

DEPARTMENT OF ANESTHESIA & PERIOPERATIVE MEDICINE

The University of Western Ontario And Its Teaching Hospitals

London Health Sciences Centre St. Joseph's Health Care London

ANNUAL REPORT July 1st, 2005 – June 30th, 2006

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The Department would like to express their appreciation to Amanda Williams and Sian Waterfield for coordinating, compiling, editing, designing and publishing this annual report. This would not be possible without their hard work and dedication.

VISION AND MISSION STATEMENT

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

Chair/Chief Report

Davy Cheng, MD, MSc, FRCPC



 ${\it 3}$ he Department of Anesthesia & Perioperative Medicine (Department) of the Schulich School of Medicine & Dentistry, *The* University of Western Ontario (UWO) consists of 63 departmental members who practice at the teaching hospital sites of the London Health Sciences Centre (University Hospital and Victoria Hospital) and St. Joseph's Health Care London.

The Department provides clinical support to 40-42 operating rooms/day at both LHSC (University and Victoria Hospitals), and SJHC London. We also provide the 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, obstetric, pediatric care, out-of-OR interventional procedures, acute and chronic pain management, blood conservation management, post-anesthetic care unit, cardiac surgery recovery unit and intensive care units. In particular, the CSTAR (Canadian Surgical Technologies & Advanced Robotics) research and training centre at the London Health Sciences Centre, UWO is a national

centre of excellence for advance surgical training and research in minimally invasive surgery procedures such as cardiac, thoracic, urology, general and fetus surgery. This provides an excellent training facility and program for anesthesia in the latest and most advanced minimally invasive surgery management.

The Department provides teaching and training to undergraduate and postgraduate trainees in anesthesia and allied health care fields both at UWO and Out-Reach Community Program. The Department is well known for its clinical and research excellence in cardiac anesthesia, neuroanesthesia, transplantation, critical care, and pain medicine. The Department has been attracting clinical/research fellows and visiting scholars from around the world (Australia, New Zealand, UK, USA, Germany, Singapore, Korea, China, Columbia, Saudi Arabia,) for training in anesthesia and perioperative medicine.

<u>Administration</u>

The human resource issue continues as a challenge because of the rising demand of OR and non-OR anesthesia services in the Teaching Hospitals, as well as the provincial wait list access pressure. The Department continues its recruitment and retention policy, working together with LHSC/SJHC, UWO and MOHLTC in improving job satisfaction and resources initiatives such as an Anesthesia Academic Practice Plan, AFP phase 1, HOCC, Academic IMG and fellowship program, Anesthesia Care Team program, and restructuring transition support from Institutions continue to be developed.

Four new faculty members joined the Department during this 2005/2006 academic year:

Dr. Miguel Arango

Dr. Miguel Arango began working as a full time Consultant on September 1, 2005. Dr. Arango had been a Clinical Fellow in Neuroanesthesia in this Department at University Hospital since February 2004. He and his family have moved to London from Medellin, Columbia where he had been practicing as an anesthesiologist at the Hospital General de Medellin and was a Neuroanesthesia Professor at the Universidad Pontficia Bolivariana. Dr. Arango is involved in several major international multi-center clinical trials assessing various treatment strategies for head injuries.

Dr. Brian Church

Dr. Brian Church joined the Department as a full time Consultant in October 2005, following completion of a Clinical Fellowship in Thoracic/Vascular Anesthesia in this Department at Victoria Hospital. Dr. Church is also a member of the Canadian Forces Health Services Group, Department of National Defense, and has an academic interest in developing a critical event simulation program.

Dr. Ian McConachie

Dr. Ian McConachie began working as a full time Consultant in our Department on April 1, 2006. The Royal College of Physicians and Surgeons of Canada granted him an Academic Certification and Fellowship in Anesthesiology. He and his wife, Diane, moved to London from Blackpool, Lancashire, England. In his role at Blackpool Victoria Hospital he was actively involved in teaching. He was an Honorary Lecturer at Manchester University, as well as an Honorary Senior Lecturer at University of Central Lancashire. He has published the "Handbook of ICU Therapy" as well as several other books, chapters, reviews and papers. Dr. McConachie's clinical practice is based at SJHC.

Dr. Katherine Ower

Dr. Katherine Ower began working as a full time Consultant in August 2005. Dr. Ower had completed her Residency, as well as a Clinical Fellowship in Chronic Pain in this Department prior to her appointment. She is continuing her practice in Chronic Pain Management at St. Joseph's Health Care, as well as practicing obstetric and general anesthesia at Victoria Hospital.

An additional four future recruits were planned for the 2006/2007 academic year:

Dr. Shalini Dhir

Dr. Shalini Dhir will begin her full time Consultant appointment on July 1, 2006. Dr. Dhir has been a Clinical Fellow at SJHC since September 2004. During her Fellowship, she has been increasingly involved in research in the areas of obstetrical and regional anesthesia. Her abstract, *Ultrasound Localization Improves Primary Success and Reduces Secondary Catheter Failure in Continuous Peripheral Nerve*

Blocks, was selected in the "Top 50" Poster Display at the recent Canadian Anesthesiologists' Society meeting in Toronto. Dr. Dhir will be working primarily at SJHC.

Dr. Philip Jones

Dr. Philip Jones will begin working as a full time Consultant in our Department on July 1, 2006. Dr. Jones is currently completing his Fellowship in Cardiac Anesthesia at University Hospital. He had previously completed his Residency here in London Hospitals, following his graduation from *The* University of Western Ontario with his MD. He will be based at University Hospital, working across the city, and focusing on cardiac anesthesia and perioperative outcomes.

Dr. Craig Railton

Dr. Craig Railton started working in our Department on August 1, 2006. Dr. Railton completed a Fellowship in the Clinical Pharmacology Specialty Program at the University of Toronto, following completion of the Royal College Exam in Anesthesia in June 2005. Prior to his medical training, he completed a PhD in Synthetic Organic Chemistry at University of Alberta. Dr. Railton's research areas include clinical pharmacology, perioperative medicine, and patient safety. He will be based at Victoria Hospital, and have a cross appointment to the Department of Medicine.

Dr. Timothy Turkstra

Dr. Tim Turkstra will be joining the Department effective July 1, 2006. He will be based at University Hospital and working at SJHC as well. Dr. Turkstra completed his MD at McMaster University, and then his Residency here in London. For the past year he has been a Clinical Fellow at University Hospital. He has won several research awards in the past two years. Prior to entering his medical training, Dr. Turkstra had attained his engineering degrees including B. Eng., M. Eng., and P. Eng designation.

<u>Fellowship</u>

The Fellowship Program as directed by Dr. Daniel Bainbridge, includes a broad scope of programs, excellent clinical exposure, and teachers and mentors in research. As of July of 2005 the program includes 14 fellows (up from 12 in 2004/2005).

Administrative Functions

Department faculty continues to play an important role in administrative functions outside the Department. Dr. Ian Herrick continues as Chief of Staff and Chair of the Medical Advisory Committee of LHSC; Dr. John Fuller as Medical Director of Perioperative Care, SJHC and a member of the RCPSC Council; Dr. Bill Sischek as the Chair of LHSC Credential Committee; Dr. Ron Butler as Site Chief of ICU, LHSC University Hospital, and Associate Director of the Cardiac Surgery Recovery Unit, LHSC; Dr. Michael Sharpe as the critical care advisor to the newly established Southwestern Local Health Integrated Network (LHIN); Dr. Rosemary Craen as Chair of the Scientific Program Committee of the Canadian Anesthesiologists' Society. Dr. Sal Spadafora has been appointed as a Corresponding Member (General) of the Anesthesia Examination Board of the RCPSC for a two-year renewable term. Dr. Richard Cherry is an anesthesia representative for the Respiratory Therapist Program at Fanshawe College, and along with Dr. Jim Watson and Dr. Fiona Ralley, is a member of the Program Advisory Committee for the Anesthesia Assistant Program. Dr. Davy Cheng continues his active advisory roles to the Hospitals, University, LHIN, MOHLTC, and National and International Anesthesia Societies.

Anesthesia Academic Practice Plan (AAPP)

Beginning May 1, 2005, the Department established a citywide Anesthesia Academic Practice Plan (AAPP), which provides a stable and competitive environment for recruitment/retention to academic anesthesia practice at LHSC/SJHC, UWO. The Department is working with AMOSO (the Academic Medical Organization of Southwestern Ontario) toward a comprehensive AHSC AFP.

Clinical

The Citywide Department has numerous areas of strong clinical activities including transplantation, vascular and thoracic anesthesia, acute pain and regional anesthesia, chronic pain program, critical care, obstetric anesthesia, pediatric anesthesia, etc. in addition to the well established areas of robotic surgery neuroanesthesia, cardiac anesthesia, and perioperative blood conservation. These focused clinical areas will continue in further development and recruitment by the Department.

Education

The Post Graduate Education Program under the Directorship of Dr. Sal Spadafora and Associate Directorship of Dr. Sandra Katsiris continues to thrive and grow, with forty-six Anesthesia residents and thirty-four offservice residents hosted from other residency training programs. Royal College achieve continued success at the examinations. The program offers general and sub-specialty rotations (Chronic Pain, Cardiac, Neuro, Ambulatory, Regional, Obstetric, Thoracic, Vascular, Pediatric, and Preadmission Clinic). New rotations in Airway Management and Acute Pain and the Cardiac Surgery being implemented. Recovery Unit are Rotations Southwestern Ontario (SWOMEN) are offered with over 20 residents participating. Our Continuing Medical Education Program under the leadership of Dr. Mary Lampe features invited lecturers from top academic institutions.

Research

The Department is committed to enhance academic productivity and academic resources including protected time and clinical access to research cases. The Department is ranked amongst the top in peerreviewed publications in academic anesthesia departments in Canada. The investigators have been successful in peer-review research grants and contract grants annually. The Department continues to build on the strengths of several outstanding academic programs: Cardiac Anesthesia and post Cardiac Surgical Recovery Unit; Critical Care Medicine; Neuroanesthesia; Regional Anesthesia and Pain Program; Evidence-based Perioperative Clinical Outcomes Program (EPiCOR); Perioperative Blood Conservation Program; and Simulator Program. New academic programs are being developed such as the Clinical Thoracic/Vascular Pharmacology, Coagulations, and Recruitment is targeted at individuals with demonstrated academic and research productivity. The expansion of the Fellowship Program has also resulted in increased academic productivity. Residents play an active role in research and presented a total of 20 presentations (poster and oral) at the Resident Research Day held jointly each year with the Anesthesia Program at McMaster University. The Canadian Anesthesiologists' Society Annual Meeting in Toronto was also well represented by our residents and Faculty.

Anesthesia Procedures for London Teaching Hospitals

| Hospital | Approxims | nate Numb | ate Number of Anesthetic Procedures Per Year for Each Group of Patients | cedures Per | r Year for Eac | sh Group of | Patients | | | |
|---|-------------------|------------|---|-------------|------------------------------|-------------|--------------------|---------------------|-------------------|-----------------|
| | l I | | | | | | | Į | Nerve Blocks | s |
| | Adult Surgical | Pediatrics | Obstetrical | Cardiac | Major Vascular Surgery | Thoracic | Neuro- surgical | Epidural/ Spinal | Other Regional | Pain Control |
| Victoria Hospital In OR Out of OR | 11,059 | 3,606 | Deliveries 2,350 C-sections 438 Epidurals 1,497 | 21 | 1,039 | 645 | 132 | 350 | 100 | 2,665 |
| Peds Consults | | 644 | | 1,476 | 2 | 2 | 1,156 | | | |
| Iniversity Healts | 8 80 | 375 | | 1 493 | | | | 300 | 100 | 2.530 |
| St. Joseph's | 16,954 | 501 | Deliveries 3,200 | | | | | 220 | 692 | 1,430 |
| Hospital | | | C-sections 890 Epidurals 2,240 | | | | | | | |
| TOTAL | 36,904 | 5,981 | Deliveries 5,550 | 1,514 | 1,041 | 647 | 1,288 | 870 | 892 | 6,625 |
| | | | C-sections 1,328 Epidurals 3,737 | | | | | | | |

DEPARTMENT OF ANESTHESIA & PERIOPERATIVE MEDICINE



Schulich

CONSERVATION PROGRAM Rakesh Shandari (Coordinator) Su Ganapathy (Director) Rakesh Bhandari (UH) Richard Tilsworth (VH) Kevin Armstrong (SJHC) PERIOPERATIVE BLOOD THORACICVASCULAR ANISTHESIA PROGRAM Geerge Nicelass (Breeton) PREADMISSION CLINIC REGIONAL ANESTHESIA Flores Rafley (Director) SITE CHIEF - SINC Streen Date (URD) R. Tilsworth (VH) J. Parkin (SJHC) Jim Watson PROGRAM Wajcieth Dobkowski (Director) LIVER TRANSPLANTATION PAEDIATRIC ANESTHESIA FELLOWSHIP PROCIRAN Daniel Bainbridge (Director) MEERCAL INFORMATICS Rosenary Crass (Director) OBSTETRICS PROGRAM Santra Katairia (Director) Seve Dain (Director) Richard Cherry (SJHC) Lynn Coveney (Director) NEUROANESTHESIA SITE CHIEF - VH David Smith (VH) Neal Badner PROGRAM CHAIRCHIEF PROGRAM PROGRAM Davy Cheng ORGANIZATIONAL CHART July 1", 2005 - June 30", 2006 CRITICAL CARE PROCRAM
Ros Burker (ICU-1/18)
Busy Cheng (CSRU)
John Futher (CCTC-VH) CHRONIC PAIN PROGRAM ANESTHESIA ASSISTANT Wajciech Dobkowski ACUTE PAIN PROGRAM Steven Dain (UH) Richard Tillmorth (VH) CARDIAC ANESTHESIA Daniel Bainbridge (TEE) PROGRAM John Murkin (Director) Jim Watson (Director) From Railey (Director) Patricia Macley-Farster STTE CHIEF - UH PROGRAM J. Alter, K. Bitton, W. Corren, I. Bineshilly, K. Bauter, J. McAlister, J. Mikatic, C. Polteri, M. Perskala Materiote, V. Espoor, J. Scales, M. Twistige, C. Witter UNDERGRADUATE EDUCATION PROGRAM Indu Singh (PGE Research Coord) POSTGRADUATE EDUCATION Sandra Katsiris (Aosoc. Director) John Fuller (Rural/Regional) ADMINISTRATIVE OFFICER DEPARTMENTAL COUNCIL Fran Igheias (UR) Fod Armstrong (SJBC) George Nicolaou (VII) CONTINUING MEDICAL EDUCATION PROCRAM Kevia Armstrang (SJBC) Tony Vannelli (Director) PROGRAM Sal Spadafora (Director) ACADEMIC APPAIRS Michael Sharpe (Chair) Mary Lamps (Director) Raeney Gverzilys (VH) SUPPORT STAFF Davy Cheng (Chair) Chris Hark (UE) COMMITTEE Lois Havter

DEPARTMENT OF ANESTHESIA & PERIOPERATIVE MEDICINE FACULTY MEMBERS

London Health Sciences Centre/St. Joseph's Health Care London

| Anderson, lan | Assoc. Prof. | Iglesias, Ivan | Asst. Prof. |
|---------------------|---------------|---------------------|---------------|
| Arango, Miguel | Asst. Prof. | lmasogie, Ngozi | Asst. Prof. |
| Armstrong, Kevin | Asst. Prof. | Katsiris, Sandra | Assoc. Prof. |
| Armstrong, Paidrig | Asst. Prof. | Kutt, Judith | Asst. Prof. |
| Badner, Neal | Assoc. Prof. | Lampe, K. Mary | Assoc. Prof. |
| Bainbridge, Daniel | Asst. Prof. | Lindsay, Peter | Asst. Prof. |
| Banner, Robert | Asst. Prof. | Lobb, Trevor | Assoc. Prof. |
| Batohi, Pravin | Asst. Prof. | McCabe, Greg | Asst. Prof. |
| Batorowicz, Maria | Asst. Prof. | McConachie, lan | Assoc Prof. |
| Bernadska, Ewa | Asst. Prof. | McKishnie, Jamie | Asst. Prof. |
| Bhandari, Rakesh | Asst. Prof. | McNamara, Jeffrey | Lecturer |
| Block, Gary | Asst. Prof. | Mezon, Bernie | Assoc. Prof. |
| Butler, Ron | Assoc. Prof. | Millman, L | Adjunct Prof. |
| Champion, Lois | Assoc. Prof. | Morley-Forster, Pat | Assoc. Prof. |
| Cheng, Davy | Professor | Murkin, John | Professor |
| Cherry, Richard | Asst. Prof. | Newton, Peter | Asst. Prof. |
| Church, Brian | Asst. Prof. | Nicolaou, George | Asst. Prof. |
| Coveney, Lynn | Asst. Prof. | Ower, Katherine | Asst. Prof. |
| Craen, Rosemary | Assoc. Prof. | Parkin, John | Assoc. Prof. |
| Cuillerier, Daniel | Asst. Prof. | Ralley, Fiona | Professor |
| Currin, Michael | Asst. Prof. | Schulz, Valerie | Asst. Prof. |
| Dain, Steven | Assoc. Prof. | Sharpe, Michael | Professor |
| Dhir, Achal | Asst. Prof. | Singh, Indu | Asst. Prof. |
| Dobkowski, Wojciech | Assoc. Prof. | Simon, Gary | Asst. Prof. |
| Fuller, John | Assoc. Prof. | Sischek, Bill | Assoc. Prof. |
| Ganapathy, Su | Professor | Smith, David | Asst. Prof. |
| Gordon, Neil | Asst. Prof. | Spadafora, Sal | Assoc. Prof. |
| Granton, Jeffrey | Asst. Prof. | St-Amand, Marc | Assoc. Prof. |
| Gverzdys, Rooney | Assoc. Prof. | Taneja, Ravi | Asst. Prof. |
| Harle, Christopher | Asst. Prof. | Tilsworth, Richard | Asst. Prof. |
| Herrick, Ian | Assoc. Prof. | Vannelli, Tony | Asst. Prof. |
| Hinds, L | Adjunct Prof. | Watson, Jim | Asst. Prof. |
| Hoogstra, Jason | Asst. Prof. | Wexler, Ron | Assoc. Prof. |

| Adjunct Professors St. Thomas-Elgin General Hospital | Professor Emeritus | Adjunct Professors Windsor |
|---|--|---|
| Bidinot, H. McNeill, B. Soderman, M. Warnock, T.F. | Bain, J.A. Gelb, A.W. Hersey, L.W. Muir, J.M. Nielsen, J.S Russell, E.S. Sellery, G.R. Varkey, G.P. | Arya, B. DaSilva, S. De Dios, O. Doerksen, D. Gnanendren, K. Liolli, A. Roberts, A Smith, J. Taylor, W. |

