



DEPARTMENT OF ANESTHESIA & PERIOPERATIVE MEDICINE

***The University of Western Ontario
And Its
Teaching Hospitals***

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

**ANNUAL REPORT
July 1st, 2004 – June 30th, 2005**

Administrative Office:

Room C3-172

London Health Sciences Centre

University Hospital

339 Windermere Road

London, Ontario

N6A 4G5

Tel: (519) 663-3031 Fax: (519) 663-3161

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

TABLE OF CONTENTS

Vision and Mission Statement/ Chair/Chief Report	1
Organizational Chart	7
Faculty Members	8
Fellows & Residents	9
Site Chief Report, LHSC-University Hospital	11
Site Chief Report, LHSC- Victoria Hospital	13
Site Chief Report, St. Joseph's Health Care	15
Departmental Programs:	
Acute Pain Program	17
Ambulatory Regional Anesthesia/Analgesia Program	17
Anesthesia Assistant Program	19
Cardiac Anesthesia Program	21
Cardiac Surgery Recovery Program	23
Chronic Pain Program	24
Continuing Medical Education Program	26
Critical Care Program	27
Evidence Based Perioperative Clinical Outcomes Research (EPiCOR) Program	29
Fellowship Program	31
Liver Transplantation Program	32
Medical Informatics	32
Neuroanesthesia Program	33
Obstetrics Program	35
Perioperative Blood Conservation Program	36
Perioperative Cardiac TEE Program	38
Postgraduate Education Program	38
Preadmission Clinic	42

Thoracic/Vascular Anesthesia Program	43
Undergraduate Education Program	44
Didactic Teaching & Education	46
Faculty Awards/Certifications	51
Resident Awards	53
Faculty Participation Nationally and Internationally	
Conference Chair/Moderator	54
Invited Lectures/Visiting Professorships	57
Publications	69
Research Grants/Funding	78
Visiting Observers	83
Web Sites	84

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

*T*he 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. We strive to provide exemplary patient care and foster excellence in anesthesia delivery, research and education at the undergraduate, postgraduate levels and in continuing medical education at regional, national and international levels.

Chair/Chief Report

Davy Cheng, MD, MSc, FRCPC



*T*he Department of Anesthesia & Perioperative Medicine (Department) of the Schulich School of Medicine & Dentistry, *The* University of Western Ontario (UWO) consists of 63 departmental members who practice at the teaching hospital sites of the London Health Sciences Centre (University Hospital and Victoria Hospital) and St. Joseph's Health Care London.

The Department provides clinical support to 38-40 operating rooms/day at both LHSC (University and Victoria Hospitals), and SJHC London. We also provide the spectrum of medical care from conducting preoperative anesthesia assessment to performing the most advanced life-supporting techniques in all perioperative settings such as ambulatory surgery, subspecialty surgery, obstetric, pediatric care, out-of-OR interventional procedures, acute and chronic pain management, blood conservation management, post-anesthetic care unit, cardiac surgery recovery unit and intensive care units. In particular, the CSTAR

(Canadian Surgical Technologies & Advanced Robotics) research and training centre at the London Health Sciences Centre, UWO is a national centre of excellence for advance surgical training and research in minimally invasive surgery procedures such as cardiac, thoracic, urology, general and fetus surgery. This provides an excellent training facility and program for anesthesia in the latest and most advanced minimally invasive surgery management.

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

Administration

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

Seven new faculty joined the Department during this year:

Dr. Jeff Granton was recruited to the Department in July 1st, 2004 based at LHSC-University Hospital. Dr. Granton was a medical graduate from UWO. He completed his residency in our Department in June 2003 and obtained his FRCPC, followed by a one year Fellowship in the Adult Critical Care Medicine Program and UWO/LHSC under the direction of Dr. David Leasa. Dr. Granton had further passed the examination in perioperative transesophageal echocardiography.

Dr. Robert Banner was recruited in September 2004 from the University of Saskatchewan to our Department in the Multidisciplinary Pain Program based at SJHC. Now 60% of his time is spent in chronic pain adding a complementary and alternative/integrative approach to pain treatment. Residents and Clinical Fellows are exposed to and are learning how these approaches add to the care of patients with chronic pain. A Departmental research grant has been awarded to Dr. Banner to investigate the use of intravenous procaine in neuropathic pain. As editorial reviewer for the Journal of Complementary and Integrative Medicine Dr. Banner is working with others at UWO to develop a network of interested professionals who practice integrative and complementary therapies within the framework of traditional medicine.

Dr. Chris Harle was recruited to Canada from the UK in the Department on September 1st, 2004 based at LHSC-University Hospital. Born and educated in South Africa, he graduated from the University of Stellenbosch Medical School. He obtained his South African diploma in anesthesia at the King Edward the VIII Hospital in Durban and moved to the UK for further training where he was awarded the FRCA in 1996. He worked as a consultant cardiothoracic anesthetist at Blackpool Victoria Hospital. Dr. Harle's main interests lie in adult cardiothoracic anesthesia, coagulation management, transesophageal echocardiography, and education.

Dr. Pravin Batohi was recruited to UWO from Newfoundland and began working at SJHC since September 1st, 2004. He received his medical degree from the University of Natal, Durban, South Africa in 1983 and his Diploma in Anesthesia in 1988. Dr. Batohi completed his last year of residency at *The University of Western Ontario* in 2001 and obtained his FRCPC. He had been practicing anesthesia at the James Paton Memorial Hospital in Gander, Newfoundland and for several years worked as a locum in our Department before moving back.

Dr. Valerie Schulz joined the Department in September 2004 and is based at LHSC-University Hospital. She is a graduate of the Anesthesia Residency Program, UWO and received her FRCPC certification in 1986. Dr. Schulz has specialized expertise in palliative medicine and her focus is on palliative care in an acute care patient setting. She is one of the first of five candidates to be awarded the Associated Medical Services Care at End of Life Fellowship in Canada.

Dr. Ngozi Imasogie completed a Fellowship in Obstetrics and Regional Anesthesia in our Department and joined the faculty at SJHC in November 2004. She attended the College of Medicine, University of Ibadan, Nigeria where she received her MB BS Ibadan. She received her Diploma in Anaesthesia (DA), Faculty of Anaesthesia West African College of Surgeons and FRCA London, UK. Dr. Imasogie's focus is on ambulatory, regional anesthesia and obstetric anesthesia

Dr. Ewa Bernadska was recruited to the Department in April 2005 and is based at SJHC where her primary functions are acute pain management and clinical anesthesia. She obtained her Medical Degree from the Wroclaw School of Medicine in Poland. She enrolled in the Anesthesia Residency program at the Memorial University of Newfoundland and received her FRCPC in 1996. She practiced anesthesia at hospitals in Newfoundland and community hospitals in Ontario prior to moving to London.

Future Recruits:

Department senior residents Dr. Brian Church and Dr. Kate Ower, who have also completed a one-year fellowship, have been recruited to join the Department in 2005. Dr. Miguel Arango who is currently doing a fellowship in neuroanesthesia will also be joining the Department.

Fellowship:

Under the Directorship of Dr. Rosemary Craen, the fellowship program is supported by the overall strengths in a broad scope of programs, good clinical exposure, excellent teachers and mentors and potential for research. As of July of 2005 there will be 14 fellows, up from 12 in 2004.

Administrative Functions:

Department faculty continue to play an important role in administrative functions outside the Department. Dr. Ian Herrick continues as Chief of Staff and Chair of the Medical Advisory Committee of LHSC; Dr. Neal Badner as Medical Director of the Preadmission Clinic, LHSC; Dr. John Fuller as Medical Director of Perioperative Care, SJHC and a member of the RCPSC Council; Dr. Ron Butler as Site Chief of ICU, LHSC University Hospital, and Associate Director of the Cardiac Surgery Recovery Unit, LHSC; Dr. Rosemary Craen as Chair of the Scientific Program Committee of the Canadian Anesthesiologists Society. Dr. Sal Spadafora has been appointed as a Corresponding Member (General)

of the Anesthesia Examination Board of the RCPSC for a two-year renewable term. Dr. Richard Cherry is an anesthesia representative for the Respiratory Therapist Program at Fanshawe College and along with Dr. Jim Watson, is a member of the Program Advisory Committee for the Anesthesia Assistant Program.

Departmental Retreat:

On November 11, 2004 the Department held a full day Retreat to reflect on the progress, analyze the current situation and to plan for the future in clinical and academic integration. The Dean of Medicine and Dentistry, and hospital administrators were present to reinforce the direction of the University and the teaching institutions. The Retreat confirmed a shared vision for excellence in clinical care, teaching and research and generated a number of suggested actions to enhance the clinical academic programs as well as the Department's role in Undergraduate and Postgraduate Education.

Anesthesia Academic Practice Plan (AAPP):

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

Clinical

The citywide Department has several areas of strong clinical activity including transplantation, acute pain and regional anesthesia, chronic pain program, critical care, obstetric anesthesia, pediatric anesthesia, etc. in addition to the established areas of neuroanesthesia, cardiac anesthesia, and perioperative blood conservation. These focused clinical areas will continue in further development and recruitment by the Department.

Education

The Post Graduate Education Program under the Directorship of Dr. Sal Spadafora and Associate Directorship of Dr. Sandra Katsiris continues to thrive and grow, with forty Anesthesia residents and thirty- four off-service residents hosted from other residency training programs. Residents achieve continued success at the Royal College

examinations. The program offers general and sub-specialty rotations (Chronic Pain, Cardiac, Neuro, Ambulatory, Regional, Obstetric, Thoracic, Vascular, Pediatric, Preadmission Clinic). New rotations in Airway Management and Acute Pain and the Cardiac Surgery Recovery Unit are being implemented. Rotations throughout Southwestern Ontario (SWOMEN) are offered with over 20 residents participating. Our Continuing Medical Education Program under the leadership of Dr. Sandra Katsiris features invited lecturers from top academic institutions.

Research

The Department is committed to enhance academic productivity and academic resources including protected time and clinical access to research cases. The Department is ranked amongst the top in peer-reviewed publications in academic anesthesia departments in Canada. The investigators have been successful in peer-review research grants and contract grants annually. The Department continues to build on the strengths of several successful academic programs: Cardiac Anesthesia and post Cardiac Surgical Recovery Unit; Neuroanesthesia, and Pain Program. New academic programs were developed such as the Perioperative Blood Conservation Program and the Evidence-based Perioperative Clinical Outcomes Program. Recruitment is targeted at individuals with demonstrated academic and research productivity in cardiac anesthesia, TEE, pain, regional anesthesia, transplant and critical care medicine. The expansion of the Fellowship Program has also resulted in increased academic productivity. Residents play an active role in research and presented a total of 20 presentations (poster and oral) at the Resident Research Day held jointly each year with the Anesthesia Program at McMaster University. The Canadian Anesthesiologists' Society Annual Meeting in Vancouver was also well represented by our residents. Dr. Geoff Bellingham was awarded the 2005 CAS LMA Vitaid Resident Research Award. Dr. Timothy Turkstra received the CSCI CIHR Resident Research Award and the PSI Foundation Resident Research Award.

DEPARTMENT OF ANESTHESIA & PERIOPERATIVE MEDICINE

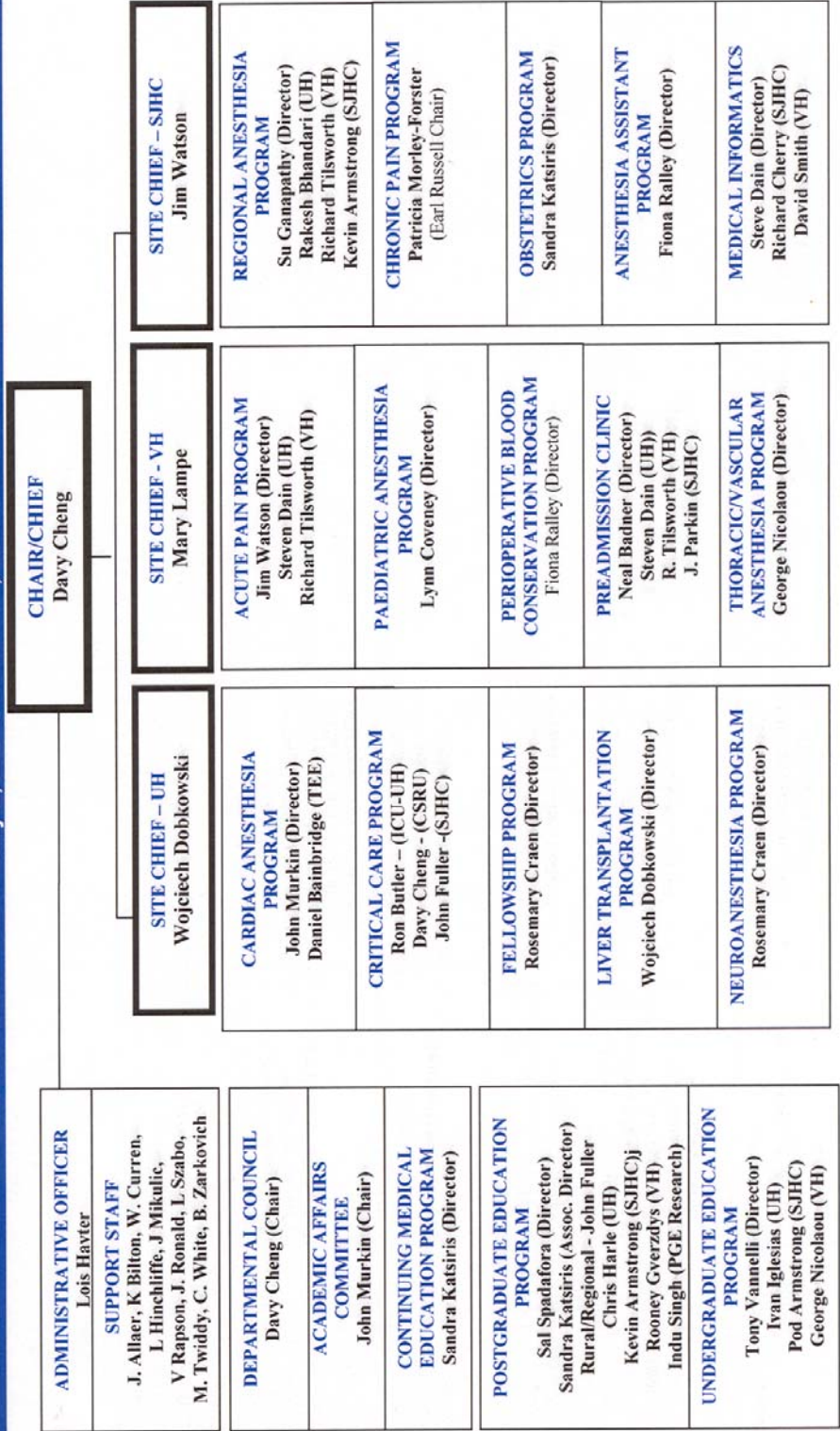


Schulich
MEDICINE & DENTISTRY

The University of Western Ontario

ORGANIZATIONAL CHART

July 2, 2004 – June 30th, 2005



DEPARTMENT OF ANESTHESIA & PERIOPERATIVE MEDICINE FACULTY MEMBERS

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

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

Adjunct Professors St. Thomas-Elgin General Hospital

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

Professor Emeritus

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

Adjunct Professors Windsor

Arya, B.
DaSilva, S.
De Dios, O.
Doerksen, D.
Fallon, K.
Gnanendren, K.
Liolli, A.
Roberts, E.
Smith, J.
Taylor, W.

