



DEPARTMENT OF ANESTHESIA & PERIOPERATIVE MEDICINE

University of Western Ontario Teaching Hospitals

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

ANNUAL REPORT
July 1st, 2003 – June 30th, 2004

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The Department would like to express their appreciation to **Jeanette Mikulic** for coordinating, compiling, editing, designing and publishing this annual report. This would not be possible without her hard work and dedication.

VISION AND MISSION STATEMENT

The Vision and Mission of the Department of Anesthesia & Perioperative Medicine, London Health Sciences Centre and St. Joseph's Health Care London, University of Western Ontario is to be an internationally acclaimed academic department in anesthesia, pain and critical care. Also, 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 is comprised of clinicians, educators, and researchers providing secondary, tertiary, and quaternary anesthesia and perioperative care at LHSC/SJHC, University of Western Ontario. We serve the city of London with a population of 350,000 and a drawing area of 2 million people from Southwestern and Northern Ontario

The Department provides clinical support to 38-40 operating rooms/day at both LHSC (University and Victoria Campus), 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 and intensive care units. In particular, the CSTAR (Canadian Surgical Technologies & Advanced Robotics) research and training centre at the London Health Sciences Centre, University of Western Ontario 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 (Saudi Arabia, USA, Germany, Korea, China, New Zealand, Columbia) for training in anesthesia and perioperative medicine.

In March 2004, Seymour Schulich, business leader and philanthropist, made a landmark \$26-million gift to The University of Western Ontario's Faculty of Medicine & Dentistry, which attributed to renaming the medical school the Schulich School of Medicine. The gift was the largest in Western's history and the largest donation ever made to any institution in the City of London. Schulich's gift provides an unprecedented level of financial support to more than 100 medical students and graduate students in medical sciences each year attending the Schulich School of Medicine as well as two Canada Research Chairs.

In the past year (2003-2004), we advanced further forward and accomplished considerable with support from our faculty, institutional administration, and the Dean of the Faculty of Medicine and Dentistry. I would like to highlight below our achievements since the past year:

Administrative

New recruitment strategy initiated by the Department includes retention and recruitment of recent UWO and Canadian graduates: Dr. Kate Ower in chronic pain management, Dr. Brian Church in thoracic anesthesia, and Dr. Jeff Granton in critical care medicine. Dr. Rakesh Bhandari in acute and regional pain anesthesia was recruited back from Windsor and the USA. Dr. Achal Dhir in transplantation anesthesia was recruited through the academic International Medical Graduate (IMG) program from United Kingdom. In the coming September 2004 we have been successful in recruiting two new faculty members to the Department, Dr.

Robert Banner in chronic pain management has been recruited from the University of Saskatchewan, and Dr. Pravin Batohi in trauma and medical information has been recruited from St. John's, Newfoundland. Furthermore, two academic IMG faculties: Dr. Ngozi Imagosie in regional and obstetric anesthesia and Dr. Chris Harle in transplantation and cardiac anesthesia have been recruited from Sheffield, England and Manchester, England, respectively.

Our clinical/research fellowship program continues to attract and expand positions in cardiac, neuroanesthesia, transplant, obstetric, regional anesthesia, pain, and thoracic/vascular anesthesia under the Directorship of Dr. Rosemary Craen.

Alternate Funding Plan – Phase 1:

The Department entered into an agreement in June 2003 to participate in Phase 1 of the MOHLTC Alternative Funding Plan including The University of Western Ontario, London Health Sciences Centre and St. Joseph's Health Care. This will provide a foundation for funding initiatives that can serve to maintain and enhance our capacity to meet our mission in clinical service, teaching and research.

Points Based Remuneration (PBR):

This year marked the implementation of the Departmental Points Based Remuneration Plan. This plan was designed to recognize contributions to the academic practice in the Department over and above the regular clinical teaching activities, as well as leadership roles, research activities and publications. This plan is intended to provide financial support for junior faculty to become involved in academic activities, and to reward the academic accomplishments of our faculty in general.

The Department continues to contribute in key administrative roles at LHSC and SJHC. Dr. Ian Herrick is the Chief of Staff and Chair of the LHSC Medical Advisory Committee, Dr. John Fuller is the Medical Director-Perioperative Care at SJHC, and Dr. Neal Badner is Medical Director of Preadmission Clinic, LHSC.

Nationally, Dr. Rosemary Craen has been appointed the Chair of the Scientific Program Committee of the Canadian Anesthesiologists' Society from 2003-2005. Dr. John Fuller was elected as a Council Member for 2004-2008 to the RCPSC Council. Dr. Gordon Sellery was awarded Life Membership, Ontario Medical Association in 2004.

Clinical

In complement to the restructuring of the LHSC/SJHC, our citywide Department continues with academic priority programs integration (cardiac anesthesia, acute, regional, and chronic pain, critical care, obstetric, thoracic/vascular, pediatric, perioperative blood conservation). With the citywide commitment of the Site Chiefs (Dr. W. Dobkowski, Dr. M. Lampe, and Dr. J. Watson), the Department continues to integrate our clinical academic programs.

Education

The Postgraduate Education Program under the Directorship of Dr. Sal Spadafora and Associate Directorship of Dr. Sandra Katsiris, continues to develop new initiatives and attracted over 100 residency applications to our program this year. All the CARM residency positions were filled by top applicants from within the province and across the nation. Residents are exposed to general and subspecialty rotations. Residents are exposed to structured teaching programs such as airway rotation and practice examinations for the RCPSC. In addition, SWOMEN (South Western Ontario Medical Education Network) offered rich experiences to over 20 residents in various voluntary rotations at community hospitals in Windsor and St. Thomas. Our CME program under the leadership of Dr. Sandra Katsiris continues to feature visiting professors from top academic institutions from USA and Canada.

Research

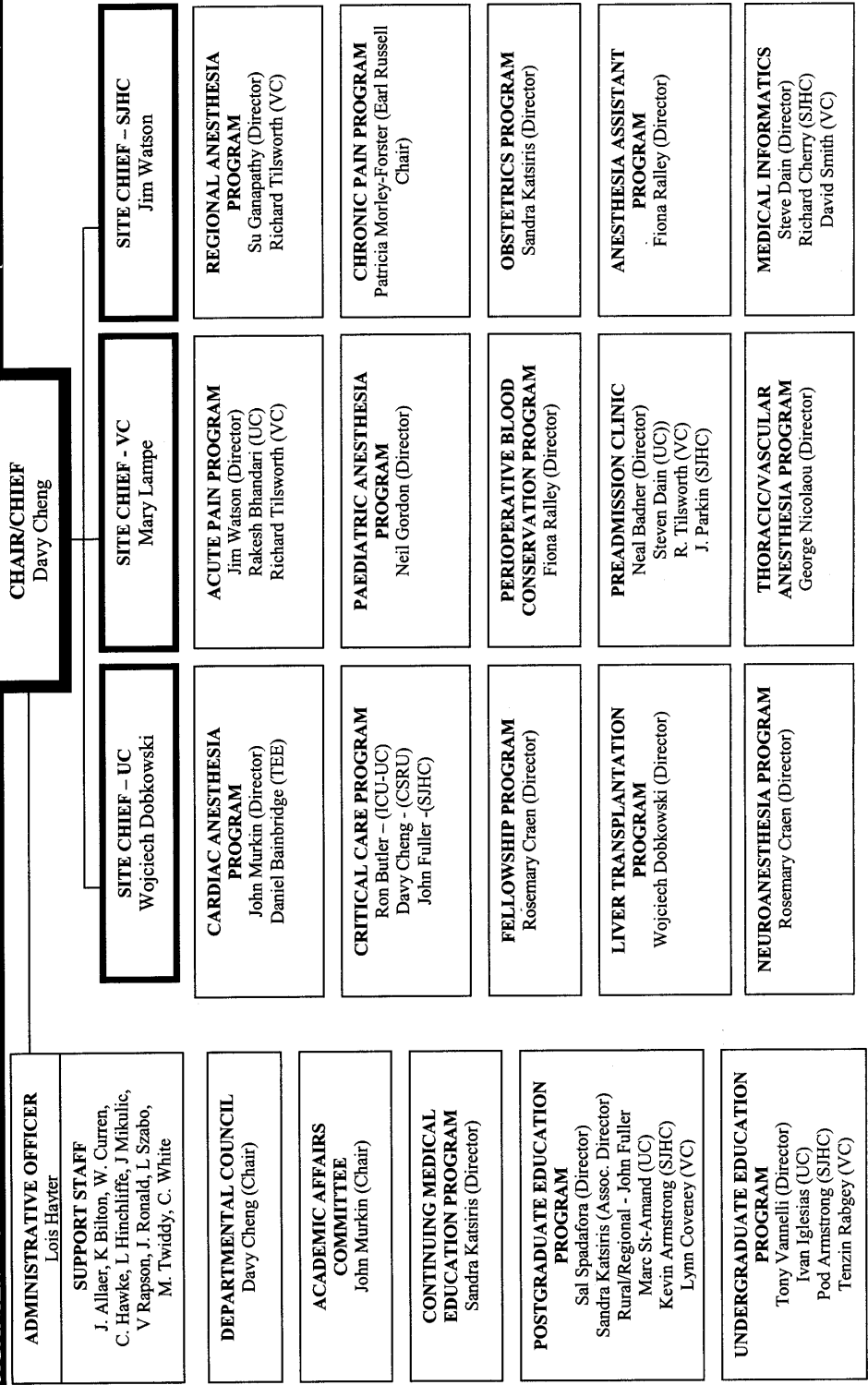
Research opportunities are available in a variety of areas including cardiac anesthesia, vascular/thoracic, neuroanesthesia, obstetrics, blood conservation, regional anesthesia, pain management, critical care, and medical informatics. In June 2004, we held a successful combined resident Research Day with MacMaster University under the leadership of Dr. Indu Singh. Departmental faculty continues to be invited as visiting professors and guest lecturers at national and international institutions, and anesthesia and surgery meetings. The Department continues to be successful in securing peer reviewed grants from national and international agencies such as the Heart & Stroke Foundation, Medical Research Council, PSI Foundation, Canadian Standards Association and Standards Council of Canada, Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council, and the National Institute of Health, together with non-peer reviewed industry grants.

**DEPARTMENT OF ANESTHESIA & PERIOPERATIVE MEDICINE
THE UNIVERSITY OF WESTERN ONTARIO**



July 1st, 2003 - June 30th, 2004

ORGANIZATIONAL CHART



**DEPARTMENT OF ANESTHESIA & PERIOPERATIVE MEDICINE
FACULTY MEMBERS**

LHSC- UNIVERSITY CAMPUS

LHSC - VICTORIA CAMPUS

ST. JOSEPH'S HEALTH CARE

Bainbridge, Daniel	Asst. Prof.	Anderson, Ian	Assoc. Prof.	Armstrong, Kevin	Asst. Prof.
Bhandari, Rakesh	Asst. Prof.	Badner, Neal	Assoc. Prof.	Armstrong, Paidrig	Lecturer
Butler, Ron	Asst. Prof.	Batorowicz, Maria	Asst. Prof.	Curriu, Michael	Asst. Prof.
Champion, Lois	Assoc. Prof.	Block, Gary	Asst. Prof.	Fuller, John	Assoc. Prof.
Cheng, Davy	Professor	Cherry, Richard	Asst. Prof.	Ganapathy, Su	Professor
Craen, Rosemary	Assoc. Prof.	Coveney, Lynn	Asst. Prof.	Hinds, Lynda	Adjunct Prof.
Cuillerier, Daniel	Asst. Prof.	Gordon, Neil	Asst. Prof.	McKishnie, Jamie	Assoc. Prof.
Dain, Steven	Assoc. Prof.	Gverzdys, Rooney	Assoc. Prof.	Millman, Logan	Assoc. Prof.
Dhir, Achal	Assist, Prof.	Hoogstra, Jason	Lecturer	Morley-Forster, Pat	Assoc. Prof.
Dobkowski, Wojciech	Assoc. Prof.	Katsiris, Sandra	Asst. Prof	Parkin, John	Asst. Prof.
Gelb, Adrian*	Professor	Kieraszewicz, Halina	Asst. Prof.	Singh, Indu	Asst. Prof.
Herrick, Ian	Assoc. Prof.	Lampe, K. Mary	Assoc. Prof.	Watson, Jim	Assoc. Prof.
Iglesias, Ivan	Asst. Prof.	Lindsay, Peter	Asst. Prof.	Wexler, Ron	Asst. Prof.
Kutt, Judith	Asst. Prof.	Lobb, Trevor	Assoc. Prof.		
Mezon, Bernie	Assoc. Prof.	McCabe, Greg	Lecturer		
Mosa, Mike	Asst. Prof.	McNamara, Jeffery	Lecturer		
Murkin, John	Professor	Newton, Peter	Lecturer		
Ralley, Fiona	Professor	Nicolaou, George	Asst. Prof.		
Sharpe, Mike	Assoc. Prof.	Simon, Gary	Asst. Prof.		
St-Amand, Marc	Asst. Prof.	Sischek, Bill	Assoc. Prof.		
Taneja, Ravi	Asst. Prof.	Small, Violet**	Adjunct Prof.		
Vannelli, Tony	Asst. Prof.	Smith, David	Asst Prof.		
		Spadafora, Sal	Asst. Prof.		
		Tilsworth, Richard	Asst. Prof.		

