



**DEPARTMENT OF ANESTHESIA & PERIOPERATIVE MEDICINE**

**University of Western Ontario Teaching Hospitals**

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

**ANNUAL REPORT  
2001 – 2002**

Administrative Office:

Room 3CA19  
London Health Sciences Centre  
University Campus  
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	3
Chair/Chief Report	3
Organizational Chart	7
Faculty Members	8
Fellows & Residents	9
Site Chief Report, LHSC-University Campus	10
Site Chief Report, LHSC- Victoria Campus	12
Site Chief Report, St. Joseph's Health Care	13
Continuing Medical Education Program	14
Fellowship Program	14
Postgraduate Education Program	15
Undergraduate Education Program	17
Cardiac Anesthesia Program	17
Cardiac Surgery Recovery Unit	18
Critical Care Program	19
Liver Transplantation Program	20
Neuroanesthesia Program	21
Acute Pain Program	23
Perioperative Blood Conservation Program	24
Thoracic/Vascular Anesthesia Program	25
Ambulatory Regional Anesthesia/Analgesia Program	25
Chronic Pain Program	26
Obstetrics Program	27
Anesthesia Assistant Program	28
Medical Informatics	28
Didactic Teaching & Education	30
Department Publications	32
Invited Lectures/Visiting Professorships	41
Conference Chair/Moderator	48
Department Research Grants/Funding	50
Department Visiting Observers	54
Department of Anesthesia & Perioperative Medicine Web Sites	55

## Vision and Mission Statement

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

## Chair/Chief Report

*Davy Cheng, MD, MSc, FRCPC*



The year of 2001-2002 has been a year of remarkable and exciting changes in the Department of Anesthesia & Perioperative Medicine, University of Western Ontario. I was appointed in September 2001 as the Chair/Chief of the Department of Anesthesia & Perioperative Medicine, London Health Sciences Centre (LHSC) / St. Joseph's Health Care (SJHC) London, University of Western Ontario.

The Department was first established in 1949, with John A. Blezard as the first Chair (1949-58), succeeded by Wolfgang E. Spoerel (1958-83), W. Arnold Tweed (1983-89), and Adrian W. Gelb (1990-2001). The challenges facing the Department are the critical shortage of anesthesiologists, as in most academic health sciences centers nationally, compounded by the transitional phases of the restructuring and reengineering at the LHSC/SJHC.

The Department of Anesthesia & Perioperative Medicine is comprised of clinicians, researchers, and teachers providing secondary, tertiary,

and quaternary anesthesia and perioperative care. We serve the city of London with a population of 330,000 and a drawing area of 2 million people from Southwestern and Northern Ontario. The Department provides clinical support to 36-40 operating rooms/day at both LHSC (University Campus and Victoria Campus), and SJHC London. We also provide the spectrum of medical care from conducting preoperative anesthesia assessment to performing the most advanced life-supporting techniques in all perioperative settings such as ambulatory surgery, subspecialty surgery, obstetric, pediatric care, out-of-OR interventional procedures, acute and chronic pain management, blood conservation management, post-anesthetic care unit and intensive care units. The Department provides teaching and training to undergraduate and postgraduate trainees in anesthesia and allied health care fields both at UWO and the 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.

In the past one-year, we have advanced forward and accomplished considerably with support from our faculty, institutional administration and the Dean of the Faculty of Medicine and Dentistry. I would like to highlight below our achievement and changes from the past year.

- The Department has officially changed the name to Department of Anesthesia & Perioperative Medicine effective January 1st 2002, in the Faculty of Medicine & Dentistry at the University of Western Ontario and its affiliated teaching institutions (LHSC/SJHC) to reflect the spectrum of our anesthesia and perioperative care.
- A Citywide Department has been re-organized with academic priority programs (cardiac anesthesia, neuroanesthesia, pain, critical care, transplantation, obstetric, thoracic/vascular, pediatric, perioperative blood conservation). I appreciate greatly the contribution of Dr. J Parkin (SJHC), Dr. G Block (LHSC-VC), and Dr. I Herrick (LHSC-UC) for their term as Site Chiefs of the Department. I welcome the citywide commitment and devotion of Dr. J Watson (SJHC), Dr. M Lampe (LHSC-VC), and Dr. W Dobkowski (LHSC-UC) who are the current Site Chiefs of the Department.
- An endowed UWO Earl Russell Chair in Pain Management was established in conjunction with SJHC. Dr. Earl Russell who is an

anesthesiologist practicing in pain management in London has generously endowed this important Chair to advance the academic and clinical management of chronic pain in a multi-disciplinary approach. Dr. P Morley-Foster from our Department is selected and inaugurated as the first UWO Earl Russell Chair in Pain Management.

- Dr. John Fuller, who was the 2001 recipient of the Professional Association of Residents and Interns of Ontario (PAIRO) Resident Advocate Award, has led our PGE program as one of the best anesthesia training programs in the country. Dr. Sal Spadafora has succeeded him as the current PGE Program Director. The Department also commits to SWOMEN, the South Western Ontario Medical Education Network, (Dr. John Fuller) and APIMG, Assessment Program for International Medical Graduate, (Dr. Richard Cherry). Dr. Richard Lee was co-winner of the 2002 PAIRO Excellence in Clinical Teaching Award. Dr. Rooney Gverzdys is promoted to Associate Professor in the Department and has completed his term as UWO anesthesia examiner for the RCPSC. Dr. David Smith has been appointed as our Departmental examiner for the RCPSC. The fellowship program continues to grow under the Directorship of Dr. Rosemary Craen. Dr. Philip Jones (PGY3) was awarded the CAS/Vitaid/LMA Resident Research Award under the supervision of Dr. Rosemary Craen.
- New recruitment strategy initiated by the Department includes retention and recruitment of recent UWO and Canadian graduates: Dr. T. Rabgey, Dr. J. Hoogstra, Dr. J. McNamara Dr. P. Armstrong; initiation of residency re-entry program: Dr. W. Athktar; and recruitment in the academic IMG program: Dr. M. Mosa and Dr. I. Iglesias.
- Other new programs established and being developed are: perioperative TEE cardiac anesthesia program (Dr. Daniel Bainbridge), perioperative blood conservation program (Dr. Fiona Ralley), cardiac surgery recovery unit (Dr. Davy Cheng), anesthesia assistant program (Dr. Fiona Ralley, Dr. Jim Watson).
- The Department has consolidated physical space at all sites. The Department has successfully secured HOCC funding to all appropriate on-call sites from the MOHLTC. We are actively

participating in the academic health sciences centers AFP negotiation with MOHLTC.

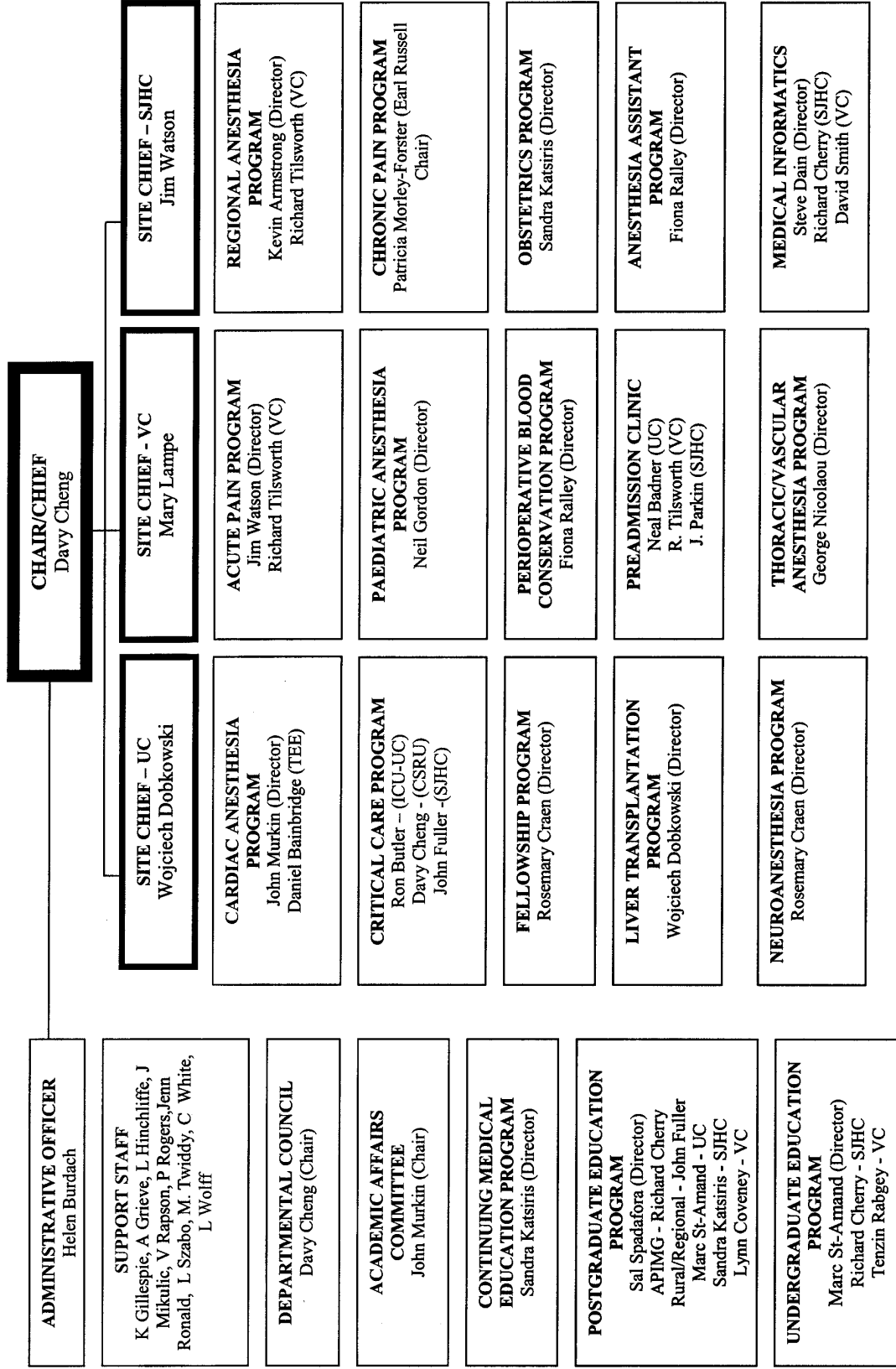
- The Department continues to contribute in key administrative roles at the LHSC/SJHC. Dr. Bill Sischek has completed his term as the LHSC MAC Chair and is appointed to the LHSC Executive Leadership Team. Dr. Ian Herrick is appointed as the Chair of LHSC MAC. Dr. John Fuller is selected as the Medical Director-Perioperative Care, SJHC. The Department is actively engaged in the citywide restructuring and clinical programs transfer for milestone 1 and 2 between LHSC/SJHC.

