



Schulich Medicine & Dentistry
Anesthesia and Perioperative Medicine
Annual Report 2016

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2016

Department of Anesthesia & Perioperative Medicine

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message from the
department chair
& chief



Dr. Davy Cheng, Department
Chair and Chief

Welcome to the Department of
Anesthesia & Perioperative Medicine
at the Schulich School of Medicine &
Dentistry, Western University.

Our Department provides clinical service to over 40 operating rooms daily (37,000 surgical procedures per annum) at the London Teaching Hospitals (London Health Sciences Centre – University Hospital and Victoria Hospital, and St Joseph's Health Care London).

Our Department is amongst the top five academic anesthesiology departments in Canada and has an international reputation for academic excellence in Research and Education. A few highlights in 2016 include:

- A first for Western University and Canada, the Centre for Medical Evidence, Decision Integrity, Clinical Impact (MEDICI) led by Dr. Janet Martin and Dr. Davy Cheng, was selected as a World Health Organization (WHO) Collaborating Centre in the study of Global Perioperative Surgery Care and Anesthesia.
- Our Department led by Dr. Davy Cheng chaired and developed the Circulation Track at the World Congress of Anaesthesiologists (WCA) hosted by the Society of Anaesthetists of Hong Kong

(SAHK) and the World Federation of Societies of Anaesthesiologists (WFSA), and was attended by over 6,000 delegates from 134 countries.

- At the International Anesthesia Research Society (IARS) annual meeting, Dr. Davy Cheng was elected as Chair of the Board of Trustees.
- Dr. Michael Sharpe was awarded for Lifetime Achievement Award from Trillium Gift of Life Network (TGLN) on organ donation awareness.
- In celebrating the annual World Anesthesia Day Grand Rounds in the Department, Visiting Professor Paul Barash from Yale School of Medicine delivered a special lecture on “The Game Changers: The Twenty Most Important Anesthesia Articles Ever Published”.

Our Department delivers a spectrum of medical care from conducting preoperative anesthesia assessment 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

Our Department provides clinical service to over 40 operating rooms daily (37,000 surgical procedures per annum) at the London Teaching Hospitals.

in acute care. Increasing the scope of our work in 2016, we expanded our anesthesia services and teaching to two Dental OR suites at the Schulich School of Medicine and Dentistry.

Our 89 faculty, 46 residents and 20 clinical fellows are committed to patient-centered quality care.

The Cardiac Anesthesia Program continues to be among the leading research programs in the clinical advancement of minimally invasive and robotic cardiac surgery internationally. The Comprehensive Pain Program continues to be a leading multidisciplinary research and clinical program, and has been instrumental in establishing Pain as subspecialty at the Royal College of Physicians and Surgeons in Canada. The Evidence-Based Perioperative Clinical Outcomes Research (EPICOR) Program and the Centre for Medical Evidence,

Decision Integrity, and Clinical Impact (MEDICI) have established our Department and Western University as an international and national evidence-based knowledge translation centre with high impact to health care decision-making and patient care. The Department is also well known for its clinical and research excellence in neuroanesthesia, transplantation, critical care, perioperative blood management and pain medicine.

The Department provides clinical training and didactic teaching to undergraduate (UGE) and postgraduate (PGE) trainees in anesthesia and allied health care fields both at Western University and outreach community programs in Southwestern Ontario. The Anesthesia Simulation Program at CSTAR (Canadian Surgical Technologies & Advanced Robotics) led by Anesthesia (Dr. Richard Cherry) provides training for UGE, PGE and allied health professionals in critical event management and opportunities for education research in this area. The Women

and Children's Hospital at LHSC is also the tertiary centre for over 6,000 obstetric delivery and pediatric/neonatology care at Southwestern Ontario.

The Department has been attracting clinical/research fellows and visiting scholars from around the world (Australia, New Zealand, UK, USA, Germany, Singapore, Korea, Japan, China, Thailand, Columbia, Egypt and Saudi Arabia) for training in anesthesia and perioperative medicine, as well as critical care medicine.

The leadership of our faculty has been recognized nationally and internationally.

They have been awarded Canadian Anesthesiologists' Society CAS Gold Medal (Davy Cheng, Wojciech Dobkowski, Patricia Morley-Forster), CAS Research Recognition Awards (John Murkin, Davy Cheng), CAS Clinical Teacher Award (John Fuller),

*The Department has been attracting
clinical/research fellows and visiting scholars
from around the world*

CAS John Bradley Young Educator Award (Arif Al-Areibi, Jeff Granton), CAS Research Awards (Daniel Bainbridge, Ronit Lavi, Collin Clarke), YWCA Women of Distinction Award (Su Ganapathy), the Hind Ratten Award (Jewel of India) (Achal Dhir), Western Silcox-Fellow Mentorship Award (Lois Champion, Ivan Iglesias); Associate Editor of Canadian Journal of Anesthesia (Philip Jones).

Faculty who has been inducted as Honorary Member of the German Society of Anaesthesiology and Intensive Care Medicine (Davy Cheng), Fellow of the Royal College of Anaesthetists in Ireland (John Murkin), the Canadian Academy of Health Sciences (Davy Cheng), honored with an Outstanding Contribution Award for Chinese Anesthesiology in China (Davy Cheng), and honored with CCPE Credentials (Davy Cheng) by the Canadian Medical Association (CMA) and the Canadian Society of Physician Executives (CSPE); elected as Trustee for the Society of Medical Decision Making (SMDM, Ava John-Baptiste).

Our Faculty have been elected as Board of Trustee in the International Anesthesia Research Society (Davy Cheng), Board of Director in the Society of Cardiovascular Anesthesiologists (Davy Cheng), NIH Protocol Review Committee (John Murkin), Chair of Royal College of Surgeons and Physicians of Canada (RCSPC) Anesthesiology Examination Board (Sandra Katsiris), Past President of the Association of Canadian University Departments of Anesthesia (Davy Cheng), Past OMA Anesthesia Chair (James Watson), OMA Honor of Excellence in Palliative Care (Valerie Schulz), LHIN Regional Critical Care Lead (Michael Sharpe), SJHC London MAC Award (Geoff Bellingham, Bill Sischek) and Joint LHSC/SJHC MAC Award (Davy Cheng); Council of the College of Nurses of Ontario (CNO) (elected Nurse Practitioner in Pain Program, Heather Whittle).

They have been appointed Chair of the Regional Advisory Committee of the RCPSC (John Fuller), Member of the Canadian Task Force Addressing Tertiary Pain Clinic Wait time and leading the establishment of Pain Specialty Certification at the RCPSC (Pat Morley-Forster). They have been invited to pen white papers to the Canadian Parliamentary Committee on Palliative and Compassionate Care (Valerie Schulz) and on Health Technology Assessment in Canada (Janet Martin).

Our faculty (Brian Church) serves in the NATO Role 3 Multinational Medical Unit which was awarded the Dominique-Jean Larrey Award, the highest NATO honor for medical achievements in Afghanistan with its highest survival rate in combat medical operation.

While I look back on the continuing successes of our Department in exemplary clinical deliverables and quality of care, expanded depth and breathe of our education in undergraduate and postgraduate education, the high impact multidisciplinary research, and the significant administrative contributions at the hospitals, University, OMA and MOHLTC, I whole-heartedly want to congratulate all those whose contributions made this possible.

Best Regards,

Davy Cheng, MD MSc FRCPC FCAHS CCPE
*Distinguished University Professor
Chair & Chief, Dept. of Anesthesia & Perioperative Medicine
Professor, Critical Care Medicine
Research Chair, Evidence-based Perioperative Clinical Outcome Research (EPiCOR) Program
Western University, London, Canada*

department organization

2016 EXECUTIVE

Davy Cheng, Chair/Chief

William Sischeck, St. Joseph's Health Care London Site Chief, and City-wide Clinical Coordinator

Ramiro Arellano, University Hospital Site Chief

George Nicolaou, Victoria Hospital Site Chief

Lois Hayter, Manager Administration & Finance

DEPARTMENT COUNCIL

Davy Cheng, Chair

Achal Dhir

Arif Al-Areibi,

Daniel Bainbridge

Geoff Bellingham

George Nicolaou

Ian Herrick

Indu Singh

Kevin Armstrong

Michelle Gros

Miguel Arango

Mohamad Ahmad

Ramiro Arellano

Richard Cherry

Ron Butler

Ruediger Noppens

William Sischek

ACADEMIC AFFAIRS COMMITTEE

Ronit Lavi, Chair

Andreas Antoniou

Davy Cheng

Fiona Ralley

Kevin Armstrong

Miguel Arango

Ramiro Arellano

Shalini Dhir

UNDERGRADUATE

Michelle Gros, Director

Pravin Batohi

Jonathan Brookes

Lori Dengler

Charlotte Sikatori

POSTGRADUATE

Arif Al-Areibi, Program Director

Andreas Antoniou, Associate Director

Davy Cheng, Chair of Department of Anesthesia and Perioperative Medicine

Lori Dengler, Education Coordinator

William Schultz, Chief Resident

Peter Mack, Site Coordinator - University Hospital

Kristine Marmai, Site Coordinator - SJHC

Stephen Morrison, Site Coordinator - Victoria Hospital

Jonathan Brookes, Resident Research Coordinator

Richard Cherry, Simulation and Information Technology Director

Nicole Campbell, Community (St. Thomas) and SWOMEN

Ed Roberts, Community (Windsor) and SWOMEN

Colin Phillips, Resident Representative

Nicole Quigley, Resident Representative

POSTGRADUATE PAIN MEDICINE RESIDENCY

Geoff Bellingham, Director

Charlotte Sikatori, Education Director

CONTINUING MEDICAL EDUCATION

Ian Herrick, Chair

Lee-Anne Fochesato

FELLOWSHIP

Miguel Arango, Program Director

Andrea Fragassi, Program Coordinator

Achal Dhir, Liver Transplant

George Nicolaou, Thoracic and Vascular

Indu Singh, Obstetric

Pat Morley-Forster, Pain Management

Ramiro Arellano, Cardiac

Richard Cherry, Simulation

Su Ganapathy, Regional

CARDIAC SURGERY RECOVERY (CSRU) CONSULTANTS

Ron Butler (Director)

Daniel Bainbridge

Davy Cheng

Jeff Granton

Philip Jones

RESEARCH COMMITTEE

Daniel Bainbridge, Chair

Collin Clarke

Craig Railton

Davy Cheng

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 Nicolaou

Ian McConachie

Jason Hoogstra

Lois Hayter

Pravin Batohi

Ron Butler

Sandra Silverthorn

ANESTHESIA QUALITY ASSURANCE, CITY-WIDE

Ian Herrick, Director

Anne Marie McIlmoyle (Director, Perioperative Services, SJHC)

Craig Railton (VH)

Geoff Bellingham (SJHC)

Indu Singh (SJHC)

Michelle Gros (VH)

Ronit Lavi (UH)

SITE ROUNDS COORDINATORS

Peter Mack (UH)

Gary Simon (VH)

Paidrig Armstrong (SJHC)

Shalini Dhir (Regional)

EQUIPMENT

Jason Hoogstra

JOURNAL CLUB CONVENERS

Philip Jones

Timothy Turkstra

ADMINISTRATIVE SUPPORT STAFF

Amanda Schwindt

Andrea Fragassi

Brie McConnell

Cathy Pollard

Cathy Worsfold

Charlotte Sikatori

Christina White

Heather Pierce

Jessica Moodie

Jiyon Ryu

Kathy Bilton

Kim Harrison

Lee-Anne Fochesato

Linda Szabo

Lori Dengler

Nicole Moyer

Ola Bienkowski

Sarah Rayner

Shannon McConnell

new faculty

Hilda Alfaro

Subspecialty: Cardiac Anesthesia
PRIMARY SITE: UH

Dr. Hilda Alfaro received her MD from Pontificia Bolivariana University in Medellin Colombia where she also completed her residency and a cardiovascular anesthesia fellowship. Dr. Alfaro has been a clinical fellow with the Department since 2013 in cardiac anesthesia. Dr. Alfaro is also pursuing a Master of Professional Education in Curriculum and Pedagogy from Western University. Her current research interest is investigating pulmonary vein flow as a useful tool to determine good isolation in one lung ventilation and correlation with arterial blood gases.

Suzanne Flier

Subspecialty: Cardiac Anesthesia
PRIMARY SITE: UH



Dr. Flier received her Doctorate in Medicine from Utrecht University in the Netherlands, she also holds a Master's Degree in Clinical Epidemiology and is currently completing her PhD studies in anesthesiology. Dr. Flier has an extensive list of publications and will be joining our Department in a Clinician-Researcher role.

Mauricio Giraldo

Subspecialty: Neuroanesthesia
PRIMARY SITE: UH

Mauricio Giraldo completed his medical school and residency program in Pontificia Bolivariana University of Medellin Colombia. After almost 10 years working as Associate Anesthesiologist in different subspecialties, he completed both cardiac and neuroanesthesia fellowships in 2013 and 2014 respectively here at Western University.

Mauricio has been working as a Clinical Fellow for the past year in our department and is currently working on research projects and completing an Intraoperative Neuromonitoring Course at the Michener Institute.

Mahesh Nagappa

Subspecialty: Ambulatory and Acute Pain Anesthesia
PRIMARY SITE: UH

Dr. Nagappa received his MD in Anesthesia from JIPMER, University of Puducherry in India in 2008. He joins us in the Clinician-Researcher role from Toronto Western Hospital, University of Toronto, following a fellowship in Perioperative Medicine and Ambulatory Anesthesia. Nagappa is a well published researcher in several major publications, and is an avid presenter with many poster and power point presentations at annual anesthesia meetings such as: IARS, ASA, SASM, ISPCOP, CSS and CAS.

Rudy Noppens

Subspecialty: Neuroanesthesia
PRIMARY SITE: UH



Dr. Ruediger "Rudy" Noppens was an associate professor of anesthesiology at the Medical Center of the Johannes Gutenberg-University in Germany. As a clinician he was not just part of the anesthesia team but also worked in pre-hospital emergency medicine as a rescue helicopter doctor and served as a chief emergency physician. During his medical training in Germany he also studied in Dublin, Ireland. He completed a post-doctoral fellowship in the field of neurosciences at Oregon Health & Science University, USA. Dr. Noppens is active as both a clinician and a research scientist. His clinical research pursuits have included strategies for airway management, innovative airway devices in anesthesia and non-invasive

hemoglobin monitoring. Dr. Noppens has also studied experimental ischemia in a variety of animal models. He has worked on strategies for preconditioning and reperfusion after experimental brain ischemia as well as mechanisms on neuronal injury.

Ramesh Vedagiri Sai

Subspecialty: Obstetric Anesthesia
PRIMARY SITE: VH



Dr. Sai has over 10 years of training and experience in India, UK and Canada. Dr. Sai obtained his DA and MD in Anesthesiology in 2002 from Medical College Trivandrum in India, a Post-Doctoral certificate in cardiac anesthesiology and Critical Care from Madras Medical Mission in Chennai India in 2003, Primary FRCA from the Royal College of Anesthetists UK in 2005, and most recently, Ramesh completed his fellowship in Obstetric Anesthesia at Western University in 2014.

Dr. Sai also has an interest in regional anesthesia, research and teaching, and is currently working towards his Teaching Certificate at Western University and MSc in Clinical Trials at LSHTM. With several publications, poster presentations, oral presentations and merits Dr. Sai is expected to be a dynamic member of the department.

Ilana Sebbag

Subspecialty: Obstetric Anesthesia
PRIMARY SITE: VH

Dr. Sebbag completed her MD (2004) and residency in Anesthesiology (2009) at the University of Sao Paulo in Brazil, where she subsequently worked as a staff anesthesiologist for three years, as well as an official instructor for the AHA ACLS courses. In 2005, she served as a military physician (2nd Lieutenant) in the Brazilian Air Force, and in 2012, she came to Canada, specifically the University of British Columbia, in order to complete a fellowship in Obstetric Anesthesia and in General with a focus in Regional Anesthesia. She joins us after spending two years as a fellow in our department at Victoria Hospital. Ilana has several national and international anesthesia meetings' presentations, as well as multiple peer-reviewed publications.

Jennifer Vergel de Dios

Research Focus: Global Health and Internationalization
PRIMARY SITE: VH

After finishing medical school at the University of Toronto, Jennifer completed her anesthesia residency at Western followed by a MEDICI Global Health fellowship focusing her studies on global maternal mortality. As a senior resident she volunteered with the Canadian Anesthesiologists' Society International Education Foundation by teaching anesthesia residents in Rwanda and completed an internship at the World Health Organization headquarters in their Essential and Emergency Surgery program. She is currently completing post-graduate studies in health economics at the University of York (UK) and looks forward to creating the Global Anesthesia program in the department.

Ray Zhou

Subspecialty: Cardiac Anesthesia
PRIMARY SITE: UH



Dr. Ray Zhou completed medical school at the University of Calgary and anesthesiology residency training at Western University and the University of Ottawa. This was followed by fellowship training in cardiac anesthesiology and intensive care at the Toronto General Hospital of the University of Toronto. Dr. Zhou's education and research interest include cardiovascular anesthesia, echocardiography, and point-of-care ultrasound. At the Toronto General Hospital, Dr. Zhou designed and implemented a training program for the cardiac anesthesiology fellows on the management of cardiac arrest in cardiac surgical patients in the CVICU.

newsmakers

OPERATION WALK

Operation Walk Canada Inc. is a not-for-profit, volunteer medical service organization. Our purpose is to provide total joint replacement surgery to patients who live in developing countries and who due to social, political and economic factors have little or no access to care for their debilitating bone and joint diseases, the most common of which is osteoarthritis.

I had the pleasure of taking part in the Operation Walk mission this year to Cuenca, Ecuador from April 7th–14th. This is a short summary of my experience working at the Santa Ines Hospital, a private hospital with approximately 150 beds located in the city of Cuenca.

Operation Walk is a non-profit volunteer medical organization that provides total joint replacement surgery to patients living in Ecuador and Guatemala with advanced and severe osteoarthritis that don't have access to specialized surgical care locally. My mentor and primary supervisor on the trip was Dr. Miguel Arango, who has been an integral member of Operation Walk since it began.

The surgeries are often complex and challenging procedures to treat developmental dysplasia of the hip (DDH), a condition which in Canada is often diagnosed and treated much earlier in a patient's life, with excellent prognosis for a normal hip joint. Unfortunately, in developing countries such as Ecuador, this condition often goes untreated and undiagnosed which results in osteoarthritis, significant hip deformities, leg length discrepancies and often disabling pain. Interestingly, one of the major causes of DDH can be attributed to the way in which mothers swaddle their babies from birth with the hips and knees in extension. This can cause joint dislocation and the formation of a pseudo hip joint higher up on the pelvis.

