA

This pediatric division is under the guidance of Program Director Dr. Mohamad Ahmad, with input from members of the Pediatric Anesthesia Subspecialty Group. We currently support at least four dedicated pediatric surgery operating rooms on a daily basis. In addition, we are increasing our involvement in ‘out-of-OR’ settings which include endoscopy/colonoscopy, MRIs, CT scans, interventional radiology, diagnostic/therapeutic lumbar punctures, bone marrow aspirates and any other procedures that are amenable to sedation. We have also implemented a ‘Parental Presence at Induction’ program in conjunction with the hospital’s ‘Child Life Program’ and have expanded pediatric preoperative assessment and postoperative pain management services. Perioperative pain management, in pediatric patients, is offered in many forms including; PCA, epidurals, single-shot nerve blocks, and/or indwelling regional block catheters.

PEDIATRIC CHRONIC PAIN

We have developed the first pediatric, multi-disciplinary chronic pain program in Southwestern Ontario. Interested staff continue to participate in the nationwide telemedicine conferences hosted by the Hospital for Sick Children, Toronto, ON. Other educational activities in pediatrics include a monthly journal club in collaboration with McMaster in Hamilton. We also have weekly pediatric rounds to discuss interesting cases and topics. Recently, we established a multidisciplinary pediatric simulation academic program to deliver simulation-based crisis management training to anesthesia and pediatric residents and fellows, as well as to the nursing staff.

REGIONAL ANESTHESIA

The regional program at Victoria Hospital is for both pediatric and adult patients. It is a multidisciplinary block room with state-of-the-art imaging and all of the necessary supporting equipment and staffing. We developed patient information pamphlets explaining the role of pediatric regional anesthesia in pain management, postoperative care after regional anesthesia, and on what to do if there are any concerns. We also developed a pediatric home regional anesthesia program, where we send paediatric patients home with continuous peripheral nerve blocks and have a system for regular follow up.

OBSTETRICAL ANESTHESIA

Dr. Indu Singh, the citywide obstetrical anesthesia director, has successfully introduced a citywide standardized obstetrical anesthesia care approach including standardized epidural solutions,
PCA, PCEA, and postoperative pain management. With the consolidation of all obstetrical services at Victoria Hospital in London, the volume of births in this level 3 unit has increased to over 6,000 deliveries per year. This makes Victoria Hospital the second busiest obstetrical unit in the province. Recently, we have established a multidisciplinary obstetrical simulation academic program to deliver simulation-based crisis management training to anesthesia and obstetrical residents and fellows, as well as to the nursing staff.

SIMULATION
The simulation program continues to thrive and expand under the guidance of Dr. Richard Cherry.

The program continues to deliver simulation-based crisis management training to anesthesia, surgical and critical care residents, as well as expanding the program to include more undergraduate medical students and surgical residents.

Research collaboration is gaining momentum along with the general awareness and interest in healthcare simulation.

QUALITY ASSURANCE
Dr. Melissa Chin, our new Quality Assurance lead at Victoria Hospital, is advancing and improving our Quality Assurance program. Dr. Chin completed her Quality Improvement Fellowship at Yale University and is, at the moment, working on improving the communication between perioperative staff during patient handovers in order to improve patient safety.

ANESTHESIA ASSISTANT PROGRAM
Our anesthesia assistant program has been a great success and has been well received by all disciplines. It has allowed us to increase our ‘out-of-OR’ commitments for all procedures that require sedation. This has led to an increase in patient safety and satisfaction, more efficient use of resources, and allows for an increased utilization of our services. The anesthesia assistant program has been beneficial for all, is well supported, and continues to expand.

ACUTE AND CHRONIC PAIN
Our multi-disciplinary pain program is well established and growing. We have one nurse practitioner to help with all aspects of pain, including research and opioid addiction. A pain database has been developed for recording patient data, which is used for quality assurance and research purposes. Our interventional pain management program is well established and has expanded to include pediatric patients.

SURGICAL CENTER
London Health Science Centre (LHSC) is developing a new model of health care to address long patient wait times and organizational inefficiencies. For a number of years, LHSC’s surgery program has experienced significant financial pressures and this project seeks to address the ongoing financial challenges through the implementation of innovative and efficient ways of delivering quality patient care for less complex surgical procedures.

Our pilot project has shown that streamlined surgical care for non-complicated OR procedures using regional anesthesia, standardized equipment, instrumentation, and disposables have shown decreased turnover time, more timely access to care and reduced length of stay in the hospital. This offers Anesthesia an opportunity to expand our Regional Anesthesia Program and increase our presence and leadership in the perioperative management of these patients.
### Clinical Statistics

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<thead>
<tr>
<th>Procedure</th>
<th>LHSC University Hospital</th>
<th>LHSC Victoria Hospital and Pediatric Day/InPatient</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Surgery</td>
<td>1,863</td>
<td>3,485</td>
</tr>
<tr>
<td>Cardiac</td>
<td>1,582</td>
<td>04</td>
</tr>
<tr>
<td>Dental</td>
<td>187</td>
<td>564</td>
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<tr>
<td>Neurologic</td>
<td>1,278</td>
<td>293</td>
</tr>
<tr>
<td>Obstetric and Gynecologic</td>
<td>0</td>
<td>3,216</td>
</tr>
<tr>
<td>Ophthalmologic</td>
<td>0</td>
<td>393</td>
</tr>
<tr>
<td>Orthopedic</td>
<td>4,352</td>
<td>3,410</td>
</tr>
<tr>
<td>Otolaryngologic</td>
<td>322</td>
<td>1,694</td>
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<tr>
<td>Plastic</td>
<td>677</td>
<td>809</td>
</tr>
<tr>
<td>Thoracic and Vascular</td>
<td>4</td>
<td>1,902</td>
</tr>
<tr>
<td>Urologic</td>
<td>504</td>
<td>1,071</td>
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<tr>
<td><strong>Total Surgical Procedures</strong></td>
<td><strong>10,769</strong></td>
<td><strong>16,841</strong></td>
</tr>
<tr>
<td><strong>Grand Total for 2016/17</strong></td>
<td><strong>27,610</strong></td>
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### St. Joseph’s Health Care London

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Count</th>
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<tr>
<td>General Surgery</td>
<td>811</td>
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<tr>
<td>Dental</td>
<td>146</td>
</tr>
<tr>
<td>Litho</td>
<td>828</td>
</tr>
<tr>
<td>Obstetric and Gynecologic</td>
<td>783</td>
</tr>
<tr>
<td>Ophthalmologic (OR)</td>
<td>3,418</td>
</tr>
<tr>
<td>* Cataract Suite</td>
<td>4,762</td>
</tr>
<tr>
<td>Orthopedic</td>
<td>1,947</td>
</tr>
<tr>
<td>Plastic</td>
<td>969</td>
</tr>
<tr>
<td>Urologic</td>
<td>1,478</td>
</tr>
</tbody>
</table>

**Total OR Surgical Procedures Requiring Anesthesia/Analgesia for 2016/17:** 15,142
Quality Assurance

Dr. Ian Herrick, Director
Ms. Lee-Anne Fochesato, Program Coordinator

The Department of Anesthesia and Perioperative Medicine has an established tradition of high quality care. Complementing the key role of the individual practitioner in providing excellent care, the Department has an established quality improvement (QI) program and multidisciplinary Quality Committee with the following mandate:

• Assist Chief/Chair and Site Chiefs with monitoring and promoting high quality anesthesia care.
• Selectively monitor and/or respond to opportunities to enhance the quality and safety of care.
• Provide a forum for the post hoc systematic review of critical incidents and events impacting on anesthesia care.
• Support education by encouraging the engagement of department members and trainees in projects to assess and enhance quality care.

The Committee met bi-monthly.

HIGHLIGHTS FOR 2017

• The Quality Committee underwent substantial change this year as the program transitioned from site representation to a program-based focus with the identification of program QI Leaders across several programs (e.g., cardiac, neuroanesthesia, regional anesthesia, chronic pain, obstetrical anesthesia, etc). Program QI Leaders will work closely with the specialty program Directors to develop and promote quality improvement and patient safety within the specialty programs.
• This year, Drs. Catalina Casas Lopez and Melissa Chin were welcomed to staff positions in the Department of Anesthesia. Both Dr. Casas Lopez and Chin have specialized interest and advanced training in Quality and Patient Safety in healthcare.
• Dr. Chin completed an Anesthesiology Fellowship in Quality and Patient Safety at Yale University and is currently also pursuing graduate studies in the Masters of Health Sciences program.
• Dr. Casas Lopez completed certification in the Safety, Quality, Informatics and Health Leadership (SQIL) program at Harvard Medical School. She is currently pursuing graduate studies in the Masters of Applied Science in Patient Safety and Healthcare Quality program at the Johns Hopkins Bloomberg School of Public Health.
• Dr. Deepti Vissa was welcomed to the QI fellowship program as our second clinical fellow in quality improvement/patient safety. Dr. Deepti joined the program after completing a fellowship in regional anesthesia. She has completed basic certification in quality and patient safety through the IHI Open School program and the IHI Leadership and Organizing for Change Course.
• This year the Quality Committee supported two large, multidisciplinary improvement projects across the three London hospitals focused on enhancing communication at perioperative care transitions. The work was timely and positioned well to support hospital preparations for accreditation in light of new Required Organizational Practices (ROP) focused on this issue that have recently been endorsed by Accreditation Canada.
• In 2017, members of the Quality Committee supported quality improvement projects in several programs including Cardiac Anesthesia, Obstetrical Anesthesia, Regional Anesthesia, and Chronic Pain as well as the multidisciplinary initiatives aimed at enhancing communication during perioperative care transitions.
RESEARCH PUBLICATIONS AND SCHOLARLY ACTIVITY BY MEMBERS OF THE QUALITY COMMITTEE IN 2017 INCLUDE:


CASAS LOPEZ C. Improving the transition of care for postoperative cardiac surgical patients – making the handover better. Western University Department of Anesthesia Multidisciplinary Rounds, April 26, 2017.