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



**ORGANIZATIONAL CHART**

Annual Report 2001 - 2002



**DEPARTMENT OF ANESTHESIA & PERIOPERATIVE MEDICINE**  
**FACULTY MEMBERS 2001- 2002**

LHSC- UNIVERSITY CAMPUS	LHSC - VICTORIA CAMPUS	ST. JOSEPH'S HEALTH CARE			
Badner, Neal	Assoc. Prof.	Anderson, Ian	Assoc. Prof.	Armstrong, Kevin	Assoc. Prof.
Bainbridge, Daniel	Asst. Prof.	Batorowicz, Maria	Asst. Prof.	Cherry, Richard	Asst. Prof.
Butler, Ron	Asst. Prof.	Block, Gary	Asst. Prof.	Currin, Michael	Asst. Prof.
Champion, Lois	Assoc. Prof.	Coveney, Lynn	Asst. Prof.	Fuller, John	Assoc. Prof.
Cheng, Davy	Professor	Gordon, Neil	Asst. Prof.	Gverzdys, Rooney	Assoc. Prof.
Craen, Rosemary	Assoc. Prof.	Herd, Stu	Lecturer	Hinds, Lynda	Adjunct Prof.
Cuillerier, Daniel	Asst. Prof.	Kieraszewicz, Halina	Asst. Prof.	Katsiris, Sandra	Asst. Prof.
Dain, Steven	Assoc. Prof.	Lampe, K. Mary	Assoc. Prof.	McKishnie, Jamie	Asst. Prof.
Dobkowski, Wojciech	Assoc. Prof.	Lee, Richard	Assoc. Prof.	Millman, Logan	Assoc. Prof.
Ganapathy, Su	Assoc. Prof.	Lindsay, Peter	Asst. Prof.	Morley-Forster, Pat	Assoc. Prof.
Gelb, Adrian	Professor	Lobb, Trevor	Assoc. Prof.	Parkin, John	Assoc. Prof.
Herrick, Ian	Assoc. Prof.	McCabe, Greg	Lecturer	Singh, Indu	Asst. Prof.
Kutt, Judith	Asst. Prof.	Newton, Peter	Lecturer	Watson, Jim	Asst. Prof.
Mezon, Bernie	Assoc. Prof.	Nicolaou, George	Asst. Prof.	Wexler, Ron	Assoc. Prof.
Murkin, John	Professor	Simon, Gary	Asst. Prof.	Yee, Irvan	Asst. Prof.
Ralley, Fiona	Professor	Sischek, Bill	Assoc. Prof.		
Sharpe, Mike	Assoc. Prof.	Small, Violet	Adjunct Prof.		
Smith, Heather	Asst. Prof.	Smith, David	Asst Prof.		
St-Amand, Marc	Asst. Prof.	Spadafora, Sal	Asst. Prof.		
Stockall, Carol	Assoc. Prof.	Tilsworth, Richard	Asst. Prof.		
Vannelli, Tony	Asst. Prof.	Thorn Harrie	Asst. Prof.		

**Adjunct Professors**

**St. Thomas-Elgin General Hospital**

Bidinot, Hugo  
 Chopra, Ashna  
 Donald, Shirley  
 McNeill, Brian  
 Soderman, Mark

**Professor Emeritus**

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



**CLINICAL FELLOWS 2001/02**

Dr. Dean Banno	Cardiac Anesthesia
Dr. Asha Gopinathan	Pain & Regional Anesthesia
Dr. Gaylene Heard	Neuroanesthesia
Dr. Jason Hoogstra	Obstetric Anesthesia
Dr. Ivan Iglesias	Cardiac Anesthesia

**RESIDENTS 2001/02**

<b>PGY5</b>	<b>PGY4</b>	<b>PGY3</b>	<b>PGY3 Family Medicine</b>
Cheeseman, Mark	Granton, Jeff	Church, Brian	Park, Jack
Goossen, Christy	Habeeb, Fawz	Fallon, Katherine	
Kim, Daniel	Ower, Kate	Kanellakos, George	
Manchuk, Derek	Vonguyen, Lan		
Rabgey, Tenzin			
Segal, Steven			
<b>PGY2-3</b>	<b>PGY2</b>	<b>PGY1-2</b>	<b>PGY1</b>
Hadi, Ibrahim	Dicecco, Rom	Al-Shamali, Khalil	Abotaiban, Ahmad
	Jones, Philip	Ho, Wayne	Dugas, Geoff
	Lee, Stephen		Ewing, Kevin
	Turkstra, Tim		Gros, Michelle
			Hussein, El Hadi
			Roos, Martin



The University Campus site is a very active academic centre. During the last year many of our colleagues participated in national and international meetings, visiting professor lectureships and co-operated with other academic centres in a variety of research projects.

The clinical service includes eleven operating rooms (cardiac surgery, neurosurgery, general surgery, orthopedics, sports medicine, plastic surgery, urology); diagnostic and therapeutic procedures in electrophysiology laboratory, neuroradiology and cardiac angiography; preadmission clinic; acute pain service; 24-hour call coverage and liver transplantation.

The key academic programs are:

**Cardiac Anesthesia** (Dr. John Murkin).

This group is very well recognized internationally and has outstanding achievements in research and education.

**Trans-Esophageal Echocardiography** (Dr. Daniel Bainbridge)

Dr. Bainbridge has organized a TEE course (CME) for the cardiac anesthesiologists. This will improve the standard of perioperative care and create the opportunity for all participants to obtain certification in TEE.

**Neuroanesthesia** (Dr. Rosemary Craen)

This is a well-recognized group internationally, which includes Dr. Adrian Gelb. Historically, this was the first academic group in our department. The research program includes basic science and clinical projects.

**Liver Transplantation** (Dr. Wojciech Dobkowski)

This group provides 24-hour coverage for liver transplantation procedures. It has also been involved in international research projects (multicenter studies).

**Acute Pain Service** (Dr. Neal Badner)

All consultants participate in Acute Pain Service. The clinical value of this service is well recognized by the surgeons and their patients. Pain management education is provided for residents and fellows.

**Medical Informatics** (Dr. Steven Dain)

This unique program was established at our site three years ago.

**Undergraduate Education** (Dr. Marc St-Amand)

Based on the opinions of medical students expressed in letters to the Dean, the high level of our undergraduate teaching is very well recognized. It continues to have increasing demand for anesthesia electives from medical students both from UWO and other universities.

**Postgraduate Education** (Dr. Marc St-Amand)

Subspecialty rotations (cardiac, neuroanesthesia, ambulatory anesthesia) have been modified and in residents' opinions have met educational objectives.

**Fellowship Program** (Dr. Rosemary Craen)

During the last year we have had six fellows in the following subspecialties: cardiac anesthesia, neuroanesthesia, regional anesthesia, and transplantation anesthesia.



The anesthesiologists at VC continue to provide a wide range of anesthetic services at both Westminster and South Street sites on a 24/7 basis at both sites. South Street Operating Room continues to be the Trauma, Vascular and Thoracic centre for the city and Westminster Campus Operating Rooms are home to pediatric care, oncologic surgery and Level Two Obstetrics.

In addition, there are preadmission assessment clinics daily, daily acute pain rounds, chronic pain management clinics four days a week, Cancer Clinic services provided.

In March 2002, with the opening of the Westminster Campus MRI scanner, the anesthesia-supported MRI and CT sedation day began at VC with approximately 15 cases each Thursday.

### **EDUCATIONAL FOCUS**

Anesthesia residency education has been further developed at VC with plans to finely tune Pediatric, Trauma, Perioperative Care and Thoracic/Vascular rotation objectives and evaluations.

Operating Room and clinic teaching for medical students is also a focus.

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 centre and performs about 4,800 deliveries per year. The surgical focus is on the Hand and Upper Limb Centre, Endo-urology, Ophthalmology, Head & Neck reconstruction as well as General Surgery, Gynecology, Plastic Surgery and care of dental patients. Approximately 20,000 surgical cases are performed each year.

After ten years in his role as Site Chief of the Department of Anesthesia, Dr. John Parkin has passed the mantel to Dr. Jim Watson. In addition, we have added two new members, Dr. Pod Armstrong and Dr. Jason Hoogstra. In the past year also, Dr. Pat Morley-Forster has assumed the role of Chair of the Earl Russell Multi-disciplinary Pain Centre. Dr. John Fuller, after ten years as Director of our Postgraduate Training Program has assumed the role of Medical Director of Perioperative Care.

Planning is well advanced for the design and construction of a new 10 operating room, ambulatory surgi-centre and radiologic and diagnostic facility. Planned completion date is 2004. This new facility will provide St. Joseph's Health Care with a modern, well-equipped facility to carry the institution into the next century. 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.

## **Continuing Medical Education Program**

*Dr. Sandra Katsiris (Director)*

The Continuing Medical Education Program was again successful over the past year. In total, there were eleven Grand Rounds presentations from July 2001 through June 2002. Five presentations were given by individuals affiliated with The University of Western Ontario, and the remaining six were given by guests participating in the Visiting Professorship Program. These included:

Dr. D. Bainbridge from The University of Saskatchewan

Dr. P. Raj from Texas Tech Medical Center

Dr. F. Chung from The University of Toronto

Dr. P. Sebel from Emory University in Atlanta

Dr. S. Liu from Virginia Mason Medical Center in Seattle

Mr. R. Paradis from The University Health Network in Toronto

All sessions were suitable for accreditation by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada.

## **Fellowship Program**

*Dr. Rosemary Craen (Director)*

Fellowships in cardiac, neurosurgical, transplantation, regional, obstetrics, pain management, vascular & thoracic anesthesia and anesthesia informatics are offered each year at the London Health Sciences Center and St Joseph's Health Care London. Generally fellowships are 12 months in duration but can be 6 months to 2 years. Programs are individualized to meet the goals of successful applicants. Generally, clinical experience is the focus along with involvement in clinical research. Fellows spend approximately 3.5 days per week in clinical activities with 1.5 days per week protected for non-clinical activities, and 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.