CLINICAL/RESEARCH FELLOWS

Abeidi, Abdelaly Cardiac Anesthesia/CSRU Ahmad-Sabry, Mohammed Cardiac Anesthesia/CSRU

Balasubramanian, Shyam Chronic Pain/Regional Anesthesia

Craig, Anne
Cardiac Anesthesia
Regional Anesthesia
Hadi, Ibrahim
Ho, Mary
Jones, Philip
Cardiac Anesthesia
Cardiac Anesthesia
Cardiac Anesthesia

Kashanian, Behnam Cardiac Anesthesia

Kashanian, Behnam
Pellerin, Helene
Plata, Ricardo
Posada, Eliana
Quaghebeur, Bert
Rachinsky, Maxim
Sridhar, Jami
Ambulatory
Neuroanesthesia
Research Neuro
Cardiac Anesthesia
Cardiac Anesthesia

Turkstra, Tim Neuroanesthesia

RESIDENTS

| | KESIDEITIS | |
|---------------------|-------------------|-------------------|
| PGY5 | PGY4 | PGY3 |
| Abotaiban, Ahmad | Al-babtain,Hesham | Al-Areibl, Arif |
| Dicecco, Rom | Gros, Michelle | Bellingham, Geoff |
| Dugas, Geoff | Liang, Lily | Brooks, Chris |
| Ewing, Kevin | Ma, Martin | Dashti, Abdullah |
| Hussein, El-Hadi | Morrell, Bobbi Jo | Gilchrist, Andrew |
| Roos, Martin | Teague, Kevin | Ligori, Tania |
| | | Luk, Ken |
| PGY4/5 | | Nguyen, Quoc |
| Prychitko, Jonathan | | Procter, Andrea |
| | | Schwartz, Robert |
| | | Singwi, Sanjeev |
| PGY2/3 | PGY2 | PGY1 |
| Dlacic, Aleksandra | Al-Solu, Hani | Antoniou, Andreas |

Dlacic, Aleksandra Al-Solu, Hani Antoniou, Andreas Katyal, Parul Al-Turkistany, Hanan Bruni, Ida

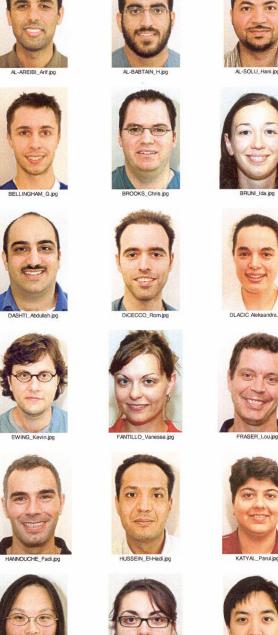
Tran, Diem

Evans, George Clarke, Collin
Fraser, Lou Fantillo, Vanessa
Hannouche, Fadi Kolesnichenko, Patricia
Lewis, Mark Marmai, Kristine

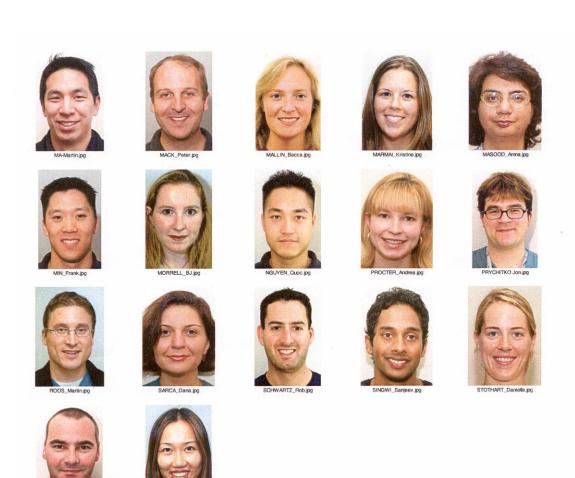
Mack, Peter Masood, Amna Min, Frank Stothart, Danielle Sarca, Dana











Site Chief Report, LHSC-University Hospital

Dr. Wojciech Dobkowski



During the past year the University Hospital site has been very active and has achieved its goals of clinical excellence, education and research. Many research projects were completed and others undertaken. There is continuing excellence in teaching of students, residents and fellows – which is reflected in the feedback provided by these trainees. The fellowship program continues to expand and improve.

Clinical services include: 14 operating rooms (cardiac surgery, neurosurgery, general surgery, orthopedic surgery, sports medicine, plastic surgery, and urology); diagnostic and therapeutic procedures in the electrophysiology laboratory, neuroradiology and cardiac angiography, pre-admission clinic, acute pain service and 24-hour coverage for liver transplantation. The key academic programs include:

<u>Cardiac Anesthesia Program</u> (Drs. Bainbridge, Dobkowski & Murkin) Traditionally this has been one of the most active academic groups on a departmental, national and international level. In June 2006 the Departmental Council approved a new Academic Cardiac Anesthesia Program, which will further improve perioperative care of cardiac patients, education and research.

Over the past year the cardiac anesthesia fellowship program has been expanded to eight fellows. There are five cardiac anesthesia consultants who participate in a seminar program for these fellows.

The TEE component of the Cardiac Program has been very active and Dr. Bainbridge and Dr. Iglesias have expertly directed the TEE teaching program. This program is designed to prepare all participants for the TEE Board Exam. TEE Rounds are held each Wednesday morning.

Under Dr. Murkin's leadership, the cardiac group organizes an internationally recognized annual meeting – "Outcomes - The Key West Meeting" held each May in Key West, Florida. In addition, Dr. Murkin, along with five other cardiac anesthesiologists, as well as members from cardiac surgery and perfusion, organized a multidisciplinary international conference - the Winter Cardiac Team Meeting - MICS (Minimally Invasive Cardio-Vascular Surgery). This meeting was held in Mont Tremblant, Quebec in February, 2006 and its focus was to foster interaction between cardiac surgeons, clinical perfusionists and cardiac anesthesiologists.

Neuroanesthesia Program (Dr. Rosemary Craen)

This has been one of the most prolific and highly recognized academic groups in our department for many years and the tradition has continued. There is an excellent neuroanesthesia fellowship program under Dr. Craen's supervision. There is an abundance of highly recognized clinical research and basic science research by members of this group. Dr. Craen has been recognized by CAS, and over the last two years she has held the position of Chair of the Scientific Committee for the CAS annual meeting.

Acute Pain Service (Dr. Bhandari and Dr. Ganapathy)

The Acute Pain and Regional Anesthesia program has continued to develop under the direction of Dr. Bhandari and Dr. Ganapathy and with the contributions of Cindy Carnegie, RN, as well as other department members. Patient care, education and research have been improved greatly with the recent progress and improvements in this program. Dr. Ganapathy's annual Varkey Continuous Catheter Regional Anesthesia and Anatomy Workshop was a great success and gave attendees an opportunity for hands-on learning.

<u>Medical Informatics</u> (Dr. Steven Dain)

Dr. Dain has continued his leadership in this area and a Medical Informatics Fellowship Program has been developed.

<u>Undergraduate Education</u> (Dr. Ivan Iglesias and Dr. Tony Vannelli) Dr. Vannelli continues in his role as city-wide undergraduate coordinator,

and Dr. Iglesias in his role as the University Hospital undergraduate coordinator. There has been continued excellence in undergraduate teaching by members of the department. Dr. Iglesias organized the

highly successful Airway Workshop, which was well attended by department members, fellows and residents, as well as doctors from the surrounding areas.

Postgraduate Medical Education (Dr. Chris Harle)

During the past year there has been continued excellence in postgraduate education in our department. Resident evaluation of teaching and rotations at this site, especially in cardiac and neuroanesthesia continues to be very good. TEE rounds have been especially well received by residents. There has been introduction of a new rotation – Perioperative Medicine. This includes three parts – ambulatory anesthesia, preadmission clinic and acute pain service.

Fellowship Program (Dr. Daniel Bainbridge)

Dr. Bainbridge has assumed the role of city-wide coordinator of the Fellowship Program. Over the last several years the program has been developing very dynamically and has attracted high quality fellows from many countries. Feedback from the fellows indicates that they are meeting their educational objectives. Fellowships are provided in the following areas: cardiac anesthesia, neuroanesthesia, regional anesthesia, pain, transplantation, clinical anesthesia, and medical informatics.

Anesthesia Rounds (Dr. Dhir and Dr. Lampe)

Dr. Dhir very capably manages the site specific rounds at University Hospital. These rounds have provided important educational tools for consultants, residents, fellows and students. Rounds have included lectures, case presentations (interactive) and morbidity and mortality rounds. Rounds are presented by consultants, fellows or residents.

Dr. Lampe organizes the grand rounds for the department. Our grand rounds have attracted high profile, internationally recognized lecturers from varied backgrounds. These rounds continue to be well attended and well received by our department members.



Having consolidated the Victoria Hospital Operating Rooms to the Commissioner's Road site, an external review was undertaken which identified equipment and functional deficiencies. The equipment deficiencies have been corrected through the purchase of new anesthesia carts (one per OR), a second fibreoptic intubation cart and a Bullard laryngoscope. Planning has begun for a complete redesign of the VH OR's to improve the functional layout.

Further development of the Thoracic/Vascular and Pediatric Anesthesia subspecialty programs also occurred.

Thoracic/Vascular Anesthesia

Both subspecialties under the direction of Dr. George Nicolaou have flourished and remain popular as a resident rotation. Planning to allow Cardiac Anesthesia Fellows from University Hospital to rotate through Thoracic and Vascular Anesthesia is underway. The newly established monthly multidisciplinary rounds (including surgeons, anesthesiologists, OR and ward nursing staff) have been well received. Two clinical research projects in these subspecialties have been completed, one of which led to a change in the postoperative epidural analgesia solution. A follow up review of this change is planned. Transesophageal echocardiography is being routinely used in vascular surgery cases. This has led to the planning of a joint (UH and VH) research project to assess diastolic dysfunction in patients undergoing abdominal aortic aneurysms.

Pediatric Anesthesia

The Division of Pediatric Surgery was officially established in January 2005 in response to the December 2003 external review of Pediatric Surgery and Anesthesia in London. This division is under the guidance of the Program Director, Dr. Lynn Coveney with input from members of the Pediatric Anesthesia Interest Group. It currently supports three

dedicated pediatric surgery OR's daily, as well as sedation for MRI's, CT scans and diagnostic LP/bone marrow biopsies out of the OR three days per week. Further expansion of this service is planned. This division has implemented a "Parental Presence at Induction" Program, and expanded pediatric preoperative assessment and postoperative pain management. In-services for the implementation of pediatric epidurals on the ward instead of in PCCU will begin in late November and early December. The planned rollout is December 15, 2006. The residents and interested staff continue to participate in the nation-wide telemedicine conference hosted by the Hospital for Sick Children. Pediatric Grand Rounds (scheduled for May 2007). The proposed topic is "Hospital-Wide Standards for Procedural Sedation". It is hoped that this educational initiative will act as a springboard to set up such standards in the CHWO.

Obstetrical Anesthesia

Dr. Sandra Katsiris, the citywide Obstetrical Anesthesia Director, has successfully introduced a citywide standardized Obstetrical Anesthesia care approach including standardized epidural solutions, PCA and PCEA. The planning for the move and consolidation of all Obstetrical Anesthesia services in London to a new location distant from the Operating Rooms at VH in January 2009 is well underway.

Site Chief Report, St. Joseph's Health Care

Dr. Jim Watson



St. Joseph's Health Care is a major teaching facility within the University of Western Ontario, Department of Anesthesiology and Perioperative Medicine. St. Joseph's acts as the tertiary care obstetrical level III centre performing about 4,800 deliveries per year.

The surgical focus is on the Hand and Upper Limb Centre, Endourology, Ophthalmology, and ENT as well as General Surgery, Gynecology, Plastic Surgery and care of dental patients. Approximately 20,000 surgical cases are performed each year.

The major areas of subspecialty training are regional anesthesia, and obstetrics with chronic pain management offered through the Earl Russell Multidisciplinary Pain Centre.

Dr. Shalini Dhir and Dr. Ian McConachie joined our faculty at SJHC in the year. Dr. Dhir will continue to pursue her subspecialty interests in regional anesthesia and Dr. McConachie in anesthesia education. We are pleased to add their abilities to our clinical and teaching staff.

Construction of the 10 new operating rooms, cataract facilities, preadmission, PACU and diagnostic centre are complete. The new facilities began operation in early 2006. This new facility provides SJHC and the City of London with a modern, well-equipped work environment to complement the extensive redevelopment of medical facilities that continues at the University of Western Ontario.

St. Joseph's Health Centre provides Fellowships in Obstetrical Anesthesia and Regional Anesthesia. The volumes of high-risk obstetrical patients and hand and upper limb patients provide a very fertile learning and research ground in these areas of subspecialty care. The new ambulatory surgi-centre is a major portion of the restructuring effort and will provide a firm foundation for future study and care of ambulatory patients. Fellows during this academic year were Dr. Shyam Balasubramanian Chronic Pain, Dr. Mary Ho Regional Anesthesia, and Dr. Ibrahim Hadi. In the next year we will have four fellows in chronic pain, regional and obstetrical anesthesia.

CLINICAL ACADEMIC PROGRAMS

Acute Pain Program

Dr. Jim Watson (Director)

\$\mathcal{S}\$ he Department of Anesthesia & Perioperative Medicine provides Acute Pain Services at four clinical sites across London. These services have been well established for greater than 15 years and provide dedicated coverage by consultants and specialized Nurse Practitioners and RN's using a variety of modalities, including PCA, epidural and a variety of continuous regional techniques. Across the city we have standardized protocols for the care of adult and pediatric patients. Ward nursing staff receive self-directed teaching packages for assessment and all treatment modalities which we continue to upgrade.

Acute Pain Service University Hospital (Drs. Bhandari & Dain)

The Acute Pain Service is comprised of Drs Bhandari, Dain, Arango, Ganapathy, Harle and Vannelli and Cindy Carnegie, our acute pain nurse. Over the past year we have greatly improved and expanded our service by now having an anesthesiologist devoted to the service, instead of also covering the pre-admission clinic. We have also expanded the service to 7 days per week. This increased staffing, along with our 2 part-time regional anesthesia fellows, has greatly increased the number of blocks being performed both for operative procedures and postoperative analgesia.

With the cooperation and support of the postanesthetic care unit (PACU) manager, Carol Rhiger and her nursing staff, our Fellows Dr. Mary Ho and Dr. Shalini Dhir (guided by Drs. Ganapathy, Bhandari and Dain), set up a regional block area in the PACU equipped with 2 dedicated portable ultrasound machines for performing ultrasound guided regional anesthesia.

By performing the blocks prior to surgery in the PACU, we have improved the efficiency of the operating rooms and are now providing postoperative patient controlled epidural analgesia to almost all patients undergoing abdominal surgery.

Ms. Cindy Carnegie has provided terrific support as a member of the acute pain team, screening patient preoperatively on a daily basis, assisting during rounds, providing educational resources and teaching to our residents, students and nurses on the wards. Cindy and Dr. Dain have extensively rewritten some of the preoperative patient information pamphlets for the city, and the educational books for nurse orientation on the surgical wards. They have also assisted the pharmacists in updating their drug information website (PDAM) for oral, intravenous, epidural, spinal analgesics, and naloxone.

In addition to his organizational support, Dr. Bhandari has started a regular resident and fellow pain management teaching program, to enhance and improve their pain management skills.

Once again, Dr. Su Ganapathy organized the Varkey Regional Anesthesia Meeting, which attracted anesthesiologists and residents from Canada and the US.

We have 2 excellent fellows shared between University Hospital and St. Joseph's Health Centre for the 2006-2007 year, and look forward to another successful year.

Ambulatory and Regional Anesthesia/Analgesia Program Dr. Sugantha Ganapathy (Director)



 ${\it 3}$ he Division of Regional Anesthesia has progressed in several areas. There were two clinical fellows, Dr. Shalini Dhir and Dr. Mary Ho that completed the fellowship program successfully.

Fellowship Program

Dr. Dhir joined St. Joseph's Health Care as a staff anesthesiologist in July 2006. Dr. Dhir has completed a study comparing three different techniques of catheter insertion for infraclavicular block, which was presented as an abstract at ASRA and CAS. It was considered one of the best abstracts. Dr. Ho has published an article in "Techniques in Regional Anesthesia and Pain Management" on peripheral plexus block in the anticoagulated patient. Dr. Ho has since returned to Singapore.

