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Dr. R. K. Reznick

**Professor and Associate Chair**

Dr. B.R. Taylor

**Surgeons-in-Chief**

Dr. J. Wedge – The Hospital for Sick Children

Dr. Z. Cohen – Mount Sinai Hospital

Dr. L. Smith – St. Joseph's Health Centre

Dr. J.L. Mahoney – St. Michael's Hospital

Dr. R. Richards – Sunnybrook & Women's College Health Sciences Centre

Dr. L. Tate – Toronto East General Hospital

Dr. B.R. Taylor - James Wallace McCutcheon Professor and Chair – University Health Network

**University Division Chairs**

Dr. M. Wiley – Anatomy

Dr. L. Wilson-Pauwels – Biomedical Communications

Dr. R. Weisel – Cardiac Surgery

Dr. Z. Cohen – General Surgery

Dr. J. Rutka – Leslie Dann Professor and Chair of Neurosurgery

Dr. J. Waddell – J. Latner Professor and Chair of Orthopaedic Surgery

Dr. P. Neligan – Wharton Chair in Reconstructive Plastic Surgery

Dr. S. Keshavjee – Thoracic Surgery

Dr. S. Herschorn – Urology

Dr. K.W. Johnston – R. Fraser Elliott Chair in Vascular Surgery

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Dr. Richard Reznick  
F. S. McLaughlin  
Professor and Chair

It's hard to believe that it's been 14 months since I took over as Chair of this Department, and am writing for the second time, a column for the Annual Report. It's been quite a year! One message I received from many as I took on this job was to rely on a planning process to set priorities and develop strategy. And indeed, we have started to embark on a formal strategic planning process. Planning is one thing, but coping with the unexpected, especially when the unexpected transforms a city, a health care system, and indeed the lives of our patients and our colleagues, is quite another. We are all very mindful of the enormity of the SARS epidemic and the effect it had on our lives. We pray that this was a unique event, which we will not again experience in our lifetime.

As many of you know, I have spent a fair bit of time my first year meeting individually with faculty members. I have done this for several reasons: to personally meet and get to know many who I knew only by name; to get a general consensus on areas of strength and weakness in our department; to garner an environmental scan of the political and economic issues important to surgeons; to discuss academic issues of promotion, scholarly productivity and the relationship of the individual surgeon to the university; and significantly, to learn about our surgeons' strategies to a balanced life.

What I have learned from these moments I have shared with our faculty has been profound and magnifies my awe for this position, intensifies my belief in our academic mission, and strengthens my resolve to work hard to keep our department strong and vibrant.

I would like to extend a fond farewell to those surgeons in our department who have retired or moved on in 2002-2003. It is impossible to, in a brief mention, do justice to individuals who were our teachers, colleagues and friends. Certainly their clinical strength and academic achievements have left our department enriched forever. We hope we have many occasions to visit and work closely again with Lynda Mickleborough, Robin Humphries, Gordon Hunter, Eric Poulin and Colin Bayliss.

This past year, we lost two of our surgical heroes to cancer. Bob Ginsberg was Chair of our Division of Thoracic Surgery, and a world-renowned lung cancer surgeon, ironically, the disease he succumbed to. Bob had innumerable qualities; a great surgeon, a dedicated teacher, and a champion for finding better ways to treat disease. He was tough, indeed gruff, was unambiguous about what he thought was right, and was hugely respected for his honesty and integrity in Toronto, at his second home at Memorial, and indeed throughout the world.

Leo Mahoney passed away on Feb 27<sup>th</sup> of this year at the age of 82. His life had been full of personal and professional accomplishments and was justifiably celebrated. Leo finished his surgical training in 1953 and in 1954, was a McLaughlin travelling fellow. Leo became well known as an excellent general surgeon, having assumed a faculty position at St. Michael's Hospital. His two major academic interests were tetanus and malignancy. But Leo is perhaps best remembered for his passion about teaching. Ostensibly until he took sick, Leo was actively engaged in developing new educational models for the study of breast disease. On a personal note, I cannot remember a single academic accomplishment I had in the last 10 years where I did not receive a kind word or a call of encouragement from Leo.

Our university's mission has been affirmed to be one of the best publically funded research-intensive universities in the world. I believe the Department of Surgery is doing more than it's fair share in that quest. Departmental funding continues to grow, in excess of \$22,000,000 in external grants and contracts. The number of endowed research chairs keeps climbing, and we now have occupied, or soon to be occupied, 25 endowed chairs.

This year our Surgeon Scientist Program won the prestigious Northrop Frye award, one of our university's highest honours. The Northrop Frye award celebrates one program each year in our entire university, that best epitomizes excellence at the interface of teaching and research. This acknowledgment of our department's excellence in this area is a testimony to the residents who have been a part of it, to the faculty who have served as research mentors, to its directors over the years, including Charles Tator, Steve Strasberg, Dick Weisel and Ori Rotstein, and to its inspirational founder, Bernie Langer.

This year we have worked hard to continuously improve the quality of our undergraduate assessment process. At a recent retreat spearheaded by Bill Tucker, Stan Hamstra and Ted Ross, a complete new evaluation bank was fashioned. This department is indebted to the large number of faculty who helped in this major effort.

Under Helen MacRae's leadership our skills lab continues to flourish and is widely recognized as one of the preeminent efforts of its kind in North America. This year, the program has expanded to include surgical training for undergraduate medical students, more programs aimed at senior level trainees, and a dramatic increase in CME events.

There are many stresses on our residency system. This year we have kicked off a process called "working towards a new training model". John Bohnen organized an excellent 11/2-day retreat, which identified significant areas of strength of our current residency education model, delineated areas in which major changes could yield improvement and planted the seeds for a formula for change.

This past year we have embarked upon a process taking the whole area of fund-raising more seriously. We have hired Rebecca Davies, an advancement officer whose time is being spent strictly on Department of Surgery activities. I am happy to report that we are already seeing the difference that having a professional fund-raiser on our team can have. There is active work on five new chairs, a series of special events as well as excellent indications, that we can expect continuing and expanded corporate support for our surgeon scientist program.

Without a doubt, the single most important political activity of this past year, has been the AFP negotiations. These have taken place at multiple levels, starting with hospital-based negotiations, migrating towards negotiations for AFP's for certain specialty groups and most recently, an exploration of the of an academic surgical AFP that would be province-wide. There is no question in my mind that over all there is overwhelming support from academic surgeons in our department for the concept of an AFP. Many people have spent countless hours trying to facilitate its development. As our advocates in this process, they deserve our support and patience. Negotiations with government are seldom easy.

I am deeply convinced that we must all pull together in this effort. There may well be strength in numbers. So much of our activities, both clinical and academic, are non-remunerated or under-remunerated. For a large and exciting Department of Surgery such as ours to continue to thrive, we will need a funding structure that rewards and acknowledges the entire spectrum of important things that we do.

Finally, a word about inter-hospital relations. Although the restructuring commission suggested and implemented dramatic changes to the hospital landscape in this last decade, one can argue that it did not address a fundamental issue and that is the issue of governance across institutions. Toronto may be the only major Canadian city without a regional health authority or equivalent. The ramifications for surgery can be profound and has the potential to impact significantly on our programs. I would argue that it is of utmost importance for our teaching hospitals to band together, enter into an era of joint planning and take shared responsibility for a breadth of clinical responsibilities, needed by our patients.

In summary, this first year as Chair has been an enriching one. Each moment has been filled with important challenges and most importantly, a deep respect I have learned for the calibre of individuals in this Department.

## Departmental and External Awards and Honors

**The Surgeon-Scientist Program**, The Northrop Frye Award

**Dr. Joel Fish**, 2003 E. Bruce Tovee Postgraduate Teaching Award

**Dr. Robert Mustard**, 2003 E. Bruce Tovee Undergraduate Teaching Award

**Dr. Christopher Schlachta**, University of Toronto, Surgical Skills Centre Distinguished Teaching Award

**Dr. Steven Gallinger**, 2003 Lister Prize

**Dr. Bobby Shayegan**, 2003 D.R. Wilson Award

**Dr. Peter Dirks**, 2003 Bernard Langer Surgeon-Scientist Award

**Dr. Lori Burrows**, 2003 George Armstrong-Peters Prize

**Dr. Ori Rotstein**, Charles Tator Surgeon-Scientist Mentoring Award

**Dr. James Mahoney**, Master Teaching Award, Fitzgerald Academy

**Dr. Christopher Schlachta**, Clerkship Teaching Award, Fitzgerald Academy

**Dr. Robert Stewart**, Clerkship Teacher Award, Fitzgerald Academy

**Dr. Carol Swallow**, Program Innovation and Development, Wightman-Berris Academy

**Dr. Mark Bernstein**, Education Administration Award, Wightman-Berris Academy

**Dr. Stan Hamstra**, Education Administration Award, Wightman-Berris Academy,

**Dr. Robert Cusimano**, Undergraduate Education Award, Wightman-Berris Academy

**Dr. Christopher Wallace**, Undergraduate Education Award, Wightman-Berris Academy

**Dr. Thomas Waddell**, Undergraduate Education Award, Wightman-Berris Academy

**Dr. Michael Fehlings**, Postgraduate Education Award, Wightman-Berris Academy

**Dr. Jay Wunder**, Postgraduate Education Award, Wightman-Berris Academy,

**Dr. Peter Chu**, Problem Based Learning Tutor Award, Peters-Boyd Academy

**Dr. Oleh Antonyshyn**, W.K. Lindsay Research Supervisor Award

**Dr. Benjamin Alman**, Arthur H. Huene Memorial Award

**Dr. John Bohnen**, 2002 PAIRO Trust Fund's Travel Award for Clinical Educators

**Dr. Paul Binhammer**, Arnis Freiberg Teaching Excellence Award

**Dr. Michael Cusimano**, Dr. Clarice Chalmers Teaching Award, St. Michael's Hospital

**Dr. Robin Humphreys**, Alan R. Hudson Teaching Award & 2003 Claus Wirsig Award from The Hospital for Sick Children Foundation

**Dr. Michael McKee**, R.B. Salter Award for Excellence in Teaching

**Dr. Martin Buckspan**, Division of Urology Resident Clinical Teaching Award

**Dr. Ron Kodama**, A.W. Bruce Award

**Dr. Griffith Pearson**, Member of the Order of Canada

**Dr. Michael Tymianski**, Royal College Medal in Surgery from the Royal College of Physicians and Surgeons of Canada

**Dr. James Rutka**, Board of Directors, American Association of Neurological Surgeons and Nation Builder Award, Science and Technology, The Globe and Mail

**Dr. Robin McLeod**, Regent, American College of Surgeons

**Dr. Robert Salter**, Minnesota Orthopaedic Society Inaugural Lifetime Achievement Award and International Federation of Surgical Colleges, Merit of Achievement

**Dr. Christopher Forrest**, American College of Surgeons Australian/New Zealand Chapter Visiting Fellow for 2003

**Dr. Magdy Hassouna**, American College of Surgeons, Australian/New Zealand Chapter Travelling Fellow for 2003

**Dr. R. Zuker**, President, American Society of Reconstructive Microsurgery

**Dr. Charles Tator**, Salute to the City Award

**Dr. Carin Wittnich**, Board of Governors of the Michener Institute

**Dr. Sender Herschorn**, Senior Editor of Reconstruction, Journal of Neurourology and Urodynamics  
**Dr. Andres Lozano**, Science Advisory Council of Neuroscience, Canada  
**Dr. Linda Wilson-Pauwels**, Certificate of Merit, Medical Book Professor Category, Association of Medical Illustrators  
**Dr. Timothy Daniels**, President, Canadian Orthopaedic Foot and Ankle Society  
**Dr. Magdy Hassouna**, Secretary/Treasurer, International Society of Pelvic Neuromodulation  
**Dr. Erin Boynton**, J.E. Samson Award, Canadian Orthopaedic Association.

## **Promotions**

Congratulations to the following members of the Department of Surgery whose academic contributions to the Department and to the University were recognized by promotions July 1, 2003. Dr. Leslie Carr was promoted to Assistant Professor. Dr. Dimitri Anastakis, Dr. Rod Davey, Dr. Stan Hamstra, Dr. Peter Kim, Dr. Andrei Krassioukov, Dr. Nizar Mahomed, Dr. Carol Swallow, Dr. Terrence Yau were promoted to Associate Professor. Dr. Howard Clarke, and Dr. John Coles were promoted to Full Professor.

## **New Faculty Appointments**

Dr. Francis Beninger, Plastic Surgery, University Health Network, Dr. Michael Borger, Cardiac Surgery, University Health Network, Dr. Gideon Cohen, Cardiac Surgery, Sunnybrook & Women's College Health Sciences Centre, Dr. Peter Ferguson, Orthopaedic Surgery, Mount Sinai Hospital, Dr. Joan Ivanov, Cardiac Surgery, University Health Network, Dr. Ian McGilvray, General Surgery, University Health Network, Dr. Kenneth Pace, Urology, St. Michael's Hospital, Dr. Sandro Rizoli, General Surgery, Sunnybrook & Women's College Health Sciences Centre, Dr. Paul Sullivan, General Surgery, Toronto East General Hospital, Dr. Lorraine Tremblay, General Surgery, Sunnybrook & Women's College Health Sciences Centre, Dr. Paul Wales, General Surgery, The Hospital for Sick Children.

## **Reviews, Searches & Appointments**

Dr. John Wedge was appointed Associate Dean, Clinical Affairs, Faculty of Medicine, University of Toronto. Dr. James Mahoney was appointed Acting Surgeon-in-Chief, St. Michael's Hospital. Dr. Shaf Keshavjee appointed Acting Chair, Division of Thoracic Surgery, Dr. James Drake appointed Head, Division of Neurosurgery, The Hospital for Sick Children. Dr. Neil Fleshner appointed Head, Division of Urology, University Health Network. Dr. Christopher Forrest appointed Head, Division of Plastic Surgery, The Hospital for Sick Children. Dr. Christopher Wallace appointed Head, Division of Neurosurgery, University Health Network. Dr. Andrew Smith appointed Head, Division of General Surgery, Sunnybrook & Women's College Health Sciences Center.



Dr. Helen MacRae  
D.H. Gales Director

The primary mission of the University of Toronto Surgical Skills Centre, is to change the way fundamental surgical skills are taught and evaluated. As well, the Skills Centre provides a platform for continuing education in surgical skills, serves as a laboratory for research in surgical skills and helps to promote and enhance the teaching of surgical skills.