## Postgraduate Education Program

*Dr. Sal Spadafora (Director)*

The Anesthesia Residency Program continues its long tradition of full accreditation approval from the Royal College of Physicians and Surgeons of Canada. The residency has worked to optimize the contribution made by each of the involved hospital sites. In anticipation of the service moves associated with the on-going restructuring, a significant portion of the residency consists of sub-specialty anesthesia rotations. As services move across the city with restructuring, the sub-specialty rotations will simply follow the clinical service. This should maintain continuity of the residency program throughout the restructuring process.

The residency constantly strives to improve in all aspects. A regular evaluation of all aspects occurs. This includes evaluation of the individuals, both residents and faculty; rounds; teaching sessions; and the clinical rotations. The Family Medicine/Anesthesia Residency continues to train much needed anesthesia providers for small communities. The residency continues to offer training to FRCPC and Family Medicine/Emergency trainees.

The Postgraduate Education Program achieved several notable successes in the past year. Dr. Richard Lee won the PAIRO Resident Teaching Award for UWO. Dr. Phillip Jones, PGY3, was awarded the CAS/Vitaid/LMA Resident Research Award. Dr. Martin Roos presented a paper at the Midwest Anesthesia Residents Conference. Applications were received from numerous gulf state trainees and two were selected to join the residency program as PGY1's. Physicians from across Canada and abroad participated in our various subspecialty fellowships.

The Postgraduate Education Program participated in several new provincial and national endeavours this year:

### **Making a Mark Program:**

Four of our faculty contributed to the first annual "Making a Mark" program, a review and exam preparation course for all Canadian final year residents.

**APIMG:**

The Ontario **A**ssessment **P**rogram for **I**nternational **M**edical **G**raduates was initiated this year. The program is coordinated by Dr. Richard Cherry and it involves a six-month assessment of specialist physicians from foreign jurisdictions towards licensed eligibility in Ontario. We participated in the development of a screening and selection process and participated in selecting the first anesthesia entrants to the program. As well, we have accepted to assess two physicians, with the first assessment currently well underway. During anesthesia rotations, the primary method of evaluation included daily evaluation forms completed by consultants with whom the ISP was assigned. This daily form mirrored the new CanMeds 2000 FITRE as outlined by the RCPSC. ICU rotation evaluation was carried out using the standard procedures utilized at each specific site.

**SWOMEN:**

The Government of Ontario initiated a program of community-based training of medical specialists in an attempt to address the physician shortages in the province. UWO and the Anesthesia Residency Program were successfully selected to participate. Through this program the residency receives four additional CaRMS entry positions annually, with the first trainees entering through the 2002 CaRMS match. The residency program is actively proceeding with development of our community based training program. Dr. John Fuller is appointed as our departmental SWOMEN. Several community anesthesiologist coordinators have been identified.

**Community Anesthesia Residency Program**

Several community-based hospital centres have been recruited to participate. Numerous residents are scheduled for community rotations in the 2002-03 academic year. Data is being collected towards developing community rotations to synchronize with our London-based training. The practicalities and principles of the program are in development.



## **Undergraduate Education Program**

*Dr. Marc St-Amand (Director)*

The Undergraduate Anesthesia Program and its rotation continues to be a popular one for the medical students to select. All hospital sites are involved. The program consists of a two-week rotation with hands on experience and clinical teaching. The students are provided with a text which is given to them on loan for the duration of the elective. A workbook is also provided for them to direct their reading and intraoperative teaching. Four morning sessions are also given during their surgical rotation. The topics have been standardized across the city and efforts are being made to further standardize the rotation from site to site. At the conclusion of the rotation they hand in a case report and receive an exit oral exam. Their final evaluation is a summary of their performance in the operating room as well as their case report and oral exam.

## **Cardiac Anesthesia Program**

*Dr. John Murkin (Director)*

In addition to the ongoing high level of clinical care delivered by members of the cardiac anesthesiology group, this year has seen the acquisition and incorporation of 2 dedicated TEE machines for the cardiac ORs at University and Victoria sites. A major initiative was undertaken in order to upgrade the skills of cardiac anesthesiology consultants to familiarize them with TEE and incorporate TEE examination into routine clinical care. To this end an inaugural series of introductory TEE lectures were organized by Dr. Dan Bainbridge and were archived on the Departmental website by Dr. Steven Dain and Peter Lok. One of the first indications of the success of this program was the successful completion of the ASE perioperative TEE examination the cardiac anesthesiology TEE Fellow, Dr. Dean Banno. ASE certification of two additional consultants and the establishment of a formal cardiac anesthesiology perioperative TEE service is an identified goal for the coming year.

In addition to undertaking several research projects examining the role of intraoperative cerebral oximetry in cardiac surgical patient outcomes, the CIHR-funded study of central nervous system outcomes after conventional cardiopulmonary bypass versus beating heart techniques for coronary revascularization was ongoing. Additionally, the University campus site was selected as part of the multicenter, CIHR-funded study of antifibrinolytics and blood product utilization in high-risk cardiac surgical patients. Initial discussions at expanding this study to include the Victoria campus site are ongoing.

Members of the cardiac anesthesiology group have been well represented in several national and international multidisciplinary meetings focusing on the perioperative management of cardiac surgical patients. The seventh annual "Outcomes" meeting was held in May in Key West, Florida, Proceedings of which were published in September 2002 issue of Heart Surgery Forum, while the third annual Cardiac Team meeting was held in September in Montebello, Quebec, both meetings being co-organized and chaired by Dr. John Murkin.

With the recent recruitment of Dr. Davy Cheng into the UWO cardiac anesthesiology group, after his successful development of the perioperative cardiac surgical recovery unit for the Toronto Health Network, discussions are underway to initiate a similar program here, offering the potential for greater involvement of cardiac anesthesiology into the postoperative care of these patients.

## **Cardiac Surgery Recovery Unit**

***Dr Davy Cheng (Director)***

With the consolidation of the cardiac surgical services from LHSC-Victoria Campus to the LHSC-University Campus during milestone 1 in the restructuring process at LHSC/SJHC, the cardiac surgery program, chaired by Dr. Richard Novick, will have an annual surgical caseload of about 1,700 patients (including the robotic cardiac surgery). A new paradigm of a cardiac surgery recovery unit (CSRU, 16 beds) is being developed and directed by Dr. D. Cheng with the associate directors, Dr. Michael Sharpe and Dr. Richard Novick. This model of parallel care with the main intensive care unit will be staffed by cardiac anesthesia, cardiac surgery and critical care. A fast track cardiac surgery recovery

pathway with the support by the nursing team headed by Ms. Lynda Robinson will be implemented to facilitate the flow and recovery of all cardiac surgical patients at LHSC. This CSRU will link the intraoperative cardiac anesthesia management and postoperative surgical ward recovery to provide the full spectrum of cardiac surgical patient care, including the education and research in these patients.

## **Critical Care Program**

**Dr. Ron Butler, ICU-UC**

The Critical Care Program at the University of Western Ontario is a multidisciplinary program that provides postgraduate training in Critical Care Medicine. Trainees gain experience working and caring for all types of critically ill patients in the Richard Ivey Critical Care Trauma Center (30 beds) and the W. E. Spoerel Intensive Care Unit (26 beds), including, trauma, neurosurgical, transplant, and cardiac critically ill patients. The program has a well-developed educational program for trainees that has been recognized for its excellence by the Royal College of Physicians and Surgeons. Faculty within critical care are also involved in basic science and clinical research. The program in critical care is currently undergoing expansion as we consolidate the care of all critically ill patients onto two sites. New critical care units are being constructed with planned opening in early 2004. Anesthesia intensivists are an integral component of the program in Critical Care. As we expand we anticipate opportunities for new faculty to join our growing program.

## **Critical Care Program**

**Dr. J. Fuller, ICU-SJHC**

The SJHC ICU is a 12-bed Medical/Surgical unit with a special interest in Obstetric Critical Care. The Medical Director is an Anesthesiologist, and the other 3 consultants are 1 Emergency Med/Intensivist and 2 Internist/Intensivists. The unit has been innovative in leading the country in the training of Nurse Practitioners, and including them in our clinical practice. The unit has also been a leader in Shared Leadership. Educational opportunities are offered for Medical Students and Postgraduate Residents, Nurse Practitioners, Nursing Students, RT

Students, Paramedics, and other allied health trainees. Research is an ongoing focus, with participation in local and multicenter studies.

## Liver Transplantation Program

***Dr. Wojciech Dobkowsk (Director)***

*“We have recently reviewed advances contributing to the improved survival of patients undergoing hepatic surgery and transplantation. Among these is the development of a liver surgery team as an outgrowth of rapid expansion of liver transplantation offering combined expertise in hepatology, liver surgery and anesthesia. It is possible to perform hepatic surgery and transplantation rapidly and safely and to minimize operative mortality. This result may be considered in the context of global evolution in techniques of anesthesia and hepatic surgery”*

***J Liver Transplantation and Surgery 1996; 2:91-98***

This Department has maintained a liver transplantation anesthesia group for almost twenty-eight years. It consists of three anesthesiologists who provide anesthesia services throughout the entire year. Over the past year sixty-five cadaveric transplants have been performed as well as six living-related transplant procedures. Among cadaveric transplants, seven were combined liver-kidney and one was heart-liver. The anesthesiologists in our group are members of a multispeciality team in pre-transplant assessment, qualification, and preparation for transplantation surgery.

A Fellowship program has been offered to Canadian and international anesthesiologists for the past twenty-two years. In addition, we offer a Visiting Physician program and have had visiting anesthesiologists from China as observers.

Our liver transplantation program is well recognized and has established international prestige. Dr. Dobkowski was a member of an international group of experts from England and Canada who cooperated with the Government and University of Kuwait in helping them develop a liver transplant program. Over the past two years Dr. Dobkowski and Dr. Sharpe visited the University of Beijing and the Transplantation Society of China giving a series of lectures together

with practical and clinical consultation to help develop a liver transplantation program in China.

We have been involved in various research projects including a multicenter study in Australia, Europe and Canada assessing the benefit and risk of Factor VII as antifibrinolytic agents in liver transplantation surgery. Ongoing research progress includes 1) the benefit of piggy-back techniques in liver transplantation in adults; 2) the effects of low doses of Factor VII combined with low dose Aprotinin on blood loss and blood products usage during liver transplantation; and 3) mega-dose of Aprotinin in fulminant hepatitis patients undergoing liver transplantation.