The fellowship rotation has been expanded to include the LHSC-UH site for the clinical fellows from both sites. This has increased the number of lower limb continuous regional blocks that the fellows can perform. LHSC-UH includes rotation in acute pain service to consolidate the follow-up of patients with continuous regional blocks. It also provides opportunities for thoracic epidural analgesia for various abdominal surgeries. Dr. K Armstrong has been the site coordinator at SJHC and Dr. Bhandari has been coordinating the LHSC-UH site, and ensures appropriate exposure of the candidates for various blocks.

Didactic and Clinical Teaching

Small group demonstrations and discussions on various topics have been initiated at both sites and are in the process of becoming formalized at one site. Resident rotation in Regional Anesthesia currently occurs mainly at SJHC due to the volume of cases and dedicated block room consultant allocation. Use of ultrasonography for Regional Anesthesia has picked up momentum and more than 80% of cases are completed with the aid of Ultrasound.

At LHSC-UH, a block area has been developed in the PACU, where all the blocks and epidurals are done with the help of the PACU nurses. Permanent staffing of this area is under consideration. A business plan is being developed to request for funding. There is an ultrasound machine for use at LHSC-UH as well for the block area. Resident exposure to regional anesthesia at LHSC-UH is still not consolidated due to staffing shortfall in this area.

Dr. Indu Singh is conducting a specific Journal Club every 3 months to discuss current important articles in regional anesthesia. This is funded by Pfizer.

Research

Dr. Imasogie is currently continuing with three important research projects. She is evaluating the role of low dose naloxone infusion combined with opiates on cognitive function in the elderly following lower limb arthroplasty as a pilot project. Her study on the role of celecoxib on transitional pain in shoulder surgery following regional blocks is nearing completion. Comparative evaluation of single versus multiple injection technique using ultrasound for axillary block is also nearing completion.

Dr. Singh had several abstracts with residents during the McMaster/UWO Resident Research day that included the use of cervical epidural for shoulder arthroplasty, and use of ultrasound for axillary block in morbidly obese patients.

Dr. Dhir completed her project on the comparative evaluation of 3 different techniques of catheter insertion for infraclavicular block. It was presented as one of the 5 best abstracts at the ASRA annual meeting. It has also been sent for publication. She is currently comparing stimulating catheters with ultrasound guided catheters, and has ongoing projects on comparative evaluation of cervical epidural with interscalene block for shoulder arthroplasty.

Dr. Ganapathy, Dr. Dhir and Dr. K Armstrong have completed a trial of periarticular local anesthetic infusion to facilitate fast tracking lower limb arthroplasty patients. They have successfully sent 2 patients home 36 hours after surgery under the care of CCAC. This abstract was presented at the annual ASA meeting.

Dr. K Armstrong is currently working on a survey of "The efficacy of an ambulatory regional anesthesia/analgesia discharge program. A quality assurance initiative for postoperative upper extremity pain management." Dr. K Armstrong is also collaboratively completing a project with the HULC unit on "Identifying and quantifying neurological dysfunction post regional anesthesia and upper limb surgery."

Dr. Ganapathy, Dr. Bhandari, Dr. Dain, Dr. Harle and Dr. Vannelli have a research project ongoing evaluating the use of inhaled liposomal fentanyl (AEROLEF) for postoperative pain following orthopedic surgery. Dr. Ganapathy and Dr. Bhandari have an ongoing project sponsored by Pfizer global on the use of Pregabalin for neuropathic pain.

Workshop

The Annual Varkey Continuous Regional Anesthesia and Anatomy Workshop was conducted in December, and was well attended. Guest faculty included Dr. Chan from Toronto and Dr. Laura Clarke from Louisville, Kentucky. An animal lab was introduced to allow hands on experience with ultrasound guided needle insertion in anesthetized pigs. This was much appreciated by registrants. The local faculty included Dr. K. Armstrong, Dr. Dhir, Dr. Watson, Dr. Imasogie, Dr. P. Armstrong and Dr I. Singh.

Other Activities and Progress

Funding is being collected to run the database program. Currently most patients are contacted on postoperative day 1 and 7 to follow up for quality assurance following regional blocks. This will be consolidated once the nursing support is obtained with the business plan. With the tremendous support from the perioperative nurses both at LHSC-UH and SJHC, we are able to provide quality of care and follow-up to patients.

Regional block procedure has been standardized with the introduction of a form modified from the sedation form with the help of Dr. Mary Ho. This is being further modified as a specific block documentation form. This is an important step medico legally as well as with regards to continuous quality improvement.

Preoperative consults for blocks are being initiated. Meetings were held to formalize the process with the help of the perioperative nursing group.

A patient information VCD showing regional blocks and a PowerPoint presentation has been generated with the help of a resident from McMaster University, who did an elective in Regional Anesthesia in our division.

Patient information pamphlets on regional blocks are also in preparation and will be available for distribution soon.



 ${\cal J}$ hroughout the past twelve months the Program Advisory Committee associated with Fanshawe College has continued to assess the possibility of developing a new college program for the training and accreditation of Anesthesia Assistants (AA).

Initially it was hoped that a joint curriculum could be developed with the Michener Institute for Applied Health Sciences in Toronto, as to provide a common curriculum throughout the province. To this aim a representative of the PAC meet with members from both the Michener Institute and the Health Sciences Division of Algonquin College. However, as the Michener Institute had already started their AA program with the first intake of students in January 2006, it was decided to continue to develop a new curriculum with Algonquin College and Thompson Rivers University (TRU) only, with an anticipated first enrolment date of January 2007.

To assist with the financing of the introduction of this new program Dr. Cheng has submitted a proposal to the Ministry of Health for funding for several AA positions. Other centres such as Hamilton have also made similar submissions. In addition LHSC is to apply to become an Anesthesia Care Team Demonstration Site and a Letter of Interest is to be submitted in the near future to the Operative Anesthesia Committee (mentioned below) of the OMA and MOHLTC. Once these demonstration sites have been evaluated it is hoped that the Anesthesia Care Team (ACT) model can be rolled-out across Ontario.

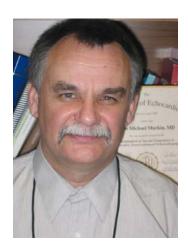
The introduction of the Anesthesia Care Team principle has been the topic of several major committee meetings during the past year from which several position papers have been published. Included in this group is the *Position Paper on Anesthesia Assistants of the Canadian Anesthesiologists' Society*, which can be viewed via a link from the June

21st 2006 newsletter on their web site at http://www.cas.ca. Another document, also available online is the paper on *Transforming the Delivery of Operative Anesthesia Services in Ontario: Report and Recommendations of the Operative Anesthesia Committee*. This is a committee set up this year jointly by the Ontario Medical Association and the Ministry of Health to address the increasing concerns about the growing shortage of anesthesia personnel. The three recommendations from this report include 1) Formal introduction of the Anesthesia Care Team model 2) Widespread training and use of anesthesia assistants 3) Change in the Schedule of Benefits which allow the use of supervision in a fee-for-service practice environment.

The next twelve months should see the development and introduction of the Anesthesia Assistants program as a recognized course at Fanshawe College. However, this will require a significant amount of teaching hours by various members of all Departments of Anesthesia across the City to make it a success.

Cardiac Anesthesia Program

Dr. John Murkin (Director)



 ${\it J}$ n continuance of the previous year, cardiac anesthesiologists have maintained the initiative to upgrade their clinical skills in order of enhancing patient care. The incorporation of TEE examination into routine clinical practice has continued

The incorporation of TEE examination into routine clinical practice has continued with a series of weekly introductory TEE lectures, which were organized once again by Dr. Iglesias. As consultants have gained experience, this lecture series has expanded to include an increasing component of case presentations. Cases are being reviewed interactively on a regular basis amongst Consultants and Fellows. Over

the last twelve months, Dr. Iglesias has also led echo review rounds three mornings a week with all Cardiac Anesthesia Fellows. The purpose of these review rounds is to review and discuss TEE exams, with a focus of the ABE exam.

Dr. Bainbridge, Dr. Champion and Dr. Iglesias under the supervision of Dr. Granton, have organized cardiac Anesthesia & Cardiac Critical Care seminar series. Fellows are meeting once per week with Cardiac Anesthesia & Critical Care Consultants to review subjects aimed to provide a solid theoretical foundation for Cardiac Anesthesia & Critical Care practice.

Overall, the Cardiac Anesthesia Fellowship program is running teaching activities for the Fellows Monday through Thursday at 07:00 am. An interactive searchable database has been completely developed and the software is currently being implemented. The Anesthesia TEE library is also in an advanced stage of development and is becoming a useful resource for presentations by our consultants.

Clinical research continues to be a very important and productive area for LHSC cardiac anesthesiology. We are currently involved in ongoing BART trial, which is CIHR-funded study of aprotinin, tranexamic acid and aminocaproic acid. This study is the focus of intense international interest given recent reports of aprotinin-related complications reported in several observational studies. The cerebral oxymetry study has been completed and demonstrated significant decrease in morbidity associated with cerebral oxymetry monitoring. Ongoing studies will assess impact of such monitoring on patients with diabetes. Members of the cardiac anesthesiology group have also been well represented in several national and international multidisciplinary meetings, focusing on the perioperative management of cardiac surgical patients. Among these were the 6th Annual Cardiac Team Meeting in Tremblant, QC and the 10th annual "Outcomes" meeting that was held in Key West, FL.



 ${\it S}$ he perioperative TEE program currently utilizes 3 TEE machines and 4 TEE probes to provide imaging to over 30 patients per week at University Hospital. We currently have 9 staff anesthesiologists who have successfully completed the Perioperative echocardiography exam.

As part of the perioperative TEE program, weekly seminars on perioperative TEE are ongoing with topics ranging from basic principles, to literature reviews, to case presentations. This seminar series runs on Wednesdays and is now starting its 5th year. It provides an excellent opportunity for staff to review TEE concepts while also providing a venue for teaching both fellows and residents. Another teaching activity added a year and half ago are the Echo Review Rounds that run Mondays and Tuesdays, all the Cardiac Anesthesia Fellows are involved. Our program for "in house" training in TEE dedicated to Consultants is also up and running. Two Consultants are attending this program currently, in the past, 7 Consultants who attended this program successfully passed the Perioperative ABE exam. Several research programs are currently being developed in Echocardiography. Our Group also participated in writing a chapter for *Intraoperative Echocardiography Multimedia Manual*.



On March 21, 2005 the 16-bed Cardiac Surgery Recovery Unit opened at LHSC, University Hospital, initially accommodating University Hospital patients only. This was followed shortly thereafter by the transfer of cardiac surgery from LHSC South Street Hospital to University Hospital in May 2005. Cardiac anesthesiologists from Victoria Hospital have been incorporated into the University Hospital cardiac anesthesia program with the support of the cardiac program and sites leadership.

The CSRU specializes in the post operative care of patients who have had cardiovascular surgery such as bypass, value replacements, heart transplantation and robotic cardiac surgery. This unit has state of the art equipment to meet the complex needs and fast track recovery of our cardiac surgical patients. The CRSU is medically staff by cardiac anesthesiologists, critical care medicine, and cardiac surgery. The trainees consist mainly of cardiac anesthesia fellow, anesthesia and cardiac surgery residents, and critical care fellow. A nurse practitioner is also linking the long-term care patients in CSRU and the cardiac surgery ward. The CSRU provides excellent experience in postoperative cardiac surgery care both clinically and academically. A study led by Dr. Richard Novick (CSRU Associate Director and Chair/Chief of Cardiac Surgery) has demonstrated improved postoperative outcomes and morbidities in such specialized recovery unit, rather than in the previous model of mixed medical/surgical intensive care units.



2 r Earl Russell has generously donated another \$400,000 to the Earl Russell Chair in Pain Research and Management, bringing the total endowment to 2.4 million dollars. The UWO Faculty and Alumni Relations have initiated a campaign to raise a further one million dollars to complete the endowment.

Clinical Care

With the addition of Dr. Kate Ower to the group of Pain Clinicians at St. Joseph's Health Care, the total number of patient visits annually has increased to approximately 4200. Purdue Pharma Inc. has donated an unrestricted educational grant of \$200,000 to the operating costs of the Clinic for 2007-2009. This money was used in part to hire a psychologist as well as an additional RN and other support personnel. Services now offered at the Pain Clinic include a manual physiotherapist one day a week, regular pharmacy consultation, and an Urgent Social Work Clinic.

Education

We were fortunate to have two excellent fellows, Dr. Ibrahim Hadi and Dr. Shyam Balasubramanian, training in the Chronic Pain Program in 2005-2006. Dr. Hadi has been appointed the Director of the first Chronic Pain Clinic in Kuwait. Dr. Balasubramanian returned to the United Kingdom to a faculty appointment in Anesthesia and Pain Management.

A Community Education Day in Chronic Pain was held at the Four Points Sheraton Hotel on November 14, 2005 during Pain Awareness Week. Over 300 patients and fifteen family doctors attended. The event was well covered by the local television station A-Channel. The Planning Committee was co-chaired by Gloria Gilbert, Director of the Downtown Physiotherapy Clinic and Dr. Morley-Forster.

Interdisciplinary Pain Rounds are being held on the fourth Wednesday of each month. A schedule of past and future topics is available on the website www.londonpain.ca

A selective in Acute and Chronic Pain Management was again offered to 80 fourth year medical students. (Dr. K. Armstrong, Dr. Morley-Forster). Family Medicine Preceptorships are offered in the Pain Clinic for about 6-8 physicians each year.

Clinical Research

Two multi-centre clinical research trials sponsored by Pfizer on the efficacy of Pregabalin for lumbosacral radiculopathy and for peripheral neuropathy began enrolment in January 2006. Participating faculty in the Department of Anesthesia and Perioperative Medicine are Dr. Morley-Forster (PI), Dr. Ganapathy, and Dr. Watson. The Neuropathic Database reached its targeted enrollment of 200 patients for the pilot study. Plans for expansion to three other sites nationally are going well.

Critical Care Program

Dr. Ron Butler, ICU-UH



 ${\mathcal J}$ he Critical Care Program at the University of Western Ontario is a multidisciplinary program that provides Royal College postgraduate training in Critical Care Medicine.

Trainees gain experience caring for critically ill patients in the Richard Ivey Critical Care Trauma Centre (30 beds) at Victoria Hospital, the Medical Surgical Intensive Care Unit (24 beds) and the Cardiac Surgery Recovery Unit (16 beds) at University Hospital. The critical care units are newly built at both University Hospital and Victoria Hospital and incorporate the newest technologies. There is exposure to a wide variety of clinical services within the program including: trauma, major vascular, thoracic, neurological, neurosurgical, transplant and cardiac. The

Program in Critical Care has a well-established educational program for trainees, which has been recognized for its excellence by the Royal College of Physicians and Surgeons. There are 17 faculty members within critical care, who possess a range of clinical backgrounds including anesthesia, internal medicine, respirology, emergency medicine and surgery. Faculty members are involved in education, and basic science and clinical research. If you are interested in postgraduate training, further details can be obtained by visiting our website http://www.lhsc.on.ca/programs/critcare/pge/

Critical Care Program

Dr. J. Fuller, ICU-SJHC



 ${\it 3}$ he Adult ICU at SJHC was successfully transferred to LHSC in April 2005, in keeping with the mission of Hospital Restructuring. Staff moved with the Program, or found alternative positions within SJHC.

It had been identified that there was a need to provide Critical Care support to certain subgroups of patients scheduled to be cared for at SJHC through to Milestone 2 of Restructuring. These include major joint orthopedics, gynecology, and especially high-risk obstetrics. To meet this need, the concept of a "Step Up Capability" was developed for SJHC. This provides staff and physical plant, based from PACU, to intervene in the case of any patient requiring Critical Care service at SJHC. Staffing includes nurses from PACU, RRT's from the hospital pool, and physicians from the citywide Critical Care Program, with clinical assistant physicians in-house after hours. Patients who can be stabilized remain at SJHC, monitored by the Step Up team. The Team transfers those who remained unstable or critically ill, to ICU (LHSC). The Step Up Capability also provides the base for the Cardiac Arrest capability at SJHC, with expanded duties better described by its new name, the Medical Emergency Response Team (MERT).

The Step Up Capability was inaugurated on April 25, 2005, coincident with closure of the SJHC ICU. Step Up has operated successfully since then. The numbers of patients and levels of acuity are almost exactly as predicted. This service has allowed continuation of the planned level of Obstetric and Surgical activity at SJHC. Data collection is ongoing to assist in developing Medical Emergency Response services at SJHC beyond Milestone 2.

Evidence Based Perioperative Clinical Outcomes Research (EPiCOR)

Dr. Janet Martin, Dr. Daniel Bainbridge, and Dr. Davy Cheng







 $oldsymbol{\mathcal{J}}$ he upsurge of evidence-based medicine over the last decade has spurred an unprecedented growth in the scientific approach to decisionmaking, in the belief that it will translate into benefits for patients (improved outcomes), practitioners (improved quality of care; improved decision-making), providers (improved in and support effectiveness). The number of clinical trials in anesthesiology has been increasing. More importantly, the number of valid trials has increased. Of these, the proportion that is focused on clinically relevant outcomes (rather than surrogate markers) has also increased. The increased availability, credibility (high validity due to appropriate methodology), applicability (clinically-important outcomes), and generalizability (across differing patient populations, risk groups, and settings) have resulted in a welcome improvement in the landscape of available evidence in anesthesiology and perioperative medicine.