Traditionally, surgical skills have been acquired in the operating room. With the increasing complexity of surgical procedures and the premium placed on operating room time, this venue is not ideal for novice learners. Furthermore, the operating room does not allow for the opportunity to practice a discrete skill repeatedly with ongoing feedback. Thus, the goal of the Skills Centre is to offer programs and learning opportunities that are an adjunct to traditional teaching and thus enhance technical skill acquisition.

The Skills Centre operates programs for all stages in the medical education continuum. Basic skills for undergraduate medical students are addressed in sessions that cover simple skills, such as chest tube insertion, fundamentals of suturing and line placement. The postgraduate curricula are much more extensive. First-year residents from all disciplines participate in the Core Curriculum. This involves sessions once per week, that concentrate on skills required across surgical disciplines. The student to faculty ratios are small, allowing residents to receive one-on-one teaching and feedback on their techniques. These sessions are very popular among the junior residents, with residents commenting that they are a highlight of their week. Divisions within the Department of Surgery, also offer specialty-specific courses, that focus on discreet operations or specialty-specific techniques, for the more senior residents. Finally, in continuing medical education, the Skills Lab is becoming an important venue for the acquisition of new techniques and operative approaches. For example, Minimally Invasive Ventral Hernia Repair has been a focus of several courses. Similar offerings across the education spectrum, are offered by the Departments of Medicine and Obstetrics and Gynecology.

To enhance the learning experience, the Surgical Skills Laboratory has been equipped with telecommunications capability. The Skills Laboratory is directly linked with two operating rooms in the Mount Sinai Hospital, allowing for participants in the Lab to view operations in the context of a course and to interact directly, with the operating surgeon. Using the Telecommunications system, the Skills Lab is able to facilitate two-way communication, and audio-visual input, from any similarly equipped facility around the world. For example, in a recent course focusing on Total Mesorectal Excision for Rectal Cancer, operations from two centres in the U.S., as well as a simulcast from the Mount Sinai Hospital, were featured. This system can also be used to project demonstrations in the laboratory, for all participants.

The models used in the Skills Laboratory, vary from very basic knot-tying boards used for basic skills, to cadavers, to virtual reality simulators. The model fidelity is tailored to the needs of the learners and the course, again enabling the Lab to be relevant to learners at many levels.

Finally, the Skills Lab is at the forefront in research on technical skill acquisition in surgery. It serves as a platform for many research projects in this domain. Dr. Adam Dubrowski, a Ph.D. in Kinesiology, is now employed full-time in the Laboratory, to carry the research agenda of the laboratory forward. He is working collaboratively with surgical faculty on projects in technical skill acquisition. Over time, the knowledge gained, will allow us to better meet the learning needs of our faculty and trainees.

In summary, the University of Toronto Surgical Skills Centre at the Mount Sinai Hospital, is a major development of the Department of Surgery. The focus on developing technical skills at all stages of the education continuum, across disciplines, coupled with leading edge research in skills acquisition, provides the opportunity to make major contributions to the practice of surgery.





Dr. William Tucker  
Director

In the autumn of 2002, Dr. Richard Reznick became the new Chair of the Department of Surgery. Dr. Reznick has shown the avid interest and strong support for Undergraduate Education that we came to rely on under Dr. Wedge's leadership. Particularly given Dr. Reznick's past academic and administrative contributions to education, we look forward to working with him in achieving our mutual goals for our undergraduate programs.

The 2002-03 academic year was unfortunately badly disrupted by the constraints on teaching necessitated by the SARS outbreaks. Probably no group suffered more from the restrictions in our activities, except our patients, than our undergraduate and postgraduate students. The surgeons in our Department have shown a willingness to cooperate in the resultant rescheduling of teaching and examining activities, for which they deserve our thanks and recognition. Some of these adjustments will carry forward into the 2003-04 academic year.

Dr. John Murnagham organized and led another Resident as Teacher Day, held on July 12, 2002, to instruct our residents in the important undergraduate teaching role they have, especially as mentors, to our Clerkship students. As in the past, this program was very positively evaluated by the residents and undergraduate students who participated in it.

On May 1, 2003, a Multiple Choice Question (MCQ) examination item preparation session, was held at the Vaughan Estate. Faculty from virtually every major surgical discipline took part in this meeting and the existing MCQ item bank for our Phase 1 and II clerkships was updated and many new items were added, based on the content presented on the Surgical Clerkship Curriculum Website. The updated MCQ items will be used in the coming academic years and validated in 2003-04 by the contemporaneous use of the National Board of Medical Examiners 'shelf' examination, the reliability of which is known.

Dr. Robert Mustard of the Division of General Surgery at St. Michael's Hospital, won this year's E. Bruce Tovee Award for undergraduate teaching in the Department. Dr. Bobby Shayegan, a resident in the Division of Urology, won the D.R. Wilson award for exemplary undergraduate teaching by a resident. Dr. Stan Hamstra, of our Department and the Centre for Research in Education won the Anderson Teaching Award at the University Health Network.

Dr. Charles Peniston completed the academic year as the supervisor of the Phase II Surgery Clerkship Objective Structured Clinical Examination and Dr. Ken Pace will replace him in 2003-04.

The teaching of Technical skills to our Phase 1 surgical clerks was formalized across the University in 2002-03 and it is anticipated that assessment of these skills, will be incorporated into future examinations.

As Chair of the Undergraduate Education Committee, I would like to thank the faculty and student representatives of the UEC and all of the faculty and residents who contribute to our undergraduate teaching mandate, for their contributions over the past academic year.



Dr. John M.A. Bohnen  
Director

University of Toronto's Department of Surgery residents and faculty members, experienced an eventful 2002-2003 year, one of accomplishments, challenges and promise. Residents thrived as clinicians and trainees. The Severe Acute Respiratory Syndrome (SARS) epidemic led to unexpected constraints and Dr. Richard Reznick, incoming Department Chair, infused new energy into the education enterprise.

All of our first-year entry positions were filled in July 2002, through the Canadian resident match. In 2002-2003, we had 211 trainees in our eleven programs (Cardiac Surgery, General Surgery, Neurosurgery, Orthopedic Surgery, Plastic Surgery, Thoracic Surgery, Urology and Vascular Surgery residencies; and Colorectal Surgery, Paediatric General Surgery and Surgical Oncology accredited fellowship programs). Beyond that, the Department provided extra clinical training for 164 clinical fellows and 21 elective residents who have joined us from every continent but Antarctica. Thirty-three residents received research training within the Surgeon Scientist Program, led by Dr. Ori Rotstein.

Residents finishing Core Surgery (years one and two) and senior residencies were highly successful in Royal College of Physicians and Surgeons (RCPSC) in-training and fellowship examinations. According to new RCPSC policy, pass/fail information is confidential; according to the reports of the residents themselves, their successes rivalled previous years of sustained excellence.

The Department of Surgery sponsors a number of educational offerings that complement the residents' clinical exposure. Dr. Bob Mustard has done a tremendous running of the Principles of Surgery Lecture series and Dr. Jameel Ali provided a POS practice exam, once again. In special "resident forum" sessions twice annually, the Core Surgery residents gave feedback to Dr. Hamstra and myself, about issues such as work conditions. On July 8, 2002, Core Surgery residents attended a half-day program "The Surgeon in Society" on topics of professional interest such as information management and surgical error. The many other events include orientation day for incoming PG1s in July; a career night for senior year medical students interested in Surgery; a senior residents' day led by Dr. Martin McKneally; a "residents as teachers" workshop led by Drs. John Murnaghan and Stan Hamstra; and Advanced Trauma Life Support training led by Dr. Jameel Ali.

The Surgical Skills Centre (SSC), under the leadership of Dr. Helen MacRae, trains Core Surgery residents in basic operating room skills and theory, in a controlled setting, under the supervision of master teachers of surgical technique. Besides Core Surgery training, the SSC provides advanced skills training for surgical divisions and the Departments of Otolaryngology and Obstetrics/Gynecology.

The divisional Program Directors continue to look after their residents' needs and organize divisional educational and social events. Many thanks to Dr. Marcus Burnstein (Colorectal Surgery); Dr. Gail Darling (Thoracic Surgery); Dr. Doug Hedden (Orthopaedic Surgery); Dr. Ron Kodama (Urology); Dr. Jack Langer (Paediatric General Surgery); Dr. Ron Levine (Plastic Surgery); Dr. Lorne Rotstein (General Surgery); Dr. Carol Swallow (General Surgical Oncology); and Dr. Chris Wallace (Neurosurgery) for continuing to make my job easy. After distinguished tenures leading the Vascular Surgery and Cardiac Surgery programs, Dr. K. Wayne Johnston and Dr. Charles Peniston, have stepped aside to pursue other tasks, to be replaced by Drs. Tom Lindsay and David Latter respectively.

Faculty members and residents were granted numerous awards by hospitals, surgical divisions and the Department of Surgery, for excellence in postgraduate teaching. Among them, Dr. Joel Fish, won the 2002-2003, E. Bruce Tovee Postgraduate Award for sustained, outstanding contributions to postgraduate training. Dr. Bobby Shayegan won the D. R. Wilson Education Prize for outstanding teaching of medical students, by a surgical resident.

SARS disrupted teaching in the operating rooms, at bedsides and in classrooms. For April, May and half of June 2003, the epidemic forced cancellations of most elective operations. Strict university and hospital infection control policies led to cancellations of rounds, classroom sessions and educational planning meetings. About a score of residents and staff were placed on various levels of quarantine. On the positive side, the city-wide emergency strengthened the working relationships between the university and the hospitals, and demonstrated the value of communication technology in achieving consensus rapidly when balancing public safety with educational needs.

With his past accomplishments in education research, and passion for teaching and innovation, Dr. Richard Reznick has raised the bar on expectations for postgraduate surgical education. Chairman Reznick has promised to take a fresh look at all aspects of surgical residency training, as part of a general renewal of our department's mission and vision. Toward that end, a retreat focusing on postgraduate surgical education was held at the Old Mill in Toronto, June 12 and 13. About 80 division leaders, program directors, education researchers and residents, expressed creative ideas around a variety of issues to inform improvement in education delivery. Distinguished guest speakers included Dr. Nadia Mikhael, Director, RCPSC, and Dr. Gary Dunnington, Chair of Surgery, Southern Illinois University School of Medicine. The rich array of ideas and concepts will be worked into a green paper for wide input, from in and outside the department, before decisions are taken on incorporating new education models into training.

Once again, we received enormous help from the outstanding administrative support of Tess Weber, Miriam Rotman and Jean DeFazio. See you next year!



Dr. Ori D. Rotstein  
Director

Research successes were abundant in the Department of Surgery over the past year. The total research funding by the Department exceeded \$27 million for the first time, as faculty grant accrual continued to rise. The Surgeon Scientist Program (SSP) remained one of our defining programs, providing surgical residents with superb opportunities for research training. This past year, 11 new residents entered the SSP, giving the Program 19 M.Sc., three M.Ed., two M.A.Sc. and 14 Ph.D. candidates involved in full-time research. These individuals were recognized locally, nationally and internationally, as evidenced by their outstanding publications in the highest quality peer-reviewed journals, as well as their success in obtaining grants and awards. This past year, over 85% of our SSPs were successful in receiving full or partial salary support from external granting agencies. The Johnson & Johnson Medical Products SSP Fellowship's third year of commitment allowed us to support four SSPs. These were Allan Eckhaus, Michael Ko, Mark Peterson and Ravindar Sidhu.

The 29th Gallie Day, featured the research work of 14 of our Surgeon Scientist Program residents in the Annual Gallie-Bateman competition. The 1st prize was awarded to Sheila Singh (supervisor: Dr. Dirks). There was a tie for the 2nd prize awardee: Paul Fedak (supervisor: Dr. R. Weisel), and Rachel Khadaroo (supervisor: Dr. O.D. Rotstein). For the second year, the Gallie Bateman Poster Competition took place on the day prior to the Gallie Day celebrations and featured a total of 42 posters from students, fellows and postdoctoral students from across the Department. Two prizes were awarded: the McMurrich Award (Basic Science) and the Wyeth-Ayerst Award (Health Services and Education research). There was a tie vote for the McMurrich Award: R.Haddad, et al - (supervisor: Dr. A.J. Smith) and K.L. Moozar, et al - (supervisor: Dr. S. Gallinger). The Wyeth-Ayerst Award was won by D.A. Ashburn (supervisor: Dr. W.G. Williams). The SSP itself, was honoured at the University of Toronto by being selected the 2003 recipient, of the Northrop Frye Departmental/Divisional Award, recognizing the ability of the Program to integrate research and education.

Faculty accomplishments were equally impressive. Over 15 new grants were awarded by the Canadian Institutes of Health Research (CIHR). Our young Faculty members were recognized through their receipt of our local competitive University grants, including the Connaught New Staff Matching Award (Drs. Cindi Morshead, Vivek Rao and Cari Whyne) and the Dean's Fund Competition for New Staff (Drs. David Backstein, Andrea McCart and Marc Pelletier). This year's Bernard Langer Surgeon Scientist Award recipient, given to the most outstanding graduate of the Surgeon Scientist Program, was Dr. Peter Dirks. Faculty contributions to new knowledge were published in the highest quality Journals, including Science, Nature and The New England Journal of Medicine. This past year, the George Armstrong-Peters Prize for best young investigator was awarded to Dr. Lori Burrows, while Dr. Steven Gallinger was honoured with the Lister Prize for best senior investigator.

The Departmental Research Committee, continued its work on developing a mentoring program for young faculty and defining the role of non-clinician scientists, in the Department of Surgery. Each month, a non-clinician scientist is highlighted in the Department of Surgery Newsletter. The Committee also participated in the preparation of this year's Gallie Day Program, highlighting SSP presentations, the Gordon Murray Lecture by Dr. David Dunn, Chair of Surgery, University of Minnesota and a provocative symposium on Regenerative Medicine.

Finally, we thank Val Cabral for her coordination of all aspects of the Departmental research activities.

In summary, this has been a stellar year for research in the Department of Surgery. We should continue to take great pride in the breadth and depth of our research accomplishments, while remaining cognizant of the importance of future research innovations, as a means of providing excellence in patient care.



Dr. R. Weisel  
Chair

During this academic year, the Division was required to respond to a variety of challenges while maintaining its focus on academic excellence.

## **Clinical**

Shortages of nurses, perfusionists and anaesthetists were compounded by the SARS outbreak and resulted in substantial down-sizing, at all four centres. However, at each of our institutions, clinical volumes are returning and we appear to have sufficient resources to meet the mandate we have been given, by the Government and our institutions, to care for the population in central Ontario. No further expansion is anticipated at the three adult centers because two additional centers will open next year.

The facilities at the Hospital for Sick Children are being expanded because of the closure of the program in London and the anticipated closure of the Ottawa program.