At the start of the trip, we began with a clinic to identify patients who would most benefit from surgical procedures. The patients were pre-screened by a local physician, Dr. Manuel, who was also a major part of the mission. This clinic ran in much the way our pre-admission clinics do at home, with the addition of translators and an absence of pre-operative testing. We were lucky if we had a Complete Blood Count and therefore relied on history and physical exam to exclude any patients with major comorbidities.



Anesthesia Resident and PGY2, Dr. Bethany Oeming, and Dr. Miguel Arango, Dept Director of the Neuroanesthesia and Fellowship programs, recently volunteered their time and expertise to the Operation Walk Initiative.

One patient in her mid-70's had to be turned down as she was extremely weak and deconditioned, wheelchair bound, and likely had an undiagnosed inflammatory arthritis condition. She could not flex/extend her cervical spine, had significant scoliosis of the lumbar spine and had other clinical findings consistent with a rheumatoid arthritis picture. In discussion with the surgical team, we had to make the decision not to offer this lady an operation for her painful hip given the lack of resources (including the potential requirement for ICU post-operatively), potential for difficult intubation and/or spinal technique, and the fact that we were leaving in 6 days and may have trouble with post-operative complications. This was a learning opportunity for me with respect to patient selection within a limited resource setting.



By the end of the afternoon, we had selected our patients (3 patients per OR team per day for 4 days). Next was organizing all our anesthesia supplies for work the next day. Quickly I learned that we had a number of items that had been left behind. These included medications such as phenylephrine, rocuronium, succinylcholine, atropine, glycopyrrolate and ephedrine. We also had only one face mask and two extra circuits. Fortunately, we were able to purchase medications from the local pharmacy to fill in the gaps. They did not carry phenylephrine, however, so we had to substitute it with ephedrine. I was nervous about this in particular because I am used to using phenylephrine to treat spinal-anesthetic related hypotension. We also had to make sure we had enough midazolam, propofol, tranexamic acid and 0.5% bupivacaine for the 4 days. I have never had to work in a setting with limited resources, and I learned first hand that this situation required an even greater focus on patient safety.

Getting into the operating rooms, there were a number of things I noticed. First off, the anesthesia machines were different in every OR and much older models. There was no backup oxygen supply. There was no scavenging system for the inhalational agents (sevoflurane and desflurane). There was only one suction supply which was being used by the surgical team. In the event we were to need urgent suction, we had to come up with a plan to quickly alert the surgical team and switch the suction onto a Yankaur for our use. I had to think and plan in a way that would not normally have been required at home.

There were two operating teams. The London team consisted of the head of Orthopedics in London, Dr. Jamie Howard, his fellow Dr. Steve Preston, and 4th year resident Dr. Erin Donohue. The other team was from Lima, Ohio and was lead by Dr. Jim Patterson. The anesthesiologist from Ohio was Dr. Paul Schweiller. I was the only Anesthesiology resident on the trip, which was to my benefit as I got to do the spinal procedures for both operating rooms. Overall, we performed 25 Total Hip Arthroplasties (many of which included shortening osteotomies) and one femur fracture repair. I completed a total of 24 spinals in four days.

I worked closely with the two anesthesiologists Dr. Schweiller and Dr. Arango. Dr. Schweiller works at a private orthopedic hospital in Lima, Ohio and he does all of the regional blocks and spinals working alongside Nurse Anesthetists. He was a fabulous teacher and I learned a lot from him. You both know Miguel, of course, and he was an exceptional mentor throughout the trip.

One of the memorable cases on the second day was that of a complicated total hip arthroplasty with shortening osteotomy who developed hemodynamic instability following bleeding. A large vein had been transected and the surgical clips were too small to contain it. The patient lost around 1L of blood and began to get hypotensive, tachycardia, and restless. Given the ongoing attempts by the surgical team to control bleeding, we had to act quickly and convert to a general anesthetic. As the patient was in the lateral position, I intubated for the first time in this position. We had to start a second large bore IV and call for blood. Blood products were an interesting aspect of the trip as well. Prior to coming into hospital, patient's had to get family members to donate blood and they each came with one unit of whole blood. If more was needed, the process needed to be repeated and it could take up to an hour to get more blood. We therefore decided early to ask for this to be arranged.

Overall, this trip was an invaluable experience in teamwork, resource management, working with translators and dealing with language barriers, practicing medicine in a developing country, and learning from a dedicated team of nurses, nurse practitioners, general practitioners, surgeons, physiotherapists, pedorthists, and volunteers. Not to mention an excellent way to practice my spinals!

The patients themselves were some of the most memorable people I have ever encountered. It was an emotional last day wishing them the best with their recovery and saying goodbye. They were so grateful and expressed such sincere gratitude for the opportunity to be able to walk again. Operation Walk is an incredible opportunity for anesthesia residents to get involved with global health initiatives and I am grateful to Dr. Miguel Arango and the department for giving me the chance to be a part of the 2016 team. If you would like more information or have any questions, please don't hesitate to ask!

DR. BETHANY OEMING (PGY2)

DEPARTMENT OF ANESTHESIA & PERIOPERATIVE MEDICINE STRATEGY MAP: 2015–2020

	OUR DEPARTMENT VISION									
Thus, achieving our VISION.	To be an internationally acclaimed academic department in anesthesia, pain and critical care. We strive to provide exemplary bestc practice patient care and foster excellence in anesthesia delivery, research and education at the undergraduate and postgraduate levels, and in continuing medical education at the regional, national and international levels.									
And, meet the needs of the PEOPLE we serve,	CLINICAL CARE OUTCOMES			EDUCATION	OUTCOMES		RESEARCH OUTCOMES			
	Best patient care experience	Optimal quality of care and patient outcomes across the perioperative continuum	Right Anesthesiologist (subspecialty), for the right patient needs, at the right time	Resident and fellow graduates are leaders in anesthesia and perioperative care for the 21st century	Faculty are exceptional educators	We are a leader in competency-based education	Global leader in research that improves patient care and safety	Top destination for developing trainees and new faculty into independent investigators positioned to succeed	Exceptional research productivity in anesthesia and perioperative medicine	
So we can operate with EFFECTIVENESS & EXCELLENCE,	IN ORDER TO ACHIEVE OUR OUTCOMES, WE MUST EXCEL AT...									
	Patient-centred ‘Surgical Home’ leadership		Evaluation and management of pain and physical /psychological symptoms	Adhering to a subspecialty care and delivery model	Developing our faculty to be excellent educators	Innovative and relevant curriculum design and delivery	Educational supervision and assessment	Advancing scientific discovery and innovation - Periop Evidence-based HTA, Cardiac, Pain and Neuroanesthesia	Research design and coordination	Providing an environment that sets researchers up for success
	Administrative leadership in operating and procedure rooms	Assessing and managing risk across the perioperative continuum								
	Partnering with surgeons and other care providers	Managing patient flow and triage through the surgical experience	Transparent communication and teamwork	Evidence-based problem solving & decision making	Simulation and experiential education	Distributed education within Southwestern Ontario	National and global healthcare outreach and educational impact	Grant writing and preparation	Collaborative multi-disciplinary teamwork and collaboration	Collecting, harvesting and using data to drive research
And, build a STRONG & PREPARED department,	IN ORDER TO HAVE THE REQUIRED CAPACITY TO EXCEL, WE MUST ...									
	Recruit, develop and support faculty to be successful		Cultivate a positive workplace that enables wellness and work/life balance		Create and trust-based	sustain a confident, and inspiring culture	Fully engage and empower faculty and staff		Mobilize value-added technologies, tools and equipment	
We use our RESOURCES wisely,	IN ORDER TO SUSTAIN OUR CAPACITY, WE MUST ...									
	Be fiscally accountable and disciplined		Diversify and expand our academic funding		Collect and to inform our	utilize high quality data practices and decisions	Develop and apply quality improvement (plan, do, check, act) and best practice protocols		Expect and measure effectiveness and productivity in clinical service, education and research	
Guided by our VALUES,	OUR VALUES We are: Leaders Respectful Accountable Collaborative Innovative Inclusive Compassionate Imaginative									

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 the provision of quality care, the Department has an established quality assurance 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 of anesthesia care.
- Support education by encouraging the engagement of department members and trainees in projects to assess and enhance quality care.
- Support research activities aligned with the objectives of the departmental QA framework and 'learnings' derived from local research initiatives with relevance to the quality or safety of anesthesia care.

The Committee met quarterly and was supported administratively by Ms. Lee-Anne Fochesato.

highlights 2016

- In 2016, the Quality Program expanded the Quality Improvement teaching block for the postgraduate academic program that was initially implemented in 2015. This further addition to the postgraduate teaching program allowed for the continued promotion of quality and safety competencies amongst our trainees.
- In 2016, the Quality Program began the Department's first Quality Improvement fellowship program. Dr. Catalina Casas Lopez was welcomed as the Department of Anesthesia and Perioperative Medicine's first Quality Improvement Fellow. Dr. Casas Lopez is working on a variety of quality improvement initiatives as part of her Fellowship, with a focus on evaluating and optimizing the transfer of cardiovascular surgical patients from the operating rooms to the Cardiac Surgery Recovery Unit at LHSC.
- Continuing quality assurance surveillance/audit activity.
- Dr. Ekta Khemani, a member of the QA Committee, presented at City-Wide Multidisciplinary Perioperative Grand Rounds on the Enhanced Recovery After Surgery (ERAS) protocol at Victoria Hospital. Dr. Khemani also promoted research in QI with a tutorial of how to conduct QI-based research projects that she presented at our Department's Research Rounds.
- 2016 also marked the commencement of multiple department-wide QI research projects and initiatives in Obstetrical Anesthesia, Regional Anesthesia, and Pain Management.



Research and scholarly publications by members of the Quality Committee in 2016 include:

Poster Presentations

Canadian Anesthesiologists' Society Annual Meeting
Vancouver, June 2016

Applying a quality lens to case reports in Anesthesia
Davidson Z, Khemani E, McConnell B, Oeming B, Girgis S, O'Byrne S, Matava C.
Department of Anesthesia and Perioperative Medicine, Western University, London, Canada and The Hospital for Sick Children, University of Toronto, Toronto, Canada

Canadian Anesthesiologists' Society Annual Meeting
Vancouver, June 2016

ERAS: Are we making the mark? A quality improvement initiative
Khemani E, Gray D, Czuczman M, Dawson C, Flesher F, Qasem F, McConachie I, Vogt K, Dunn K, Leslie K.
Department of Anesthesia and Perioperative Medicine and Department of Surgery
Western University Department of Anesthesia and Perioperative Medicine, London, Canada

clinical sites

Victoria Hospital, London Health Sciences Centre (LHSC), University Hospital LHSC, and St. Joseph's Health Care London



St. Joseph's Health Care London

Dr. William Sischek, Site Chief

As 2016 draws to a close we are marking several events in our year. We note with pride the ongoing excellence of clinical care and academic activity provided by the city-wide Department of Anesthesia and Perioperative Medicine. The goal of excellent clinical care and attention to the academic mandates of the Department and Hospital continue to be realized by the deliberate integration of faculty across the multiple hospital sites in the City of London.

In May we celebrated the retirement of two long time St. Joseph's Hospital anesthesiologists—Dr. Logan Millman and Dr. John Parkin. Both had successful

and noteworthy careers in the Department and had been part of the many sentinel changes over the years, each contributing in their own way. Their many contributions were noted at the Department's annual retirement celebration in early June. We were saddened by the unfortunate passing of Dr. Millman a few weeks after his retirement and he will be greatly missed by many of us.

2016 saw a growth in the SJHC Pain Clinic which has named Dr. Geoff Bellingham as its Medical Director. This new appointment will allow Geoff the opportunity to set expanded goals for the clinic which recently received approval for an additional \$1.3M in global funding from the Ministry of Health and Long Term Care. In addition to the successful Pain Medicine residency program which Dr. Bellingham helped establish in London, this added support endorses the very important work done by this clinic. It also ensures the prominence which the Pain Management Program has achieved, both in the Department and the Hospital, is continued.

Our department continues to support and foster the Regional

Anesthesia program, which has a particular prominence at SJHC because of the Roth-McFarlane Hand and Upper Limb Clinic (HULC). The expertise of the Regional group continues to grow as we recruit to the program and look forward to the expansion of Regional Anesthesia services across the city. The regional anesthesia program supporting the HULC continues to generate interest as we recruit fellows from around the world to take part in the clinical, teaching and research activities of the program. Their innovative, efficient techniques and home support of blocks help set a standard for others to follow.

The MOHLTC's many challenges to hospitals and physicians to provide excellent patient care are being actively engaged at St. Joseph's Health Care London and we are proud to contribute to those efforts. We continue to support the important work of the HULC, the Breast Program, Urology, Dental Surgery, General Surgery, Mental Health and so many other services. As we look forward to 2017 we see that it holds a great deal of promise.



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 also 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 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 Office Resources

The Anesthesia office space has been modernized with updated computer equipment, an up to date medical library, and a formal classroom/team room that utilizes 'smart-board' technology.

Anesthesia Operating Room Resources

Anesthesia resources include a transesophageal echocardiography machine with 3-D 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.

Thoracic/Vascular Anesthesia

Both thoracic and vascular subspecialties have flourished and remain popular as resident rotations and as 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. With respect to vascular anesthesia, our

We now have eighteen state of the art Operating Suites equipped with the latest anesthesia and surgical technological advances.



Dr. George Nicolaou, Site Chief

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.

Paediatric Anesthesia

This paediatric division is under the guidance of Program Director, Dr. Mohamad Ahmad, with input from members of the Paediatric Anesthesia Subspecialty Group. We currently support three to 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 procedure that is 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 paediatric preoperative assessment and postoperative pain management services. Perioperative Pain management, in paediatric patients, is offered in many forms including; PCA, epidurals, single-shot nerve blocks and/or indwelling regional block catheters. We have developed the first paediatric, multi-disciplinary chronic pain program in Southwestern Ontario. Interested staff continues to participate in the nationwide telemedicine conferences hosted by the Hospital for Sick Children, Toronto, ON. Other educational activities in paediatrics include a monthly journal club in collaboration with McMaster, Hamilton. We also have weekly paediatric rounds to discuss interesting cases and topics. Recently, we have established a multidisciplinary paediatric simulation academic program to deliver simulation-based crisis management training to anesthesia and paediatric residents and fellows, as well as to the nursing staff.

Regional Anesthesia

The regional program at Victoria Hospital is for both paediatric and adults patients. It is a multidisciplinary block room with state-of-the-art imaging and all of the necessary supporting equipment and staffing. We have also developed patient information pamphlets explaining the role of paediatric regional anesthesia in pain management, postoperative care after regional anesthesia and on what to do if there are any concerns. We are

also developing a paediatric home regional anesthesia program, where we can 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. Ekta Khemani has helped advance and improve our Quality Assurance program. After completing her Masters of Medical Sciences and residency in Toronto, Dr. Khemani completed a 1 year certificate in Quality Improvement and Patient Safety at the University of Calgary, where she won first prize for best quality improvement project. Dr. Khemani currently sits on the Victoria Hospital Perioperative Quality Council and the Department of Anesthesia Quality Assurance committee. She is also the recipient of the mini fellowship award for Six Sigma in healthcare. Her current projects include a multidisciplinary quality improvement initiative in ERAS, examining quality indicators in anesthesia care, and developing a QI curriculum for residents and fellows.

The Operating Suites at Victoria Hospital have undergone major renovations and reconstruction.

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 allowing 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 continues to expand. We have two nurse practitioners that 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.

University Hospital, LHSC

Dr. Ramiro Arellano, Site Chef

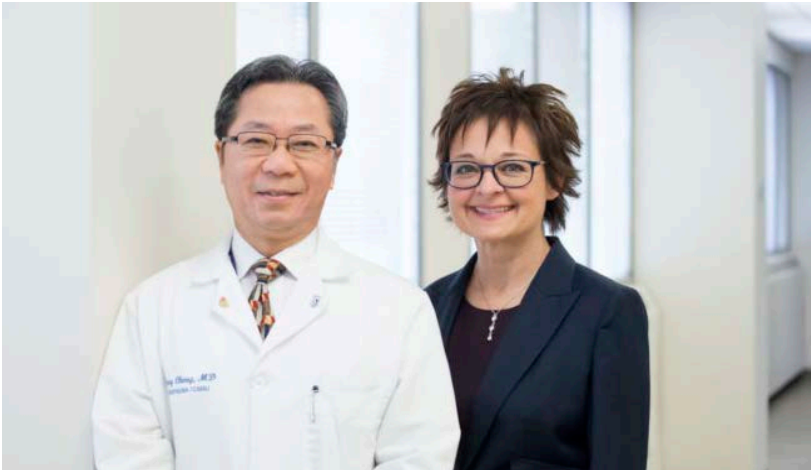
As 2016 draws to a close, we are seeing the culmination of almost five years' efforts towards full city-wide integration of staff and services. The clinical academic staff functions principally from one of the two acute care hospital groups at either the University or Victoria Hospital. Between them the two groups cover the clinical and academic commitments of the city including St. Joseph's Health Care of London Hospital, an ambulatory hospital specializing in upper limb, eye, urology and breast surgery services in addition to ambulatory Medicine and Pain Services.

Growth has continued in the Department on several fronts, with the addition of varied staff. 2015 saw the arrival of three new staff: Dr. Gopa Nair, a pediatric specialist trained as a resident at the Cleveland Clinic, an Obstetric and Ambulatory fellow at the University of Toronto and a subspecialty pediatric fellowship at the Seattle Children's Hospital; Dr. Ekta Khemani, a graduate of the University of Toronto with training in Quality Management and Certification in Patient Safety; and Dr. Matt McFarling, a former resident of the program who returned following subspecialty fellowship training in Cardiac Anesthesia and certification in transesophageal echocardiography at the Ottawa Heart Institute.

In addition to these individuals the Department continues to recruit actively to all sub-specialty programs. The expanding out-of-OR services in addition to new clinical commitments in the recently opened Schulich School of Medicine and Dentistry dental suite continue to present us with challenges and opportunities. Our current staff complement of over 85 clinicians city wide has ample room to expand to meet the demands being seen in the growing and complex world of our University-based department. On a related note, the Department practice plan evolved to a partnership structure this year, after many years as an association of clinicians. This change marks the dissolution of the Anaesthesia Associates of London, Canada, an organization in continuous existence since the 1950's.