VISSA D, CASAS LOPEZ C, ARELLANO R, HERRICK I. Perioperative handover – Talking to each other (better)! Western University Department of Anesthesia Grand Rounds, April 19, 2017.

CASAS LOPEZ C. A perspective on how to promote leadership, quality and safety in Anesthesia. Oral presentation. XXII Guayas Anesthesiology Meeting, Guayaquil, Ecuador, August 10-13, 2017.
Anesthesia Assistants
Dr. James Watson, Program Director

The Department of Anesthesia and Perioperative Care continues to build on the success of the Anesthesia Care Team. We have continued with the development of this program. The two major teaching hospitals in London, London Health Sciences Centre and St. Joseph’s Health Care London, and the Department of Anesthesia and Perioperative Medicine have invested more resources into this program to increase the number of Anesthesia Assistants, and increase the number of areas the department can integrate care.

Anesthesia Assistants have been integrated into work routines and clinical care with the cooperation of the entire department. This has allowed us to reliably provide service for some of the key wait time initiatives such as cataract surgery. In the cataract suite, we use a model of care where one consultant supervises two Anesthesia Assistants.

Other AA’s assist in the block room or monitor patients after major regional blockade or provide special assistance in the operating room for more complex cases. Care of patients outside the OR such as pediatric imaging and procedures, neuroradiology or electrophysiology labs, have all benefited from having consistent and reliable assistance in these challenging environments. In September 2008, Fanshawe College in London initiated a training program for Anesthesia Assistants. The eighth class began in September and was fully subscribed. The Department of Anesthesia and Perioperative Medicine has been involved in the design of this program and has provided a significant amount of classroom and operating room instruction. During the Basic Program, run from September to December, most teaching is provided by Fanshawe College instructors affiliated with the Respiratory Therapy Department. For the Advanced Program or second semester which runs from January to April most of the lectures and workshops are physician directed. Many of the senior anesthesia residents and fellows participate in teaching these courses and workshops along with consultant staff. Residents and the participating faculty members have found this to be a rewarding training experience. Enrolment has begun for next year’s class.

Nationally there is new competency framework for anesthesia assistant teaching. This year we have introduced a new curriculum with the goal of improving this teaching framework. Fanshawe College has been at the forefront of this evolution. The Fanshawe teaching program will be reviewed under a new national accreditation program this year.

The role of Anesthesia Assistants is generally becoming widespread in Ontario and Canada and has been recently adopted by the Canadian Anesthesiologists’ Society. Currently, we are developing new models of care in areas where previously the Department has not had the human resources to provide coverage. This includes endoscopy and obstetrics with expanded invasive radiology. We have participated in provincial teams in association with the MOH/LTC to further develop and define the roles within the Anesthesia Care Team. Review of the application of the ACT model has demonstrated a cost effective, safe and accepted model of care. We have continued to receive funding from the Ministry of Health that continues to support the ACT program. We will continue to explore ways to improve patient safety, efficiency, and improve working conditions for anesthesiologists.

CSRU and Critical Care
Dr. Jeff Granton, Medical Director

The Cardiac Surgery Recovery Unit (CSRU) is a 14 bed critical care unit that specializes in the care of the post-operative cardiac surgery patient. The CSRU is one of three teaching intensive care units under the leadership of the Critical Care Western.

Each year we care for over 1400 patients that undergo Cardiac Surgery including: on and off pump coronary bypass, valve replacements, heart transplantation, minimally invasive and robotic cardiac surgery, complex aortic reconstruction, trans-catheter valves and ventricular assist device placement. This unit has state of the art equipment to meet the complex needs and fast track recovery of our cardiac surgical patients.

The CSRU is staffed by critical care physicians with backgrounds that include cardiac anesthesiology, critical care medicine, and cardiac surgery.

Resident trainees from anesthesia, cardiac surgery, cardiology, and critical care rotate through the unit along with cardiac anesthesia fellows. The CSRU has an Advanced Practice Nurse who works within the unit and provides a key link between the CSRU and Cardiac Surgery ward. The CSRU provides excellent experience in postoperative cardiac surgery care both clinically and academically.

One and two year fellowship opportunities are available within the unit.
Neuroanesthesia
Dr. Rudy Noppens, Program Director

Neuroanesthesia provided care to a total of 1059 patients in Neurosurgery and 213 patients in Interventional Neuroradiology at University Hospital in 2017.

The vast majority of neurosurgical patients received care by a subspecialty trained member of the dedicated Neuroanesthesia team.

This past year, the Neuroanesthesia team consisted of eight faculty members: Drs. Miguel Arango, Jason Chui, Rosemary Craen, Daniel Cuillerier, Mauricio Giraldo, Ian Herrick, Rudy Noppens and Tim Turkstra. Dr. Rudy Noppens is new newest member of the group, as he was recently recruited from Germany to join as Director of Neuroanesthesia. Dr. Christine Dy-Valdez from the Philippines and Dr. Aldo Espinosa Tadea from Mexico joined the team for a one-year fellowship training in Neuroanesthesia. Additionally, a total of eight residents completed their rotation in the subspecialty of Neuroanesthesia at University Hospital.

Administrative support was provided in 2017 by Jayme Robbins and Sherry Gorog.

In order to master future challenges in the rapidly changing field of anesthesia, specific members of the neuro-team took the lead for neuro-monitoring, research, education, quality improvement, and fellowship program.

EDUCATION FOR STAFF, FELLOWS AND RESIDENTS
Weekly “neurorounds” were organized by Dr. Giraldo. Educational events progressed positively, with active participation from all faculty members, residents in neuroanesthesia rotation at UH, fellows, and some guests from other areas such as neurosurgery and neuroradiology.

During the last year, most major topics from the field of neuroanesthesia were covered, with journal clubs focusing on the most recently published scientific articles. This year, an attempt will be made to adapt the academic plan to the requirements of the SNACC and to increase participation from other specialties involved in different areas of neurosciences. Most of the teaching activities are made available online for residents, fellows, and staff.

RESEARCH
Dr. Jason Chui started monthly research meetings in order to bundle research efforts and to individually support specific activities. Current research activities are in the field of acute subarachnoid hemorrhage, stroke, airway management, neuromonitoring, and basic science projects with a focus on an Alzheimer’s animal model.

QUALITY IMPROVEMENT
Neuroanesthesia actively participates in the interventional acute stroke treatment. An interdisciplinary approach was created in order to improve an effective and timely treatment. A quality improvement program has been initiated with the goal to constantly improve patient care in this field.

NEUROMONITORING
The department of anesthesia offers intraoperative neuromonitoring services in the operating room and radiology suite. A Cascade Elite INOM device is available and is operated and maintained by neuroanesthesiologists Drs. Chui and Giraldo.

Since October 2016, a total of 42 patients at high risk for neuronal injury were monitored using SEP, EMG and EEG during procedures.

FELLOWSHIP PROGRAM
Fellows in neuroanesthesia are exposed to a wide variety of neurosurgical procedures, including stereotactic surgery, endoscopic neurosurgery, craniotomies for tumors and hemifascial spasm, carotid endarterectomy, and spinal instrumentation. Fellows also have the opportunity to learn how to use Transcranial Doppler, Cerebral Oximetry, Evoked Potential and EEG monitoring during surgery. Neuroanesthesia fellows usually work together with an experienced neuroanesthesiologist on these cases. The 1:1 ratio allows a great learning experience. Fellows have the opportunity to participate in research projects and are expected to actively participate in neuro rounds and research meetings.
Obstetric Anesthesia

Dr. Indu Singh, Program Director

The Obstetric (OB) Anesthesia Program is located in the Grace Donnelly Women’s Health Pavilion (B Tower), at Victoria Hospital, London Health Sciences Centre. Members of the OB Anesthesia Subspecialty group actively provide excellence in clinical care, education, research, and quality improvement in the Obstetrical Care Unit (OBCU).

CLINICAL CARE

There were approximately 6000 deliveries in the past year, making this OBCU one of the busiest in Ontario.

The OB Anesthesia group provided regular Preadmission Clinics on Wednesdays where anesthesia care plans were made in advance for patients considered to be at increased risk. A 24h epidural service continued to be provided by the group and the epidural labour analgesia rate last year was almost 85% with high patient satisfaction rates. The cesarean delivery rate was 22% and more than 90% were completed with neuraxial anesthesia.

Pain rounds were done daily by the OB Anesthesia group for post-cesarean patients and demonstrated reassuring pain scores, low rate of bothersome side effects, and low complication rates.

Members continued to be active on OB-related committees. Dr. Sandra Katsiris is the Anesthesia representative on the Maternal and Perinatal Death Review Committee for the Chief Coroner of Ontario. Dr. Kristine Marmai represents Anesthesia on the OB Neonatal Quality Review Committee and the OBCU OR Committee. Dr. Michelle Gros is on the Perinatal Collaborative Council and Dr. Ian McConachie is on the Skin-to-skin after Cesarean Committee.

EDUCATION

Resident Education

Residents continued to do two 1 month rotations as per the Royal College requirements. During the rotations, they provided anesthesia for labour pain relief, instrumental vaginal deliveries, cesarean deliveries, and participated in the OB Anesthesia Preadmission Clinic and Pain Rounds for post-cesarean patients. These rotations are coordinated by Pravin Batohi.

Competency Based Medical Education was successfully introduced this past year. Entrustable professional activities (EPAs) for OB anesthesia were created by Arif Al-Arebi. A formal introduction to epidural labor analgesia including practice on a dummy torso for the new residents was supervised by Drs. Al-Arebi and Kristine Marmai.

Regular formal OB Anesthesia teaching rounds were provided to residents by all consultant members of the subspecialty group on Monday mornings. These rounds are coordinated by Dr. Kamal Kumar.

Wednesday afternoon resident academic lectures for OB anesthesia were given this past year by Drs. Pod Armstrong, Batohi, Gros, Kumar, Marmai, McConachie, Sai, and Singh.