## **Recruits**

Dr. Gideon Cohen returned to Sunnybrook & Women's College Health Sciences Centre, after a year in Cleveland, to join Dr. Marc Pelletier who was recruited to the staff last year. Dr. Cohen received his Ph.D. during his surgical scientist training and he will compliment the basic and clinical research programs at Sunnybrook Hospital.

Dr. Michael Borger returned from a year in Germany, developing his expertise in minimally invasive valve surgery. He will be joining Dr. Viv Rao, a recruit from last year, to enhance the academic programs at the Toronto General Hospital. Dr. Borger completed his Ph.D. with Dr. David Naylor, in Clinical Epidemiology and will augment the program in surgical innovation and translation at that institution.

Dr. Chris Caldarone was recruited to the Hospital for Sick Children from the University of Iowa, where he was the Chief of Paediatric Cardiac Surgery. His impressive clinical skills will augment the excellent results obtained at Hospital for Sick Children and his basic science research, will compliment the expanding program at that institution.

## **Resident Training**

Dr. David Latter has been appointed the new Program Director and will spearhead innovative approaches to teaching. The Division continued its tradition of selecting its first choice in the resident match.

## **Awards**

Dr. Paul Fedak received the Vivien Thomas Young Investigator Award from the American Heart Association, the Bigelow Prize at the Terrence Donnelly Cardiac Surgical Residents Day and the PSI Resident Research Award.

Dr. Subodh Verma received the International Society for Heart Research Young Investigator Award.



Dr. Zane Cohen  
Chair

This has been a tumultuous year for all the members in the Department of Surgery. The academic year 2002-2003 has been dominated by the SARS outbreak. This has affected aspects of our clinical care, research and educational activity. Fortunately, it appears that we are now able to put the SARS outbreak behind us and hopefully we can look back and try to take some positive aspects out of a very difficult and stressful situation. One of our own general surgical staff was affected by SARS and hospitalized. Dr. Lorraine Tremblay is a SARS survivor in the true sense of the word and I would like to salute her, on behalf of all the members of our general surgical division.

## Resident Training

Thirteen new PGY residents, including one from Saudi Arabia and one IMG resident have been accepted into our general surgical program, for the academic year 2002-2003. These individuals are: Drs. Doreen Chung, Ivan

Diamond, Frank Eng, Philippe Garzon, Anand Govindarajan, Catherine Kim, Murray Meek, Brian Pinchuk, Sundeep Rai, Tania Zakrison, Zofir Al Hariri, and Dr. Aida Deliallisi. We wish them success in the general surgery residency program which began July 1, 2003.

The following general surgical residents were successful in completing the general surgical training program for 2002-2003. They are as follows: Drs. Maryam Aleyaseen, Tamara Znajda, Ulana Kawun, Robin Boushey, Mohamed Al-Omran, Wael Al-Kattan, Daniel Melamedov and Dr. Arvind Nanda.

The residents engaged in full-time research in the Surgeon-Scientist Program during 2002-2003 were: Rebecca Gladdy – (Supervisor - Dr. Jane Danska); Kouros Moozar – (Supervisor – Dr. Steve Gallinger); Anand Ghanekar – (Supervisor – Dr. David Grant); Laura Musselman – (Supervisors – Prof. Stan Hamstra/ Dr. Richard Reznick); Mary Ann Aarts – (Supervisor – Dr. John Marshall); Tracey Asano – (Supervisor – Dr. Robin McLeod); Neelesh Jain – (Supervisor – Dr. Matadial Ojha); Rachel Khadaroo – (Supervisor – Dr. Ori Rotstein); Kinga Powers – (Supervisor – Dr. Ori Rotstein); Giuseppe Papia – (Supervisor – Dr. Ori Rotstein); Angel Arnaout – (Supervisor – Dr. Joyce Slingerland); Veena Guru – (Supervisor – Dr. Jack Tu); Ian McGilvray – (Supervisor – Dr. Gary Levy); Ravi Sidhu – (Supervisor – Prof. Stan Hamstra).

## Promotions

During this academic year the following were promoted to Associate Professor: Prof. Stan Hamstra, Drs. Peter Kim, Helen MacRae and Dr. Carol Swallow. We congratulate those who were promoted for their superior efforts, that have been now been recognized in a concrete way.

## New Faculty

During the academic year 2002-2003, Dr. Alexandra Easson joined the general surgical staff of Mount Sinai Hospital/University Health Network as a surgical oncologist with a major interest in breast oncology. Dr. Robert Gryfe joined the Division of General Surgery at Mount Sinai Hospital with a cross-appointment at the University Health Network. Rob's main interest is also in surgical oncology with a specific interest in colorectal disease. Dr. Todd Penner joined the General Surgical Division at the University Health Network, with a primary appointment at the Toronto Western Hospital in the area of minimally invasive surgery. Drs. Sandro Rizoli and Lorraine Tremblay joined the general surgical staff at Sunnybrook & Women's College Health Sciences Centre in the area of critical care and trauma. Dr. Paul Wales joined the general surgical staff at the Hospital for Sick Children, with a specific interest in paediatric trauma and Dr. Paul Sullivan joined the general surgical staff at the Toronto East General Hospital, with a major interest in minimally invasive surgery.

## Honours, Awards and Appointments

We are particularly proud of the fact that Dr. Richard Reznick became the Chairman of our Department of Surgery, at the University of Toronto, in October of 2002. Other appointments included Dr. Andy Smith who became the Head of the Division of General Surgery at Sunnybrook & Women's College Health Sciences Centre and Dr. Chris Schlachta who became the Head of the Division of General Surgery at St. Michael's Hospital, as of July 1, 2003. Dr. John Marshall was appointed the Head of the Division of Clinical Investigation and Human Physiology at the Toronto General Hospital Research Institute.

Canadian Institutes of Health Research (CIHR) grants were obtained by Drs. Mark Catral, Steve Gallinger, Andrus Kapus, Peter Kim, John Marshall, Andrea McCart, and Dr. Ori Rotstein. The above named individuals in some cases held two or even three grants from different granting agencies. In addition to that, Dr. Annie Fecteau received the Hospital for Sick Children Research Award. Dr. Rob Gryfe received a Cancer Care Ontario/CIHR as well as a National Institute of Health (NIH) Award. Dr. Lavina Lickley received a National Cancer Institute Council (NCIC) award and Dr. Helen MacRae received an award from the Association of Canadian Medical Colleges. Dr. David McCready received an NCIC award and Dr. David Urbach has received awards from Physicians' Service Incorporated (PSI); Ministry of Health and Long Term Care (MOHLTC) and the Surgical Infection Society.

Dr. Robin McLeod was elected President of the Canadian Association of General Surgeons, in September 2002, for a one-year term. Dr. Robert Mustard received the E. Bruce Tovee Teaching Award for Undergraduate Education; Dr. Chris Schlachta received the Surgical Skills Centre Distinguished Education Award; Dr. Steve Gallinger received the Lister Prize; Dr. John Bohnen received the PAIRO Trust Fund Travel Award for Clinical Educators. Dr. Carol Swallow received the Wightman-Berris Academy Award for Program Innovation and Development; Dr. Andy Smith received the Peters-Boyd Academy Award for Excellence in Continuing Education and Teaching and Dr. Calvin Law received a Peters-Boyd Academy Teaching Award. In addition, Dr. Richard Reznick was the Gallie Lecturer at the Royal College of Physicians and Surgeons of Canada in September of 2002 and Dr. Ori Rotstein accepted the Northrop-Frye Faculty Award on behalf of the Surgeon Scientist Program at the University of Toronto. These are but a few of the awards and honours that were received in the Division of General Surgery in the past academic year.

The proposed Bernard and Ryna Langer Chair in the Division of General Surgery, continues towards completion of the financial commitment. Over \$600,000 has been deposited into the Chair Fund. This money has been raised entirely by the surgeons within the General Surgical Division of our Department of Surgery. It is hoped that the remainder of the \$2,000,000.00 chair will be raised through direct-mail efforts and a special kick-off event for major donors. Again, I wish to thank the division members for their continuing contribution and dedication to this worthy cause.

Our surgical residents, particularly those in the Surgeon Scientist Program were also extremely successful in their grant capture as well as overall in their academic productivity. Rebecca Gladdy – Canadian Institutes of Health Research (CIHR) Fellowship; Kouros Moozar – University of Toronto Personnel Award; Anand Ghanekar – Canadian Institutes of Health Research (CIHR) Fellowship; Laura Musselman – Physicians' Services Incorporated (PSI) and the Royal College for Physicians & Surgeons (RCPSC) Fellowship; Mary Anne Aarts Surgical Infection Society (SIS) and Physicians Services Incorporated (PSI) Fellowship; Tracey Asano – National Cancer Institute of Canada (NCIC) Fellowship and Physicians Services Incorporated (PSI) and the American Society of Colorectal Surgeons (ASCRS) Grant; Neelesh Jain – Canadian Institutes of Health Research/ Hospital for Sick Children Foundation (CIHR/HSFC) Fellowship; Rachel Khadaroo – Alberta Heritage Foundation Fellowship; Kinga Powers – Canadian Institutes of Health Research (CIHR) Fellowship and University of Toronto Personnel Award; Giuseppi Papia – University of Toronto Personnel Award; Angel Arnaut – Canadian Breast Cancer Fellowship; Veena Guru – Canadian Institutes of Health Research (CIHR) Fellowship; and Ian McGilvray - Canadian Institutes of Health Research (CIHR) Fellowship and Physicians Services Incorporated (PSI) Grant.

## Events

The 43rd Annual Update Course for General Surgeons and Residents, was held in April of 2003. There was certainly much debate as to whether or not this event should take place, considering the first SARS outbreak. However, it was decided to proceed with minimal screening taking place on site. The course was hugely successful with over 300 registrants present. Unfortunately, over 100 additional registrants did not attend because of fears related to SARS. In addition, a number of the lectures had to be teleconferenced to the conference center, with up-to-the-last-minute arrangements. I must take this opportunity, to thank those individuals in our Continuing Medical Education office, for their support during difficult times. The guest lecturer on site was Dr. Robert Beart. Guest lecturers teleconferenced to the site were Drs. Hartley Stern and Michel Gagne. All did an outstanding job. All of our general surgical staff presented in an exemplary way, as was indicated by the evaluations during the course. Dr. David McCready again organized the Post-Graduate Course in Breast Surgery and the 3rd Annual Minimally Invasive Surgical Post-Graduate Course was held in the fall of 2002. This was organized by Drs. Eric Poulin and Joseph Mamazza. The featured guests were: Dr. Adrian Park from the University of Kentucky, Lexington Kentucky and Dr. Maurice Arregui, Directors of Fellowship in Laparoscopy, Endoscopy and Ultrasound, from Vincent Hospital and Health Care Centre in Indianapolis, Indiana. The Update Course and Minimally Invasive Surgery courses, were live telesurgery from the operating rooms at Mount Sinai Hospital and St. Michael's Hospital, which demonstrated excellent laparoscopic skills.

The Annual Assembly for General Surgeons and Residents took place in June 2003. This was once again a great success! Drs. Steven Gallinger and Carol Swallow organized the event and I wish to thank them both.

The highlight of the academic day was the presence of Dr. John Birkmeyer from Dartmouth University, Lebanon, New Hampshire, who was the E. Bruce Tovee Lecturer. He did an outstanding job in assessing the presentations and distributing the awards for Best Papers, to Drs. Rebecca Gladdy, Laura Musselman and Dr. Kinga Powers.

These are but a few of the highlights, for what is truly a great division of General Surgery. I am extremely proud of the division's accomplishments and I wish to thank all the members of the division, for their continuing efforts and collaborative support.





Dr. James T. Rutka  
Dan Family Chair

## Resident Achievements

### Royal College Examinations:

All six graduating residents who took their Royal College Examinations in Neurosurgery passed and received FRCSC.

They are: Drs. Mojgan Hodaie, Taufik Valiante, Michael Taylor, Victor DaSilva, Howard Ginsberg, and Dr. Steve Casha.

### Resident Research Awards (International/National):

Several residents received externally funded fellowships and awards during the year:

Dr. Gelareh Zadeh: two-year CSTP (clinician scientist training program) fellowship from The Hospital for Sick Children; co-winner KG McKenzie Prize in Basic Science (CCNS); NCIC Fellowship Award.

Dr. Eve Tsai: co-winner KG McKenzie Prize in Basic Science (CCNS).

Dr. Todd Mainprize: Neurosurgery Research and Education Foundation (NREF) Fellowship (AANS).

Dr. Ash Singhal: PSI Resident Research Award, for the best clinically-relevant research paper, submitted by a resident in a sub-specialty area.

Dr. Eve Tsai: 2003 Synthes Award for Spinal Cord and Spinal Column Injury.

### Resident Research Awards (University of Toronto):

Dr. Steve Casha: 2003 Alan Hudson Resident Teaching Award.

Dr. Todd Mainprize: 2003 Warren Ho Humanitarian Scholarship Award.

Dr. Karim Mukhida: Sopman Humanitarian Award (UHN).

Dr. Sheila Singh: 1st prize in the Gallie-Bateman resident research competition, Department of Surgery; Josie Walthers Memorial Award for laboratory research, first prize (HSC); 2nd Morley Prize.

Dr. Gelareh Zadeh: highest ranked Post Graduate Faculty of Medicine Awardee; co-winner 1st Morley Prize.

Dr. Taufik Valiante: 1st Horsey Prize.

Dr. Julian Spears: 2nd Horsey Prize.

Dr. Eve Tsai: co-winner 1st Morley Prize.

## Faculty Achievements

### Awards

Dr. Michael Fehlings: Physicians Services Incorporated Foundation, new grant; Cervical Spine Research Society Award; two-year grant Heart and Stroke Foundation; two-year grant Heart and Stroke Foundation of Ontario; Anderson Post-graduate Award (UHN); Wightman-Berris Academy Award for Individual Teaching Excellence.

Dr. Eric Massicotte: Cervical Spine Research Society Award.

Dr. Ab Guha: Ontario Cancer Research Network, new grant.

Dr. Jim Rutka: Pediatric Brain Tumor Foundation of the United States, two-year grant. (Todd Mainprize); winner Globe and Mail's Nation Builder of the Year competition in the category of Science and Technology; three-year grant Ontario Cancer Research Network (OCRN).

Dr. Charles Tator: recipient, Salute to the City Award (Cadillac Fairview); lifetime achievement award, Canadian Spine Society.

Dr. Michael Tymianski: winner of the Royal College of Physicians and Surgeons' Gold Medal in Surgery.

Dr. Paul Muller: two grant awards from the CIHR.