CLINICAL/RESEARCH FELLOWS

Arango, Miguel	Neuroanesthesia
Church, Brian	Vascular/Thoracic Anesthesia
Dhir, Shalini	Obstetric Anesthesia
Foster, Gareth	Regional Anesthesia
Ha, Duc	Cardiac Anesthesia
Hadi, Ibrahim	Pain Management
Kenway, Lisa	Regional and Obstetric Anesthesia
Khalifah, Nezar	Neuroanesthesia & Informatics
Kashanian, Benham	Cardiac Anesthesia
Kopyeva, Tatyana	Cardiac Anesthesia
Marwaha, Gulshan	Regional Anesthesia
Ower, Kate	Pain Management
Saidi, Nousheh	Cardiac Anesthesia
Sait, Atif	Cardiac Anesthesia

RESIDENTS

PGY5	PGY4	PGY3
Akhtar, Wasim	Abotaiban, Ahmad	Al-Babtain, Hesham
Al-Sadkhan, Haydar	Dicecco, Rom	Gros, Michelle
Hadi, Ibrahim	Dugas, Geoff	Liang, Lily
Jones, Philip	Ewing, Kevin	Ma, Martin
Lee, Stephen	Hussein, El-Hadi	Mallin, Becca
Turkstra, Tim	Prychitko, Jonathan	Morrell, Bobbi Jo
Yu, Jian	Roos, Martin	Narayanan, Kanna
		Sandhu, Manjot
		Teague, Kevin
		Toptchieva, Anna
PGY2-3	PGY2	PGY1
Gilchrist, Andrew	Al-Areibi, Arif	Al-Turkistany, Hanan
	Al-Solu, Hani	Evans, George
	Bellingham, Geoff	Lewis, Mark
	Brooks, Chris	Mack, Peter
	Chelico, Liza	Min, Frank
	Dashti, Abdullah	Tran, Diem
	Dlacic, Aleksandra	
	Katyal, Parul	
	Luk, Ken	
	Nguyen, Quoc	
	Sarca, Dana	
	Schwartz, Robert	

RESIDENTS

2004
to
2005



ABOTAIBAN, A



AKHTAR, W



AL-AREIBI, A



AL-BABTAIN, H



AL-SADKHAN, H



AL-SOLU, H



AL-TURKISTANY, H



BELLINGHA, G



BROOKS, C



CHELICO, L



DASHTI, A



DICECCO, R



DLACIC, A.



DUGAS, J



EVANS, G



EWING, K



GILCHRIST, A



GROS, M



HADI, I



HUSSEIN, E-H



JONES, P



KATYAL, P



LEE, S



LEWIS, M



LIANG, L



LUK, K



MACK, P



MALLIN, B



MA, M



MIN, F



MORRELL, BJ



NARAYANAN, K



NGUYEN, Q



PRYCHITKO, J



ROOS, M



SANDHU, M



SCHWARTZ, R



TEAGUE, K



TRAN, D



TURKSTRA, T



YU, J

Site Chief Report, LHSC-University Hospital

Dr. Wojciech Dobkowski



During the past year, University Hospital site has continued to meet and exceed its mission..... *Clinical Excellence, Education and Research.* Many clinical research projects were completed and others undertaken. There were increased numbers of medical students and residents rotating through the department and feedback from them reflected a very high standard of clinical teaching. There were Fellows in cardiac anesthesia, neuroanesthesia and regional anesthesia at UH during 2004-05.

Over the past year, the UH Department of Anesthesia and Perioperative Medicine has seen considerable changes with many service transfers to this site. While this was challenging, Department members continued to provide exemplary clinical care to their patients.

The intraoperative transesophageal echocardiography service continued to flourish and meet the increased demands resulting from the transfer of cardiac surgery to UH. The robotic cardiac surgery program, which restarted in 2003, saw continued development and expansion with many patients benefiting from this less invasive technique.

UH Anesthesia provided clinical services for cardiac surgery, neurosurgery, general surgery, orthopedics, sports medicine, plastic surgery, dentistry, urology, ENT, interventional neuroradiology, EP Lab, cardiac angiography, pre-admission clinic, acute pain service and 24-hour coverage for liver transplantation.

Cardiac Anesthesia Program (Dr. John Murkin)

Traditionally, cardiac anesthesia is one of the most active academic groups at UH. Over the last year, with the transfer of cardiac surgery to UH, the cardiac anesthesiologists and surgeons from Victoria Hospital were welcomed to University Hospital.

There is a dedicated group of anesthesiologists with a focus on beating-heart surgery and robotic cardiac surgery and a number of research projects are underway in this area.

Transesophageal Echocardiography Program (Dr. Daniel Bainbridge)
Under Dr. Bainbridge's leadership, the TEE Program continued to flourish. TEE rounds on Wednesday mornings, prior to regular rounds, have been very well received and attended.

Neuroanesthesia Program (Dr. Rosemary Craen)
The Neuroanesthesia Program remains one of the strongest in the Department with a very dedicated group of neuroanesthesiologists. This group continues to receive international recognition in the research area. There is a superb Neuroanesthesia Fellowship Program under the leadership of Dr. Craen.

Acute Pain Service (Dr. Steven Dain/Dr. Rakesh Bhandari)
Drs. Dain and Bhandari and Cindy Carnegie, RN, have continued to devote themselves to the development and expansion of the Acute Pain Service. The APS has grown into a well-oiled academic program with an excellent database, research and innovative methods of teaching. Residents and Fellows are provided with specialized and cutting-edge training in the area of acute pain management.

Continuing Medical Education Program
Dr. Mary Lampe will be joining University Hospital and as of August 1st, 2005 will be supervising the CME Program currently under the supervision of Dr. Sandra Katsiris. This program has been very actively developing and benefiting all our colleagues.

Undergraduate Education (UH - Dr. Ivan Iglesias)
We have continued to have increasing numbers of Meds 3 and 4 students rotating through the Department. Feedback from the students indicates that we are exceeding their expectations in the area of clinical teaching. Over the past year, Dr. Iglesias undertook many new initiatives, including airway management case logging and out-of-OR IV training.

Postgraduate Medical Education (UH - Dr. Chris Harle)
Dr. Harle assumed responsibility for postgraduate education at University Hospital in the spring of 2005 following Dr. St-Amand's

resignation from this position after many years of dedicated service. Resident evaluation of the UH clinical teaching and rotations continued to be excellent in all areas.

Anesthesia Rounds (Dr. Achal Dhir)

Dr. Achal Dhir assumed responsibility for educational rounds and organized a series of interesting, topical and educational rounds for Department members. Rounds have included lectures, case presentations, morbidity and mortality and resident/fellow presentations.

Fellowship Program (Dr. Rosemary Craen)

Under Dr. Craen's expert guidance, over the past year the Fellowship Program has continued to expand and flourish in all subspecialty areas. We were able to attract high quality Fellows from many countries. The cardiac fellowship was especially popular. In addition to honing their cardiac subspecialty skills in the operating rooms, the cardiac anesthesia Fellows also had the opportunity to work in the newly opened Cardiac Surgery Recovery Unit.

Regional Anesthesia Program (UH - Dr. Rakesh Bhandari)

Under Dr. Bhandari, the Regional Anesthesia Program continued to grow and develop. Ultrasound guided regional blocks are now being undertaken with regularity.

Site Chief Report, LHSC-Victoria Hospital

Dr. Mary Lampe



*O*n June 12, 2005, we completed the long-awaited consolidation of Victoria Hospital Operating Rooms and Perioperative Patient Care from two sites, (South Street Campus and Westminster Campus) to one site now called Victoria Hospital on Commissioner's Road.

Further development of the Thoracic/Vascular and Pediatric Anesthesia subspecialty programs occurred after the Departmental Retreat in November 2004.

Thoracic/Vascular Anesthesia: Dr. George Nicolaou as Thoracic/Vascular Program Director and Dr. Neal Badner as Co Director established monthly multidisciplinary rounds (including surgeons, anesthesiologists, OR and ward nursing staff), defined generalist and subspecialty case mix in thoracic and vascular anesthesia, completed resident/fellow rotation objectives and began two clinical research projects in these subspecialties.

Pediatric Anesthesia: The Division of Pediatric Surgery was officially established in January 2005 in response to the December 2003 external review of Pediatric Surgery and Anesthesia in London. Three dedicated Pediatric Surgery ORs daily have been assigned at VH; most Pediatric surgical cases have been consolidated to VH (Children's Hospital of Western Ontario) and Perioperative Anesthesia Support ("parental presence at induction" program, Preoperative Assessment and Postoperative Pain Management) has also progressed. We now participate in a nationwide Pediatric Anesthesia Round teleconference every two months and formal Pediatric Anesthesia curriculum design is underway under the guidance of the Pediatric Anesthesia Program Director, Dr. Lynn Coveney with input from members of the Pediatric Anesthesia interest group.

Obstetrical Anesthesia: Dr. Sandra Katsiris, the citywide Obstetrical Anesthesia coordinator has successfully introduced a citywide standardized Obstetrical Anesthesia care approach. At VH, she has also been successful in the last two months in transitioning the Obstetrical Anesthesia services provided at VH from a service intertwined with the Operating Room services at VH to "stand alone" program status which will support the move of all Obstetrical Anesthesia services in London to a new location distant from the Operating Rooms at VH in January 2008.



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. Ngozi Imasogie and Dr. Eva Bernadska joined our faculty at SJHC in September 2004. Dr. Imasogie will continue to pursue her subspecialty interests in regional anesthesia and Dr. Bernadska in obstetrical anesthesia. 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 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. Gareth Foster-Regional, Dr. Shalini Dhir,-Obstetrical and Regional Anesthesia, and Dr. Kate Ower-Chronic pain/Regional. In the next year we will have four fellows in chronic pain, regional and obstetrical 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.

Ambulatory and Regional Anesthesia/Analgesia Program

Dr. Sugantha Ganapathy (Director)



During the past year, the division made progress both in clinical teaching and research. The problems with cox-2 inhibitors resulted in many research projects from being completed. The movement of general surgery to the University Hospital has delayed completion of one research project.

Dr. Imasogie joined the group as a staff at St. Joseph's Health Care. The allocation of consultants with experience in regional anesthesia (Drs. K. Armstrong, P. Armstrong, I. Singh, J. Parkin, J. McKishnie, N. Imasogie and S. Ganapathy) to the block room for supervision of residents and fellows doing regional blocks at SJHC has resulted in

improved teaching, optimized turnover time and success with regional blocks.

Dr. Gareth Foster completed a fellowship in Regional Anesthesia. We currently have Dr. S. Dhir doing a fellowship in regional/ambulatory anesthesia and Dr. Mary Ho will begin her fellowship in July 2005. The project comparing ultrasound guided technique to traditional and stimulating catheters has been completed and has been accepted for presentation at the IARS meeting in March 2006. Plans to initiate rotation of SJHC fellows to LHSC UH to improve exposure to lower limb blocks has been accepted by the group. This should consolidate the experience of fellows in lower limb, truncal and upper limb blocks.

The process of selection of fellows in Regional Anesthesia has been formalized after discussion with the Fellowship Coordinator and Site Coordinators for Regional Anesthesia Drs. Armstrong and Bhandari.

Evaluation of patient suitability for regional blocks in the Preadmit Clinic has been accepted by the group and will be implemented in 2006.

Dr. Bhandari has initiated the purchase of an US machine for RA at LHSC UH. The block room area is being developed at this site too.

Development of pediatric regional anesthesia is scheduled for discussion in 2006.