* University of California, San Francisco as of February, 2004

** Retired June, 2004

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

LOCUMS

Rabgey, T.

CLINICAL/RESEARCH FELLOWS

Haydar Al-Sadkhan Miguel Arango Michael Cummings Ngozi Imagosie Lisa Kenway Nezar Khalifah Gulshan Marwaha Nousheh Saidi	Vascular/Thoracic Anesthesia Neuroanesthesia Cardiac Anesthesia Regional & Obstetric Anesthesia Regional & Obstetrics Anesthesia Neuroanesthesia & Informatics Regional Anesthesia Cardiac Anesthesia
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RESIDENTS

PGY5	PGY4/5	PGY4	PGY3
Wasim Akhtar Brian Church Katherine Fallon George Kanellakos Kate Ower	Ibrahim Hadi	Philip Jones Stephen Lee Tim Turkstra Jian Yu	Ahmad Abotaiban Rom Dicecco Geoff Dugas Kevin Ewing Jon Prychitko El-Hadi Hussein Martin Roos
<div style="text-align: center;"> PGY3 <u>Family Medicine</u> Gillian Edmonds Rebecca Mallin </div>			
PGY2-3	PGY2	PGY1-2	PGY1
Michelle Gros	Hesham Al-Babtain Tim Davies Martin Ma Lily Liang Bobbi Jo Morrell Manjot Sandhu Anna Toptchieva Allison Shaikh	Kevin Teague	Arif Al-Areibi Hani Al-Solu Geoff Bellingham Chris Brooks Liza Chelico Abdullah Dashti Ken Luk Quoc Nguyen Cara Reimer Robert Schwartz

RESIDENT PHOTOS



Abotaiban, A. Al-Reibi, A. Al-Babtain, H. Al-Solu, H. Bellingham, G. Brooks, C.



Chelico, L. Church, B. Dashti, A. Dicecco, R. Dugas, J. Edmonds, G.



Ewing, K. Fallon, K. Gros, M. Hadi, I. Hussein, E-H. Kanellakos, G.



Lee, S. Liang, L. Luk, K. Mallin, B. Ma, M. Morrell, B.J.



Nguyen, Q. Ower, K. Prychitko, J. Reimer, C. Roos, M. Sandhu, M.



Schwartz, R. Shaikh, A. Teague, K. Toptchieva, A. Turkstra, T. Yu, J.

Site Chief Report, LHSC-University Campus

Dr. Wojciech Dobkowski



During the past year the University Campus site has been very active accomplishing the goals of our mission in clinical excellence, education and research. Many clinical research projects were completed and new ones started. Undergraduate and postgraduate education feedback the students, residents and fellows suggest that we made significant progress and contributions. In particular, we emphasize improvement in our fellowship program.

Clinically we have improved the standard of care in cardiac anesthesiology by the further development and consolidation of the transesophageal echocardiography program. The robotic cardiac surgery program was restarted in 2003 and after one year developed to a fully operational program with significant contribution of our four cardiac anesthesiologists.

The clinical services include twelve operating rooms (cardiac surgery, neurosurgery, general surgery, orthopedics, sport medicine, plastic surgery, urology); diagnostic and therapeutic procedures in electrophysiology laboratory, neuroradiology and cardiac angiography, preadmission clinic, acute pain service and 24-hour coverage for liver transplantation. This year we expanded our transplantation program and the anesthesiology department provides services for combined pancreatic and kidney transplant. Year 2005 is coming with new challenges for our department. Institutional transfer of cardiac services from VC, general surgery, urology and emergency services from SJHC will bring more operating rooms and emergency cases to UC and automatically increase work load for anesthesiology. Two faculty, Dr. Jeff Granton and Dr. Chris Harle will join the Department in Critical Care and Transplant Cardiac Anesthesia.

The key academic programs are:

Cardiac Anesthesia Program (Dr. John Murkin)

Traditionally, cardiac anesthesia is one of the most active academic groups not only in this department, but also nationally and internationally. Over the last year there has been a development of a well-defined group of anesthesiologists with interests in beating heart surgery and robotic cardiac surgery. This program includes many innovative research projects. To meet increased number of cases after services transfer, our cardiac group will have a new organization structure allowing this group to meet all standards as an academic group committed to cardiac anesthesiology.

This group has been very active in providing services for robotic surgery. In September we were part of new medical history at LHSC, the first so-called Hybrid Procedure in North America was performed with significant contribution of our anesthesiologists.

Transesophageal Echocardiography Program (Dr. Daniel Bainbridge)

Dr. Bainbridge has established a citywide TEE Research Education Program.

Neuroanesthesia Program (Dr. Rosemary Craen)

This has been one of the best programs in our department for years with a well-established reputation internationally. This is an excellent fellowship program, with interesting clinical research and participation in basic science research.

Liver Transplantation Program (Dr. W. Dobkowski)

24-hour call coverage is provided for liver transplantation and also provides a fellowship program. The group has been involved in international research projects and also provides a fellowship program.

This year we finalized an international multicenter study “Factor VII in Liver Transplantation”. At the World Congress of Anesthesiology in Paris 2004, our group presented a paper “Mega-dose of Aprotinin in liver transplantation for patients with fulminant hepatitis. This was first in the world providing clinical information regarding mega-dose of Aprotinin.

Acute Pain Service (Dr. Steven Dain)

Under Dr. Dain's direction the Acute Pain Service became a well-developed academic program with an excellent database, research and innovative methods of teaching. Pain management education is provided for residents and fellows. Dr. Dain and Clinical Nurse Cindy Carnegie, who specializes in acute pain treatment, have improved this service over the last two years with excellent cooperation between anesthesiology, surgery, psychology and psychiatry.

Medical Informatics (Dr. Steven Dain)

Dr. Dain has been very well recognized internationally as an expert in standards for medical equipment. He is a member of many national and international committees and also created an interesting fellowship program in this field.

Undergraduate Education (UC - Dr. Ivan Iglesias)

According to our medical students, Dr. Iglesias has been one of the best teachers. His commitment to undergraduate education is very well recognized. Based on feedback from the Dean and students, over the last year our site improved this part of education. Dr. Iglesias set up a series of lectures in the Medical School entitled "Resuscitation Medicine". Also, under the supervision of Dr. Iglesias our department is preparing a workshop "Airway Management" for residents, fellows, emergency physicians, and doctors from peripheral hospitals which is scheduled for the fall of 2004.

Dr. T. Vannelli from UC is the citywide Coordinator of Undergraduate Medical Education in the Department of Anesthesiology & Perioperative Medicine.

Postgraduate Medical Education (UC - Dr. Marc St-Amand)

Feedback from residents indicates our subspecialty rotations like cardiac, neuroanesthesia and ambulatory anesthesia progressed and improved. In cardiac anesthesia, very high marks were obtained with TEE rotation which is unique on a national level.

Dr. Mike Mosa is responsible for organization of our departmental educational rounds. This program includes lectures, also from other specialties, presentation of interesting cases, and mortality and morbidity rounds. Majority of these presentations have been prepared by residents or fellows.

Fellowship program (Dr. Rosemary Craen)

Our fellowship program has been developing very dynamically over the past year under Dr. Craen's directorship. Her innovative approach to this program from an organizational and teaching point of view has made fellowship in our site more attractive. In the opinion of all our fellows, time spent in our department has met their educational objectives.

Regional Anesthesia Program (UC - Dr. Rakesh Bhandari)

Dr. Bhandari developed the regional anesthesia teaching program at UC. Ultrasound equipment for regional anesthesiology will be available for advance teaching.

Site Chief Report, LHSC-Victoria Campus

Dr. Mary Lampe



VC (Victoria Campus) is London's largest anesthesia service delivery site. There are 13000 adults and 3000 pediatric cases in the VC Operating Rooms annually. The patients span the entire range of age, acuity, and level of care. VC, at the time of preparing this report, continues to be situated on two active and distinct sites – South Street Campus (SSC) and Westminster Campus (WC).

SSC Operating Rooms house the adult surgical specialties of Vascular, Thoracic, Cardiac, General Adult Surgery, some high acuity Oncology, and Trauma surgery. SSC is the city's Trauma Center and has the Critical Care – Trauma Centre on site. Anesthesia services outside of the Operating Room at SSC are Adult Preadmission Clinic, Acute Pain Services, and four Chronic Pain Outpatient Clinics per week, inpatient preoperative anesthesia consultation, electroconvulsive therapy support, cardioversion support, interventional radiological procedure support, and emergency airway assistance.

At WC, there are both Pediatric and Adult surgical specialty operating rooms. Otolaryngology, craniofacial, pediatric neurosurgery, dental surgery, pediatric ophthalmology, urology, gynecology and orthopedics

have elective OR time. There is a Pediatric Critical Care Unit and Pediatric Emergency Department at WC. Pediatric diagnostic imaging support is MRI and CT and is offered by VC anesthesiologists one day each week. There is a Level 2 Labour and Delivery Unit with about 2500 deliveries per year. Epidural services for labour analgesia is offered.

VC anesthesiologists host a very active clinical teaching unit for multidisciplinary and anesthesia specialty training.

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. Robert Banner and Dr. Pravin Batohi will join our faculty at SJHC in September 2004. Dr. Banner will continue to pursue his subspecialty interests in chronic and acute pain management and Dr. Batohi in trauma and medical informatics. 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 is well underway. The new facilities will begin operation in late 2005 and early 2006. This new

facility will provide 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. Lisa Kenway - Regional/OB and Dr. Ngozi Imagosie - Obstetrical and Regional Anesthesia.

DEPARTMENTAL PROGRAMS

Acute Pain Program

Dr. Jim Watson (Director)

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.

Dr. Kevin Armstrong, Dr. Su Ganapathy and Ms. K. Horrill have established an ambulatory continuous regional anesthesia program. This allows placement of continuous regional anesthesia catheters in patients prior to discharge and allows for care of these patients at home postoperatively.

Dr. Kevin Armstrong and Dr. Jim Watson have taken part in satellite broadcasts of live demonstrations of regional blocks. The most recent was from London, Ontario to Victoria, BC during the 2002 Canadian Anesthesia Society Meeting. Blocks were performed on four patients in real time and broadcast live in interactive sessions with participants in Victoria. Members of the Acute Pain Service at St. Joseph's Hospital has also taken part in national initiatives to improve and standardize care of patient and education of practitioners in the field of acute pain.