Dr. Robin Humphreys: 2003 Recipient of HSC Foundation Claus Wirsig Humanitarian Award; Donald D. Matson Memorial Lecture (AANS); 2003 Alan Hudson Faculty Teaching Award.

Dr. Michael Cusimano: Dr. Clarice Chalmers Teaching Award (SMH).

Dr. Andrei Krassioukov: American Spinal Injury Association (ASIA) award for the best published paper in the area of spinal cord.

Dr. James Eubanks: two operating grants Heart and Stroke Foundation.

Dr. Karen Davis: two-year grant, Ontario Mental Health Foundation.

Dr. Mark Bernstein: recipient of the 2002-2003 Wightman-Berris Academy Award for Education

Administration; Anderson Award for long standing contributions to teaching (UHN).  
 Dr. Fred Gentili: J.F. Ross Fleming Award (UHN).  
 Dr. Chris Wallace: Anderson Undergraduate Award (UHN).  
 Dr. Peter Dirks: Bernie Langer Surgeon Scientist Award.  
 Dr. Andres Lozano: Penfield Lecturer (CCNS).

**New Funded Initiatives**

Establishment of the Alan and Susan Hudson Chair in Neuro-Oncology.

**U. of T. Neurosurgery Lectureships**

Botterell – Professor Rudolph Fahlbusch, University of Erlangen, Germany.  
 Keith – Dr. Ed Benzel, The Cleveland Clinic.  
 Hendrick – Professor Anthony Hockley, University of Birmingham, UK.  
 Lougheed – Dr. Charles Branch, Wake Forest University.

**City-Wide Rounds**

St. Michael’s Hospital, Dr. William Couldwell, University of Utah Medical Center.  
 Sunnybrook and Women’s College Health Sciences Centre, Dr. Susan Mackinnon, Barnes-Jewish Hospital, Washington University in St. Louis.  
 The Hospital for Sick Children, Dr. Ian Pollack, Children’s Hospital of Pittsburgh.  
 Toronto Western Hospital, Dr. Marc Mayberg, Cleveland Clinic.  
 2nd Annual Peripheral Nerve Symposium - Dr. Susan Mackinnon, Barnes-Jewish Hospital, Washington University in St. Louis.  
 16th Annual Marshall Lecturer - Dr. Howard Eisenberg, University of Maryland.

**Promotions**

Dr. Andrei Krassioukov – Associate Professor

**New Faculty Recruits**

Dr. Farhad Pirouzmand – Sunnybrook and Women’s College Health Sciences Centre.  
 Dr. Abhaya Kulkarni – The Hospital for Sick Children.  
 Dr. Taufik Valiante – Toronto Western Hospital.

Publications by neurosurgery faculty and residents equaled 103 and there were 83 Visiting Professorships by the faculty.

**Appointments**

Dr. Andres Lozano: named to the Science Advisory Council of Neuroscience Canada; elected into the Society of Neurological Surgeons.  
 Dr. Jim Rutka: appointed to the AANS Board of Directors for three years; appointed to the Editorial Board of Pediatric Neurosurgery; re-appointed to a two year term on the AANS Publications Committee.  
 Dr. Jim Drake: Neurosurgeon-in-Chief at The Hospital for Sick Children effective March 1st, 2003.  
 Dr. Michael Cusimano: appointed to the Steering Committee on Listening for Direction on Injury at the CIHR.  
 Dr. Karen Davis: appointed a member of a five-year NET (New Emerging Team) CIHR grant.  
 Dr. Chris Wallace: elected into the Society of Neurological Surgeons.  
 Dr. William Horsey (Professor Emeritus) passed away on August 23rd, 2002.



Dr. James P. Waddell  
A.J. Latner Professor &  
Chairman

The Division of Orthopaedic Surgery had a fruitful and productive year 2002/2003. Some of the changes recommended by the external review of the Division the previous year, have been implemented and in particular, our decision to reinstitute a compulsory year of research, has been accepted by the University and the Royal College. We were pleased that the annual CaRMS match confirmed that the popularity of orthopaedics, as a specialty at the University of Toronto, has increased substantially and that the additional year of training, was not an impediment to applications, from excellent and committed individuals.

Our medical student educational initiative which had been so successful the previous year had to be cancelled this year because of the SARS situation; we had 50 or more applications for 15 available spots; these applications came from all Ontario Medical Schools and those individuals selected for this experience were very disappointed when the initiative had to be cancelled. Despite this set-back we intend to hold this next year.

Academic activity in the division was excellent over the past year. Peer-reviewed publications exceeded the previous year and peer review grant support, improved substantially over the previous year. The academic activity was reflected not only in peer-reviewed publications but also in invitations to other universities and participation in national and international meetings. There were many visitors to the division in the past academic year; the highlight was the 2002 Kennedy Visiting Professors - Dr. Bruce Browner, Professor & Chairman of Orthopaedic Surgery, at the University of Connecticut and Chairman of the International Committee of the American Academy of Orthopaedic Surgeons. Dr. Browner's clinical interest is in trauma and he provided excellent insight into the current standard of trauma care in the United States; in addition he has a strong interest in international orthopaedic surgery through the Bone & Joint Decade; he had valuable and significant interactions not only with the residents but faculty members throughout the Department of Surgery who share his interest in surgical development in the emerging world.

The Basic Science Visiting Professor was Dr. Ted Miclau, from the University of California at San Francisco. Dr. Miclau is a recognized expert in traumatology but also is a very accomplished research scientist in the area of cell signalling. Dr. Miclau spent some additional days around his professorship, in order to visit the two Level 1 trauma centers at Sunnybrook & Women's College Health Sciences Centre and St. Michael's Hospital, with Drs. Jay Wunder and Ben Alman.

The Austrian, Swiss, German Travelling Fellows spent several days with us in March of 2003 visiting the hospitals affiliated with the University of Toronto and presenting their work to the residents at the weekly academic day. Unfortunately the European Paediatric Orthopaedic Society Travelling Fellows who were scheduled to visit were unable to do so because of SARS. There were a number of cancellations of activities secondary to SARS including the 19th Annual Upper Extremity Update and a number of our City Wide Rounds.

Individual members of the faculty singled out for excellence included, Drs. Rod Davey and Nizar Mahomed, both promoted to Associate Professor level effective July 1, 2003; in addition Dr. Nizar Mahomed was recognized by his international peers by being nominated and accepted as the 2003 ABC Travelling Fellow. Dr. Michael McKee was recognized for his teaching excellence by the orthopaedic resident, by being awarded the R.B. Salter Teaching Award in Orthopaedic Surgery.

Other faculty members who have been recognized by their peer group include Dr. Ben Alman who received the Arthur H. Huene Memorial Award from the Paediatric Orthopaedic Society of North America for his research work. Dr. Alman and Dr. Jay Wunder received a CIHR operating grant and Dr. Alman a Premier's Research Excellence Award. Dr. David Backstein was awarded the Insall Travelling Fellowship, to allow him to expand his knowledge and expertise in knee surgery; Dr. Erin Boynton received the Edouard Samson Award from the Canadian Orthopaedic Association for the most outstanding research in Orthopaedic Surgery in Canada, as judged by the Canadian Orthopaedic Research Society and the Canadian Orthopaedic Association. Dr. Paul Marks was awarded a fellowship for the American Orthopaedic Society for Sports

Medicine; unfortunately his trip was cancelled because of the SARS situation but he will be able to make use of this award in the next year. Dr. Robert Salter received the Award of Merit from the International Federation of Surgical Colleges. He also received the Lifetime Achievement Award from the Minnesota State Society of Orthopaedic Surgery.

Dr. John Wedge, while former Chairman of the Department and current Surgeon-in-Chief at the Hospital for Sick Children remains a member of the Division of Orthopaedic Surgery. Therefore, we will take full credit for his recent appointment as the Associate Dean for Clinical Affairs within the Faculty of Medicine.

Excellence in our trainees was also recognized; Dr. Sevan Hopyan, a final year resident who was awarded the Gold Medal for Research by the Royal College.

We had two new appointments to the Division. Dr. John Lau, a graduate of the University of Toronto Orthopaedic Training Program, having completed fellowship training in Foot and Ankle Surgery has been appointed to the staff of the University Health Network; this is a rapidly growing area of specialization in Orthopaedic Surgery and we are looking forward to Dr. Lau's participation and contribution. Dr. Peter Ferguson, also a graduate of the University of Toronto Orthopaedic Training Program, has joined the faculty with a staff position at Mount Sinai Hospital and Princess Margaret Hospital. Peter's interests lie primarily in oncology and lower limb reconstruction. We are delighted that Peter has joined the faculty and look forward to his continued involvement with education and oncology research.

We are looking forward to the next year in the expectation that there will be continued improvement and development of academic Orthopaedic Surgery, at this University.

# Division of Plastic Surgery



Dr. Peter Neligan  
Wharton Chair in  
Reconstructive Plastic  
Surgery

The Division of Plastic Surgery had a successful academic year. It saw several faculty members recognized in different spheres.

Dr. Ronald Zuker was elected as President of the American Society for Reconstructive Microsurgery, at its Annual Meeting in Hawaii, in January of 2003. Dr. Zuker is the second such faculty member to serve in this position; Dr. Ralph Manktelow having previously been President of this Society. Dr. Peter Neligan was elected the 2003 Visiting Professor by the Plastic Surgery Education Foundation, the educational arm of the American Society of Plastic Surgeons. This is the first time that a Canadian has been appointed to this position, which involves visiting a number of Plastic Surgery Residency Programs across North America. Dr. Christopher Forrest was elected incoming Chairman of the Plastic Surgery Research Council (PSRC). This is a two-year commitment that involves chairmanship of the scientific program for next year's meeting in Ann Arbor, Michigan. Dr. Forrest will then host the meeting at the University of Toronto in 2005. This is a very prestigious

honour. Again, Dr. Forrest is the second faculty member to be elected as Chairman of PSRC; Dr. Nancy McKee having formally served as Chairman in 1992.

January 2003, also saw the change of the guard at The Hospital for Sick Children. Dr. Ronald Zuker stepped down as Division Head, after 16 years of leadership and was succeeded by Dr. Christopher Forrest, as the new Division Head. During his 16 years as Head of Sick Children's Hospital, Dr. Zuker built an international Fellowship Program and established the Hospital for Sick Children's Division of Plastic Surgery, as the premier Paediatric Plastic Surgery Division in the world.

A search is currently underway for a new Head of the Hand Program at the Toronto Western Hospital. It is hoped that an appointment will be made early in 2004.

Two residents graduated from the Program this year, Dr. Melinda Musgrave and Dr. Ali Adibfar. Both were successful in the Royal College exams.

The Annual Faculty Awards were won this year by Dr. Paul Binhammer and Oleh Antonyshyn. Dr. Binhammer won the Arnis Freiberg Teaching Award and Dr. Antonyshyn, won the W.K. Lindsay Research Supervisor Award.

We had two Visiting Professors during the year. Dr. Jack Coleman was the inaugural visitor for the biannual combined Division of Plastic Surgery/Department of Otolaryngology Head and Neck Rounds and presented a lecture on microvascular reconstruction of the head and neck. The annual Hoyle Campbell Visiting Professor this year, was Dr. Ian Jackson.



Dr. Shaf Keshavjee  
Acting Chair

## *Members*

**Dr. S. Keshavjee - Professor (Division Head – 2003)**

**Dr. G. Darling - Associate Professor**

**Dr. R. Ginsberg – (Division Head – 2002)**

**Dr. M. Johnston - Associate Professor**

**Dr. M. Liu – Associate Professor**

**Dr. E. Spratt - Associate Professor**

**Dr. A. Pierre - Assistant Professor**

**Dr. T. Waddell - Assistant Professor**

**Dr. C. Compeau - Lecturer**

## **Clinical Accomplishments**

The Division of Thoracic Surgery continues to have the largest clinical activity of any Thoracic program in Canada. We continue to serve as the primary tertiary referral centre for most of Ontario and a quaternary referral centre for the rest of Canada. The Toronto Lung Transplant Program continues to be an international leader in clinical activity and outcomes. The End Stage Lung Diseases Program, a multi-disciplinary endeavor with the Respirology Division, continues to grow with integrated and innovative approaches to diseases such as emphysema, pulmonary fibrosis and pulmonary hypertension. The Foregut Program focuses on clinical and academic endeavors related to diseases of the esophagus and proximal stomach. The Thoracic Service has continued to develop expertise in minimally invasive surgery for the management of both benign and malignant thoracic conditions. Our service is heavily involved in clinical trials in lung cancer, esophageal cancer and lung transplantation. Our division members are principle or co-principal investigators on a number of national and international multicentre trials.

## **Teaching and Research**

The University of Toronto continues to be the largest and most comprehensive training program in the country for Thoracic Surgery, providing residency training within the Royal College Program and fellowship training to numerous surgeons from all over the world, under the co-ordination of Dr. Darling, Program Director. The FG Pearson Award for Best Resident/Fellow Teacher was awarded to Dr. Yaron Shargall and the RJ Ginsberg Award for Best Postgraduate Teacher was awarded posthumously to Dr. Ginsberg.

The Thoracic Surgical Research Laboratories continue to be very successful with grant capture and publications. Drs. Keshavjee, Liu and Waddell each received highly ranked Canadian Institutes of Health Research (CIHR) operating grants, for their respective research projects. Dr. Waddell also received a CIHR Junior Investigator salary award. Our laboratory program continues to provide an exciting and productive training environment, for residents in the Surgical Scientist Program and for numerous postgraduate fellows from all over the world.

## **Retirement & Recruitment**

Thoracic Surgery suffered a great loss in March 2003, with the death of Dr. Robert Ginsberg. The profound respect held world-wide for his lifetime achievements, knowledge, leadership and teaching in Thoracic Surgery, was demonstrated by the large international attendance to the celebratory tribute, held in Toronto, in February 2003.

Dr. Andrew Pierre was appointed Assistant Professor, in 2002 and an attending Thoracic Surgeon, at the Toronto General Hospital. Dr. Pierre trained in General Surgery and Thoracic Surgery, at the University of Toronto. He then completed a fellowship, in minimally invasive surgery, at the University of Pittsburgh.



Dr. Sender Herschorn  
Professor and Chairman

## Faculty Appointments, Promotions, Honours and Changes

This year the Division Faculty consists of 20 geographic full-time surgeons and 1 Ph.D. Scientist.