The formation of the formal partnership is expected to further facilitate the important academic and clinical work of the Western University Department of Anesthesia and Perioperative Medicine and provide a powerful force to drive the "business of medicine" for the Department members and their employees. Hopefully 2016 will see the successful continuation of our growth and faculty recruitment to meet the ever increasing clinical, research and teaching needs of our vibrant, expanding university department.

newsmakers



WESTERN UNIVERSITY FACULTY, DR. DAVY CHENG (MEDICI MEDICAL DIRECTOR) AND DR. JANET MARTIN (MEDICI DIRECTOR) WORK IN COLLABORATION WITH THE WORLD HEALTH ORGANIZATION (WHO).

Dr. Cheng represented the Department of Anesthesia and Perioperative Medicine, as well as the Scientific Affairs Committee of the World Federation of Societies of Anesthesiologists (WFSA), and Dr. Martin chaired a working group on Data Metrics and Quality Indicators in Emergency and Essential Surgery and Anesthesia Care.

MEDICI has been collaborating with WHO GIEESC on:

- Developing evidence-informed guidelines
- Advocating for development of capacity for essential surgery, anesthesia, emergency and critical care in resource-poor settings as a component of Universal Health Care
- Providing workshops on evidence-informed decision-making in essential surgery and anesthesia contextualized to resource-poor settings

Janet Martin, Davy Cheng, and Jennifer Vergel de Dios are co-authors on a newly published paper, “Survey of the capacity for essential surgery and anaesthesia services in Papua New Guinea”. This paper is the result of a WHO GIEESC project in collaboration with local health

authorities, and provides a first-time cross-sectional measure of capacity gap to provide essential surgical, emergency and anesthesia services in Papua New Guinea.

Dr. Martin and Dr. Cheng also presented the MEDICI led WHO Guidelines for Screening, Diagnosis, Triage, and Management of Patients Presenting for Surgery in the Context of Ebola Virus Disease (EVD) and Other Viral Haemorrhagic Fevers (VHF). The guidelines and accompanying algorithm provide evidence-based recommendations for the safe provision of anesthesia and surgical services in the context of EVD.

See: Janet Martin, Goa Tau, Meena Nathan Cherian, Jennifer Vergel de Dios, David Mills, Jane Fitzpatrick, William Adu-Krow, Davy Cheng. Survey of the capacity for essential surgery and anaesthesia services in Papua New Guinea. *BMJ Open* 2015;5:e009841 doi:10.1136/bmjopen-2015-009841. *Global health*



By: Lori Dengler (pictured above), Postgraduate Education Coordinator

Leave for Change

Position: Career Development Advisor, Tra Vinh University Teaching and Learning Centre
Country and Place of Assignment: Tra Vinh, Vietnam
Dates: July 23–August 14, 2016

What motivated you to apply for Leave for Change?

I have always been a very active volunteer in both my London and Western/Schulich communities, and I became very interested in Leave for Change when Frank Miller was selected to go a couple of years ago. I also attended a presentation by Michele Parkin after her return from Malawi. I kept the program on my radar, but was somewhat intimidated by the position descriptions on the Uniterra website and by the idea that only two Western employees would be selected annually. When I finished my second BA in Adult Education this year and with my HR background, I saw a really good fit with a couple of the available positions and decided to take a chance and apply.

What do you hope to share with your host?

I have a passion for teaching and lifelong learning, and I hope to use that enthusiasm and my educational and volunteer experience to assist my partners at the Teaching and Learning Centre at Tra Vinh University in Vietnam with preparing workshops that will help their them to teach soft skills, like teamwork, conflict

Leave for Change is a volunteerism program that brings the world to your workplace. The employee gains experience, exposure to social/development issues and takes a key role in showing how we are making a difference internationally. The program enables two staff this year to transform their vacation into a three to four-week volunteer assignment in one of 10 developing countries in Africa, Asia and Latin America. Volunteers contribute skills and advice to local partner organizations with the support of a team of professionals in the host country. Employees contribute by using their vacation time to serve on assignment in a developing country; the university invests in the employee by matching costs shared with external partners.

resolution, and change management to their teachers and students. I am very excited to make a connection with my higher education colleagues in another country and hope to learn about Vietnamese working and leisure lives and represent Western and Schulich as welcoming global citizens.

My hosts are additionally quite pleased that I work with students at Schulich and are anticipating that the students at their Medical and Pharmacy Division might also benefit from my time there.

What do you think you will gain personally from this experience?

Although I have been very excited about this opportunity since I learned I would be going, my pre departure training really helped to cement the idea that I will be immersed in the Southern Vietnamese lifestyle. I relish the chance to be just a bit more than a tourist by, hopefully, having a positive impact as a volunteer and co-worker.

What do you hope to bring back to Western from your experience?

I hope to encourage others to broaden their global experiences and to understand that no matter what their skill set is, they can contribute to making a positive difference in the world.



education programs

Undergraduate and Postgraduate (Residency, and Pain Medicine Residency) Programs, Continuing Medical Education, and Fellowship

Pain Medicine Residency Program

Dr. Geoff Bellingham, Director

The past year has marked another milestone for the Pain Medicine Residency at Western University. Both of our inaugural residents, Dr. Michael Pariser and Dr. Amjad Bader, completed their training and successfully challenged the Royal College Pain Medicine examination. As such, they both have the distinction of being trained as Canada’s first accredited Pain Medicine Subspecialists.

On a national level, this subspecialty-training program has gained momentum as other universities gain accreditation for their Pain Medicine Residency programs. To strengthen all of our training programs, the program directors have collaborated to deliver lectures and workshops on a national level. This relationship has led to quarterly national videoconferencing teaching sessions that focus on teaching CanMEDS roles relevant to pain management. Again, Western University has acted as a leader hosting the first of such video conferences with Dr. Carole Orchard speaking on interprofessional collaboration within pain clinics.

The St. Joseph’s Pain Clinic has also been fortunate to receive funding from the Ministry of Health and Long-Term Care to enhance the care delivered to patients through increased physician services and allied health. This is welcome news to our community but also serves as an opportunity for the residents to benefit from an enriched clinical environment.

With the increased funding, Western University Pain Medicine residents will have increased opportunities to be exposed to interventional techniques in addition to collaborating and learning from allied health colleagues.

Residents will have opportunities to work with and learn from a pain clinic pharmacist, social worker, and a number of psychologists, psychiatrists, and occupational therapists.

The residency is also grateful for the tremendous work put forth by our Program Administrator, Charlotte Sikatori McLain. Over the past year, Charlotte has settled in to become an integral component to the smooth running of the program.

The work of the Pain Medicine Residency Committee has been effective at achieving the goal of launching Canada’s first Pain Medicine Residency. We look forward to improving the program further for future trainees and to continue to act as leaders and collaborators for Pain Medicine education in Canada.

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Undergraduate Education

Dr. Michelle Gros, 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 one of the three teaching hospitals in London. We have increased the flexibility so that the 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 2015-2016 academic year, we had 133 clerks, 21 Western elective students, 52 visiting elective students, and 4 non-credit pre-clerkship summer clinical elective students rotate through our program at Western.

New this year, we had 4 medical students submit very interesting essays to the CAS medical student essay contest. We are encouraging the medical students to submit essays again this 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 takes a group of dedicated residents to help run this each year.

Every student that has rotated through our Department has 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 the rotations for future students. Some of the outcomes have been improved communication at the start of the rotation where we provide a detailed orientation email to the students, it has expanded the accessibility of learning resources, and currently we are establishing OR maps that will help students adapt smoothly to the physical OR locations.

Our department continues to have a strong presence in undergraduate teaching, and we encourage as many faculty as possible to get involved in this teaching.

With a talented team of 43 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.

Postgraduate Education

Dr. Arif Al-Areibi, Director

Continued success for Western's Anesthesia Residency program with another outstanding year.

Our department, with its accomplished, highly-qualified faculty and superior leadership support, continues to successfully drive one of the largest training programs in Canada.

Program Leadership

With clear goals of aspiring for excellence and providing the highest quality training structure and environment, we continue to design optimal opportunities for our trainees to earn their place amongst the most qualified clinicians and educators in the profession.

The staff and resident members of the Core Post Graduate Committee and Subcommittees continue to play an important role in all aspects of our training program and their contributions are an important factor in creating our collegial educational environment.

The new additions and developments to our leadership program will also create the required structure to accommodate the upcoming implementation of CBD (Competency By Design) in July 2017

Education programs

With a talented team of 43 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 to develop our administrative structure and evaluate its efficiency. In 2016, we began fine tuning a state of the art electronic database that allows our program leaders to improve communication with trainees and teachers and will also have a positive impact on our evaluation process.

We maintain and strengthen 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. With the advent of CBD and the new place of simulation as a summative assessment tool, our consultants are investing significant time and energy in creating a focused curriculum.

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 Masters degrees.

McMaster-Western Research Day

Congratulations to our residents, Dr. Matthew Chong (first place), Dr. Ranko Bulatovic, Dr. Zach Davidson (third place), Dr. Alex Freytag, Dr. Nan Gai and Dr. Natalie Melton, for their outstanding presentations at this year's 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.

Canadian Anesthesiologists' Society

At this year's Annual Meeting of the Canadian Anesthesiologists' Society (CAS) in Vancouver, British Columbia, from June 24-27, our department was

represented by Dr. Matthew Chong who was selected to compete in the nationwide Resident Research Competition. Our department was also brilliantly represented by four program residents Lina Lee, Natalie Melton, Nan Gai, and Hesham Youssef.

MARC 2016

MARC is an annual conference, sponsored by the Association of Midwest Academic Anesthesia Chairs (AMAAC). This year, Minnesota welcomed 570 conference attendees, with representatives and residents from all 33 AMAAC institutions in attendance. Residents from each clinical-academic center participated in numerous research competitions during the conference.

Seven of our residents presented eight studies at this year's Midwestern Anesthesia Resident's Conference (MARC) and every study won in the final competitions! This year's tremendous success was as a result of the amazing effort put forth by our residents, Ranko Bulatovic (2nd place), Matthew Chong (two 1st first place), Zach Davidson (2nd place), Caitlin Gallagher (1st place), Danielle Lapierre (2nd place), Hwa Lee (3rd place), and Natalie Melton (3rd place).

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.



residents

graduated

- BANASCH,**
Matthew
- BEBBINGTON,**
Fraser
- CHIN,**
Melissa
- JASUDAVISIUS,**
Amanda
- LUDWIG,**
Nathan
- LIN,**
Bill
- MANJI,**
Farah
- PHILLIPS,**
Colin
- YOUSSEF,**
Hesham
- REWARI,**
Abhitej
- BROWN,**
Lukas | PGY3 |
JR. RESIDENT REP
- BULATOVIC,**
Ranko | PGY5
- CHONG,**
Matthew | PGY3
- CHOW,**
Mike | PGY4
- DAHROUJ,**
Dalal | PGY5
- DAVIDSON,**
Zachary | PGY2
- FISHER,**
Kyle | PGY4 |
CHIEF RESIDENT
- FREYTAG,**
Alex | PGY5
- FRIDFINNSON,**
Jason | PGY5
- GAI,**
Nan | PGY5
- GALLAGHER,**
Caitlin | PGY4
- GILL,**
Rajwinder | PGY2
- HYNES,**
Zachery | PGY2

- ISMAIL,**
Mohamed | PGY5
- JAKOBOWSKI,**
Luke | PGY4
- JIANG,**
Jessica Ming | PGY5
- KHALAF,**
Roy | PGY5
- LAPIERRE,**
Danielle | PGY4
- LEE,**
Hwa | PGY4
- LEEPER,**
Terrence | PGY3
- MELTON,**
Natalie | PGY4
- MERRIFIELD,**
Kaylyn | PGY2
- MOHAJER,**
Kiarash | PGY3
- NGUYEN,**
Don | PGY5
- OEMING,**
Bethany | PGY3
- PIRANI,**
Zameer | PGY3
- QUIGLEY,**
Nicole | PGY5
- SCHULTZ,**
William | PGY5
- SEFEIN,**
Osama | PGY2
- SMALLWOOD,**
Jennifer | PGY5
- SZOKE,**
Daniel | PGY2
- TERLECKI,**
Magda | PGY4
- TRYPHONOPOULOS,**
Takis | PGY3

new residents

- BELROSE,**
Jillian | PGY1
- GERMAN,**
Mark | PGY2
- JOSCHKO,**
Abigayel | PGY1
- MACKENZIE,**
Allison | PGY1
- PARADISO-SHAW,**
Derek | PGY1
- PIUS,**
James | PGY1
- ROSTAS,**
Bradley | PGY1

current

- BAIRAGI,**
Ranjana | PGY4
- BOROWIEC**
Sebastian | PGY2
- BEHBEHANI,**
Hasan | PGY3

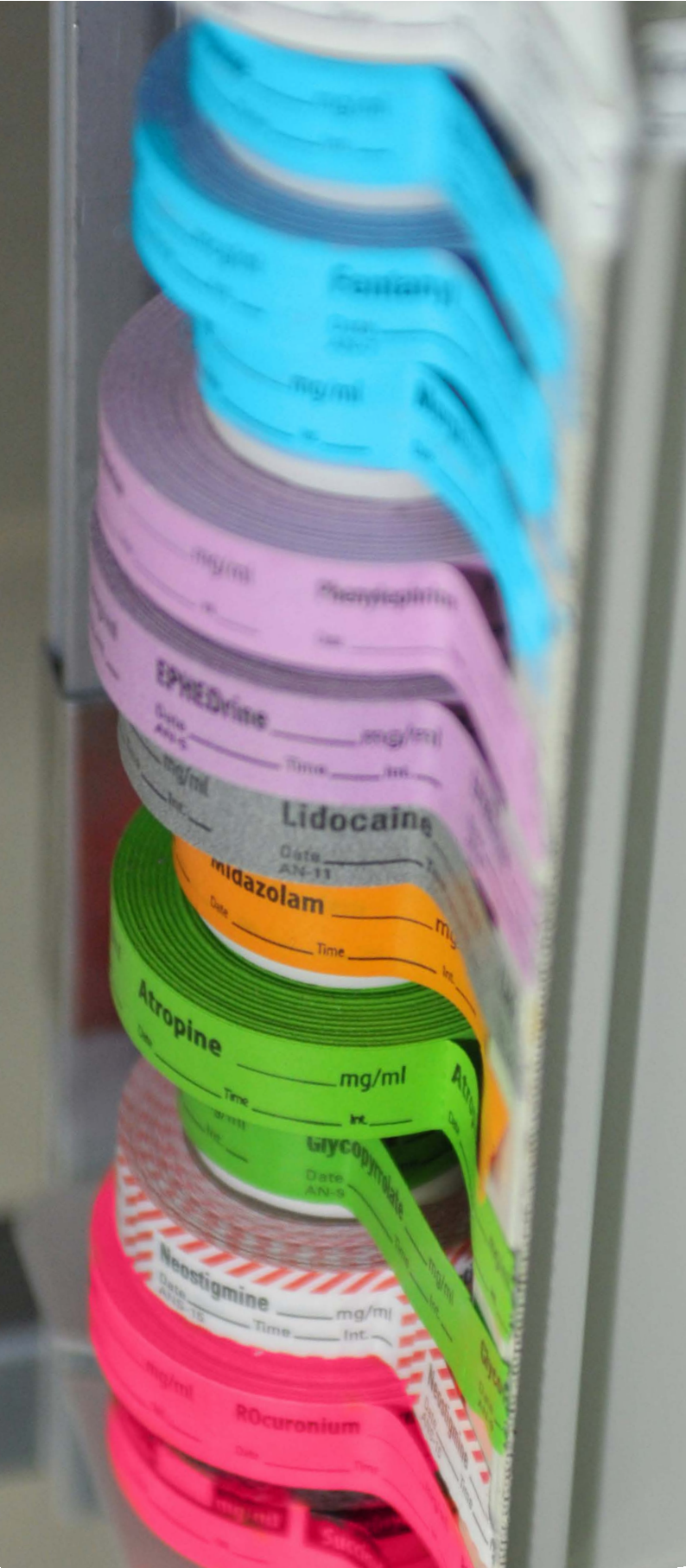
continuing medical education

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

Under the auspices of the Continuing Professional Development Office at the Schulich School of Medicine and Dentistry, the Department of Anesthesia and Perioperative 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. In 2016, the Department had the honour of hosting a number of distinguished guests including:

- **Dr. Paul Barash**, Past Chair, Department of Anesthesia, Yale; for City-Wide Grand Rounds in celebration of World Anesthesia Day
- **Dr. Meena Nathan Cherian**, Former lead of the WHO Emergency and Essential Surgical Care Program and its global forum: the WHO Global Initiative for Emergency and Essential Surgical Care, at the World Health Organization, Headquarters, Geneva, Switzerland for City-Wide Grand Rounds



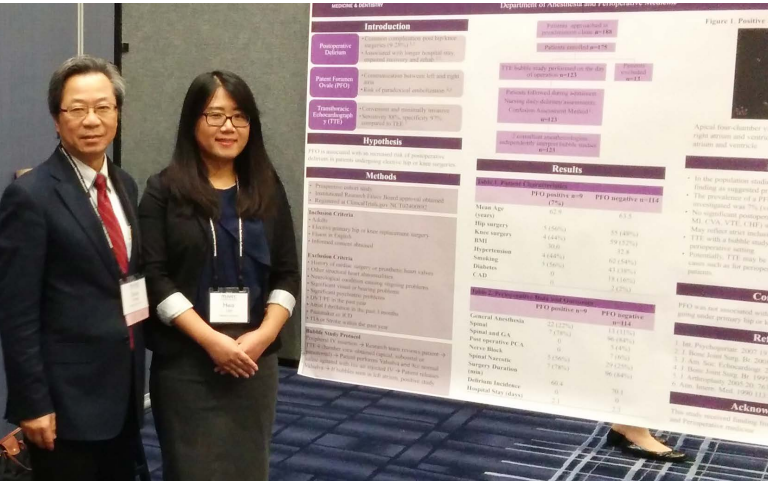
newsmakers

Resident research wins big at MARC 2016

Seven of our residents presented eight studies at this year's Midwest Anesthesia Resident's Conference (MARC) and every study won in the final competitions. This year's tremendous success was as a result of the amazing effort put forth by our residents, Ranko Bulatovic, Matthew Chong, Zach Davidson, Caitlin Gallagher, Danielle Lapierre, Hwa Lee, and Natalie Melton, as well as the tireless efforts of our faculty advisors, Postgraduate Administration and Resident Research Team.

MARC is an annual conference, sponsored by the Association of Midwest Academic Anesthesia Chairs (AMAAC). Residents from over 35 different clinical-academic centers participated in numerous research competitions during the conference.

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 momentous success would not have been possible without you!