SJHC purchased a Sonosite Titan for use in the block room. The use of ultrasound for initiating blocks has been adopted by SJHC and has reached a level of comfort that research projects are currently underway evaluating the role of ultrasound for regional anesthesia. The division had the first workshop on the use of Ultrasound for Regional Anesthesia in October 2004. This was funded by unrestricted educational grant from Sonosite. A section on US for regional anesthesia has been incorporated in the core seminar series for the residents.

Annual workshop demonstrating ultrasonography for regional anesthesia was conducted on December 9th and 10th 2004. Drs. Vincent Chan, Peter Bevan, and Colin McCartney were the guest faculty. Drs. Ganapathy, Armstrong and Foster were the local faculty providing the teaching. Apart from clinical demonstration of blocks, the workshop

introduced innovative hands-on experience for the use of ultrasound and insertion of stimulating catheters in the animal lab in anesthetized pigs. This was rated as a superb experience by registrants. The funding for the workshop for a total of \$16,000 was provided by unrestricted educational grants from industry sponsors.

Pfizer Canada has provided an unrestricted educational grant of \$6000.00 towards the database program. The program had an initial trial to fine-tune the data collection. Corrections have been made and the program is due to be initiated in 2006.

A study utilizing the I-Flow elastomeric pumps for wound infusion following total hip and knee arthroplasty is nearing completion. The abstract was accepted for presentation as a poster at the annual ASA meeting. Three patients have been discharged home the day after surgery following total knee and total hip arthroplasty under the care of CCAC utilizing this technique. A "Fast Track Arthroplasty Program" initiative has been submitted to the Ministry of Health for funding support.

Anesthesia Assistant Program

Dr. Fiona Ralley (Director)



*A*t the February Board meeting of the Canadian Anesthesiologists' Society (CAS) the Board accepted changes to the CAS Guidelines to the Practice of Anesthesia as recommended by the Standards Committee relating to the scope of practice by anesthesia assistants. These changes demonstrate the recognition for the increasing need for trained individuals to "help" in the delivery of safe and efficient anesthesia services and are a continuation of the development of the **Anesthesia Care Team**.

The CAS now recognizes the formal job designation of "Anesthesia Assistant", but stated that they must have undergone specific training in anesthesia assistance.

With these positive advancements from the CAS and the MOHLTC, a Program Advisory Committee was set up by Fanshawe College to address the possibility of offering a new college program for the training and accreditation of Anesthesia Assistants starting 2006. Members of this committee were from the Faculty of Health Sciences and Human Services, Fanshawe College, and the Departments of Respiratory Therapy, Nursing, and Anesthesia, from both LHSC and SJHC. The inaugural meeting was in April 2005.

At this meeting it was decided to survey the involved personnel e.g. Anesthesia Residents and Consultants, Respiratory Therapists and Critical Care Nursing Staff to assess the interest in developing such a program. In addition the need for such a program was discussed. The results of the survey were very positive from Anesthesia Consultants, but indicated a degree of wariness from the Anesthesia Residents who showed that they felt Anesthesia Assistants might infringe on their training opportunities in the OR. There was less interest from the Respiratory Therapist and Nursing Staff as indicated by the small numbers of returns of the questionnaires. After some discussion, it was the decision of the committee to continue with the development of the program.

Although a job description of the Anesthesia Assistants was developed for the Allied Health Committee of the CAS (presented at the Annual General Meeting, CAS, Vancouver, June 2005), the committee felt that a job description more related to our local needs was required which could then be compared to the national profile for completeness in the future. A national curriculum for Anesthesia Assistants has been developed by the Canadian Society of Respiratory Therapists and this will be used as a guideline for the development of the proposed program at Fanshawe College.

Obviously over the next twelve months there could be the possibility of the slow introduction of Anesthesia Assistants into the Operating Rooms. The scope of practice for anesthesia assistants must first be approved by the Department of Anesthesia, the local hospital

administration and/or the Medical Advisory Committee. The decision to hire anesthesia assistants will be dependent upon the hospital in which anesthesia services are provided and the consultant anesthetists who are providing these services.

Cardiac Anesthesia Program

Dr. John Murkin (Director)



*I*n continuance of the previous year, cardiac anesthesiologists have maintained the initiative to upgrade their clinical skills in order of enhancing patient care. The incorporation of TEE examination into routine clinical practice has continued, as have the series of weekly introductory TEE lectures, which were organized once again by Drs. Bainbridge and Iglesias.

As consultants have gained experience, this lecture series has expanded to include an increasing component of case presentations and an interactive searchable database is further being developed. Cases are being reviewed interactively on a regular basis amongst Consultants and Fellows.

The perioperative anesthesiology TEE service was established at University Hospital two years ago 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. This year a Quality Assurance Program involving forms indicating the minimum TEE views required according to the patient's main

diagnosis has been developed and implemented for the TEE examinations performed by the Fellows. While it is recognized that 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 support. As such, there is a commitment to provide sufficient consultant staffing to maintain this program. Our strong commitment to this program has strengthened our position as a leading academic anesthesiology centre and has placed cardiac anesthesiology at the forefront of clinical care.

Clinical research continues to be a very important and productive area for LHSC cardiac anesthesiology. With Dr Murkin as Principle Investigator the recently completed study assessing the role of cerebral oximetry in 200 cardiac surgery patients demonstrated a significant decrease in major organ morbidity and mortality in the monitored versus the control patients and has been submitted for publication. A follow-up study assessing the role of cerebral oximetry in diabetic patients undergoing coronary revascularization and incorporating perioperative neurocognitive testing as an outcome variable is currently underway. The CIHR-funded multicenter BART trial assessing the relative merits of aprotinin versus tranexamic acid versus amicar in high-risk cardiac surgical patients is ongoing with recruitment projected for the next 18 months. The CIHR-funded study of genetic predisposition to perioperative cognitive dysfunction has also commenced enrollment earlier this year and is being conducted in conjunction with investigators at UBC. Dr. Dobkowski and colleagues are assessing the impact of mini-circuit CPB and its impact on inflammatory mediators. Drs. Bainbridge and Iglesias are involved in a new project collecting information on right and left ventricular function using tissue Doppler techniques and right ventricle pressure waveforms. The protocol on collecting data on 100 patients and a proposal for grant funding has been submitted. Dr Taneja has received independent grant funding to investigate heparin kinetics and inflammatory mediators with emphasis on activated protein C in cardiac surgical patients.

Members of the Cardiac Anesthesiology Group have been well published again this year with editorials and peer-reviewed articles appearing in *Circulation*, *Anesthesiology*, *Canadian Journal of Anesthesia*, and *Heart Surgery Forum* among others. There has also been notable representation at several national and international

multidisciplinary meetings focusing on the perioperative management of cardiac surgical patients. Among these were the annual American Heart Association meeting in Dallas, 5th Annual Cardiac Team Meeting in Whistler, BC and the ninth annual “Outcomes” meeting that was held in Key West, Florida, the proceedings of which will be published in the February 2006 edition of Seminars in Cardiothoracic and Vascular Anesthesia.

The identified goals for the upcoming year continue to be to integrate the Cardiac Anesthesiology Group onto one site following the integration of all cardiac surgical services at the University Hospital site. Our strong commitment to the incorporation of all qualified and interested members of the city-wide cardiac group has led the cardiac anesthesiology section of The London Health Sciences Centre to be internationally recognized and remain dedicated to “exemplary care, teaching and research.”

Cardiac Surgery Recovery Program

Dr. Davy Cheng (Director)



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

The CSRU specializes in the post operative care of patients who have had cardiovascular surgery such as bypass, valve replacements, heart transplantation and robotic cardiac surgery. The unit has state of the art

equipment to meet the complex needs and fast track recovery of our cardiac surgical patients.

Chronic Pain Program

Dr. Patricia Morley-Forster (Earl Russell Chair)



The Department of Anesthesia and Perioperative Medicine welcomed new faculty member Dr Robert Banner, from Saskatoon. Dr Kate Ower, a graduate of the Western Anesthesia residency program, will also be joining the Department following completion of her Fellowship. Both have training in chronic pain management.

Clinical Care

In November 2004, a presentation was made to the Quality of Care Committee of the St. Joseph's Health Care Board reviewing the service at the Pain Clinic at St. Joseph's. Almost 90% of survey respondents rated their overall quality of care as either excellent or very good. The number of patient visits had increased by over 40% in 2004 in comparison to 2002. A fast-tracking system has been established to allow patients with certain types of neuropathic pain to be treated early to reduce the development of chronic pain.

Education

We have been fortunate to have two excellent fellows training in the Chronic Pain Program, Dr Ibrahim Hadi since March, 2005, and Dr Shyam Balasubramanian who arrived from the United Kingdom in July, 2005.

There has been growing interest from other disciplines in understanding pain and its consequences with invited presentations being made to the Departments of Medicine, Psychiatry, Family Medicine, ENT, and Plastic Surgery. Monthly Interdisciplinary Pain Rounds continued with a program of external visiting speakers and internal faculty from a wide range of disciplines.

With his interests in prolotherapy and neural therapy, Dr. Banner has been invited to join the London Integrative Medicine Network with a mandate to increase the teaching of Complementary Medicine in the Faculty of Medicine and Dentistry.

Research

Dr. Geoff Bellingham PGY3 was awarded the LMA/Vitaid CAS Resident Research Award for his project *The Use of Intra-operative, Low-Dose Ketamine in Chronic Pain Patients Undergoing Laparotomy* at the 2005 CAS conference. Research links have been strengthened with the Lawson Heath Research Institute, particularly the Geriatric Care and Rehabilitation Program with a collaborative grant application to the WSIB Regional Centres of Excellence Program. The Canadian Foundation for Innovation (CFI) awarded financial support in 2003 for a two-year pilot project to evaluate the long-term pharmacologic management of chronic neuropathic pain with an outcome-oriented computerized database. This pilot has been completed in July 2005 and the results have been presented at several international conferences. Plans are proceeding to extend the data collection to other academic pain clinics in Canada.

Financial Success

Dr. Earl Russell generously donated another million dollars to bring the total endowment for the Earl Russell Chair in Pain Management to two million dollars. This has allowed recruitment of a researcher with an international reputation in pain research to take on the Chair and to focus on expanding the research component of the Pain Program. The mandate of the original Chair included the responsibility of Medical Director of the SJHC Chronic Pain Clinic. With growth of the clinic, it has become necessary to make the Directorship a separate administrative position. AMOSO has provided a grant of \$60,000 for three years to assist with funding this new role.

Continuing Medical Education Program

Dr. Sandra Katsiris (Director)

*M*embers of the Department had the opportunity to attend a total of 14 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, a number of sessions were presented by affiliates of *The University of Western Ontario*.

Ms. Shelagh Bantock	Department of Risk Management, LHSC
Dr. Lorne Gula	Department of Cardiology
Mr. Richard Jones	Department of Pharmacy, LHSC
Dr. Barbara Lent	Associate Dean, Equity & Gender Issues, & Faculty Health, Department of Family Medicine
Dr. Richard Novick	Division of Cardiac Surgery
Dr. Michael Sharpe	Department of Anesthesia & Perioperative Medicine
Dr. Bryan Young	Department of Clinical Neurological Sciences

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

Dr. Pamela Angle	University of Toronto
Dr. Joachim Boldt	Justus-Liebig University, Germany
Dr. Richard Cooper	University of Toronto
Dr. Barry Finegan	University of Alberta
Dr. Orlando Hung	Dalhousie University
Dr. Bruce Macpherson	University of Toronto
Dr. Terry Smith	University of Toronto

All sessions met criteria for accreditation by the Royal College of Physicians and Surgeons of Canada's Maintenance of Certification Program.

Dr. Mary Lampe will be assuming responsibility for the Continuing Medical Education Program effective August 1, 2005.

Critical Care Program

Dr. Ron Butler, ICU-UH



*T*he Critical Care Program at the University of Western Ontario is a multidisciplinary program that provides Royal College postgraduate training in Critical Care Medicine.

Trainees gain experience caring for critically ill patients in the Richard Ivey Critical Care Trauma Centre (30 beds) at Victoria Hospital and the Medical Surgical Intensive Care Unit (24 beds) and the Cardiac Surgery Recovery Unit (16 beds) at University Hospital.

The critical care units are newly built at both University Hospital and Victoria Hospital and incorporate the newest technologies. There is exposure to a wide variety of clinical services within the program including: trauma, major vascular, thoracic, neurological, neurosurgical, transplant and cardiac. The Program in Critical Care has a well-established educational program for trainees, which has been recognized for its excellence by the Royal College of Physicians and Surgeons. There are 15 faculty within critical care with a range of clinical backgrounds including anesthesia, internal medicine, emergency

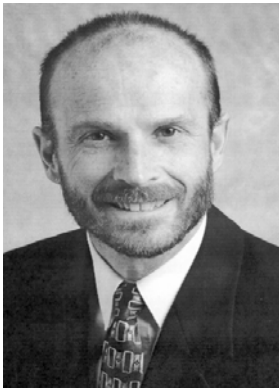
medicine and surgery. Faculty members are involved in education, basic science and clinical research.

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



*T*he Adult ICU at SJHC was successfully transferred to LHSC in April 2005, in keeping with the mission of Hospital Restructuring. Staff moved with the Program, or found alternative positions within SJHC.

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

The Step Up Capability was inaugurated on April 25, 2005, coincident with closure of the SJHC ICU. Step Up has operated successfully since then. The numbers of patients and levels of acuity are almost exactly as predicted. This service has allowed continuation of the planned level of Obstetric and Surgical activity at SJHC.