There were two new recruits in July: Dr. Robert Nam at Sunnybrook and Women's College Health Sciences Centre, who obtained his Masters in Clinical Epidemiology, while in the Surgical Scientist Program. He completed the University of Toronto Uro-Oncology Fellowship at the Toronto General Hospital, Princess Margaret Hospital and Sunnybrook and Women's College Health Sciences Centre, in June 2002. He began his Urology practice with a special interest in Uro-oncology. Dr. Kenneth Pace completed his Masters in Clinical Epidemiology and a Fellowship in Minimally Invasive Surgery with

Dr. Eric Poulin, at St. Michael's Hospital. He is based at St. Michael's Hospital and aims to build a clinical epidemiology program in Stone and Endourology and Minimally Invasive Surgery. Dr. Gordon McLorie left the Hospital for Sick Children after 20 years, to take the position of Chief of Paediatric Urology, at the Detroit Children's Hospital, part of Wayne State University. Dr. Joao Pippi Salle arrived in June from Montreal Children's Hospital, McGill University, to begin practice at the Hospital for Sick Children.

The programmatic orientation of the Division, with focused activity in specialized areas, has continued.

### Programs and Participants

1. Oncology – University Health Network, Sunnybrook and Women's College Health Sciences Centre, St. Michael's Hospital.
2. Stone Disease and endourology – St. Michael's Hospital, University Health Network, Sunnybrook and Women's College Health Sciences Centre, Mount Sinai Hospital.
3. Neurourology and reconstruction – Sunnybrook and Women's College Health Sciences Centre, Toronto Western Hospital, Hospital for Sick Children.
4. Andrology – Mount Sinai Hospital.
5. Transplant – Toronto General Hospital, St. Michael's Hospital, Hospital for Sick Children.
6. Pediatrics – Hospital for Sick Children.
7. MIS – University Health Network, St. Michael's Hospital, Sunnybrook and Women's College Health Sciences Centre.

The Faculty continued their academic activities. They provided leadership in many basic and clinical research trials and many national and international urological organizations.

### Hospital for Sick Children

Dr. Darius Băgli, Associate Professor, continued his basic research in bladder physiology. He received a CIHR grant as co-principal investigator along with Kimberley Woodhouse (PI) and Mark Kortshott and Maurice Ringuette. The grant was for \$87,488 yearly (plus operating funds) for three years for their project entitled: An acellular matrix containing bioactive peptides for use in bladder reconstruction.

Dr. Bagli, as the PI and his research team continued work in the second year of their three-year funding from Canadian Institute of Health Research (CIHR), on his grant entitled: The role of Erk MAP kinase in bladder smooth muscle cell response to injury.

Dr. Walid Farhat, Assistant Professor, who joined the Division last year continued his work in tissue engineering and repopulation of acellular matrices, for the purpose of bladder reconstruction.

He was awarded a Canadian Urological Association Scholarship, in recognition of his work to date and in support of his research, for 2003-04.

Dr. Tony Khoury, Professor and Chief of the Division at Hospital for Sick Children and Dr. Gordon McLorie

were invited speakers and session moderators, at the Johns Hopkins Exstrophy meeting in Baltimore, MD., Oct 15-16, 2002. The titles of their talks were: Is there a need for bladder neck reconstruction in exstrophy – Khoury and Determinants of success in bladder exstrophy repair – McLorie. Dr. Khoury was also Visiting Professor at the University of Monufia, Egypt, in December, 2002. He served as the external member of the discussion committee that reviewed the thesis of one of the international fellows from the Hospital for Sick Children, Dr. Hamdy Abou Taleb. Dr. Taleb completed his Ph.D. under Dr. Khoury's supervision in Toronto. The title of his thesis was: Outcome analysis of interventions for vesicoureteral reflux in children. Dr. Khoury also gave a talk entitled: Current Reconstructive techniques in Hypospadias Surgery.

Dr. Khoury was an invited speaker on May 8-10, 2003, at the Department of Urology Grand Rounds, Westchester Medical Center, Maria Fareri Children's Hospital, New York Medical College in Valhalla, New York and the Department of Urology Grand Rounds, Long Island Jewish Medical Center, Schneider Children's Hospital, Albert Einstein Medical School, in New Hyde Park, New York. The topics of his two talks were 'Principles and applications of reconstructive techniques in hypospadias surgery' and 'Contemporary studies in bladder reconstruction: New directions from Toronto'.

Dr. Khoury was also Visiting Professor at the Pediatric Urology Workshop at the Al Mafraq Hospital, in Abu Dhabi, UAE, on June 4-11, 2003. He presented a series of lectures on recent advances in: Management of Hypospadias, Bladder Reconstruction and the Management of Intersex.

He also continued his research with co-investigators, Drs. Lori Burrows and Frank Dicosmo (Institute of Biomaterials and Biomedical Engineering) in the second year of a two-year grant from the Kidney Foundation of Canada for their project, "Development of anti-microbial coatings for peritoneal catheters suitable for simultaneous exchange procedures".

Dr. Lori Burrows, Assistant Professor, continued as Director of the Centre for Infection and Biomaterials Research. Last fall Dr. Burrows and Dr. C.M. Deber were co-PIs on a peer-reviewed grant from the NIH-SCOR Pilot Studies program for CF research at Hospital for Sick Children, entitled, "Novel peptide antibiotics against CF lung pathogens".

Dr. Burrows was awarded a peer-reviewed research grant of \$45,000 by the Canadian Infectious Disease Society for her work, infection and biomaterial. The Janssen-Ortho Research Grant competition is for basic research related to antimicrobial resistance, and the project is entitled "Antimicrobial activity of novel membrane-active peptides and synergy with conventional antibiotics". Dr. Charles Deber, Hospital for Sick Children (HSC), was the co-PI on this grant.

On Gallie Day, May 9th, 2003, Dr. Burrows received the George Armstrong-Peters Prize, awarded to "a young investigator (up to five years) who has shown outstanding productivity during his/her initial period, as an independent investigator, as evidenced by research publications in peer-reviewed journals, grants held, and students trained".

At the Centre for Infection and Biomaterials Research, Dr. Burrows' Postdoctoral Fellow, Claude Gallant, received 3rd place (Basic Research) in the Hospital for Sick Children's Josie Walther Memorial Surgical Services competition, May 16, 2003, for her presentation entitled "Using the IBET approach to monitor gene expression in *Pseudomonas aeruginosa* biofilms".

With Dr. Lynne Howell, Hospital for Sick Children, Dr. Burrows received a "New Ideas Proposal" grant from PENCE (the Canadian Protein Engineering Network of Centres of Excellence). This is a one-year grant, \$40,000, entitled "Proteins involved in type IV pilus biogenesis in *Pseudomonas aeruginosa*" and is intended to fund a new collaboration between our labs, to crystallize proteins required in the synthesis and function of these important adhesive virulence factors.

Dr. Burrows' new postdoctoral fellow, Dr. Liliana Sampaleanu, received a Canadian Institutes Health Research (CIHR) Fellowship Award through the "CIHR Training Program in Structural Biology of Membrane Proteins Linked to Disease" to work on this project.



Raynah Fernandes, who did her fourth year research project with Dr. Burrows in the lab, has received an National Science & Engineering Research Council (NSERC), Undergraduate Student Summer Research Award, through the Department of Surgery, to continue her project entitled “Analysis of pilin adhesive function through site-directed mutagenesis of key residues”.

## **Mount Sinai Hospital**

Dr. Keith Jarvi, Associate Professor and Division Chief at Mount Sinai, continued to lead the Male Infertility Program with peer-reviewed funding. He became the first Director of the The Murray Koffler Urologic Wellness Centre (MKUWC), at Mount Sinai Hospital which opened in February, 2003. This is a unique outpatient facility specializing in a comprehensive range of men’s health services. The Centre offers medical and psychological care for male-specific illnesses, including prostate health, male fertility and sexual health, and andropause. The MKUWC was made possible through generous funding from the Koffler family and tremendous commitment of the Mount Sinai Foundation. Other members of the division participated in various aspects of urologic care, including Drs. John Trachtenberg, Robert Nam and Neil Fleshner for prostate; Dr. Armand Zini for male infertility, and Dr. Martin Buckspan for male sexual health.

Dr. Armand Zini, Associate Professor, continued his role in the Male Infertility Program and started work as PI on a grant of \$61,000 from the PSI Foundation entitled: Human sperm DNA integrity and pregnancy outcome after IVF/ICSI.

Dr. Martin Buckspan, Associate Professor, remained active in the ambulatory setting of the new Murray Koffler Urologic Wellness Centre.

## **Sunnybrook and Women’s College Health Sciences Centre**

Dr. Lesley Carr was promoted to Assistant Professor and continued as Medical Director of the Women’s Pelvic Health Centre at Women’s College Ambulatory Care Centre of S.W.C.H.S.C. Dr. Carr also directed the weekly Urology School for the residents. Dr. Lesley Carr organized on September 20th, the first Women’s Pelvic Health Update, which was held at the Old Mill. It was a highly successful and very well-attended event. It brought together providers from different specialties for the first time to discuss women’s pelvic problems in one forum.

Dr. Sender Herschorn, Professor, continued as Chair of the University Division. He also continued as the Departmental Director of Continuing Professional Development. He was appointed Section Editor of Reconstruction in the journal, Neurourology and Urodynamics and was asked to chair the section on Surgery for Male Incontinence at the 3rd International Consultation on Urinary Incontinence, sponsored by WHO, to be held in July, 2004.

He addressed Victoria and Vancouver area urologists and gynecologists on “Minimally invasive surgery for stress urinary incontinence” October 23rd and 24th, 2002. He also directed the 10th Annual Urology Update 2002, that was held in November, 2002, at the Harbour Castle Westin.

He was a guest speaker at the Urogynecology Meeting in Montreal, organized by the Department of Urology at McGill University, December 12-13, 2002. He gave talks on: 1.) Conservative management of incontinence; 2.) Investigation and new avenues of pharmacotherapy for refractory overactive bladder; and 3.) Surgery for refractory over-active bladder.

He became the first holder of the The Martin Barkin Chair in Urological Research. This was created to fund research and education in urology at the University of Toronto and its affiliate teaching hospitals. The Chair was established in conjunction with the Faculty of Medicine Development Department. It was named in honour of Martin Barkin, a former member of the Division of Urology and retiring Board Chair, at Sunnybrook and Women’s College Health Sciences Centre in honour of his life-long contribution to health care. The Sunnybrook and Women’s Foundation has also committed to raising funds for the Chair.

Dr. Herschorn was also appointed Chair of the Guidelines Committee of the Canadian Urological Association, at the Annual Meeting in June, 2003, in Montreal.

Dr. Laurence Klotz, Professor and Division Chief at Sunnybrook and Women’s College Health Sciences Centre, continued his research in Uro-oncology and his many leadership appointments. He received a grant from the Canadian Prostate Cancer Research Foundation, for his project entitled: A feasibility study for a phase III clinical trial of standard treatment versus active surveillance with selective delayed intervention for localized, favourable risk prostate carcinoma. He also continued his work as part of other peer-reviewed trials, including the Select Trial and Differential Gene Expression in Prostate Cancer.

He was an invited Faculty at a prostate cancer meeting, held in Rotterdam, Netherlands last fall. He is also an invited faculty at the second annual Canadian Oncology course for Urology senior residents, sponsored by McGill University in Montreal, last January.

Drs. Michael Jewett and Laurie Klotz, along with Principal Investigator Dr. Ricardo Rendon, former urology fellow at the UNH and currently in the department of Urology at Dalhousie University, Halifax, received a grant for “Identification of Preoperative Prognostic Factors for Small Renal Cell Carcinoma” from Capital Health Centre for Clinical Research.

Dr. Klotz and Dr. Martin Gleave, from University of British Columbia, were awarded a three-year grant of \$540,000 for the project entitled, “Companion study of bone mineral density of intermittent versus continuous androgen ablation therapy in prostate cancer” by the Ontario Cancer Research Foundation, in the Spring.

Dr. Ron Kodama, Associate Professor, continued in his capacity as Program Director

He organized the Surgical Skills Lab session on TURP and TURBT on Saturday, October 5th, 2002. He arranged the all-day workshop for PGY 1-4s with the help of Circon ACMI. The lab included basic sessions in which electrosurgery and TUR techniques were discussed. The hands-on part consisted of multiple stations with prostate and bladder tumour models. All of the residents had an opportunity to learn about the instrumentation and carry out transurethral resections with resectoscopes under simulated conditions. Drs. Radomski and Herschorn and the laboratory staff assisted Dr. Kodama at the sessions.

Dr. Kodama was a featured speaker at the Annual Northeastern Urology Update in Sudbury, ON., last Fall. He spoke about “The current management of urethral and pelvic trauma”.

He directed the annual Urology Fair, which was held in Toronto, January 11, 2003. All English-speaking University Urology Programs, send representatives to interview all potential Urology candidates for the CaRMS.

He also organized the third annual Basic Science Review Course for PGY1-3 residents last February. This year all Canadian urology programs sent residents to the course that was held in Toronto. The topics were Paediatrics presented by Dr. Tony Khoury and Infertility presented by Dr. Keith Jarvi.

Dr. Kodama also won the A.W. Bruce Division of Urology Undergraduate Education Award, which he has done every year since the award began.

Dr. Robert Nam was appointed to the staff at Sunnybrook and Women’s College Health Sciences Centre, July, 2002. His research is focused on the genetics of prostate cancer and he has continued to collaborate with Dr. Stephen Narod of the Department of Medicine. He was successful in obtaining a peer-reviewed grant from the Canadian Prostate Cancer Research Foundation, for his project entitled: Genetic and serological testing for prostate cancer. He started this work in collaboration with Dr. John Trachtenberg.

He was awarded a Canadian Urological Association Scholarship for his first year in practice and in June, the scholarship was renewed for another year.

He was also awarded the Division of Urology Postgraduate Teaching Award, for Surgical Teaching.

## **University Health Network**

### **Toronto General and Princess Margaret Hospitals**

Dr. Neil Fleshner, Associate Professor, became Chief of Division of Urology at the University Health Network, as of July 1. He moved from Sunnybrook and Women’s College Health Sciences Centre, where he worked since starting his Uro-Oncology career in July 1997. He continued his clinical and basic research in prostate cancer with his major peer-reviewed grants.

He was awarded a Canadian Prostate Cancer Research Initiative Grant entitled, “Incidence and characteristics of prostate cancers in men with PSA levels < 2.5 ng/ml” last winter.

Drs. Michael Jewett, Professor, continued his research in Uro-oncology. He along with Dr. Klotz, and Principal Investigator, Dr. Ricardo Rendon, a former University of Toronto UroOncology Fellow and currently in the Department of Urology at Dalhousie University, Halifax, received a grant for “Identification of Preoperative Prognostic Factors for Small Renal Cell Carcinoma” from Capital Health Centre for Clinical Research. Dr. Jewett with Dr. John Trachtenberg, also received a grant from the Change Foundation entitled: “Development and Evaluation of Internet training courses for cancer patients” with Dr. Gunter Eysenbach, as Principal Investigator.