MARC was held this year in Minnesota April 8th–10th

Ranko Bulatovic won second place for:
FAST TRACK REGIMEN INCORPORATING ADDUCTOR CANAL BLOCKS TO FACILITATE DISCHARGE AFTER OVERNIGHT STAY FOLLOWING KNEE ARTHROPLASTY - A FEASIBILITY STUDY
R. Bulatovic MD, R. Vijayashankar MD, P. Magsaysay MD, H. Hsu MD, J. Howard FRCSC, S. MacDonald FRCSC, E. Vasarhelyi FRCSC, B. Lanting FRCSC, S. Ganapathy FRCPC

Matthew Chong presented two posters at MARC this year, both of which won in final competitions.

Awarded second place:
TRANSFUSION TRIGGERS IN CRITICAL CARE AND PERIOPERATIVE PATIENTS: A META-ANALYSIS OF RANDOMIZED TRIALS
Matthew A. Chong, Rohin Krishnan, Janet Martin, MEDICI Centre, Department of Anesthesia and Perioperative Medicine, Schulich School of Medicine & Dentistry

And also awarded second place:
RANDOMIZED CONTROLLED TRIAL OF CONTINUOUS PULSE OXIMETRY AND WIRELESS CLINICAL NOTIFICATION POST-SURGERY: THE VIGILANCE STUDY
Matthew A. Chong¹, James E. Paul², Norman Buckley², Toni Tidy², Diane Buckley²

Zach Davidson won 2nd place for his poster presentation of the study:
APPLYING A QUALITY LENS TO CASE REPORTS IN ANESTHESIA
Zach Davidson MD, (Ekta Khemani MD MSc FRCPC), Brie McConnell MLIS, Bethany M. Oeming MD, Sandy Girgis HBSc, Sean O'Byrne, and Clyde Matava MBChB Mme

Caitlin Gallagher was awarded first place for his poster presentation of the retrospective chart review:
POSTOPERATIVE MONITORING OF PATIENTS WITH OBSTRUCTIVE SLEEP APNEA: HOW LONG IS LONG ENOUGH?

Caitlin Gallagher, MD, Brian Rotenberg, MD FRCSC, John Fuller, MD FRCPC

Danielle Lapierre placed second for her presentation of:
THE ESOPHAGEAL COOLING DEVICE: A NEW TEMPERATURE CONTROL TOOL IN THE INTENSIVIST'S ARSENAL

Danielle M Lapierre M.Sc., M.D., (Ahmed Hegazy, MBCh FRCPC), Eyad Althenayan MBBS

Hwa Lee won third place for her presentation
PERIOPERATIVE DELIRIUM RISK AND PATENT FORAMEN OVALE IN HIP OR KNEE SURGERY
Hwa Lee M.D., Nan Gai M.D., Ronit Lavi M.D., Philip Jones M.D., Douglas Naudie M.D., Daniel Bainbridge M.D.

Natalie Melton was awarded 3rd place for
TOTAL SHOULDER ARTHROPLASTY EXPEDITED PATHWAY: SAME DAY DISCHARGE FEASIBILITY STUDY
Natalie Melton M.D., Shalini Dhir M.D. FRCPC, George Athwal M.D. FRCSC, Darren Drosdowech M.D. FRCSC, Kevin Armstrong M.D. FRCPC

THANK YOU

Dr. Arif Al-Areibi,
Postgraduate Education
Director and MARC 2016
Co-chair

Dr. Jon Brookes,
Director of Resident
Research

Lori Dengler,
Postgraduate
Education Coordinator

Lee-Anne Fochesato,
Research Coordinator

Dr. Mohamad Ahmad
Dr. Daniel Bainbridge
Dr. Davy Cheng
Dr. Rosemary Craen
Dr. Ekta Khemani
Dr. Ronit Lavi
Dr. Peter Mack

Other major activities for 2016 included:

- Conversion to a new CPD database and evaluation platform (VENTIS). The launch of this program facilitated the centralized management of accredited CPD activities across the department (common platform for notification, evaluation and tracking CPD credits) and allowed for accessible evaluation of all CPD events and programs.
- The Department received accreditation from the Royal College of Physicians and Surgeons of Canada for two new CPD activities with the commencement of Research Rounds and Pediatric Journal Club.
- GoTo Meeting was implemented as a videoconferencing system that facilitated the city-wide broadcasting of many departmental CPD activities.
- Audit of accredited departmental CPD activity.

2016 Invited Speakers and Grand Rounds

- Dr. Meena Cherian (WHO)**
Access to surgical care in the context of the Ebola virus disease outbreak in west Africa
FEBRUARY 17, 2016
- Dan Jaremko, Diamond L**
Moving from APMSS to VENTIS
What this means for everyone
MARCH 30, 2016
- Dr. Clyde Matava (U of T)**
eLearning in medical education: still fad or the future?
APRIL 20, 2016
- Dr. Paul Barash (Yale)**
World Anesthesia Day
The game changers: The twenty most important anesthesia articles ever published
OCTOBER 19, 2016
- Dr. Jennifer Nelli (Harvard)**
“Code stroke and the mechanical thrombectomy: a comparison of neurologic outcomes between GA and CS. What should I give and why?”
NOVEMBER 16, 2016

fellowship program

Dr. Miguel Arango, Program Director and Andrea Fragassi, Program Coordinator

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.

2015-2016 saw the complete overhaul of the Fellowship website. It was an arduous task, and one that all Program Directors took an active role. All Program Directors updated their individual subspecialties by including comprehensive Goals and Objectives, Assessment/Evaluation and a Research component. This task was undertaken as part of the goal of the Fellowship Program to become Accredited with the Royal College of Physicians and Surgeons of Canada.

Over the course of Fellowship Committee meetings, it was decided that the application process for Fellows needed to be updated and be more streamlined. The Program now only requires a Letter of Intent, updated CV and three reference letters. This has made a vast improvement to the Program and the quality of candidates that have applied to the Program.

Lastly, Andrea Fragassi, Fellowship Program Administrator, created an Orientation Manual and Cost of Living document which was added to the website, as well as a “New Fellows” tab. This will give new Fellows a chance to review and become familiar with the application process and what they can expect when they arrive in London.



During the 2015-2016 academic year, the department had 23 clinical fellows, broken down as follows:

Cardiac	4 Fellows
Neuro	2 Fellows
Regional	3 Fellows
Transplant	2 Fellows
OB	2 Fellows
Vascular	2 Fellows
Simulation	1 Fellow
General	3 Fellows
Acute Pain	2 Fellows
Quality Improvement	1 Fellow

2015–2016 Fellow Research Accomplishments/Presentations

New case report by Drs. Kyle Fisher (PGY3), Fatemah Qasem (OB Fellow), Pod Armstrong and Ian McConachie

April 05, 2016
Anesthetic considerations in a parturient with Freeman-Sheldon syndrome. Int J Obstetric Anesth. 2016 Feb. [Article in press]

Anesthesia for High Volume, Multilevel Epidural Blood Patch (HVBP) in Idiopathic Intracranial Hypotension (IIH), Angela Builes, (Neuro Fellow). Presented at Euro Neuro

J Neurosurg Anesthesiol. 2016 Apr;28(2):S1-51
A. Builes, M. Arango, S.P. Lownie, M. Sharma, S. Panday. 9th International Update on Neuroanesthesia and Neurointensive Care EURONEURO 2016: Barcelona, Spain

Obstetric Fellows, Drs. Ilana Sebbag and Fatemah Qasem, and Dr. Shalini Dhir publish case series on ultrasound guided quadratus lumborum blocks

May 24, 2016
Ultrasound guided Quadratus Lumborum

block for analgesia after cesarean delivery: case series. Brazilian Journal of Anesthesiology. Available online 21 April 2016.

Pulmonary Veins Flow Variation in One Lung Ventilation – Submission and Presentation at CAS

Presenter: Dr. Hilda Alfaro (Fellow)
Co-Authors: Drs. Daniel Bainbrige, Mauricio Giraldo (Fellow), Philip Jones, Ronit Lavi, Bob Kiaii, and Michael Chu

Unknown Persistent Left Superior Vena Cava in Hiatus Hernia Patient – Submission and Presentation at CAS

Presenter: Dr. Hilda Alfaro
Co-Authors: Drs. Achal Dhir and Maurico Giraldo

Dr. Miguel Arango, Dr. Peter Tryphonopoulos (PGY3) and colleagues publish in Can J Neurol Sci

August 03, 2016
Outcomes of general anesthesia and conscious sedation in endovascular

treatment for stroke. Can J Neurol Sci. 2016 Jul 13;1-4. [Epub ahead of print]

A&A features first case report of anesthetic management of a liver retransplant patient undergoing one-lung ventilation

September 23, 2016
Drs. Adrienne Carr (Clinical Fellow), Nelson Gonzalez (Clinical Fellow) and Ramiro Arellano, report a case of a patient with bronchobiliary fistula (BBF) undergoing liver retransplantation

Anesthetic considerations in a parturient with congenital insensitivity to pain with anhidrosis

October 31, 2016
Drs. Zameer Pirani (PGY3), Fatemah Qasem (Clinical Fellow) and Sandra Katsiris, publish unique case report in the International Journal of Obstetric Anesthesia

clinical academic program

Anesthesia Assistants Program

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 in to 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

list of 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
- DAWKINS, Franklin**
Cardiac, Costa Rica
- ELDEYASTY, Basem**
Neuroanesthesia, Egypt
- ELSAHARTY, Aya**
Obstetric, Egypt
- FUJII, Satoru**
Cardiac, Japan
- GONZALEZ, Nelson**
General, Colombia

- LIN, Bill**
Regional, Canada
- LOPEZ CASAS, Catalina**
Quality Insurance, 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
- VISSA, Deepti**
Quality Insurance, India
- YANG, Churao**
Regional, Canada
- YOUSSEF, Hesham**
General, Egypt



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 are remodeling our teaching program to improve capture of the goals of this program with an eventual move to a system of national coordination. Fanshawe has been at the forefront of this evolution.

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 MOHLTC 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 anesthesiologist. 2016 marked the 10th anniversary of the ACCTTS. We have come a long way from our humble beginnings using portable office dividers as a simulation lab and debriefing around grainy video in a dimly lit alcove. We have also come a long way in our pedagogy and vision for the use of simulation in education. As competency based medical education rolls out in 2017 we are preparing to meet the new challenges and opportunities it will invariably bring. Simulation continues to be one of the strengths of our training program.



(ACCTTS) Anesthesia and Critical Care Teaching Through Simulation

Dr. Richard Cherry, Director ACCTTS Faculty: R Cherry (Director), A Antoniou, I Bruni, R Butler, L Champion, B Church, J Granton, S Morrison, G Nair, D Sommerfreund

In 2016 ACCTTS welcomed Dr. Ron Leeper to our group. Dr. Leeper completed a simulation fellowship at Johns Hopkins University and practices clinically in general surgery and critical care. We look forward to expanding our interdisciplinary simulation with our surgical colleagues. ACCTTS also welcomed Dr. Angela Builes as our simulation fellow for 2016-17. Dr. Builes brings a passion for neuroanesthesia simulation and crisis management. We look forward to expanding in these important areas. We also enjoy the opportunity to partner with our fellowship alumnae and in 2016 had the privilege of delivering faculty development seminars webinars to Dr. Grace Catalan's (ACCTTS Fellow 2015) new simulation instructors in the Philippines.

Through 2016 ACCTTS delivered high quality simulation experiences through to our undergraduate and postgraduate trainees in over thirty simulation events. We further expanded our programs to include additional pediatric and thoracic simulation.

The ACCTTS group continues to represent the department in notable local and national simulation leadership roles:

Dr. Cherry – Chair of the Royal College Simulation Summit (2016 St. John's Newfoundland), Royal College Simulator Educator Training Course (instructor) and member of the Royal College Simulation Center Survey and Accreditation Committee.
Dr. Antoniou – CanNASC representative for Western
Dr. Church – Canadian Military Simulation instructor

CSRU and Critical Care

Dr. Ron Butler, Program 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 Program. Each year we care for over 1300 patients that undergo Cardiac Surgery including: coronary bypass, valve replacements, heart transplantation, minimally invasive and robotic cardiac surgery, 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. Dr. Jeff Granton will be taking over as the Director of the CSRU in 2017.

Neuroanesthesia

Dr. Miguel Arango, Program Director

The Neuroanesthesia Program has had another successful year in 2015-2016. Between July 1, 2015 and June 30, 2016, University Hospital had a total of 1218 Neuro cases and Victoria Hospital had 269.

Our goal is to provide advanced training to those individuals (residents/fellows) who either plan to enter academic anesthesiology with an emphasis in neurosurgical anesthesia or those who wish to practice in a setting that has a large number of neurosurgical procedures. Trainees gain knowledge not just through

case experience, but also through an organized teaching program. The Neuroanesthesia program is designed to gain expertise in the following areas.

Clinical

London Health Sciences Centre is a national referral centre for the management of patients with cerebral aneurysms and arteriovenous malformations. In recent years, it has been discovered that surgery for Intractable Epilepsy has valuable therapeutic potential and this has resulted in epilepsy surgery becoming one of the "fastest growth areas" in neurosurgery. Patients are done awake but sedated so that their speech and motor areas of the brain can be mapped prior to surgical excision.

Stereotactic Surgery is used for diagnostic biopsies, management of chronic pain and movement disorders, and the management of intractable epilepsy. Each of these requires different anesthetic approaches.

In addition to the above "special areas", residents/fellows will be exposed to a wide variety of the more usual neurosurgical procedures, including endoscopic neurosurgery, craniotomies for tumors and hemifascial spasm, carotid endarterectomy, and spinal instrumentation.

Residents/Fellows will also have the opportunity to learn how to use Transcranial Doppler, Cerebral Oximetry, Evoked Potential and EEG monitoring during surgery.

Non-Anesthesia Experience

Residents/Fellows will spend a brief period on the epilepsy service to have a better understanding of the total management of patients with epilepsy and to learn (much) more about the reading, use and potential of EEG monitoring.

As well, a similar brief period will be offered in the Neuroradiology Department to learn more about the indications and uses of diagnostic and interventional neuroradiology and to become much more facile with the interpretation of CT scans, MRI, etc.

Research/Academic Activities

The Department offers a variety of research opportunities.

It is our expectation that each fellow will complete at least one research project taking it from conception through to completion. In addition, each fellow is expected to write at least one review article/book chapter. Further participation in research and writing activities is always welcomed and encouraged.

In the coming year, it is the goal of the Fellowship Committee to have a more structured Research Program for each subspecialty. In this regard, the Department will benefit from published research and attract Fellows not only wanting clinical experience, but a willingness to participate in ongoing and new research.

Under supervision, fellows will also review manuscripts submitted to a variety of anesthesia journals, abstracts submitted to anesthesia scientific meetings, and grant applications. These activities together with the research activities outlined above will provide fellows with an excellent insider's view of the entire research process.



Dr. John Murkin

The number of deliveries in the past year increased to approximately 6500, so that this OBCU was one of the busiest in the province.

Obstetric Anesthesia

Dr. Indu Singh, Program Director

Dr. Sandra Katsiris stepped down in September as Director of Obstetric Anesthesia after 16 years of exemplary leadership. Dr. Katsiris will continue as a member of the Obstetric Anesthesia subspecialty group and will continue her role as the Anesthesia representative on the Maternal and Perinatal Death Review Committee for the Chief Coroner of Ontario. Dr. Indu Singh, a long time member of the group and subspecialty coordinator was appointed as Director in September.

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

Clinical care

The number of deliveries in the past year increased to approximately 6500, so that this OBCU was one of the busiest in the province. Almost 60% of deliveries were considered high risk. The Obstetric Anesthesia group provided regular Preadmission Clinics on Wednesdays where anesthesia care plans were made in advance for patients 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%. The cesarean delivery rate was 22% and more than 90% were completed with neuraxial anesthesia. Pain rounds continued to be done daily by the Obstetric Anesthesia group for post-cesarean patients to ensure optimal pain relief.

Dr. Andreas Antoniou organized multidisciplinary (Anesthesiology, Neonatology, Nursing, Obstetrics, and Respiratory Therapy) simulation sessions on site for the obstetrical care team.

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 Obstetric Anesthesia Preadmission Clinic and Pain Rounds for post-cesarean patients. Residents have been required to do one independent study project on an Obstetric Anesthesia topic of their choice during each rotation. These rotations had been coordinated by Dr. Indu Singh until September last year. Since then, they are coordinated by Dr. Pravin Batohi. Regular formal teaching rounds were provided to residents by all consultant members of the subspecialty group on Monday mornings and these rounds are coordinated by Dr. Kamal Kumar. The Obstetric Anesthesia Resident Guidebook, developed last year by Drs. Kumar, Sandra Katsiris, Fatemah Qassem, Ilana Sebbag, and Indu Singh was made into an

electronic format. The epidural teaching video created by Drs. Kumar, Kristine Marmai and Jason Fridfinson became available online this past summer for our trainees. Efforts continued to be made by members of the group to regularly teach US guided neuraxial anesthesia to the residents.

In the past year, journal club was started by Drs. Ian McConachie and Sai. These have been accredited for CME points.

The fellowship program was fully subscribed. Drs. Fatemah Qassem and Mouveen Sharma completed their fellowships successfully this past summer. Drs. Aya Elsharty and Yamini Subramani joined as Obstetric Anesthesia fellows and provide 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. The fellowship program has been coordinated by Drs. Ian McConachie and Indu Singh.

Dr. McConachie was an invited guest speaker at the 9th National Conference of the Association of Obstetric Anaesthesiologists, in Mumbai, India last October. He gave the following two talks: “General anaesthesia for LSCS : Is she really asleep?” and ‘Oxytocin: Less is More.” He also presented anesthesia considerations in the local Obstetrical care multidisciplinary rounds “Skin to skin care post-cesarean delivery” last March.

Research

The group remained active in research with multiple projects completed or ongoing during the last year. Two residents (Drs. Kyle Fisher and Zameer Priani) were successful in publishing their case reports. Our fellows were also successful in research during the last year. Both Drs. Fatemah Qassem and Mouveen Sharma presented abstracts in the Top 100 abstracts session at the SOAP annual meeting in Boston last year. Dr. Qassem’s abstracts included “Efficacy of Surface Landmark Palpation for Identification of the Cricoid Cartilage in Obstetric Patients: A Prospective Observational Study” and “Anesthetic Considerations in a Parturient with Freeman Sheldon Syndrome”. Dr. Sharma’s abstract was “Comparison of ultrasound

measured posterior longitudinal ligament length in parturients in the standard sitting and crossed leg positions: A Case Series.” Dr. Ilana Sebbag also presented her case series, “Ultrasound guided quadratus lumborum block for postcesarean analgesia.” All three fellows published successfully last year.