The Evidence Based Perioperative Clinical Outcomes Research (EPiCOR) Program is a multidisciplinary collaboration amongst Departments of Anesthesia & Perioperative Medicine, Surgery, Pharmacy, and Physiology/Pharmacology; whose mandate is to provide comprehensive systematic reviews and meta-analyses of new and existing technologies including medical devices, surgical procedures, interventional procedures, drugs, and diagnostic techniques in order to inform important perioperative clinical and economic questions with best available evidence.

The EPiCOR Program Completed the Following Research and Presentation during the 2005/2006 year:

- Bainbridge D, Cheng DC, Martin JE, Novick R; Evidence-Based Perioperative Clinical Outcomes Research (EPiCOR) Group. NSAID-analgesia, pain control and morbidity in cardiothoracic surgery. Can J Anaesth 2006 Jan;53(1):46-59.
- Bainbridge D, Martin JE, Cheng DC. Patient-controlled versus nurse-controlled analgesia after cardiac surgery-a meta-analysis. Can J Anaesth 2006 May;53(5):492-9.
- Bainbridge D, Cheng D, Martin J, Novick R. Does off-pump or minimally invasive coronary artery bypass reduce mortality, morbidity and resource utilization when compared to percutaneous coronary intervention? A meta-analysis of randomized trials. Journal of Cardiothoracic and Vascular Surgery (in press).
- Does the MAZE procedure and its variants improve clinical outcomes and resource utilization? A meta-analysis of clinical trials. Presented at: Canadian Anesthesiologists' Society, June 2006
- How to interpret Meta-Analyses. Workshop for residents and fellows in London, July 2006.

Ongoing Projects by the Program Include:

- Utilization of volatile anesthetics: An economic assessment
- Off-pump coronary artery bypass surgery versus conventional coronary artery bypass surgery: An economic evaluation
- Aprotinin versus tranexamic acid in cardiac surgery: A metaanalysis of randomized trials

This year anesthesiologists from this group provided services to 62 liver transplant patients. Dr. Harle joined the liver transplant group, which also includes Dr. Dhir, Dr. Dobkowski, Dr. Ralley and Dr. Vannelli.

A liver transplantation Journal Club was initiated over the past year.

The UH liver transplantation group co-organized the Transplantation Symposium held during the CAS meeting, June 2006. We plan to continue co-organizing this symposium for future meetings.

Three new research projects have been approved and incoming fellows will be involved in these projects.

Medical Informatics Program

Dr. Steven Dain (Director)



 ${\mathcal J}$ he Department of Anesthesia and Perioperative Medicine webserver hosted by Steven Dain continues to be used extensively by the members of the department and others throughout the world.

An informal survey found that all the recruited fellows and most of the residents that applied to our program had "checked out" the departmental website prior to applying to the UWO anesthesia program. More of the secretaries throughout the city have been trained to upload their own files and create content for the site over the past year. Thanks to Ms. Jamie Allaer, Wendy Curren and Jackie Mcallister for their timely updates.

Due to the hospital Information Management (IM) Group increasing network security within the London Hospitals, much of the video multimedia lectures available from the departmental webserver are not available for access from outside the hospital. Dr. Dain has been working with Michelle Saunders of IM to once again allow access to these programs during the winter of 2006-2007.

The anesthesia informatics program continued with its successful networking of the transesophageal echocardiogram (TEE) machines and the imminent move towards a wireless networking, so that the machines will be more mobile in moving between operating rooms and not be limited by their access to the cardiac operating rooms.

Dr. Dain and Dr. Arango continue to collect real-time and archived hemodynamic and physiological data for the operating room monitoring system for support of ongoing studies in the department.

Dr. Cuillerier deserves special recognition for writing and administering the Anesthesia and Perioperative Medicine Scheduling System for the past few years. This system is instrumental in organizing the human resources in the city-wide departments comprising over 60 consultants and numerous fellows over 3 sites.

Neuroanesthesia Program

Dr. Rosemary Craen (Director)



 ${\mathcal J}$ he aim of the Neuroanesthesia Fellowship Program is to provide advanced training to those individuals 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 fellowship is designed to gain expertise in the following areas:

Clinical Neuroanesthesia

Cerebrovascular Surgery and Endovascular Treatment: We are a national referral centre for the management of patients with cerebral aneurysms and arteriovenous malformations.

Surgery for Intractable Epilepsy: While we have been doing this type of surgery for more than two decades, it is only recently that neurologists and neurosurgeons worldwide have come to realize the therapeutic potential of such surgery and this has resulted in epilepsy surgery becoming one of the "fastest growth areas" in neurosurgery. We are one of Canada's two major national referral centres. Patients are operated on while awake, though sedated so that their speech and motor areas of the brain can be mapped prior to surgical excision.

Stereotactic Surgery: This 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", 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, spinal instrumentation etc.

Monitoring/Diagnostic Skills

Fellows will have the opportunity to learn how to use Transcranial Doppler, oximetry, Evoked Potential and EEG monitoring during surgery.

Non-Anesthesia Experience

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 clinical research opportunities. It is our expectation that each fellow will complete at least one research project, 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.

Under supervision, fellows will also review manuscripts submitted to a variety of anesthesia journals, and 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.

For fellows interested in medical education, we encourage them to take the 2-day or the 5-day course in "Teaching At the University Level" offered by our University. For those who anticipate that teaching will be a major component of their career, we advise our 30-week teaching course for medical educators.

Obstetrics Program

Dr. Sandra Katsiris (Director)



 ${\it 3}$ he past year's volume of deliveries in the city approximated 6500, a slight decrease from the year before. An increasing proportion of these deliveries however, are occurring at LHSC-VH. The majority of this shift is due to the increased ability of LHSC-VH to care for ill parturients with the on-site presence of the Critical Care Trauma Centre.

SJHC continues to be the tertiary obstetrical referral centre in the city, responsible for the majority of high-risk obstetrical anesthesia and neonatal care. Both SJHC and LHSC-VH now have available a dilute (0.08% bupivacaine) solution for use in epidural analgesia. It is hoped that use of this solution will translate into reduced motor block for parturients, with increased satisfaction of epidural analgesia. In addition, both sites have full capacity to run PCEA and IV PCA for labour

analgesia. The birthing centres have been included as part of a citywide initiative to secure new PCA pumps as the current models are becoming outdated. The decision to move to disposable epidural kits has occurred at both sites. The implementation dates should occur in early 2007.

The outer shell of the Grace Donnelly Women's Health Pavilion at LHSC-VH is complete. Consolidation of obstetrical anesthesia services at this site is unlikely to occur before the year 2009. The structure template includes four dedicated c-section operating rooms. The design configuration of these rooms is currently in the planning stage. It is hoped that the opportunity to design efficient, functional space will be realized.

Movement of the main operating rooms to their new location at SJHC has left the birthing centre there somewhat isolated. In particular, access to difficult airway equipment has been problematic. To this end, funding has been secured for a glidescope system to be purchased and dedicated to the birthing centre there. The LHSC-VH birthing centre is still contained within the overall OR shell, allowing ready access to airway equipment when needed. However, when consolidation in the Grace Donnelly Women's Health Pavilion occurs, a dedicated, fully stocked difficult airway cart will be required for the new birthing centre.

The MORE^{OB} (Managing Obstetrical Risk Efficiently) program was implemented in London this year. It is a patient safety program of the Society of Obstetricians and Gynaecologists of Canada. It encompasses a multidisciplinary team approach to improving patient safety. Two anesthesiologists (Dr. Indu Singh and Dr. Sandra Katsiris) are participating in the core phase of this program, which takes place over a three-year period.

The core resident rotations through the obstetrical unit at SJHC continued to be fully subscribed. Resident exposure to and educational experience with challenging obstetrical anesthesia cases occurred at both sites. Obstetrical cases continue to figure prominently in resident research and presentations. Resident exposure to obstetrical anesthesia in the city has never been greater. The obstetrical anesthesia fellowship program has accepted Dr. Michelle Gros to participate as a clinical fellow for the upcoming year.

Perioperative Blood Conservation Program

Dr. Fiona Ralley (Director)

The program this year has moved forward due to its integration with the Surgical Clinical Business Unit leading to significant improvements in the streamlining of patient pathways. This has mostly been the result of the enormous contribution made by the nurses in the preadmit clinic in providing patients with the necessary information and education. Based on a "Patient Screening Decision Tree" preadmission clinic nurses now guide the PBCP nurses to focus only on specific patients where blood conservation strategies will be most beneficial. This new endeavor was necessary as the MOH increased the targeted required procedures to include radical prostatectomies and all primary CABG patients. In addition Medical Directives for the indication for erythropoietin, preoperative autologous donation and intravenous iron administration are being finalized, which after presentation to the Medical Advisory Committee will be used to further streamline patient care.

The initial retrospective data collection on the primary CABG patients showed an overall transfusion rate of 39.3% (up from 31% in 2003). Unfortunately the prospective data collection for Jan-July 2006 showed a further increase in transfusion rate to 54%, with nearly half of these transfusions being given in CSRU. This was despite a presentation to the Division of Cardiac Surgery in February to explain the principles of perioperative blood conservation and request their active participation in the program Meetings between the various members of the cardiac care teams are being arranged to look into the reasons for this increase.

In March, the Ontario Ministry of Health confirmed funding for a further 3 year term (until March 2009) for the ONTraC program. Funding for a second Blood Conservation Coordinator was granted and Valerie Binns has joined the team. Both nurses work primarily at University Hospital at present, although plans are in place to offer the program to all patients at both LHSC and SJHC who meet the criteria.

Our future objectives for the next year include strategies to communicate information about the PBCP to all LHSC surgeons who carry out procedures associated with high blood loss and promote PBCP as

standard patient care. To this aim it is hoped that a data extraction database will be developed to start in January 2007 whereby transfusion rates for high blood loss surgical procedures linked to pre-operative and lowest hemoglobin, surgeon, and length of stay will be derived electronically on a monthly basis. UWO REB approval of this project is pending.

Thoracic/Vascular Anesthesia Program

Dr. George Nicolaou (Director)



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

Vascular surgery operates five times a week and Thoracic surgery three times a week. Our TEE Program is well developed with formal teaching and rounds. We have monthly Multidisciplinary, Morbidity and Mortality Rounds with our surgical colleagues.

The majority of vascular and thoracic patients coming through our institution have multiple co-existing diseases including cardiorespiratory compromise. These patients have an extensive preoperative evaluation by anesthesia and/or internal medicine, cardiology and respirology. We have developed a multidisciplinary 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.

Thoracic

The robotic and video-assisted thoracic surgical 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 lobectomies and 80 esophagectomies.

Vascular

The Vascular Division of Surgery at Victoria Hospital has and continues to be a pioneer in endovascular stenting of abdominal and thoracic aneurysms and claims one of the largest series in North America. Our institution also repairs ruptured abdominal and thoracic aneurysms that have favorable anatomy by the endovascular route. The thoraco-abdominal aneurysm program is well developed and these aneurysms are now generally repaired using fenestrated stents. The thoraco-abdominal aneurysms that cannot be repaired using stents, are repaired utilizing partial left heart bypass. Yearly, on average, we perform 150 open abdominal aneurysm repairs, along with 50 thoracic and 100 abdominal endovascular stents.

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 of the anesthetists experienced in TEE, available for guidance.

Research Projects in Progress

- 1. A review of effectiveness of thoracic epidural analgesia vs. patient controlled analgesia for patients with chest trauma.
- 2. Compare outcomes of anesthetic management for endovascular aneurysm repair vs. open aneurysm repair.
- 3. Study the hypothesis that low dose inhaled carbon monoxide decreases reperfusion injury in humans undergoing revascularization procedures.
- 4. To determine the effects of infrarenal clamping and unclamping on diastolic function using TEE, in patients undergoing AAA repair.
- 5. To determine the short and long-term analgesic effects of preoperative pregabalin in patients undergoing thoracotomies.

Residents

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 they are encouraged to partake in clinical research. At the beginning and at 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.

Fellows

Our Fellowship program is well established with ongoing clinical research opportunities, in collaboration with our surgical colleagues. The program is one year in duration and in accordance with Fellowship training elsewhere in the city. The Fellow works independently in the operating room two days per week, one day in vascular, one day in thoracic per week with a consultant, and the fifth day is for academic and research projects. The Fellows are encouraged to attend X-Ray Rounds, Thoracic/Vascular Rounds and fiberoptic bronchoscopy clinics. Reading material is provided and they 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.

Overall, the Thoracic/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 Thoracic/Vascular anesthesia, 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.

EDUCATION PROGRAMS

Fellowship Program

Dr. Daniel Bainbridge (Director)



Anesthesia fellowships in cardiac and cardiac recovery unit, neurosurgical, transplantation, regional, ambulatory, obstetrics, pain management, vascular & thoracic anesthesia and anesthesia informatics are offered each year at the London Health Sciences Centre and St. Joseph's Health Centre. Generally fellowships are 12 months in duration, but can be anywhere from 6 months to 2 years.

The Fellowship Program has continued to grow over the last several years. For the 2005/2006 academic year a total of 11 fellows were enrolled within the department. On April 22nd 2006, the inaugural fellowship research day was held with ten fellows presenting research projects. Dr. Jones, Dr. Turkstra and Dr. S. Dhir, all received awards for their presentations. The day was concluded with a key note address by Dr. Don Miller, the current editor of the Canadian Journal of Anesthesia, with a lecture entitled "Peer Review and Quality of Journal Publications: What Readers Should Know". During the month of October the coordinators of the fellowship programs met for an evening meeting to discuss setting objectives, evaluation of fellows and to review the role of the college of medicine in credentialing fellows. Both events were well received and further events are planned for the upcoming year.



During the academic year 2005-2006, the Postgraduate Education Program of the Department of Anesthesia and Perioperative Medicine at the University of Western Ontario had 44 Anesthesia residents and 36 off-service residents hosted from other residency training programs.

The program continued to provide excellent teaching, clinical exposure, research opportunities and a comprehensive teaching program at our London, St. Thomas and Windsor sites.

Educational Activities

The program continues to offer high quality general and subspecialty rotations including:

- Acute Pain
- Airway Management
- Ambulatory Anesthesia
- Cardiac Anesthesia
- Chronic Pain
- Neuroanesthesia
- Obstetric Anesthesia
- Palliative Medicine
- Pediatric Anesthesia
- Preadmission Clinic
- Regional Anesthesia
- Thoracic Anesthesia
- Vascular Anesthesia

SWOMEN

We continue to offer rotations throughout the Southwestern Ontario Medical Education Network (SWOMEN) with 13 residents participating in these experiences.

Our second annual Airway Management Workshop was held in October, 2005. This comprehensive didactic and practical hands-on course was developed through the tireless efforts of Dr. Bainbridge, Dr. Iglesias and Dr. Harle, with countless others helping to make the meeting a success.

We have continued with our rich and varied academic teaching sessions and have expanded our structured teaching program to include a formal preparation course for The Royal College of Physicians and Surgeons of Canada combined Written and Oral Examination. This program has been made possible through the efforts of our Associate Program Director, Dr. Katsiris.

Resident Research Day

Our resident research day took place in London on June 9th, 2006. This full day event, held jointly with the Anesthesia Program at McMaster University, was a great success. A special thanks to Dr. Indu Singh for making this day a success. The day consisted of 18 poster presentations and 7 oral research presentations. The keynote speaker was Dr. Homer Yang, Chair at the University of Ottawa. He presented: "Why Should I Do Research?". Dinner and an anesthesia trivia night followed at the Grosvenor Club.

Resident Research Day Poster Presentations by UWO Residents

- Anesthetic Management of a Case of Cauda Equina Syndrome During Pregnancy – Dr. Arif Al-Areibi
- Anesthetic Challenges of a Morbidly Obese Parturient with Pre-Eclampsia – Dr. Vanessa Fantillo
- Anesthetic Management for Cesarean Section of a Parturient With Moderately Severe Aortic Stenosis – Dr. Parul Katyal
- Extubation of a Difficult Airway Dr. Geoff Bellingham
- Taking Aim With the Trigger Tool Does Application of This Chart Review Tool in Targeted Populations Increase Effectiveness? – Dr. Frank Min

- Analgesia for Hepatic Resection for Metastatic Carcinoid Tumours
 Dr. Abdullah Dashti
- Cervical Epidural Analgesia for Shoulder Arthroplasty Dr. Tania Ligori
- Reconstruction of an Esophageal-Carinal Fistula: A Case Report and Review of Anesthetic Management – Dr. Ken Luk
- Anesthetic Management of a 12 Year-Old With Epidermolysis Bullosa -Dr. Amna Masood
- Radiological Examination of the Subclavian Vein In Vivo Dr. Andrea Procter

Resident Research Day Oral Presentations by UWO Residents

- Hyperbaric Low Dose Intrathecal Ropivacaine Provides Better Anesthesia for Ambulatory Knee Surgery – Dr. Diem Tran
- Comparison of the Bonfils Intubation Fibrescope and the Bullardscope in a Simulator with a Restricted Cervical Range of Motion – Dr. Quoc Nguyen
- Anesthetic Management of AAA Repair Endovascular vs. Stent -Dr. Kevin Teague

Our residents also played an active role in presentations at the Annual Canadian Anesthesiologists' Society Meeting in Toronto in June of 2006.

Resident Research Awards

Dr. Geoff Bellingham, Canadian Anesthesiologists' Society Vitaid-LMA Resident Research Grant for "Use of Intraoperative, Low Dose Ketamine in Chronic Pain Patients Undergoing Laparotomy".

2005-2006 PGE Committee

The following people have served the Postgraduate Education program and I wish to acknowledge them for their help and thank all the Faculty Members for their hard work.

Each and every member of the Department of Anesthesia makes this program a success. A special thanks is extended to Ms. Linda Szabo our Education Coordinator who helps make every component of the program run smoothly and efficiently.