Evidence Based Perioperative Clinical Outcomes Research (EPiCOR)

Janet Martin, Pharm D; Daniel Bainbridge, MD; Davy Cheng, MD



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

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

The EPiCOR Program has completed the following research:

- Cheng D, Bainbridge D, Martin J, Novick R. Does off-pump coronary artery bypass reduce mortality, morbidity and resource utilization when compared to conventional coronary artery bypass or percutaneous coronary intervention? A meta-analysis of randomized trials. *Anesthesiology* 102:188-203, 2005.
- Bainbridge D, Cheng D, Martin J. Safety and efficacy of off pump coronary artery bypass surgery versus conventional coronary artery bypass and percutaneous transluminal coronary angioplasty. *Seminars in Cardiothoracic and Vascular Anesthesia* 9:105-111, 2005.
- Bainbridge D, Cheng D, Martin J, Novick R. NSAID-analgesia, pain control and morbidity in cardiothoracic surgery. *Can J Anesth* 53:46-59, 2006.
- Bainbridge D, Cheng D, Martin J, Novick R. Patient-controlled analgesia versus nurse-controlled analgesia: A meta-analysis of randomized trials. *Can J Anesth* 2006 (in press)

The EPiCOR Program also contributes to teaching opportunities and publications for the purpose of raising awareness of the need for evidence-based decision-making:

- Cheng DCH, Martin JE. Raising the bar: a primer on evidence-based decision-making. *Seminars in Cardiothoracic and Vascular Anesthesia* 9:1-4, 2005.

Ongoing projects by the Program include:

- Off-pump coronary artery bypass surgery versus percutaneous coronary intervention: A meta-analysis and systematic review
- Utilization of volatile anesthetics: An economic assessment
- Off-pump coronary artery bypass surgery versus conventional coronary artery bypass surgery: An economic evaluation
- Aprotinin in Cardiac Surgery: A meta-analysis of dose-response.
- Aprotinin versus tranexamic acid in cardiac surgery: A meta-analysis of randomized trials
- Aprotinin in orthotopic liver transplantation: A meta-analysis of randomized trials
- Amiodarone in cardiac surgery: A meta-analysis of randomized trials
- Drugs for post-operative nausea and vomiting: A systematic review and meta-analysis of randomized trials
- Impact of duplicate publications on meta-analysis

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.

Liver Transplant Program

Dr. Wojciech Dobkowski (Director)

*T*he Liver Transplant Team comprised of Drs. Fiona Ralley, Achal Dhir, Tony Vannelli and Wojciech Dobkowski provided expert care to 68 liver transplantation patients in 2004-2005. The academic program includes clinical projects:

- Mega dose of Aprotinin and anti-inflammatory response
- Renal protection during liver transplantation
- Brain oxygenation during liver transplantation

The Liver Transplant Fellowship Program has been in existence since 1989.

Medical Informatics Program

Dr. Steven Dain (Director)



*T*he Anesthesia informatics group had a very busy and productive year once again. Dr. Nezar Khalifah participated in our anesthesia informatics fellowship completing several projects. Drs. Dain and Bainbridge continued to develop the TEE database with the assistance of the cardiac fellows. This database will be used for both educational purposes as a means for the fellows to keep track of the TEE's that they perform and as a research tool.

The Department of Anesthesia and Perioperative Medicine has also been working with the Information Management Department at the London Health Sciences Centre with the deployment and testing of a wireless local area network within our Department and the University Hospital operating rooms. The departmental website continues to grow. Thanks to Ms. Jamie Allaer and Linda Szabo for assistance in keeping the information current.

Dr. Nezar Khalifah, during his informatics fellowship, with the assistance of Dr. Steven Dain developed expertise in database design and normalization, developed a basic understanding of Microsoft Access databases, and learned basic queries using structured query language (SQL). He also developed expertise in Macromedia Dreamweaver in development of two websites. The one website was for the UWO foreign graduates which provides an orientation for them to the resources at UWO and within London, ON. The other website was for the Saudi Arabian Society of Neurosurgery. Dr. Khalifah also created a database to help track neurosurgical patient's anesthetics, both for tracking resident experience and for research studies.

Dr. David Smith continued to provide excellent cases and questions for discussions on his *Question of the Week* website. Dr. Miguel Arango continues to develop databases for his research studies, and helps in the development of a multinational study database. He also provides information and support to the South American Neuroanesthesia Society website.

Neuroanesthesia Program

Dr. Rosemary Craen (Director)

*T*he aim of the Neuroanesthesia Fellowship Program is to provide advanced training to those individuals who either plan to enter academic anesthesiology with an emphasis in neurosurgical anesthesia or those who wish to practice in a setting that has a large number of neurosurgical procedures. Trainees gain knowledge not just through

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

Clinical Neuroanesthesia:

Cerebrovascular surgery and Endovascular Treatment: We are 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 hemifacial 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)

*T*he past year’s volume of deliveries in the city approximated 7000. This number continues to increase from previous years due to an escalating number of referrals from the periphery to both LHSC-VH and SJHC. SJHC continues to be the tertiary obstetrical referral centre in the city, responsible for the majority of high-risk obstetrical anesthesia care. However, with the arrival of Milestone I, and the movement of the

Critical Care Trauma Unit to Victoria Hospital, there has been an increase in the acuity of obstetrical patients being treated at Victoria Hospital.

The outer shell of the Grace Donnelly Women's Health Pavilion, located at LHSC-VH, is almost complete. Consolidation of obstetrical services in this centre is estimated to take place in 2008. There is still a huge amount of work to be done over the coming years to realize this vision.

With the vision of consolidation of obstetrical services at a single site, departmental movement toward unification of obstetrical anesthetic practice in the city continues. Standardized obstetrical post-partum pain sheets were implemented. Movement of elective c-sections out of the main operating rooms and back to the birthing centre is planned for Victoria Hospital. This is in keeping with the model at SJHC, and the planned model once consolidation occurs. The next endeavours will be standardization of patient information brochures and obstetrical anesthesia 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. The introduction of regular residents at Victoria Hospital, as well as the closure of operating rooms at South Street Hospital and transfer to Victoria Hospital has significantly increased resident exposure to obstetrical anesthesia in the city.

The obstetrical anesthesia fellowship program has accepted Dr. Kathy Woo to participate as a clinical fellow for the upcoming year.

Perioperative Blood Conservation Program

Dr. Fiona Ralley (Director)

*U*nfortunately the growth of this program has been restricted by the lack of funding to support additional personnel for patient management and data collection and analysis. However it has managed to continue with its primary goals for teaching, research and patient education.

Orthopedic and vascular patients continue to be the main source of patient care although the program is now referred most of the patients who refuse blood products to review. Expansion of patient care services to elective primary coronary artery bypass graft surgical procedures is to begin in the fall.

Over the past twelve months, all vascular and orthopedic patients were screened preoperatively to review if any perioperative blood conservation modalities were indicated. 154 vascular patients were reviewed, with a reduction in transfusion rate of 39.7% to 28.6% over the twelvemonth period. 863 primary arthroplasty patients and 185 revision arthroplasty patients were also reviewed. Of these patients 93 (9%) received preoperative EPREX and 92 (9%) predonated autologous units of blood. Unexpectedly transfusion rates in knee replacement procedures have risen over the past six months and this is being vigorously investigated. A relationship to the change of postoperative anticoagulation regimens from oral Coumadin to sc fragin has been suggested as the possible cause.

A proposal for new and expanded program/service was presented to the Medical Advisory Committee for LHSC and was subsequently endorsed as consistent with current standards of care and the recommendations of the Krever Commission. In addition they further recommended its operational integration within the perioperative care program. Current efforts are now being directed to the programs integration with the Surgical Clinical Business Unit. It is hoped that this integration will lead to additional staff support.

A research project into the management of perioperative anemia is in progress and data collection to form a database to assess the possibility of predicting patients that will require blood transfusion during surgery for primary CABG procedures is being developed. Teaching of the nursing and medical staff has continued throughout the year and included an information session for nurses in the preadmit clinic on the use of various blood conservation modalities for patients undergoing primary CABG. It is hoped that this will enable us to use some of the resources of the PAC in the future.

Perioperative Cardiac TEE Program

Dr. Daniel Bainbridge (Director)

The perioperative TEE program currently utilizes 3 TEE machines and 4 TEE probes to provide imaging to over 30 patients per week at University Hospital. We currently have 9 staff anesthesiologists who have successfully completed the Perioperative echocardiography exam. As part of the perioperative TEE program, weekly seminars on perioperative TEE are ongoing with topics ranging from basic principles, to literature reviews, to case presentations. This seminar series is now starting its 4th year, and provides an excellent opportunity for staff to review TEE concepts while also providing a venue for teaching both fellows and residents.

Postgraduate Education Program

Dr. Sal Spadafora (Director)



During the academic year 2004-05, the Postgraduate Education Program of the Department of Anesthesia and Perioperative Medicine at the University of Western Ontario had 43 Anesthesia residents and 34 off-service residents hosted from other residency training programs.

The program continued to provide excellent teaching, clinical exposure, research opportunities and a comprehensive teaching program. The program saw a consolidation of Cardiac Anesthesia rotations at University Hospital and the consolidation of the Victoria Hospital sites at the Commissioners Road site with the closure of South Street Hospital operating rooms.

Educational Activities:

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

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

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

Our first annual Airway Management Workshop was held on October 2, 2004. This comprehensive didactic and practical hands-on course was developed through the tireless efforts of Dr. D. Bainbridge and Dr. I. Iglesias.

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.

Our scheduling of rotations, evaluations of residents, faculty evaluation and tracking of cases has been converted to an online electronic system with the One45 system and the national Resident Log Book project. The programs were implemented under the guidance of Dr. R. Cherry and will enable us to improve our management of this data.

Resident Research Day:

Our resident research day took place in Hamilton on June 1, 2005. This full day event, held jointly with the Anesthesia Program at McMaster University, was a great success. A special thanks to Drs. Peachey, Rieber & Skrinkas of McMaster University for a well-organized event.

The day consisted of 13 poster presentations and 7 oral research presentations. The invited lecturer was Dr. W. Scott Beattie who presented "Resident Contributions to the Science of Anesthesiology". Dinner and an anesthesia trivia night followed at the McMaster University Faculty Club.

Our residents played an active role in presentations at the Annual Canadian Anesthesiologists' Society Meeting in Vancouver in June 2005. Dr. Tim Turkstra represented the program with his participation in the CAS Annual Resident Research Competition. Dr. Geoff Bellingham was awarded the 2005 CAS LMA Vitaid Resident Research Award. This is the third time in the past four years that this prestigious national resident research award has been given to a resident in our program (Drs. Jones 2002 and Turkstra 2004).

Research Presented:

Ahmad Abotaiban, PGY4:

Use of Tsui Test for Targeted Epidural Blood Patch in a Patient with Spontaneous Intracranial Hypotension Pressures Generated by Air Compression During Loss of Resistance Technique

Aleksandra Dlacic, PGY2:

Postoperative Lidocaine for Exacerbation of Chronic Non-Cancer Pain

Andrew Gilchrist, PGY2:

Anesthetic Management of a Parturient with an Intra-abdominal Pregnancy

Parul Katyal, PGY2:

Endotracheal Cuff Puncture: A Complication of Intrajugular Venous Cannulation

Nezar Khalifah, Clinical Fellow:
Anesthetic Management for Clipping of a Giant Middle Cerebral Artery Aneurysm Using Selective Cerebral Hypothermia

Lily Liang, PGY3:
Use of Ultrasound Guided Axillary Block in Morbidly Obese Patients

Kate Ower, Clinical Fellow:
Qtc Prolongation in a Chronic Pain Patient Treated with Methodone

Brian Church, Clinical Fellow:
A Review of Thoracic Epidural Analgesia versus Patient Controlled Analgesia for Patients with Chest Trauma

Kevin Ewing, PGY4:
Anesthetic Management of a Parturient with Mitral Regurgitation

Nezar Khalifah, Clinical Fellow:
Patient Satisfaction following Awake Craniotomy

Timothy Turkstra, PGY5:
Lightwand & Glidescope vs MacIntosh for Potential C-Spine Injury

2004 -2005 PGE Committee:

The following people have served the Postgraduate Education program and I wish to acknowledge them for their help and thank all the Faculty Members for their hard work. Dr. Lynn Coveney (Victoria Hospital) and Dr. Marc St-Amand (University Hospital) stepped down as site coordinators in the 2004 - 2005 academic year. Our thanks to them for their many years of dedicated service to the Postgraduate Education Program. They continue to contribute to our success in other ways.

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

PGE Committee Members:

Dr. Kevin Armstrong – SJHC Site Coordinator

Dr. Davy Cheng – Department Chair

Dr. Richard Cherry – IT Coordinator
Dr. John Fuller – SWOMEN Coordinator
Dr. Rooney Gverzdys – VH Site Coordinator
Dr. Christopher Harle – UH Site Coordinator
Dr. Sandra Katsiris – Associate Program Director
Dr. Ed Roberts – SWOMEN Windsor Rep
Dr. Indu Singh – Research Coordinator
Dr. Dave Smith – RCPSC Examiner
Dr. Mark Soderman – Community Anesthesia Rep
Dr. Sal Spadafora – Program Director
Linda Szabo – Education Coordinator

Resident Reps:

Dr. Kevin Ewing, Chief Resident
Dr. Bobbi Jo Morrell, Junior Resident Representative
Dr. Hesham Al-Babtain, ISR Representative

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. The primary focus of the UH site was the integration of cardiac services for the city as well as the absorption of inpatient general surgical patients from SJHC. The VH site worked towards consolidation into a new clinic planned for the summer of 2005. Volumes and patient comorbidities continued to increase at both sites.

Thoracic/Vascular Anesthesia Program

Dr. George Nicolaou (Director)

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

Vascular surgery operates five times a week and thoracic surgery three times a week. Our TEE program is well developed with formal teaching and rounds. We also have multidisciplinary rounds with our surgical colleagues.