With the development of liver transplantation in the areas of living-related and combined transplantation, the educational goal of our group is to attract anesthesia residents into this existing academic program.

## **Neuroanesthesia Program**

*Dr. Rosemary Craen (Director)*

The aim of the Neuroanesthesia 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. Fellows 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 tumours and hemifascial spasm, carotid endarterectomy, spinal instrumentation etc.

### **MONITORING/DIAGNOSTIC SKILLS**

Fellows will have the opportunity to learn how to use Transcranial Doppler, 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, they are 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.

## **Acute Pain Program**

*Dr. Jim Watson (Director)*

The acute Pain Service at St. Joseph's Health Care has been well established for 15 years. We continue to provide care to 35-40 new patients each week and provide a variety of modalities, including PCA, epidural and continuous regional techniques. The citywide Acute Pain Task Force has standardized procedures and techniques across the city and produced self-directed teaching packages for nursing staff at all sites, which has served to standardize management of acute pain patients. At St. Joseph's Health Centre our nurse practitioner/clinical nurse specialist, Kim Horrill has also helped to coordinate the education of staff and care of patients on the APS.

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

Dr. Kevin Armstrong and Dr. Jim Watson have taken part in satellite broadcasts of live demonstrations of regional blocks. The most recent was from London, Ontario to Victoria, BC during the most recent Canadian Anesthesia Society Meeting. Blocks were performed on four patients in real time and broadcast live in interactive sessions with participants in Victoria. The Acute Pain Service at St. Joseph's Hospital

has also taken part in national initiatives to improve and standardize care of patient and education of practitioners in the field of acute pain.

## **Perioperative Blood Conservation Program**

*Dr. Fiona Ralley (Director)*

This program was championed by Dr. D. Cheng after a meeting of interested personnel in April 2002, including anesthesiologists, surgeons, nurses, pharmacists, perfusionists, preadmission, perioperative care and blood transfusion services. A committee to institute a blood conservation program at LHSC was convened and the members are listed below. The duties of this committee include 1) the ensuring of optimized utilization of blood and blood products through assessment of current patient care maps and identification of pathways for the application of appropriate blood conservation strategies 2) the provision of staff and patient education to facilitate patient's informed decision-making regarding blood transfusion and alternatives 3) the monitoring and tracking of patient outcomes for the purpose of benchmarking and standard setting. The first task of this committee has been to coordinate and run the MOH ONTraC program and to assist in the data collection for the second stage of PROBE. This has resulted in the hiring of a Transfusion Nurse Coordinator (Donna Berta) who will be funded by the MOH for 2 years.

This committee meets bi-monthly and discusses the ongoing projects as mentioned above. Initially the main area of blood conservation has involved orthopedic and vascular patients, but next year this will be expanded to include cardiac, major spine surgeries and hepatic resections.

### **Committee Members:**

Dr Fiona E. Ralley (Chair)(Anesthesia and Perioperative Medicine)

Donna Berta (Transfusion Nurse Coordinator)

Dr Steve MacDonald (Orthopedic Surgery)

Dr Wai Ng (Neurosurgery)

Dr Ian Chinlee (Hematology)

Dr Ward Davies (General Surgery)

Dr Ken Harris (Vascular Surgery)

Dr George Nicolaou (Anesthesia and Perioperative Medicine)



Peter Allen (Perfusion)  
Ruth Alexander (Operating room Coordinator, SJHC)  
Rob Cambell (Coordinator, Retail Pharmacy)  
Kim Jenkins (Coordinator Preadmission Clinic)  
Kathleen Eckert (Blood Transfusion Services)

### **Thoracic/Vascular Anesthesia Program**

***Dr. George Nicolaou (Director)***

The Vascular/Thoracic Program at the Victoria Campus is an extremely busy program, covering all types of elective and emergency cases, with the exception of lung transplantation. The endovascular stent program for abdominal and thoracic aneurysms is one of the best in North America. Our residency program encompasses four-week blocks of subspecialty training in Vascular/Thoracic anesthesia with clear objectives and daily assessments. The residents are encouraged to take part in clinical research. Our Fellowship program is well established with ongoing clinical research opportunities. Overall, the Vascular/Thoracic program at Victoria Campus has an incredible variety of interesting and complex cases. This offers excellent opportunities for Fellows and Residents to become proficient in Vascular/Thoracic anesthesia, both in a clinical and research setting.

### **Ambulatory Regional Anesthesia/Analgesia Program**

***Dr. Kevin Armstrong (Director)***

At SJHC we embarked on the ambulatory regional anesthesia/analgesia (ARAA) program. This program enables patients to be discharged home with continuous peri-neural analgesia following upper limb surgery. This is a comprehensive program where patients and their families go through an education process peri-operatively. After conformation of effective analgesia they are discharged home. Community care resource access provides follow up and serves as resources or links back to anesthesia should it be required.

Research activity related to regional anesthesia at SJHC included:

1. *The impact of regional anesthesia together with a block room on peri-operative efficiency.* Investigators: Dr K Armstrong and Dr R Cherry. This study is completed and under going writing process.
2. *Ambulatory regional anesthesia / analgesia (ARAA) for upper limb surgery.* Investigators: K Horrill and K Armstrong. This program is still ongoing.

## **Chronic Pain Program**

***Dr. Patricia Morley-Forster (Earl Russell Chair)***

City Wide Interdisciplinary Pain Rounds are held on the fourth Tuesday of the month at 4:30 pm in room 1, 900 Richmond Street. Most of the topics are of interest to those involved in treating chronic pain. However, at least one of the sessions per academic year is related to acute pain management.

Arrangements are being made for two Visiting Professors in the upcoming academic year; Dr. Allan Finley, an anesthesiologist from Dalhousie with interest in pediatric pain and Dr. Joel Katz, a psychologist appointment to the Department of Anesthesia in Toronto with an interest in post-operative pain and chronic post-surgical pain.

A six-part 12-hour seminar course on physiology of pain, pharmacology of opioids, acute pain management and chronic pain management is being offered for the first time this year to the Meds IV (transition) year.

Beginning July 1, 2003, there will be a Neuropathic Pain Fellowship with the focus being a Multidisciplinary Neuropathic Pain Clinic staffed by anesthesiologists and neurologists. This would be based at St. Joseph's Health Care. There will also be two fellowships of combined regional anesthesia/chronic pain offered at SJHC supervised by Drs. Kevin Armstrong and Pat Morley-Forster.

The headquarters of the Canadian Pain Society has been moved from Ottawa to London based at Dr. Morley-Forster's office in F208, St. Joseph's Health Care. The president-elect is a psychologist on staff at

UWO, Dr. Gary Rollman. The annual meeting of the Canadian Pain Society will be held May 22-25<sup>th</sup>, 2003, in Toronto. There needs to be more anesthesiology representation. Information can be obtained on their website at: [www.canadianpainsociety.ca](http://www.canadianpainsociety.ca).

A Strategic plan for the Pain Program was completed this summer. The final draft will be available in the next month to anyone who is interested. Plans are underway to construct a web site, which should be completed by January 2003.

The Lawson Health Research Institute Rehabilitation and Geriatric Care Research Day will be held on November 20<sup>th</sup>, 2002. The focus of the conference is "Pain an emerging area of research excellence within LHRI". Dr. Morley-Forster will be speaking on "peripheral opioid analgesia; mechanisms and clinical implications.

## **Obstetrics Program**

*Dr. Sandra Katrisis (Director)*

SJHC provides primary, secondary and tertiary perinatal care. LHSC provides primary and secondary perinatal care. Current number of deliveries annually are 3500-4000 at SJHC and 2500-3000.at LHSC.

Citywide workload continues to increase due to additional labouring patients from surround communities (there continue to be hospitals in the region unable to provide perinatal services around the clock due to lack of anesthesia, obstetrics, general surgery, pediatrics, or a combination thereof).

Dedicated OBS resident rotation continues to function well. One resident (very rare two) per month for 11 of the 12-month rotations. Residents report satisfaction with intense exposure to a variety of obstetrical cases during their rotation, and ability to solidify epidural skills. Night call at SJHC strengthens exposure to and experience in management of obstetrical anesthesia cases.

The Fellowship program has been filled for the last five years with solid trainees. The current fellow is Dr. Mark Cheesman. Fellows participate in the obstetrical preadmission program Wednesday mornings (provides

fellow opportunity to participate in management of complex cases from early prenatal stage). The current set up is a weekly rotation with two days per week in the obstetrical unit which allows independent work with supervision by staff consultant (fellows are in the obstetrical unit on Wednesdays when the resident is absent due to core teaching sessions).

Research/Protocol Development In Progress:

- Comparison of resident experience with Sprotte vs. Tuohy needle for initial instruction in epidural catheter placement.
- Effect of the respiratory cycle on accidental intravenous epidural catheter placement during labour.
- Development of standard protocol for intravenous remifentanil PCA in labour.
- Development of guidelines for use of pentaspan in labouring/early post-partum women.

## **Anesthesia Assistant Program**

*Dr. Fiona Ralley (Director)*

An Anesthesia Assistant Medical Directive has been prepared and presented to the Medical Advisory Committee for approval. It is anticipated that this program will be implemented in the upcoming year.

## **Medical Informatics**

*Dr. Steven Dain (Director)*

Informatics is the scientific field that deals with the storage, retrieval, sharing, and optimal use of biomedical information, data, and knowledge for problem solving and decision-making. It touches on all basic and applied fields in biomedical science and is closely tied to modern information technologies, notably in the areas of computing and communication.

Its ultimate role of the division is to evaluate, implement and maintain an electronic preoperative anesthesia record-keeping system. Current activities include evaluation of the marketplace to see what record-

keeping systems are available. Steven Dain is a member of the Canadian Anesthesiologist's Society Data dictionary Taskforce, which is working with the American Patient Safety Foundation to develop a common ontology for coding of anesthesia data, so that data can be compared between centers.

Other projects include the UC acute pain service data, which is approaching 10,000 patient visits recorded. Dr Richard Cherry is working with the residents in obstetrical anesthesia with a palm pilot based database of resident experience.