PGE Committee Members

Dr. Kevin Armstrong - SJHC Site Coordinator

Dr. Davy Cheng - Department Chair

Dr. Richard Cherry - IT Coordinator

Dr. John Fuller - SWOMEN Coordinator

Dr. Rooney Gverzdys - VH Site Coordinator

Dr. Christopher Harle - UH Site Coordinator

Dr. Sandra Katsiris - Associate Program Director

Dr. Ed Roberts - SWOMEN Windsor Rep

Dr. Indu Singh - Research Coordinator

Dr. Dave Smith - RCPSC Examiner

Dr. Mark Soderman - Community Anesthesia Rep

Dr. Sal Spadafora - Program Director

Linda Szabo - Education Coordinator

PGE Committee Resident Reps

Dr. Bobbi Jo Morrell, Chief Resident

Dr. Chris Brooks, Junior Resident Representative

Dr. Hesham Al-Babtain, ISR Representative

Undergraduate Education Program

Dr. Tony Vannelli (Director)



 ${\it \it \mathfrak{T}}$ he broad-based knowledge and technical skill of anesthesiologists, in the Department of Anesthesia and Perioperative Medicine at The University of Western Ontario (UWO) continue to provide a rich resource for all four years of undergraduate medical education (UME).

The most prominent elements of the Anesthesia program are presented in the Clinical Clerkship. This Year 3 Anesthesia Rotation continues to combine one-on-one clinical teaching and hands-on experience in the OR supplemented by didactic seminars, as part of the Surgical Block. Despite being relegated to a two-week selective, the Anesthesia clerkship continues to be extremely popular, with over ninety percent of UWO Medical Students choosing anesthesia. Indeed, with the ongoing expansion of undergraduate medical enrollment, the challenge will be accommodating students within the clinical OR environment. This year, Dr. Hoogstra has replaced Dr. Nicolaou as the Anesthesia UME Coordinator at Victoria Hospital. With the recent acquisition of a simulator at UWO, a major initiative for the coming year will be to incorporate anesthesia simulator into UME and in particular, to complement the Clinical Clerkship curriculum.

Continuing Medical Education Program

Dr. Mary Lampe (Director)



Citywide CME events for Consultants, Fellows, Residents and Southwestern Ontario Anesthesiologists were:

September 21, 2005 "Can the Choice of Volatile Anesthetic Improve

Patient Safety Outcomes?"

Dr. Stephen DeHert

September 28, 2005 "Perioperative Assessment for Pulmonary

Resection"

Dr. Peter Slinger

Professor of Anesthesia, University of Toronto

October 18, 2005 Southwestern Ontario Anesthesiologist's Meeting

Airway Management Adjuncts
 Coordinator: Dr. Ivan Iglesias

| | Assistant Professor of Anesthesia, University of Western Ontario |
|-------------------|---|
| November 21, 2005 | "Communication Workshop for Consultants" Dr. John Muir Professor of Anesthesia, University of Western Ontario |
| November 23, 2005 | "A Magical Mystery Tour – Anesthesia in Children Outside the OR" Dr. John Muir Professor of Anesthesia, University of Western Ontario |
| January 16, 2006 | "Advancement in Colloid Volume Therapy" Dr. Jean Francois-Baron Dr. Davy Cheng Professor of Anesthesia, University of Western Ontario |
| February 22, 2006 | "Neuroanesthesia Update" Dr. Timothy Turkstra |
| April 3, 2006 | "Current Issues in Perioperative Medication Management & Studies Examining the Safety of Perioperative Angiotensin" Dr. Craig Railton |
| April 5, 2006 | "Health Canada Advisory: Aprotinin Alert" Dr. John Murkin |
| April 12, 2006 | "Transfusion Triggers: What to, When to How to?" Dr. Brian Muirhead |

Now Treatable"

Dr. Garnette Sutherland

May 10, 2006

Aitken Lecture - "The Two Kinds of Stroke are

May 24, 2006 "Current Trends in Regional Anesthesia"

Dr. Su Ganapathy

May 30, 2006 "Emerging Indications for Factor VIIa - Opening

Pandora's Box?" Dr. Ian Chin-Yee

June 21st, 2006 "Ultrasound Guided Central Catheters"

Dr. Andre Denault

Each subspecialty program presents a clinical update every two years on a rational basis. The CME city-wide program is also augmented by site-specific teaching rounds that are built around clinical cases/topics on "morbidity and mortality" reviews.

In addition, there are multidisciplinary Perioperative rounds five times per year, which review current and new patient care practices.

FACULTY DIDACTIC TEACHING AND EDUCATION

Dr. Steven Dain

4th Year Medical Students

Lecture: What is Medical Informatics?

University Hospital, London ON

Presenter: Lessons Learned from Pain Services

Dr. Achal Dhir

4th Year Medical Students

LMCC refresher course lecture on Anesthesia

3rd Year Medical Students

Seminar: Pre Anesthetic Evaluation & Preparation IV Training Session

Dental Students

Lectures: Parenteral Anesthesics Introduction to General Anesthesia

PACU nurses, in-service

Lectures: Chronic Pain Syndrome

Case discussion on post-operative hypotension (surgical vs. anesthetic

causes) and its management, administrative issue Fluid balance and Perioperative fluid requirements

Commonly used drugs in the PACU

Operating Room nurses

Lecture: ABC - Anesthesia Basics for Circulating nurses

Respiratory Therapy students

Lecture: Anesthesia – an overview

Interactive session: Airway management and anesthetic

drugs

Presenter, Departmental Quality Assurance Rounds

Case Presentation: Cervical decompression, Craniotomy for

SDH, Post AVR bleeding

Case of Eisenmenger syndrome and Pheochromocytoma

Anesthesia for liver transplant – challenges and special considerations

Dr. Jeff Granton

Patient Centered Learning (PCL) Tutor, Year 2, Trimester 2 (2005/06)

City-Wide Mock Oral Exams for Anesthesia PGY-5, April 24-25, 2005

Monthly Lecturer ICU Junior Resident Seminars (2005/2006)

Lecturer Anesthesia Resident Educational Half Days Assessment for Brain Death Anesthesia for the Drug Abusing Patient COPD and Preoperative Assessment Anesthesia and Cardiopulmonary Bypass

Coordinator of Cardiac Anesthesia Residency Training Program March 2006 to Present

Coordinator Cardiac Anesthesia Lecture Series (2006)

Presenter for Transesophageal Echocardiography Rounds (2005/2006)

Presenter for Site Specific Morning Anesthesia Rounds (2005/2006)

Lecturer Senior Resident Educational Series, Program in Critical Care Care of the Cardiac Patient Management of the Difficult Airway

Coordinator of Quarterly Critical Care/Pathology Autopsy Rounds (2005/2006)

Instructor for Internal Medicine Transition Day – Update on ACLS

Lecturer for Schulich School of Medicine and Dentistry – Internal Medicine Interest Group - Airway Management

Associate Director Residency Training Committee – Program in Critical Care (2006)

Instructor University Hospital Friday Morning "Trouble Rounds" (2006)

Interviewer Anesthesia Residency CaRMS Interview Day

Core Member of Critical Incident Simulator Group (2005/2006)

Dr. Ngozi Imasogie

City-Wide Grand Rounds Lecture: Post-operative Cognitive Dysfunction: Another Peri-operative Challenge

Organizer of Regional block demonstrations: St Joseph Health Care

- -Interscalene Brachial Plexus Block
- -Infraclavicular Brachial Plexus Block

Residents Rounds:

- -Neonatal Anesthesia Basics
- -Neonatal Anesthesia Details
- -New Adjuncts in Acute Pain Management

In-service Training for Nurses: Low does Naloxone infusion as an analgesic (In-patient Nurses, PACU and SDA Nurses)

Dr. Indu Singh

Residents Lectures: Anesthesia for Obstetric Emergencies, 2006 Reversal Agents & Anticholinestereases, 2005 Neuraxial Anesthesia 2005

Medical Student Lectures: Management of Upper Airway Obstruction 2005, 2006

OR Nursing Students Lectures: General Anesthesia, the A, B, C's, 2006

Rounds presentations: Management of PDPH 2006, Anesthesia for PDA ligation in a neonate 2005, Anesthesia for repair of gastroschisis in a neonate, 2005

Dr. John Murkin

The Division of Cardiac Surgery - Cardiac Surgery Morning Rounds The London Health Sciences Centre, University Hospital London, ON Lecture: Best Practices in Cardiac OR's

Department of Anesthesia & Perioperative Medicine
The London Health Sciences Centre – University Hospital
Site Specific Rounds

Lecture: Health Canada Advisory: Aprotinin Alert

FACULTY AWARDS/CERTIFICATIONS/RECOGNITIONS

2005-2006 **<u>Dr. Lois Champion</u>**

USC Teaching Honour Roll Award of Excellence

Dr. Shalini Dhir

2006 Top 50 Poster Award, 62nd CAS Annual Meeting

"Ultrasound localization improves primary success and reduces secondary catheter failure in continuous

peripheral nerve blocks"

2006 Best in Meeting Award, 31st ASRA

Annual Meeting, "Ultrasound localization improves primary success and reduces secondary catheter

failure rate"

2006 Honorable Mention, Fellows Research Day

2006 Winner, Regional Scientific Session, Midwest

Anesthesiology Residents' Conference, "Ultrasound

localization for peripheral nerve blocks"

2005 Dr. John Fuller

CAS Teacher of the Year Award

2006 Dr. John Murkin



Dr. John Murkin was conferred as an Honorary Fellow (by election) of the College of Anaesthetists R.C.S.I. (FCARCSI) at the College's Conferring Ceremony, Irish Anaesthesia Congress, May 11th 2006, Dublin, Ireland.

From left to right: Dr. Ian Orr, Dr. John Murkin, Prof. Howard Fee, Dr. Peter Slinger, and Dr. Joe Tracey.

2006 Dr. Fiona Ralley

Novo Nordisk Canada-CAS Research Award

2005 <u>Dr. Indu Singh</u>

Faculty Support in Research Education Grant

Department of Anesthesia Undergraduate Teacher of

the Year Award 2005-2006

2005 Dr. Ravi Taneja

David S. Sheridan Canadian Research Award



Dr. Gordon Sellery Retires After 38 Years of Service



Dr. Gordon Sellery was born and educated in Toronto, and following graduation from the University of Toronto in 1960 with his MD and internship at the Toronto General Hospital, he went to England to travel and pursue training in Anaesthesia, receiving his English Diploma in Anaesthetics in 1962.

Following his return to Canada, a year was spent with the Grenfell Medical Mission in Northern Newfoundland and Labrador as a general practitioner, traveling by dog team and plane to fishing settlements along the coast. During a year as a GP Anaesthetist in Barrie Ontario, he decided to specialize in anaesthesia.

After a four-year residency in the Toronto program, Sellery passed the FRCPC exam and came to London to join the staff at Victoria Hospital. During his 18 years at Victoria Hospital he was coordinator of the ICU for three years and served as Chief of Anaesthesia for 15 years, before moving north to University Hospital in 1986.

During this period, Sellery moved up the academic ladder becoming a full professor in 1979 and retiring from the University in 1996 as a Professor Emeritus. Over the years, he taught students and residents and served on many committees related to the educational mission of the department. He also served as an examiner for the Royal College for a number of years, and was a surveyor for the Canadian Council of Health Services Accreditation.

Sellery served as Chair of the International Standards of Practice Committee, served on the Executive of the Canadian Anesthetists' Society for 10 years and was the founding Chair of the Board of the Canadian Anesthesia Research Foundation. He was also on the Executive of the World Federation of Societies for Anesthesiologists for eight years before being elected a vice-president. He was Chairman of the Bid Committee that successfully attracted the 12th World Congress of Anesthesiologists to Canada, June 2000 and served on the Congress Organizing Committee.

In 1993 Sellery received the gold medal of the Canadian Anesthesiologists' Society for his contributions to the specialty in Canada.

Sellery is married to Catherine Sellery, LHSC Business Manager in Medicine Services, and the proud father of six children and grandfather of 'soon to be' 11 grandchildren. He plans to take a relaxing summer 'vacation' at the cottage near Grand Bend, and in the fall pursue his love of history, geography, traveling, curling, hiking and golf.

FACULTY PARTICIPATION NATIONALLY & INTERNATIONALLY

Conference Chair/Moderator/Organizer

Dr. Kevin Armstrong

Moderator: 62nd CAS Annual Meeting, Toronto, ON, June 16-20, 2006

Poster Session: Regional Anesthesia

Dr. Neal Badner

Symposium Organizer: 24th Annual Can-Am Clinical Anesthesia Conference, Niagara Falls, ON, May 7, 2006

Dr. Daniel Bainbridge

Co-Organizer: Southwestern Ontario Anesthesia Meeting & Airway Workshop, London, ON, Oct. 15-16, 2005

Dr. Davy Cheng

Canadian Organizing Committee & Co-Chair: China/CVT-CAS Cardiac Anesthesia Symposium, Shanghai & Beijing, PR China, July 8-10, 2005

Panel: Recent Advancement in Cardiac Anesthesia & Surgery

Panel: Complications in Cardiac Surgery

Symposium Chair: 6th Asian Society of Cardiovascular Anesthesia Meeting, Bali, Indonesia, July 20-22 2005

Lecture: Continuous SvO2 Monitoring During Heating Heart Surgery

Co-Moderator: 24th Annual Symposium Clinical Update in Anesthesiology, St Thomas, US Virgin Islands, Jan 20, 2006 Session XI: *Cardiac Surgery*

Scientific Committee Member & Moderator: The Winter Cardiac Team Meeting, Mt. Tremblant Quebec, Feb. 11-15, 2006

Co-Moderator: Society of Cardiovascular Anesthesiologists 28th Annual Meeting & Workshop, San Diego, CA, May 2, 2006

Workshop: Best-Practice Clinical Pathways to Improve Postoperative Outcomes in Cardiac Surgery

Program Chair: Current Concepts and Trends in Blood Management, Conference, Montreal, QC, May 5-7, 2006

Dr. Rosemary Craen

Session Chair: 62nd CAS Annual Meeting, Toronto, ON, June 16-20,

2006

Moderator: Plenary Symposium

Dr. Steven Dain

Co-Organizer: The Winter Cardiac Team Meeting 2006, Mt. Tremblant

Quebec, Feb. 11-15, 2006

Director: Multimedia

Co-Organizer: 10th Annual Outcomes 2006 "The Key West Meeting",

Key West, FL, May 17-20, 2006

Director: Multimedia

Symposium Chair: Canadian Standards Advisory Committee – ISO TC 121 SC 1 Toronto, ON, June 17, 2006

Dr. Wojciech Dobkowski

Symposium Chair: The Winter Cardiac Team Meeting, Mt. Tremblant,

QC, Feb. 11-15, 2006

Moderator: Neurological Events in Pediatric Cardiac Surgery

Symposium Chair: CAS 62nd Annual Meeting, Toronto, ON, June 18, 2006, Transplant Symposium

Dr. Sugantha Ganapathy

Chair: The Varkey Regional Anesthesia & Anatomy Workshop, London, ON, December 2005

Moderator: CAS 62nd Annual Meeting, Toronto, ON, June 18, 2006

Poster Session: Acute Pain

Dr. Jeff Granton

Session Chair: CAS 62nd Annual Meeting, Toronto ON, June 18, 2006 Refresher Course #4: New Approaches to the Management of the Organ Donor

Dr. Christopher Harle

Co-Organizer: Southwestern Ontario Anesthesia Meeting & Airway

Workshop, London, ON, Oct. 15-16, 2005

Chair of Session: CAS 62nd Annual Meeting, Toronto, ON, June 18,

2006

Refresher Course: Update on ACLS

Moderator: CAS 62nd Annual Meeting, Toronto, ON, June 20, 2006

Poster Discussion: Airway

Dr. Ivan Iglesias

Co-Organizer & Session Moderator: Southwestern Ontario Anesthesia Meeting & Airway Workshop, London, ON, Oct. 15-16, 2005

Organizer & Moderator: The Winter Cardiac Team Meeting, Mt. Tremblant Quebec, Feb. 11-15, 2006

Organizer: Tri-Cities Emergency Medicine Meeting, Cambridge, ON,

April, 2006

Workshop: Difficult Airway

Dr. John Murkin

Symposium & Chair Organizer: The Winter Cardiac Team Meeting, Mt. Tremblant, Quebec Feb. 11-15, 2006

Symposium Chair Organizer: 10th Annual Outcomes, "The Key West Meeting", Key West, FL, May 18, 2006

Moderator Panel Discussion: Controversies in Cognitive Assessment

Dr. Fiona Ralley

Moderator: 62nd CAS Annual Meeting, Toronto, ON, June 18, 2006 Poster Discussion

Dr. Michael Sharpe

Co-Organizer & Moderator: Toronto Critical Care Symposium, Toronto, ON, Oct. 26, 2005

Symposium Organizer: Critical Care Trials Group, June 11-14, 2006

Symposium Organizer: 62nd CAS Annual Meeting, Toronto, ON, June 18, 2006

Transplantation Section

Dr. Indu Singh

Conference Organizer: McMaster-Western Anesthesia Resident Research Day, London, ON, June 9, 2006

Moderator: Midwest Anesthesiology Residents' Conference, Chicago, IL,

March 18, 2006

Session: Chronic Pain, Obstetric Anesthesia

Dr. Sal Spadafora

Section Chair: 62nd CAS Annual Meeting, Toronto, ON, June 18-20, 2006

Section in Education

Dr. Jim Watson

Moderator: The Varkey Regional Anesthesia & Anatomy Workshop, London, ON, December 2005

Invited Lectures/Visiting Professorships

Dr. Miguel Arango

Invited Speaker: Southwestern Ontario Anesthesia Meeting & Airway

Workshop, London, ON, Oct. 15-16, 2005 Lecture: Postoperative Renal Dysfunction

Workshop: Airway

Dr. Kevin Armstrong

Invited Speaker: Southwestern Ontario Anesthesia Meeting & Airway

Workshop, London, ON, Oct. 15-16, 2005 Lecture: *Update on Obstetrical Analgesia*

Invited Speaker: 62nd CAS Annual Meeting, Toronto, ON, June 20, 2006

Lecture: Spinal Cord Injury and Neuraxial Blockade

Dr. Neal Badner

Airway Demonstrator: 24th Annual Can-Am Clinical Anesthesia Conference, May 7, 2006

Presenter: 62nd CAS Annual Meeting, Toronto, ON, June 16-20, 2006

Poster Discussion: Economics/Health & Ambulatory

Dr. Daniel Bainbridge

Invited Speaker: Southwestern Ontario Anesthesia Meeting & Airway

Workshop, London, ON, Oct. 15-16, 2005

Lecture: Pulmonary Hypertension, Perioperative Management

Invited Speaker: Windsor, ON, November 10, 2005

Lecture: Effect of Inhalational Anesthesia on Myocardial Protection

Invited Speaker: Sunnybrook Hospital, Toronto, ON, Nov. 28, 2005

Lecture: HES in Cardiac Surgery

Visiting Professor: HES in Cardiac Surgery, Kitchener, ON, February

2006

Invited Speaker: The Winter Cardiac Team Meeting, Mont Tremblant, QC, February 11-15, 2006

Lecture: Intraoperative Echocardiography. Is the Future Truly Visionary?