The majority of the vascular and thoracic patients coming through our institution have multiple co-existing diseases including cardiorespiratory compromise. These patients have an extensive preoperative evaluation by anesthesia and/or internal medicine, cardiology and respirology. We are also in the process of developing a postoperative high-risk clinic for follow up of these patients. The thoracic and vascular surgical programs have their own postoperative step-down monitored units. The video-assisted thoracoscopic and robotic thoracic programs are well established at our institution. The number of procedures performed in this fashion is increasing every year.

The endovascular stent program for abdominal and thoracic aneurysms is one of the biggest in North America. Ruptured aneurysms that have favourable anatomy are repaired by endovascular stents. The thoraco-abdominal program is well developed and encompasses, when necessary, the use of partial left heart bypass.

Our residency program includes two four week blocks of subspecialty training in vascular and thoracic anesthesia. Educational objectives are clearly outlined and monitored through daily assessments. The residents are encouraged to partake in clinical research. At the

beginning and at the end of their rotations, the residents have an MCQ examination to assess improvement during their rotation. An oral examination is also administered at the end of the rotation.

Our fellowship program is well established with ongoing clinical research opportunities in collaboration with our surgical colleagues. The program is one year in duration. Each week the fellow works with a consultant one day in the vascular and the thoracic room, as well as two days independently in other services. The fifth day is reserved for academic or research pursuits. The fellows are encouraged to attend radiology and vascular rounds, and bronchoscopy clinics. Reading material is provided and they are encouraged to go to another centre for an elective to further enhance their training. The program is flexible and is designed to accommodate one's educational needs.

Overall, the Vascular and Thoracic Program at Victoria Hospital is a very busy program that is constantly evolving to keep up with medical advances. It offers excellent opportunities for fellows and residents to become proficient in vascular and thoracic anesthesia.

Undergraduate Education Program

Dr. Tony Vannelli (Director)

*T*he 2004-2005 academic year marked a year of change with respect to the UWO surgical clerkship and anesthesia. Didactic anesthesia lectures to clinical clerks has been streamlined and consolidated at two sites. Currently, UWO clinical clerks receive anesthesia lectures by dedicated anesthesia faculty, covering topics of preanesthetic evaluation and preparation, general anesthesia and monitoring and finally, spinal and epidural anesthesia and postoperative pain control. Lectures have been consolidated at University and Victoria Hospital. However, St. Joseph's Health Care continues to maintain a strong clinical teaching presence for clinical clerks in the operating room setting. Electives and selectives in anesthesia continue to be an extremely popular and competitive rotation among UWO and non-UWO 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 medical/surgical principles and practices that will serve the students well regardless of their chosen field. Currently, the medical student exposure to anesthesia at UWO remains a clinically-based intraoperative experience that in the future will incorporate simulation-based learning experience.

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. Faculty have successfully completed a new Meds IV course in Resuscitation Medicine.

FACULTY DIDACTIC TEACHING AND EDUCATION

Dr. Neal Badner

Guest Examiner

Marking a Mark February 2005

Dr. Daniel Bainbridge

Co-Organizer of TEE Rounds 2004-2005

Echocardiography Rounds Presented 2004

September 29 "Doppler U/S pulswave/continuous wave/colour"

October 13 "Assessment of the left ventricle"

Resident Oral Exams 2004

February 17 Mock Oral

March 2 Mock Oral

April 13 Mock Oral

April 25 Mock Oral

Journal club

September 30 Co-moderator, Cardiac Journal club. Case discussion, management of the high-risk cardiac patient.

Dr. Ron Butler

Undergraduate Education:

Meds III Anesthesia Clerkship Lecture Series

Clinical Supervision ICU for Meds IV electives in ICU

Postgraduate Education:

ICU Junior Resident Lectures – Critical Care

Lecturer, Anesthesia Core Lecture Series

Coordinator, Evidence Based Medicine Series – Critical Care Senior Residents

PGY1-2 transition day- ACLS refresher

Examiner:

Anesthesia Resident Practice Orals

Invited Continuing Medical Education
Spontaneous breathing trials RRT University Hospital

Dr. Lois Champion

Undergraduate Education:

Patient Centred Learning Tutor Year 1 Medicine.

Lecturer Year 2 Medicine: Cardiovascular Pharmacology series, Resuscitation, Shock, Error in Medicine, and Toxicology series.

Coordinator: Emergency Care Week (Year 2 Medicine).

Course Coordinator and Lecturer for 'Consideration of Legal, Ethical and Organizational Aspects of Medicine' Course (Year 4 Medicine).

Postgraduate Education:

Resident Coordinator, University Hospital Intensive Care Unit.

Resident Seminars, University Hospital Intensive Care Unit:
-Subarachnoid Hemorrhage, Intracranial Pressure, Hepatic Failure, Transfusion, Hemodynamics, Vasoactive Pharmacology.

Critical Care Residency Program: Academic Half Day Practical Care series (monthly):

Cardiovascular Surgery Academic Half Day: New Directions in Inotropic Support

Cardiac Surgery Recovery Unit seminars: Delirium, Evidence Based Intensive Care

Dr. Steven Dain

Undergraduate Education:

Co-organizer with Dr. Candice Gibson, Department of Pathology, Health Informatics Selective for fourth year medical students (about 25 students).

Lecturer: *“Introduction to Health Informatics”* for fourth year selective development of educational material for medical students on Departmental website.

Postgraduate Education:

Anesthesia core teaching session *“Capnometers, Oximeters, Agent Analyzers Theory and Function.”* February 2005.

Educational Materials Developed for Postgraduate Education:

Development of Resident Training Materials on departmental website.

London Airway Symposium. Assisted Dr. Ivan Iglesias and Dr. Daniel Bainbridge in organization and running of this program.

Dr. John Fuller

Critical Care Senior Residents Seminars

Critical Illness in Pregnancy, April 6, 2005

Difficult Airway Sepsis, September 28, 2005

Critical Care Trauma Centre Junior Residents Seminars

Airway Management, July 7 and September 2, 2005

OB Critical Care, August 15, 2005

Department of Medicine Core Residents Lecture

Critical Care, November 10, 2005

UWO Faculty Development Workshop

Writing Effective Remediation Plans

Dr. Ivan Iglesias

4th Year Medical Students:

Developed an elective course *“Resuscitation Medicine”* with a series of 10 classes including three workshops, and a booklet handout.

3rd Year Medical Students:

Assisted in development of a program on Peripheral Vascular Access

Dr. Patricia Morley-Forster

Anesthesia Core Residency Lecture Program:

Fetal Anatomy and Physiology, April 2004

Acute Postoperative Pain Management of Chronic Pain patient, September 2004

Assessment & Treatment of Patients in the Chronic Pain Clinic, April 2005

Plastic Surgery Core Residency Lecture Program:

Pathophysiology of Complex Regional Pain Syndrome, July 2004

Medical Undergraduate Student Involvement:

Academic Half-Day *Assessment and Treatment of Chronic Pain* – Meds III, 2004

Role of nerve blocks in diagnosis and treatment of chronic pain.

Med IVs. Pain and its Management in the New Millennium (Rated 6.4 / 7), 2003-05

Additional teaching Roles:

Instituted and organized monthly Interdisciplinary Pain Lectures for UWO Pain Program including invited & local speakers, 2004-05

Supervised Family Medicine residents on one-day rotation through Pain Clinic (6-8/year) 2004-05

Dr. Gordon Sellery

Teaching of residents and medical students in the OR.

Dr. Michael Sharpe

Postgraduate Education:

Junior Resident Seminar Series – Critical Care
Critical Care Grand Rounds
Senior Resident Teaching Sessions – Critical Care

Examiner:

Oral Exam for Senior Residents – Program in Critical Care
Medicine
Oral Exam for Residents in Anesthesia
PhD Examiner, Department of Physiology, UWO, April 18, 2005

FACULTY AWARDS/CERTIFICATION/RECGONITIONS

2005 **Dr. Richard Cherry**
Abbott Laboratories Award
Resident Teacher of the Year

2005 **Dr. Lois Champion**
-Canadian Association of Medical Education Certificate of Merit
-*The University of Western Ontario Student Council Honour Roll, Award of Excellence*
-Hippocratic Council Clinical Science Teaching Award, *The University of Western Ontario*

2005 Dr. Steven Dain
Head, Canadian Delegation to
Organization for International
Standardization (ISO)



2005 **Dr. John Fuller**
Canadian Anesthesiologists
Society Clinical Teacher
Award



2005 **Dr. Su Ganapathy**
Abbott Laboratories Award
Fellow Teacher of the Year



2005 **Dr. Ivan Iglesias**
Abbott Laboratories Award
Undergraduate Teacher
of the Year



2005 **Dr. Patricia Morley-Forster**
AMOSO Opportunity Fund Award
Medical Leadership for St. Joseph's
Health Care Pain Clinic" \$60,000



2005 **Dr. Valerie Schulz**
Associated Medical Services
Educational Fellowship in Care at
End of Life Award



RESIDENT AWARDS

2005 **Dr. Geoff Bellingham**
CAS/Vitaid Award-LMA
Residents Research Grant
Competition
*“Use of Low Dose
Intraoperative Ketamine for
Chronic Pain Patients
Undergoing Laparotomy”*
(Supported by Faculty, Dr. I.
Iglesias, Dr. P. Morley-Forster,
Dr. R. Bhandari, Dr. S. Dain)



2005 **Dr. Tim Turkstra**
CSCI CIHR Resident
Research Award
And PSI Foundation
Resident Research Award
*“Cervical Spine Motion: A
Fluoroscopic Comparison during
Intubation with Lightwand,
GlideScope and Macintosh
Laryngoscope – A Randomised
Controlled Trial”*



FACULTY PARTICIPATION NATIONALLY & INTERNATIONALLY

Conference Chair/Moderator/Organizer

Dr. Neal Badner

Chair/Moderator, 23rd Annual Can-Am Anesthesia Clinical Conference. Niagara Falls, ON, May 7, 2005.

Dr. Daniel Bainbridge

Co-Organizer, Southwestern Ontario Anesthesia Meeting, The Airway Workshop. Department of Anesthesia & Perioperative Medicine, The University of Western Ontario. London, ON, October 2, 2004.

Dr. Davy Cheng

Moderator, Session VIII: Congestive Heart Failure. 23rd Annual Symposium: Clinical Update in Anesthesiology. Fajardo, Puerto Rico. January 17-21, 2005

Scientific Committee Member, Whistler Cardiac Team Meeting, Whistler, British Columbia. March 18-22, 2005.

Moderator, Preadmission Clinic (PAC) and Perioperative Blood Conservation Program (PBCP). London Health Sciences Centre Perioperative Blood Conservation Program. Spencer Hall Conference Centre, London, Ontario. April 14, 2005.

Co-Moderator, Session A: Vascular III: Dilemmas in Postoperative Care of the Cardiovascular Patient. Society of Cardiovascular Anesthesiologists 27th Annual Meeting & Workshops, Baltimore, Maryland, USA. May 14-18, 2005.

Co-Chair, Poster Discussion 1: CVT 1

Co-Chair, Poster Discussion 2, CVT2

Canadian Anesthesiologists' Society 61st Annual Meeting, Vancouver, B.C. June 19, 2005.

Dr. Rosemary Craen

Chair, Plenary Symposium. Canadian Anesthesiologists' Society 61st Annual Meeting, Vancouver, BC. June 18, 2005

Dr. Steven Dain

Director of Multimedia Services. London Airway Symposium 2004. October 2, 2004.

Director of Multimedia Services. Cardiac Team Meeting 2005. Whistler, British Columbia. March 18–22, 2005.

Director of Multimedia Services, Outcomes 2005. Key West, Florida. May 18–22, 2005.

Chair, Symposium to the Anesthetic Workstation: Evaluation, Purchase, Maintenance and Troubleshooting. Canadian Anesthesiologist's Society. 61st Annual Meeting. Vancouver, B.C. June 2005.

Co-Chair, Poster Discussion (Critical Care, Transplant, Equipment) Canadian Anesthesiologists' Annual Meeting, Vancouver, B.C. June 2005.

Scientific Committee, Ontario Medical Education Network (OMEN), Annual Meeting. 2005

Dr. Su Ganapathy

11th Annual Regional Anesthesia & Pain Medicine Meeting, University of Toronto, Toronto, ON, October 2004.

Team Member: Intensive Upper Limb Workshop.

30th Annual Spring Meeting American Society of Regional Anesthesia, Toronto, ON, April 21-25, 2005

Workshop: Paravertebral blocks.

Workshop: Femoral sciatic and obturator blocks.

Workshop: Psoas compartment blocks.

Workshop: Regional anesthesia and ultrasound: upper limb locks.

Dr. Ivan Iglesias

Organizer, Southwestern Ontario Anesthesia Meeting, The Airway Workshop. Department of Anesthesia & Perioperative Medicine, The University of Western Ontario. London, ON, October 2, 2004.

Dr. John Murkin

Co-organizer, Cardiac and Vascular Surgery - State-of-the-Art Profusion Techniques, Anesthetic Management, Surgical Strategies: A Team Approach. The Whistler Cardiac Team Meeting. Whistler, BC. March 18-22, 2005.

Moderator: Scientific Abstracts II, En Bloc Exclusion of Pulmonary Vein Region Using Off Closed Beating Intercardiac Approach. A Pilot Study for Mini-Invasive Surgical Ablation of Atrial Fibrillation.