Dr. Jewett was a guest speaker at the Mexican Society of Urology Guadalajara and spoke about “Small Renal Masses: Treatment Options”, and “T1 Bladder Tumor: Cystectomy or TUR” last winter. He was Visiting Professor at the University of Washington Dept of Urology Seattle and spoke about “Strategies to minimize morbidity of treatment options for testis cancer” and presented the Highlights of Kidney Cancer Research Plenary and the Plenary Session entitled “Quality of life issues in cancer treatment choice: testis cancer” at the Societe International d’Urologie 26th Congress in Stockholm.

He co-supervised graduate students in the Departments of Medical Biophysics and Health Administration, as well as the Institute of Medical Sciences summer students and UroOncology Fellows.

Dr. Jewett was also elected Vice-President of the Canadian Urological Association, at the Annual Meeting in June.

Drs. John Trachtenberg and Michael Jewett, co-investigators, and Drs. Paul Ritvo (PI), Andrew Mathew, Murray Krahn, and Jane Irvine received funding from the Canadian Prostate Cancer Research Initiative, for their study entitled “Couple’s Decision-Making and Adaptation in Prostate Cancer Treatment”.

Dr. Michael Robinette, Associate Professor, continued as the major individual, contributing to the Multi-organ transplant program.

Dr. John Trachtenberg, Professor, hosted the annual Princess Margaret Hospital Prostate Cancer Retreat, at the Ontario Science Centre. Local and outside speakers provided a review of new and exciting technology in the investigation and treatment. Dr. Eric Klein, a uro-oncologist from the Cleveland Clinic, and Dr. Dave Bostwick, a renowned uro-pathologist from Virginia, were the outside speakers. In the evening, some of the speakers addressed the public on new developments in the fight against this highly prevalent disease. Mr. Tony Clement, Ontario Minister of Health and Long-Term Care, addressed the audience and stressed the importance of the work being done in prostate cancer.

Dr. Trachtenberg spoke at the Weitzmann Institute of Science Annual meeting, Toronto, ON., October 17, 2002. He and Drs. Sharon Sharir, and Arjen Bogaards received an IDEA grant from the National Cancer Institute of Canada (NCIC), for “Fluorescent Guided Radical Prostatectomy”. He also co-chaired, along with Dr. Larry Goldenberg from the University of British Columbia, the 12th annual Issues and Controversies in Prostate Cancer at Whistler, B.C.

He gave a keynote speech at the Ninth International Photodynamic Association meeting in Miyazaki, Japan, on May 23, 2003, by videoconference. The SARS outbreak prevented his direct attendance. He also moderated the localized prostate cancer poster session at the American Urological Association Annual Meeting in Chicago

Dr. Trachtenberg was recognized for his clinical and research expertise at a Gala Dinner on June 19th at the Sheraton Centre. The Canadian Society for the Weizmann Institute and the Princess Margaret Hospital, teamed up to honour Dr. Trachtenberg, Director of the Prostate Centre at the Princess Margaret Hospital. There were well over 1,000 people who attended this event.

### **Toronto Western Hospital**

Dr. Magdy Hassouna, Associate Professor, continued his basic and clinical work in neurourology and neuromodulation. He was elected Secretary/Treasurer of the International Society of Pelvic Neuromodulation.

He was a guest speaker at the International Society for Pelvic Neuromodulation, held in Phoenix, Arizona, January 9-12, 2003. The title of his lecture: “Standardization for Parameters of Stimulation in Patients with Voiding Dysfunction.”

He was a Visiting Professor at the Functional Electric Stimulation (FES) Institute, at the Case Western Reserve University in Cleveland, Ohio, on April 11, 2003. This Institute is world-renowned for the application of neurostimulation for different applications: limbs, hands, and deep brain.

Dr. Sidney Radomski, Associate Professor, continued his work in incontinence, erectile dysfunction, and laparoscopy. He also continued his role as the Urology co-ordinator in the Surgical Skills Lab. He conducted hands-on sessions for the residents in various minimally topics during the year.

## St. Michael's Hospital

Dr. John Honey, Associate Professor and Chief of the St. Michael's division, continued his work as Director of the Lithotripsy Unit. He was a featured speaker at "Laser certification course, for the use of Holmium Lasers in Urology" which was held In November in conjunction with Urology Update 2002.

He was also appointed Chair of the Scientific Committee for the World Congress of Endourology, to be held in Montreal, September, 2003.

Dr. Kenneth Pace, Assistant Professor, was appointed to the staff in July and began his work in the Stone and Minimally Invasive Surgery.

Dr. Kenneth Pace, and co-author Dr. John Honey, won the prize for the Best Poster in the Endourology Section, at the American Urological Association Meeting recently, in Chicago. The title was, Shock wave lithotripsy at 60 or 120 shocks per minute: a randomized, single-blinded trial. Other co-authors were M. Harju, S. Dyer, R. Kodama, L. Carr, A. Zini, S. Radomski, K. Jarvi, M. Robinette, and S. Herschorn.

Dr. Robert Stewart, Assistant Professor, continued as the principal urologist in the kidney transplantation program. He also continued his basic research into angiogenesis in prostate cancer.

### Academic Events & Divisional Awards

The Annual Charles J. Robson Research Day was held on March 27th at the Vaughan Estate. Dr. Patrick Walsh, Professor and Chairman of Urology Johns Hopkins Medical School, was the Visiting Professor. He lectured on Hereditary Prostate Cancer at the symposium and on the following morning, gave a Workshop on his technique of nerve-sparing radical prostatectomy.

The Annual Robson Day gala dinner, was held on March 27th and the prizes for the best presentations were awarded. Due to the SARS outbreak, the Friday morning session was held at the Vaughan Estate, rather than the Toronto General Hospital.

The winners in the various categories were as follows:

#### A) Resident – basic

1st - Ethan Grober for:

The educational impact of bench model fidelity on the acquisition of technical skill: the use of clinically relevant outcome measures.

Co-authors: S.J. Hamstra, K.R. Wanzel, R.K. Reznick, E.D. Matsumoto, R.S. Sidhu, K. A. Jarvi

2nd - Aaron Blumenfeld for

Improved sperm DNA integrity following varicocelectomy.

Co-authors: K. Jarvi, J. Wills, A. Zini

#### B) Resident - clinical

1st - Arthur Grabowski for

One year results of a prospective study evaluating the changes in health-related quality of life with implantation of the artificial sphincter for post-prostatectomy incontinence.

Co-authors: S.B. Radomski, S. Herschorn, M. Hassouna

2nd - Aaron Blumenfeld for

Quality of life and urinary symptoms after stress incontinence surgery: pubovaginal sling pubovaginal sling versus tension-free vaginal tape.

Co-author: S. Herschorn

### **C) Fellow - basic**

**1st** - Sarel Halachmi for

STAT3 kinase in bladder stretch injury.

Co-authors: K. Aitken, D. Bagli

**2nd** - John Hodapp for

Dissociated autologous urothelial grafting for bladder augmentation in a porcine model.

Co-authors: C. Smith, A. Hafez, S. Halachmi, D. Bagli, W. Farhat, A. Khoury

### **D) Fellow - clinical**

**1st** - Sharon Sharir for

Database-generated real time graphic flow chart for patients with bladder cancer.

Co-authors: S. Punen, R. L. Panton, M.L.K. Yip, H. Kwok, T Truong, M-J. Salpeter, B.L. Gallie, M.A.S. Jewett

**2nd** - Sarel Halachmi for

The role of bacterial infection in pediatric acute epididymo-orchitis.

Co-authors: J. Hodapp, W. Farhat, D.J. Bagli, A.E. Khoury

### **E) Medical student**

Jonathan Cardella for

Open versus laparoscopic donor nephrectomy for renal transplantation: is there a difference in patient morbidity or satisfaction?

Co-authors: L. Jamnicky, M. Sawhey, M. Robinette

### **Other Awards won by Residents**

Dr. Tony Finelli, PGY-5, won the A.W. Harrison Clinical Clerk Teaching award for this six months at Sunnybrook and Women's College Health Sciences Centre.

Dr. Bobby Shayegan, PGY-4, won the D.R. Wilson undergraduate teaching award for excellence on Gallie Day.

## **Undergraduate and Postgraduate Education**

Apart from regular 3rd and 4th year rotations, as well as many rotations with outside elective students who are interested in a career in Urology, the division participates in the Arts and Science of Clinical Medicine series, for pre-clerkship students, and the Year-3 and Year-4 seminar series. There is also 1-week Foundations of Clinical Medicine series, on a yearly basis, during which Urology topics are introduced in lecture format to Year-2 students.

The annual MCCQE evening review lecture series in Urology was held in March and co-coordinated by Dr. Sender Herschorn with participation by Drs. John Honey, Michael Jewett, Sid Radomski, John Trachtenberg, and Walid Farhat. The lectures and notes are updated yearly.

There are a total of 20 residents in the Program. In addition, there are 11 fellows in clinical and research positions.

Graduates of the program in 2003 were Drs. Arthur Grabowski, Eddie Matsumoto, Ben Chew, Tony Finelli, and Sergio Giancola. All have continued in fellowship positions in various areas in Toronto and in the United States.

Three new PGY 1 residents were welcomed to the Division in July. Drs. Rob Hamilton and Michael Kogon from the University of Toronto and Dr. Jonathan Chan from McMaster.

## **Urology School**

Every Friday morning residents from all hospitals attend weekly didactic and interactive teaching seminars. Dr. Lesley Carr organizes the yearly program. It includes a monthly journal club and regular Surgical Skills lab sessions organized by Dr. Sid Radomski.

## Visiting Professors

Dr. Patrick Walsh from Johns Hopkins was the Robson Visiting Professor just at the beginning of the SARS closure. His two-day visit was a huge success.

Visiting Speakers for Urology Update were, Dr. Michael B. Chancellor from the University of Pittsburgh, Dr. Mitchell C. Benson, from Columbia University in New York, Dr. Edward J. McGuire from the University of Michigan in Ann Arbor; Dr. Joseph L. Chin from the University of Western Ontario in London; Dr. Marc Goldstein New York Hospital, Cornell Med Center; Dr. Elspeth McDougall from the University of California Irvine Medical Centre; Dr. Mani Menon of the Henry Ford Health System, Department of Urology in Detroit MI, and Dr. Howard M. Snyder, III of the Division of Paediatric Urology at the University of Pennsylvania, PA. Dr. Snyder also spent a day at the Hospital for Sick Children.

## Clinical and Research Rounds

The division holds weekly rounds throughout the academic year.

University Health Network (with Mount Sinai Hospital):

Thursdays –Norman Urquhart 4th Floor Conference room; 4-5:00 pm.

Sunnybrook and Women's College Health Sciences Centre:

Wednesdays A304 Urology Conference Room; 7-8 am.

St. Michaels' Hospital:

Mondays 7:30-8:30 am in room 2-Victoria-008.

Hospital for Sick Children

Research rounds - Wednesday mornings at 7:00 am in Urology conference room M292.

Case Management - Wednesday afternoons at 5:00 pm on 6B Atrium Management.

Teaching Rounds - Thursday mornings at 7:00 am in Urology conference room M292.

Monthly inter-hospital rounds were interrupted by SARS and will have resumed September, 2003.

## Continuing Professional Development

The 10th annual Urology Update 2002, was held at the Harbour Castle Westin Hotel. The participants were from all over Canada and the northeastern United States. New developments in the following areas were covered: urinary incontinence, infertility, paediatrics, laparoscopy, penile, and prostate cancer. There were seven outside faculty and 19 University of Toronto faculty members who spoke at the course. Dr. Sender Herschorn was the course director and Dr. Laurie Klotz was co-director. The planning committee consisted of Drs. John Honey, Keith Jarvi, Tony Khoury, and Sidney Radomski



Dr. K. Wyne Johnston  
Chair

## Education

Dr. Alan Lossing's core lectures in Vascular Surgery continue to be among the best as evaluated by the undergraduates. Dr. Lindsay co-organized a major course at the Institute for Medical Sciences on the "Critical care – bench to bedside". Dr. Douglas Wooster co-ordinated a Canadian group that included Dr. Szalay that has developed the next version of the Vascular Self-evaluation Program (a CME program for Vascular Surgeons). He organized a very successful Vascular Ultrasound Imaging Program. Dr. David Szalay, is Director of Medical Education at St. Joseph's Health Center. He developed a patient website for the management of venous disorders. Dr. Michael Ameli organized a multidisciplinary symposium. Dr. Daryl Kucey supervised a Masters student from the Surgical Scientist Program. Dr. Wayne Johnston gave the invited guest lecture to the Japanese Vascular Society.

## Research

Dr. Barry Rubin continues to have a five-year Canadian Institutes of Health Research (CIHR) grant and a grant from PSI. He is studying myocardial gene expression and human neutrophil function. Dr. Lindsay has a PSI grant entitled "Ruptured aortic aneurysm: early organ prevention strategies". Dr. Johnston received a new four-year CIHR grant to support his basic research programs, with Professors Richard Cobbold and Matadial Ojha (Biomedical Engineering) in Doppler ultrasound and in hemodynamics studies. Dr. Kucey, with Dr. J. Tu, are funded by a grant from the Canadian Heart and Stroke Foundation, to evaluate carotid endarterectomy in the community.

## Honours

Dr. Johnston completed his six-year term as the Editor-in-Chief of the Journal of Vascular Surgery and continues as the R. Fraser Elliott Chair, in Vascular Surgery. Dr. Lindsay's research fellow, Dr. Denis Harkin won the Lifeline Award, for the best research paper among 80 submitted, to the annual meeting of the American Association of Vascular Surgery. Dr. Wooster is a director of the American Board of Vascular Surgery and is the representative of the Canadian Society for Vascular Surgery, to the board of the Society of Vascular Surgery. As past president of the Peripheral Vascular Surgery Society, Dr. Lindsay represents this group on the Society of Vascular Surgery Board. Dr. Ameli was appointed an honorary member of the Welsh Surgical Society.

## Administration

Dr. Rubin represented University Health Network and the Mount Sinai Hospital in the negotiations related to Alternative Funding. Dr. Johnston chaired the committee on the merger of the American Association of Vascular Surgery and the Society of Vascular Surgery. Dr. Robert Maggisano is president of the Medical Association at Sunnybrook and Women's College Health Sciences Centre, a member of the board of directors and is representative to the Provost Task Force on clinical faculty. Dr. Wooster is Chair of the Standards Committee for the Royal College and has been asked to serve on a consensus committee, on carotid duplex.