Ambulatory and Regional Anesthesia/Analgesia Program

Dr. Sugantha Ganapathy (Director)



The program had a retreat to plan out our direction for the coming year and to identify areas of strength within the division. Didactic and clinical teaching of regional anesthesia and analgesia has gone through major changes with the introduction of ultrasonography for initiating the blocks.

Dr. W. Romano from Radiology gave the regional team hands-on experience with the use of ultrasound using a phantom in January 2004. In April 2004 Dr. Ganapathy and Dr. Bhandari attended a course in Germany on the use of ultrasonography for vascular access as well as for various regional anesthetic techniques such as nerve blocks and epidurals. Since their return, St. Joseph's Health Care has procured a Sonosite ultrasound machine which is being actively used by residents, fellows and staff for initiating blocks. A similar purchase is being initiated at LHSC-UC. Dr. Ganapathy spent 3 days at the Toronto Western Hospital with Dr. Chan, learning the use of ultrasonography for line placement and regional blocks. Dr. Vincent Chan from the University of Toronto was invited to spend 4 days in London in January 2004 to provide hands on teaching of various blocks using ultrasound to residents, fellows and staff.

Dr. Armstrong has initiated a lecture series on Thursday mornings to residents and fellows to cover topics on regional anesthesia and analgesia. This also provides an opportunity for fellows to take part in resident education.

Use of stimulating catheters for various blocks is being introduced to improve success rates with blocks and to reduce secondary catheter failure with the ambulatory regional analgesia program.

Demonstration of initiation of continuous interscalene block was done at St. Joseph's Health Care. Further demonstrations are planned for the coming year at regular intervals.

We have initiated a Database to collect information on all blocks being done at SJHC with long-term follow-up of patients following regional anesthesia. The data collection will be merged with Cerner eventually.

The Ambulatory Regional Analgesia Program Initiated by Dr. K. Armstrong is running smooth with well over 50 patients that have left the hospital 23 hours after admission and managed successfully in the community with continuous regional analgesia.

We have had 2 qualified anesthesiologists spend a total of 2 weeks with us learning regional blocks and acute pain management with continuous regional blocks.

We have currently 1.5 fellows in regional anesthesia and 1 fellow that has completed ambulatory fellowship with the division.

A hands-on workshop to teach use of ultrasound on volunteers and phantom is scheduled for October 9th, 2004, with guest faculty from the University of Toronto. The annual telecast workshop is being reintroduced and is to take place on December 10th and 11th 2004. A journal club to discuss regional and ambulatory anesthesia related publications is being initiated.

Anesthesia Assistant Program

Dr. Fiona Ralley (Director)



Little has advanced with this program during the past twelve months. This may be due to the hesitancy to commit to anesthesia assistants with the potential for them becoming similar to the anesthesia technicians in Quebec who are allowed to be alone in the OR during surgery even when the patient is receiving general anesthesia.

Recent changes in the CAS Guidelines to the Practice of Anesthesia relating to the scope of practice by anesthesia assistants has had little impact as yet. These new guidelines allows an anesthesiologist to temporarily leave the OR and delegate the care to an anesthesia

assistant. However these current changes do not address the issues of what is appropriate training for these individuals and what will be the scope of their practice. With the recognition by the MOHLTC on the anesthesia team provider concept, it is hoped that the Anesthesia Assistant Program will move forward in our Department.

Cardiac Anesthesia Program

Dr. John Murkin (Director)



Over the past year the major initiatives undertaken to upgrade the clinical skills of cardiac anesthesiology consultants and thus enhance patient care by incorporating TEE examination into routine clinical practice have continued. The series of weekly introductory TEE lectures continue and are now organized by Drs. Dan Bainbridge and Ivan Iglesias and have been archived on the Departmental website by Dr. Steve Dain and Peter Lok.

As consultants have gained TEE experience, this lecture series has expanded to include an increasing component of case presentations and an interactive searchable database is being developed.

Consistent with these initiatives a number of consultants again attended the SCA Introductory and Advanced Courses in Perioperative TEE held in San Diego in February. This year a further 3 LHSC anesthesiology consultants, Drs. Mezon, Mosa and St-Amand successfully passed the ASE certification examination in Perioperative TEE bringing the total number of TEE certified anesthesiology consultants at LHSC to 8. It is anticipated that soon all consultants involved in cardiac anesthesiology will have significant familiarity and expertise in perioperative TEE, if not actual ASE certification.

The perioperative anesthesiology TEE service that was established at University Campus last year in order to provide a dedicated anesthesiology consultant and Fellow to assist in TEE examinations for cardiac surgical cases continues to function, albeit sometimes intermittently, given the overall shortage of clinical anesthesiologists.

Despite this, the program has been demonstrated to be a major draw for attracting clinical Fellows into the program. Participating consultants and Fellows are very supportive of this program, which offers an opportunity to further their clinical TEE skills while enhancing patient care. While it is recognized that the TEE service represents a major commitment of both time and resources, it is felt that the improvements in patient care as well as the enhanced opportunities for teaching and research fully justify this step. As such there is a renewed commitment to provide sufficient consultant staffing to maintain this program. Overall, from having essentially no perioperative TEE capabilities only 3 years ago, LHSC cardiac anesthesiology is now at the forefront of clinical care and strengthens its position as a leading Academic anesthesiology center.

Clinical research continues to be a very important and productive area for LHSC cardiac anesthesiology. The final data analysis of the randomized, blinded and prospective LHSC study examining the role of intraoperative cerebral oximetry in 200 cardiac surgical patients undergoing CABG surgery has demonstrated significantly improved patient outcomes, especially in diabetic patients, resulting in shorter vent times, ICU and overall hospital lengths of stay, associated with such patient centered neuromonitoring, a world first. Additionally, the CIHR-funded study of antifibrinolytics and blood product utilization in high-risk cardiac surgical patients (BART trial) is ongoing. Medtronic selected LHSC as the first Canadian site, second in the world, to employ the innovative 'mini-pump' CPB circuit with several clinical studies planned to examine various patient outcomes. Under Dr. Bob Kiaii, the cardiac surgical robotics program is also increasing its activities with Dr. Dobkowski acting as the cardiac anesthesia coordinator for robotics. These cases have recently been expanded to include 'hybrid' procedures in which patients undergo robotic IMA harvesting and anastomosis followed by percutaneous coronary intervention (PCI) with placement of a vascular stent, all during the same anesthetic. Not only are these procedures technically challenging with episodes of prolonged one-lung ventilation and potential myocardial ischemia, but the anticoagulation management is radically different from more routine CABG surgery and offers an opportunity for exploring the role of alternative anticoagulant therapies including bivalirudin.

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 was the eighth annual "Outcomes' meeting was held in May in Key West, Florida, Proceedings of which were published in September 2004 issue of Heart Surgery Forum.

The identified goals for the upcoming year continue to be the further acquisition of TEE skills by all cardiac anesthesiologists, as well as consolidation of the perioperative TEE service. A major role for cardiac anesthesiology is expected in the soon to be opened Cardiac Surgery Recovery Unit. Efforts at the integration of the citywide cardiac anesthesiology group onto one site are ongoing pending the integration of all cardiac surgical services at the UH campus. The commitment to the incorporation of all qualified and interested members of the city wide cardiac group into an internationally-recognized cardiac anesthesiology section at LHSC dedicated to 'exemplary care, teaching and research' is unwavering.

Cardiac Surgery Recovery Program

Dr. Davy Cheng (Director)

With the consolidation of the cardiac surgical services from LHSC-Victoria Campus to the LHSC-University Campus during milestone 1 in the restructuring process at LHSC/SJHC, the cardiac surgery division, chaired by Dr. Richard Novick, will have an annual surgical caseload of about 1,600 patients (including the robotic cardiac surgery). A new paradigm of a cardiac surgery recovery unit (CSRU, 16 beds) is being developed and directed by Dr. Davy Cheng with the associate directors, Dr. Michael Sharpe and Dr. Richard Novick. This model of parallel care with the medical/surgical intensive care unit will be staffed by cardiac anesthesiologists, cardiac surgeons and intensivists. A fast track cardiac surgery recovery pathway with the support by the nursing team headed by Ms. Lynda Robinson will be implemented to facilitate the flow and recovery of all cardiac surgical patients at LHSC. This CSRU will link the intraoperative cardiac anesthesia management and postoperative surgical ward recovery to provide the full spectrum of cardiac surgical patient care, including the education and research in these patients. The anticipated establishment of the CSRU is in the spring of 2005.

Chronic Pain Program

Dr. Patricia Morley-Forster (Earl Russell Chair)



In 2003, a selective course, initiated in 2002 was offered again to Meds IV students entitled “Pain and Its Management in the New Millennium”. The course consisted of six two-hour seminars from a variety of disciplines including Neurology, Internal Medicine, Anesthesiology, Addiction Medicine, Nursing, and Pharmacy. Eighty students registered which was an increase from the previous year.

Citywide Interdisciplinary Pain Rounds were held monthly during the academic year from September to June. Although there are occasionally external speakers, the majority of presenters are involved in clinical or basic research in London. The concept is to provide a forum to publicize their own research and to invite comments and possible collaboration among faculty from diverse backgrounds.

Topics concerning the pathophysiology, diagnosis and management of pain are covered in both the Central Nervous System and Musculoskeletal System Courses for Meds I, II, and III students totaling 37.5 hours of formal undergraduate teaching on pain.

Anesthesia residents continue to rotate through the Pain Clinic and elective rotations are being developed for both psychiatry and internal medicine residents. As well as medical students and residents, nurse practitioners and family doctors have spent time observing and working in the clinic which brings expertise back to their community.

Undergraduate students are encouraged to observe in the Ambulatory Pain Clinics at SJHC or LHSC during their elective time.

Continuing Medical Education Program

Dr. Sandra Katsiris (Director)

Members of the Department had the opportunity to attend a total of 10 Continuing Medical Education Grand Rounds presentations during the past year. The sessions included a number of subspecialty anesthetic disciplines, and many of them were conjoint presentations with other subspecialty medical or surgical services.

This year, only one session was presented by an affiliate of the University of Western Ontario.

Dr. Dwight Moulin – Department of Clinical Neurological Sciences and Oncology.

The other nine presentations were given by faculty participating in the Visiting Professorship Program. These included:

Dr. William Young	University of California San Francisco
Mr. Will Assad	Pall Medical Corporation
Dr. Jean-Francois Hardy	University of Montreal
Dr. Vincent Chan	University of Toronto
Dr. Ban Tsui	University of Alberta
Dr. Joel Fox	University of Calgary
Dr. Sulpicio Soriano II	Harvard Medical School in Boston
Dr. Berend Mets	Penn State College of Medicine
Dr. Asokumar Buvanendran	Rush University in Chicago

All sessions were accredited by the Royal College of Physicians and Surgeons of Canada's Maintenance of Certification Program.

Critical Care Program

Dr. Ron Butler, ICU-UC



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 all types of critically ill patients in the Richard Ivey Critical Care Trauma Centre (30 beds) and the W.E. Spoerel Intensive Care Unit (26 beds)

including trauma, neurosurgical, transplant and cardiac critically ill patients.

The University Campus ICU has recently been rebuilt and when the critical care services are consolidated at two sites (2005) the Victoria Campus will move to its newly constructed unit. 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. The Critical Care faculty is multidisciplinary with members from anesthesia, emergency medicine, internal medicine, respirology and surgery. Faculty members are actively involved in both 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 SJHC ICU is a 12-bed Medical/Surgical unit with a special interest in Obstetric Critical Care. The Medical Director is an Anesthesiologist, and the other 3 consultants are Emergency Medicine/Intensivist (1) and Anesthesiologists (2). The unit has been innovative in leading the country in the training of Nurse Practitioners, and including them in the clinical practice model. The unit has also been a leader in promoting and utilizing Shared Leadership.