Dr. Marmai lectured about OB Anesthesia at the Resident Exam Preparation Course-Making a Mark. Dr. Shalini Dhir gave a lecture to the OB residents about OB anesthesia and Dr. Gros lectured the medical students about OB Anesthesia.

The OB Anesthesia Case of the Week PBLD was started last year by Drs. Kumar, Marmai, and Singh.

Journal club was carried out regularly and coordinated by Drs. Ian McConachie and Sai. These have been accredited for CME points.

Obstetrical Anesthesia Interdisciplinary Simulation Sessions were coordinated by Dr. Andreas Antoniou. These sessions were held at CSTAR as well as the new Simulation Centre in the B Tower at Victoria Hospital. Anesthesia residents, obstetrics and gynecology residents, obstetrical nurses, and respiratory therapists participate together in scenarios to explore issues such as leadership, communication, team dynamics, task delegation and situational awareness. These crisis resource management (CRM) skills contribute to effective teamwork in emergent situations.

Fellow Education

Both Drs. Aya Elsaharty and Yamin Subramani continued their fellowships for a second year. They provided regular clinical care in the OBCU, as well as in the Obstetric Anesthesia Preadmission Clinic and in the wards on Pain rounds of post-cesarean patients. Both fellows were active and successful in research and presented their work at the annual SOAP and CAS meetings. Yamin presented her systematic review at the Richard Knill competition at the CAS meeting. Aya had 2 publications and her work was featured in Anesthesiology News in the past year.

The goals and objectives for the fellowship were revised as per the latest CanMEDS by Dr. Indu Singh. The fellowship program has been supervised by Drs. Ian McConachie and Indu Singh.

INVITED LECTURES

Anesthesia/Analgesia?

Two initiatives in the past year included:

1. Improving patients’ experiences with spinal anesthesia for elective cesarean delivery by Drs. Elsaharty, Khemani, Qasem, Sebbag, and Singh. This was presented by Aya at the CAS meeting and by Fatemah at the SOAP meeting.

2. Creation of a checklist to assist in anesthesia handover in the OB PACU by Drs. Elsaharty, McConachie, Sai, and Singh. This was presented as an abstract by Aya at the CAS and SOAP meetings.

QUALITY IMPROVEMENT

Two initiatives in the past year included:

1. Improving patients’ experiences with spinal anesthesia for elective cesarean delivery by Drs. Elsaharty, Khemani, Qasem, Sebbag, and Singh. This was presented by Aya at the CAS meeting and by Fatemah at the SOAP meeting.

2. Creation of a checklist to assist in anesthesia handover in the OB PACU by Drs. Elsaharty, McConachie, Sai, and Singh. This was presented as an abstract by Aya at the CAS and SOAP meetings.

Pain Management

Dr. Geoff Bellingham, Program Director

In 2017, there were 7265 physician-related visits to the SJHC Pain Management Program which included new consults, follow-up visits, and procedures. In addition, there were 2923 visits to pain clinic psychologists for individual treatment sessions or group cognitive-behavioural therapy.

In June of 2016, the SJHC Pain Management Program received $1.3 Million in enhanced operating funds from the Ministry of Health and Long-Term Care. This was a province-wide initiative for increasing support for Allied Health services.

This funding has provided the pain clinic with the ability to hire a full-time pharmacist and a social worker in 2017. Our pharmacist has provided excellent support in helping to manage complex polypharmacy issues. Since coming onboard, she has seen 235 patients for specialized pharmacy consultations in addition to being available for immediate support by staff when required. Our social worker has also started to provide enhanced services to our patients such as spearheading family support groups.

Our physical and occupational therapy staff have also expanded. In 2017, there were 300 individual physiotherapy clinic visits and 650 occupational therapy visits (including group visits). We have also expanded our nursing staff by creating a full-time nursing position in addition to more part time nursing availability.

Finally, we have increased the fluoroscopy suite time with the additional funding. In 2017, we started providing patients with fluoroscopic guided interventions 4.5 days a week.

Overall, the increased staffing has supported a continued growth in the number of new patients our clinic has been able to accept to the program in order to better serve our community. Additionally, this has also resulted in the achievement of our long-standing goal of reducing the median wait times for a new patient consultation to 150 days.

Finally, Dr. Manikandan Rajarathinam has joined the pain clinic staff and the Department of Anesthesia and Perioperative Medicine in 2017. Dr. Rajarathinam has been assessing and managing patients with chronic non-cancer pain in his clinic in addition to performing fluoroscopy-based spine interventions.

EDUCATION

UNDERGRADUATE

The fourth-year medical school elective for pain management was provided again in 2017 by a multidisciplinary team. This year, presentations on Pain and Addiction were mandatory for the entire fourth year class. Feedback from the students was favorable, with a majority of the class agreeing that the lecture series was a valuable learning experience. Ten seminars of ninety minutes each were offered including topics such as analgesic pharmacology, managing pain in the emergency room and ICU, non-pharmacologic approaches for pain control, cannabinoids for pain management, and managing pain in the elderly.
Pain management was also taught to the second-year medical students by the pain clinic staff during the musculoskeletal block. Two lectures were provided including injections for low back pain and peripheral musculoskeletal targets for pain management.

POSTGRADUATE
To learn more about the Pain Medicine Residency Program, see p. 47

CONTINUING MEDICAL EDUCATION
Monthly Interdisciplinary Pain Rounds were organized again in 2017 by the Earl Russell Chair, Dr. Dwight Moulin. Email notification is circulated to all Department members and also posted on www.westernpain.ca

Further information is available on the website www.westernpain.ca regarding undergraduate, postgraduate and upcoming speakers for interdisciplinary pain rounds.

RESEARCH
Research by the pain clinic faculty has been robust and varied over the past year. Projects have included examining the structural and functional brain changes in complex regional pain syndrome, impacts of written discharge instructions for outpatient post-operative opioid use, and a systematic review and meta-analysis of randomized controlled trials for gabapentinoids for chronic low back pain.

Publications have also included the novel use of erector spinae plane blocks for post-thoracotomy pain syndrome and chronic shoulder pain. Pain clinic faculty have also presented research at the 2017 Canadian Anesthesiologists’ Society annual staff meeting. This included a best paper award in chronic pain on “Plasma Level of Ketamine and Norketamine in Low Dose Oral Ketamine in Chronic Pain Patients,” as well as a presentation of a retrospective study on post-operative pain management of orthotopic liver transplantation.

Finally, patient recruitment for a two-year AMOSO funded study entitled “Development of an Innovative Opioid Safety Program in Pain Clinics (Op-Safe): A Multi-Centre Project,” was successfully completed at the pain clinic. This project was a multicentre observational trial with partners at Women’s College Hospital, Toronto Western Hospital, and Mt. Sinai Hospital in Toronto.

Trainee grants of up to $10,000 continue to be available annually from the Earl Russell Chair in Pain Research to provide seed funding for pain research projects initiated by trainees registered at Western University or Lawson Health Research Institute. The competition is adjudicated by the Earl Russell Scientific Advisory Board.

FUTURE PLANS
In the coming year, further plans for expansion of the Allied Health services in the pain clinic will continue. Patients will benefit from increased access to physiotherapy, occupational therapy, and psychology resources.

Interventional procedures under fluoroscopic guidance will also increase to a full five days a week.

Palliative Medicine
Dr. Valerie Schulz, Program Director

Dr. Valerie Schulz is practicing in Palliative Medicine through the Department of Anesthesia & Perioperative Medicine, at London Health Sciences Centre, and as a Professor at Western University. Through the support of this department she has been able to contribute to clinical, educational, research, and academic advances in Palliative Medicine during 2017.

Dr. Schulz participates clinically in LHSC’s Critical Care Units, and supports the Renal dialysis unit, the Heart Failure Team and the Pre-Admission Clinic at University Hospital, for patients with palliative needs. The palliative service considers an approach to symptom management and goals of care and treatment options for patients with life threatening and/or life limiting illnesses.

Locally, Dr. Schulz is taking a leadership role in discussions regarding the assessment of frail patients in the peri-operative period. These discussions are advancing with the support of Peri-operative Care leadership, clinical expertise drawn from Geriatric Medicine, Surgery, and Anesthesiology, at St. Joseph’s Health Centre and London Health Sciences Centre Administration. The purpose of the assessing frail patients in the peri-operative period would be to collaboratively explore care options across their trajectory of care from community, through surgery and to the best location after surgery for example rehabilitation or community. Nationally, Dr. Schulz is a member of the inaugural Palliative Medicine Specialty Committee at the Royal College of Physicians and Surgeons of Canada.

Research collaborations with Dr. Lorelei Lingard at the Centre for Research and Innovation (CERI) at Western, resulted in publications from our multi-site, multi-disciplinary Palliative Care project exploration, palliative care on the heart failure care team, and mapping patient and provider experiences and expectations. CIHR and AMOSO AFP Innovation Funding support this project.

AMOSO is supporting Drs. Golton, Sarpal, and Schulz, on a multi-year education project, titled: Implementation of a Cross-Discipline Palliative Care Curriculum for Post-Graduate Medical Residents at Western University. Our aim is to integrate discipline specific palliative approach to care within the core curriculums of Clinical Neurological Sciences, Pediatrics, Critical Care, and Anesthesiology.

In addition to advocating for advances in Palliative Care, Dr. Valerie Schulz is honoured to accept her new role as the Associate Dean for Continuing Professional Development (CPD) at Schulich School of Medicine & Dentistry, Western University.

Dr. Valerie Schulz’ contributions to Palliative Medicine and CPD Western were made possible through the support of Western University, Schulich School of Medicine & Dentistry, and the Department of Anesthesia & Perioperative Medicine.
Pediatric Anesthesia
Dr. Mohamad Ahmad, Program Director

2017 was a challenging year for the Pediatric Anesthesia Program at LHSC and Western University. Drs. Morrell, Nair and Connolly left the program. However, we did recruit Dr. Abhijit Biswas and Dr. Ushma Shah, both of whom recently completed pediatric anesthesia subspecialty training at The Hospital for Sick Children in Toronto and are also keenly interested in regional anesthesia and medical education.