## New programs

Dr. Szalay was the first vascular surgeon in Canada to perform endogenous laser ablation of the saphenous vein, for the treatment of varicose veins. Dr. Rubin initiated a nurse-run program for the management of wounds and lymphedema. The new programs for the endovascular management of thoracic aneurysms (Drs. Maggisano and Kucey) and abdominal aortic aneurysms (Drs. Sternbach and Lindsay) are becoming well-established.



Dr. Michael J. Wiley  
Chair

## New Faculty

The Division complement grew this year with addition of Dr. Cindi Morshead to the tenure stream as an Assistant Professor. Cindi's research focuses on the characterization of neural stem cells and their potential role in neural regeneration in the CNS. She is currently applying in vivo and in vitro models to manipulate neural stem cells in order to understand their lineage commitment. Her funding comes from The Stem Cell Network –NCE and CIHR.

## Interactive Multimedia

The Division continued to move forward in developing multimedia to support our teaching programs. We have begun work on "Anatomia", a website for topics that present particular challenges in the dissecting room. The pedagogical approach and site design are complete, and were presented at the Slice of Life Conference in Philadelphia, in June. The first module, "The Larynx" will be introduced this fall [<http://brodel.med.utoronto.ca/~jodie/anatomia/>]. Dr. Stewart completed programs on "Accommodation" and "The Nasal Cavity", that can be viewed in the "Contacts and Links" section of the Brain and Behaviour page at the Educational Innovation Laboratory website [<http://icarus.med.utoronto.ca>]. Presentations, based on these programs were also made at the Symposium on the Use of Innovative Technology for Teaching Morphological Sciences at the Annual Meeting of the Canadian Federation of Biological Societies in June.

## Special Achievements

Dr. Anne Agur was appointed Associate Editor of the journal *Clinical Anatomy*, and also published the second edition of *Essential Clinical Anatomy*, co-authored with Dr. Keith Moore, Professor Emeritus and a former Chair of the Department of Anatomy. Anne also was a Visiting Professor at the Mayo Clinic, where she lectured on the clinical anatomy of the lower limb.

Dr. Pat Stewart was appointed Chair of the Curriculum Sub-Committee of the Dean's Advisory Committee on E-based Education.

Dr. Bernie Liebgott was awarded the "Teacher of the Year Award" by the Class of '05 in the Faculty of Dentistry in recognition of his outstanding contributions to undergraduate dental education.

Dr. Barbara Ballyk received the "Favorite Teacher Award" from the Class of '06 in the Faculty of Physical and Health Education.

## Visiting Professor

Dr. Eyner Lozano, a general surgeon and anatomist joined the Division as a Visiting Professor from the Faculty of Medicine at the National University of Columbia. Dr. Lozano is developing an interactive CD on the Surgical Anatomy of the Liver and Biliary Apparatus. While visiting the Division, he worked with Bernie Liebgott on further refining the program and developing an English version. He also participated in teaching anatomy to the first year medical class.

## Dr. Carlton Smith

Professor Emeritus Carlton Smith passed away on May 9, 2003. Dr. Smith taught Anatomy and Neuroanatomy to countless students during a career that spanned over 40 years at this University. Following his retirement, Dr. Smith was a very generous supporter of Anatomy with donations to renovate the J.C.B. Grant Museum and to establish the Harland-Smith Lectureship as part of the Surgery Grand Round Series.





Dr. Linda Wilson-Pauwels  
Chair

Faculty in the Division of Biomedical Communications (BMC), are dedicated to the continued development of research in Biomedical Communications. In conjunction with Pain Week (an inter-professional education initiative), Leila Lax was part of a team that developed a Knowledge Building on-line Learning Program, for inter-faculty health science students, as well as an accredited continuing education course for health-care practitioners. Working with the University of Toronto's Center for the Study of Pain (UTCSP), Linda Wilson-Pauwels was granted six CIHR student scholarships for BMC students, who are designing their Master's Research Projects in the area of Pain. The IVIS (Interpretive Visualization) Group were granted developmental funding from Merck Frosst, for an exciting project titled, PharmaPlanner. An interdisciplinary team from the Faculties of Medicine and Pharmacy are creating a data-structured retrieval system, that will generate a pictorial PharmaMenu for the management of medication.

A Bell University Laboratories grant-supported the purchase of \$140,000 worth of new technology. State-of-the-art computers, video camera and editing suite, scanners and printers, will ensure the continuation of exciting new media and animation projects.

The MScBMC program continues to attract qualified students. The 16 students in-house and nine new students include students with undergraduate degrees in Psychology, Biology, Animal Science, Pharmacology, Athletic Therapy, Engineering, Industrial Design, Scientific Illustration, as well as students with PhDs in English Literature and Organic Chemistry. The nine new students include three VISA students.

Our goal next year is to increase our student numbers and faculty complement. Negotiations with the University of Toronto at Mississauga and Sheridan College, are ongoing.



Charles H. Tator -  
President and Chairman

Any organization, no matter what sector or field it belongs to, benefits from creating and operating by a mission statement. A mission statement is its guiding principle for achieving its goals in a focused and direct way.

As Chair of the Surgical Alumni Association, I have recently reviewed our association's mission statement to help guide the activities and outcomes of our work. *The mission statement of the Surgical Alumni Association is the "preservation of our legacy" in research, investigation and education, and to uphold the integrity of the Surgeon Scientist Program in the University of Toronto.*

Our mission statement is two-pronged. First, it addresses the goal of maintaining relationships and building on that collegiality with each and every student, alumna or alumnus who receives or has received surgical training, at University of Toronto. Surgical alumni are the link in the chain between their teachers and the next generation of students. It is the interest of the Surgical Alumni Association, to maintain and build rich relationships with surgical alumni: our legacy.

In the 2002-2003 academic year, the Surgical Alumni Association continued its work in developing, and in many cases renewing, relationships with the alumni. This work will be carried on in 2003-2004 with increased vigor, with the hiring of a dedicated Department of Surgery development and alumni relations staff person, last May. We welcome Rebecca Davies and know that she will increase the effectiveness of your Alumni Association.

Secondly, the mission statement refers also to our abiding pride in and commitment to the Surgeon Scientist Program (SSP), the program we continue to refer to as the "jewel in the crown" of the Department of Surgery. The goals of the SSP are to provide an excellent research-training program for surgical residents and to improve our understanding of surgical conditions and their treatment. The SSP is a model for emerging programs in North America and our graduates go on to fill the continent's academic surgery departments. Indeed, the Surgical Scientist Program was given University of Toronto's 2003 Northrop Frye Award this year, for its excellence.

I'm so very delighted to report that donations from alumni and faculty to the Surgical Alumni Fund, increased by 20% for 2002! The main beneficiaries of the fund are, of course, surgeon scientists enrolled in the Surgeon Scientist Program. To me, our alumni's support of the SSP is a natural intersection of the Department of Surgery's legacy and our future and a great outcome, with respect to our mission statement.



Dr. Robert Bell  
Director

The future of Surgical Oncology at the University of Toronto is very bright with progress being made at the local and provincial levels. The Society for Surgical Oncology has approved the University of Toronto General Surgery Surgical Oncology Fellowship, for inclusion in the matching process; the first time that approval has been granted for a non-US center. Drs. Carol Swallow, Andy Smith and Sharif Hanna, deserve a great deal of credit for the success of this fellowship program.

Provincially, the changing role of Cancer Care Ontario (CCO) means that it will assume responsibility for the quality of cancer surgery across the province. The provincial Surgical Oncology Quality program is now headed by Hartley Stern, one of the originators of the Surgical Oncology Committee in the Department of Surgery. Dr. Stern and members of our Department including Drs. David McCready and Andy Smith, are leading the development of quality indicators for breast and colo-rectal surgical oncology on a provincial basis. The Clinical Council at Cancer Care Ontario will implement the work of the Surgery Quality group and I will chair that committee. Surgical Oncology quality improvement will constitute a major component of the patient safety agenda that the Clinical Council will pursue.

The Chairs of Surgery, Otolaryngology, Gynecology and Ophthalmology have agreed to re-develop the University of Toronto Surgical Oncology Umbrella Committee. This Committee has successfully promoted academic issues across the University and promises to continue an advocacy role for University Surgical Oncologists.



Dr. Sender Herschorn -  
Director

Continuing Professional Development (CPD), continues to be a major focus within the department. Most members participate actively in educational programs of all descriptions. Despite SARS the department was very active last year.

Two years ago the members of the department set about complying with the Royal College of Physicians and Surgeons of Canada (RCPSC), guidelines for accreditation of their own CPD activities. The guidelines require tracking all of the CPD activities for each year is well known. Fellows are required to earn 400 credits during five years of active practice by participating in educational activities of their choice. The first five-year cycle extends from January 1, 2001 until December 31, 2005. Members are required to submit continuing professional development (CPD) hours from the previous year by the January 31<sup>st</sup> deadline. Details of the program can be obtained from the following website: <http://rcpsc.medical.org/english/maintenance/>. In January of each year, a stratified, random sample of three percent of Fellows who have completed CPD activities in the previous year will be required to validate their self-reports of participation in CPD activities. It is therefore essential to maintain the records of continuing education (CE) activity.

A new section has been added RCPSC website that is dedicated to Guidelines for CPD Providers. It contains information on accrediting programs, application forms and contact information for accredited providers.

There were courses held in all divisions and 16 that were run by the University Continuing Education Department. The list of the courses and directors are in the Table. Of note is General Surgery that held its 42<sup>nd</sup> annual update. The Aesthetic Plastic Surgery Course has been given for 33 years. Thoracic Surgery scheduled its 30<sup>th</sup> course but unfortunately cancelled because of SARS. The Vascular course has been given for 21 years and the Upper Extremity course for 18 years. The Pelvic and Acetabular course, not held under the auspices of the University but put on by the Division of Orthopaedics, has been given for 15 years. The Urology Update was 10 years old and continues to be the largest urology CE event in Canada.

Despite the cancellation and/or postponement of six courses, there were almost 1200 participants and 187 hours of courses given. Most of the cancelled courses were rescheduled for the fall. There was great understanding on the part of the sponsors and hotels, as well as assistance from the University of Toronto CE Department, with minimizing the financial impact of the cancellations.

Excellence in CE activity continues to have a positive impact on the annual performance review and in academic promotion. The teaching dossier of all is reviewed and contribution to CE, is considered an important facet of academic activity.

**Table: Course directors and CE events**

LESLEY CARR	WOMEN'S PELVIC HEALTH UPDATE
THOMAS BELL	CANADIAN SOCIETY FOR AESTHETIC PLASTIC SURGERY EDUCATIONAL SYMPOSIUM
THOMAS BELL	CANADIAN SOCIETY FOR AESTHETIC (COSMETIC) PLASTIC SURGERY 29TH ANNUAL MEETING
EMIL SCHEMITSCH	THE 8TH MEETING OF THE INTERNATIONAL SOCIETY FOR FRACTURE REPAIR
JAMES WADDELL	KENNEDY VISITING PROFESSOR
LINDA WILSON-PAUWELS	CPD ONLINE: SENTINEL NODE BIOPSY
SENDER HERSCHORN	UROLOGY UPDATE 2002
JOSEPH MAMAZZA	2002 UPDATE IN MINIMALLY INVASIVE SURGERY
THOMAS BELL	CANADIAN LASER AESTHETIC SURGERY SOCIETY: EDUCATIONAL SYMPOSIUM 2002
DOUGLAS WOOSTER	VASCULAR IMAGING TORONTO 2003
ROBIN RICHARDS	19TH ANNUAL UPPER EXTREMITY UPDATE *
MITCHELL BROWN	TORONTO BREAST SURGERY SYMPOSIUM *
WALTER PETERS	33RD ANNUAL SYMPOSIUM ON AESTHETIC PLASTIC SURGERY *
THOMAS BELL	CANADIAN SOCIETY FOR AESTHETIC (COSMETIC) PLASTIC SURGERY EDUCATIONAL SYMPOSIUM: ANCILLARY PROCEDURES IN AESTHETIC FACIAL SURGERY *
ZANE COHEN	UPDATE IN GENERAL SURGERY 2003 - 43RD ANNUAL COURSE FOR PRACTISING SURGEONS
MASSEY BEVERIDGE	BETHUNE ROUND TABLE ON INTERNATIONAL SURGERY *
SHAF KESHAVJEE	TORONTO THORACIC REFRESHER COURSE: 30TH ANNIVERSARY GALA *

\* Cancelled or postponed due to SARS



Dr. J.H. Wedge  
Professor  
Surgeon-in-Chief

## Heads Of Division

Dr. G. Van Arsdell – Cardiac Surgery  
Dr. J. Langer – General Surgery  
Dr. J. Drake – Neurosurgery  
Dr. W. Cole – Orthopaedic Surgery  
Dr. C. Forrest – Plastic Surgery  
Dr. A. Khoury - Urology

There has been considerable change in leadership at the Hospital for Sick Children this year. Dr. Robin Humphreys, an international leader in paediatric neurosurgery, stepped down as head of the Division and retired from practice. Robin was the last of the three original full-time neurosurgeons at Hospital for Sick Children, so we have had a complete generational change. Dr. James Drake has succeeded Robin as head of the Division and Dr. Abhaya Kulkarni has joined the neurosurgical group. Dr. Ron Zuker who has served with distinction, as head of the Division of Plastic Surgery for 17 years has been replaced by Dr. Christopher Forrest, an internationally renowned craniofacial surgeon.



Dr. Christopher Caldarone from the University of Iowa and a former Hospital for Sick Children fellow, has joined the Division of Cardiac Surgery. Chris has a significant research commitment in which his studies focus on the physiology of the neonatal heart. Dr. Joao Luiz Pippi Salle has joined the Division of Urology, to replace Dr. Gordon McLorie who left to become head of Paediatric Urology, at Wayne State University. Dr. Pippi Salle was formerly head of Urology, at the Montréal Children's Hospital.

This year Dr. John Coles and Dr. Howard Clarke were promoted to Full Professor and Dr. Peter Kim to Associate Professor.

Research grant capture and publications continue to grow, such that tremendous pressure has been placed on our Research Institute, to provide sufficient space to accommodate the growing size of our surgical laboratories.

Numerous awards were received by our Faculty, which include, Dr. Christopher Forrest – American College of Surgeons: Australia/New Zealand Travelling Fellowship; Dr. James Rutka – appointed to the Board of Directors, the American Association of Neurological Surgeons; and Dr. Bill Williams has assumed the presidency of the Congenital Heart Surgeons' Society.