Educational opportunities are provided for Medical Students, RT students, Paramedic trainees, and other allied health trainees. Research is an ongoing focus, with participation in local and multicenter studies.

The ICU was an early site of the initiation of the Digital Imaging implementation this year at SJHC, and it has been found to be an invaluable tool.

Celebrating the digital imaging implementation in the ICU at SJHC on April 8, 2004 are Nick Sauro, medical radiation technologist, John Fuller, Yolanda DeVries, RN, and Lynn Bender medical radiation technologist.



Fellowship Program

Dr. Rosemary Craen (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 Center. Generally fellowships are 12 months in duration but can be anywhere from 6 months to 2 years.

Programs are individualized to meet the goals of successful applicants. Generally, clinical experience is the primary focus with opportunities for clinical research. Fellows spend approximately 4.0 days per week in clinical activities with 1.0 day per week protected for non-clinical activities, and may participate in night call schedule (from home). Fellows are also encouraged to be actively involved in resident, medical student and nursing education, give didactic lectures and participate in anesthesia rounds and specialty conferences. Applications are usually considered 12-18 months prior to start date.

Further information may be found on the Department website:
<http://anesthesia.lhsc.on.ca>

Liver Transplant Program

Dr. Wojciech Dobkowski (Director)

This year anesthesiologists from this group provided services to almost seventy liver transplantation surgeries.

Dr. William Wall, Director of Transplantation Program in LHSC stated recently in his interview for national television: "Our excellent outcome after liver transplantation has been related to hard work of surgeons, hepatologists and liver transplant anesthesiologists".

Medical Informatics Program

Dr. Steven Dain (Director)



The Anesthesia informatics group has had a busy and productive year. The Departmental website has been greatly expanded and is now running on a database driven platform that allows greater control over the content and user accessibility.

Rounds and other events will be posted and a journal article and lecture note repository has been added that will greatly enhance our ability to circulate documents for rounds, journal club, and Departmental communications.

The Acute Pain Service database had a major setback as we had been waiting for a new rugged handheld computer with a bar code reader to arrive. Hopefully it will be up and running by the time of this report.

Drs. Dain and Bainbridge have also installed the Datex-Ohmeda Datacollect Software that allows the downloading and display of all the anesthesia machine and hemodynamics of each patient from the central server. This will be of great help for research and recording of critical events. Data is only kept on the server for 7 days, so it must be done within that time interval.

Drs. Dain and Bainbridge have also been working on a TEE database and library in conjunction with the cardiac fellows.

Dr. David Smith continues to provide excellent questions for discussion on his Question of the Week website.

Miguel Arango, a neuroanesthesia fellow, also has several database projects on the go, in addition to working on the South American Neuroanesthesia Website.

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 an international 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. The majority of these patients are done awake but sedated so that their speech and motor areas of the brain can be mapped prior to surgical excision.

Stereotactic Surgery: 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 research opportunities that span the range from cell culture studies, in vitro vasculature, whole animal (brain blood flow, blood volume and ICP, experimental ischemia) and human (cerebral blood flow, evoked potentials, EEG, ICP, patient controlled sedation, and clinical outcome studies).

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

Under supervision, fellows will also review manuscripts submitted to a variety of anesthesia journals, abstracts submitted to anesthesia scientific meetings and grant applications. These activities together with the research activities outlined above will provide fellows with an excellent insiders 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. This number has increased from previous years due to an escalating number of referrals from the periphery to both LHSC-WC and SJHC. SJHC continued to be the tertiary obstetrical referral centre in the city, responsible for the majority of high-risk obstetrical anesthesia care.

As restructuring pushed forward in the city, the Grace Donnelly Women’s Health Pavilion, located at LHSC-WC, began to take shape. The vision for Milestone 2 (date remains unconfirmed) is a concentration of women’s and children’s care in London at the Health Pavilion. As the physical structure took shape, much work was done in an attempt to organize the clinical patient care for this new building. There is still a huge amount of work to be done over the coming years to realize this vision.

With a view toward consolidation of obstetrical services at a single site, departmental movement toward unification of obstetrical anesthetic practice in the city began. Standardized obstetrical epidural analgesia solutions were implemented across the city. In addition, standardized citywide obstetrical epidural analgesia order sheets were introduced. Input and participation from both sites was vital for these processes. Future endeavours will include other clinical order sheets and information sheets, as well as standardization of equipment.

The core resident rotations through the obstetrical unit at SJHC continued to be fully subscribed. The resident exposure to, and educational experience with challenging obstetrical anesthesia cases was superior over the past year. In addition, completion of an obstetrical anesthesia database occurred. A number of residents used obstetrical

anesthesia case reports or projects to present at various venues throughout the year (Midwest Anesthesia Residents' Conference, McMaster-UWO Annual Research Day, Crystal Mountain Residents' Conference, etc.).

The obstetrical anesthesia fellowship program has accepted Dr. Shalini Dhir to participate for the upcoming year. She will begin her fellowship in August, and will be focusing on clinical obstetrical anesthesia.

Perioperative Blood Conservation Program

Dr. Fiona Ralley (Director)

This program has continued to grow over the past 12 months although expansion into other surgical areas apart from orthopedics and vascular surgery has been much slower than desired. The committee continues to meet biannually and is now a sub-committee of the City Wide Transfusion Committee which reports to the MAC. In addition the committee has been responsible for the draft of standard operating procedures (SOP) for the collection and redistribution of blood intraoperatively i.e. cell savers, acute normovolemic hemodilution etc. It is expected that the OR Committee will pass these SOPs in the near future.

This past year has seen the addition of research into the program. Dr. Ma (whilst still in the Dept. of Medicine but now in the Dept. of Anesthesia and Perioperative Medicine) carried out a retrospective study evaluating single unit red cell transfusions in reducing allogeneic blood exposure. Findings from this study were presented by him at several meeting including the Residents Research Day last year and have been submitted for publication. This stimulated the planning of a prospective study on the same subject that has just received REB approval with plans to commence in November 2004. A full grant proposal (jointly with the Dept. of Hematology) was submitted to the Anemia Institute and for a PSI Foundation Resident's Grant. Unfortunately these were not successful, but created a good learning experience for the residents involved.

Teaching of the nursing and medical staff has continued throughout the year with the emphasis on the management of postoperative anemia, rather than transfusion guidelines, to emphasize that blood transfusion is

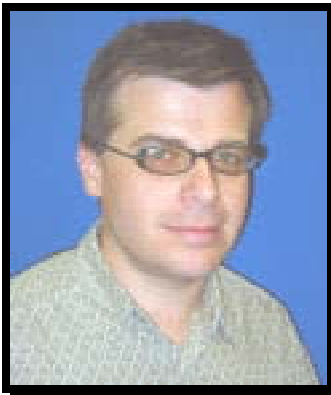
not always required. An algorithm has been developed to help with the introduction of these concepts to the surgical residents, which is hoped to be implemented slowly over the next few months.

We are now only the second Canadian hospital to be listed in the Society for the Advancement of Blood Management Hospital database for hospitals that offer a service for alternative therapies for blood transfusion. Dr. Ralley is also currently a member of the Ontario Blood Utilization Management Strategy Working Group under the auspices of the Anemia Institute.

A new initiative to involve Family Physicians in the screening of patients 2-3mths prior to their elective surgery date is to be introduced in the fall 2004 to reduce the workload of the Transfusion Nurse Coordinator and to improve the time frame with which patients can have their hemoglobin optimized before surgery. This is the first PBCP to involve Family Physicians in their program and we hope to be able to present on our experiences to other programs.

Postgraduate Education Program

Dr. Sal Spadafora (Director)



The Postgraduate Education Program continues to thrive and grow in the Department of Anesthesia and Perioperative Medicine at the University of Western Ontario. With forty Anesthesia residents and thirty four off service residents hosted from other residency training programs. Our successes have been in providing excellent teaching, clinical exposure, research opportunities and continuing to build on our established teaching program. Our residents achieved continued success at the Royal College examinations, which is but one outcome marker of the program's activities.

Educational Activities:

The program continues to offer high quality general and subspecialty rotations (Chronic Pain, Cardiac, Neuro, Ambulatory, Regional, Obstetric, Thoracic, Vascular, Pediatric, Preadmission Clinic). We have

developed and are implementing rotations in Airway Management, and Acute Pain. We continue to offer varied training rotations throughout the Southwestern Ontario Medical Education Network (SWOMEN) with over 20 residents participating in these experiences.

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 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. Sandra Katsiris. Dr. Katsiris was recruited for this role given the expanded residency size, and her expertise and enthusiasm for Postgraduate teaching.

Dr. Richard Cherry has also been given a formal role in the program in charge of not only the Airway Rotation but the implementation of on-line evaluations, case logging and information technology.

Resident Research Day:

This year, the resident research day, which we hosted on June 4, 2004, was a full day event held jointly with the Anesthesia Program at MacMaster University. The day consisted of 5 case presentations and discussions, 9 poster presentations, and 10 research presentations. Dinner and an anesthesia trivia night followed. The day was the result of tireless efforts of our Resident Research Coordinator, Dr. Indu Singh, and our Chief Resident, Dr. Philip Jones.

Resident Research Presented:

Dr. Phil Jones: Hydrogen Peroxide Causing Venous Oxygen Embolism During Total Colectomy

Dr. Michelle Gros: The Anesthetic Management of a Parturient with the Fontan Circulation

Dr. Anna Toptchieva: ICU Admissions from an Obstetric Tertiary Care Centre – A Five Year Review

Dr. Ken Luk: Severe Aortic Stenosis in Pregnancy – A Case Report & Review of Anesthetic Management

Dr. Bobbi-Jo Morrell: Anesthetic Management of a Neurosurgical Emergency in a Second Trimester Parturient

Dr. Lily Liang: The Anesthetic Considerations for a Neonate Presenting with Tetralogy of Fallot and Tracheoesophageal Fistula Requiring Defunctioning Colostomy and Re-Expansion Pulmonary Edema After Emergency Laparotomy

Dr. Geoff Dugas: Pheochromocytoma and Pregnancy – A Case Report and Review of Anesthetic Management

Dr. Tim Turkstra: Cervical Spine Motion: A Fluoroscopic Trial Comparing Lightwand and Glidescope to MacIntosh Laryngoscopy

Dr. Martin Roos: Comparison of the Bullard and Glidescope Laryngoscopes in a Simulated Difficult Airway

Dr. Martin Ma: A Retrospective Study Evaluating Single Unit Red Cell Transfusion in Reducing Allogeneic Blood Exposure

Dr. Steve Lee: The Use of Intraoperative Ketamine in Chronic Pain Patients Undergoing Laparotomy

Dr. Katherine Fallon: Fat Embolization and Fatal Cardiac Arrest During Hip Arthroplasty with Methylmethacrylate

Dr. George Kanellakos: Sickle-Cell Anemia in a Pregnant Jehovah Witness Patient Requiring Cesarean Section

Dr. Abdullah Dashti: Anesthetic Management of Abruption in a Parturient with Neurofibromatosis

Dr. Ibrahim Hadi: Airway Obstruction in a Patient with Severe Rheumatoid Arthritis

Dr. Jonathan Prychitko: Antenatal Assessment of a Patient with Ischemic Heart Disease and Other Complications of Type I Diabetes Mellitus

2003-2004 PGE Committee:

The following people have served on the Postgraduate Education Committee and I wish to acknowledge them for their help.