Publications in the past year included the following:

Sharma M, McConachie I. Neuraxial blocks in parturients with scoliosis and after spinal surgery. J Obstet Anaesth Crit Care 2016; 6:70-4

Sebbag I, Qasem F, Dhir S. Ultrasound guided quadratus lumborum block for analgesia after cesarean delivery. Rev Bras Anesthesiol. 2016: Apr; 1-4.

Fisher K, Qasem F, Armstrong P, McConachie I. Anesthetic considerations in a parturient with Freeman-Sheldon syndrome. Int J Obstet Anesth. 2016 Aug; 27:81-4.

Sebbag I, Qasem F, Armstrong K, Jones PM, Singh S. Waveform analysis for lumbar epidural needle placement in labour. Anaesthesia. 2016 Aug;71(8):984-5.

Pirani Z, Qasem F, Katsiris S. Anesthetic considerations in a parturient with congenital insensitivity to pain with anhidrosis. Int J Obstet Anesth. 2016 Oct 21

Quality Improvement

Two initiatives, started last year, are ongoing: “Improving patients experiences with spinal anesthesia for elective cesarean delivery” by Drs. Elsharty, Qasem, Sebbag and Singh and “Creation of a checklist to assist in anesthesia handover in the OB PACU” by Drs. Elsharty, McConachie, Sai, and Singh.

Pain Management

Dr. Pat Morley-Forster, Program Director

Clinical Care

In 2016, there were 7444 physician-related visits to the SJHC Pain Management Program which included new consults, follow-up visits and procedures. In addition there were 617 visits to the psychologists, for individual treatment sessions or group cognitive-behavioural therapy.

In June , 2016, the SJHC Pain Management Program received \$1.4 Million in enhanced operating funds from the Ministry of Health and Long-Term Care . This was a province-wide initiative; Pain Clinics in Ottawa, Kingston, Toronto, Hamilton, and Thunder Bay also received operating grants. The purpose of this funding is to improve patient access to Allied Health disciplines. There will be increased support for Nursing, Psychology, Occupational Therapy, Physiotherapy, and creation of a full-time Pharmacy and Nurse-Practitioner role. Outcomes will be monitored using a centralized province-wide database, the Collaborative Health Outcomes Information Registry (CHOIR).

EDUCATION

Undergraduate

The Meds IV Pain Medicine Selective for 2016 is based on case presentations and provides a total of 24 hours of instruction on pharmacology of analgesics, management of acute pain and cancer pain and assessment and management of chronic neck and back pain. There are also special topics on pain in the emergency room, in family practice, in the elderly and in the addicted patient. The pain medicine course is multidisciplinary including neurologists, anesthesiologists, family doctors, psychiatrists, a psychologist and a pharmacist.

Postgraduate

Dr. Michael Pariser and Dr. Amjad Bader both completed the Pain Medicine Residency and successfully passed the Royal College Pain Medicine Specialty Examination. Dr. Geoff Bellingham, was also eligible to write the



Dr. Pat Morley-Forster, Program Director

exam through the Practice-Eligible route and was also successful in obtaining his pain medicine certification. Two new residents started in July 2016. Dr. Colin Phillips, an alumnus of the UWO Anesthesia Program and Dr. Doris Leung a U of Ottawa Anesthesia graduate.

For the Pain Medicine residents, teaching sessions are held every second Wednesday; occasionally there are national half-day program linking online with Pain Medicine Residents across the country. 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. These are open to all Anesthesiology faculty and trainees.

Continuing Medical Education

Monthly Interdisciplinary Pain Rounds were organized again in 2016 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 westernpain.ca regarding undergraduate, postgraduate and upcoming speakers for interdisciplinary pain rounds.

Research

Trainee grants of up to \$10,000 are 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 deadline for grant applications is October 31, 2017 and the competition is adjudicated by the Earl Russell Scientific Advisory Board.

An RCT entitled Long-term outcome of IV lidocaine in the management of neuropathic pain, spearheaded by Dr. Dwight Moulin, the Earl Russell Chair, was completed in 2016. Dr. Morley-Forster and Dr. Geoff Bellingham were collaborators. It will be submitted for publication in early 2017.

The multi-centre Canadian Registry and Database for Neuropathic Pain (NEPDAT) led by Dr. Moulin published in 2015 has already generated an additional 7 peer-reviewed papers, examining different aspects of the data. A study entitled Plasma level of ketamine and norketamine in low dose oral ketamine in chronic pain patients first-authored by Dr Qutaiba Tawfic, in collaboration with Dr. Geoff Bellingham, Dr. Morley-Forster, and Dr. Craig Railton was completed and will be presented at the Canadian Anesthesia Society meeting in spring 2017.

Future Plans

Dr. Geoff Bellingham was appointed in December, 2016 to the position of Physician Lead, Pain Management Program. Dr. Morley-Forster will retire in January, 2017. In July 2017, Dr. Raj Manikandan, will begin his practice in Anesthesiology and Chronic Pain. He did a one year fellowship in Chronic Pain at Western in 2011 and just completed another year of training at the Michael De Groote Centre of Pain Management at McMaster University. Two Pain Medicine Residents have been selected to start in July, 2017.

In the coming year, there will be new allied health positions added to the Pain Program and an increase in patient volumes consistent with the MOHLTC target of 15-20% increase in patient visits for 2017.

Palliative care is advancing at a rapid pace across Ontario and Canada.

Palliative Medicine

Dr. Valerie Schulz, Program Director

Dr. Valerie Schulz is practicing in Palliative Care, through the Department of Anesthesia & Perioperative Medicine, at London Health Sciences Centre, 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 2016.

Dr. Schulz participates clinically in LHSC's Critical Care Units, and in the Renal Dialysis Unit at University Hospital, available to the Heart Failure Clinic, and Pre-Admission Clinic 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.

Heart Failure Clinic at St. Joseph's Health Centre began during 2016, and Palliative Care is being integrated into the clinical practice as a support team for patients who are predictably approaching the end of their lives.

Locally, Dr. Schulz is taking a leadership role in discussions regarding the assessment of trial 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, and 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.

Regionally, Dr. Valerie Schulz was appointed the Regional Palliative Care LHIN Co-Lead, and these leads are invited to join the Ontario Palliative Care Network.

Nationally, Dr. Schulz is a member of the inaugural Palliative Medicine Specialty Committee at the Royal College of Physicians and Surgeons of Canada. Research initiatives continue to advance as Drs. Valerie Schulz and Lorelei Lingard at the Centre for Research and Innovation (CERI) Western, provide leadership for a multi-site, multi-province Palliative Care project exploring: Palliative care on the heart failure care team: Mapping patient and provider experiences and expectations. CIHR and AMOSO AFP Innovation Funding support this project. This year's research focus created partnerships and dissemination of results through publications.

AMOSO is supporting Drs. Gofton, 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.

Palliative Care is advancing at a rapid pace across Ontario and Canada, and Dr. Valerie Schulz has dedicated her career to this laudable cause.

These contributions to Palliative Medicine were made possible through the support of Western's Department of Anesthesia & Perioperative Medicine.

Perioperative Patient Blood Management Program

Fiona E. Ralley, Program Director

The perioperative patient blood management program is now a well established part of a patient's preoperative assessment when they have a scheduled appointment at the surgical pre-admit clinic. As before, the majority of the patients assessed by the program coordinators are under the umbrella of the ONTraC program, where transfusion data is sent to a central site for analysis from 25 hospitals in Ontario. However, in addition, now most patients scheduled for a surgical procedure that can be associated with a significant blood loss are generally seen by the program. Furthermore, the program accepts referrals for any surgical or obstetric patient where their physician requests their assessment for the implementation of any blood management modalities. The use of intravenous iron to treat the anemia associated with pregnancy has increased and the program has been requested to help organize this. With the increased awareness of iron deficiency anemia in the surgical population the possibility of an anemia clinic is being discussed. As in the past all patients who refuse blood products for whatever reason are reviewed by the program.

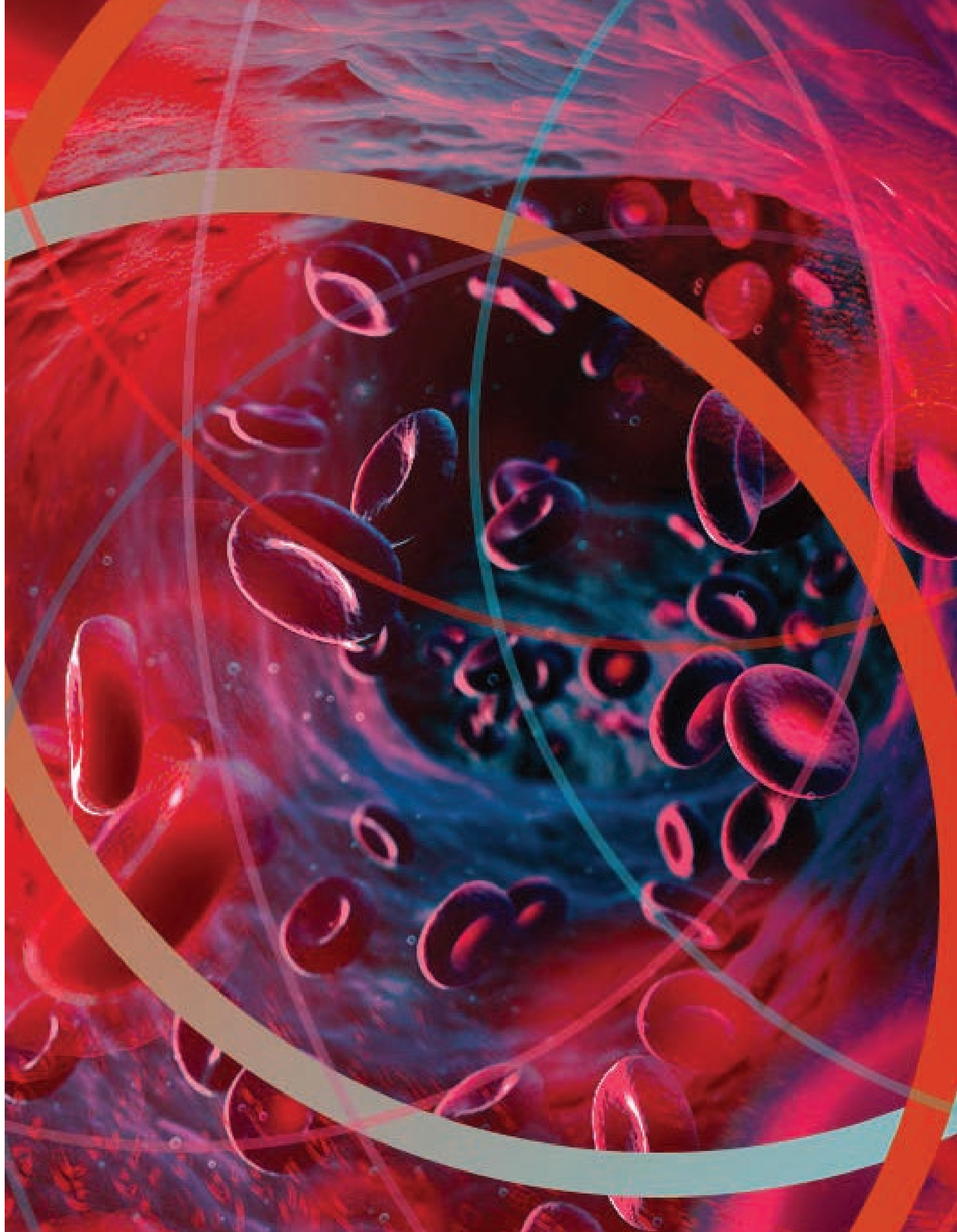
With the success of the early implementation of oral iron to orthopedic surgical patients when they are scheduled for surgery (up to three months prior to their surgical date) this service is now being implemented for patients undergoing colo-rectal surgery. Although this surgical patient population does not have such a long surgical wait time (generally less than 3-4 weeks) as many of these patients have severe iron deficiency anemia it is anticipated that even a small increase in hemoglobin may have a significant effect on perioperative transfusion rates. As with the orthopedic population hemoglobin results will be reported on the hospital S-drive and the PPBMP coordinators will review these results and contact any patients who might benefit from preoperative iron and/or erythropoietin. Unfortunately due to the short lead times these patients will probably require intravenous iron in addition to oral iron supplementation.

This year has seen several changes in the staff of the PPBMP. In April Donna Berta who was the founding coordinator of the program in 2002 and who has had a significant influence on the growth and success of the

program resigned to accept another position at LHSC. Her infinite knowledge and hard work will be greatly missed. Her position as the senior of the two ONTraC coordinators was taken on by Valerie Binns who has been with the program for the past 10 years. In addition a new PPBMP coordinator was hired—Christine Cotton. As a previous PAC nurse she was very familiar with the program and has settled well into her new position. With the retirement of Dr. Fiona Ralley in December 2016 the role of Director of the program has been handed over to Dr Christopher Harle, who with his keen interest in Patient Blood Management (PBM) will definitely continue to advance the program as one of the most recognized PBM programs in Canada. Lastly with the increased number of patients with severe preoperative anemia it was felt that an Internal Medicine physician would be a good addition to the program. Dr. Marko Mrkobrada has agreed to take on this role and his expertise and advice will be a great addition to the program.

As previous years members of the PPBMP have continued to advance the knowledge relating to PBM via invited lectureships, presentation at various society meetings, abstracts and publication of research outcomes. Two of the manuscripts submitted last year have been published and the third is under review. New studies on the influence of instituting smaller volume blood draw tubes in ICU patients on the incidence of transfusion rates in this patient population and the effect of early iron therapy in patients with iron deficiency anemia scheduled for colo-rectal surgery are being implemented.

Next year will be the 15th anniversary of the inauguration of the Perioperative Patient Blood Management Program (initially named the Perioperative Blood Conservation Program). We hope to use this milestone to increase awareness of the program to enable all patients who could benefit from patient blood management to be assessed in an appropriate time frame. As always the PPBM extends an invitation to anyone who wishes to enquire about any of our many patient blood management strategies to contact any member of the program. In addition information can be obtained from our hospital website at: www.lhsc.on.ca/bloodmanagement



Regional, Acute and Comprehensive Pain Management

Dr. Kevin Armstrong, Program Director

In 2016 we had a significant development with regards to regional anesthesia within the city. For many years we have had struggles with introducing a formalized regional program to Victoria Hospital. Lead by Drs. Gopa Nair and George Nicolaou in collaboration with nursing leadership and a number of others, a “block room” was considered and a trial period started in late 2016. Given the patient population (trauma, pediatrics, vascular) there is an excellent opportunity to add peripheral regional anesthesia to the neuraxial anesthesia already provided at VH. As mentioned above this has been a pilot project, with the block room running on Thursdays and Fridays. Work is still required, and finding the human resources to allow 5 days per week regional anesthesia is underway.

Another big change coming to VH, is in the area of APS. Our nurse clinician Heather Fisher, had her last clinical day in December of 2016 Heather’s involvement with pain management, dates back to the 1990’s. Since that time she has been an excellent educator, clinician, and innovator to the anesthesia consultants, resident staff, nursing staff and patients of Victoria hospital. Most recently she has been a central figure during the introduction of electronic charting and orders, the introduction of lidocaine infusions, and the soon to be available IVPCA addition of ketamine. She will be greatly missed by all of the Vic personnel. Personally, and on behalf of the entire Department of Anesthesiology and Perioperative Medicine, I would like to extend my sincere gratitude to Heather for all that she has done in supporting the acute pain service across the city.

Heather Whittle, one of our NPs will be assuming many of Heather’s responsibilities for 2017.

For a number of years there has been a vision to harness the expertise of services with knowhow in pain management and apply this to pain management to previously under served patient populations. The identified services are Chronic Pain, Acute Pain, Palliative Care, and Regional anesthesia. Three programs have been in place for a few years and are signs of future directions for a comprehensive pain management program. The intrathecal catheter placement and

management for palliative pain, which was initiated by Dr. Collin Clarke has continued. After a review of patients through 2014 & 2015, he is assessing who most benefits from this program. It is expected that growth will continue as the health care systems understand the benefits this program has for a challenging group of patients. The pediatric chronic pain management program, under the leadership of Dr. Raju Poolacherla, is a relatively new program at VH. The clinic runs one day per week, and is composed of a multi-disciplinary team that includes a psychologist and pharmacist. This goal of this program is to provide care to largely under recognized and under treated group of patients in South west Ontario. The Acute Pain Management fellowship was initiated in 2015, by Dr. Qutaiba Tawfic. For 2016 we had 2 APS fellows in the system. Clinically, service is provided weekly at both VH and UH. A significant amount of work has been done with 7 abstracts having been submitted for the 2017 CAS meeting.

For a number of years residents and fellows have had the opportunity to gain 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 (see above), this opportunity will be enhanced with greater exposure to regional anesthesia for foot and ankle surgeries, as well as pediatric regional anesthesia. In 2016 fellows and residents have contributed to the academic mission of the department through presentations at meeting, teachings and peer reviewed publications (see publication list).

Our support from nursing includes our Nurse Clinician Heather Fisher,, and our 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.

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. Towards the end of 2016 a “block room” model was introduced to VH (see above). To cover the added clinical requirements

There is an ever increasing need for innovative strategies to manage the pain of patients presenting for surgery.

of 3 block rooms in the city will be challenging for the 9 members of the regional group. It is expected that the recruitment of 3 additional consultants will address this issue.

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 trunchal blockade, namely paravertebral blocks.

At UH the general surgery, orthopedic and plastic surgery populations provide a high volume of clinical work, educational opportunities, and research involving trunchal blockade and lower limb regional analgesia. The UH block room continues to evolve. We continue to have challenges with space allocation.

The clinical work at the VH site is expected to be peripheral nerve blockade for lower limb surgery in both children and adults. We are currently working through the introduction of this process, which impacts on several groups and areas (SCDU, ORS, PACU, the floors).

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 a research 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 UH and VH 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 of nurse clinicians and on call residents. At SJHC, the numbers are much smaller and often involve regional analgesia. As noted above the retirement of Heather Fisher will greatly impact the work at the VH site. In 2016 we continues to work with our surgical colleagues and their teams to identify, patients who are expected to experience challenges with pain management post operatively. In 2016 we were able to introduce a mutually agreed upon standardized pain management orders for the arthroplasty group at UH. At this point we do not have our transitional pain management program in place, but plan to move toward this in 2017.

Complex Pain Management Program

There is an ever increasing need for innovative strategies to manage the pain of patients presenting for surgery. Some patients have generalized chronic pain, other have pre-existing chronic pain at the site of surgery, and other 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. These pathways are 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 opportunity for our trainees, and opportunities for research and audit activity. These changes also include a number of challenges related to human resources, identification, communication, education, etc. In 2017 we will continue to work towards a manageable solution and integrate the Chronic Pain, Acute Pain and Regional groups.