Academically, we continue to be very active. We had twelve anesthesia and non-anesthesia residents complete pediatric anesthesia blocks at Victoria Hospital.

We held four pediatric anesthesia journal clubs in 2017. We also participated in three Pediatric Anesthesia Telerounds with other pediatric anesthesia departments across the country. Program members are also involved in simulation, Royal College exam preparation, resident half-day teaching, and Thursday morning teaching rounds. We also participated for the first time in the Division of Pediatric Surgery Research Day in February.

Clinically, our pediatric case volumes have remained constant. The most exciting development has been the addition of pediatric dental cases at Western’s Dental Surgical Care Unit located in the Dental Sciences Building. Its purpose is to serve pediatric patients in need of general anesthesia for dental procedures but also to train dental students to work on anesthetized patients. Drs. Poolacherla, Simon and I are providing pediatric anesthetic services there. In 2017 we looked after 52 patients.

We also continue to expand our multidisciplinary teaching in effort to improve quality of care. We held six in-services on pediatric anesthesia and pain management for B6, PACU, and PMDU nurses in 2017.

In 2018, our goals are to expand our quality assurance initiatives. Drs. Poolacherla and Shah are leading that effort.

Dr. Sommerfreund has taken over the simulation program and we are hoping to recruit another colleague to join him.

Drs. Biswas and Shah are actively developing pediatric regional anesthesia projects. We have also been invited to teach half-days for the Pediatric residents. This presents an exciting opportunity to further integrate ourselves into the wider world of pediatrics at Western and LHSC.

We also held two first-ever in-services for OR nurses in which we covered the principles of pediatric anesthesia and anesthesia emergencies. These were very well received and we have been invited back for more teaching.
Regional and Acute Pain

Dr. Kevin Armstrong, Program Director

In 2017 we saw further progression with Chronic Pain, Acute Pain, and Regional anesthesia across the city. Some programs have been previously noted in the annual reports. Two of these programs have been in place for a few years and are important to the patients we serve. Dr. Collin Clarke continues to provide intrathecal catheter placement and management for palliative pain.

The pediatric chronic pain management program, under the leadership of Dr. Raju Poolacherla, continues to provide a clinic one day per week for children with chronic pain.

The team is comprised of a nurse, a psychologist and pharmacist. The goal of this program is to provide care to a largely under recognized and under treated group of patients in Southwest Ontario.

During 2017 we continued towards coordinated and advanced care for patients with complex pain challenges. Intensive Peri-operative Pain Care (IPPC) for complex patients is expected to launch in 2018. The work of Drs. Kate Ower and Qutaiba Tawfic looks to integrate existing resources which include our nurse practitioners, Charlotte McCallum and Heather Whittle. Dr Manikanadan Rajaratnam (one of our newer recruits) is expected to a play significant role in the growth of this program.

For a number of years residents and fellows have had the opportunity to gain clinical exposure, experience, knowledge and skill in the practice of regional anesthesia at the SJHC and UH sites. For 2017 with the addition of the VH block room, this opportunity was further enhanced with greater exposure to regional anesthesia for foot and ankle surgeries, as well as pediatric regional anesthesia.

Our support from nursing includes Nurse Practitioners Heather Whittle (VH) and Charlotte McCallum (UH). As the roles of the programs expand, these individuals will play a significant role in both clinical care, as well as education. See Intensive Peri-operative Pain Care (IPPC) for complex patients noted above.

REGIONAL ANESTHESIA

Regional anesthesia and analgesia, in the form of peripheral nerve block, is well established in the clinical care of perioperative patients at SJHC and UH. The formalized regional program at Victoria Hospital moved to 5 day per week program. Much of this work was led by Drs. Gopa Nair and George Nicolaou in collaboration with nursing leadership. Unfortunately, due to personal reasons, Dr. Nair has left the city. His work is now continued by one of our new faculty Dr. Bill Lin.

We welcomed two additional pediatric consultants, who also have experience in regional. They are Drs. Abhijit Biswas and Ushma Shah. We also welcomed Mahesh Nagappa and Herman Sehmbi to the department. Given the patient population (orthopedic trauma, pediatrics, vascular, thoracic) there is an excellent opportunity to add peripheral regional anesthesia to the neuraxial anesthesia already provided at VH.

At SJHC, the clinical load of the Hand and Upper Limb Centre (HULC), results in a high volume of clinical work, educational opportunities, and research involving the brachial plexus. The presence of the breast care program is an opportunity to increase our activity in truncal planar blocks.

At UH the general surgery, orthopedic, and plastic surgery populations provide a high volume of clinical work, educational opportunities, and research involving truncal blockade and lower limb regional analgesia. The VH block room continues to evolve. We continue to have challenges with space allocation. Towards the end of 2017, there was a physical change in the block room and preparation process. Patients expected to receive a regional technique are now identified and prepared in the block room. This change contributes to efficiencies in the process by eliminating a step of moving patients.

As the clinical work increases, we continue to strive towards academic productivity from our clinical work. This includes both educational activities, and research output. In addition to our established researchers, we have established a research team. The goal of this research team is to provide support and structure for our new faculty to become effective and successful in an academic career. We continue to collaborate with our surgical colleagues, as well as the Department of Anatomy and Cell Biology.

ACUTE PAIN MANAGEMENT

The clinical load at both VH and UH sites continue to be highly subscribed. There are 100 to 150 primary clinical visits per week by the APS team at both sites. Additionally there are supplemental visits by our nurse practitioners and on call residents. Going forward we plan to establish and grow an Intensive Peri-operative Pain Care program for the complex patient.

Given the population of patients we serve, regional analgesia is an important component of acute pain management for the patient with complex pain.

COMPLEX PAIN MANAGEMENT PROGRAM

There is an ever increasing need for innovative strategies to manage the pain of patients receiving surgery. Some patients have generalized chronic pain, others have pre-existing chronic pain at the site of surgery, and others develop chronic post-surgical pain. The extent of these problems is variable, and difficult to predict. We continue to work towards pain management pathways that draw on the expertise of those who work in regional anesthesia, acute pain management, and chronic pain. Intensive Peri-operative Pain Care (IPPC) for complex patients is expected to improve the care for all patients but especially those at higher risk for chronic post-surgical pain. This involves pre-operative assessment and management, intraoperative management and techniques, as well as interventions that persist beyond the usual 2-5 days that a patient may be in hospital.

Such changes have the potential to improve patient care, offer learning opportunities for our trainees, and opportunities for research and audit activity. In 2018 we will continue to work towards a manageable solution and integrate the Chronic Pain, Acute Pain, and Regional groups.
Thoracic and Vascular Anesthesia

Dr. George Nicolaou, Program Director and Fellowship Coordinator

The academic Thoracic and Vascular Anesthesia Program continues to thrive and grow at an exponential pace in the Department of Anesthesia and Perioperative Medicine at Western University. Located at Victoria Hospital, it is an extremely busy program covering all types of complex elective and emergency cases, with the exception of lung transplantation.

Vascular surgery operates six times a week and thoracic surgery five times a week. We have monthly multi-disciplinary and morbidity and mortality rounds with our surgical colleagues to assure quality control and to keep up on current events.

The majority of vascular and thoracic patients coming through our institution have multiple co-existing diseases including severe cardiorespiratory compromise. These patients have an extensive preoperative evaluation by anesthesia and/or internal medicine, cardiology, and respirology. We have developed a multi-disciplinary perioperative high-risk clinic for optimization and follow up with patients. The Thoracic and Vascular Surgical Programs have their own postoperative step-down monitored units with invasive monitoring capabilities.

THORACIC SURGERY

The robotic (da Vinci robot) and video-assisted thoracic surgical (VATS) programs are well developed at our institution and currently account for 80% of cases, the remainder being open thoracotomies or investigative procedures.

VASCULAR SURGERY

The Vascular Division of Surgery at Victoria Hospital continues to be a pioneer in endovascular stenting of abdominal and thoracic aneurysms and claims one of the largest series in North America. In April 2013, the construction of the hybrid vascular operating room was completed. This hybrid suite is equipped with numerous large, high-definition flat screen monitors for viewing images as well as the patients’ vital signs.

On average per year, we perform 300 major pulmonary resections and 80 esophagectomies. We have the largest experience with esophagectomies and VATS procedures in Canada.

To enhance clinical experience and improve our teaching program, we have developed an advanced VATS surgery and anesthesia workshop using a pig model. Here, consultants can enhance their skills in fiberoptic bronchoscopy and management of one lung ventilation. The pediatric thoracic anesthesia program has evolved with the recruitment of a pediatric thoracic surgeon. Pediatric thoracic procedures include investigative, video-assisted and open procedures. Alongside this is the adult and pediatric regional anesthesia and acute pain program, allowing for excellent perioperative pain management. The majority of our adult and pediatric patients receive thoracic epidurals or paravertebral blocks for postoperative pain management.

It combines the newest computer generated technology and the newest radiologic imaging in a sterile operating room environment. This gives the surgeons the ability to perform traditional open surgery and minimally invasive endovascular procedures on the same patient, at the same time, in the same place.

Patient benefits include:
- Shorter procedure times;
- Less radiation used during imaging;
- Reduced need for ICU care;
- Shorter hospital stays;
- Faster recovery.

Ruptured abdominal and thoracic aneurysms that have favourable anatomy are repaired by the endovascular route at our institution. The thoraco-abdominal aneurysm program is well developed and these aneurysms are now generally repaired using endovascular branched stents.

The thoraco-abdominal aneurysms that cannot be repaired using endovascular stents are repaired utilizing partial left heart bypass. In conjunction with cardiac surgery, we are doing elephant trunk-type procedures and aortic arch aneurysm repairs, via the endovascular route. We use rapid ventricular pacing to optimize surgical conditions before stent deployment.

On average per year, we perform 150 open abdominal aneurysm repairs, 35 endovascular thoracic, 150 endovascular abdominal and 12 endovascular thoraco-abdominal aneurysm repairs.