Committee Membership:

Dr. Kevin Armstrong, SJHC Coordinator
Dr. Davy Cheng, Department Chair
Dr. Richard Cherry, IT Coordinator
Dr. Lynn Coveney, LHSC-VC Coordinator
Dr. John Fuller, SWOMEN Coordinator
Dr. Rooney Gverzdys, Past RCPSC
Dr. Ibrahim Hadi, Gulf State Resident Rep
Dr. Phil Jones, Chief Resident
Dr. Sandra Katsiris, Citywide OB Coordinator
Dr. Ed Roberts – SWOMEN – Windsor
Dr. Indu Singh – Research Coordinator
Dr. David Smith – RCPSC Examiner
Dr. Mark Soderman – Community Anesthesia Rep
Dr. Sal Spadafora – Program Director
Dr. Marc St-Amand – LHSC-UC Coordinator
Dr. Anna Toptchieva – Jr. Resident Rep
Linda Szabo – Recording Secretary

Each and every member of the Department of Anesthesia makes this program a success and the hard work of all Faculty Members is acknowledged and appreciated.

Special thanks are extended to Ms. Linda Szabo, our Education Assistant, who helps make every component of the program run smoothly.

Preadmission Clinic

Dr. Neal Badner (Director)

The Preadmission Clinic of the London Health Sciences Centre is a multidisciplinary unit including members of the Department of Anesthesia and Perioperative Medicine, Department of General Internal Medicine, Nursing, and other allied health professionals. When initiated in the early 1990s the goal was to preadmit 50% of patients. However,

currently the preadmission rate is well over 95% of elective surgical patients encompassing complex patients undergoing difficult procedures at a busy tertiary care center. The department has recently revised the preoperative testing guidelines to minimize preoperative laboratory testing in conjunction with changes to the Canadian Anesthesiology Society guidelines and the American Society of Anesthesiology practice advisory. Future planning is underway to allow consolidation to two sites in conjunction with citywide hospital restructuring.

Thoracic/Vascular Anesthesia Program

Dr. George Nicolaou (Director)

The Vascular/Thoracic Program at the Victoria Site is an extremely busy program, covering all types of complex elective and emergency cases, with the exception of lung transplantation.

The majority of the vascular and thoracic patients coming through our institution have cardiorespiratory compromise and numerous co-existing diseases. These patients have an extensive preoperative evaluation so they can be optimized preoperatively. The thoracic and surgical programs have their own step-down monitored beds. Very few patients ever end up in the Intensive Care Unit. The video thoroscopic and robotic assisted thoracic programs have been well developed at our institution over the years. The number of thoracic procedures performed in this fashion is increasing every year.

The endovascular stent program for abdominal and thoracic aneurysms is one of the best and biggest in North America. Ruptured abdominal and thoracic aneurysms that have favorable anatomy are also repaired by endovascular stents at our institution. The thoraco-abdominal aneurysm program is well developed and these aneurysms are repaired while the patient is on partial left heart bypass.

Our residency program encompasses four-week blocks of subspecialty training in Vascular/Thoracic anesthesia with clear objectives, reading material and daily assessments. The residents are encouraged to partake in clinical research. In the middle of their rotations, the residents will have a mini-examination to assess areas of weakness. They then will have another two weeks to improve on these areas. At the end of their rotation they will have a final examination.

Our Fellowship program is well established with ongoing clinical research opportunities, in collaboration with our surgical colleagues. The program is one year in duration. The Fellow works in the operating room two days per week independently, one day in vascular and one day in thoracic per week with a consultant. The Fellows are encouraged to attend X-ray rounds, vascular rounds and fiberoptic bronchoscopy clinics. Reading material is provided and they are encouraged to go to another center for a week, to gain new ideas. The Fellowship program is extremely flexible, and is designed to accommodate everyone's needs.

Overall, the Vascular/Thoracic program at Victoria Hospital is a very busy program, with an incredible variety of interesting and complex cases. The program offers excellent opportunities for Fellows and Residents to become proficient in Vascular/Thoracic anesthesia, both in a clinical and research setting.

Undergraduate Education Program

Dr. Tony Vannelli (Director)

The Department of Anesthesia and Perioperative Care continues a long and proud tradition of involvement in undergraduate medical/dental education. The Department maintains a strong commitment and presence throughout all four years of undergraduate medical education at UWO.

Preceptorships are offered to medical students beginning in first and second years. More formal electives and selectives are offered in clerkship and fourth year. This is an extremely popular and competitive rotation, not only among UWO medical students, but also national and international medical students. Thanks to the interest and dedication of faculty and residents the majority of students report that it is an excellent experience. The rotations emphasize teaching principles and practices that will serve the students well regardless of their chosen field.

To encourage excellence in the teaching of undergraduate medical students each year, the Department recognizes a faculty member with an Award for Excellence in Undergraduate Medical Education. The Department also participates in local high-school co-op student

education throughout the year. More formal didactic lectureship is presented to undergraduate dental students as part of the oral surgery course. Currently, efforts are underway to design and implement a new fourth-year course in Resuscitation Medicine by faculty members.

FACULTY DIDACTIC TEACHING AND EDUCATION

Dr. Neal Badner

Undergraduate seminars:

Medical Students (M4)	Sedation & Anesthetics
Medical Students:	Regional Anesthesia
Dental Students:	Preoperative Assessment
	Intravenous Anesthesia

Testamur of the National Board of Echocardiography Special Competence in Perioperative Transesophageal Echocardiography, July 2003.

Co-Director, Journal Club, July 1, 2002 – present.

Dr. Ron Butler

Undergraduate Education:

Meds III Anesthesia Clerkship Lecture Series
Clinical Supervision ICU for Meds IV electives in ICU
Instructor Anesthesia Clerkship Lecture Series

Postgraduate Education:

ICU Junior Resident Lectures – Critical Care
CCTC Junior Resident Lectures – Critical Care
Lecturer, Anesthesia Core Lecture Series
Coordinator, Evidence Based Medicine Series, Critical Care Senior residents
Coordinator, Department of Anesthesia Journal Club
Coordinator, Journal Club for Critical Care Senior Residents
LHSC, University Campus

Examiner:

Oral Exam for Critical Care trainees.

Resident Teaching:

“Weaning from Mechanical Ventilation” – Resident Training Program, Anesthesia – May 5, 2004

Dr. Lois Champion

Undergraduate Education:

Undergraduate Education - Course Instructor, Clinical Methods and Patient Centred Learning – Year 1 and 2

Supervisor – medical student electives in intensive care unit

Integrative Medicine III Lectures – Cardiopulmonary Resuscitation 2004, Emergency Week Wrap-Up 2004

Emergency Care and Concluding Day – Yr. 2

PCL – small group tutor – Yr. 2

Postgraduate Education:

Junior Resident Seminar Series – Critical Care

Senior Resident Lectures Series – Critical Care

Coordinator, Practical Care Seminar Series – Senior Residents, Program in Critical Care Medicine

Cardiovascular Surgery Resident Seminars (Academic Half Day)

Department of Surgery Academic Half Day for Surgery Residents

Faculty Wide Postgraduate Education Academic Half Day

Dr. John Fuller

Anesthesia Resident Core Teaching Session

“Physiologic Changes of Pregnancy”

January 7, 2004

Educational Roles:

Chair, RCPSC mandated- Internal Review of UWO Neuropathology Residency Program

Coordinator, SJHC Perioperative Grand Rounds (Quarterly Round)

Site Coordinator SJHC for ICU Resident Rotations

Interviewer for CaRMS residency positions February 13, 2004

Interviews for non-CaRMS residency positions (Family Medicine

Anesthesia, Gulf State applicants, Repatriation candidates)

ICU Resident Seminars

SJHC - 2 per month, January -June, 2004

CCTC - *“Airway Management and Intubation”* July 5, 2003

Resident Mock Oral Examinations

March 2 and April 13, 2004

Workshop Demonstrator
2-Day Teaching Workshop
UWO, Faculty of Medicine & Dentistry
December 11 and 12, 2003

Workshop Organizer
Computer Basics for SWOMEN Educators
Windsor
November 13, 2003

Dr. Sandra Katsiris

Coordination of Obstetrical Anesthesia subsection of resident seminar series (one lecture given)
Coordination of RCPSC oral exam prep course for PGY5's (100% exam success)

Dr. John Murkin

UWO Anesthesia Residency Academic Program
Seminar: Complications in Cardiac Surgery.

Meds III Seminars:
Management of Blood Volume, Electrolytes and Acid Base Balance

Dr. Gordon Sellery

Teaching of Residents, Medical Students, and Respiratory Therapists in the OR

Dr. Michael Sharpe

Postgraduate Education:

1. Junior Resident Seminar Series – Critical Care
2. Critical Care Grand Rounds
3. Senior Resident Teaching Sessions – Critical Care
4. Cardiac Surgery Resident Seminar Series

Examiner:

1. Oral Exam for Senior Residents – Program in Critical Care Medicine

2. Oral Exam for Residents in Anesthesia
3. Mid-Level PhD Examination, Department of Medical Biophysics, UWO
4. Masters of Science – Brent Moyer, Dept. of Physiology, UWO – Nov. 28, 2003.

Educational Materials Developed for Postgraduate Education:

1. Program in Critical Care Medicine, UWO Senior Resident Seminar Series, two topics: 1) Ventilator Induced Lung Injury; 2) New Modes of Septic Therapy
2. Program in Critical Care Medicine, UWO – Senior Resident Practical Sessions, two topics: 1) Neuromuscular Blockade Part 1 (Pharmacology); Neuromuscular Blockade Part 2 (Clinical Application)

FACULTY AWARDS/CERTIFICATION/RECGONITIONS

2004 **Dr. Kevin Armstrong**

Abbott Laboratories Award
Undergraduate Teacher of the Year

2004 **Dr. Lois Champion**

- Faculty of Medicine & Dentistry, Dean's Award of Excellence in Teaching
- Hippocratic Council Clinical Science Teaching Award 2003-2004

2003 **Dr. Richard Cherry**

Medical Director for the Respiratory Therapy Program Advisory Committee, Fanshawe College
Respiratory Therapy Program, Fanshawe College

2004 **Dr. John Fuller**

SJHC Medical Advisory Committee Award for Outstanding Contributions Resulting from his leadership in the ICU
Service to Medical Community:
Elected to RCPSC Council as a Council Member for 2004-2008

2004 **Dr. Sugantha Ganapathy**

Abbott Laboratories Award
Fellow Teacher of the Year

2003 **Dr. Ian Herrick**

Interim Chief of Staff, LHSC



2004 **Dr. Sandra Katsiris**
Abbott Laboratories Award
Resident Teacher of the Year.

2003 **Dr. Mike Mosa**
UWO Fall Faculty Mini Fellowship Award
Fellowship in Use of Perioperative Transesophageal Echo
San Diego, California

2003 **Dr. John Murkin**
American Society of Echocardiography, Perioperative
Echocardiography Examination

2004 **Dr. Bill Sischek**
Recognized by the Medical Advisory Committee of LHSC for his 7-
year contribution to the MAC. He term as Past-Chair of the MAC
ended June 30.

2004 **Dr. Gordon Sellery**
Awarded Life Membership
Ontario Medical Association



2004 **Dr. Michael Sharpe**
Herbert Jasper Prize - Canadian Society of Clinical
Neurophysiologists
Paper: *Treatment of Refractory Status Epilepticus with
Inhalational Anesthetic Agents: Isoflurane and Desflurane*
Co-author with Mirsattari SM and Young GB

FACULTY PARTICIPATION NATIONALLY & INTERNATIONALLY

Conference Chair/Moderator/Organizer

Dr. Davy Cheng

Participant, Roundtable Discussion. Establishing a Blood Conservation Program: Leveraging the Efficacy of a Serine Protease Inhibitor. San Diego, CA. . September 11-12, 2003

Co-Chair, CVT-CAS Luncheon Symposium. 50th Anniversary of Cardiopulmonary Bypass Surgery. Canadian Cardiovascular Congress. Toronto, Canada. October 25, 2003.

Moderator, 1. Minimally Invasive Surgery.2. Regional Anesthesia and the Cardiac Surgical Stress Response. 9th Annual Update on Cardiopulmonary Bypass. Snowmass, Colorado. March 14-20, 2004.