Pediatric Anesthesia Report

Dr. Mohamad Ahmad, Program Director

The pediatric anesthesia program had a solid year in 2016. The operating room, with its varied and challenging cases, continues to hone our abilities as a tertiary-care clinical service. Our out-of-OR practice was as busy as ever but we nonetheless improved our ability to deal with urgent bookings. We updated and digitized some of our charts and forms and embarked on quality-improvement projects.

We have also actively engaged our residents and other learners in these activities and it has been rewarding to see many of them seek further training in pediatric anesthesia fellowships. Academically, our weekly resident teaching continues to be popular with learners and we have firmly established pediatric journal club as an opportunity for everyone in the department to keep up to date. A number of pediatric group members are involved in RCSPC exam preparation, especially Drs. Vanessa Fantillo and David Sommerfreund, and PCCIA teaching.

Continuing their work from 2015, Dr. Sommerfreund and Dr. Gopakumar Nair have become integral members of the pediatric simulation program at LHSC and Western. They have run simulation days for residents both in and out of program. Plans are in the works for simulation days with anesthesia assistants.

Drs. Nair and Collin Clarke have expanded pediatric regional anesthesia at Victoria Campus. Our residents have been pleased to do their first peripheral blocks in pediatric patients. We hope to expand this further in the upcoming year with the establishment of a block room at Victoria Campus and recruitment of other regionalists.

Dr. Raju Poolacherla continues to develop the pediatric chronic pain program. His multidisciplinary clinic on Fridays was busy from the start and demand for the service continues to grow as word spreads throughout our region. More recently, the program and Dr. Clarke began offering sympathetic nerve blocks for pediatric complex regional pain syndrome. Additional modalities for treating complex pain problems are being planned for the upcoming year. These are all new services for our region. Some of our residents (and myself) have attended the pain clinic and found it a great educational experience.

The pediatric anesthesia program will expand northward in 2017 when the Schulich Dental Surgical Care Unit opens to pediatric patients in January. One part of the unit's mission is to educate dental students about working in a general anesthetic environment and so we foresee an academic opportunity there as well.



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 respiratory. We have developed a multi-disciplinary perioperative high-risk clinic for optimization and follow up of these 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. 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 our clinical experience and improve our teaching program, we have developed an advanced VATS surgery and anesthesia workshop



Dr. George Nicolaou, Program Director and Fellowship Coordinator

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

using a pig model. Here, consultants can enhance their skills in fiberoptic bronchoscopy and management of one lung ventilation. The pediatric thoracic anesthesia program is evolving 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.

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 patient's vital signs. 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.

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



Patient benefits include the following:

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

aneurysms are now generally repaired using endovascular branched stents. The thoraco-abdominal aneurysms that cannot be repaired by using endovascular stents are repaired utilizing partial left heart bypass. Recently, we have started repairing aortic arch aneurysms 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.

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, one day in vascular and one day in 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 in 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 currently 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 both in a clinical and research setting. It is designed to meet the individual's needs, along with the best exposure to the available clinical caseload.



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

The influence of CPAP and PEEP (with a recruitment maneuver) on PaO2 during one lung ventilation, employing a lung protective ventilation strategy

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

Malignant Pleural Effusion Thoracoscopic Outpatient Pleurodesis. A feasibility trial

From January to December 2016, our team provided anesthesia for 62 liver transplantations including many critically ill recipients from the ICU.

Transplant (Liver) Anesthesia

Dr. Achal Dhir, Program Director

Transplant Faculty: **A Dhir, R Arellano, M St-Amand, A Vannelli and S Morrison**

The Liver Transplantation Program continues to provide excellent clinical care to patients for liver transplantation, liver resections and major Hepato-biliary surgeries. There have been some changes in the surgical team. Dr. WJ Wall who started the transplant program at LHSC has retired and Dr. Roberto Hernandez decided to move to the US. Dr. Anton Skaro from Chicago has joined the surgical team and we look forward to working with him.

From January to December 2016, our team provided anesthesia for 62 liver transplantations including many critically ill recipients from the ICU. 58 livers came from brain dead donors and 4 were donations after cardiac death. During the same period, our group also provided services for about one hundred major liver resections. Our team is also involved with preoperative assessment and optimization of patients before they are listed for liver transplant.

We run a successful fellowship program and have been lucky to have some very good fellows. Dr. Adrienne Carr after finishing her residency from Calgary joined our fellowship program. She had excellent clinical and academic experience and has now joined as anesthesia consultant in Halifax. She is also part of the liver transplant team in Halifax. Dr. Sonja Payne

replaced Dr. Nelson Gonzales in July 2015. Apart from excellent clinical experience, 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.

Academic achievements:

Suphathamwit A, Dhir A, Dobkowski W and Quan D. 'Successful hepatectomy using venovenous bypass in a patient with carcinoid heart disease with severe tricuspid regurgitation'. Journal of Cardiothoracic and vascular anesthesia 2016;30(2):446-451

Carr A, Gonzalez N, Hernandez R, Arellano R. A case report of anesthetic management for liver retransplantation in a patient with bronchobiliary fistula. A&A case reports, Sept. 2016

The project on Infusion of ketamine and Lidocaine for pain management after major liver resection is complete and being written up.

We presented an interesting and clinically challenging case report of 'Managing difficult airway for emergency liver transplant, more than one challenge to manage' in IARS annual conference, 2016, San Francisco.

Dr. Dhir delivered lectures on ‘Anesthesia for liver transplantation’, at the annual conference of Indian Society of Anaesthesiologists (ISA), in Ludhiana, India in November 2016.

Ongoing projects:

- Blood utilization during liver transplantation
- Pain management after liver transplantation
- ALPPS – Anesthesiologists’ perspective

**PS: Dr. Dhir was also involved with the following non-liver related academic activities:

Cardiac Fellows’ lectures:

- 14 March 2016: Cardiomyopathies and Heart Failure
- 13 June 2016: Congenital Heart Disease
- Teaching of AA students at Fanshawe college:
- Inhalational anesthetics
- Induction of anesthesia
- Heart disease and anesthesia

Invited lectures

- ‘Anemia and cardiac surgery’ 21 January 2016, 34th Anesthesia international symposium: Clinical update in Anesthesiology, Surgery and Perioperative Medicine, San Juan, Puerto Rico
- ‘Hemodynamic collapse in the OR – TEE as a compass’ 13 Feb. 2016, IACTA, Chennai, India

Editorial board

- Annals of cardiac Anesthesia
- IACTA Echo library
- Judge: Free paper session, 13 Feb. 2016, IACTA Chennai

Manuscript reviewer

- Annals of Cardiac Anaesthesia
- European Journal of Surgical oncology
- Indian Heart Journal
- Seminars in Cardio Vascular Anesthesia

Abstracts:

- Dhir A. Hemodynamic collapse in the OR – TEE as a compass. IACTA 2016, Chennai, India, abstract book
- Alfaro H, Lima R, Giraldo M, Dhir A. Unexpected Persistent Left Superior Vena Cava in Cardiac Patient with Unknown Hiatus Hernia. Abstract # EW 15, SCA ECHO week 2016, Atlanta, GA.
- Alfaro H, Lima R, Dhir A. Unexpected Persistent Left Superior Vena Cava in Cardiac Patient with Unknown Hiatus Hernia. CAS annual meeting 2016.
- Sadkhan HH, Dhir AK, Kishore K, Quan D. ‘Managing difficult airway for emergency liver transplant, more than one challenge to manage’. IARS annual conference 2016 abstract.

In 2016, MEDICI was officially designated as a World Health Organization (WHO) Collaborating Centre for Global Surgery & Anesthesia

MEDICI
Medical Evidence Decision Integrity Clinical Impact

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

About the Program

The Centre for Medical Evidence, Decision Integrity & Clinical Impact (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.

MEDICI encompasses:

1. **HiTEC** (High Impact Technology Evaluation Centre), a hospital-focused, evidence-based health technology assessment program which serves to inform hospitals and regional health in London, Ontario and beyond.
2. **EPiCOR** (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.
3. **Know4Go**, a framework to support decision-makers and policy-makers to contextualize and synthesize 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)’.

In 2016, MEDICI was officially designated as a World Health Organization (WHO) Collaborating Centre for Global Surgery & Anesthesia.

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
 - Optimising 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



**Medical Evidence
Decision Integrity
Clinical Impact**

MEDICI HIGHLIGHTS: Global Impact
World Health Organizations Collaborating
Centre (WHO CC)

In 2016, MEDICI was designated as an official World Health Organization Collaborating Centre, becoming the only WHO CC in the world mandated to study perioperative, surgical, and anesthetic care. With this designation, MEDICI will support the WHO's efforts in progressing towards universal access to safe and effective essential surgery and anesthesia. This designation closely follows the inclusion of strengthening emergency and essential surgical care and anesthesia as a component of universal health coverage by the World Health Assembly in 2015.

MEDICI's collaborations with the WHO will include:

- Building the capacity for essential surgery, anesthesia, emergency and critical care in resource-source settings as a component of Universal Health Care
- Developing evidence-informed context-sensitive patient care guidelines
- Conducting evidence synthesis, knowledge translation, and impact analysis in the areas of perioperative, surgical, and anesthetic care

MEDICI CORE TEAM

Janet Martin, PharmD, MSc (HTA&M)
Director & Assistant Professor

Davy Cheng, MD, MSc, FRCPC, FCAHS, CCPE
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University Professor

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Program Coordinator & Information Specialist

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Amy Newitt, MLIS
Research Assistant

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Research Assistant

Junsong Gong, MD, PhD
Postdoctoral Fellow

Jingyi Li, MD, PhD
Postdoctoral Fellow

Riaz Qureshi, BSc, MSc (epi) candidate
Masters Student, Thesis Research

MEDICI Publications

Wang L, Johnston BC, Kaushal A, Cheng D, Martin J. (2016). Ketamine added to morphine patient controlled analgesia for postoperative pain in adults: a systematic review and meta-analysis of randomized trials. *Can J Anaesth.* 63(3): 311-325.

Martin J, Polisena J, Dendukuri N, Rhainds M, Sampietro-Colom L.(2016). Local health technology assessment in Canada: Current state and next steps.*Int J Technol Assess Health Care.* 32(3): 1-6.

John-Baptiste A, Sowerby L, Chin C, Martin J, Rotenberg B. (2016). A cost analysis comparing surgical trays with redundant instruments to reduced trays. *CMAJ Open.* 4(3): E404-8.

Jasudavisius A, Arellano R, Martin J, Bainbridge D. (2016). A systematic review of transthoracic and transesophageal echocardiography in non-cardiac surgery: Implications for point of care ultrasound education in the operating room. *Can J Anaesth.* 63(4): 480-487.

Wang Li, Lee M, Zhang Z, Moodie J, Cheng DC, Martin J. (2016). Does preoperative rehabilitation

for patients planning to undergo joint replacement surgery improve outcomes? A systematic review and meta-analysis of randomized controlled trials. *BMJ Open.* 6(2): e009857.

John-Baptiste A, Schapira MM, Cravens C, Chambers JD, Neumann PJ, Siegel J, Lawrence W. (2016). The Role of Decision Models in Health Care Policy: A Case Study. *Med Decis Making.* 36(5): 666-79.

Habbous S, Acedillo R, Przech S, Sarma S, Garg A, Martin J. The efficacy and safety of sevelamer and lanthanum versus calcium-containing and iron-based binders in treating hyperphosphatemia in patients with chronic kidney disease: a systematic review and meta-analysis. *Nephrol Dial Transplant.* 2016 Sep 20. pii: gfw312.

Sampietro-Colom L, Martin J. Introduction. Hospital-based health technology assessment: the next frontier. In: Sampietro-Colom, Martin J, editors. In Sampietro-Colom L, Martin J (eds). Hospital-Based Health Technology Assessment: The Next Frontier for HTA. Springer-

Verlag, London, UK, 2016. ISBN 978-3-319-39203-5.

Martin J, Lal A, Moodie J, Newitt A, Cheng D. Hospital-based HTA in London, Ontario. In: Sampietro-Colom L, Martin J (eds). Hospital-Based Health Technology Assessment: The Next Frontier for HTA. Springer-Verlag, London, UK, 2016. ISBN 978-3-319-39203-5.

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Martin J, Sampietro-Colom L. Looking to the future of hospital-based health technology assessment. In: Sampietro-Colom L, Martin J (eds). Hospital-Based Health Technology Assessment: The Next Frontier for HTA. Springer-Verlag, London, UK, 2016. ISBN 978-3-319-39203-5

Global HB-HTA Book

Hospital-Based Health Technology Assessment: The Next Frontier for Health Technology Assessment, co-edited by Dr. Martin, is published. This book is a collection of international case descriptions facilitate comparison of HB-HTA across 18 countries, intended to provide information to those working the in the field of HTA, and decision & policy makers in the hospital setting.

www.springer.com/us/book/9783319392035



newsmakers

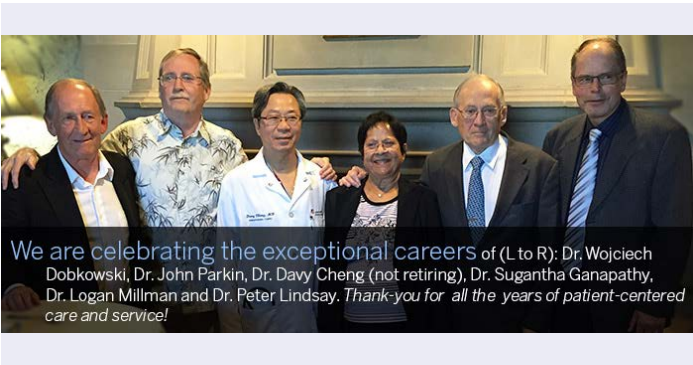
Canadian National Anesthesiology Simulation Curriculum (CANNASC)

Dr. Andreas Antoniou and colleagues on the development and implementation of the Canadian National Anesthesiology Simulation Curriculum (CANNASC). A simulation-based assessment of anesthesiology residents' competence.

The specialty of anesthesiology will soon adopt the Competence By Design (CBD) approach to residency education developed by the Royal College of Physicians and Surgeons of Canada (RCPSC).

A foundational component of CBD is frequent and contextualized assessment of trainees. In 2013, the RCPSC Anesthesiology Specialty Committee assembled a group of simulation educators, representing each of the 17 Canadian anesthesiology residency programs, to form the Canadian National Anesthesiology Simulation Curriculum(CanNASC) Task Force. The goals were to develop, implement, and evaluate a set of consensus-driven standardized mannequin-based simulation scenarios that every trainee must complete satisfactorily prior to completion of anesthesiology residency and certification. Curriculum development followed Kern's principles and was accomplished via monthly teleconferences and annual face-to-face meetings.

See: Chiu M, Tarshis J, Antoniou A, Bosma TL, Burjorjee JE, et al. Simulation-based assessment of anesthesiology residents' competence: development and implementation of the Canadian National Anesthesiology Simulation Curriculum (CanNASC). *Can J Anaesth.* 2016 Dec;63(12):1357-1363. Epub 2016 Sep 16.



Retirement Announcements

Our Annual Retirement Reception and Celebration was held on June 9th at the Windermere Manor, in honour of the following five consultants who have recently retired from the Department of Anesthesia and Perioperative Medicine:

- Dr. Wojciech Dobkowski - December 31, 2015
- Dr. Sugantha Ganapathy - September 30, 2015
- Dr. Peter Lindsay - May 31, 2016
- Dr. Logan Millman - May 31, 2016
- Dr. John Parkin - May 31, 2016

For a combined total of 162 years of patient-centered care and service, our consultants have shared their wisdom, knowledge and expertise with our department, as well as nation-wide and globally. Our faculty, residents, fellows, and staff are grateful to have worked with them.

This work highlights that scientific research should not only strive to push the bounds of basic knowledge but also welcome pragmatic studies performed in real-world settings to address daily clinical conundrums

Anesthetists at University Hospital LHSC, Set Record Recruitment Rates for Large RISCCS RCT

The Randomized Isoflurane and Sevoflurane Comparison in Cardiac Surgery (RISCCS) is a pragmatic randomized non-inferiority comparative effectiveness clinical trial that began in November 2011. From its inception to conclusion in March 2014, the RISCCS study saw participation of 464 adults having coronary artery bypass graft and/or single valve surgery.

With a recruitment number of 464 adults, this is by far the largest RCT devised and performed by Department faculty to date. In addition, this RCT was conducted and completed exclusively at LHSC University Hospital.

In the July 2016 issue of the Canadian Journal of Anesthesia, Drs. Mathis and Kheterpal then discuss the clinical impact of this study in their editorial,

“Newer isn’t always better: comparative effectiveness of sevoflurane and isoflurane in cardiac surgery,”

“The direct ramifications of this study are interesting. For instance, the authors suggest potentially saving millions of healthcare dollars per

year if anesthesiologists opt to use isoflurane rather than sevoflurane during cardiac surgery. Of greater interest, however, is the fact that this study was just now performed, despite both anesthetics being available for over 20 years in the context of clinical equipoise.

This work highlights that scientific research should not only strive to push the bounds of basic knowledge but also welcome pragmatic studies performed in real-world settings to address daily clinical conundrums.”
(Mathis, 2016)

See: Jones PM, Bainbridge D, Chu MW, Fernandes PS, Fox SA, Iglesias I, Kiaii B, Lavi R, Murkin JM. Comparison of isoflurane and sevoflurane in cardiac surgery: a randomized non-inferiority comparative effectiveness trial. *Can J Anaesth.* 2016 Oct;63(10):1128-39.

MEDICI Presentations

Martin J. (2016). HTA 2020: Role of Networks to Achieve improved Efficiencies in HTA & KT. Canadian Agency for Drugs and Technologies in Health (CADTH) Symposium, Ottawa, Canada

Martin J. (2016). IDEAL + Know4Go: Applied Continuously in the Real World Setting. IDEAL Conference, Oxford University, Oxford, United Kingdom

Cheng D. (2016) Global Anesthesia Mortality and Surgery / Anesthesia Capacity Gap. 11th Pan Arab Congress of Anesthesia, Intensive Care and Pain Management, Dubai, United Arab Emirates.

Cheng D. (2016) Value-based anesthesia decision-making and knowledge translation (KT), 45th Annual Meeting of the Association of Cardiac Anesthesiologists, Chicago, IL.