Preliminary results of one of our studies have shown that spinal oximetry detects decreases in spinal cord blood flow early, allowing for the early initiation of preventive spinal cord protection treatment strategies. We presented our results on spinal cord protection strategies at the 2012 International Forum of Cardiovascular Anesthesia in China.

TRANSESOPHAGEAL ECHOCARDIOGRAPHY (TEE)

Our Transesophageal Program is well developed with formal teaching and multi-disciplinary weekly rounds. We have also acquired a new TEE machine with 3D capabilities. TEE is specifically available for management of thoracic aneurysm stenting and for adjunctive management of the vascular patient with associated cardiac disease. While not every anesthetist involved in vascular anesthesia is experienced in TEE, there is usually one anesthetist experienced in TEE available for guidance.

POINT-OF-CARE ULTRASONOGRAPHY

Recently, we have acquired a new ultrasound machine for point-of-care ultrasonography for use in the perioperative period. We have an established basic and advanced teaching program for point-of-care ultrasonography for consultants, fellows, and residents.

RESEARCH PROJECTS IN PROGRESS

- The Role of Intraoperative Lidocaine Infusion in Preventing Chronic Post Surgical Pain After Video Assisted Thoracoscopic Surgery: Randomized Double-Blinded Controlled Study;
- Treatment modalities for spinal cord protection;
- Comparing Transcutaneous to Transdural Near-Infrared Spectroscopy for Detection of Regional Spinal Cord Ischemia in a porcine model;
• Biochemical markers of spinal cord ischemia in patients undergoing thoracic aortic endovascular repair.
• Inhaled milrinone during one lung ventilation in thoracic surgery: a feasibility pilot study.

RESIDENT TRAINING

Our Residency Program includes two four-week blocks of subspecialty training in vascular and thoracic anesthesia. Educational objectives are clearly outlined and monitored through daily assessments. Reading material is provided and residents are encouraged to partake in clinical research. At the beginning and the end of their rotations, the residents have an MCQ examination to assess improvement during their rotation. An oral examination is also administered at the end of the rotation.

FELLOWSHIP PROGRAM

Our Fellowship Program is well established with ongoing clinical research opportunities, in collaboration with our surgical colleagues. The program is one year in duration. Each week, the fellow will work two days independently in the operating room, and one day in both vascular and thoracic with a consultant. The fifth day is for academic and research projects. The fellows are encouraged to attend x-ray rounds, thoracic/vascular rounds, fiberoptic bronchoscopy clinics and transesophageal rounds. Reading material is provided and fellows are encouraged to go to another centre for two weeks to broaden their experience. The Fellowship Program is extremely flexible and is designed to accommodate the individual fellow’s needs.

SIMULATION

The integration of simulation scenarios on thoracic and vascular anesthesia for fellows and residents has been very successful and rewarding. This environment allows for better preparation in this clinically diverse patient population. We continue to develop this frontier of enhanced learning.

SUMMARY

Overall, the Thoracic and Vascular Program at Victoria Hospital is a very busy program with an incredible variety of interesting and complex cases. It is constantly evolving to keep up with medical and technological advances and to ensure that patients receive the most optimal perioperative care available. The program offers excellent opportunities for fellows to become proficient in adult and pediatric thoracic/vascular anesthesia, transesophageal echocardiography, and point-of-care ultrasonography in both clinical and research settings. It is designed to meet the individual’s needs, along with the best exposure to the available clinical caseload.

Transplant Anesthesia

Dr. Achal Dhir, Program Director

TRANSPLANT FACULTY: A DHIR, R ARELLANO, N GONZALES, P JONES, S MORRISON, M ST-AMAND, AND A VANNELLI

The liver transplantation program continues to provide excellent clinical care to patients for liver transplantation, liver resections and major Hepato-biliary surgeries. There were two additions - Dr. Phil Jones and Dr. Nelson Gonzales joined the liver group in 2017.

Apart from his clinical experience, Dr. Jones brings research expertise, and this will provide a boost to our research program. After completing his super fellowship, Dr. Gonzales also joined the group. He is pursuing a master’s program and we look forward to collaborating with him.

From January to December 2017, our team provided anesthesia for 52 liver transplantations including five critically ill recipients from the ICU.

This also included a combined liver-kidney transplant. 45 livers came from the brain dead donors while 7 were donations after cardiac death. During the same period, our group also provided services for sixty eight major liver resections. The team is also involved with preoperative assessment and optimization of patients before they are listed for liver transplant.

We run a successful fellowship program with two current fellows. Dr. Maria Aspi from the Philippines joined in January 2017 and completed her fellowship in December. Dr. Franklin Dawkins after completing cardiac fellowship replaced Dr. Sonja Payne in July 2017. Apart from receiving excellent clinical experience, our fellows are also involved with research and academic activities. We also conduct monthly PBLDs and journal clubs. Liver Transplantation Anesthesia group attends Transplant rounds regularly and participates in ‘Liver assessment’ and ‘M & M’ rounds conducted by Transplant surgeons & Hepatology colleagues.

HIGHLIGHTS

Dr. Achal Dhir delivered an invited lecture on ‘Fluids in donor hepectectomy’, in a symposium conducted by the Institute of Liver and Biliary Sciences on 14 May 2017. ILBS, Delhi, India.

Dr. Achal Dhir conducted case base panel discussion on ‘New onset cardiac dysfunction – early post-transplant’, in a symposium organized by Centre for Liver and Biliary Sciences, Delhi, 16 Sept. 2017.


ONGOING PROJECTS:
• Incidence, Risk Factors and Outcomes of Intraoperative Cardiovascular Events During Liver Transplantation
• Pain management after liver transplantation
The success continues for Western’s Anesthesia Residency program with another outstanding year. 2017 has been a great success with many noteworthy achievements. Our department, with its accomplished, highly-qualified faculty and superior leadership support, continues to successfully drive one of the largest training programs in Canada.

The challenges of making the transition to competency-based medical education during the past year have only reaffirmed this commitment to excellence and we look forward to further success as we welcome our second cohort of Competency by Design learners.

**PROGRAM LEADERSHIP**

In November of 2017, Dr. Arif Al-Areibi stepped down from the position of Director of Postgraduate Education Program in our Department. Arif was appointed to this position in July 2014, and has successfully lead our PGE program forward into the Competency By Design curriculum that was implemented in Anesthesia in July 2017. He and his PGE Committee members are to be commended for their contributions to continually improve our program and ensure the success of our residents each year.

Please join me in expressing our appreciation for his dedication and hard work throughout the past 3 years, during a challenging transition for residency programs in Canada.

**EDUCATION PROGRAMS**

With a clear goal of providing the highest quality training structure and learning environment, we continue to design optimal opportunities for our trainees to earn their place amongst the most qualified clinicians and educators in the profession. During the past year our PGME subcommittees worked very closely with the Core Post Graduate Committee to accentuate the importance of learner-centred curriculum and diversity in the workplace. These new subcommittees continue to open doors for more creative and thoughtful educational ideas, with more leadership roles for our trainees and teachers.

**Postgraduate Education**

Dr. Anita Cave, Program Director

With a talented team of 46 program residents, we provide the highest level of medical training nurtured by an interdependent learning environment, and welcome numerous trainees from other services including the Physician Assistants from the Canadian Forces.

We continue our leadership at Western in simulation and training in Crisis Resources by highly skilled educators who maintain an unparalleled level of excellence and who are also involved nationally in developing the Canadian Simulation program.

Along with the new, state of the art, simulator, we have the structure that will allow us to maintain a meaningful presence in this field.

Our department offers a wide variety of subspecialty training opportunities in anesthesia, with a large case volume which allows us to be among the top Canadian training programs in resident clinical exposure. In addition, our residents regularly participate in national and international electives, including medical missions, with ongoing support from faculty and departmental leadership.

**RESEARCH**

Our trainees continue to pursue and work on high quality research projects which they have presented at both the national and international level. We are committed to supporting and encouraging resident research and provide administrative and financial support to all residents who are participating in research projects, including in-training master’s degrees.

**MCMASTER-WESTERN RESEARCH DAY**

Congratulations to our residents, Dr. Matthew Chong (1st place) and Dr. Jillian Belrose (2nd place), for their outstanding presentations at this years’ Mac-Western Research Day. This competition continues to be an enriching and rewarding opportunity for our residents to examine different research methods and presentation methods (oral presentation, poster, case reports) and gain a broader scope of research in Anesthesia.
In addition, special thanks to Drs. Kate Ower and Jon Brookes for their continued support of the residents and for acting as Judges at this year’s competition. And many thanks to Dr. Angela BuilesAguilar for providing excellent feedback and support during the presentation practice sessions.

On behalf of the entire department, we are thrilled to be able to congratulate all of this year’s winners for putting forth such a wonderful showcase of resident research. We would also like to thank all our faculty advisors and mentors, and Postgraduate Administration and Resident Research team – this success would not have been possible without you!

Thank you:
Dr. Arif Al-Areibi, Postgraduate Education Director.

RESIDENTS AND RESEARCH PROJECTS
Dr. Jill Belrose (PGY1): REGULATION BY FYN KINASE: A POTENTIAL TARGET IN NEUROPATHIC PAIN (Basic Science study)

Won 1st place presentation in Basic science, and the prestigious FAER (Foundation for Anesthesia Research) research prize for best poster!

Supervisor: Dr. John MacDonald

Dr. Sebastian Borowiec (PGY2): A SYSTEMATIC REVIEW AND META-ANALYSIS OF OSA SCREENING QUESTIONNAIRES IN PREGNANCY

Supervisor: Dr. Mahesh Nagappa

Dr. Matt Chong (PGY3): PERINEURAL VERSUS INTRAVENOUS DEXAMETHASONE AS AN ADJUVANT FOR PERIPHERAL NERVE BLOCKS: A SYSTEMATIC REVIEW AND META-ANALYSIS

1st place presentation in Regional

Supervisor: Dr. Indu Singh

Dr. Michael Chow (PGY4): EVALUATION OF VIDEO BASED ASYNCHRONOUS LEARNING TOOL FOR INCOMING ANESTHESIA RESIDENTS: OUTCOMES AND SATISFACTION

Supervisor: Dr. Marcel D’Eon


Won 2nd place in Patient safety.