Dr. David Smith continues to provide excellent service and support of the CLAS internet web-based anesthesiology conference and holiday scheduling software system. He is also providing a website for the question of the week.

Dr. Steven Dain continues to maintain and organizing the departmental website <http://anesthesia.lhsc.on.ca> which also provides interactive streaming audio and video of visiting professors lectures and the early morning TEE teaching sessions.

Dr. George Kanellakos attended the Stanford University Medical Informatics Course in Palo Alto California and we look forward to George's input into this division in the future in setting up CD-ROM libraries within the department.

## ***Didactic Teaching and Education***

### **Dr. Kevin Armstrong**

Departmental classroom courses:

Regional anesthesia for the upper limb

Interdepartmental classroom courses:

Postoperative pain management and regional anesthesia.

### **Dr. Neal Badner**

Postgraduate seminars:

Coronary artery disease, risk assessment and perioperative management

Local anesthetics

Undergraduate seminars:

Medical students - Regional anesthesia

Dental students - Intravenous anesthesia

### **Dr. Ron Butler**

Departmental classroom courses:

ICU Junior resident lectures - Critical care

Meds III clerkship lecture series

CCTC Junior resident lecture - Critical care

Interdepartmental classroom courses:

Coordinator Faculty wide academic half day - Clinical epidemiology and EMB

### **Dr. Lois Champion**

ICU Junior and Senior resident lectures series

Coordinator, Practical care seminar series for senior residents,

Program in Critical Care Medicine

Undergraduate lectures:

Pharmacology lectures: antiarrhythmic therapy; adrenergic pharmacology, cholinergic pharmacology and toxicology

Integrative Medicine lectures: shock and resuscitation

### **Dr. Rosemary Craen**

Anesthesia Residents:

2 neuroanesthesia lectures

Medical Students:

1 anesthesia lecture

**Dr. Steven Dain**

Anesthesia Residents:

Lecture: Gas Monitoring, Capnometry, Pulse Oximetry and the Anesthesia Work Station.

Medical Informatics 4<sup>th</sup> year Selective- Lecture:  
What in the world is Medical Informatics?

**Dr. John Fuller**

Airway Management, ICU Teaching Rounds, SJHC  
Airway Management, ICU Teaching Rounds, SJHC  
Oral Examiner, Making A Mark Anesthesia Course  
Meeting Organizer, McMaster/UWO Research Day

**Dr. John Murkin**

Departmental classroom courses: Complications in cardiac anesthesia

Interdepartmental classroom courses: Acid base and fluid management

**Dr. Michael Sharpe**

Departmental classroom courses: Junior resident teaching sessions in Critical Care

UWO Senior resident teaching Program in Critical Care

**Peer Reviewed Publications**

Beattie, W.S., **Badner, N.H.**, Choi, P. Epidural analgesia reduces postoperative myocardial infarction: A meta-analysis. *Anesth Analg* 93:853-858,2001.

**Badner, N.H.**, Freeman, D., Spence, J.D. Preoperative oral B vitamins prevent nitrous oxide-induced postoperative plasma homocysteine increases. *Anesth Analg* 93:1507-1510, 2001.

Cook, D., Meade, M., Guyatt, G., **Butler, R.** Trials of miscellaneous interventions to wean from mechanical ventilation. *Chest* 120:438S-444S, 2001.

Meade, M.O., Guyatt, G., **Butler, R.**, Elms, F., Hand, L., Ingram, A., Griffith, L. Trials comparing early vs late extubation following cardiovascular surgery. *Chest* 120:445S-453S, 2001.

Meade, M.O., Guyatt, G.H., Cook, D.J., Sinuff, T., **Butler, R.** Trials of corticosteroids to prevent postextubation airway complications. *Chest* 120:464S-468S, 2001.

**Armstrong, K.P., Kennedy, B., Watson, J.T., Morley-Forster, P.K., Yee, I., Butler, R.** Epinephrine reduces the sedative side effects of epidural sufentanil for labour analgesia. *Can J Anesth* 49:1: 72-80, 2002.

**Butler, R.**, Laufer, B. Best evidence in anesthetic practice. Prevention: recombinant human activated protein C reduces mortality in severe sepsis. *Can J Anesth* 49:2: 207-209, 2002.

Wake, P.J.; Ali, M., Carroll, J., Siu, S.C., **Cheng, D.C.H.** Clinical and echocardiographic diagnoses disagree in patients with unexplained hemodynamic instability after cardiac surgery. *Can J Anesth* 48:778-783, 2001.



**Cheng, D.C.H.**, Newman, M.F., Duke, P., Wong, D.T., Finegan, B., Howie, M., Fitch, J., Bowdle, T.A., Hogue, C., Hillel, Z., Pierce, E., Bukenya, D. The efficacy and resource utilization of remifentanyl and fentanyl in fast-track coronary artery bypass graft surgery: A prospective randomized, double-blinded controlled, multi-center trial. *Anesth Analg* 92:1094-1102, 2001.

Howie, M.B., **Cheng, D.**, Newman, M.F., Pierce, E.T., Hogue, C., Hillel, Z., Bowdle, T.A., Bukenya, D. A randomized double-blinded multicenter comparison of remifentanyl versus fentanyl when combined with isoflurane/propofol for early extubation in coronary artery bypass graft surgery. *Anesth Analg* 92:1084-1093, 2001.

Hynninen, M., Borger, M.A., Rao, V., Weisel, R.D., Christakis, G.T., Carroll, J.A., **Cheng, D.C.H.** The effect of insulin cardioplegia on atrial fibrillation after high-risk coronary bypass surgery: A double-blinded, randomized, controlled trial. *Anesth Analg* 92: 810-816, 2001.

Rajagopal, A., **Cheng, D.C.H.** Pro:Atrial arrhythmia prophylaxis is required for cardiac surgery. *J Cardiothorac Vasc Anesth* 16:114-117, 2002.

Place, D.G., Peragallo, R.A., Carroll, J., Cusimano, J.R., **Cheng, D.C.H.** Postoperative atrial fibrillation: A comparison of off-pump coronary artery bypass surgery and conventional coronary artery bypass graft surgery. *J Cardiothorac Vasc Anesth* 16:144-148, 2002.

**Dain, S.L.** Breathing circuit disconnections: averting catastrophes. *Can J Anesth* 48:840-843 2001.

Boyd, W.D., Kiaii, B., Koderia, K., Rayman, R., Abu-Khudair, W., Fazel, S., **Dobkowski, W.B.**, **Ganapathy, S.**, Jablonsky, G., Novick, R.J. Early experience with robotically assisted internal thoracic artery harvest. *Surg Laparosc Endosc Percutan Tech* 12:52-57, 2002.

**Ganapathy, S.**, **Murkin, J.M.**, **Dobkowski, W.**, Boyd, D. Stress and inflammatory response after beating heart surgery versus conventional bypass surgery: the role of thoracic epidural anesthesia. *Heart Surg Forum* 4:323-327, 2001

**Murkin, J.M.**, **Ganapathy, S.** Anesthesia for robotic heart surgery: an overview. *Heart Surg Forum* 4:311-314. 2001.

Kodera, K., Boyd, W.D., Kiaii, B., Novick, R.J., Rayman, R., **Ganapathy, S., Dobkowski, W.B.**, McKenzie, N.F., Menkis, A.H., Otsuka, T., Yozu, R. Clinical experience in thoracoscopic left internal mammary artery harvesting with voice activated robotic assistance. *Kyobu Geka* 2001 54:987-991; discussion 991-994, 2001.

**Ganapathy, S.**, Buckley, D.N. Best evidence in anesthetic practice. Prevention: intraoperative neuraxial blockade reduces some postoperative complications. *Can J Anaesth* 48:990-992, 2001.

Cechetto, D., **Gelb, A.W.** The amygdala and cardiovascular control. *J Neurosurg Anesth* 13:285-287, 2001.

**Gelb, A.W.**, Wilson, J.X., Cechetto, D.F. Anesthetics and cerebral ischemia - should we continue to dream the impossible dream? *Can J of Anesth* 48:727-731, 2001.

Daskalopoulos, R., Korcok, J., Farhangkhgoee, P., Karmazyn, M., **Gelb, A.W.**, Wilson, J.X. Propofol protection of sodium-hydrogen exchange activity sustains glutamate uptake during oxidative stress. *Anesth Analg* 93:1199-1204, 2001

**Gelb, A.W.** From what countries do chairpersons and invited speakers at important anesthesia and intensive care meetings come? *Eur J Anaesthesiol* 19:75-76, 2002.

Granton, J., **Gelb, A.W.** Neuroprotection during carotid endarterectomy. *Seminars in Cardiothoracic and Vascular Anesthesia* 6:21-25, 2002.

Wilson, J.X., **Gelb, A.W.** Free radicals, antioxidants, and neurologic injury: Possible relationship to cerebral protection by anesthetics. *J Neurosurg Anesth* 14:66-79, 2002.

Watts, A.D.J., Wyss, A.J., **Gelb, A.W.** Phenylephrine increases cerebral perfusion pressure without increasing intracranial pressure in rabbits with balloon-elevated intracranial pressure. *J Neurosurg Anesth* 14:31-34, 2002.

Cenic, A., **Craen, R.A.**, Lee, T-Y., **Gelb, A.W.** Cerebral blood volume and blood flow responses to hyperventilation in brain tumors during isoflurane or propofol anesthesia. *Anesth Analg* 94:661-666, 2002.

**Gelb, A.W.**, Bayona, N.A., Wilson, J.X., Cechetto, D.F. Propofol anesthesia compared to awake reduces infarct size in rats. *Anesthesiology* 96:1183-1190, 2002.

**Herrick, I.A., Ganapathy, S., Gelb, A.W.** Patient-controlled sedation. *Best Practice & Research Clinical Anaesthesiology* 15: 127-135, 2001

**Herrick, I.A., Craen, R.A.;** Blume, W.T., Novick, T., **Gelb, A.W.** Sedative doses of remifentanyl have minimal effects on EcoG spike activity during awake epilepsy surgery. *J Neurosurg Anesth* 14:55-58, 2002.

Ma, J., Shen, B., Stewart, L.S., **Herrick, I.A.**, Leung, L.S. The septohippocampal system participates in general anesthesia. *J Neurosci* 22:RC200: 1-6, 2002.