Qureshi R, Sutton D, Martin J. (2016) Evidence reversals. 5th International Society for Evidence-based Healthcare Congress, Kish Island, Iran

Martin J, Cheng D. (2016) Evidence-Based Health Technology Assessment, Knowledge Translation in Surgery, Anesthesia & Critical Care: Building a Centre of Excellence.,

Ontario Ministry of Health & Long Term Care AFP Innovation Showcase. Toronto, ON

Martin J. (2016) Know4go: Combining Evidence, Economics, and Everything Else that Matters to Increase Innovation Efficiency during Budget Cutbacks. Association of Academic Health Centers International (AAHCI) Meeting, London, Canada

Cheng D. (2016) Assessing transcathether Aortic Valve Implantation: Quantifying the Learning Curve. Association of Academic Health Centers International (AAHCI) Meeting, London, Canada

Martin J. (2016) What proportion of anesthesia evidence is valid and relevant? Academy of Cardiac Anesthesiologists (ACA) Annual Meeting, Chicago, USA

Martin J. (2016) What proportion of published evidence is valid and relevant? European Critical Care Workgroup Initiative Annual Meeting (ECWI), Helsinki, Finland

Cheng D. (2016) Minimally Invasive Cardiothoracic Surgery: Are Clinical Outcomes Significantly Better than Conventional Surgery?, European Workgroup on Cardiothoracic Intensivists Annual Meeting, Helsinki, Finland.

Martin J. (2016) Sepsis Related Mortality: Increasing, Decreasing, or Flat-lining? European Critical Care Working Initiative Annual Meeting (ECWI), Helsinki, Finland

Cheng D. (2016) TAVI vs Surgical AVR vs Medical Management: An Update on the Evolving Evidence, European Workgroup on Cardiothoracic Intensivists Annual Meeting, Helsinki, Finland

Martin J. (2016) Hospital-Based HTA: Addressing Difficult Decisions using Know4Go. Health Technology Assessment for Decision-Makers Institute, Toronto Health Economics and Technology Assessment (THETA), Toronto, Canada

Cheng D. (2016) Transfusion Thresholds - Do Outcomes Differ for Critical Care vs Surgical Patients?, Czech Society of Anesthesiology and Intensive Care Medicine, Prague, CZ

Cheng D. (2016) Health Technology Assessment and Knowledge Translation - Evidence to Guidelines to Practice: the road less traveled, J Earl Wynands Endowed Lectureship in Anesthesiology, University of Ottawa Heart Institute

MEDICI Presentations

Martin J. (2016) Minimally invasive Surgery, Health Technology Assessment and the Learning Curve. World Congress of Anesthesiology (WCA), Hong Kong, China

Cheng D. (2016) Value and Evidence-Based Cardiac Care, Pre-World Congress of Anesthesiologists 24th Annual Meeting of Chinese Society of Anesthesiologists, Guangzhou, China

Cheng D. (2016) TAVR – Anesthesia Management and Outcomes, Pre-World Congress of Anesthesiologists 24th Annual Meeting of Chinese Society of Anesthesiologists, Guangzhou, China

Cheng D, Martin J. (2016) What Proportion of Evidence is Valid and Relevant? Canadian Anesthesiologists' Society (CAS) Annual Meeting. Vancouver, Canada

Martin J, F Zhu, Cheng D. (2016) Hospital-Based HTA: Updates from Canada. Health Technology Assessment International (HTAi), Tokyo, Japan

Cheng D, Cherian M, Martin J. (2016) Safe surgery and anesthesia in the context of an Ebola outbreak. Invited speaker, Euroanesthesia Congress (ESA), London, UK

Martin J. (2016) What proportion of the published literature is valid and relevant? Invited Presentation, British Medical Association and BMJ Evidence Group, BMA House, London, UK.

Martin J. (2016) Combining Evidence, Economics, Ethics, and 'Everything Else' for Decision-Making in Healthcare. British Medical Association and BMJ Evidence Group, BMA House, London, UK.

Amaral A. on behalf of CWC Working Group. (2016) Choosing Wisely Canada (CWC): Five things not to do in the ICU. Canadian Critical Care Society Annual Meeting (CCCS). Toronto, ON.

Martin J. (2016) Surgical and Anesthetic-Related Mortality: What are the contemporary risks, and are they improving over time?, Clinical Update in Anesthesia & Perioperative Medicine, San Juan, PR.

Cheng D. (2016) Global Challenges in Anesthesia - Are we doing enough?, Clinical Update in Anesthesia & Perioperative Medicine, San Juan, PR.

Cheng D. (2016) What is the World Health Organization doing about the Global Health Crisis?, IARS Annual Meeting, San Francisco, CA

Cheng D. (2016) Value-Based Anesthesia Care: Practice Evidence Reversal and Choosing Wisely Campaign, IARS Annual Meeting, San Francisco, CA

Cheng D. (2016) OPCAB: Current Evidence and Perioperative Management, Korean Society of Cardiothoracic and Vascular Anesthesiologists Annual Meeting. Seoul, South Korea

Cheng D. (2016) PCI vs CABG (Controversies in interventional cardiology), SCA 38th Annual Meeting and Workshops, San Diego, CA.

Ongoing MEDICI Research Programs

- Health Technology Assessment & Knowledge Translation (2013-2015 specific projects in collaboration with clinical programs including orthopedic surgery, cardiology, thoracic surgery, anesthesia, critical care, ENT surgery, ophthalmology, and mental health)
- Rapid Synthesis Methodologies to Support Decision-Makers
- Real World Robust Decision-Making
- Quantifying Opportunity Cost across Multiple Competing Opportunities
- Disinvestment-Reinvestment Methodology
- Evidence Contextualization
- Value of information Analysis
- Evidence Reversals
- Relevance of health economics in the hospital setting
- Know4Go Applications: Combining Evidence + Ethics + Economics + “Everything Else” to inform value in health care

MEDICI Workshops Provided

Ten workshops were provided at various local and international symposia, including IARS, CAS, SCA, HTA Exchange, CADTH, KT Canada, Clinical Update in Anesthesia, and HTAi as well as for local teaching venues (resident research day, academic half-days, etc). Popular workshops include:

- **Know4Go:** a framework for decision-making when resources are limited and options are many
- **Health Economics**
- **Hospital-Based HTA**
- **Statistics for the Terrified**
- **Bias & Spin:** Tips and Tricks for Discerning the Literature
- **Evidence-Based Decision-Making, HTA & Knowledge Translation**
- **Perioperative & Anesthetic-Related Mortality**
- **Stentless Valves versus Conventional Valves for Aortic Valve Replacement**
- **Multislice CT, MRI, TEE/TTE Ultrasound, versus Angiography for Aortic Dissection Surgical AF Ablation** (MAZE and related procedures)

MEDICI Courses Taught

- MPH 9014 “Health Economics”**, Master of Public Health Program (Dr. Ava John-Baptiste)
- EPI 9562 “Clinical Epidemiology”**, Master’s in Epidemiology (Dr. Janet Martin)
- EPI 4320 “Clinical Epidemiology”**, 4th Year Undergraduate Honors Specialization (Dr. Janet Martin)
- EPI 9574 “Cost-Effectiveness Analysis”** Master’s in Epidemiology (Dr. Ava John-Baptiste)
- EPI 9576 “Health Economics Research Methods”**, Master’s in Epidemiology (Dr. Ava John-Baptiste)



EPICOR
Evidence Based Perioperative Clinical Outcomes Research

About the Program

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 interventional 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 Fiberoptic Intubation
- Dexmedetomidine for Craniotomy
- 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 Erythropoietics
- Ultrafiltration
- Miniaturized Circuits
- Cell Saver

Minimally Invasive & Robotic Surgical Methods

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

Mini-Mitral Valve Surgery

- Mini-Aortic Valve Surgery
- Robotic Surgery

Bypass Surgery

- Endovascular versus Open Vein Harvest for CABG (EVH)
- 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
- Multislice CT, MRI, TEE/TTE Ultrasound, versus Angiography for Aortic Dissection
- Surgical AF Ablation (MAZE and related procedures)

International Guidelines and
Consensus Statements

In addition, EPICOR has collaborated with other international groups to perform evidence-based systematic reviews and consensus statements. These forums provide a unique opportunity to provide capacity-building in skills related to study design, statistical analysis, evidence-based decision-making, meta-analysis and systematic review, and GRADE'ing the evidence. The following areas have been addressed by consensus conferences led by EPiCOR/MEDICI:

- Off-Pump Coronary Artery Bypass Surgery (OPCAB)
- Endovascular Vein Harvest (EVH)
- Video-Assisted Thoracic Surgery for Lung Cancer (VATS)
- Transmyocardial Revascularization (TMR)
- Stentless Aortic Valves (SAV)
- Ablation of Atrial Fibrillation (AFL)
- Thoracic Endovascular Aortic Repair (TEVAR)
- Minimally invasive mitral valve repair (MI-MVS)
- Perioperative Colloids (HES, Albumin, Gelatins)
- Blood Management – Drugs, Devices and Procedures
- Perioperative Antibiotic Prophylaxis
- Transcathether aortic valve implantation (TAVI)

research



Journal Articles

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3. **Ahmad M, Sommerfreund D**. A new analgesic paradigm for pediatric tonsillectomy: Are we dragging our heels? *Canadian journal of anaesthesia = Journal canadien d'anesthesie*. 2016;63(3):256-9.

4. Bagur R, Kiaii B, Teefy PJ, Diamantouros P, **Lavi R**, Harle et al. First North American Experience With the Engager Self-Expanding Transcatheter Aortic Valve: Insights From the London Health Sciences Centre Heart Team. *Ann Thorac Surg*. 2016 Aug;102(2):e167-71.

5. Bharadwaj S, Haji F, Hebb M, **Chui J**. Direct motor evoked potentials and cortical mapping using the NIM® nerve monitoring system: A technical note. *J Clin Neurosci*. 2016 Dec 22. pii: S0967-5868(16)30225-9

6. Bosma KJ, Read BA, Bahrgard Nikoo MJ, **Jones PM**, Priestap FA, Lewis JF. A Pilot Randomized Trial Comparing Weaning From Mechanical Ventilation on Pressure Support Versus Proportional Assist Ventilation. *Crit Care Med*. 2016 Jan 20;31(1):68-71.

7. Bozso SJ, Grant A, **Iglesias I**, Chu MW. Minimally Invasive Periareolar Approach to Unroofed Coronary Sinus Atrial Septal Defect Repair. *Ann Thorac Surg*. 2016 Sept;102(3):e223-5.

8. Chin JL, Billia M, Relle J, Roethke MC, Popeneciu IV, **Harle C**, et al. Magnetic Resonance Imaging-Guided Transurethral Ultrasound Ablation of Prostate Tissue in Patients with Localized Prostate Cancer: A Prospective Phase 1 Clinical Trial. *European urology*. 2016;70(3):447-55.

9. Chiu M, Tarshis J, **Antoniou A**, Bosma TL, Burjorjee JE, Cowie N, et al. Simulation-based assessment of anesthesiology residents' competence: development

and implementation of the Canadian National Anesthesiology Simulation Curriculum (CanNASC). *Can J Anaesth*. 2016 Dec;63(12):1357-1363.

10. Chu MW, Bagur R, Losenno KL, **Jones PM**, Diamantouros P, Teefy P, et al. Early clinical outcomes of a novel self-expanding transapical transcatheter aortic valve bioprosthesis. *J Thorac Cardiovasc Surg*. 2016 Dec 15. pii: S0022-5223(16)31678-62016.

11. **Chui J**, Craen RA. An update on the prone position. *Canadian Journal of Anesthesia*. 2016 Jun;63(6):737-67.

12. Chung F, Memtsoudis SG, Ramachandran SK, **Nagappa M**, Opperer M, Cozowicz C, et al. Society of Anesthesia and Sleep Medicine Guidelines on Preoperative Screening and Assessment of Adult Patients With Obstructive Sleep Apnea. *Anesth Analg*. 2016 Aug;123(2):452-73.

13. Chung F, **Nagappa M**, Singh M, Mokhlesi B. CPAP in the Perioperative Setting: Evidence of Support. *Chest*. 2016 Feb;149(2):586-97.

Journal Articles

14. **Dhir S, Armstrong K, Armstrong P**, Bouzari A, Mall J, Yu J, **Ganapathy S**, King G. A randomised comparison between ultrasound and nerve stimulation for infraclavicular catheter placement. *Anaesthesia*. 2016 Feb;71(2):198-204.

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17. **Fisher K, Qasem F, Armstrong P, McConachie I**. Anesthetic considerations in a parturient with Freeman-Sheldon syndrome. *Int J Obstet Anesth*. 2016 Aug;27:81-4.

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23. **Jones PM, Bainbridge D**, Chu MW, Fernandes PS, Fox SA, **Iglesias I**, Kiaii B, **Lavi R, Murkin JM**. Comparison of isoflurane and sevoflurane in cardiac surgery: a randomized non-inferiority comparative effectiveness trial. *Can J Anaesth*. 2016 Oct;63(10):1128-39.

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28. Lohse JA, Piepho T, **Noppens R**. Awake video laryngoscopy - A revolution in the management of the anticipated difficult airway?. *Trends in Anaesthesia and Critical Care*. 2016 Feb;6:37-42.

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41. Sharma M, **McConachie I**. Neuraxial blocks in parturients post spinal surgery and with scoliosis.

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Book Chapters

Aarvold ABR, Wiggins J, **Sebbag I**, Kintu A, Mung'ayi V, Douglas J. Anaesthesia [Chapter 10] In: Magee LA, von Dadelszen P, Stones W, Mathai M, editors. *The FIGO Textbook of Pregnancy Hypertension: An evidence-based guide to monitoring, prevention and management*. London; The Global Library of Women's Medicine, 2016

Chui J, **Martin J**, **Cheng DC**. Acute Decompensated Heart Failure and Cardiogenic Shock [chapter] In: *Textbook of Critical Care including Trauma and Emergency Care*. Vol 1. 2016 Jan. p.270-283

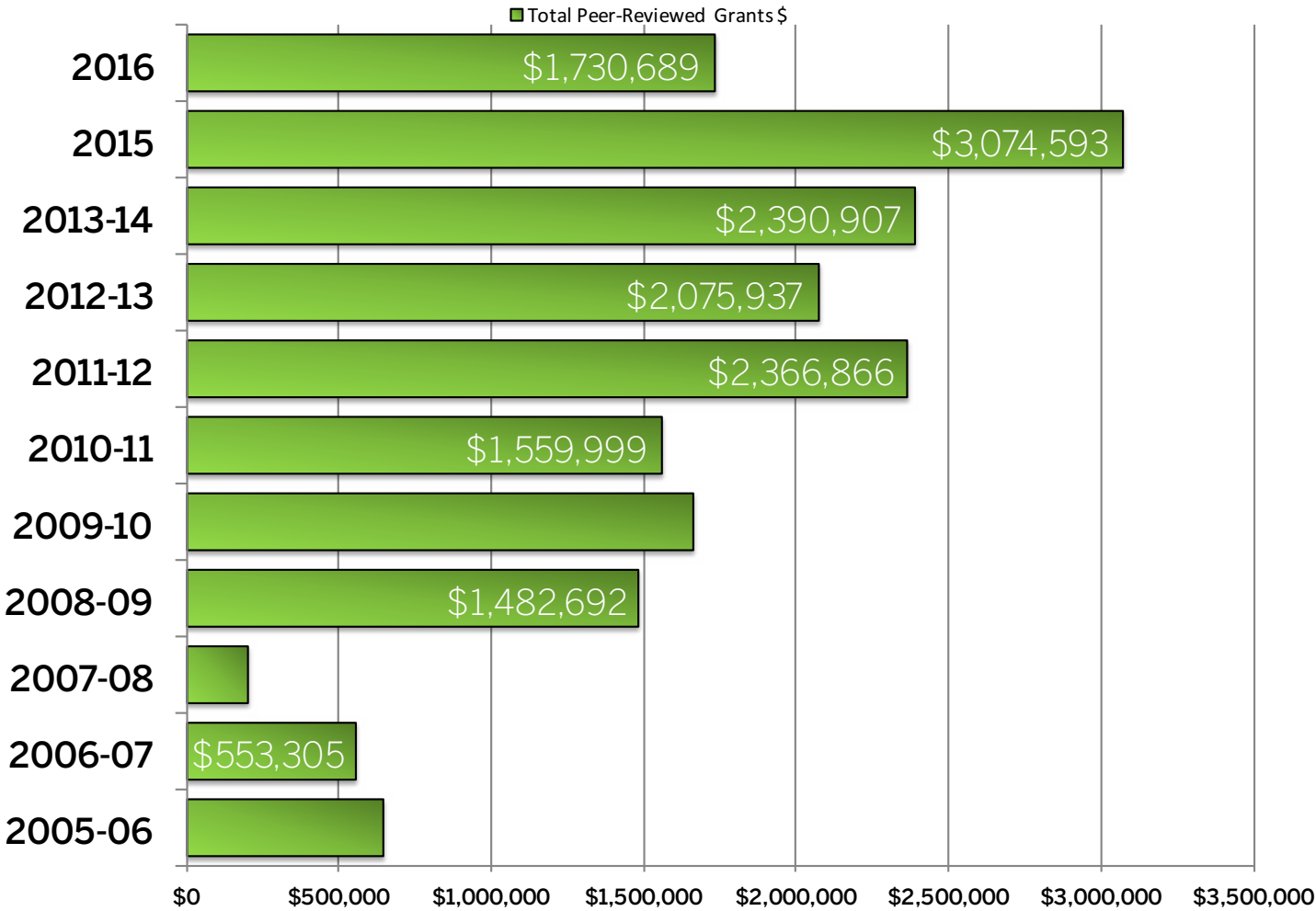
Ian Herrick, **Jason Chui**, Randall T., Higashida, Adrian W. GelbGelb AW. Occlusive Cerebrovascular Disease: Anesthetic Considerations [chapter]. In: *Cottrell & Patel's Neuroanesthesia*, 6th Ed. 2016 Dec 31.