Supervisor: Dr. Jason Chui

Dr. Terrence Leeper - REGIONAL CHANGES IN BLOOD FLOW AND ENDOTHELIAL FUNCTION FOLLOWING BRACHIAL PLEXUS BLOCK.

3rd place presentation in Regional.

Supervisor: Dr. Peter Mack

A SPECIAL THANK YOU TO OUR PROGRAM LEADERS FOR THEIR DEDICATION AND GREAT CONTRIBUTION TO THE SUCCESSFUL YEAR:

• PROGRAM DIRECTOR: Anita Cave (as of Dec 1 2017)

• PROGRAM DIRECTOR: Arif Al-Areibi (Jan to Nov 2017)

• ASSOCIATE PROGRAM DIRECTOR: Andreas Antoniou

• DEPARTMENT CHAIR: Davy Cheng; Ramiro Arellano (as of July 2017)

• EDUCATION COORDINATORS: Linda Szabo and Lori Dengler

• RESEARCH COORDINATOR: Ronit Lavi and Jonathan Brookes

• VH SITE COORDINATOR: Steve Morrison

• UH SITE CO-ORDINATOR: Hilda Alfaro

• SJHC SITE CO-ORDINATOR: Kristine Marmai

2017 Graduates
ISMAIL, Mohamed
JIANG, Jessica Ming
KHALAF, Roy
NGUYEN, Don
QUILEY, Nicole
SCHULTZ, William
SMALLWOOD, Jennifer

• SIMULATION/IT: Richard Cherry

• CHIEF RESIDENT: Lukas Brown

• SENIOR/JUNIOR RESIDENT REPRESENTATIVES: Zach Davidson and James Pius

• FELLOWSHIP COORDINATOR: Miguel Arango

• ACADEMIC MENTORING SUBCOMMITTEE: Jeff Granton

• EVALUATION SUBCOMMITTEE: Ray Zhou

• EXAMINATION PREPARATION SUBCOMMITTEE: Michelle Gros

• RESIDENTS WELLNESS SUBCOMMITTEE: Pravin Batohi

• ACADEMIC HALF DAY SUBCOMMITTEE: Steve Morrison

And another special thank you to our team of residents for their positive contribution to our training program as leaders and learners.
The Pain Medicine residency has continued to provide a successful two-year training program to graduates of a variety of entry disciplines. Dr. Colin Phillips has recently graduated the clinical component of the residency and is currently working in Prince George, B.C. as an anesthetist and a pain medicine specialist. Dr. Doris Leung has continued her training and will be completing her clinical requirements in June of 2018. Both candidates will be eligible to challenge the Royal College Pain Medicine Specialty Examination in the fall of 2018.

Two new residents started the training program in July of 2017. Dr. Scott Cook is a graduate of the University of Ottawa Physiatry residency and Dr. Abdul Alfasi is a graduate of the University of Ottawa Neurosurgery residency.

For the Pain Medicine residents, teaching sessions are held every second Wednesday. The national half-day program linking online with Pain Medicine Residents across the country continues to provide subjects to fulfill the CanMEDs roles such as quality improvement or community practice management.

A national ‘ground-school’ for the Pain Medicine residents was also held for the first time in July of 2017. This was hosted over a web conferencing platform and provided incoming residents with talks covering various foundational knowledge aspect of pain management. One highlight included a talk provided by Dr. Busse, the lead author of the new National Opioid Use Guidelines.

For the senior Anesthesiology residents, six academic half-days were provided, covering a variety of acute, chronic, and cancer pain topics.

Clinical Case Rounds discussing complex cases are held every three months in the Pain Clinic classroom at St Joseph’s Health Care on Wednesday mornings from 0715-0830 hours. These are open to all interested faculty and trainees.

Residents

CURRENT RESIDENTS
ALBOOG, Abdulrahman | PGY1
BAE, Sandy | PGY1
BAIRAGI, Ranjana | PGY5
BEHEHANI, Hasan | PGY5
BELROSE, Jillian | PGY2
BOROWIEC, Sebastien | PGY3
BRADEN, Kevin | PGY1
BROWN, Lukas | PGY4
CHONG, Matt | PGY4
CHOW, Mike | PGY5
DAHROUJ, Dalal | PGY5
DAVIDSON, Zach | PGY4

DESHPANDE, Nachiket | PGY1
FISHER, Kyle | PGY5
FREYTAG, Alex | PGY5
GALLAGHER, Caitlin | PGY5
GERMAN, Mark | PGY3
GILL, Rajwinder | PGY3
HYNES, Zach | PGY3
JAKOBOWSKI, Luke | PGY4
JOSCHKO, Abigayel | PGY2
LAPIERRE, Danielle | PGY5
LARKIN, John Paul | PGY1
LEE, Lina | PGY5
LEEPER, TJ | PGY4
LU, Jordan | PGY1
MACKENZIE, Allison | PGY2
MELTON, Natalie | PGY5
MERRIFIELD, Kaylyn | PGY3
MOHAJER, Kiarash | PGY4
OEMING, Bethany | PGY4
PARADISO-SHAW, Derek | PGY2
PIRANI, Zameer | PGY4
PIUS, James | PGY2
SEFEIN, Osama | PGY3
SZOKE, Daniel | PGY3
TERLECKI, Magda | PGY5
TRYPHONOPoulos, Takis | PGY4
WOODES, Megan | PGY1
YASHPAL, Namrta | PGY1

At CAS 2017, from L to R: Drs Kevin Armstrong, Jon Brookes, Pod Armstrong, Herman Sehmbi, Deepti Vissa, Angela Bulles, Terrence Leeper, Brigid Brown, Shalini Dhir, Ronit Lavi, and Fatemah Qasem.
Undergraduate Education

Dr. Michelle Gros, Program Director

Anesthesia is a mandatory two-week core rotation that all third-year medical students complete as part of their surgery block at Western. Six students are on Anesthesia at any one time throughout the city. Typically, two students are assigned to each of the three teaching hospitals in London. We have increased flexibility so that clerks spend time at more than one hospital. This allows for better exposure to the wide variety of anesthetics delivered at the different sites.

Clerks spend each day of their rotation assigned to a staff supervisor, providing for exceptional one-on-one teaching. The clerks also spend one day of their rotation in the cataract suite where they are paired with a staff anesthesiologist for the day to develop IV insertion skills. This is a favourite day of the rotation for many of the clerks.

The medical students are all given an updated anesthesia student textbook to read during their rotation and a list of learning topics to read about and discuss with their supervising anesthesiologists. We have also added useful learning tools and links to our website and encourage the students to use these as well.

The Anesthesia Bootcamp in the CSTAR Simulation Centre continues to be very well received by the students. Each group of students spends one day of their rotation in the simulator with a simulation fellow. They are introduced to some basic skills and aspects of our specialty, so that when they come to the operating room, they feel more comfortable with the basics of anesthesia. Presentations include preoperative assessments, the anesthesia machine and monitoring, airway management, and drug administration. They then have the opportunity to run through some case-based scenarios. The students are very enthusiastic about this highly-rated opportunity, and state that it has eased their transition into the operating room.

We also have a significant number of Western and visiting elective students from Canada and abroad that rotate through the Anesthesia program. They are all given the opportunity to meet with the Program Director to discuss the residency program at Western during their rotation. They are also given more flexibility to see different aspects of anesthesia such as acute and chronic pain, and obstetrical anesthesia, just to name a few.

For the 2016-2017 academic year, we had 130 clerks, 19 Western elective students, 36 visiting elective students, and 4 non-credit pre-clerkship summer clinical elective students rotate through our program at Western.

Again this year, we had very thought-provoking essays submitted to the CAS medical student essay contest. We are encouraging the medical students to submit essays again next year to this contest.

Another highlight is the annual orientation to airway management lecture and workshop that our department runs for the incoming year of clerks. This was evaluated very highly and each year it takes a group of dedicated residents to help run this event.

Every student that has rotated through our Department received an exit interview at their respective site. The focus of the interview is to provide an opportunity for the students to share their input on how we can continue to improve rotations for future students.

Some of the outcomes have improved communication at the start of the rotation where we provide a detailed orientation email to the students.

We have also been able to expand accessibility of learning resources. New this year, we are asking the students if they worked with an outstanding teacher that they would like to nominate for the undergraduate teacher of the year award.

Our department continues to have a strong presence in undergraduate teaching at the first and second year level, and we encourage as many faculty members as possible to get involved in this teaching.

AND FINALLY, A VERY SPECIAL THANK YOU TO:

• Pravin Batohi, SJHC Site Coordinator
• Jonathan Brookes, UH Undergraduate Medical Education Site Coordinator
• Charlotte Sikatori McLain, Undergraduate Education Coordinator
Continuing Professional Development

Dr. Ian Herrick, Program Director

Under the auspices of the Continuing Professional Development Office at the Schulich School of Medicine and Dentistry, the Department of Anesthesia Continuing Professional Development Program supports a variety of high quality continuing education events aimed at practicing anesthesiologists and affiliated health care professionals.

Current activities include departmental rounds (held as monthly city-wide forums across London hospitals); weekly site rounds (held at each hospital site and designed to address issues and topics of local interest) and subspecialty rounds and seminars (organized to meet the educational needs of subspecialty groups e.g., cardiac anesthesia, neuroanesthesia, obstetrical anesthesia, etc.).

In addition, the CPD Program hosts several lectureships and accredits local, national or international conferences and workshops supported by the Department and organized by its members.