Workshop: TEE Workshop for Non-Specialists

Presenter: 10th Annual Outcomes, "The Key West Meeting", Key West,

FL, May 18, 2006

Presentation: Measurement of Aortic Strain and Plaque Burden:

Correlation with Aortic Velocity During Cardiopulmonary Bypass

Invited Speaker: CAS 62nd Annual Meeting, Toronto, ON, June 16-20,

2006

Lecture: Anesthesia for Sepsis

Dr. Robert Banner

Invited Speaker: Interdisciplinary Treatment for Orofacial Pain, San

Diego, CA, Feb. 11-13, 2006

Lecture: Neural Therapy and Prolotherapy

Presenter: Canadian Pain Society Annual Conference, Edmonton, AB, June 16-18, 2006

Poster Presentation: Prolotherapy (Regenerative Injection Therapy) in Chronic Pain – A Review of the Literature and Clinical Experience

Dr. Ron Butler

Invited Speaker: Canadian Association for Critical Care Nurses Annual Conference, Oct. 26, 2005

Lecture: Hypothermia in Cardiac Arrest – Is it Working?

Presenter: Toronto Critical Care Symposium, Toronto, ON, October, 2005

Presentation: Cluster Randomized Trial to Improve Weaning and Extubation from Mechanical Ventilation

Invited Speaker: Anesthesia Alberta, Lake Louise, AB, Feb. 19, 2006 Lecture: *Evidence-Based Ventilation*

Dr. Lois Champion

Invited Speaker: Canadian Resuscitation Institute, Ottawa, ON, June 6-7, 2006

CCRT Course

Dr. Davy Cheng

Invited Speaker: 165th Conference of Liaoning Society of Anesthesiology, Anshan, Liaoning Province, PR China, July 1-3, 2005 Lecture: *Perioperative Arrhythmia Management in Cardiac Surgery*

Panel Speaker: 1st China/CVT-CAS Cardiac Anesthesia Symposium, Shanghai & Beijing, PR China, July 8-10, 2005

Lecture: Anesthesia Management & Outcome in OPCAB Surgery Lecture: Perioperative Arrhythmia Management in Cardiac Surgery

Invited Speaker: 6th Asian Society of Cardiovascular Anesthesia Meeting, Bali, Indonesia, July 20-22, 2005

Lecture: COX I and II inhibitors: Pharmacology & Clinical Application in Cardiac Surgery

Lecture: Transfusion Best Practice in Cardiac Surgery

Invited PBLD Speaker: Society for the Advancement of Blood Management Symposium, Phoenix, AZ, Sept. 16-18, 2005 Lecture: Cardiac Surgery: Emergent CABG in Patient who has just Undergone Failed Stent Placement and is on Clopidigrel

Invited Speaker: 50th Annual Ontario Anesthesia Meeting, Royal Botanical Gardens, Burlington, ON, Sept. 23-25, 2005 Lecture: *Blood Management Strategies in 2005*

Panel Speaker: American Society of Anesthesiologists 100th Annual Meeting, Atlanta, GA, Oct. 24, 2005

Clinical Forum: Coexisting Heart/Vascular Disease

Case 1: Aortic Surgery and Ischemic Cardiomyopathy

Case 2: Myocardial Revascularization and Carotid Endarterectomy

Invited Speaker: International Society of Minimally Invasive Cardiothoracic Surgery, Winter Workshop, Shanghai, PR China, Dec. 2-4, 2005

Lecture: Endoscopic Harvesting of Veins: ISMICS Consensus Statement

Invited Speaker: 24th Annual Symposium Clinical Update in Anesthesiology, St. Thomas, Virgin Islands, Jan. 20, 2006 Lecture: OPBAC Surgery: *Perioperative Physiology and Fast Track Management*

Invited Speaker: The Winter Cardiac Team Meeting, Mont Tremblant, QC, February 11-15, 2006

Lecture: Meta-Analysis: Beating Heart or Conventional CAB

Invited Speaker: Society of Cardiovascular Anesthesiologists 28th Annual Meeting & Workshop, San Diego, CA, May 1-2, 2006 Lecture: *Off Pump CABG Surgery: What are the Real Benefits?*

Invited Speaker: Canadian Society for Transfusion Medicine Conference, Montreal, QC, May 5-7, 2006 Lecture: *PNBC How are we? What are we?* Invited Speaker: ISMICS Annual Scientific Meeting, San Francisco CA,

June 9, 2006

Lecture: Consensus Statement-Transmyocardial Revascularization

Invited Speaker: CAS 62nd Annual Meeting Toronto, ON, June 18, 2006 Lecture: *Problem Based Learning Case: Emergent ACB in Failed PCI Patients on Clopidogrel and Anti-platelet Agents*

Invited Speaker: Ontario Hospital Association Blood Management and

Conservation, Toronto, ON, June 27, 2006

Lecture: Bloodless Surgery

Dr. Richard Cherry

Invited Speaker: Southwestern Ontario Anesthesia Meeting & Airway

Workshop, London, ON, Oct. 15-16, 2005

Workshop: Cricothyrotomy

Dr. Brian Church

Invited Speaker: Southwestern Ontario Anesthesia Meeting & Airway

Workshop, London, ON, Oct. 15-16, 2005 Lecture: *Trauma Airway Management*

Dr. Lynn Coveney

Invited Speaker: Southwestern Ontario Anesthesia Meeting & Airway

Workshop, London, ON, Oct. 15-16, 2005 Lecture: *Pediatric Airway Management*

Dr. Dan Cullerier

Workshop Demonstrator: Southwestern Ontario Anesthesia Meeting & Airway Workshop, London, ON, Oct. 15-16, 2005

Dr. Steven Dain

Invited Speaker: OMA Section of Anesthesia Annual Meeting, Hamilton,

ON, Sept. 23-25, 2005

Lecture: Digital Photography

Invited Speaker: London Airway Symposium, London, ON, Oct. 14-15,

2005

Lecture: Rick Management in Errors

Invited Speaker: Southwestern Ontario Anesthesia Meeting & Airway

Workshop, London, ON, Oct. 15-16, 2005 Lecture: *Error Prevention in Anesthesia*

Invited Speaker: Southwestern Surgical Association Annual Meeting,

London, ON, Nov. 11, 2005

Lecture: Epidural Analgesia for Perioperative Management

Visiting Professor: Biomedical Engineering, University of Toronto, Toronto, ON, Nov. 22, 2005

Visiting Professor: Clinical Engineering Instrumentation, Hospital for Sick

Children, Toronto, ON, Nov. 23, 2005

Lecture: Respiratory Therapy/Anesthesiology

Invited Speaker: Trillium & Southlake Hospitals Dinner, Thornhill, ON,

Nov. 23, 2005

Presentation: Perioperative Fluids

Southwestern Ontario Anesthesia Meeting & Airway Workshop, London, ON, Oct. 15-16, 2005

Lecture: Error Prevention in Anesthesia

Dr. Achal Dhir

Southwestern Ontario Anesthesia Meeting & Airway Workshop, London, ON, Oct. 15-16, 2005

Workshop Demonstrator

Invited Speaker: Revelations: An International Conference, New Delhi,

Dec. 18, 2005

Lecture: Age Retardation- Value of Health Choices

Invited Speaker: CAS 62nd Annual Meeting, Toronto, ON, June 17, 2006

Lecture: Special Considerations for Liver Transplantation

Dr. Wojciech Dobkowski

Invited Speaker: SABM Symposium, Milwaukee, WI, Sept. 17, 2005

Lecture: Liver Transplant: Methods of Decreasing Transfusion of Blood

Products

Invited Speaker: The Winter Cardiac Team Meeting, Mt. Tremblant,

Quebec, Feb. 11-15, 2006

Lecture: Direct Thrombin Inhibitors in Cardiac Surgery

Lecture: Optimization of the High Risk Patient

Invited Speaker: CAS 62nd Annual Meeting Toronto, ON, June 18, 2006

Lecture: Special Considerations for Liver Transplantation

Dr. Sugantha Ganapathy

Invited Speaker: Third Annual Fireworks in Anatomy of Regional Blockade, University of Louisville Anesthesia Department, Louisville, KY, July 9-10, 2005

Lecture: Axillary Block and Rescue Blocks of Upper Limb

Workshop: Anatomy Dissection Pertaining to Regional Anesthesia

Invited Speaker: 12th Annual Regional Anesthesia & Pain Medicine Hands on Workshop, Sept. 30-Oct. 2, 2005

Lectures: Continuous RA at Home, Spinal Hematoma and Nerve Injury

Workshops: Intensive Lower Limb, Paravertebral Block

Invited Speaker: OAPRS 1st Annual Meeting, Atlanta, GA, Oct. 21, 2005 Lecture: *US for Upper Limb Blocks*

Visiting Professor/Invited Speaker: Aich Medical University & Japan Society of Clinical Anesthesia, Japan, November 2005

Lecture: Use of Ultrasound for Regional Anesthesia

Demonstrator: The Varkey Regional Anesthesia & Anatomy Workshop, London, ON, December 2005

Workshop: Supraclavicular Block, Lumbar Plexus and Sciatic Block

Visiting Professor: McMaster University, Hamilton, ON, 2006 Orthopedic Pain Management

Invited Speaker: 51st Annual Scientific Meeting of the Michigan Society of Anesthesiologists, Lansing, MI, March 11, 2006

Lecture: Introduction to Ultrasound Guided Nerve Blocks

Workshop Demonstrator: 31st Annual Regional Anesthesia Meeting ASRA, Rancho Mirage, CA, April 8, 2006

Lecture: PBLD: Choice of Neuraxial Anesthesia and Local Anesthetic in

Parturient Undergoing Stat C-Section

Workshop: Thoracic Epidural

Invited Speaker: Ultrasound and Regional Anesthesia: 3rd Annual

International Symposium ISURA, Toronto, ON, April 23, 2006

Lecture: *Ultrasound Imaging – Technical Considerations*

Workshop: Axillary and Infraclavicular Blocks

Workshop Demonstrator: 62nd CAS Annual Meeting, Toronto, ON, June

16 - 20, 2006

Workshop: US and Regional Anesthesia, Resident Section, Leader.

Workshop: Upper Limb Blocks US

Dr. Jeff Granton

Invited Speaker: 24th Annual Can-Am Clinical Anesthesia Conference, ACLS Update, Niagara Falls, ON, May 5-6, 2006

Dr. Christopher Harle

Southwestern Ontario Anesthesia Meeting & Airway

Workshop, London, ON, Oct. 15-16, 2005

Lecture: Postoperative Pain Management Update

Dr. Ivan Iglesias

Invited Speaker: Southwestern Ontario Anesthesia Meeting & Airway

Workshop, London, ON, Oct. 15-16, 2005

Lecture: Perioperative Management of Diabetic Patients

Workshop: Airway, Basic Component

Visiting Professor: University of Panama Anesthesia Program,

November 2005

Lecture: Diabetes Mellitus and Airway Assessment

Workshop: Preoperative Assessment

Invited Speaker: The Winter Cardiac Team Meeting, Mt. Tremblant,

Quebec Feb. 11-15, 2006

Lecture: Intraoperative TEE cases

Invited Speaker: Regional Nursing Conference, March 2006

Lecture: PACU Purpose

Invited Speaker: Tri-Cities Emergency Medicine Meeting, Cambridge,

ON, April, 2006

Workshop: Approach to a Difficult Airway

Dr. Ngozi Imasogie

Invited Speaker: Neonatal Intensive Care Unit, London Health Sciences

Centre, London, ON, June 12, 2006

Lecture: Low Dose Naloxone Infusion: An Analgesic

Demonstrator: McMaster-Western Anesthesia Resident Research Day,

London, ON, June 9, 2006

Workshop: Demonstration of Ultrasound Blocks

Dr. Philip Jones

Demonstrator: 24th Annual Can-Am Clinical Anesthesia Conference,

Niagara Falls, ON, May 7, 2006

Workshop: Lightwand

Dr. Sandra Katsiris

Invited Speaker: Southwestern Ontario Anesthesia Meeting & Airway

Workshop, London, ON, Oct. 15-16, 2005 Lecture: *Obstetrical Airway Management*

Invited Speaker: CAS 62nd Annual Meeting, Toronto, ON, June 16-18,

2006

Case Discussion #11: Shortness of Breath

Dr. Ian McConachie

Invited Speaker: 3rd Annual Critical Care Symposium, The Penine Acute

Hospitals, Manchester, UK, April 27, 2006

Lecture: Interesting Cases

Dr. John Murkin

Invited Speaker: Riverside Methodist Hospital's Anesthesia CME

Conference, Columbus, OH, September 20, 2005 Lecture: Systematic Inflammatory Response Invited Speaker: The 10th Annual Society of Cardiovascular Anesthesiologists, Okayama, Japan, Sept. 23-24, 2005

Lecture: CNS Injury in Cardiac Surgery: What Do We Know?

Lecture: Adequacy of Perfusion: Optimizing Brain and Body Oxygenation Improves Clinical Outcome

Invited Speaker: Symposium – Innovative Strategies to Improve Open Heart Surgery Outcomes, San Francisco, CA, October 7-9, 2005

Lecture: Impact of SIRS in CPB

Invited Speaker: The "Boston Meeting" – The Cardiac Surgery Team

Meeting, Boston, MA, Oct. 14-16, 2005

Lecture: Neurologic Monitoring

Invited Speaker: Southwestern Ontario Anesthesia Meeting & Airway

Workshop, London, ON, Oct. 15-16, 2005

Lecture: Neurologic Complications in Non-Cardiac Surgery

Invited Speaker: American Society of Anesthesiologists Annual Meeting,

Atlanta, GA, Oct. 22-26, 2005

Lecture: Neuromonitoring and Interventions in Cardiac Surgery

Invited Speaker: CT Anesthesia Conference, The University of Colorado

Health Sciences Center, Denver, CO, Nov. 10, 2005

Lecture: Aprotinin Inflammation and Perioperative Stroke

Lecture: Improving Neurologic Outcomes in the CABG Patient

Invited Speaker: AHA Scientific Sessions 2005, Neurocognitive

Outcomes After Cardiac Surgery, Dallas, TX, Nov. 14, 2005

Lecture: What is (Should Be) the Standard of Care for Monitoring?

Invited Speaker: Association of Cardiothoracic Anaesthetists 22nd

Autumn Meeting, Belfast, Ireland, Nov. 18, 2005

Lecture: Brain Protection at Cardiothoracic Surgery

Invited Speaker: Symposium – BONES, New Jersey, NY, Dec. 2, 2005

Lecture: Betting Bleeding Outcomes in Orthopedics: New & Emerging

Strategies

Invited Speaker: National Trasylol Faculty Summit Meeting, Kissimmee,

FL, Dec. 2-4, 2005

Lecture: Cutting Edge Science: Cerebral Outcomes Following CPB, CABG

Invited Speaker: Innovative Strategies to Improve Open Heart

Surgery Outcomes, Miami, FL, Jan. 13, 2006

Lecture: Serine Protease Inhibitors: Thrombin Inhibition & Stroke

Reduction

Invited Speaker: Cardiac Team Meeting Orlando, FL, Jan. 14-15,

2006

Lecture: ARS Lecture

Lecture: High Risk Patient and Risk Factors

Invited Speaker: BONES Surgical Excellence Meeting Baltimore, DC,

Jan. 28, 2006

Lecture: Applying Landmark Evidence to Orthopedic Surgery Practice

Invited Speaker: The Winter Cardiac Team Meeting, Mt. Tremblant,

Quebec Feb. 11-15, 2006

Lecture: Consensus Statement – Best Practice CPB

Lecture: Pathophysiological Basis of CNS Injury in Cardiac Surgical

Patients

Visiting Professor: St. Vincent's Medical Center, Toledo, OH, Feb. 22,

2006

Lecture: Safety & Efficacy of Pharmacotherapeutic Interventions for

Blood Management in Cardiac Surgery

Invited Speaker: Cardiac Team Meeting – Bayer Expert Meeting.