Chair, Technology Workshop, Understanding How and When to Apply New Monitoring Technology. SCA 26th Annual Meeting. Honolulu, Hawaii. April 24-28, 2004.

Co-Chair, Poster Discussion 9 Cardiovascular/Thoracic. Canadian Anesthesiologists' Society 60th Annual Meeting. Quebec City, Canada. June 22, 2004.

Co-Chair, Poster Discussion 6 Cardiovascular/Thoracic. Canadian Anesthesiologists' Society 60th Annual Meeting. Quebec City, Canada. June 22, 2004.

Dr. Rosemary Craen

Scientific Convener, Canadian Anesthetists' Society Annual Meeting, Quebec City June 18-22, 2004

Chair, Plenary Session, Canadian Anesthetists' Society Annual Meeting, Quebec City, Canada, June 19, 2004.

Dr. Steven Dain

Director of Multimedia Services. Cardiac Team Meeting 2003. Quebec City, Quebec September 13-14, 2003

Director of Multimedia Services. Outcomes 2004. The Key West Meeting. Key West, Florida. May 19-23, 2004.

Dr. Su Ganapathy

Society for Ambulatory Anesthesia (SAMBA) 19th Annual Meeting. Seattle, Washington, April 2004.

Workshop: *Paravertebral Block*.

Canadian Anesthesiologists Society Annual Meeting, Quebec City, June 2004.

Workshop: *Paravertebral Block*.

Dr. Adrian Gelb

Moderator, Panel Session, Neuroanesthesia for the Occasional Neuroanesthesiologist. American Society of Anesthesiologists Annual Meeting. San Francisco, California. October 13, 2003.

Dr. John Murkin

Co-organized and Chaired. Outcomes 2004 Key West Meeting, "Cardiac and Vascular Surgery: Neurobehavioral assessment, Physiological Monitoring and Cerebral Protective Strategies", May 19-23, 2004.

Lecture: "*Applied Neuromonitoring and Improved Outcomes*"

Co-Organizer Cardiac Team Meeting: *Managing the Failing Heart*, Orford, Quebec. September 13-14, 2003.

Moderator: *Mechanical Considerations for Managing the Failing Heart*.

Moderator: *Pharmacologic Considerations for Managing the Failing Heart*.

Dr. Michael Sharpe

Co-Chair, Right Ventricular Failure Session, 24th International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium. April 2, 2004.

Invited Lectures/Visiting Professorships

Dr. Neal Badner

Guidelines Advisory Committee Opinion Leader Training Workshop.
London, Ontario July 3, 2003.

Lecture: *The LHSC Experience in implementing Clinical Practice Guidelines.*

Guidelines Advisory Committee & North Network videoconference.
September 16, 19, 23 and 25, 2003.

Lecture: *Preoperative Testing Guidelines – Who needs them and why?*

A Sports Medicine CME event. London, Ontario, October 15, 2003.

Lecture: *NSAIDs/COXIBs Is there a difference? Does it matter?*

13th World Congress of Anesthesiologists, Paris, France. April 20 and 21, 2004.

Lecture: *General Anesthesia for Laparoscopic Surgery*

Lecture: *Preoperative Evaluation in Developed Countries*

Cardiology Rounds, LHSC, London, Ontario, May 10, 2004.

Lecture: *Preoperative Testing – Clinical Practice Guidelines.*

Dr. Daniel Bainbridge

Outcomes, The Keywest Meeting, Key West, Florida, May 19-22, 2004

Lecture: *Utility of 3D Echocardiography for Evaluation of the ascending Aorta.*

Dr. Ron Butler

19th Annual Challenges in Critical Care Conference, The Best Western Lamplighter Inn, London, ON, June 4, 2004.

Lecture: *Spontaneous Breathing Trials.*

ICU Grand Rounds, LHSC – U.C, London, ON, June 17, 2004.

Lecture: *“Canadian Nutrition Guidelines”.*

Dr. Lois Champion

Critical Care Nursing Association, London ON, February 2004.

Lecture: *An Update in Management of Septic Shock.*

Dr. Davy Cheng

5th Asian Society of Cardiovascular Anesthesia Meeting, Seoul, Korea.
September 17-21, 2003

Lecture: *OPCAB and Robotic Surgery: Periop Management & Outcome.*

Lecture: *Anesthesia for Patients with Cardiac Risks in Non-Cardiac Surgery.*

Lecture: *Right Heart Failure Etiology, Monitoring and Treatment.*

Joint Meeting of the Canadian Anesthesiologists' Society and the College of Anaesthetists RCSI in conjunction with the South of Ireland Association of Anaesthetists, Killarney, Ireland. September 26-29, 2003

Lecture: *Cox II Inhibitors, Pharmacology and Clinical Applications.*

3rd Symposium of Anesthesia for Organ Transplantation, Beijing, PR China. November 1-4, 2003

Lecture: *Heart Transplantation and LVAD*

Blood Utilization Management (BUM). Ontario Leaders Forum. Ontario's 1st Showcase of Blood Utilization Management. Toronto, Ontario. December 2, 2003. Presenter

22nd Annual Symposium Clinical Update in Anesthesiology, Acapulco. Mexico. January 17-24, 2004

Lecture: *NSAIDS in Cardiothoracic Patients.*

Cardiac Surgery Resident Seminar, Division of Cardiac Surgery, Department of Surgery, The University of Western Ontario. February 4, 2004

Lecture: *Fast track cardiac anesthesia*

9th Annual Update on Cardiopulmonary Bypass, Snowmass, Colorado. March 14, 2004

Lecture: *Early Extubation 2004.*

Tongariro Cardiac Surgery Meeting. Taupo New Zealand. March 26-28, 2004

Lecture: *OPCAB: Outcomes and who should get it.*

Lecture: *Fast track cardiac surgery: success & failure.*

Lecture: *Transfusion best practices in cardiac surgery.*

ISA (Indian Society of Anesthesiologists) Annual Meeting. New Delhi, India. April 10-11, 2004

Lecture: *Anesthesia in minimally invasive cardiac surgery: OPCAB and robotic surgery.*

13th World Congress of Anaesthesiologists. Paris, France. April 17-23, 2004

Lecture: *Anesthesia for Fast-Track Cardiac Surgery.*

Lecture: *Preoperative Evaluation: The Drug Addicted Patient.*

Department of Anesthesiology and Pain Medicine, University of Alberta. May 14, 2004

Lecture: *Evidence-based safety and efficacy of OPCAB versus CCAB and PTCA.*

2004 Sullivan Healthcare Consulting Seminar. Westin Harbor Castle, Toronto, Ontario. June 3-4, 2004

Lecture: *Implementing Pre-surgical Screening and the Role of Anesthesia in Perioperative Care.*

International Society of Minimally Invasive Cardiac Surgery (ISMICS) Annual Scientific Meeting. London, England. June 23-26, 2004

Lecture: *ISMICS Expert Consensus Statement OPCAB Surgery*

Dr. Rosemary Craen

Panel on Neuroanesthesia for the Occasional Neuroanesthesiologist. American Society of Anesthesiologist's Annual Meeting, San Francisco, USA. October 13, 2003

Lecture: *Positioning in Neuroanesthesia*

Panel on Anesthesia for Minimally Invasive Neurosurgical Procedures. American Society of Anesthesiologist's Annual Meeting, San Francisco, USA. October 15, 2003

Lecture: *Anesthesia for Neuroendoscopy*

Making the Mark for PGY5 Canadian Anesthesia Residents, Toronto, Canada. February 21, 2004.

Lecture: *Essential Neuroanesthesia*.

Panel on Peer Review. Canadian Anesthetists' Society Annual Meeting, Quebec City, Canada. June 20, 2004

Lecture: *CPSO Peer Review Process – My personal perspective*.

Dr. Steven Dain

Department of Anesthesia. Queen's University. Kingston, Ontario, March 17, 2004.

Grand Rounds presentation.

Lecture: *Primer of Risk Management*.

Resident Lecture: *Physics in Anesthesia*.

Toronto Anesthesia Symposium. Toronto, Ontario, April, 2004.

Lecture: *Risk Management*

Dr. Su Ganapathy

Presentation organized by Merck Frosste to community orthopedic surgeons. Niagara Falls, ON, April 2004.11.02

Lecture: *Why not opiates for orthopedic pain*.

Dr. Adrian Gelb

Combined Meeting of the Hong Kong Society of Anaesthetist and ISAP, Hong Kong September 2003.

Lecture: *Drug Choice for Neurosurgery; The diverse drug effects of Propofol*.

American Society of Anesthesiologists Annual Refresher Course Lecture, San Francisco, October 2003.

Lecture: *Control of the Cerebral Circulation*.

Japan Society for Clinical Anesthesia, Shimonoseki, Japan, October 2003

Lecture: *Perioperative Stroke*.

Mexican Federation of Anesthesiology, Zacatecas, Mexico, November 2003.

Lecture: *Perioperative Stroke; Autoregulation.*

The Department of Anesthesiology, University Hospitals, Catholic University of Leuven, Belgium, January 9-10, 2004.

Lecture: *Monitoring Depth in Anesthesia.*

5th Annual Conference of the Indian Society of Neuroanesthesiology and Critical Care. (ISNACC), Nimhans, Bangalore. February 6-8, 2004.

Lecture: *Drug Choices for Neuroanesthesia, Misunderstandings in cerebrovascular physiology.*

Dr. John Murkin

Cardiovascular Medical Other Alternative & Surgical Therapies Conference (COAST). Lake Tahoe, Nevada, September 5-7, 2003.

Lecture: *Can the Neurologic Risk of Cardiac Surgery be Decreased?*

Lecture: *Hyperglycemia: An Unrecognized Risk?*

Cardiac Team Meeting: Innovative Strategies to Improve Open Heart Surgery Outcomes. Atlanta, Georgia, September 19, 2003.

Lecture: *Inflammatory Response to CPB.*

The Boston Perfusion Meeting, Neuromonitoring in Cardiac Surgery. Boston Massachusetts, October 10-12, 2003.

Lecture: *Cognitive Dysfunction Post Bypass: Survey of the Field.*

Lecture: *Cerebral Oximetry.*

Piedmont Hospital, Grand Rounds. Atlanta Georgia, October 15, 2003.

Lecture: *Oximetry: Decreasing the Neurologic Risk of Cardiac Surgery.*

Experts Forum: Brain Oximetry. Paris France, October 23-24, 2003.

Lecture: *Optimizing Cerebral Protection During Routine CABG Surgery.*

57th National Congress of the Italian Society of Anaesthesia, Analgesia, Resuscitation and Intensive Care, Rome Italy, October 27-28, 2003.

Lecture: *Value of Perioperative Cerebral Oxygen Monitoring in Cardiac Surgery*

American Heart Association Scientific Sessions, Orlando Florida, November 9-12, 2003.

Lecture: *Are These Differences in Neurologic Outcomes Following On Versus Off CABG.*

Lecture: *CNS Injury in Heart Surgery*

Duke University, Raleigh North Carolina, November 25, 2003.

Lecture: *Perioperative Cerebral Oxygen Monitoring in Cardiac Surgery.*

Washington Heart Center, Washington, DC, December 1-2, 2003.

Lecture: *Neuromonitoring: Decreasing the Neurologic Risk of Cardiac Surgery.*

Emory University School of Medicine – New Horizons in Anesthesiology, February 8-13, 2004.

Lecture: *Hyperglycemia: An Unrecognized Risk*

Lecture: *Robotic Surgery; Monitoring Oxygen Saturation in The Brain.*

Berne Anesthesia Symposium, Berne Switzerland, February 17-22, 2004.