**Murkin, J.M.** Attenuation of neurologic injury during cardiac surgery. *Ann Thorac Surg* 72:S1838-1844, 2001.

Mehta, Y., Khanna, S., Juneja, R., Trehan, N., **Murkin, J.M.;** Shore-Lesserson L., Konstadt S.N. Cardiac surgery in patients with mobile aortic atheromas. *J Cardiothorac Vasc Anesth* 15:778-784, 2001.

**Murkin, J.M.** Neurologic monitoring during cardiac surgery. *Seminars in Cardiothoracic and Vascular Anesthesia* 6:35-38, 2002.

**Murkin, J.M.,** Boyd, W.D., **Ganapathy, S.,** Adams, S.J., Peterson, R.C., Morgan, J., Lok, P. Neuroprotection during CPB: From mechanisms to interventions. *Seminars in Cardiothoracic and Vascular Anesthesia* 6:3-6, 2002.

**Murkin, J.M.** Optimal management of cardiopulmonary bypass for the high risk patient. *Ann Cardiac Anesth* 5:162-165, 2002.

**Murkin, J.M.** Adverse central nervous system outcomes after cardiopulmonary bypass: A beneficial effect of aprotinin? *Seminars in Cardiothoracic and Vascular Anesthesia* 5:282-285, 2001.

**Iglesias, I., Ralley, F.E., Murkin, J.M.,** Novick, R. Development of a predictive index for complications in cardiac surgery: Preliminary report on retrospective observations. *Ann Thorac Surg* 73: 372S, 2001.

**Murkin, J.M.,** Maurer, J., Niemcryk, S. Full dose aprotinin administration is associated with a significant decrease in perioperative stroke in patients undergoing elective cardiac surgery: A meta-analysis. *Ann Thorac Surg* 73: 374S, 2002.

**Murkin, J.M.,** Boyd, W.D. MICS 111 Introduction. *Heart Surgery Forum* 4:289, 2001.

**Murkin, J.M.,** Stump, D.A. Introduction: Outcomes 2001. *Ann Thorac Surg* 73:353-354, 2002.

Fallon, K.M., **Fuller, J.G., Morley-Forster, P.** Fat embolization and fatal cardiac arrest during hip arthroplasty with methylmethacrylate. *Can J Anesth* 48:626-629, 2001.

**Morley-Forster, P.** Regional techniques for Cesarean Section. *Techniques in Regional Anesthesia and Pain Management* 5:24-29, 2001.

Cook, D., Laporta, D., Skrobik, Y., Peters, S., **Sharpe, M.,** Murphy, P., Chin, D., Crowther, M. Prevention of venous thromboembolism in critically ill surgery patients: A cross-sectional study. *J Crit Care* 16:161-166, 2001.

Ellis, C.G., Bateman, R.M., **Sharpe, M.D.,** Sibbald, W.J., Gill, R. Effect of a maldistribution of microvascular blood flow on capillary O<sub>2</sub> extraction in sepsis. *Am J Physiol* 282:H156-164, 2002.

Cook, D., McMullin, J., Hodder, R., Heule, M., Pinilla, J., Dodek, P., Stewart, T., **Sharpe, M.** Prevention and diagnosis of venous thromboembolism in critically ill patients: a Canadian survey. *Crit Care* 5:336-342, 2001.

Bateman, R.M., Ellis, C.G., **Sharpe, M.D.,** Freeman, D. The effect of hemolyzed plasma on the batch measurement of nitrate by nitric oxide chemiluminescence. *Clin Chem* 47:1847-51, 2001.

Bateman, R.M., Ellis, C.G., **Sharpe, M.D.**, Freeman, D. Optimization of nitric oxide chemiluminescence operating conditions for measurement of plasma nitrate and nitrite. *Clin Chem* 48:570-3, 2002.

### **Books:**

**Badner, N.** (Guest Editor). Anesthesia and minimally invasive surgery. In *Bailliere's Best Practice & Research in Clinical Anaesthesiology*: Elsevier Science Ltd. Kent 16:1-143, 2002.

**Cheng DCH** (Guest Editor): Blood Conservation in Cardiac Surgery: The Role of Hemoglobin Based Oxygen Carriers. *Can J Anesth* 48 (4): supplement, 2001

### **Book Chapters**

Wake P., **Cheng D.C.H.**: Postoperative Intensive Care In Cardiac Surgery. Edited by Metzler H: *Current Opinion in Anesthesiology* 14: 41-45, 2001. Lippincott, Williams & Wilkins

**Cheng D.C.H.**, Vegas A: Anesthesia for the Surgical Management of Ischemic Heart Disease. Edited by Thys DM: *Textbook of Cardiothoracic Anesthesiology*. Chapter 21: 530-588, McGraw-Hill, 2001.

**Herrick, I.A.; Gelb, A.W.** Occlusive cerebrovascular disease: Anesthetic Considerations. In *Anesthesia and Neurosurgery*, 4<sup>th</sup> Edition. Cottrell JE and Smith DS (Eds) CV Mosby, St. Louis pp 459-471, 2001.

**Herrick, I.A.** Occlusive cerebrovascular disease. In *Essence of Anesthesia Practice*. Roizen, M.F.; Fleisher, L.A. (Eds) W.B. Saunders, Philadelphia p242, 2002.

**Sharpe, M.D.**; Zimmermann, W. Parkinson's Disease [Paralysis Agitans]. In: Roizen, M.F. and Fleisher, L.A. (Eds). *Essence of Anesthesia Practice* 2nd Edition, W.B. Saunders, Philadelphia p250, 2001.

## **Non-Peer Reviewed Publications**

**Cheng, D.C.H.** Optimal Red Cell Therapy in Hospitals. Proceedings from the Ontario Hospital Association Blood Issues Session of the 77<sup>th</sup> Ontario Hospital Association 2001 Convention & Exhibition, November 2001.

**Dain, S.L.** Normal Accidents: Human error and Medical Equipment Design. Proceedings of Outcomes 2002, The Key West Meeting, Key West FL, May 2002.

**Gelb, A.W.,** Herrick, I.A. Carotid endarterectomy: continuing challenges. IARS 2002 Review Course Lectures Suppl to: Anesthesia & Analgesia 58-61(2002)

**Morley-Forster, P.** The end of the shift. University of Western Ontario Medical Journal 71:61-62, 2001.

**Murkin, J.M.** Stroke and the elderly: Aortic atheroma and CNS outcomes after cardiac surgery. Cardiovascular Reviews and Reports 22:397-401, 2001.

**Murkin, J.M.** Towards safer CPB: Techniques and technologies for the new Millennium. The ASCV Gazette. 2: 7-11, 2001.

Young, G.B., Bayliff, C., Bruni, J., Camfield, P., Jones, M., Lovell, S., **Sharpe, M.** Antiepileptic Drug Therapy. Canadian Pharmacists Association. L36-40, 2002.

## **International Standard Publications**

**Dain, S.L.** Anaesthetic and respiratory equipment - heat and moisture exchangers [HMEs] for humidifying respired gases in humans. Part 2: HMEs for use with tracheostomized patients having minimum tidal volumes of 250 ml. Geneva. 1-7, 2001.

**Dain, S.L.** Lung ventilators - Part 4: Particular requirements for operator-powered resuscitators. Geneva 1-22, 2002.

**Dain, S.L.** Sleep apnoea breathing therapy - Part 1: Sleep apnoea breathing therapy devices. Geneva 1-26, 2002.

**Dain, S.L.** Medical electrical equipment - Part 2-12: Particular requirements for the safety of lung ventilators - critical care ventilators Geneva 1-42, 2001.

### **Abstracts**

**Badner, N.H.**, Freeman, D., Spence, J.D., Doyle, J.A. Preoperative oral B vitamins prevent nitrous oxide induced postoperative plasma homocysteine elevations. *Anesth Analg* 92:SCA 95, 2001.

Mazer, D., Duke, P., Finegan, B., **Cheng, D.**, Hall, R. Canadian surgery on anticoagulation for cardiopulmonary bypass. *Can J Anesth* 49(S1), 2002.

Djaiani, G., Wall, C., Peragallo, R., Carroll, J., Naylor, D., **Cheng, D.** A randomized controlled comparison of the cost-saving in fast-track cardiac surgery one-year after hospital discharge. *Anesth Analg* 93: SCA31, 2002.

Mukherji, J., Djaiani, G.N., Karski, J.M., Fedorko, L., Jose, G., **Cheng, D.C.**, Cusimano, R.J. Intraoperative conversion of scheduled off-pump coronary artery bypass surgery increases perioperative morbidity. *Anesthesia and Analgesia* 93:SCA 51, 2002.

Akhtar, W., Djaiani, G., Karski, J., Carroll, J., Poonawala, H., Fedorko, L., Hynninen, M., **Cheng, D.** Pulmonary artery catheterization and clinical outcomes in patients undergoing coronary revascularization surgery. *Anesth Analg* 93:SCA 104, 2002.

Rajagopal, A., Balatbat, J., Ali, M., Djaiani, G.N., Karski, J.M., Heinrich, L., Sui, S., **Cheng, D.C.** Pulmonary artery systolic pressure using saline contrast echocardiography. *Anesth Analg* 93: SCA 72, 2002.

Mazer, D., Duke, P., Finegan, B., **Cheng, D.**, Hall, R. Canadian survey on anticoagulation for cardiopulmonary bypass. CAS Annual Meeting 2002. *Can J Anesth* 49(21), 2002.

Balatbat, J.T., Karski, J.M., Mukherji, J., David, T.E., **Cheng, D.** The effect of tranexamic acid on bleeding after deep hypothermic circulatory arrest. *Anesthesiology* 95:A204, 2001.

**Ganapathy, S.** Co author: Abstract: Prospective clinical trial of Computer-Enhanced endoscopic off-pump coronary artery bypass grafting with one year follow up at the annual meeting of Society of Thoracic surgeons meeting at Fort Lauderdale, Florida, Jan 2002.



## Invited Lectures/Visiting Professorships

### **Dr. Neal Badner**

Shoulder Arthroscopy Course, Ottawa, Ontario. *Postoperative Pain Management: An Anesthesiology Perspective*. February 9, 2002.

Canadian Society of Hospital Pharmacists Southwestern Chapter. *Postoperative Pain Management: An Anesthesiologists Point of View*. March 6, 2002

Post Anesthesia Care Conference, London, Ontario. *Failure to Awaken*. April 6, 2002.