Co-organized and Chaired, Cardiac and Vascular Surgery: Neurobehavioral Assessment, Physiological Monitoring and Cerebral Protective Strategies. Outcomes 2005 The Key West Meeting. Key West, Florida. May 18-21, 2005.

Moderator: The Obese Diabetic: Atheroma, Hyperglycemia and Cerebral Dysautoregulation

Panel Discussion: Cardiac Surgery Brain Injury Etiologic Factors and Prevention.

Chair, Satellite Symposium - Anti-fibrinolytics: old drugs/new concepts. Canadian Anesthesiologists 61st Annual Meeting. Vancouver, BC. June 20, 2005.

Moderator, Clinical Trial Design. National Experts Orthopedic Surgery Consultants and Advisory Board Meeting. New York, NY. June 10-12, 2005.

Moderator, Innovative Strategies to Improve Open Heart Surgery Outcomes. Cardiac Team Meeting. Chicago, Illinois. June 24-26, 2005.

Dr. Sal Spadafora

Moderator, Transition to Practice - A Resident's Guide.

Residents Section Luncheon, Canadian Anesthesiologists' Society Annual Meeting, Vancouver, B.C June 18th, 2005.

Moderator, Education/Simulation Poster Discussion Session.
Canadian Anesthesiologists' Society Annual Meeting, Vancouver, B.C. June 20th, 2005.

Chair, CAS-SEA. (Canadian Anesthesiologists' Society - Section on Education in Anesthesia).
Canadian Anesthesiologists' Society Annual Meeting, Vancouver, B.C. June 2005.

Invited Lectures/Visiting Professorships

Dr. Kevin Armstrong

The Varkey Continuous Catheter Regional Anesthesia and Anatomy Workshop, Department of Anesthesia & Perioperative Medicine, *The University of Western Ontario*. London, ON, December 10-11, 2004.
Lecture: *Trouble-shooting continuous regional blocks*.

Dr. Daniel Bainbridge

Southwestern Ontario Anesthesia Meeting, The Airway Workshop. Department of Anesthesia & Perioperative Medicine, *The University of Western Ontario*. London, ON, October 2, 2004.
Lecture: *The laryngeal mask airway*.
Lecture: *Heliox, CPAP and BiPAP*.

Society of Cardiovascular Anesthesiologists 27th Annual Meeting and Workshop. Baltimore, Maryland, May 16, 2004.
PBL Discussion: Cardioprotection during OPCAB.

Dr. Lois Champion

CME Day sponsored by Department of Psychiatry. London, ON. April 14, 2005.
Lecture: *Delirium and Curbing the Downward Spiral - A Multidisciplinary Approach*.

Medical Student Speaker Series, *The University of Western Ontario*.
London, ON, January 15, 2005.

Lecture: *Balancing Career and Family*.

Faculty Development Workshop, *The University of Western Ontario*.
London, ON, October 2004.

Coordinator: *Writing and Reviewing Extended Match Questions*.

Acute Critical Events Simulation (ACES) Course. Vancouver, July 2004.

Coordinator: *Breathing Module course for Critical Care residents and fellows*.

Dr. Davy Cheng

VIII National Congress of the Turkish Society for Cardiovascular
Surgery. Kapadokya, Nevsehir. September 1-5, 2004.

Lecture: *Evidence-Based Outcome in Safety and Efficacy of OPCAB
Surgery*.

Lecture: *Fast Track Cardiac Anesthesia & Surgery: Past, Present and
Future*.

American Society of Anesthesiologists (ASA) Annual Meeting. Las
Vegas, Nevada. October 23-27, 2005.

Panel Speaker, *Off-Pump Coronary Artery Bypass Surgery (OPCAB): Is
it Really Minimally Invasive*.

Lecture: *Nuts and Bolts of Off-Pump Surgery for the Anesthesiologist:
The Physiology of the Displaced Heart*.

The 3rd Asia Pacific Conference on Evidence-Based Medicine. Hong
Kong. November 26-28, 2004.

Lecture: *Off-pump Versus Conventional Coronary Artery Bypass: Meta-
analysis*.

The International Society for Minimally Invasive Cardiac Surgery
(ISMICS). Second Annual Winter Meeting. Bangkok, Thailand.
December 3-5, 2004.

Lecture: *OPCAB Surgery: Perioperative Physiology and Fast Track
Management*.

23rd Annual Symposium Clinical: Update in Anesthesiology. Fajardo, Puerto Rico. January 17-21, 2005.

Lecture: *Evidence Based Safety and Efficacy of OPCAB vs CCAB and PTCA.*

Whistler Cardiac Team Meeting, Whistler, British Columbia. March 18-22, 2005.

Lecture: *Fast Track Anesthesia: Past, Present and Future.*

Lecture: *Beating Heart Surgery: Evidence Based Safety and Efficacy.*

Departments of Anesthesia and Cardiac Surgery, Trillium Health Centre, Mississauga, Ontario. April 6, 2005.

Lecture: *Evidence Based Safety and Efficacy of OPCAB versus CCAB: Meta-analysis and Systematic Review in Low-risk and High-risk patients.*

Chicago Society of Anesthesiologists, Chicago, Illinois. April 19, 2005.

Lecture: *Perioperative Physiology and Management in OPCAB and Robotic Surgery.*

Grand Rounds, Department of Anesthesia, Rush University. Chicago, Illinois. April 20, 2005.

Lecture: *Evidence Based Safety and Efficacy Outcomes in OPCAB Surgery.*

Course in Transfusion Medicine, Haematology & Transfusion Medicine, University of Sydney, OZ, Australia. May 11-13, 2005.

Lecture: *Transfusion Safety: from Good to Great - The Canadian Experience.*

Lecture: *Blood Management in 2010.*

Lecture: *Blood Management - Shifting the Paradigm.*

Society of Cardiovascular Anesthesiologists 27th Annual Meeting & Workshops, Baltimore, Maryland, USA, May 14-18, 2005.

PBLD Lecture: *Evidence Based Outcomes OPCAB Surgery.*

ISMICS 2005 Annual Scientific Meeting. New York NY, USA. June 1-4, 2005

Lecture: *Endoscopic Conduit Harvesting.*

Dr. Rosemary Craen

All India Institute of Medical Sciences, New Delhi, India. October 6, 2004.

Lecture: *Sevoflurane – Added Benefit or Just Added Cost?*

Evening CME lecture to Anesthesiologists, Ahmedabad, Le Meridian. October 11, 2004.

Lecture: *Sevoflurane – Added Benefit or Just Added Cost?*

Research Society of Anesthesiology and Clinical Pharmacology (RSACP) Mumbai, India. October 15-16, 2004.

Lecture: *Anesthetic Implications of Posterior Fossa Surgery in the Sitting Position*

Lecture: *Airway & Sedation strategies during Awake Craniotomy.*

Review of Brain Anatomy and Physiology to Neurology Residents, UWO, London, ON. January 12, 2005.

Making the Mark Banff, Canada. February 24-27, 2005. Lecture: *Essential Neuroanesthesia.*

Abbott National Meeting, Hamilton, ON. March 2, 2005 Lecture: *Neuroanesthesia for Dummies.*

XXXVI Colombian Congress of Anesthesia, Bogota, Colombia. March 18, 2005.

Lecture: *Brain Death: Diagnosis, Management and implications for the organ donor.*

Lecture: *Minimum invasive anesthesia for neurosurgery.*

CAS Annual Meeting, Vancouver, BC. June 15-16, 2005.

Lecture: *Sevoflurane: Added Benefit or just Added Cost?*

Lecture: *Drug choices in Neuroanesthesia*

Ottawa Hospitals, Ottawa, ON. April 19-21, 2005.

Lecture: *Anesthesia for Minimally Invasive Neurosurgery*

Lecture: *Anesthetic Management of the Patient with Intracranial Hypertension*

Lecture: *Sevoflurane: Added Benefit or just Added Cost?*

Dr. Steven Dain

CME Speaker. Windsor, ON. September 28, 2004.

Lecture: *Perioperative Fluid Management*

CME Speaker. Guelph, ON. October 7, 2004.

Lecture: *Perioperative Fluid Management.*

Institute of Biomaterials and Biomedical Engineering, The University of Toronto. March 8, 2005.

Lecture: *Anesthesia Technology.*

CME Speaker. Halifax, Nova Scotia. April 4, 2005

Lecture: *Perioperative Fluid Management*

CME Speaker. Moncton, New Brunswick. April 4, 2005.

Lecture: *Perioperative Fluid Management.*

CME Lecture. Fredericton, New Brunswick. April 5, 2005

Lecture: *Perioperative Fluid Management*

CME Lecturer/Invited Speaker, Whistler Winter Anesthesia. Department of Anesthesiology and Continuing Education, Queens University.

February 23, 2005, Whistler, British Columbia. Lecture: *Human Error and Accidents.*

Whistler Winter Anesthesia, Department of Anesthesiology and Continuing Education. Queens University. February 25, 2005.

Whistler, British Columbia.

Lecture: *Usability Engineering and How to Purchase Equipment*

CME Lecture: Thunder Bay, Ontario. May 25, 2005.

Lecture: *Perioperative Fluid Management.*

University of Manitoba. Winnipeg, Manitoba. May 26, 2005.
Lecture: *Perioperative Fluid Management.*

Symposium to the Anesthetic Workstation: Evaluation, Purchase, Maintenance and Troubleshooting. Canadian Anesthesiologist's Society. 61st Annual Meeting, Vancouver, B.C., June 2005.
Lecture: *The Purchasing Process: Requests for Proposals Tips and Tricks*

Dr. Wojciech Dobkowski

Whistler Cardiac Team Meeting, Whistler, British Columbia. March 18-22, 2005.

Lecture: *Anesthesia for Robotic Heart Surgery.*

Lecture: *Preparation of the High Risk Patient for Cardiac Surgery.*

Dr. Su Ganapathy

11th Annual Regional Anesthesia & Pain Medicine Meeting, University of Toronto, Toronto, ON, October 2004.

Case Presentation: *Paresthesia following peripheral nerve block: Incidence and prevention at the medico legal symposium.*

Panelist: *Breakfast and discussion with the experts- Controversies in regional anesthesia.*

Workshop: *Paravertebral blocks.*

The Varkey Continuous Catheter Regional Anesthesia and Anatomy Workshop, Department of Anesthesia & Perioperative Medicine, The University of Western Ontario. London, ON, December 10-11, 2004.

Lecture: *Current trends in acute pain.*

30th Annual Spring Meeting American Society of Regional Anesthesia, Toronto, ON, April 21-25, 2005

Lecture: *Thoracic paravertebral blocks.*

46th Annual McGill Anesthesia Update, McGill University. Montreal, QC, May 28-30, 2005.

Lecture: *Complications of labor epidurals.*

Lecture: *Post-block nerve deficits.*

Dr. Sandra Katsiris

23rd Annual Can-Am Anesthesia Clinical Conference. Niagara Falls, ON, May 7, 2005.

Seminar: *Non-Epidural Analgesia in Obstetrics*

Dr. Patricia Morley-Forster

Merck-Frosst Clinical Workshop. Chatham, Ontario, September 2004.
Chatham ON

Lecture: *Acute Pain Management - The Basics*

Department of Psychiatry CME day. The University of Western Ontario.
London, ON, October 14th, 2004

Lecture: *Co-existing Pain and Addiction*

Canadian Pain Society Neuropathic Pain Experts Panel. Toronto, ON,
April 2005.

Lecture: *The State of Human Clinical Research in Neuropathic Pain*

Canadian Pain Society. Halifax, NS, May, 2005

Lecture: *University Affiliated Pain Clinics in Advocating for Political Change*

Tillsonburg Family Physicians. Tillsonburg, ON, May 26, 2005.

Lecture: *Attitudes of Canadian Physicians towards Opioid Prescribing for Chronic Pain*

Interdisciplinary Pain Rounds, St. Joseph's Health Care. London, ON,
June 2005.

Lecture: *The Relief of Pain Resolving Ethical Issues*

Dr. John Murkin

The Eighth Annual Meeting of the European Association of
Echocardiography (EUROECHO 8). Athens, Greece. December 1-4,
2004.

Lecture: *Neurological Complications of Cardiopulmonary Bypass*

Whistler Cardiac Team Meeting. Whistler, BC. March 18-22, 2005.

Lecture: *Oximetry and Neuromonitoring in Cardiac Surgery*

Lecture: *Inflammatory Response and CNS Injury*

Texas Heart Institute. Houston, Texas. March 30-31, 2005.

Lecture: *Brain Injury and the Inflammatory Response*

Coronary Artery Bypass Graft (CABG) Surgery: Getting the Heart of the Matter Symposia. St. Louis, Missouri. April 23, 2005.

Lecture: *Optimizing CABG Surgery Program Quality: Blood Transfusion as a Predictor of Morbidity and Mortality*

2nd International Course on Extracorporeal Perfusion Technologies Intercept 2005. Milan, Italy. April 28-30, 2005.

Lecture: *Pathophysiological Bases of CPB-Derived Brain Damage*

Australian and New Zealand College of Anesthetists Annual Scientific Meeting. Auckland, New Zealand. May 7-11, 2005

Lecture: *The Role of Antifibrinolytics in Adult Cardiac Surgery*

Lecture: *Brain Injury after Cardiac Surgery*

Lecture: *Improving Clinical Outcomes*

Annual Meeting of the Society for Anesthesia and Resuscitation of Belgium. Brussels, Belgium. May 12-15, 2005.

Lecture: *Update on Cerebral Monitoring - INVOS*

Outcomes 2005 The Key West Meeting. Key West, Florida. May 18-21, 2005

Lecture: *Cerebral Protection in Cardiac Surgery: An Overview*

The Missouri Perfusion Society, 10th Annual Scientific Meeting. St. Louis, Missouri. June 3-4, 2005.