Total peer-reviewed journal articles: 4445

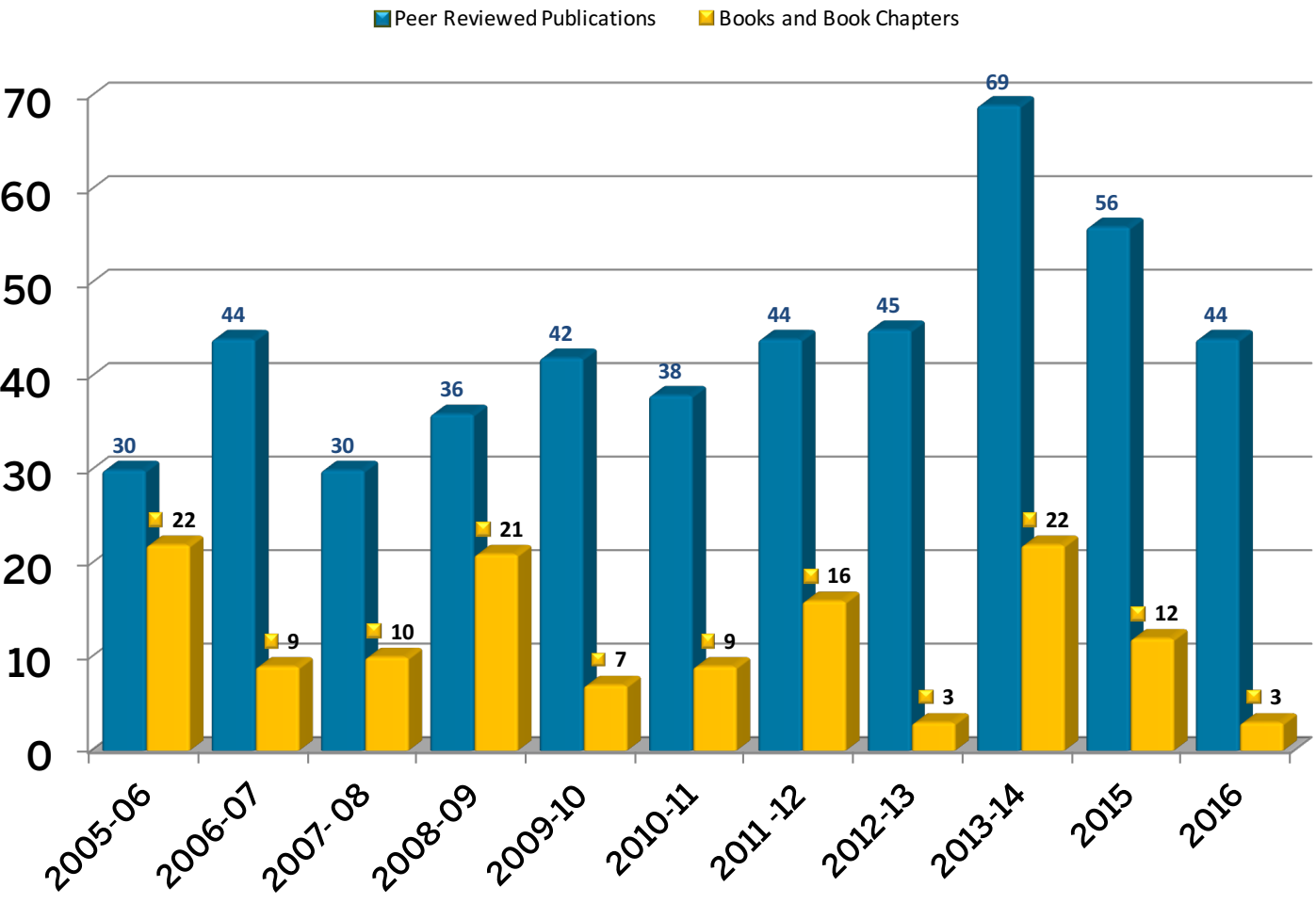
Total book chapters: 32

Total year-to-date publications: 47

peer-reviewed grants **totals**
PEER-REVIEWED GRANTS PER ANNUM



peer-reviewed publications **totals**
PEER-REVIEWED PUBLICATIONS PER ANNUM
BOOKS AND BOOK CHAPTERS PER ANNUM



newsmakers

Dr. Michael Sharpe Receives the Lifetime Achievement Award for Lifetime Commitment to Organ Donation Awareness



London Health Sciences Centre (LHSC) is pleased to congratulate Dr. Michael Sharpe, a intensivist at LHSC's University Hospital, on

receiving the Lifetime Achievement Award from Trillium Gift of Life Network (TGLN).

The award is presented to a physician who is a strong advocate for organ and tissue donation both internal and external to the hospital, who mentors other hospital staff and physicians on the importance of organ donation and who has illustrated a dedication to advancing donation practices.

As a critical care physician who trained at LHSC – a hospital that cares for neurosciences patients as well as home to the regional trauma program – Dr. Sharpe says it is the nature of the hospital's business to care for people who have experienced acute brain injuries.

"During my training, I also worked with physicians who were considered champions of transplantation, including [Drs.] Neil McKenzie, Bill Wall and Cal Stiller, so organ donation was part of a culture established early on in my career."

Dr. Sharpe says years ago when his team approached a family about the possibility of donating their loved one's organs, not many people knew much about it. "It was a totally new concept," he says. "Today, in many instances families are actually the first to bring up the subject when their loved one has had a significant injury."

One mother who understands all too well the importance of organ donation awareness is Ann Hider, 79, whose son Barry McGucken became an organ donor following his sudden death from a brain aneurysm in 1984.

While there was not the same level of awareness about the importance of organ donation back then, Hider says it was fortuitous that just six weeks before her son's death he told her that he had just signed his organ donor card. "There wasn't the same level of awareness about organ donation then, so it was like a miracle that he came in and told me that when he did," says Hider.

Two teenagers ended up with her son's kidneys and another young girl received his eyes. Hider says it brings her comfort to know that her son was able to help save and improve the lives of others—which is exactly why Dr. Sharpe will continue working with his team to increase organ donation awareness.

"What I've learned over the years is the beneficial impact organ donation has on donor families," says Dr. Sharpe. "In talking to patients' families who have donated, it's a tremendous benefit for the grieving families. So my resolve in all of this is to ensure each and every potential organ donor's family has had the opportunity to make the decision."

Both Dr. Sharpe and Hider underscore the importance of talking about your end-of-life wishes with your family, and with taking the step to register your consent to be an organ donor at BeADonor.ca/LHSC.

Dr. Davy Cheng is Elected Chair of the Board of Trustees for the International Anesthesia Research Society

Dr. Davy Cheng, Distinguished University Professor and Chair/Chief of Department of Anesthesia & Perioperative Medicine at Western University was elected as Chair of the Board of Trustees (2016–2017), at the International Anesthesia Research Society (IARS) annual meeting in May 2016.

The IARS is a nonpolitical, not-for-profit medical society founded in 1922 with its mission focused solely on the advancement and support of education and scientific research related to anesthesiology. The IARS contributes nearly \$1 million annually to fund anesthesia research; maintains a worldwide membership of more than 15,000 physicians, physician residents, and others with doctoral degrees, as well as health professionals in anesthesia-related practice; sponsors the SmartTots initiative in partnership with the FDA; and publishes the monthly Anesthesia & Analgesia journal in print and online as well as the clinical companion journal A&A Case Reports, published semi-monthly.

Dr. Davy Cheng Chairs Circulation Track at the World Congress of Anaesthesiologists, and the Scientific Affairs Committee of the WFSA in Hong Kong



The Hong Kong Convention and Exhibition Centre was the stage hosting the 16th World Congress of Anaesthesiologists (WCA 2016), this past August. Starting on the 28th and continuing to September 2nd, attracted over 6,500 delegates from 134+ National Societies of Anesthesiology around the world.

The WCA serves as an ideal networking platform for anaesthesiologists from around the globe to meet, and acts as a key resource for education and best practice in anaesthesiology and its sub- specialties; it is the flagship congress of the World Federation of Societies of Anaesthesiologists (WFSA). Dr. Davy Cheng, Chair and Chief of the Department of Anesthesia and Perioperative Medicine at Western University, chaired the Circulation Track of WCA HK 2016, and led 80 esteemed cardiac anesthesiologists presenting in the track.

Dr. Cheng was also elected as Chair of the Scientific Affairs Committee of WFSA at the General Assembly meeting at WCA HK [pictured above], as nominated by the

Canadian Anaesthesiologists' Society (CAS). The WFSA Scientific Affairs Committee has elected members from all 6 global regions in the world (Europe, South America, North America, Australia/New Zealand, Africa, Asia).

Prior to the WCA HK congress, Dr. Cheng delivered the Welcome Address at the Opening Ceremony to thousands of attendees at the Pre World Congress of Anesthesiologists Cardiac Symposium (representing the WFSA, Society of Cardiovascular Anesthesiologists, and International Anesthesia Research Society) [pictured below], together with the Asian Society of Cardiovascular Anesthesiologists for an international cardiac anesthesia symposium with the Chinese Society of Anesthesiologists in Guangzhou, China; in advancing the knowledge exchange and practice in cardiac anesthesia, surgery and critical care globally.





Dr. Nicole Quigley

grants & funding

Peer Reviewed

Bainbridge D & Murkin J. ORNIM Medical: Intraoperative NIRS-based CBF in Comparison to TCD Cerebral Flow Velocity: A Correlation Analysis.
2013–Present: \$50,000

Bainbridge D et al. CIHR Grant: Transfusion requirements in Cardiac Surgery (TRICS III).
2013–2016: \$711,173 of \$2,133,521 [Year 3 of 3]

Builes A, Arango M, Gonzalez N, Arias I, Giraldo M. Ultrasound evaluation of airway changes after prone position surgeries. Anesthesia IRF.
2015–2017: \$2,790 of \$5,580 [Year 1 of 2]

Cheng D, John-Baptiste A, Kiaii 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 1 of 2]

Cheng D, Rahman A. Pilot Randomized Control Trial of Nutritional Care Pathway in at Risk Cardio-Vascular Surgery Patients. AMOSO Innovations Fund.
2015–2017: \$171, 583 [Year 2 of 2]

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

D’Aragon F, Cook D, Dhanani D, Hanna S, Lamontagne F, Sharpe M & Frenette J. Association Anesthesiologistes du Quebec: DONATE – Pilot Study.
2015–2016: \$20,000

Ellis CG, Drangova M, Janssen B, Fox-robichaud A, Martin C, Fraser D & Sharpe M. CIHR Grant: Noninvasive Functional Biomarker for Early Detection and Continuous Monitoring of Microvascular Dysfunction. CIHR.
2015–2017: \$106,483 of \$212,966 [Year 2 of 2]

Flier 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 1 of 2]

Frechette E, Nicolaou G, et al. Lawson IRF: MAPLE TOP: Malignant Pleural Effusion Thoracoscopic Outpatient Pleurodesis. A Feasibility Trial.
2015–2017: \$7,500 of \$15,000

Gai N, Bainbridge D & Lavi R. Anesthesia IRF: Patent Foramen Ovale and Risk of Postoperative Delirium following Elective Hip and Knee Arthroplasty Surgeries.
2014–2016: \$5,000 of \$10,000 [Year 2 of 2]

Ganapathy S, Fichtinger G, Borschneck D & Jaeger M. CIHR/ NSERC Collaborative Health Research Projects: Perk Tutor: Ultrasound-guided Needle Placement Training Platform.
2013–2016: \$112,313 of \$336,940 [Year 3 of 3]

Ganapathy S, Vissa D. A novel single injection phrenic nerve sparing ultrasound guided subscapularis plane block compared to interscalene block for arthroscopic shoulder surgery – A prospective, randomization non-inferiority study. Anesthesia IRF.
2016–2018: \$4,710 of \$9,420 [Year 1 of 2]

Hernandez-Alejandro R, Ralley F, Dhir A & Morrison S. Sanofi: Assessment for Postoperative Hypercoagulability using Rotational Thromboelastometry in Patients Undergoing Major Hepatic Resection for Cancer.
2014–2016: \$15,000 of \$30,000 [Year 2 of 2]

Peer Reviewed *continued*

Khemani E, McConachie I, Qasem F, Gray D, Leslie K. Evaluatoion of ERAS: Has it Made a Difference? A continuous, multidisciplinary intiative to improving the quality of ERAS as Victoria Hospital. Anesthesia IRF.
2015–2017: \$1,208 of \$2,415 [Year 1 of 2]

John-Baptiste A, Cheng D, Martin J, Arellano R & Jones P. Anesthesia IRF: Clinical Impact of Disinvestment in Hydroxyethyl Starches for Patients Undergoing Cardiac Surgery.
2014–2016: \$5,000 of \$10,000 [Year 2 of 2]

Jones P. Anesthesia IRF: International Surgical Outcomes Study (ISOS).
2014–2016: \$4,085 of \$8,170 [Year 2 of 2]

Lavi R, Chui J, Baindbridge D, Arellano R, Naudie D. Raising the Bar is South Western Ontario: Current Perioperative Ultrasound Use and Future Plans. AMOSO Innovation Fund.
2016–2018: \$42,735 of \$85,470 [Year 1 of 2]

Lavi R, McFarling M, Racine J, Mack P, Bainbridge D & Iglesias I. Anesthesia IRF: Efficacy of Surface Landmark Palpation for Identification of the Cricoid Cartilage in Obstetric Patients: A Prospective Observational Study.
2014–2016: \$900 of \$1,800 [Year 2 of 2]

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 1 of 2]

Naudie D & Ralley F. Resident Research Grant Support from Department of Surgery: Comparative Efficacy of Topical versus Intravenous Administration of Tranexamic Acid in Primary Total Hip Arthroplasty.
2014–2016: \$2,500 of \$5,000 [Year 2 of 2]

Mack P, Quigley N, Lavi R, Lavi S, Rachinsky M & Shoemaker K. Anesthesia IRF: Regional Changes in Upper Limb Perfusion following Brachial Plexus Block: A Pilot Study.
2014–2016: \$5,000 of \$10,000 [Year 2 of 2]

MEADE M, D’ARAGON F, RIBIE C, SHARPE M, BALL I, DHANANI S, HANNA S. Prospective Obervational Study of Deceased Organ Donation Management in 2 ICUs. Canadian Blood Services Kenneth J. Fyke Award.
2015–2016: \$90, 525, 05.

Railton C, Chong M, Kim R. Rocuronium pharmacogenetics. Anesthesia IRF.
2016–2018: \$4,465 of \$8,930 [Year 1 of 2]

Sebbag I, Singh I & Qasem F. Anesthesia IRF: Efficacy of Pulsatile Pressure Waveform Presence to Confirm Correct Placement of Epidural Needle in Laboring Pregnant Patients: A Prospective Observational Cohort Study.
2014–2016: \$1,000 of \$2,000 [Year 2 of 2]

Sodenkoppam Vijayashankar R, Ganapathy S, Uppal V, MacDonald S & Howard J. Anesthesia IRF: Ambulatory Continuous Adductor Canal Block to Facilitate Same Day Discharge following Total Knee Arthroplasty: A Pilot Study.
2014–2016: \$4,750 of \$9,500 [Year 2 of 2]

Taneja R. Advance Care Planning at LHSC. LHSC Funding.
2016–2018: 13,250 of \$25,600 [Year 1 of 2]

Taneja R. Advance care planning - ICU to grassroots. AMOSO Opportunities Fund.
2015–2016: \$48,750 of \$97,500 [Year 1 of 2]

Taneja R, Jones P. Advance care planning at LHSC. AMOSO Innovation Fund.
2016–2018: \$75,000 of \$150,000 [Year 1 of 2]

Taneja R, Faden L & Lingard L. Anesthesia IRF: Advance Care Planning for Critical Care – A Prelude to Breaking Barriers.
2014–2016: \$5,000 of \$10,000 [Year 2 of 2]

Taneja R, Hynes Z, Cristancho S. Heuristics and biases in cardiac anesthesia anticoagulation management. Anesthesia IRF.
2016–2018: \$2654 of \$5990 [Year 1 of 2].

Tawfic Q, Pirani Z, Kumar K, Nicolaou G, Amiruddin N. The role of intraoperative lidocaine infusion in preventing chronic post-surgical pain after VATS. Randomized double-blinded controlled study. Anesthesia IRF.
2016–2018: \$2,995 of \$5,990 [Year 1 of 2].

Turkstra T. Comparison of simultaneous endotracheal tube insertion with GlideScope use: a pilot study. Anesthesia IRF.
2015–2017: \$1,855 [Year 2 of 2]

You JJ, Taneja R. iDecide: Improving decision-making about goals of care during serious illness in late life. CIHR -Institute for Ageing Grant.
2016: \$24,994

You JJ, Taneja R. Improving Advance Care Planning for Frail Elderly Canadians. Canadian Frailty Network.
2016–2018: \$49,998 of \$99,997 [Year 1 of 2].

newsmakers

Global Corporate Challenge

For the third year in a row, Western is stepping up to the Global Corporate Challenge (GCC). It's a great way to have some fun with coworkers and add steps to your day. Whatever your current level of activity, this is great way to get moving! Register soon as places are limited to the first 200 teams to register. The Challenge begins May 25th.

The GCC makes living a healthy and active life easy and fun to do by taking teams on an exciting 100-day virtual journey around the world. You will join more than 1000 organizations (including over 50 other educational institutions) and 370,000 participants from 185 countries around the world!

How does it work? It's all about finding fun and creative ways to add steps and activities into your day. You receive a great device - a GCC Pulse - that will track your progress. The steps you rack up all count toward your team's virtual journey around the world. You have the freedom to earn your steps alone or together, or both.

This is how you get on board:
Put together a team of seven of your Western colleagues and appoint a Captain. Western employees only please! Your Captain registers your team on the GCC Western website. Western and departments are working together to sponsor 200 teams of seven this year, so act fast! There is no cost for participants.

Your Captain receives a message that their registration has been accepted, pending approval. HR contacts your "Area Manager", a person helping us manage the logistics in your Faculty or unit, to get the go-ahead for your team.

Team members receive a welcome email and are invited to activate their online profile. GCC sends out GCC Pulse activity trackers for each team member. The kits go to Area Managers for distribution, normally within 3-7 business days.



On May 25th, the worldwide journey begins! Human Resources is hosting a launch party in the Great Hall from 10:00 a.m. to noon on the 25th where you can pick up some snacks and other cool stuff to help you and your team be successful.

This initiative is all about personal wellness. It is a fun way to challenge yourself no matter where you are at. You may be moving toward that goal of 10,000 steps a day, or training for your next triathalon. Just taking the stairs instead of the elevator, getting off the bus two stops earlier, or biking to work all add up to active living. Only you will know your numbers.

The majority of Western participants last year reported decreased stress levels, improved productivity and concentration, increased sleep, and definitely an increase in steps per day!

To register a team or get more information visit the Western Global Corporate Challenge website. You must register by 4 pm on May 18th.

Having trouble registering?
Contact Sarah Gray at sarah.gray@gettheworldmoving.com or phone 1.416.304.9500 ext. 2005.

Want to connect with your department's GCC Area Manager?
Other questions? Contact hrhelp@uwo.ca

THE AMAZING RACE SCHULICH EDITION



The Amazing Race Schulich Edition

To celebrate the Schulich Wellness committee's first year as a committee the Amazing Race Schulich Edition was held on April 29th on the Western University Campus.

22 teams participated in the event, and Team Magneto took top prize. With over 100 people participating, our committee has agreed that we will put on another "amazing race" next year. Look for more information coming out in April, about our May 2017 event.

A big "THANK YOU" to the organizers, volunteers, and participants, who make the 2016 Amazing Race Schulich Edition a huge success.

www.schulich.uwo.ca/wellness/activities/the_amazing_race.html

