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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.
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

The 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.

Administration
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 Pontificia 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.

**Fellowship**
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 off-service residents hosted from other residency training programs. Residents achieve continued success at the Royal College 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 Recovery Unit are being implemented. Rotations throughout 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 peer-reviewed 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 Pharmacology, Coagulations, and Thoracic/Vascular Programs. 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

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<td>St. Joseph's Hospital</td>
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<td>36,904</td>
<td>5,981</td>
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<td>1,514</td>
<td>1,041</td>
<td>647</td>
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### Department of Anesthesia & Perioperative Medicine

#### Faculty Members

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

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<td>Anderson, Ian</td>
<td>Assoc. Prof.</td>
<td>Iglesias, Ivan</td>
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<td>Bainbridge, Daniel</td>
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<td>Batohi, Pravin</td>
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<td>Batorowicz, Maria</td>
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<td>Cheng, Davy</td>
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<td>Cherry, Richard</td>
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<td>Wexler, Ron</td>
<td>Assoc. Prof.</td>
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### Adjunct Professors

**St. Thomas-Elgin General Hospital**

- Bidinot, H.
- McNeill, B.
- Soderman, M.
- Warnock, T.F.

### Professor Emeritus

- Bain, J.A.
- Gelb, A.W.
- Hersey, L.W.
- Muir, J.M.
- Nielsen, J.S.
- Russell, E.S.
- Sellery, G.R.
- Varkey, G.P.

### Adjunct Professors Windsor

- Arya, B.
- DaSilva, S.
- De Dios, O.
- Doerksen, D.
- Gnanendren, K.
- Lioli, 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
Dhir, Shalini Regional Anesthesia
Hadi, Ibrahim Acute and Chronic Pain
Ho, Mary Regional Anesthesia
Jones, Philip Cardiac Anesthesia
Kashanian, Behnam Cardiac Anesthesia
Kashanian, Behnam Ambulatory
Pellerin, Helene Neuroanesthesia
Plata, Ricardo Neuroanesthesia
Posada, Eliana Research Neuro
Quaghebeur, Bert Cardiac Anesthesia
Rachinsky, Maxim Cardiac Anesthesia
Sridhar, Jami Cardiac Anesthesia
Turkstra, Tim Neuroanesthesia

RESIDENTS

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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:

**Cardiac Anesthesia Program** (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.

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

**Undergraduate Education** (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.
The 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)**

The 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.
Throughout 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
In 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.
The 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*. 

*Cardiac TEE Program*  
*Dr. Ivan Iglesias (Director)*
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, valve 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.
Dr. 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

The 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

The 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

The upsurge of evidence-based medicine over the last decade has spurred an unprecedented growth in the scientific approach to decision-making, in the belief that it will translate into benefits for patients (improved outcomes), practitioners (improved quality of care; improved support in decision-making), and providers (improved cost-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:


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 meta-analysis of randomized trials
Liver Transplant Program

Dr. Wojciech Dobkowski (Director)

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)

The 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)**

The 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)

The 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 city-wide 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\textsuperscript{08} (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.
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)

The 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**

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.
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)

The 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

May 10, 2006
Aitken Lecture – “The Two Kinds of Stroke are Now Treatable”
Dr. Garnette Sutherland
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


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 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 & Anticholinesterases, 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


**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  **Dr. Lois Champion**
USC Teaching Honour Roll Award of Excellence

2006  **Dr. Shalini Dhir**
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 Dr. Indu Singh
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 Anaesthesitcs 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.
Confereene 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**

**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

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

**Dr. Rosemary Craen**
Session Chair: 62nd CAS Annual Meeting, Toronto, ON, June 16-20, 2006
Moderator: *Plenary Symposium*

**Dr. Steven Dain**
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**

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**

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

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
Lecture: Postoperative Renal Dysfunction
Workshop: Airway

Dr. Kevin Armstrong
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
Presenter: 62nd CAS Annual Meeting, Toronto, ON, June 16-20, 2006
Poster Discussion: Economics/Health & Ambulatory

**Dr. Daniel Bainbridge**
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

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

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**
Workshop: *Cricothyrotomy*

**Dr. Brian Church**
Lecture: *Trauma Airway Management*

**Dr. Lynn Coveney**
Lecture: *Pediatric Airway Management*

**Dr. Dan Cullerier**

**Dr. Steven Dain**
Invited Speaker: OMA Section of Anesthesia Annual Meeting, Hamilton, ON, Sept. 23-25, 2005
Lecture: *Digital Photography*

Lecture: *Risk Management in Errors*
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**
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*

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**  
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

Lecture: Neurologic Monitoring

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

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*

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*

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

Lecture: Cerebral Oximetry

Invited Speaker: Canadian Anaesthesiology Innovator’s Meeting, The Emerging Role of Factor Vlla in Cardiac Surgery, Toronto, ON, June 3, 2006  
Lecture: Safety Factor of Vlla 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**

**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**
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: *Brochoscopes*

**Dr. Ravi Taneja**  
Workshop: *Brochoscopes*

**Dr. Anthony Vannelli**  
Lecture: *Upper Airway Topicalization*  
Workshop: *Teaching F.O.B*

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**FACULTY PUBLICATIONS**

**Peer Reviewed Publications**


**Books/Book Chapters**


Abstracts/Case Reports


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).


Haljan G, Sutherland AM, Murkin JM, Walley KR. Serum erythropoietin levels increase after coronary artery bypass surgery and are associated with neurological outcome at discharge from hospital. 62nd CAS Annual Meeting Abstract 2006 June;26447.

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.


**Non-Peer Reviewed Publications/Letters/Editorials**


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.


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
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

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.


CSA-Z305.12-06
Safe storage, handling, and use of portable oxygen systems in residential buildings and health care facilities.

ISO 81060-1:

**Standards Written 2006**


ISO/TC 121/SC 1


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.


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.


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.

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*  
Principal 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 off-pump 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 orthopaedic 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 orthopaedic 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 Lily 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
Research Grants / Funding Summary 2002-2006

Research Grant Funding

Million

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Web Sites

Department of Anesthesia and Perioperative Medicine
http://anesthesia.lhsc.on.ca/

London Health Sciences Centre
www.lhsc.on.ca

St. Joseph's Health Care
www.sjhc.london.on.ca

Schulich School of Medicine & Dentistry,
University of Western Ontario
www.schulich.uwo.ca