Lecture: *SIRS and Perioperative Brain Injury*

Lecture: *Transfusions as a Predictor of Morbidity and Mortality.*

New York Society of Perfusion Scientific Program Spring Meeting. Plainview, New York. June 11, 2005.

Lecture: *Mechanism of Injury, Cerebral Oximetry, and Clinical Outcomes in Cardiac Surgery.*

Canadian Anesthesiologists' Society 61st Annual Meeting. Vancouver, BC. June 19-20, 2005.

Lecture: *Establishing a Canadian Cardiovascular/Thoracic Anesthesia Clinical Trials Group*

Lecture: *Inflammation of CNS Injury.*

Dr. Fiona Ralley

Liver Transplant Rounds. London Health Sciences Centre. London, Ontario. October 13 2004

Lecture: *Anesthesia and Liver Transplantation.*

23rd Symposium Clinical Update in Anesthesiology. Fajardo, Puerto Rico. January 17-23 2005,

Lecture: *Heparin Induced Thrombocytopenia and Heparin Alternatives.*

OnTraC Coordinators Meeting. Toronto, Ontario, Canada. March 30, 2005.

Lecture: *Practical Aspects of Iron Therapy*

Meeting of Preadmit Nursing Staff, London Health Sciences Centre. London, Ontario. April 14, 2005

Lecture: *Coronary Artery Bypass Surgery and PBCP*

Dr. Michael Sharpe

3rd Annual Atlantic Critical Care Symposium, Moncton, New Brunswick. September 10-11, 2004.

Lecture: *Crystalloid versus Colloid Resuscitation in the ICU*

Department of Anesthesia & Perioperative Medicine Grand Rounds, LHSC-UH, London, ON. September 22, 2004.

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

Sarnia General Hospital Medical Grand Rounds, Sarnia, ON. September 27, 2004.

Lecture: *Management of severe sepsis and septic shock*

ICU Educational Nursing Conference, LHSC-UC, London, ON. September 28, 2004.

Lecture: *The use of continuous EEG in the ICU*

17th Annual Congress of the European Society of Intensive Care Medicine, Berlin, Germany. October 12, 2004.
Lecture: *Use of continuous EEG in the ICU*

Toronto Critical Care Symposium, Toronto, ON. October 22, 2004.
Lecture: *Continuous EEG in the ICU*

Oakville Hospital Medical Grand Rounds, Oakville, ON. November 18, 2004.
Lecture: *Management of severe sepsis and septic shock*

Trillium Organ procurement Officers In-Service, LHSC-UC, London, ON. January 12, 2005.
Lecture: *Donor Declaration and Management*

Critical Care Grand Rounds, LHSC-SSC, London, ON. January 14, 2005.
Lecture: *Donor Management – Canadian Consensus Guidelines*

Eli Lilly Medical Grand Rounds, Toronto, ON. January 25, 2005.
Lecture: *Current Management Considerations for Severe Sepsis and Septic Shock*

Hotel Dieu Medicine/ICU Grand Rounds, Windsor, ON. January 27, 2005.
Lecture: *Crystalloid versus Colloids in the ICU*

Royal Victoria Hospital Medical Grand Rounds, Barrie, ON. February 5, 2005.
Lecture: *Fluid Resuscitation in the Critically Ill*

Lilly Partnership in Critical Care: Speaker Training Workshop, Calgary, Alberta. February 8, 2005.
Lecture: *Community Acquired Pneumonia*

North York General Medical Grand Rounds, Toronto, ON. February 23, 2005.
Lecture: *Identification and Management of Severe Sepsis Patients*

2nd Annual Currents Conference in Critical Care, London, ON. February 23, 2005.

Lecture: *Hypothermia Protocol for Witnessed Cardiac Arrest*

The Centre for Critical Illness Research Seminar Series, LRCC, London, ON. March 8, 2005.

Lecture: *Sepsis: Clinical Perspectives*

Scarborough/North York Hospitals, Department of Anesthesia Conference, Toronto, ON. April 12, 2005.

Lecture: *Fluid Resuscitation: Art or Science?*

Humbar River Regional Hospital Grand Rounds, Toronto, ON. May 19, 2005.

Lecture: *Surviving sepsis in 2005*

Grey Bruce Regional Hospital Grand Rounds, Owen Sound, ON. June 3, 2005.

Lecture: *Surviving sepsis in 2005*

ICU Grand Rounds, LHSC-UC, London, ON. June 21, 2005.

Lecture: *DNAR, Withholding, Withdrawal Policies*

[Dr. Sal Spadafora](#)

The University of Western Ontario, Urology Resident Seminar Series. London, Ontario, November 23, 2004.

Lecture: *Anesthesia for Urologic Procedures.*

ACUDA Postgraduate Education Committee. Ottawa, Ontario, November 28, 2004.

Title: *Anesthesia Resident Labor and Delivery Coverage - A National Survey.*

Annual Anesthesia Interview Day for Clinical Clerks. The University of Western Ontario, London, Ontario, January 21, 2005.

Title: *The Anesthesia Residency at The University of Western Ontario.*

SWOMEN (Southwestern Ontario Medical Education Network) Evening. Windsor, Ontario, May 17, 2005.

Title: *The CaRMS Process and Anesthesia.*

ACUDA Postgraduate Education Committee Meeting. Vancouver, B.C.,
June 17th, 2005.

Title: *Funding Residency Education Programs in Anesthesia.*

FACULTY PUBLICATIONS

Peer Reviewed Publications

P J Devereaux, W Scott Beattie, Peter T-L Choi, **Neal H Badner**, Gordon H Guyatt, Juan C Villar, Claudio S Cinà, Kate Leslie, Michael J Jacka, Victor M Montori, Mohit Bhandari, Alvaro Avezum, Alexandre B Cavalcanti, Julian W Giles, Thomas Schricker, Homer Yang, Carl-Johan Jakobsen, Salim Yusuf. How strong is the evidence for the use of perioperative beta-blockers in non-cardiac surgery? Systematic review and meta-analysis of randomised controlled trials. *BMJ* 331:313-321, 2005.

Bainbridge D. 3-D imaging for aortic plaque assessment. *Semin Cardiothorac Vasc Anesth.* 9:163-165, 2005.

Bainbridge DT, Murkin JM, Menkis A, Kiaii B. The use of 3D epiaortic scanning to enhance evaluation of atherosclerotic plaque in the ascending aorta: a case series. *Heart Surg Forum*; 7: E636-8, 2004.

Bainbridge D, Cheng DCH, Martin J. Coronary Artery Bypass Graft Surgery Versus Conventional Coronary Artery Bypass Graft Surgery: A Systematic Review of the Literature. *Semin Cardiothorac Vasc Anesth.* Cheng, D. (Guest Editor). Westminster Publications, Glen Head NY, USA, 9:105-111, 2005.

Al Muslim O, **Butler R.** Best evidence in critical care medicine: Selective digestive decontamination decreases mortality and morbidity in the intensive care. *Can J Anesth* 1(7)737-9, 2004.

Djaiani G, Fedorko L, Borger M, Mikulis D, Carroll J, **Cheng D,** Karkouti K, Beattie S, Karski J. Mild to moderate atheromatous disease of the thoracic aorta and new ischemic brain lesions after conventional coronary artery bypass graft surgery. *Stroke* 35:e356-e358, 2004.

Cheng DC, Bainbridge D, Martin JE, Novick RJ. Does off-pump coronary artery bypass reduce mortality, morbidity and resource utilization when compared to conventional coronary artery bypass or

percutaneous coronary intervention? A meta-analysis of randomized trials. *Anesthesiology* 102:188-203, 2005. (Accompanied by an Editorial View. Floyd T and Fleisher LA. Off-pump coronary artery bypass and the hypothesis from which it grew: Is it yet to be tested? What are the downsides of the lingering questions? *Anesthesiology* 102:3-5; and selected for the *Anesthesiology* CME Program.)

Cheng DCH. (Editorial): Regional analgesia and ultra-fast-track cardiac anesthesia. *Can J Anesth* 52:12-17, 2005.

Cheng DCH, Martin J. Raising the Bar: A Primer on Evidence-Based Decision-Making. In *Seminars in Cardiothoracic & Vascular Anesthesia*. Cheng, D. (Guest Editor). Westminster Publications, Glen Head NY, USA, 9:1-4, 2005.

Cheng DCH. Routine immediate operating room extubation post OPCAB surgery: benefits for patients, practitioners, or providers? (Editorial) *J Cardiothorac Vasc Anesth* 19: 279-281, 2005.

Todd MM, Hindman BJ, Clarke WR, Torner JC; Intraoperative Hypothermia for Aneurysm Surgery Trial (**IHAST**) Investigators (**Craen R**). Mild intraoperative hypothermia during surgery for intracranial aneurysm. *N Engl J Med* 352(2):135-45, 2005.

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

Morley-Forster PK. Lessons from the Labor Room in Istanbul; *Editorial Pain Res Manage* 2004.

Morley-Forster PK, Re: Doctor Shortage. Letter to the Editor. *College of Physicians and Surgeons of Ontario. Member Dialogue* Sept/Oct: 6, 2004.

Ower K, Morley-Forster PK, Moulin DE. Variable Prolongation in an Asymptomatic Patient Treated with Methadone for Chronic Pain. *J Opioid Management* 1: 73-76, 2005.[*Faculty Supervisor, Fellow Research Project*].

Sellke FW, Di Maio JM, Caplan LR, Ferguson TB, Gardner TJ, Hiratzka LF, Isselbacher EM, Lytle BW, Mack MJ, **Murkin JM**, Robbins RC: American Heart Association. Comparing On-pump and Off-pump Coronary Artery Bypass Grafting: Numerous Studies But Few Conclusions: A Scientific Statement from the American Heart Association Council on Cardiovascular Surgery and Anesthesia in Collaboration with the Interdisciplinary Working Group on Quality of Care and Outcomes Research. *Circulation* 111(21):2858-64, 2005.

Murkin JM. Applied Neuromonitoring and Improving CNS Outcomes. *Semin Cardiothorac Vasc Anesth* 9(2):139-42, 2005.

Murkin JM. Improving Clinical Outcomes: Multidisciplinary Management, Metabolism and Monitoring. *Semin Cardiothorac Vasc Anesth* 9(2):113-4, 2005.

Saidi N, Murkin JM. Applied Neuromonitoring in Cardiac Surgery: Patient Specific Management. *Semin Cardiothorac Vasc Anesth* 9(1):17-23, 2005.

Murkin JM. Postoperative Cognitive Dysfunction: Aprotinin, Bleeding and Cognitive Testing. *Can J Anesth* 51(10):957-62, 2004.

Murkin JM. Improving Clinical Outcomes: Multidisciplinary Management, Metabolism, and Monitoring. *Semin Cardiothorac Vasc Anesth* 9(2):113-14, 2005.

Murkin JM. Applied Neuromonitoring and Improving CNS Outcomes. *Semin Cardiothorac Vasc Anesth* 9(2):139-49, 2005.

Murkin JM, Stump DA. Outcomes 2004 Abstracts. *Heart Surg Forum Reviews*. (6):508-18, 2004.

Murkin JM. The Inflammatory Response and Its Role in Perioperative CNC Injury. *Heart Surg Forum Reviews*. 2(1):7-10, 2004.

Ma M, Eckert K, **Ralley F**, Chin-Yee I. A retrospective study evaluating single-unit red blood cell transfusions in reducing allogeneic blood exposure. *Transfusion Medicine* 15: 307-312, 2005.

Sharpe MD, Young GB, Harris C. The apnea test for brain death determination: An alternative approach. *J Neurocritical Care* 1:363-6, 2004.

Ellis CG, Jagger J, **Sharpe M**. The microcirculation as a functional system. *Critical Care* 9 (Suppl 4):S3-S8, 2005.

Bhutani M, Ralph T, **Sharpe MD**. Acute paralysis following a bad potato: A case of *Botulism*. *Can J Anesth* 52:433-6, 2005.

Taneja R, Parodo J, Jia SH, Kapus A , Rotstein O, Marshall JC 4. Delayed neutrophil apoptosis in sepsis is associated with maintenance of mitochondrial transmembrane potential and reduced caspase 9 activity. *Crit Care Med* 32:1460-9, 2004.

Book Chapters

Champion, L. Physiology of Gas Exchange, Early Management of Respiratory Failure, Introduction to Mechanical Ventilation, Respiratory Mechanics, Practical Approach to Mechanical Ventilation In *Acute Resuscitation and Crisis Management* (D. Neilopovitz ed.) University of Ottawa Press, 2005.

Cheng D. (Guest Editor). Raising the Bar: A Primer on Evidence Based Decision Making. *Seminars in Cardiothoracic & Vascular Anesthesia*. Westminster Publications, Glen Head NY USA, 9:1, March 2005

Fabregas N, **Craen R.A**. Endoscopic and Stereotactic Neurosurgery. Gelb, A.W. (ed) *Current Opinion in Anesthesiology* 17: 377 – 382, October 2004.

Non-Peer Reviewed Publications/Letters

Hadi IA, **Morley-Forster PK**. Analgesia in Labour. *St. Joseph's Health Care Perinatal Outreach Newsletter* 27 1-4, 2005.

Bainbridge DT, Martin J, **Cheng D**. Is off-pump bypass grafting truly superior to conventional coronary artery bypass grafting? *Ann Thorac Surg* 79(1):383; 2005. (Author reply)

Cheng DC, **Bainbridge D**, Martin JE, Novick RJ. Underreporting of Conversion from Off-pump Coronary Artery Bypass Surgery. *Anesthesiology* 103(4):902-3, 2005.