A Canadian Orthopedic Consultants Meeting. Victoria, BC. Lecture: *Postoperative Pain Management: An Anesthesiology Perspective*. May 31, 2002.

### **Dr. Davy Cheng**

Panel Speaker, Symposium on Blood Conservation in Cardiac Surgery. 54<sup>th</sup> Canadian Cardiovascular Society Annual Meeting, Halifax, Nova Scotia. *Safety & Efficacy of O-Raffinose Crosslinked Human Hemoglobin in CABG Surgery*. October 23, 2001.

Panel Speaker, Ontario Hospital Association 2001 Convention, Blood Issues Session. Toronto, Ontario. *Optimal Red Cell Therapy in Hospitals*. November 6, 2001.

Guest Speaker, 4<sup>th</sup> Asian Society of Cardiovascular Anesthesia Meeting, Cebu City, Philippines. 1: *Fast Track Cardiac Anesthesia* and 2: *Off-Pump Cardiac Surgery: Perioperative Management and Outcome*. November 12-13, 2001.

Visiting Professor, Department of Anesthesia & Intensive Care, Prince of Wales Hospital, The Chinese University of Hong Kong. 1: *Fast Track cardiac Surgery: an Update* and 2: *Off-pump Coronary Artery Bypass Surgery: Perioperative Management and Outcome*. November 17, 2001.

Guest Speaker, 20<sup>th</sup> Annual Symposium Clinical Update in Anesthesiology, Paradise Island, Bahamas. *Fast Track Cardiac Surgery*. January 13-19, 2002.

Visiting Professor, Department of Anesthesia, McMaster University, Hamilton, ON. 1: *Perioperative Blood Conservation* and 2: *Perioperative Atrial Fibrillation Management*. February 6, 2002.

Guest Speaker Philadelphia Society of anesthesiologists. Philadelphia, Pa. *Off-Pump Coronary Bypass Surgery*. March 13, 2002.

Visiting Professor, Department of Anesthesiology and Surgery, Thomas Jefferson University. *Fast Track Cardiac Surgery: An Update*. March 14, 2002.

Visiting Professor, Department of Anesthesia & Intensive Care, The Chinese University of Hong Kong. 1: *Perioperative Blood Conservation and Oxygen Therapeutics* and 2: *Perioperative Atrial Fibrillation Management*. April 8-13, 2002.

PBLD Speaker, Society of Cardiovascular Anesthesiologists 24<sup>th</sup> Annual Meeting, New York NY. *OPCAB Surgery: Practical Issues—Update*. April 20-24, 2002.

Guest Speaker, Richard Ament, M.D., Memorial Lecture, Can-AM Meeting, Niagara-on-the-Lake, ON. *Perioperative Blood Conservation and Oxygen Therapeutics*. May 18, 2002.

Refresher Course Speaker, Mexico Anesthesiology Society 28<sup>th</sup> Annual Meeting, Mexico City, Mex 1: *Off-Pump Cardiac Surgery: Perioperative Management and Outcome* and 2: *Critical Care in Cardiac Surgical Patients: Present and Future*. June 6-8, 2002.

Panel Speaker, CVT Section Symposium “New technologies in the perioperative management of cardiovascular and thoracic patients”, Canadian Anesthesiologists’ Society 58<sup>th</sup> Annual Meeting, Victoria, British Columbia. *Robotic and minimally invasive cardiac procedures*. June 22, 2002.

**Dr. Rosemary Craen**

McGill Anesthesia Update 2001, Montreal, Canada. *Current Trends in Neuroanesthesia*. 2001.

XXVII Annual Meeting of the Mexican Society of Anesthesiologists. Mexico City, Mex. 1: *New Trends in Neuroanesthesia* and 2: *Diagnostic Approach to the Patient Who Fails to Awaken*. 2001.

Society of Neurosurgical Anesthesiology and Critical Care, Annual Meeting New Orleans. *Conscious Sedation for Neurosurgical Procedures for Movement Disorders and Epilepsy*. 2001.

**Dr. Steven Dain**

Anaesthetic Practice 2001 - OMA Section of Anaesthesia Annual Meeting Toronto, ON. *Normal Accidents: Human Error and Equipment Design*. December 1-2, 2001.

University of Toronto, Faculty of Biomedical Engineering, *Usability Engineering and Medical Equipment Design*. February 2002

3<sup>rd</sup> Biennial Biomedical Engineering and Usability Engineering Congress, University of Applied Sciences, Münster, Germany. *Normal Accidents, Human error and Medical Equipment Design*. March 2002

Ontario Postoperative Anesthetic Nurses' Association (OPANA) Annual Meeting, London, Ontario. *Perioperative Fluid Management*. May 2002.

Outcomes 2002, The Key West Meeting, Key West FL. *Normal Accidents: Human Error and Medical Equipment Design*. May 21-26, 2002.

Canadian Anesthesiologists' Society Annual Meeting, Victoria BC. Workshop: *How to Purchase Anesthetic Equipment*. May 23, 2002.

**Dr. John Fuller**

Canadian Ambulatory Anesthesia Interest Group Meeting, CAS Meeting. Lecture: *Malignant Hyperthermia and Ambulatory Anesthesia*. June 2002.

**Dr. S. Ganapathy**

University of Texas, Houston. *Continuous Catheter Blocks for Ambulatory Surgery*. June 28, 2002.

**Dr. Adrian Gelb**

International Society for Anesthetic Pharmacology (ISAP), 10<sup>th</sup> Annual Meeting, New Orleans. *Remifentanil in Neurosurgery, a success story?* October 12, 2001.

American Society of Anesthesiologists Annual Refresher Course Lecture, New Orleans. *Control of the Cerebral Circulation*. October 13, 2001.

48<sup>th</sup> Brazilian Meeting of Anesthesiology. Recife, Brazil. *Neuroanesthesia – Update in Drugs Choice*. November 17-21, 2001.

The Brian Marshall Lecture. University of Toronto. *Neuroanesthesia – what they didn't tell me*. January 24, 2002.

Visiting Professor, Department of Anesthesia, University of Toronto. January 24-25, 2002.

Visiting Professor, Washington Univ., Department of Anesthesiology. April 2-3, 2002.

ESA, Nice. *Funding of Research to North American anesthesiology Departments*. April 2002.

Malaysian Society of Anaesthesiologists, KL. *Managing Elevated Intracranial Pressure*. May 2002.

10<sup>th</sup> NeuroMonitoring Symposium, Munich. *Future Perspectives in neuromonitoring*. April 2002.

Visiting Professor, Westfälischen Wilhelms-Universität, Münster, Germany. June 2002.

Visiting Professor, Friedrich-Alexander Universität, Erlangen, Germany. 2002.

**Dr. John Murkin**

Cardiac Team Meeting 2001, New Approaches to Current Challenges, Parry Sound, Ontario. *Role of Pharmacologic Agents in CPB*. September 22-23, 2001.

University Medical Center, Utrecht, The Netherlands. *Aortic Atheroemboli and Brain Injury in Cardiac Surgery*. November 25, 2001.

Cardiac Surgical Resident Symposium, Tucson, AZ. *Neurologic Injury After Heart Surgery*. December 9, 2001.

Fifth Annual New Era Cardiac Care: Innovation & Technology, Dana Point, California. *Neurocognitive Changes During Perfusion*. January 4-6, 2002.

Advances in Stroke Prevention, London, ON. *Pre and Post Cardiac Bypass Surgery and Imaging*. February 11, 2002.

Total Myocardial Revascularization Without Cardiopulmonary Bypass. Tampa, FL. *Hemodynamic Changes During Cardiac Manipulation and Stabilization in Off-CPB Surgery: Relevance in Organ perfusion*. March 15-16, 2002.

Panel: Key Issues in Anesthesia in Off-CPB Surgery.

Panel: Hypotensive Anesthesia and Off-Pump Myocardial Revascularization: Role of Brain Monitoring – Pros and Cons.

NHLBI, NIA and NINDS Workshop on Neurocognitive Changes Following Cardiac Surgery. Session #2 Surgical Issues. Bethesda, Maryland. *Anesthesia/Pharmacology*. April 4-5, 2002.

Connecticut Society of Perfusion 2nd Annual Symposium. Neurologic Monitoring and Protection in Cardiac Surgery, Hamden, CT. *Neuroprotection During CPB: From Mechanisms to Intervention*. April 6, 2002

Society of Cardiovascular Anesthesiologists, New York, NY. *Aprotinin, Antifibrinolytics and Brain Dysfunction*. April 20-24, 2002.

Outcomes 2002 Key West FL “Cardiac and Vascular Surgery: Neurobehavioral Assessment, Physiological Monitoring and Cerebral Protective Strategies”. Panel Discussion: *Brain Injury and Cardiac Surgery. A Unifying Hypothesis?* May 22-26, 2002.

3<sup>rd</sup> International Symposium on Myocardial Protection from Surgical Ischemic Reperfusion Injury, Asheville, NC. *Hemodynamic Changes During Cardiac Manipulation in Off-CPB Surgery: Relevance in Brain Perfusion.* June 2-6, 2002.

OPCRES: Anesthesiology’s Role in Improved Patient Outcomes. Austin, TX. *Hemodynamic Changes During Beating Heart Surgery.* June 8-9, 2002.

CT Surgeons Group, Detroit MI. *Optimizing Patient Care: Aprotinin, Antifibrinolytics and Clinical Outcomes in Cardiac Surgery.*

University of Michigan, Grand Rounds: *Use of Serine Protease Inactivators in Cardiac, Transplantation and Orthopedic Surgery*

University of Michigan, Residents Lecture: CNS Outcomes in Cardiac Surgery: Aprotinin and the Inflammatory Response. June 18-19, 2002.

Canadian Anesthesiologists’ Society Annual Meeting, Victoria, BC. *Seminar: Managing Uncontrolled Hemorrhage in Trauma and Surgery: A Novel and Promising Alternative.* June 21-24, 2002.

**Dr. Michael Sharpe**

A Clear Process to Organ Donation: An Information Forum for the Health Care Community: Hotel-Dieu Grace Hospital, Windsor, Ontario. *Role of the Intensivist: Declaration and Management.* November 21, 2001.

Cardiovascular Surgery Resident Program - Seminar Series, U.W.O. *Pulmonary Hypertension.* February 6, 2002.