2017 INVITED SPEAKERS

In 2017, the Department had the pleasure to host several grand round speakers and events that included:

- Dr. Richard Novick, Professor of Cardiac Surgery, University of Calgary – January 18, 2017
- Dr. Chris Watling and Dr. Shannon Venance, Postgraduate Medical Education, Schulich School of Medicine and Dentistry, Western University – March 22, 2017
- Dr. Sharon Koivu, Physician Consultant, Palliative Care, London Health Sciences Centre and Associate Professor, Department of Family Medicine, Western University – May 17, 2017
- Dr. Supriya Singh, Resident, Department of Orthopaedic Surgery, Western University – May 17, 2017
- Dr. Ian Ball, Regional Medical Lead for Organ Donation, Trillium Gift of Life Network – September 20, 2017
- Mr. Robert Sibbald, Clinical and Corporate Ethicist, London Health Sciences Centre – September 20, 2017
- Dr. Kim Burchiel, Professor, Departments of Neurological Surgery and Anesthesiology and Perioperative Medicine, Oregon Health and Science University – November 14, 15, 2017
- Dr. Jason Brookes, Performance Coach & Consultant, Maven Consulting Group and Lecturer, Department of Emergency Medicine, University of Manitoba – December 13, 2017
- Dr. Richard Novick (Cardiac Surgery, University of Calgary) – “Trouble in the OR: The Call, the Save, and the Threat” January 18, 2017
- Dr. Qutaiba Tawfic (Anesthesiology, Western University) – “Focus on Effective Postoperative Pain Management” February 15, 2017
- Dr. Chris Watling and Dr. Shannon Venance (Postgraduate Medical Education, SMED) – “Evolution of Revolution: Transforming Residency Training to CBME” March 22, 2017
- Drs. Deepti Vissa, Catalina CasasLopez, and Ian Herrick (Anesthesia, Western University) – “Perioperative Handover – Talking to Each Other (Better)” April 19, 2017
- Dr. Sharon Koivu (Palliative Care, Family Medicine, Western University), Supriya Singh (Orthopedic Surgery, Western University) – “Perioperative Opiates: Reducing Risk While Maintaining Comfort” May 17, 2017
- Drs. Matt Chong, Yamini Subramani, Aya Elsaharty, and Bridig Brown (Anesthesia, Western University) – “Resident and Fellow CAS Presentations” June 14, 2017
- Dr. Ian Ball (Trillium Gift of Life Network) and Mr. Robert Sibbald (London Health Sciences Centre) – “MAID and Organ Donation” September 20, 2017
- Dr. Ian Herrick (Anesthesia, Western University) – “Perioperative Handover – The Good, the Bad and the Ugly!” December 20, 2017

OTHER MAJOR ACTIVITIES FOR 2017 INCLUDE:

- The Department received accreditation from the Royal College of Physicians and Surgeons of Canada for three new CPD activities with the commencement of the Pain Journal Club, Consultant TEE Rounds, and Neuro-Anesthesia Research Rounds.
- WebEx was implemented as a webcasting system to support the city-wide broadcasting of many departmental CPD activities.
- Audit of accredited departmental CPD activity.
- The Perioperative Ultrasound Workshop was hosted by the Department in 2017. This two-day accredited workshop explored the utility of point-of-care ultrasound in the perioperative setting.
Fellowship

Dr. Miguel Arango, Program Director

Fellowships in cardiac, neurosurgical, transplantation, regional, obstetrics, acute pain, simulation and vascular & thoracic anesthesia are offered each year at the London Health Sciences Centre and St. Joseph’s Health Care London. Fellowships are 12 months in duration, depending on subspecialty and interest in Research.

During the 2017 academic year, the department had 23 clinical fellows, broken down as follows:

- CARDIAC: 5 FELLOWS
- NEURO: 2 FELLOWS
- REGIONAL: 3 FELLOWS
- TRANSPLANT: 2 FELLOWS
- OBSTETRIC: 2 FELLOWS
- VASCULAR: 2 FELLOWS
- SIMULATION: 1 FELLOW
- GENERAL: 3 FELLOWS
- ACUTE PAIN: 2 FELLOWS
- QUALITY ASSURANCE: 1 FELLOW

2017 FELLOWS

AMIRUDDIN, Nabeel  
Vascular/Thoracic, India

ARIAS, Isabel  
Cardiac, Colombia

ASPI, Maria  
Transplant, Philippines

BANASCH, Matthew  
Vascular/Thoracic, Canada

BERRIO, Marta  
Cardiac, Colombia

BROWN, Brigid  
Regional, Canada

BUILES, Angela  
Simulation, Colombia

COURNOYER, Catherine  
Vascular/Thoracic, Canada

DAWKINS, Franklin  
Cardiac, Costa Rica

DY-Valdez, Christine  
Neuroanesthesia, Philippines

ELDEYASTY, Basem  
Acute Pain, Egypt

ELSAHARTY, Aya  
Obstetric, Egypt

ESPINOSA, Aldo  
Neuroanesthesia, Mexico

FREYTAG, Alexander  
Regional, Germany

FUJII, Satoru  
Cardiac, Japan

GAO, Bill  
Regional, Canada

GONZALEZ, Nelson  
General, Colombia

KARUPPIAH, Niveditha  
Regional, India

LIN, Bill  
Regional, Canada

LOPEZ CASAS, Catalina  
Quality Assurance, Colombia

PAYNE, Sonja  
Transplant, Canada

QASEM, Fatemah  
Acute Pain, Kuwait

SADKHAN, Hussien  
Acute Pain, Iran

SATO, Keita  
Cardiac, Japan

SEHMBI, Herman  
General, India

SUBRAMANI, Yamini  
Obstetric, India

VANDENBRANDE, Jeroen  
Cardiac, Belgium

VISSA, Deepti  
Quality Assurance, India

YANG, Churao  
Regional, Canada

YOUSSEF, Hesham  
General, Egypt

Several of our fellows, including DRS. MARTA BERRIO, LUZ MARIA LOPERA, AND ISABEL ARIAS, were involved in a new Perioperative Transantronic (TEE) and Transesophageal (TEE) Echocardiography workshop held in Medellin, Colombia in November 2017. This was the first workshop of its kind for the region and our fellows, along with anesthesia faculty, had great success with this event.

Simulation Fellow ANGELA BUILES presented at the Canadian Anesthesiologists Society’s annual meeting this year in Niagara Falls. She also presented at the 45th Annual SNACC Meeting that was held in Boston and at the Canadian Simulation summit in Montreal. Additionally, Dr. Builes was significantly involved in facilitating the Simulation Airway Bootcamp for PGY1 and PGY2.


Anesthesia and Critical Care Teaching Through Simulation (ACCTTS)

Dr. Richard Cherry, Program Director

In 2017 ACCTTS delivered more than 1500 learner hours of high quality, simulation based formative learning and summative assessment for trainees.

The undergraduate anesthesia bootcamp and postgraduate anesthesia resident simulation training sessions continue, as they have for the past decade, to be recognized as tremendous assets to the department. In addition, residents from a wide variety of specialties receive Crisis Resource Management training from ACCTTS faculty during their Critical Care rotation. Senior residents in Critical Care, who have a wealth of clinical experience, are able to consolidate their training in regular simulation sessions. Expert ACCTTS faculty members continue to regularly collaborate with simulation efforts of other departments such as obstetrics, otolaryngology, and surgery.

Our experience and established education approaches using simulation have garnered us recognition as leaders in the field within our academic health center. Increasingly, our faculty members are taking on simulation leadership roles at local, regional, and national levels.

In 2017, Dr. Richard Cherry was named the inaugural Associate Dean, Learning with Technology & Simulation for the Schulich School of Medicine & Dentistry. This position will oversee the development and stewardship of simulation activities for the school and help establish a collaborative and coordinated strategy for simulation with our clinical partners.

OTHER NOTABLE ACHIEVEMENTS FOR ACCTTS DURING 2017 INCLUDE:

- A successful poster presentation by Dr. Angela Builes (Simulation Fellow) at the Royal College Simulation Summit (Montreal)
- Workshops at the Schulich Education Conference
- Presentation at the Chatham Kent Education Day
- Supporting a simulation based learning experience for high school students during Discovery Day
- Schulpich Competency-Based Medical Education Innovation Fund grant funding to pursue a unique simulation training opportunity that concurrently delivers learner training and faculty development during the same event.

With greater emphasis on simulation anticipated as CBME residents form a greater component of trainee cohort, ACCTTS is actively planning for faculty expansion and additional resource development in 2018. Other exciting areas of opportunity include the creation of simulation programs for staff continuing professional development.
Centre for MEDICI (Medical Evidence Decision Integrity Clinical Impact)

Dr. Janet Martin, Program Director
Dr. Davy Cheng, Medical Director

The Centre for Medical Evidence, Decision Integrity & Clinical Impact (MEDICI) is a World Health Organization (WHO) Collaborating Centre for Global Surgery & Anesthesia in the Department of Anesthesia & Perioperative Medicine, Schulich School of Medicine and Dentistry, Western University. MEDICI was established in 2011/12 with the support of the Schulich School of Medicine and Dentistry, London Health Sciences Centre, St. Joseph’s Health Care London, and Lawson Research, and received official WHO Collaborating Centre Status in 2016.

MEDICI encompasses:

- Know4Go (Evidence-Based Perioperative Clinical Outcomes Research Group): which supports research synthesis and clinical research with a focus on anesthesia, surgery, perioperative medicine, and critical care for local, national, or international settings.
- HiTEC: (High Impact Technology Evaluation Centre): a hospital-focused, evidence-based health technology assessment which contextualizes and synthesizes evidence, economics, SLEEPERs, and forgone opportunities to illuminate whether a decision should be a ‘go’ or ‘no-go’, or whether more research is required (and is worth it).

MEDICI HAS THREE KEY MANDATES:

1. PRACTICE & POLICY: To provide timely, contextualized evidence synthesis to facilitate evidence-informed decision-making related to drugs, devices, procedures, and programs in the real-world setting, with a special focus on:
   - Hospital-based health technology assessment for decision-making related to drugs, devices, procedures, and health services relevant to acute care.
   - Optimizing decision-making across portfolios of opportunities in healthcare using Know4Go
   - Health services assessment for local, regional, national, and international decision-making, to support capacity-building and improved outcomes in global surgery, anesthesia, and perioperative care

2. EDUCATION: To provide educational and capacity-building opportunities in evidence-informed decision-making, health technology assessment, health economics, health policy, and knowledge translation locally, nationally, and internationally in the developed and developing world.