San Antonio, TX, March 31-April 2, 2006

Lecture: High Risk Patients & Risk Factors

Invited Speaker: Society of Cardiovascular Anesthesiologists

28th Annual Meeting & Workshop, San Diego, CA, April 29-May 3, 2006

Lecture: Best Practice Management to Reduce Postoperative CVA

Annual Irish Congress of Anaesthesia, Dublin, Ireland, May 11-12, 2006

Lecture: Antifibrinolytics: Role of PAR Receptors in Clinical Outcomes

Lecture: Strategies for Reducing Neurologic Injury in Cardiac

Surgery

Invited Speaker: 10th Annual Outcomes 2006 "The Key West Meeting",

Key West, FL, May 17-20, 2006

Lecture: Hematocrit, Hyperoxia, Tissue Perfusion and Outcomes Lecture: Stratification, Adverse Events and Statistical Outcomes

Invited Speaker: EACTA Congress Venice, Italy, May 24, 2006

Lecture: Brain Dysfunction in Adult Cardiac Surgery

Invited Speaker: 47th Annual McGill Anesthesia Update, May 27-29,

2006, Montreal, QC

Lecture: Cerebral Oximetry

Invited Speaker: Canadian Anaesthesiology Innovator's Meeting, The Emerging Role of Factor VIIa in Cardiac Surgery, Toronto, ON, June 3, 2006

Lecture: Safety Factor of VIIa in Non-Hemophiliacs; A Review of

Literature

Invited Speaker: CAS 62nd Annual Meeting, Toronto, ON, June 16-18,

2006

Lecture: Antiplatelet Agents in the Clinical Setting

Dr. George Nicolaou

Workshop Demonstrator: Southwestern Ontario Anesthesia Meeting & Airway Workshop, London, ON, Oct. 15-16, 2005

Dr. John Parkin

Workshop Demonstrator: The Varkey Regional Anesthesia & Anatomy

Workshop, London, ON, Dec. 2, 2005

Workshop: Supraclavicular Ultrasound Guided Brachial Plexus Blocks

Dr. Valerie Schulz

Invited Guest: Ontario Today, CBC Radio One, Feb. 7, 2006

Palliative Care Discussion: What Do You Want, at the End of Life?

Dr. Michael Sharpe

Invited Speaker: CACCN Dynamics of Critical Care Conference,

Ottawa, ON, Oct. 2, 2005

Lecture: Re-establishing Organ Function in Sepsis

Invited Speaker: Regina General Hospital, Oct.19, 2005

Lecture: Resuscitation of the Microcirculation

Invited Speaker: Toronto Critical Care Symposium, Toronto, ON, Oct.

26, 2005

Lecture: Goal Directed Therapy to Restore the Microcirculation

Invited Speaker: GE Healthcare Monitoring Symposium, Mississauga,

ON, Feb. 7, 2006

Lecture: Continuous EEG Monitoring in the ICU

Visiting Professor: Department of Critical Care Medicine, Calgary, AB,

March 1, 2006

Lecture: Restoring Microcirculation in Septic Patient - Current Research

and Methodologies

Invited Speaker: Canadian Association of Critical Care Nurses, Spring

Education Day, London, ON, March 3, 2006

Lecture: Inhalational Anesthesia in the ICU

Invited Speaker: Organ Donation Crisis in Ontario: Finding Solutions,

Trillium Gift of Life Network, Toronto, ON, March 26, 2006 Lecture: *Intensivist's Perspective: Barriers and Opportunities*

Invited Speaker: Trillium Gift of Life Network Symposium, Toronto, ON,

June 6, 2006

Lecture: Role of the ICU in Organ Donation, LHSC Experience

Invited Speaker: CAS 62nd Annual Meeting, Toronto, ON, June 17, 2006

Lecture: New Approaches to the Management of the Organ Donor

Dr. Indu Singh

Invited Speaker: Sunnybrook and Women's College Health Sciences

Centre, Department of Anesthesia, OMCEP Teleconference

Lecture: Methods of Labour Analgesia

Dr. Sal Spadafora

Invited Speaker: Making a Mark Program, Banff Education Center,

Banff Alberta, February 9, 2006

Lecture: An Approach to Avoiding Common Difficulties in Oral Exam

Performance

Dr. Marc St. Amand

Workshop Demonstrator: Southwestern Ontario Anesthesia Meeting & Airway

Workshop, London, ON, Oct. 15-16, 2005

Workshop: *Brochoscopes*

Dr. Ravi Taneja

Workshop Demonstrator: Southwestern Ontario Anesthesia Meeting & Airway

Workshop, London, ON, Oct. 15-16, 2005

Workshop: Brochoscopes

Dr. Anthony Vannelli

Invited Speaker: Southwestern Ontario Anesthesia Meeting & Airway

Workshop, London, ON, Oct. 15-16, 2005 Lecture: *Upper Airway Topicalization*

Workshop: Teaching F.O.B

FACULTY PUBLICATIONS

Peer Reviewed Publications

Guiraudon GM, Jones DL, Skanes AC, Bainbridge D, Guiraudon CM, Jensen SM, et al. En bloc exclusion of the pulmonary vein region in the pig using off pump, beating, intra-cardiac surgery: a pilot study of minimally invasive surgery for atrial fibrillation. Ann Thorac Surg 2005 Oct;80(4):1417-23.

Bainbridge D, Cheng DC, Martin JE, Novick R; Evidence-Based Perioperative Clinical Outcomes Research (EPiCOR) Group. NSAID-analgesia, pain control and morbidity in cardiothoracic surgery. Can J Anaesth 2006 Jan;53(1):46-59.

Bainbridge D, Martin JE, Cheng DC. Patient-controlled versus nurse-controlled analgesia after cardiac surgery-a meta-analysis. Can J Anaesth 2006 May;53(5):492-9.

Bainbridge D. Aortic assessment for cardiac surgical procedures. Cardiothorac Vasc Anesth 2006 Jun;10(2):158-61.

Kiaii B, McClure RS, Skanes AC, Ross IG, Spouge AR, Swinamer S, Rayman R, Bainbridge D, Iglesias I, et al. Robotic-assisted left atrial ligation for stroke reduction in chronic atrial fibrillation: a case report. Heart Surg Forum 2006;9(1):E533-5.

Busch CA, Shore BJ, Bhandari R, Ganapathy S, MacDonald SJ, Bourne RB, et al. Efficacy of periarticular multimodal drug injection in total knee arthroplasty. A randomized trial. J Bone Joint Surg Am 2006 May;88(5):959-63.

Karski J, Djaiani G, Carroll J, Iwanochko M, Seneviratne P, Liu P, Kucharczyk W, Fedorko L, David T, Cheng DC. Tranexamic acid and early saphenous vein graft patency in conventional coronary artery bypass graft surgery: a prospective randomized controlled clinical trial. J Thorac Cardiovasc Surg 2005 Aug;130(2):309-14.

Puskas J, Cheng D, Knight J, Angelini G, Decannier D, Diegeler A, et al. Off-pump versus conventional coronary artery bypass grafting: a meta-analysis and consensus statement from the 2004 ISMICS Consensus Conference. Innovations 2005 Fall;1(1):3-27.

Allen K, Cheng D, Cohn W, Connolly M, Edgerton J, Falk V, et al. Endoscopic vascular harvest in coronary artery bypass grafting surgery: a consensus statement of the The International Society of Minimally Invasive Cardiothoracic Surgery (ISMICS) 2005. Innovations 2005 Winter;1(2):51-60.

Cheng D, Allen K, Cohn W, Connolly M, Edgerton J, Falk V, et al. Endoscopic vascular harvest in coronary artery bypass grafting surgery: a meta-analysis of randomized trials and controlled trials. Innovations 2005 Winter;1(2):61-74.

Cheng DCH, Barash PG. Is fast-track intensive care unit management still on the express track? Crit Care Med 2006 Jun;34(6):1826-8.

Djaiani G, Karski J, Yudin M, Hynninen M, Fedorko L, Carroll J, Poonawala H, Cheng D. Clinical outcomes in patients undergoing elective coronary artery bypass graft surgery with and without utilization of pulmonary artery catheter-generated data. J Cardiothorac Vasc Anesth 2006 Jun;20(3):307-10.

Dain SL. Management of high-risk perioperative systems. Semin Cardiothorac Vasc Anesth 2006;10(2):1-4.

Kiaii B, McClure RS, Kostuk WJ, Rayman R, Swinamer S, Dobkowski WB, et al. Concurrent robotic hybrid revascularization using an enhanced operative suite. Chest 2005 Dec;128(6):4046-8.

Ganapathy S, Nielsen KC, Steele SM. Outcomes after paravertebral blocks. Int Anesthesiol Clin 2005 Summer;43(3):185-93.

Tsui BC, Kropelin B, Ganapathy S, Finucane B. Dextrose 5% in water: fluid medium for maintaining electrical stimulation of peripheral nerves during stimulating catheter placement. Acta Anaesthesiol Scand 2005 Nov;49(10):1562-5.

Ho M, Ganapathy S. Is peripheral/plexus block safe in the anticoagulated patient? Techniques in Regional Anesthesia & Pain Management 2006 Apr;10(2):56-61.

Chung F, Imasogie N, Ho J, Ning X, Prabhu A, Curti B. Frequency and implications of ambulatory surgery without a patient escort. Can J Anaesth 2005 Dec;52(10):1022-6.

Morley-Forster PK. Primary care for chronic pain patients. Can Fam Physician 2005 Aug;51:1073.

Morley-Forster PK, Abotaiban A, Ganapathy S, Moulin DE, Leung A, Tsui B. Targeted thoracic epidural blood patch placed under electrical stimulation guidance (Tsui test). Can J Anaesth 2006 Apr;53(4):375-9.

Morley-Forster PK, Singh S, Angle P, Littleford J, Currin M, Halpern SH. The effect of epidural needle type on postdural puncture headache: a randomized trial. Can J Anaesth 2006 Jun;53(6):572-8.

Zhang T-Z, Zhou J, Murkin J, Cheng D. Anesthesia for robotic-assisted cardiac surgery. F Med Sci Anesth Resus 2005 Aug;26(4):235-239.

Murkin JM. Aprotinin: ischemia, inflammation and neurologic risk. Heart Surgery Forum Reviews 2005 Sept;3(1):7-10.

Murkin JM. The role of recombinant activated factor VII in hemorrhage following cardiac surgical procedures. TATM 2005 Nov;7(1):37-9.

Murkin JM, Stump DA. Introduction: outcomes 2005. Heart Surg Forum 2005 Dec;8(6):E416-24.

Murkin JM. Neurologic complications in noncardiac surgery. Semin Cardiothorac Vasc Anesth 2006 Jun;10(2):125-7.

Railton CJ, Kapur B, Koren G. Subtherapeutic risperidone serum concentrations in an adolescent during hemodialysis: a pharmacological puzzle. Ther Drug Monit 2005 Oct;27(5):558-61.

Ma M, Eckert K, Ralley F, Chin-Yee I. A retrospective study evaluating single-unit red blood cell transfusions in reducing allogeneic blood exposure. Transfus Med 2005 Aug;15(4):307-12.

Moulin DE, Palma D, Watling C, Schulz V. Methadone in the management of intractable neuropathic noncancer pain. Can J Neurol Sci 2005 Aug;32(3):340-3.

Queen D, Woo K, Schulz VN, Sibbald RG. Chronic wound pain and palliative cancer care. Ostomy Wound Manage 2005 Nov; 51(11A Suppl):9-11.

Ellis CG, Jagger J, Sharpe M. Review: The microcirculation as a functional system. Critical Care 2005;Suppl(4):S3-S8.

Turkstra TP, Craen RA, Pelz DM, Gelb AW. Cervical spine motion: a fluoroscopic comparison during intubation with lighted stylet, GlideScope, and Macintosh laryngoscope. Anesth Analg 2005 Sep;101(3):910-5.

Books/Book Chapters

Badner NH. Anesthetic management of co-morbid diseases affecting cardiopulmonary bypass. In: Cheng DC, David TE, editors. Perioperative care in cardiac anesthesia and surgery. Philadelphia (PA): Lippincott Williams & Wilkins; 2006. p. 85-90.

Bainbridge D. Perioperative monitoring in cardiac anesthesia. In: Cheng DC, David TE, editors. Perioperative care in cardiac anesthesia and surgery. Philadelphia (PA): Lippincott Williams & Wilkins; 2006. p. 99-103.

Bainbridge D, Cheng DCH. Routine cardiac surgery recovery care: extubation to discharge. In: Cheng DCH, David TE, editors. Perioperative care in cardiac anesthesia and surgery. Philadelphia (PA): Lippincott Williams & Wilkins; 2006. p. 341-45.

Champion LK. Breathing. In: Hodder R, editor. Critical care response team (provider manual). Ottawa (ON): Canadian Resuscitation Institute; 2006. p. 65-123.

Champion LK. Infection, sternal debridement, and septic shock. In: Cheng DC, David TE, editors. Perioperative care in cardiac anesthesia and surgery. Philadelphia (PA): Lippincott Williams & Wilkins; 2006. p. 381-385.

Cheng DCH, David TE, editors. Perioperative care in cardiac anesthesia and surgery. Philadelphia (PA): Lippincott Williams & Wilkins; 2006.

Cheng DCH, David TE. Prognostic risks and preoperative assessment. In: Cheng DCH, David TE, editors. Perioperative care in cardiac anesthesia and surgery. Philadelphia (PA): Lippincott Williams & Wilkins; 2006. p. 3-10.

Cheng DCH, Bainbridge D. Fast-track cardiac anesthesia management in on-pump and off-pump coronary artery bypass surgery. In: Cheng DCH, David TE, editors. Perioperative care in cardiac anesthesia and surgery. Philadelphia (PA): Lippincott Williams & Wilkins; 2006. p. 13-20.

Cheng DCH, Bainbridge D. Postoperative cardiac surgery recovery and outcomes. In: Kaplan JA, Reich DL, Lake CL, Konstadt SN, editors. Kaplan's cardiac anesthesia. 5th ed. Philadelphia (PA): Saunders; 2006. p. 1043-1060.

Cheng DCH, Craig A. Management of special patient populations. In: Perioperative blood management: a physician's handbook. 1st ed. Bethesda (MD): AABB; 2006. p. 153-175.

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Harle C. The cardiac surgical patient in the ICU. In: McConachie I. Handbook of ICU therapy. Cambridge (UK): Cambridge University Press; 2006. p. 401-415.

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Iglesias I, Murkin JM. Central nervous system dysfunction after cardiopulmonary bypass. In: Kaplan JA, Reich DL, Lake CL, Konstadt SN, editors. Kaplan's cardiac anesthesia. 5th ed. Philadelphia (PA): Saunders; 2006. p. 1103-1128.

Iglesias I, Murkin JM. Circulatory arrest and neuroprotection. In: Cheng DCH, David TE, editors. Perioperative care in cardiac anesthesia and surgery. Philadelphia (PA): Lippincott Williams & Wilkins; 2006. p. 37-41.

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Taneja R. Management of the cardiac surgical emergency. In: Cheng DCH, David TE, editors. Perioperative care in cardiac anesthesia and surgery. Philadelphia (PA): Lippincott Williams & Wilkins; 2006. p. 185-192.

Abstracts/Case Reports

Arango M, Niño C, Mejia-Mantilla J. Survey of neuroanesthesia practice patterns in Colombia. Eur J Anaesthesiol 2005;22(Suppl 36):14-15.

Roos MR, Armstrong K. Comparison of the bullard and glidescope laryngoscopes in a simulated difficult airway. Anesthesiology 2005;103:A839.

Nguyen Q, Armstrong K. Comparison of the bonefils fiberscope and bullard laryngoscope. Can J Anesth 2006;53:26464.

Teague K, Badner N, Nicolao G, Smith D, DeRose G. Anaesthetic management of AAA repair: endovascular vs. stent. Can J Anesth 2006;53:26210.

Bainbridge D, Guiraudon, GM, Jones DL, Boughner D, Skanes AC, Peters TM. Evaluation of three echocardiographic imaging approaches for instrument guidance for off pump beating intracardiac surgery. Can J Cardiol 2005 Oct;21(Suppl C):657.

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Katyal P, Currin M, Singh I. Anesthetic management for cesarean section of a parturient with moderately severe aortic stenosis. 62nd CAS Annual Meeting Case Report 2006 June;26471.

Dhir S, Fuller J. Obstetric analgesia and labor management of pregnancy with ESRD on hemodialysis. Medically Challenging Cases: MC80. Presented at the ASA Annual Meeting; 2005; Atlanta (GA).

Dhir S, Ganapathy S. Success rates of infraclavicular blocks with three different insertion techniques. Anesth Analg 2006 March;102;S-309.

Dhir S. Continuous infraclavicular brachial plexus block using ultrasound improves primary success rate and reduce secondary cathether failure rate. Presented at The 2nd World Congress on Regional Anesthesia and Pain Therapy; 2006 March 3-7th; Rio de Janeiro, Brazil.

Dhir S. Ultrasound guided brachial plexus localization improves primary success and reduces secondary failure rate. Presented at MARC; 2006 March 17-19; Chicago (IL).

Dhir S. Periarticular local anesthetic infusion with I-flow elastomeric pump provides superb analgesia, reduce opioid use and facilitates early ambulation. Presented at MARC; 2006 March 17-19; Chicago (IL).

Dhir S, Ganapathy S. Ultrasound localization improves primary success and reduces secondary catheter failure in continuous peripheral nerve blocks. Can J Anesth 2006 June;53:26090.