A Clear Process to Organ Donation: An Information Forum for the Health Care Community. St. Joseph’s Health Centre, Sudbury, Ontario. *Role of the Intensivist: Declaration and Management of the Organ Donor.* April 3, 2002,

A Clear Process to Organ Donation: An Information Forum for the Health Care Community: London Health Sciences Centre - Victoria

Campus, London, Ontario. *Role of the Intensivist: Declaration and Management*. April 23, 2002.

The 2nd Symposium of Anesthesia for Organ Transplantation, Beijing, P.R. China. *Heart Transplantation*. June 1-4, 2002.

The 2nd Symposium of Anesthesia for Organ Transplantation, Beijing, P.R. China. *Postoperative Care of the Liver Transplant Patient*. June 1-4, 2002.

## Conference Chair/Moderator

### **Dr. Davy Cheng**

*Chair*, Poster discussion session on Blood Conservation, Canadian Anesthesiologists' Society 58<sup>th</sup> Annual Meeting, Victoria, British Columbia. June 25, 2001.

*Chair*, "How To" Session, 54<sup>th</sup> Canadian Cardiovascular Society Annual Meeting, Halifax, Nova Scotia. Cardiac Surgery and Neurocognitive Dysfunction-Etiology, Prevention and Treatment. October 21, 2001.

*Chair*, Symposium on Blood Conservation in Cardiac Surgery. 54<sup>th</sup> Canadian Cardiovascular Society Annual Meeting, Halifax, NS. *Blood Conservation in Cardiac Surgery: Surgery, Anesthesiology and Perfusion Perspectives*. October 23, 2001.

*Chair*, Cardiac Surgery IV Session, 54<sup>th</sup> Canadian Cardiovascular Society Annual Meeting, Halifax, Nova Scotia. *Outcomes in New Trend of Cardiac Surgery*. October 23, 2001.

*Chair*, blood Issue Forum, Ontario Hospital Association 2001 Convention, Toronto, ON. *Managing Scarce Blood Resources—Alternative Solutions Today*. November 6, 2001.

*Moderator*, Multi-site International symposium. Anemia Institute for Research and Education. AIRE Anemia Awareness Week. London Health Sciences Centre, London, ON. *Cutting Edge Benefits to Treating Anemia*. March 26, 2002.

### **Dr. Rosemary Craen**

American Society of Anesthesiologist's Annual Meeting, New Orleans, USA. *Clinical Forum: Challenging Cases in Neuroanesthesia*. 2001

*Chair*, Plenary Session, McGill Anesthesia Update, Montreal, Canada. 2001.

*Moderator*, Poster Discussion Session, Canadian Anesthetists' Society Annual Meeting, Halifax, Nova Scotia. 2001.



**Dr. Steven Dain**

*Host of International Electrotechnical Committee Joint working Group on Medical Equipment alarm Signals, Vancouver BC. Technical Writings. July 2001.*

*Multi-Media Director, Cardiac Team Meeting, Parry Sound, September 2001.*

*Multi-Media Director and Organizer, Outcomes 2002, The Key West Meeting. May 2002.*

*Workshop Leader, Canadian Anesthesiologists' Society Annual Meeting, Victoria BC. June 2002.*

**Dr. Sue Ganapathy**

*Directed and conducted a telecast workshop "The Varkey Continuous catheter regional Anesthesia and Anatomy Workshop. November 29-30, 2001.*

*Conducted the live telecast regional anesthesia workshop at the CAS annual meeting. Regional section Chair at the CAS. June 25, 2002.*

**Dr John Murkin**

*Organized and chaired second annual three-day multidisciplinary cardiac team meeting "New Approaches to Current Challenges" held at Parry Sound, and one day symposium "Aprotinin and Antithrombosis" in Key, West, Florida. September 21-23, 2001.*

*Co-organized and chaired the four day Outcomes 2002 Key West Meeting, "Cardiac and Vascular Surgery: Neurobehavioral Assessment, Physiological Monitoring and Cerebral Protective Strategies". May 22-26, 2002.*

*Course director and organizer for two day "OPCRES: Anesthesiology's Role in Improved Patient Outcomes" in Austin Texas. June 8-9, 2002.*

*Scientific Advisor for the Italian Multicenter trial of Brain Oxygen Saturation in Milan Italy. Acted as Scientific Advisor to HIH Symposium on Neurocognitive Changes Following Cardiac Surgery in Bethesda, Maryland. 2002.*

## **Department Research Grants/Funding**

### **Peer Reviewed Grants/Funding**

#### **Dr. Ron Butler**

Yang H, **Butler RJ**, Roberts R. *Metoprolol after vascular surgery - (renewal)*. 2 year funding \$112,415.00 - total award. Heart and Stroke Foundation. 2001.

Role: Principal Site Investigator

**Butler RJ**, Martin CM, Gwadry-Sridhar. *A cluster randomized trial to improve weaning and extubation from mechanical ventilation in community hospitals*. 2 year funding \$145,000.00 - total award. PSI Foundation. 2001.

Role: Principal Investigator

#### **Dr. Rosemary Craen**

Todd M, University of Iowa. (PI). *Hypothermia during intracranial aneurysm surgery (IHAST2)*. 4 year funding \$6.5 million - total award. National Institute of Health. 2001-2004.

Role: Site Investigator

#### **Dr. Steven Dain**

*Healthcare Policy Development*. \$10,000. Canadian Standards Association and Standards Council of Canada. 2001.

#### **Dr. Davy Cheng**

*The role of bradykinin post cardiopulmonary bypass on bleeding and hypotension*. \$30,000. Anemia Institute for Research & Education, Canada. 2001-2002.

Principal Investigator

*Efficacy of ANH in reducing the incidence of allogenic blood transfusion in cardiac surgery*. \$30,000. Anemia Institute for Research & Education, Canada. 2001-2002.

Co-Investigator with Dr. Keyvan Karkouti (PI)

*The effect of a merger on a two site cardiac surgery and anesthesia service on patient outcomes and institutional safety culture* \$12,500. Lawson Health Research Institute. Internal Research Fund (IRF). 2002-2004.

Co-Investigator with Dr. Richard Novick (PI)

*Continuous Xcell-Saver, Neurocognitive Outcome and Cardiac Surgery.* \$199,995. Heart and Stroke Foundation of Ontario, Canada. Grant #NA4915. 2002-2004.

Co-Investigator with Dr. George Djaiani (PI)

**Dr. Adrian Gelb**

*Anesthetics in the Prevention of Ischemic Brain Injury.* \$150,769. Heart and Stroke Foundation of Canada. 1999-2001.

Co-Investigator with J.X. Wilson and D.F. Cechetto

*Hypothermia during Intracranial Aneurysm Surgery (IHAST2).* University of Iowa Multicentre Trial. \$6.5 million. National Institute of Health. M. Todd, Principal Investigator. 2001-2004

Advisory Committee Member

*A Multi-slice CT and MR CBF Mapping in the Assessment of Cerebral Ischemia.* \$98,585. Heart and Stroke Foundation of Ontario. 2000-2002.

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

*Cardiovascular dynamics: from model to physiology.* (\$103,975; \$102,210; \$98,925.) NSERC (Natural Sciences and Engineering Research Council) December 2000 - November 2003.

Co-Investigator with R.L. Hughson (PI), J.K. Shoemaker, D.C. Lin

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

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

*The Addition of Hyperventilation to Mannitol Therapy Does not Further Reduce Raised Intracranial Pressure.* \$4,600. London Health Sciences Centre, Internal Research Fund, 2000-02.

Co-Investigator with **R.A. Craen (PI)**, T-Y Lee

## Non-Peer Reviewed Grants/Funding

### **Dr. Neal Badner**

*The safety and efficacy of electrotransport (E-Trans) fentanyl compared to PCA morphine for the treatment of postoperative pain.* Multicenter clinical trial. Alza Corporation. \$52,000. 1999-2001.

*Safety and efficacy of CJC-1008 (long-acting dynorphin analogue) for postoperative analgesia following total knee arthroplasty. Phase II multicentre, clinical trial.* \$72,500, (2001-2). Conjuchem Corporation. 2001-2002.

### **Dr. Davy Cheng**

*Maintenance Anesthesia with Desflurane or Propofol for OPCAB Surgery.* Baxter Healthcare Corporation. US\$90,000. 2002.  
Co-Investigator

*Double-blind, randomized multicenter trial to evaluate recovery parameters and extubation time upon arrival at ICU following Zemuron or pancuronium in OPCAB surgery.* Organon Inc. US\$50,000. 2001-2002.

Principal Investigator

### **Dr. Adrian Gelb**

*Mechanisms of remifentanil-induced hypotension.* \$12,000.00 Abbott Laboratories Limited. 2001.

*The Effect of Aggrenox on Cerebral Perfusion during Cerebral Ischemia.* \$70,737. Boehringer-Ingelheim. 2001

Co-Investigator

### **Dr. John Murkin**

*The influence of cardiopulmonary bypass on CNS outcome following coronary artery surgery.* Medical Research Council of Canada. Ongoing study.

Principal investigator.

*Blood conservation using antifibrinolytics: a randomized trial in high risk cardiac surgery (Bart).* Canadian Institutes of Health Research. Multicentre ongoing study. Site Principal Investigator.

**Department of Anesthesia & Perioperative Medicine**  
**Visiting Observers**

Dr. Wu Anshi	Aug 20, 01 - Feb 28, 02	Department of Anesthesia Beijing Redcross Chaoyang Hospital Beijing, China
Dr. Jiang Zongbin	Sept 26, 01 - June 30, 02	Department of Anesthesiology The First Affiliated Hospital of Gungxi Medical University China
Dr. Chung Schun Guo	May 15, 02 - Aug 8, 02	Shenzhen, China
Dr. Khalid Samad	May, 02 - June, 02	Chief Anesthesia Resident Agha Khan University Hospital Karachi, Pakistan
Dr. Ram Prasad Kaushal	May 1, 02 - May 31, 02	Bhopal Memorial Hospital & Research Centre, Bhopal, India

**Department of Anesthesia & Perioperative Medicine Web Site**

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

**Anesthesia Residency Program**

<http://anesthesia.lhsc.on.ca/Residents/schedules/Academic2001-02.htm>

**Continuing Education Articles**

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

**E-mail Directory**

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

**Fellowship Programs**

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

**London Ontario Teaching Hospitals**

<http://anesthesia.lhsc.on.ca/stjoes/sjhca.htm>

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

**UWO Faculty of Medicine**

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