3. RESEARCH: To conduct cutting-edge research to advance the front of health technology assessment, economic analysis, health policy analysis, decision-making sciences and knowledge translation in the developing and developed world.
MEDICI HIGHLIGHTS

REACH Network

In 2017, Drs. Janet Martin and Davy Cheng of the MEDICI Centre were co-applicants and co-investigators on a successful Canadian Institutes of Health Research (CIHR) Operating Grant: Strategy for Patient-Oriented Research – Guidelines and Systematic Reviews. The project is titled SPOR REACH Network and led by nominated PI Dr. Andrea Tricco (St. Michael’s Hospital, Toronto). A total funding amount of $4,997,000 was received for a period of five years.

The REACH Network aims to improve the health of Canadians through the development of a rapid learning health system, where patients receive the right intervention at the right time. The Network is made up of patients, healthcare providers, researchers, knowledge users, and policy-makers from all health system levels across Canada. Through the knowledge, expertise, evidence and skills brought together by its 177 members, the Network will support healthcare decision making and practice by providing both standard and rapid responses to knowledge-user queries posed by patients, policy and decision makers, and other knowledge-users. This approach aims to strengthen the Canadian healthcare system, increase efficiencies, decrease research waste, expand the profile of Canadian research, and support the next generation of researchers and trainees in Canada.

Distinguished Leader Award of Excellence

In May 2017, Dr. Janet Martin was awarded the Schulich Distinguished Leader Award of Excellence – Graduate/Postgraduate Education. This is the highest category award for outstanding achievements in education and leadership locally and internationally.

Vice Dean, Faculty Affairs

In July 2017, Dr. Davy Cheng was appointed Vice Dean, Faculty Affairs, the Schulich School of Medicine and Dentistry, after completing 16 years as Chair/Chief of the Department of Anesthesia & Perioperative Medicine.

EPICOR

Members: Drs. Davy Cheng, Janet Martin, and Daniel Bainbridge

The Evidence Based Perioperative Clinical Outcomes Research (EPICOR) Group is a multidisciplinary collaboration between Perioperative Medicine & Anesthesia, Surgery, Pharmacy, Medicine, and Pharmacology, housed within the MEDICI Centre, whose mandate is to provide comprehensive systematic reviews, meta-analyses, and health technology assessments of new and existing technologies including medical devices and equipment, surgical, and other intervention procedures, drugs, and diagnostic techniques in order to inform important perioperative clinical and economic questions with best available evidence.

Our goal is to identify, synthesize, and translate best evidence into decisions for policy and everyday practice, and to collaborate with others in this mission locally, nationally, and internationally.

The EPICOR Group has completed research in the following areas:

PERIOPERATIVE SUPPORTIVE CARE

- Levosimendan for Prevention of Arrhythmia and Death
- Dexmedetomidine for Prolonged ICU Sedation
- Dexmedetomidine for Awake Fibreoptic Intubation
- Dexmedetomidine for Cerebral Osmotherapy
- Dexmedetomidine for MAC
- Ketamine for Post-operative Analgesia
- Patient Controlled versus Nurse Controlled Analgesia
- NSAIDs versus Non-NSAID Multimodal Analgesia
- Cox 2 Selective Perioperative Analgesia
- Amiodarone Perioperatively
- Postoperative Nausea and Vomiting
- Perioperative Gastric Acid Suppression

BLOOD CONSERVATION & FLUID MANAGEMENT

- Antifibrinolytics
- Synthetic Colloids versus Albumin
- IV Iron
- Perioperative Erythropoietins
- Ultrafiltration
- Miniaturized Circuits
- Cell Saver

MINIMALLY INVASIVE & ROBOTIC SURGICAL METHODS

- Off-Pump versus On-Pump Coronary Artery Bypass Surgery
- Transcatheter Aortic Valve Implantation (TAVI)

MINI-MITRAL VALVE SURGERY

- Mini-Aortic Valve Surgery
- Robotic Surgery

BYPASS SURGERY

- Endovascular versus Open Vein Harvest for CABG (EHV)
- Video-Assisted Thoracic Surgery (VATS)
- Thoracic Endovascular Aortic Repair versus Conventional Open Repair (TEVAR)
- Minimally invasive versus conventional mitral valve surgery (MI-MVS)
- Transcatheter Aortic Valve Intervention Innovative Surgical & Imaging Techniques
- Stentless Valves versus Conventional Valves for Aortic Valve Replacement
- Multi-slice CT, MRI, TEE/TEE Ultrasound, versus Angiography for Aortic Dissection
- Surgical AF Ablation (MAZE and related procedures)
Research

Peer-Reviewed Grants

<table>
<thead>
<tr>
<th>Year</th>
<th>Grants (USD)</th>
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<tr>
<td>2017</td>
<td>$794,139</td>
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<td>2006-07</td>
<td>$50,000</td>
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</table>

Peer-Reviewed Publications

Journal Articles | Books and Book Chapters
Grants

Peer-Reviewed

ARANGO M, JONES PM. GASTROKE - The effect of General Anesthesia versus Sedation for patients with acute ischemic stroke undergoing endovascular treatment on three month morbidity and mortality, a feasibility study 2017-2019: $3650 of $7,300 [Year 1 of 2]


CHENG D, JOHN-BAPTISTE A, KIAI B, THAIN J, MARTIN J, SCHULZ V, ARELLANO R, BAINBRIDGE D, JONES P. Measuring Frailty and Quality of Life for Patients with Aortic Stenosis who Undergo Trans Catheter Aortic Valve Implantation or Surgical Aortic Valve Replacement. AMOSO Innovation Fund. 2016-2018: $75,000 of $150,000 [Year 2 of 2]

CHENG D, MARTIN J. Development of WFSA Global Anesthesia Clinical Research Toolkits. 2017: $10,000


CHERRY R, BUILES A, HAJI F, NOPPENS R, BOULTON M, ARANGO M. Neurosurgical-team, Simulation Based Training (NEUROSIM) Competency-based Medical Education. CBME Implementation Award, SSMD. 2017: $3,500

CHUI J, CRAEN R, HERRICK I, BOULTON M & PANDEY S. Lawson IRF: Goal-Directed Therapy in Endovascular Coiling of Cerebral Aneurysms - A Prospective, Double-Blinded, Randomized Controlled Trial. 2015-2017: $7,500 of $15,000


FIJER S, JONES P. Impact of preoperative beta blocker withdrawal on postoperative 30-day morbidity and mortality. Anesthesia IRF. 2015-2017: $5,000 of $10,000 [Year 2 of 2]


JONES PM. The effectiveness of Oscillating Positive Expiratory Pressure (OPEP) therapy in high risk patients following coronary artery bypass grafting surgery: A Randomized Clinical Trial. 2015-2017: $62,500 of $125,000 [Year 2 of 2]

JONES PM. MACDONALD B. SodiUm SeleniTe Adminstration IN Cardiac Surgery (SUSTAIN CSx-trial). A multicenter, randomized controlled trial of high dose sodium-selenite administration in high risk cardiac surgical patients. surgical patients 2017: $50,000


LINGARD L, WATLING C, CHAHINE C, CHERRY R, Advancing Assessment Science Through Competency-Based Medical Education. Dean’s Research Initiative Grant. 2016-2018: $50,000 of $100,000 [Year 2 of 2]

NOPPENS R, BELROSE J, PRADO M, PRADO V. The effect of volatile anesthetics on Alzheimer’s Disease in an animal model. IRF grant. 2017-2019: $4935 of $9,870 [Year 1 of 2]


SUKHERA J, POOLACHERLA R. Comfort & Coping strategies in children. Children’s Health Foundation. 2017-2018: $63,000 of $126,000 [Year 1 of 2]

TANEJA R. Advance Care Planning at LHSC. LHSC Funding. 2016-2018: 13,250 of $25,600 [Year 2 of 2]

TANEJA R, JONES P. Advance care planning at LHSC. AMOSO Innovation Fund. 2016-2018: $75,000 of $150,000 [Year 2 of 2]


GOTTSSCHALK BH, FUJII S, JONES PM, CHU MWA. Atypical chest pain and blood blister: more than meets the eye. The Canadian Journal of Cardiology. 2017 Sept; 33(9):1206.e7-1206.e8.


Simple congenital heart disease in adults [chapter 11]. PUENTES W, VEGAS A A.

SAMPIETRO-COLOM L L., MARTIN J J. (EDS.) Hospital-Based Health Technology Assessment The Next Frontier for Health Technology Assessment. 2016. Adis

Hospital-Based HTA and Know4Go at MEDICI in London, Ontario, Canada [Chapter 12]. MARTIN J J., LAL A, MOODIE J J., FANG Z Z., CHENG D D.

Hospital-Based HTA in China [Chapter 24] WANG L L., FANG Z Z.

Clinician Perspectives on Hospital-Based HTA [Chapter 31]. CHENG D D., MARTIN J J.


Editorials & Commentary

DHIR S S., SONDEKOPPAM RV. Reply to Dr Price. (Comment on: Optimizing the combined cuprascapular and axillary nerve (SAXX) block.) Regional Anesthesia and Pain Medicine. 2017 January-February; 42(1): 123.


JONES PM, BAINBRIDGE D D., CHU MW, LAVI R R. In reply: Isoflurane use is not associated with prolonged intensive care unit stay following routine cardiac surgery when compared to sevoflurane. Canadian Journal of Anesthesia. 2017 January; 64(1): 102-103.


Dr. Ray Zhou (centre) wins Best Paper Award at the Canadian Anesthesiologists’ Society (CAS) Annual Meeting, June 2017. The paper was based on research regarding heparin resistance and of Heparin-Induced Thrombocytopenia (HIT); it has since been published in the Journal of Cardiothoracic and Vascular Anesthesia (Jan 2018).

Dr. Deepti Vissa (QI Fellow), presents her research on single injection shoulder block at the CAS Annual Meeting, June 2017. Photo Courtesy of Dr. Chris Harle (@tifferharle)