Lecture: *Impact of Anesthesia Upon Neurological Outcome in Cardiovascular Surgery.*

Connecticut Society of Perfusion Third Annual Symposium, Best Practices Perfusion, Boston Massachusetts, March 6, 2004

Lecture: *Enhancing Neurologic Outcomes.*

Delaware Valley STS Meeting, Philadelphia, PA, April 20, 2004

Lecture: *Postoperative Management of CVA.*

Society of Cardiovascular Anesthesiologists, 26th Annual Meeting, Honolulu Hawaii, April 24-28, 2004.

Lecture: *Brain: Transcranial Doppler, Cerebral Oximetry and BIS Monitor.*

The AmSECT 42nd International Conference, Hollywood Florida, April 29 - May 2, 2004.

Lecture: *The Inflammatory Process and Its Role in CNS Injury.*

Lecture: *Cerebral Oxygen Monitoring.*

Outcomes 2004 – Cardiac and Vascular Surgery: Neurobehavioral Assessment, Physiological Monitoring and Cerebral Protective Strategies, Key West Florida, May 19-22, 2004.

Lecture: *Applied Neuromonitoring and Improved Outcomes.*

Canadian Anesthesiologists Society Annual Meeting, CVT-CAS/PNBC Symposium, Quebec City Quebec, June 19-22, 2004.

Lecture: *Update on Antifibrinolytics.*

Innovative Strategies to Improve Open Heart Surgery Outcomes Symposium, Washington DC. June 25-27, 2004.

Dr. Fionaalley

22nd Annual Symposium, Clinical Update in Anesthesiology and Advances in Techniques of Cardiopulmonary Bypass, Acapulco, Mexico January 19-23, 2004.

Lecture: *Is female gender really a preoperative risk factor for cardiac surgery?*

Department of Anesthesia & Perioperative Medicine, University of Western Ontario, Citywide Grand Rounds, January 21, 2004.

Lecture: *A Perioperative Blood Conservation Program*

Dr. Michael Sharpe

Thunder Bay Regional Hospital, Thunder Bay, ON, November 26, 2004.

Lecture: *Pathophysiology of Sepsis: Management Strategies.*

Critical Care Grand Rounds, LHSC-SSC, London, ON, November 28, 2003.

Lecture *Recommendations of the Canadian forum on Neurological Determination of Death.*

St. Thomas-Elgin Hospital, St. Thomas, ON, February 4, 2005.

Lecture: *Xigris for treatment of sepsis.*

Intensivist Advisory Board, Bristol-Myers Squibb, Cancun, Mexico, February 20, 2004.

Lecture: *Fluid Management in the ICU patient: Art or Science?*

24th International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 30 - April 2, 2004.

Lecture: *Is there a place for anabolic steroids?*

Lecture: *Continuous EEG in the ICU.*

Lecture: *Care of the Organ Donor.*

Lecture: *Acute asthma: Inhalation anesthesia?*

A Clear Process to Organ Donation: An Information Forum for the Health Care Community, Sault Ste Marie Hospital, Sault Ste Marie, ON, April 23, 2004.

Lecture: *Canadian Guidelines for Neurological Determination of Death and Organ Donor Management.*

ICU Grand Rounds, LHSC-UC, London, ON, May 12, 2004.

Lecture: *New Canadian Consensus Guidelines for Organ Donor Management.*

Newmarket Hospital, Newmarket, ON, May 20, 2004.

Lecture: *Changing outcomes in the ICU – Pathophysiology and the Management of Severe Sepsis and Septic Shock.*

First Annual Tri-City Internal Medicine & Critical Care Symposium, Waterloo, ON, June 12, 2004.

Lecture: *Colloids: How much is too much?*

FACULTY PUBLICATIONS

Peer Reviewed Publications (23)

Armstrong KP, Cherry RA. Brachial plexus anesthesia compared to general anesthesia when a block room is available. *Can J Anesth* 51:41-44, 2004.

Bainbridge D, Murkin J, Calaritis C, Menkis A. Aortic dissection in a patient with a previous ascending aortic dissection and repair: the role of new monitoring devices in the high-risk patient. *Sem Cardiothorac Vasc Anesth*, 8(1):3-7, 2004.

Klein AA, Djaiani G, Karski J, Carroll J, Karkouti K, McCluskey S, Poonawala H, Shayan C, Fedorko L, **Cheng D.** Acupressure wristbands for the prevention of postoperative nausea and vomiting in adults undergoing cardiac surgery. *J Cardiothorac Vasc Anesth*, 18:68-71, 2004.

Cheng DCH, Mazer CD, Martineau R, Ralph-Edwards A, Karski J, Robblee J, Finegan B, Hall, RI, Latimer R, Vuylsteke A. Safety and efficacy of hemoglobin raffimer (Hemolink™) in elective coronary artery bypass surgery: a Phase II study. *J Thorac Cardiovasc Surg*, 127:79-86, 2004.

Myles PS, Daly DJ, Djaiani G, Lee A, **Cheng DCH.** A systematic review of the safety and effectiveness of fast track cardiac anesthesia. *Anesthesiology*, 99:982-87, 2003
(Accompanied by an Editorial View. Wallace AW. Is it time to get on the fast track or stay on the low track? *Anesthesiology* 99:982-987).

Lownie SP, Menkis AH, **Craen RA,** Mezon B, MacDonald J, Steinman D. Extracorporeal femoral to carotid artery perfusion in selective brain cooling for a giant aneurysm. *J Neurosurg*, 100: 343-347, 2004.

Dain S. Invited commentary: Incident with a Baxter AS40A syringe pump: vigilance is warranted. *Can J Anesth* 51: 185-186, 2004.

Kaye A, Kucera IJ, Heavner J, **Gelb A**, Anwar M, Duban M, Arif AS, **Craen R**, Chang CT, Trillo R, Hoffman M. The Comparative Effects of Desflurane and Isoflurane on Lumbar Cerebrospinal Fluid Pressure in Patients Undergoing Craniotomy for Supratentorial Tumors. *Anesth Analg*, 98:1127-32, 2004.

Dugas G, **Fuller J**, Singh, S, **Watson J**. Pheochromocytoma and pregnancy: a case report and review of anesthetic management. *Can J Anesth* 51:134-38, 2004.

Iglesias I, Bainbridge D, Murkin J. Intraoperative echocardiography: support for decision making in cardiac surgery. *Semin Cardiothorac Vasc Anesth*, 8(1):25-35, 2004.

Murkin JM, Stump DA. Introduction: Outcomes 2003. *Heart Surg Forum* 6(4)190, 2003.

Murkin JM. Inflammatory responses and CNS injury: Implications, prophylaxis, and treatment. *Heart Surg Forum* 6(4)193-195, 2003.

Murkin JM. Transfusion Trigger Hct 25%: Above or Below, Which is Better? Pro: HCT<25% is Better. Pro and Con. *J Cardiothorac Vasc Anesth* 8(2):234-237, 2004.

Murkin JM. Perioperative Multimodality Neuromonitoring: An Overview. *Sem Cardiothorac Vasc Anesth* 8(2)June:167-171, 2004.

Zhong R, Tucker J, Zang Z, Wall W, Grant D, Quan D, Garcia B, Goa Z, Asfar S, **Sharpe M, Gelb A**, Bailey M, Stiller C. The long-term survival of baboon-to-monkey kidney and liver xenografts. *Xenotransplantation*, 10: 398-409, 2003.

Kimmerly DS, Tutung E, Wilson TD, Serrador JM, **Gelb AW**, Hughson RL, Shoemaker JK. Circulating norepinephrine and cerebrovascular control in conscious humans. *Clin Physical Funct Imaging*, 23:314-319, 2003.

Schneider G., **Gelb A.W.**, Heindl B., Kochs E. Detection of Awareness in Surgical Patients with EEG-based Indices – Bispectral Index (BIS) and Patient State Index (PSI). *Brit J Anaesth* 91:329-35, 2003.

Eberspacher E., Werner C., Engelhard K., Blobner M., **Gelb A.W.** The Effect of Hypothermia on the Expression of Apoptosis-Regulating Proteins After Incomplete Cerebral Ischemia and Reperfusion in Rats. *J Neurosurg Anesthesiol* . 15:200, 2003.

Gelb AW, Salevsky F, Chung F, Ringaert K, McTaggart-Cowan R Wong T, Manninen P, Francis K Remifentanyl with morphine for transitional analgesia results in more rapid neurological recovery than fentanyl in patients undergoing elective supratentorial craniotomy. *Can J Anesth* 50:946-952, 2003.

Cowie D, Shoemaker K, **Gelb AW**. Orthostatic hypotension occurs frequently in the first hour after anesthesia. *Anesthesia Analgesia* 98:40-5, 2004.

Bateman RM, **Sharpe MD**, Ellis CG. Bench to bedside review: Microvascular dysfunction in sepsis – hemodynamics, oxygen transport, and nitric oxide. *Crit Care* 7:359-73, 2003.

Mirsattari SM, **Sharpe MD**, Young GB. Treatment of refractory status epilepticus with inhalational anesthetic agents: Isoflurane and desflurane. *Arch Neurol* 61:1254-9, 2004.

Sharpe MD, Ghent C, Grant D, Horbay GLA, McDougal J, Colby WD. Efficacy and safety of itraconazole prophylaxis for fungal infections after orthotopic liver transplantation – A prospective, randomized, double-blind study. *Transplantation* 76:977-83, 2003.

Book Chapters (2)

Bainbridge D, Cheng DCH. Fast-track cardiac anesthesia - Is it safe? In *Evidence-Based Practice of Anesthesia*. Edited by Fleisher LA. WB Saunders, Publishers. Chapter 57, p 359-363. 2004.

Forster N, Engelhard K, **Gelb AW**. Is There a Best Technique in the Patient with Increased Intracranial Pressure? In *Evidenced-Based Practice of Anesthesiology*; Edited by Fleisher LA. WB Saunders, Publishers. Chapter 62: p. 389-392, 2004.

Non-Peer Reviewed Publications (12)

Badner NH. General Anesthesia for Laparoscopic surgery. Programme of the 13th World Congress of Anesthesiologists. C029-a, April 2004.

Badner NH. Preoperative Evaluation in Developed Countries – North America. Programme of the 13th World Congress of Anesthesiologists. C066-a, April 2004

Cheng, D. Letter from the Editor. Anemia and Surgery. Anemia Institute Review. Special Edition March 2004.

Cheng, D. Comment to article Inhaled prostacyclin appears to be a safe and effective selective pulmonary artery vasodilator in cardiothoracic surgical patients with hypertension. *Anesthesiology News*, October 2003

Cheng, D. Blood Products Advisory Panel. Bloody Easy. Blood Transfusions, Blood Alternatives and Transfusion Reactions. A Guide to Transfusion Medicine. Edited by Savattug Inc., Toronto, Ontario. Published by Sunnybrook and Women's College Health Sciences Centre. August 2003.

Ganapathy, S. Update on peripheral regional analgesia. *Techniques in Regional anesthesia and Pain Management* 7:148-154; July 2003.

Gelb AW. ASA Refresher Lecture. Control of the Cerebral Circulation. 2003.

Gelb AW. Combined Meeting of the Hong Kong Society of Anaesthetist and ISAP, Hong Kong September 2003. Titles: Drug Choice for Neurosurgery; The diverse drug effects of Propofol.

Gelb AW. Perioperative Stroke. Japan Society for Clinical Anesthesia, Shimonoseki, Japan, October 2003.

Gelb AW. Perioperative Stroke; Autoregulation. Mexican Federation of Anesthesiology, Zacatecas, Mexico, November 2003.

Gelb AW. Monitoring Depth in Anesthesia. The Department of Anesthesiology, University Hospitals, Catholic University of Leuven, Belgium, January 2004.

Gelb AW. Drug Choices for Neuroanesthesia, Misunderstandings in cerebrovascular physiology. 5th Annual Conference of the Indian Society of Neuroanesthesiology and Critical Care. (ISNACC). Nimhans, Bangalore. February 2004.