Dhir S, Fuller J. Anesthetic management of pregnancy in end stage renal disease on haemodialysis. 62nd CAS Annual Meeting Case Report 2006 June;26091.

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Sharpe MD. New approaches to the management of the organ donor. CAS 62nd Annual Meeting Supplement.

Raihan SM, Ladak HM, Young GB, Sharpe MD. Cepstral analysis of EEG for early detection of vasospasm. Presented at the 16th Annual Canadian Conference on Intelligent Systems; 2006 May 31 -June 2; Victoria (BC).

Fantillo V, Singh S, Parkin J. The anesthetic challenges of a morbidly obese parturient with preeclampsia. 62nd CAS Annual Meeting Case Report 2006 June;26486.

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Masood A, Singh S, Spadafora S. Management of anesthesia in a child with epidermolysis bullosa dystrophica. 62nd CAS Annual Meeting Case Report 2006 June;26441.

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Turkstra TP, Pellerin H. Modification of an LMA unique to facilitate endotracheal intubation: a case-report. 62nd CAS Annual Meeting Case Report 2006 June; 26314.

Non-Peer Reviewed Publications/Letters/Editorials

Arango M. CRASH-2. Aleatorización clínica de un antifibrinolítico en la hemorragia significativa. Rev Esp Anestesiol Reanim 2005;52(10): 585-586.

Tsui BC, Armstrong K. Can direct spinal cord injury occur without paresthesia? A report of delayed spinal cord injury after epidural placement in an awake patient. Anesth Analg 2005 Oct;101(4):1212-4.

Miller DR and Members of the Canadian Journal of Anesthesia Editorial Board. Canadian Journal of Anesthesia: 2006 and beyond. Can J Anaesth 2006 Jan;53(1):1-5.

Cheng DCH, Choi PT. Evidence-based decision making: current challenges and a new feature in the Canadian Journal of Anesthesia. Can J Anesth 2006 Jan;53(1):6-10.

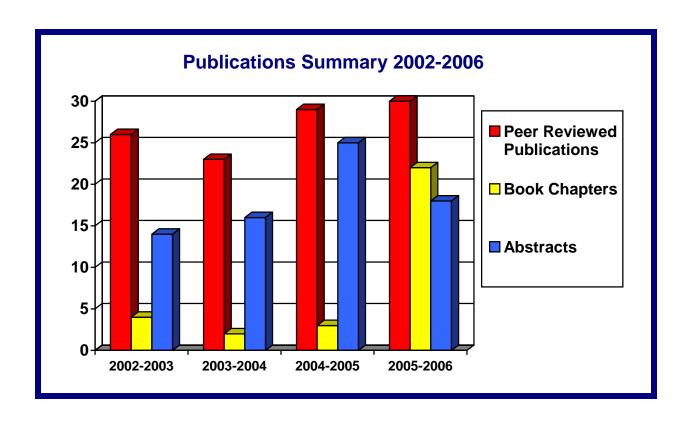
Horswell JL, Cheng DCH. Reply. J Cardiothorac Vasc Anesth 2006 Feb;20(3):468-469.

Fabregas N, Craen RA. Pressure inside the neuroendoscope should be measured on the inflow channel. J Neurosurg Anesthesiol 2006 Apr;18(2):161-3, author reply 163.

Hadi I, Morley-Forster PK. Analgesia in labour. Partner 2005 Winter;27:1.

Morley-Forster PK. Addressing physician resources for chronic pain management. Can J Anesth 2005;52(10):1103.

Schulz V. Doctor looks death in the eye: dying patients need to prepare for death, just as people do for birth. London Free Press 2005 July 25.



International Standard Publications

Dr. Steven Dain

Dr. Dain is the Head of Canadian Delegation, Organization for International Standardization (ISO Technical Committee 121 Anaesthetic and Respiratory equipment) and is Chairman of the Canadian Advisory Committee to ISO TC 121. He is on numerous national and international committees related to the writing of biomedical engineering standards for medical electrical equipment, and adoption of these international standards for the Standards Council of Canada.

Standards Reviewed 2005

ISO/DIS 8836: 1997

Suction catheters for use in the respiratory tract.

ISO/TC 121/SC 2 N18

Anaesthesia amd Respiratory Equipment - Respiratory Therapy

Equipment - Part 2: Nebulizing Systems & Components.

ISO TC 121/SC 3 N1227

Non-invasive sphygmomanometers - Part 1: Requirements and test methods for non-automated measurement type.

Standards Written 2005

ISO/DIS 8835-3.2

Inhalational anaesthesia systems - Part 3: Transfer and receiving systems of active anaesthetic gas scavenging systems.

ISO 5360:1993/ FDAmd 1

Anaesthetic vaporizers - Agent-specific filling systems-Amendment 1.

IEC 60601-1-8: 2003/FDAmd 1

Medical electrical equipment - Part 1-8: General requirements for safety - Collateral standard: General requirements, tests and guidance for alarm systems in medical electrical equipment and medical electrical systems - Amendment 1.

ISO/DIS 8185.2

Respiratory tract humidifiers for medical use - Particular requirements for respiratory humidification systems.

Standards Reviewed 2006

CSA Z305.12

Safe Storage, handling, and use of portable oxygen systems in residential buildings and health care facilities.

CAN/CSA-Z305.12-06

Safe Storage, handling, and use of portable oxygen systems in residential buildings and health care facilities.

CAN/CSA-Z8835-4-06

Inhalation Anaesthesia Systems – Part 4: Anaesthetic Vapour Delivery Devices.

CAN/CSA-Z8835-5-06

Inhalational Anaesthesia Systems – Part 5: Anaesthetic Ventilators

CAN/CSA-Z10651-2-06

Lung Ventilators for Medical Use – Particular Requirements for Basic Safety and Essential Performance – Part 2: Home Care Ventilators for Ventilator-Dependent Patients.

CAN/CSA-Z10651-6-06

Lung Ventilators for Medical Use – Particular Requirements for Basic Safety and Essential Performance – Part 6: Home Care Ventilatory Support Devices.

IEC 60601-2-49 (2006-01) – Medical electrical equipment – Part 2-49: Particular requirements for the safety of multifunction patient monitoring equipment.

CSA-Z305.12-06

Safe storage, handling, and use of portable oxygen systems in residential buildings and health care facilities.

ISO 81060-1:

Non-invasive sphygmomanometers – Part 1: Requirements and test methods for non-automatic measurement type.

Standards Written 2006

ISO 5356-2:2006 - Anaesthetic and Respiratory Equipment -- Conical connectors -- Part 2: Screw-threaded weight-bearing connectors.

ISO 5360:2006 – Anaesthetic Vaporizers – Agent-Specific Filling Systems.

ISO/TC 121/SC 1

CAN/CSA-Z8835-4-06 – Inhalational Anaesthesia Systems – Part 4: Anaesthetic Vapour Delivery Devices.

CAN/CSA-Z8835-5-06 – Inahalational Anaesthesia Systems – Part 5: Anaesthetic Ventilators.

CAN/CSA-Z10651-6-06 – Lung Ventilators for Medical Use-Particular Requirement for Basic Safety and Essential Performance – Part 6: Home Care Ventilatory Support Devices.

CAN/CSA-Z10651-2-06 - Lung Ventilators for Medical Use-Particular Requirement for Basic Safety and Essential Performance – Part 2: Home Care Ventilators for Ventilator-Dependent Patients.

ISO 10651-5:2006 – Lung Ventilators for Medical Use – Particular requirements for basic safety and essential performance. Part 5: Gas powered emergency resuscitators.

IEC 60601-1-8-am (2006-03) – Amendment 1 – Medical electrical equipment – Part 1-8: General requirements for safety - Collateral standard: General requirements, tests and guidance for alarm systems in medical electrical equipment and medical electrical systems.

IEC 60601-2-13-am1 (2006-05) Medical electrical equipment – Part 2-13: Particular requirements for the safety and essential performance of anaesthetic systems.

CAN/CSA-C22.2 No. 60601-2-13 – Medical electrical equipment – Part 2-13: Particular requirements for the safety and essential performance of anaesthetic systems.

CAN/CSA-Z8835-4-06 – Inhalational anaesthesia systems-Part 4: Anaesthetic vapour delivery devices.

CAN/CSA-Z8835-5-06 – Inhalational anaesthesia systems-Part 5: Anaesthetic ventilators.

CAN/CSA-Z10651-2-06 – Lung Ventilators for medical use – Particular requirements for basic safety and essential performance. Part 2: Homecare ventilators for ventilator dependent patients.

CAN/CSA-Z10651-6-06 – Lung Ventilators for medical use – Particular requirements for basic safety and essential performance. Part 6: Homecare ventilatory support devices.

CAN/CSA-C22.2 No. 60601-2-13:06 (2006-09) — Medical Electrical Equipment — Part 2-13: Particular requirements for the safety and essential performance of anaesthetic systems.

CAN/CSA-Z9360-1-06 – Anaesthetic and respiratory equipment – Heat and moisture exchangers (HMEs) for humidifying respired gases in humans – Part 1: HMEs for use with minimum tidal volumes of 250 mL.

CAN/CSA-Z9360-2-06 – Anaesthetic and respiratory equipment – Heat and moisture exchangers (HMEs) for humidifying respired gases in humans- Part 2: HMEs for use with tracheostomized patients having minimum tidal volumes of 250 mL.

CAN/CSA-Z7376-06 – Anaesthetic and respiratory equipment – Laryngoscopes for tracheal intubation.

ISO 5356-2 Anaesthetic and respiratory equipment – Conical Connectors – Part 2: Screw threaded weight-bearing connectors.

IEC 60601-1-8-am1 (2006-03) – Amendment 1 – Medical electrical equipment – Part 1-8: General requirements for safety – Collateral Standard: General requirements, tests and guidance for alarm systems in medical electrical equipment and medical electrical systems.

IEC 60601-2-13-am1 (2006-05) – Amendment 1 – Medical electrical equipment – Part 2-13: Particular.

FACULTY RESEARCH GRANTS/FUNDING

Peer Reviewed Grants/Funding

Dr. Miguel Arango

Bristol-Myers Squibb Canada, CAS Grant, 2005, \$20,000 Comparison of equiosmolar does of mannitol 20% versus hypertonic saline 7.5% infusion, in the reduction of brain bulk during elective craniotomies for supratentorial brain tumor resection Principle Investigator

Dr. Daniel Bainbridge

Dr. R. A. Gordon Patient Safety Research Award, 2005, \$40,000

Does sevoflurane cause harm? A comprehensive analysis of best available evidence

Principal Investigator

Earl Wynands Award, CAS, 2005

Echocardiographic guided ASD repair in a closed breathing heart offpump model: a new approach to minimally invasive cardiac surgery Principal Investigator

Dr. Rakesh Bhandari

Delex Therapeutics Incorporated, 2005-2006

A multi-centre placebo-controlled, randomized 2-part study (open-label lead-in followed by a double-blind dosing) to determine the efficacy and safety of inhaled AevoLEFT (Aerosolized Liposome-Encapsulated Fentanyl 500 mcg/mL) in the treatment of acute post-operative pain in adult patients undergoing elective orthpaedic surgery Co-Investigator

Johnson & Johnson Pharmaceutical Research & Development, 2006 A randomized, double-blind, active- and placebo-controlled, parallel group, multicentre study to evaluate the efficacy and safety of multiple doses of CG5503 immediate-release formulation in the treatment of acute pain from total hip replacement surgery followed by voluntary open-labeled extension

Co-Investigator

Optimization of the dose of intrathecal hydromorphone in patients undergoing hip arthroplasty, 2006
Principle Investigator

Dr. Ron Butler

PSI Foundation Clinical Research Grant, June, 2006, \$83,000

Treatment of acute on chronic liver failure patients with molecular adsorbent recirculating system (MARS®) in patients awaiting liver transplantation

Co-Investigator

Dr. Davy Cheng

Canadian Patient Safety Institute, 2005-2007, \$46,000 The effect of a merger of a two site cardiac surgery and cardiac anesthesia service on patient outcomes and institutional safety culture Co-Investigator with Richard Novick, Principal Investigator

AMOSO, 2006-2009, \$120,000

Anesthesia & Clinical Pharmacology Academic Joint Recruitment Fund Co-Investigator with Craig Railton

Dr. Rosemary Craen

CAS Grant, 2005, \$10,000

Comparison of equiosmolar does of mannitol 20% versus hypertonic saline 7.5% infusion, in the reduction of brain bulk during elective craniotomies for supratentorial brain tumor resection Co-Investigator

Dr. Shalini Dhir

PSI Foundation Clinical Research Grant, 2006, \$1,49,500 Randomized controlled trial examining a set of small vs. large tuohy epidural needle on post dural puncture headache Site Co-Investigator

Dr. Wojciech Dobkowski

Akzo Nobel, Organon, 2005-2006

A multi-center, randomized, parallel group, comparative, safety-assessor blinded phase IIIa trial, in adult surgical subjects under general anesthesia at increased risk for pulmonary complications

Co-Investigator

Dr. Sugantha Ganapathy

Delex Therapeutics Incorporated, 2005-2006

A multi-centre placebo-controlled, randomized 2-part study (open-label lead-in followed by a double-blind dosing) to determine the efficacy and safety of inhaled AevoLEFT (Aerosolized Liposome-Encapsulated Fentanyl 500 mcg/mL) in the treatment of acute post-operative pain in adult patients undergoing elective orthpaedic surgery

Site Principle Investigator

Pfizer, 2005

Pregabalin study in neuropathic pain
Site Principle Investigator

Dr. Christopher Harle

Internal Research Fund, 2006, \$10,000 Systematic evaluation of heparin/protamine management in perioperative care of the cardiac surgical patient Co-Investigator

Dr. Ivan Iglesias

Bayer Grant, 2005, \$5000

Intraoperative low dose ketamine infusion, effect on postoperative pain management

Principle Investigator

Dr. Philip Jones

Akzo Nobel, Organon, 2005-2006, \$61,994

A multi-center, randomized, parallel group, comparative, safety-assessor blinded phase IIIa trial, in adult surgical subjects under general anesthesia at increased risk for pulmonary complications

Co-Investigator

Dr. Valerie Schulz

CIHR Grant 2004-2009, \$1,363,586

A multidisciplinary cancer pain research network to improve the classification, assessment, and management of difficult cancer pain problems

Co-Investigator

Dr. Michael Sharpe

PSI Foundation Clinical Research Grant, June, 2006, \$83,000
Treatment of Acute on Chronic Liver Failure Patients with Molecular Adsorbent Recirculating System (MARS®) In Patients Awaiting Liver Transplantation
Co-Investigator

Single Centre Industry Grant, GE Technologies, 2006, \$130,000 Use of fMRI in prognostication of cardiac arrest survivors Principle Investigator

Dr. Indu Singh

PSI Foundation Clinical Research Grant, 2006, \$1,49,500 Randomized controlled trial examining a set of small vs. large tuohy epidural needle on post dural puncture headache Site Principle Investigator

Peer Reviewed Internal Grants/Funding

Dr. Miguel Arango

Lawson Health Research Institute Internal Research Fund, 2005

Comparison of equiosmolar does of mannitol 20% versus hypertonic saline 7.5% infusion, in the reduction of brain bulk during elective craniotomies for supratentorial brain tumor resection

Principle-Investigator

Dr. Daniel Bainbridge

Department of Anesthesia & Perioperative Care Internal Grant, 2006 Insulin binding to CPB circuits, \$7,700 Principal Investigator

Lawson Health Research Institute Internal Research Fund, 2005
Comparison of equiosmolar does of mannitol 20% versus Hypertonic
Saline 7.5% infusion, in the reduction of brain bulk during elective
craniotomies for supratentorial brain tumor resection
Co-Investigator

Dr. Indu Singh

Faculty Support Research Grant, 2006, \$10,000

An exploration of residents' experiences with in-training evaluations

Co-Investigator

Dr. Ravi Taneja

Internal Research Fund, 2006, \$10,000
Systematic evaluation of heparin/protamine management in perioperative care of the cardiac surgical patient
Principle Investigator

Non-Peer Reviewed Grants/Funding

Dr. Lois Champion

Canadian Intensive Care Foundation, Eli Liliy Canada, Altana Pharma, and Bristol-Myers Squibb Grant for National ACES Course, 2006, \$75,000

Co-Investigator

MOHLTC Educational Grant for Ontario's Critical Care Strategy, 2006, \$2.5 million

Co-Investigator

MOHLTC Educational Grant for CCRT Instructor Certification, 2006, \$123,000

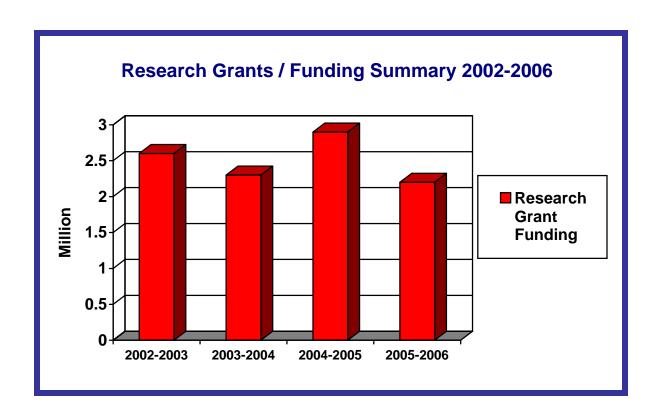
Co-Investigator

Dr. Davy Cheng

Akzo Nobel, Organon, 2005-2007, \$61,994

A multi-center, randomized, parallel group, comparative, safety-assessor blinded phase IIIa trial, in adult surgical subjects under general anesthesia at increased risk for pulmonary complications

Principal Investigator









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