International Standard Publications

Dr. Steven Dain

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

Standards Reviewed

ISO 18777:2005. Transportable liquid oxygen systems for medical use – Particular requirements.

ISO 18778:2005. Respiratory equipment –Infant Monitors—Particular requirements.

ISO 18779:2005...Medical devices for conserving oxygen and oxygen mixtures—Particular requirements.

ISO 19054:2005. Rail Systems for supporting medical equipment.

ISO 21969:2005. High-pressure flexible connections for use with medical gas Systems.

Standards Written

ISO 21647:2004. Medical electrical equipment—Particular requirements for the basic safety and essential performance of respiratory gas monitors.

ISO 9919:2005. Medical electrical equipment—Particular requirements for the basic safety and essential performance of pulse oximeter equipment for medical use.

ISO 14408:2005 Tracheal tubes designed for laser surgery—Requirements for marking and accompanying.

Abstracts

Guiraudon G, Jones D, Guiraudon C, **Bainbridge D**, Xiaoping Y, Drangova M, Peters T, Skanes A. En block exclusion of pulmonary vein region using off pump close beating intracardiac approach. A pilot study for mini-invasive surgical ablation of atrial fibrillation. *Can J Cardio* 20:566, 2004.

Bainbridge D, Cheng D, Martin J. Is PCA superior to nurse controlled analgesia for cardiac surgery? *Can J Anesth* 52:A36, 2005.

Martin, J, **Bainbridge D, Cheng, D**. Impact of duplicate publication in a meta-analysis of off-pump versus on-pump coronary artery bypass surgery. Presented at the 12th Cochrane Colloquium, Ottawa. Program and abstract book 0-062, October 2004.

Bainbridge DT, Cheng DC, Martin JE, Novick RJ. Do increased doses of aprotinin improve mortality, morbidity and resource utilization in cardiac surgery? A meta-analysis of randomized dose-response trials. *Anesthesiology* 101:A239, 2004.

Bainbridge DT, Cheng DC, Martin JE, Novick RJ. Does aprotinin improve morbidity, mortality and resource utilization in cardiac surgery compared with tranexamic acid or aminocaproic acid? A meta-analysis of randomized controlled trials. *Anesthesiology* 101:A240, 2004.

Howie MB, **Cheng DC**, del Rio CL, **Bainbridge D**, Shao Y. Desflurane versus propofol in OPCAB surgery: Is there a protective advantage? *Anesthesiology* 101:A256, 2004.

Kim M, **Cheng D, Bainbridge D**, Martin J. Does amiodarone improve clinical outcomes and resource utilization when given prophylactically to

patients undergoing cardiac surgery? A meta-analysis of randomized trials. *Anesthesiology* 101:A277, 2004.

Zaroff J, Hindman B, Fisher L, Short T, Greif R, Myles P, Lawton M, Litt L, Samra S, Lam A, **Craen R**, Gelb A. Intraoperative hypothermia and the risk of cardiac injury and dysfunction in patients with subarachnoid hemorrhage. *Stroke* February 2005.

Foster G, Imasogie N, Ganapathy S, Drosdowech D. Effect of Valdecoxib on transitional pain after elective ambulatory surgery. *Regional Anesth & Pain Med* 30:A21, 2005.

Temple CLF, Ernst S, Pautler S, Ross DC, **Fuller J**, Anderson S, Hurlock-Chorostecki T, Bettger-Hahn, M. High-dose interleukin-2 for metastatic melanoma: Challenges and early results. *Can J Plast Surg* 12:61, 2005. Presented at the Canadian Society of Plastic Surgeons 59th Annual Meeting, Nanaimo BC, June 2005.

Ganapathy S, Watson J, Imasogie N, Rajgopal C. Opioid-free anesthesia and analgesia provides adequate pain relief and improves outcomes after colon resection: A preliminary report. *Regional Anesth & Pain Med* 30: A42, 2005.

Ganapathy S, Foster G, Armstrong K, Bevan P. Ultrasonographic localization of continuous brachial plexus catheter tip using agitated dextrose solution: Case reports. *Regional Anesth & Pain Med* 30: A43, 2005.

Liang L, Foster G, Singh S, Parkin J. Successful use of ultrasound guided axillary block in three morbidly obese patients. *Regional Anesth & Pain Med* 30: A52, 2005.

Teasell R, Getty H, Shapiro A, **Morley-Forster PK**,_Hong S, Harth M, Pope J, Sequeira K, Horrill K. Identification of Distinct Patient Subgroups at Risk for Dysfunction Secondary to Pain. Presented at 11th Annual Academic Day for Ontario Physiatrists October 22, 2004

Moulin DE, **Morley-Forster PK**, Connolly B, Guerin J, Watling C, **Watson J**. Prospective Study of the Management of Chronic

neuropathic Non-cancer Pain. *Pain Research and Management* 10:102, 2005.

Ower K, Morley-Forster PK, Moulin DE. QTc Prolongation in a Patient Treated with Methadone for Chronic Pain. *Can Anaesth Soc Meeting Abstracts*, June 2005.

Abotaiban, A, **Morley-Forster PK, Ganapathy S,** Moulin DE, Tsui B. Epidural catheter stimulator for targeted blood patch in a Patient with Spontaneous Intracranial Hypotension. *Can Anaesth Soc. Meeting Abstracts*, June 2005.

Shapiro A, Getty, H, Teasell, R, **Morley-Forster PK,** Hong S, Sequeira K, Horrill K. Identification of Distinct Patient Subgroups at Risk For Dysfunction Secondary to Pain. *Accepted by Can Pain Soc Meeting* May 2005.

Murkin JM, Iglesias I, Bainbridge D, Adams S, Schaefer B, Irwin B, Fox S, Novick RJ. Brain oxygenation in diabetic patients during coronary surgery: A randomized prospective blinded study. SCA Abstract 2005.

Sharpe MD, Butler R, Harris C. Organ Donation: A Ten-Year Experience. *J Crit Care* 9:S106-7, 2005.

Jeganathan TPD, Fraser G, Goldman D, **Sharpe MD,** Ellis CG. Increased Leukocyte Transit Times through capillaries contributes to maldistribution of flow. *J Crit Care* 9:S31, 2005.

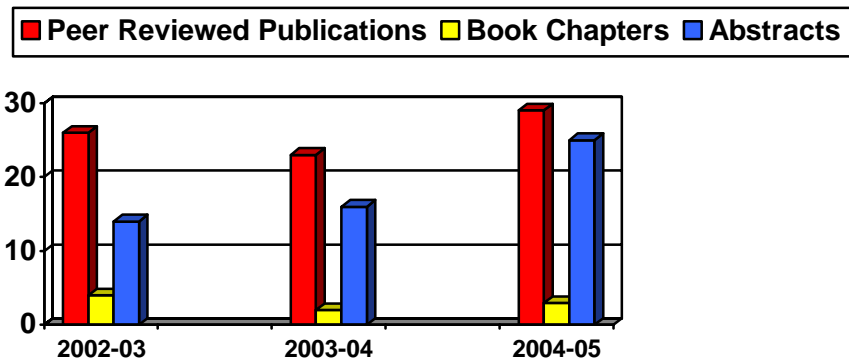
Fraser GM, Goldman D, **Sharpe MD,** Ellis CG. Impact of early sepsis on Oxygen Delivery in the Microvasculature. *J Crit Care* 9:S30, 2005.

Young B, **Sharpe MD.** Reversible EEG suppression and cranial nerve aflexia in acute hepatic failure. *Can J Neuro Sci* 32(Suppl 1):S40, 2005.

Turkstra TP, Craen RA, Pelz D, Gelb AW. Comparison of cervical spine motion with bag-mask ventilation vs. Macintosh laryngoscopy in patients with potential cervical spine injury: A fluoroscopic trial. *J Neurosurg Anesth* October 2004.

Turkstra TP, Craen RA, Pelz D, Gelb AW. Lightwand & Glidescope vs. Macintosh for potential C-spine injury. Presented at the Canadian Anesthesiologists' Society Annual Meeting, June 2005.

PUBLICATON SUMMARY 2002-2005



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 Hospital, LHSC

Principal Investigator Dr. Homer Yang

Dr. Ron Butler

A prospective observational study of spontaneous breathing trials in clinical practice” Ontario Thoracic Society Block Term Grant, June 2005
12 Months (\$6,743.00) Burns K, **Butler R**, Martin C, Smith S.

Co-Investigator

Dr. Davy Cheng

Multicenter Benchmark study on Volume Therapy and Blood Transfusion in Surgical Patients

Anemia Institute for Research & Education (AIRE). 2005-2006 \$25,500

Principal Investigator and Coordinating Center

Predictors of Massive Blood Loss in Cardiac Surgery: Development and Validation of a Simple Prediction Rule.

Canadian Institutes of Health Research. 2005-2006. (\$81,797 and \$15,000)

Site Collaborator with Keyvan Karkouti, Principal Investigator

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. Ivan Iglesias

Intraoperative ketamine infusion, influence on postoperative pain.
Canadian Anesthesiologists' Society. 2004-2005 (\$5,000).
Principal Investigator.

Dr. Patricia Morley-Forster

Disentangling the placebo effect: The relative roles of pharmacology and response expectancies in pain and sleep: CIHR – New Emerging Team Grant, 2003-2008 (\$1,200,000)
Co-investigator
Principal Investigators: Leora Swartzman, Dr. Gilles Lavigne

Understanding How Analgesia affects the Central Nervous System Processing of Pain in Patients with Fibromyalgia. Funded by NET Grant, 2005.
Lawrence K, Prato F, Swartzman L, Morley-Forster PK, Harth M, Bell D.

Prospective Study of the Management of Chronic Neuropathic Non-Cancer Pain. Canadian Foundation for Innovation Canadian Pain Trials Network. 2004. (Total Award \$1,991,059)
Co-applicant (\$141,454 UWO)

Dr. John Murkin

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.

Genetic determinants of cognitive dysfunction following CPB.
Heart and Stroke Foundation July 2004 (\$93,973.00).
Dr. K.R. Walley, Dr. J.M. Murkin. “

Clinical Relevance of Cardiotomy Blood Salvage during Cardiopulmonary Bypass.
Canadian Institutes of Health Research (CIHR) Grant No. 70885, January 2005.
Dr. Robert Kiaii, Dr. Fraser Rubens, Dr. J.M. Murkin

Dr. Michael Sharpe

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

Dr. Ravi Taneja

Inflammatory Response to Cardiopulmonary Bypass — Does it Crosstalk with Activated Protein C? Canadian Anesthesiologists' Society. David S Sheridan Canadian Research Award 2005 (\$10,000)

Peer Reviewed Internal Grants/Funding

Dr. Daniel Bainbridge

Lawson Health Research Institute, Internal Research Fund (IRF). 2005 (\$5,400)

Project: *Acetaminophen to Prevent Postoperative Hyperthermia in Cardiac Surgical Patients.*

Principal Investigator

Dr. Davy Cheng

Lawson Health Research Institute, Internal Research Fund (IRF). 2005-2006. (\$7,600)

Project: *Cost Analysis and Economic Analysis of Post-Operative Nausea and Vomiting in a Canadian Teaching Hospital*

Co-Investigator with Janet Martin, Principal Investigator

Dr. Michael Sharpe

Lawson Health Research Institute, Internal Research Fund (IRF), 2005 (\$10,000.00)

Project: *Efficacy of Linear Prediction Co-efficients Computed from Continuous EEG for Early Detection of Vasospasm in Patients Following Subarachnoid Hemorrhage*

Principal Investigator

Non-Peer Reviewed Grants/Funding

Dr. Neal Badner

GlaxoSmithKline, 2005-05. (\$30,000).

Project: *Neurokinin1 Antagonist for Postoperative Nausea & Vomiting Prevention.*

Site Principal Investigator.

Dr. Robert Banner

Department of Anesthesia & Perioperative Medicine, Academic Opportunities Fund. 2005. (\$10,000)

Project: *Local Anesthesia and Chronic Pain Relief; Is Procaine a useful drug?*

Principal Investigator

Co-Investigator: **Dr. P. Morley Forster**

Dr. Su Ganapathy

Development of Data base Program. Unrestricted Educational Grant, Pfizer Canada (\$6,000).

Workshop on US for Regional Anesthesia. Unrestricted Educational Grant, Sonosite (\$2,000).

Varkey Continuous Regional Anesthesia & Anatomy Workshop. Unrestricted Educational Grant, Multiple Sponsors (\$16,000).

Dr. Patricia Morley-Forster

Efficacy and Safety of Pregabalin in the Treatment of Subjects with Neuropathic Pain Associated with Lumbosacral_Radiculopathy.

Multicentre RCT. Pfizer Canada Inc. 2005 (\$65,000)

Site PI

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

Baxter Research Award 2005. (\$5,965)

Project: *The efficacy of anabolic steroids for the nutritional rehabilitation of critically ill patients.*

Dr. Ravi Taneja

Department of Anesthesia & Perioperative Medicine, *The University of Western Ontario.* (\$ 10,000)

Project: *Microvascular coagulopathy following cardiopulmonary bypass*

Visiting Observers

Kim, Myoung-OK	February -	Department of Anesthesiology & Pain Medicine NHIC Ilsan Hospital Koyang, Kyungki, Korea
Lu, Guanyu	April – October 2005	Department of Anesthesia Capital University of Medical Sciences Beijing, PR China
Zhang, Tiezheng	July 2004 – June 2005	Department of Anesthesia The Northern Hospital Shenyang, Liaoning Province PR China

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 Schulich School of Medicine & Dentistry

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