International Standard Publications (7)

Dr. Steven Dain is the Head of Canadian Delegation, International Standards Organization (ISO Technical Committee 121 Anaesthetic and respiratory equipment and serves on numerous national and international committees related to the writing of standards for medical electrical equipment and adoption of these international standards to the Canadian Standards Association (CSA).

IEC 60601-2-13:2003. Medical electrical equipment - Part 2-13: Particular requirements for the safety of anaesthetic systems.

ISO 5356-1:2004. Anaesthetic and respiratory equipment - Conical connectors - Part 1: Cones and sockets.

ISO 8835-4:2004. Inhalational anaesthesia systems - Part 4: Anaesthetic vapour delivery devices.

ISO 17510-2:2003. Sleep apnoea breathing therapy - Part 2: Masks and application accessories.

ISO 23328-1:2003. Breathing system filters for anaesthetic and respiratory use - Part 1: Salt test method to assess filtration performance.

ISO 10651-6:2004. Lung ventilators for medical use - Particular requirements for basic safety and essential performance - Part 6: Home-care ventilatory support devices.

ISO 10651-2:2004. Lung ventilators for medical use - Particular requirements for basic safety and essential performance - Part 2: Home care ventilators for ventilator-dependent patients.

Abstracts (16)

Zarnke K, Dresser G, Moor R, Colquhoun, Taylor B, Larocque, Sue-A-Quan G, Gilbert K, Bycraft C, Martin J, **Badner N**, McDonald D, Paul T, Mahon JL. Peri-operative corticosteroids to prevent iatrogenic adrenal insufficiency: Are the doses used too high? Clin Pharm Ther 2004

Bainbridge D, Cheng D, Martin J, Novick R. Does Aprotinin improve outcomes compared with tranexamic acid for aminocaproic acid in cardiac surgery. A meta-analysis. Presented at the 22nd Annual Symposium Clinical Update in Anesthesiology, Acapulco, Mexico, January 17-24, 2004.

Bainbridge D, Cheng D, Martin J, Novick R. In patients undergoing cardiac surgery, does high-dose aprotinin reduce morbidity and resource utilization compared with low-dose aprotinin? A meta-analysis. Presented at the 22nd Annual Symposium Clinical Update in Anesthesiology, Acapulco, Mexico, January 17-24, 2004.

Cheng D, Martin J, **Bainbridge D**. Do NSAIDS (Cox-selective and non-selective) decrease morbidity and resource utilization in cardiothoracic surgery compared with other analgesics? A meta-analysis of randomized controlled trials. SCA 26th Annual Meeting & Workshops 2004. *Anesth Analg* 98(4S): SCA 132, 2004.

Djaiani G, Fedorko L, Borger M, Carroll J, Mikulis D, **Cheng D**, Karkouti K, Beattie S, Karski J. Mild to moderate disease of the thoracic aorta and new ischemic brain lesions after conventional coronary artery bypass graft surgery. SCA 26th Annual Meeting & Workshops 2004. *Anesth Analg* 98(4S): SCA 16, 2004.

Bainbridge D, Cheng D, Martin J, Novick R. Non-steroidal anti-inflammatory agents compared with opioid analgesia in cardiothoracic surgery: A meta-analysis. Presented at the 22nd Annual Symposium Clinical Update in Anesthesiology, Acapulco, Mexico, January 17-24, 2004.

Gelb AW, Craen RA, Chan M, Heath KJ, Mohanty B, Dash HH, Reddy K, Megyesi J. Hyperventilation does not improve neurosurgical operating conditions during supratentorial craniotomy. *J Neurosurg Anesthesiol*, 15: A56, 2003.

Kim YS, **Murkin JM.** A comparison of heparin management test and activated coagulation time with anti-Xa heparin concentration during cardiac surgery. *Heart Surg Forum*, 6(4):203, 2003.

Murkin JM, Menkis A, Adams SJ, MacKenzie R, Peterson R. Epi-aortic scanning significantly decreases intervention-related and total cerebral emboli. *Heart Surg Forum* 6(4):203, 2003.

Iglesias I, **Murkin JM,** Bainbridge D, Adams S. Monitoring cerebral oxygen saturation significantly decreases postoperative length of stay: A prospective randomized blinded study. *Heart Surg Forum*;6(4):204, 2003.

Ellis C, Goldman D, Bateman R, **Sharpe M.** Microvascular oxygen transport Abnormalities in experimental sepsis interpreted using a computational model. *J Crit Care* ;8(Suppl):S34,2004.

Sharpe M, Harris C. Isoflurane anesthesia for status asthmaticus: 10 years experience. *J Crit Care* 8(Suppl 1):S7, 2004.

Korngut L, Young GB, Lee D, **Sharpe MD.** Diffusion weighted imaging of post-coronary artery bypass graft (CABG) encephalopathy. *Can J Neuro Sci* 31(Suppl 1):S34, 2004.

Mirsattari SM, **Sharpe MD,** Young GB. Treatment of Refractory Status Epilepticus with Inhalational Anesthetic Agents: Isoflurane and Desflurane. *Can J Neuro Sci* 31(Suppl 1):S21, 2004.

Young GB, Al-Muslim O, **Sharpe MD.** Therapeutic hypothermia in comatose survivors of cardiac arrest: a feasibility study. *Can J Neuro Sci* 31(Suppl 1):S21, 2004.

Price J, Parnes L, Wilson S, Fox S, **Sharpe M,** Quantz M. Is Translaryngeal Tracheostomy (TLT) Associated with an Increased Incidence Of Mediastinitis Following Cardiac Surgery? *American*

Thoracic Society 2004 International Conference May 21-26, 2004. *Am J Respir Crit Care Med* 169(7):A845, 2004.

FACULTY RESEARCH GRANTS/FUNDING

Peer Reviewed Grants/Funding

Dr. Neal Badner

Poise - Perioperative Use of Beta-Blockers to Prevent Ischemia.
Canadian Institute of Health Research. 2001 - 2007.
Site investigator-Victoria Campus, LHSC
Principal Investigator Dr. Homer Yang

Dr. Davy Cheng

Blood Conservation using Antifibrinolytics: A Randomized Trial in a Cardiac Surgery Population - the BART Study
Canadian Institutes of Health Research and Ontario Ministry of Health, 2002-2005. (\$2,209,327 and 1,599,858)
Co-investigator
Principal Investigator P. Herbert

Continuous Cell-Saver, Neurocognitive Outcome and Cardiac Surgery.
Heart and Stroke Foundation of Ontario, Grant # NA 4915, 2002-2004.
\$199,995.
Co-Investigator
Principal Investigator G. Djaiani

Dr. Rosemary Craen

Hypothermia during Intracranial Aneurysm Surgery (IHAST2). National Institute of Health, 2000 - 2004. Total Grant 6.5 million. University of Iowa Multicenter Trial.”
Site Investigator
Principal Investigator M. Todd
2 sub studies:

1. Myocardial Ischemia and Subarachnoid hemorrhage funded by UCSF
2. Cognitive Function after Aneurysm Surgery funded by NIH

Comparison of Intubating Stylet and GlideScope to Macintosh Laryngoscope for intubation of Patients with Potential Cervical Spine Injury. 2004 Residents' Research Grant Competition. Canadian Anesthesiologists' Society. " - \$5000.

Supervisor

Applicant T Turskstra

Co-Applicants AW Gelb, D Pelz

Dr. John Fuller

Ventilator Acquired Pneumonia (VAP) Study. A multicentre trial. Canadian Institute of Health Research. March 2003 - June 2005.

Site Coordinator SJHC

Principal Investigator Dr. Daren Heyland

Dr. Adrian Gelb

Multi-slice CT and MR CBF perfusion mapping in thrombolytic treatment of stroke. Canadian Institutes of Health Research 2001-2004. (\$34,772; \$69,544; \$69,544; \$34,772).

Co Investigator with T-Y. Lee (PI), M.J. Hogan, B.K. Rutt

Dr. John Murkin

"The influence of cardiopulmonary bypass on CNS outcome following coronary artery surgery". \$181,187. MRC/CIHR (Medical Research Council/ Canadian Institutes of Health Research). 2000 - 2004.

Principal Investigator

Blood conservation using antifibrinolytics: a randomized trial in high risk cardiac surgery (BART). CHIR (Canadian Institutes of Health Research). Multicentre ongoing study.

Site Principal Investigator.

Peer Reviewed *Internal Grants/Funding*

Dr. Davy Cheng

The effect of a merger on a two site cardiac surgery and anesthesia service on patient outcomes and institutional safety culture.

Lawson Health Research Institute, Internal Research Fund (IRF), 2002 - 2004. \$12,500.

Co-Investigator

Principal Investigator R. Novick

Dr. Michael Sharpe

Efficacy of Linear Prediction Co-efficients computed from continuous EEG for early detection of vasospasm in patients following subarachnoid hemorrhage. \$9,000. LHRI Internal Research Fund, 2003.

Principal Investigator

Efficacy and pharmacokinetics of oral thyroid replacement therapy in organ donors. \$16,346.95. Multi-organ Transplant Program Scientific Review Research Grant, 2004

Principal Investigator.

Non-Peer Reviewed Grants/Funding

Dr. Davy Cheng

Lipid A Antagonist in CABG and/or valve surgery with CPB. \$20,000.

EISAI Inc.

Site Principal Investigator

Dr. Su Ganapathy

Research studies initiated by fellows and staff in regional and ambulatory anesthesia. \$8,300.00

I-Flow Corporation

Dr. John Murkin

Predictive value of brain oxygen saturation in cardiac surgery.

Somanetics - ongoing study.

Dr. Fiona Ralley

A Double-Blind Multicenter Study of the Safety and Efficacy of parecoxib Sodium/Valdecoxib and Placebo/Valdecoxib compared to Placebo for Treatment of Post Surgical Pain in Patients who have Coronary Bypass Graft via Median Sternotomy" - ongoing study.

Dr. Michael Sharpe

*Validation of the Datex-Ohmeda continuous EEG Module: Comparison with the standard, multi-channel EEG Monitor XL-TEK. \$45,988.00
Datex-Ohmeda Division, Instrumentarium Corp. 2002-03
Principal Investigator*

*A Phase 3, Randomized, Double-Blind, Comparative Study of Micafungin (FK463) versus Placebo in the preemptive antifungal therapy in patients in the intensive care unit. \$47,539.00. Fujisawa Healthcare Inc., 2002-03
Principal Investigator*

Visiting Observers

Christine Pape-Becker	January - July 2004	Department of Anaesthesiology University of Saarland Homburg, Germany
Myoung-OK Kim	February - July 2004	Department of Anesthesiology & Pain Medicine NHIC Ilsan Hospital Koyang, Kyungki, Korea
Naeem Zubair	March 15-19, 2004	Consult/Staff Anaesthetist Edmundston Regional Hospital Edmundston, New Brunswick
Ursula Beckmann-Barrie	May 28 - July 15, 2004	Intensive Care Specialist John Hunter Hospital Newcastle, NSW

Web Sites

Department of Anesthesia & Perioperative Medicine Web Site

<http://anesthesia.lhsc.on.ca/>

Anesthesiology Residents Page

<http://anesthesia.lhsc.on.ca/default.aspx?tabid=30>

Continuing Education Articles

<http://anesthesia.lhsc.on.ca/Default.aspx?tabid=41>

Telephone/E-mail Directory

<http://anesthesia.lhsc.on.ca/Default.aspx?tabid=27>

Fellowship Programs

<http://anesthesia.lhsc.on.ca/uwo/fellows/fellowships.htm>

London Ontario Teaching Hospitals

<http://www.lhsc.on.ca/>

<http://www.sjhc.london.on.ca>

UWO Faculty of Medicine

<http://www.med.uwo.ca/>

<http://www.med.uwo.ca/newfaculty/>