The demand for our clinical fellowship positions, continues to increase for the approximately 20 positions available, in the six divisions of surgery. A recent survey detailed an impressive list of countries around the world, from which our fellows originate and the leadership positions, our former fellows have assumed around the world. The constant turnover of bright and experienced trainees from around the world, contributes significantly to our academic enterprise and our fellows frequently win awards from international specialty societies, for their presentations at meetings. Our fellowship program is one of our precious resources at Hospital for Sick Children and it is gratifying to see the high level of popularity with numerous applicants, for each available position.

# Division of Cardiac Surgery

Dr. C. Caldarone - Associate Professor

Dr. J.G. Coles - Professor

Dr. G.S. Van Arsdell - Associate Professor

Dr. W.G. Williams - Professor

Dr. C. Wittnich - Professor

## Publications

**Ashburn DA, Harris L, Downar EH, Siu S, Webb GD, Williams WG:** Electrophysiologic surgery in patients with congenital heart disease. *Seminars in Thoracic and Cardiovascular Surgery. Pediatric Cardiac Surgery Annual*: January 2003; 6: pp 51-8.

**Ashburn DA, McCrindle BW, Tchervenkov CI, Jacobs ML, Lofland GK, Bove EL, Spray TL, Williams WG, Blackstone EH:** Outcomes after the Norwood operation in neonates with critical aortic stenosis or aortic valve atresia. *Journal of Thoracic and Cardiovascular Surgery*: May 2003; 125: pp 1070-82.

**Azaki A, Russell JF, McCrindle BW, Van Arsdell GS, Benson LN, Coles JG, Williams WG:** Anatomic repair of anomalous left coronary artery from the pulmonary artery by aortic reimplantation: early survival, patterns of ventricular recovery and late outcome. *Annals of Thoracic Surgery*: May 2003; 75: pp 1535-1.

**Belanger MP, Askin N, Wittnich C:** Multiple "In vivo" liver biopsies using a freeze-clamping technique. *Journal of Investigative Surgery*: July 2002; 15 (2): pp 109-112.

**Butany J, Ahluwalia MS, Leask RL, Silverside C, Graba J, Williams WG:** Pulmonary site bioprosthesis: failure at 15 years. *Circulation*: September 2002; 106: pp e37-9.

**Butany J, Ahluwalia MS, Leask RL, Silverside C, Graba J, Williams WG:** Pulmonary site porcine bioprosthesis: evaluation at 14 years. *Canadian Journal of Cardiology*: November 2002; 18: pp 1173-75.

**Butany J, Scully HE, VanArsdell G, Leask R:** Prosthetic heart valves with silver-coated sewing cuff fabric: early morphological features in two patients. *Canadian Journal of Cardiology*: July 2002; 18: pp 733-738.

**Humpl T, Campbell R, Stephens D, Van Arsdell G, Benson LN, Holtby HM, Slutsky AS, Adatia I:** Levels of exhaled nitric oxide before and after surgical and transcatheter device closure of atrial septal defects in children. *Journal of Thoracic and Cardiovascular Surgery*: October 2002; 124: pp 806-810.

**Konstantinov IE, Coles JG:** The role of intraoperative device closure in the management of muscular ventricular septal defects. In: *Pediatric Cardiac Surgery Annual 2002* (Constantine Mavroudis, ed). Elsevier Science Inc., New York: 2002

**Konstantinov IE, Van Arsdell GS, O'Blenes S, Roy N, Campbell A:** Retroaortic innominate vein with coarctation of the aorta: surgical repair and embryology review. *Annals of Thoracic Surgery*: March 2003; 75: pp 1014-6.

**Pedra CAC, Justino H, Nykanen DG, Van Arsdell G, Coles JG, Williams WG, Freedom RM, Benson LN:** Percutaneous stent implantation to stenotic bioprosthetic valves in the pulmonary position. *Journal of Thoracic and Cardiovascular Surgery*: July 2002; 124: pp 82-87.

**Van Arsdell G, Tsoi K:** Subaortic stenosis: at risk substrates and treatment strategies. *Cardiology Clinics*: November 2002; 20: pp 421-429.

**Wallen WJ, Belanger MP, Wittnich C:** Pre-ischemic administration of ribose to delay the onset of irreversible ischemic injury and improve function: studies in normal and hypertrophied hearts. *Canadian Journal of Physiology and Pharmacology*: February 2003; 81: pp 40-47.

**Williams WG, Ashburn DA Jr, Webb GD:** Cardiac reoperations in adults with congenital heart disease. In: *Advanced Therapy in Cardiac Surgery, 2nd Edition* (Franco KL, Verrier ED, eds). BC Decker Inc, Hamilton: 2003: pp 208-216.

## Invited Visits to other Hospitals/Universities

**Coles JG:** STS 39th Annual Meeting, San Diego, California January 2003. Non-ABO Compatible Cardiac Transplantation.

**Van Arsdell GS:** American Association for Thoracic Surgery, Boston, Massachusetts, May 2003. Alpha blockade in the management of stage I palliation for hypoplastic left heart syndrome.

**Van Arsdell GS:** European/North American Symposium on Congenital Heart Disease in the Adult, London, United Kingdom, September 2002. Subvalvar aortic stenosis.

**Van Arsdell GS:** European/North American Symposium on Congenital Heart Disease in the Adult, London, United Kingdom, September 2002. Surgery of aortic valve and LVOT (co-chair).

**Van Arsdell GS:** University of California, San Francisco Course on Congenital Cardiac Surgery, San Francisco, CA, May 2003. The Toronto experience with Norwood and Transplantation.

**Williams WG:** Boston Children's Hospital Congenital Heart Disease Course, Boston, Massachusetts, May 2003. CHSS Results with Aortic Valve Stenosis.

**Williams WG:** American College of Cardiology, Chicago, Illinois, March 2003. Hypertrophic cardiomyopathy: Surgical considerations: proven beyond doubt.

**Williams WG:** A Team Approach to Pediatric Cardiac Disease, Children's Hospital of Denver, Vail, Colorado, March 2003. Long-term expectations following the Fontan operation.

**Williams WG:** Boston Children's Hospital Congenital Heart Disease Course, Boston, Massachusetts, May 2003. Management of single ventricle.

**Williams WG:** David A. Murphy Day, IWK Hospital, Halifax, Nova Scotia, June 2003. Measuring performance in congenital heart surgery.

**Williams WG:** European Association for Cardiothoracic Surgery, Monte Carlo, Monaco, September 2002. Outcomes of 829 neonates with complete TGA 11-16 years after repair.

**Williams WG:** A Team Approach to Pediatric Cardiac Disease, Children's Hospital of Denver, Vail, Colorado, March 2003. Outcomes with the use of alpha blockade.

**Williams WG:** Team Approach to Pediatric Cardiac Disease, Children's Hospital of Oregon, Vail, Colorado, March 2003. Quality of life for survivors of congenital heart surgery.

**Williams WG:** European/North American Symposium on Congenital Heart Disease in the Adult, London, United Kingdom, September 2002. Surgical approach to arrhythmia in ACHD.

**Williams WG:** Japanese Association for Thoracic Surgery, Fukuoka, Japan, October 2002. Tetralogy of Fallot.

**Wittnich C:** Rotary Club, Bracebridge, Ontario, April 2003. Heart Disease and what you need to know - does age and your gender affect your vulnerability?

**Wittnich C:** American Cetacean Society, Seattle, Washington, October 2002. Saving marine mammals in their natural habitat - do they have a future?

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

A training program in cardiovascular research: molecules to humans, heart failure to prevention (TACTICS). Liu P, 31 co-applicants incl Carin Wittnich: CIHR (\$855,000 2002 - 2007).



Cardiomyocyte Transplantation. *Coles, JG, Hannigan, G*: Heart and Stroke Foundation of Ontario (\$30,000 2002 - 2003).

Impact of gender on myocardial pathology & ischemia/reperfusion (renewal).  
*Wittnich C*: Heart & Stroke Foundation of Ontario (\$237,404 2001 - 2004).

Integrin-linked kinase (ILK) improves cardiomyocyte survival. *Coles JG, Hannigan, Gregory*: Canadian Institute of Health Research (CIHR) (\$93,065 2002 - 2005).

Magnetic resonance imaging for ischemic heart disease. *Wright G, Burns P, Coates G, Downar E, Fort S, Hendler A, Hu B, McKerlie C, Merchant N, Mickleborough L, Wittnich C*: Medical Research Council of Canada (\$350,000 1999 - 2002).

Oxygen stress in newborn hearts (renewal). *Wittnich C*: Heart & Stroke Foundation of Ontario (\$387,069 2002 - 2006).

## Honours Received

**Coles JG**: Top Ten Ranking in Teaching Effectiveness Score (TES), February 2003.

**Williams WG**: Director, Congenital Heart Surgeons Society Data Center, July 2002.

**Williams WG**: President, Congenital Heart Surgeons Society, July 2002.

**Wittnich C**: Appointed to the Michener Institute Board of Governors, October 2002.

**Wittnich C**: Queen's Jubilee Medal, December 2002.

**Wittnich C**: Tenure, Full Professor Departments of Surgery & Physiology, July 2002.

## Division of General Surgery

**Dr. S.H. Ein - Associate Professor**

**Dr. A.H. Fecteau – Assistant Professor**

**Dr. J.T. Gerstle - Assistant Professor**

**Dr. P.C.W. Kim - Associate Professor**

**Dr. J. C. Langer - Professor**

**Dr. P. Wales - Assistant Professor**

## Publications

**Aziz D, Schiller D, Gerstle JT, Ein SH, Langer JC:** Can “long-gap” esophageal atresia be safely managed at home while awaiting anastomosis? *Journal of Pediatric Surgery*: May 2003: 38: pp 705-08.

**Benharouga M, Sharma M and Lukacs GL:** CFTR folding and maturation in cells. *Methods in Molecular Medicine*: September 2002: chapter 15: pp 229-43.

**Borenstein S, Diamond I, Grant D, Greig P, Jones N, Ng V, Roberts E, Fecteau A:** Outcome of pediatric Live-donor liver transplantation - The Toronto Experience. *Journal of Pediatric Surgery*: May 2003: 38, No 5: pp 668-671.

**Borenstein S, Diamond IR, Grant DR, Greig PD, Jones N, Ng V, Roberts E, Fecteau A:** Outcome of pediatric live-donor liver transplantation-the Toronto experience. *Journal of Pediatric Surgery*: February 2003: 38: pp 668-71.

**Bruch SW, Langer JC:** Omphalocele and gastroschisis. In: *Newborn Surgery, Second Edition*. (Puri, P., eds). Butterworth-Heinemann, Oxford, UK: 2003: pp 605-13.

**Chen LE, Minkes RK, Shackelford PG, Strasberg SM, Kuo EY, Langer JC:** Cut it out: managing hepatic abscesses in patients with chronic granulomatous disease. *Journal of Pediatric Surgery*: May 2003: 38: pp 709-13.

**Ein SH:** Complications Following Esophageal Atresia Repair. *American College of Surgeons, 88th Annual Clinical Congress, Proceedings*: October 2002: pp 120-124.

**Fraga JC, Kim P:** Surgical treatment of parapneumonic pleural effusion and its complications. *Jornal de Pediatria*: December 2002: 78 Supl.2: pp S161-170.

**Ghanekar A, Lajoie G, Luo Y, Yang H, Choi J, Garcia B, Cole EH, Greig PD, Cattral MS, Phillips MJ, Cardella CJ, Levy GA, Zhong R, Grant DR:** Improvement in rejection of human decay accelerating factor transgenic pig-to-primate renal xenografts with administration of rabbit antithymocyte serum. *Transplantation*: July 2002: 15: pp 28-35.

**Greig P, Lilly L, Scudamore C, Erb S, Yoshida E, Kneteman N, Bain V, Ghent C, Marotta P, Grant D, Wall W, Tchervenkov J, Barkun J, Roy A, Marleau D, McAlister V, Peltekian K:** Early steroid withdrawal after liver transplantation: The Canadian tacrolimus versus microemulsion cyclosporin a trial: 1-year follow-up. *Liver Transplantation and Surgery*: June 2003: 9: pp 587-95.

**Hanto D, Fecteau A, Alonso M, Valente J, Whiting J:** ABO incompatible liver transplantation with no immunological graft losses utilizing total plasma exchange, splenectomy, and quadruple immunosuppression: evidence for accommodation. *Liver Transplantation*: January 2003: 9: pp 22-30.

**Hayes-Jordan A, Connolly B, Temple M, Chait P, Weitzman S, Njere I, Langer J, Kim PCW:** Image guided percutaneous approach is superior to thoracoscopic procedure in the diagnosis of pulmonary nodules in children. *Journal of Pediatric Surgery* 39(5):745-748

**Hayes-Jordan A, Connolly B, Temple M, Chait P, Weitzman S, Njere I, Langer JC, Kim PCW:** Image guided percutaneous approach is superior to thoracoscopic procedure in the diagnosis of pulmonary nodules in children. *Journal of Pediatric Surgery*: May 2003: 38: pp 745-48.

- Kellersmann R, Lazarovits A, Grant D, Gracia B, Chan B, Kellersmann A, Wang H, Jevnikar A, Wagner N, Werner M, Ulrichs K, Thiede A Zhong R:** Monoclonal antibody against b7 integrins, but not b7-deficiency attenuates intestinal allograft rejection in mice. *Transplantation*: November 2002: 15: pp 1327-34.
- Langer JC:** Abdominal wall defects. *World Journal of Surgery*: January 2003: 27: pp 117-24.
- Langer JC, Forte V:** Lymphatic malformations (cystic hygroma). In: *Newborn Surgery, Second Edition* (Puri, P., eds). Butterworth-Heinemann, Oxford, UK: 2003: pp 687-95.
- Langer JC:** The failed fundoplication. *Seminars in Pediatric Surgery*: May 2003: 12: pp 110-17.
- Lechardeur D and Lukacs GL:** Intracellular barriers to non-viral gene transfer. *Current Gene Therapy*: November 2002: 2: pp 183-94.
- Mei-Zahav M, Solomon M, Tracheal D, Langer JC:** Bochdalek diaphragmatic hernia: not only a neonatal disease. *Archives of Diseases of Childhood*: June 2003: 88: pp 532-35.
- Mill P, Mo R, Fu H, Grachtchouk M, Kim PCW, Diugosz AA, Hui C-c:** Sonic hedgehog-dependent activation of Gli2 is essential for embryonic hair follicle development. *Genes and Development* 2003; 17(11): 1303-1312.
- Moraes TJ, Langer JC, Forte V, Shayan K, Swezey N:** Pediatric pulmonary carcinoid: a case report and review of the literature. *Pediatric Pulmonology*: April 2003: 35: pp 318-22.
- Pampinella F, Lechardeur D, Zanetti E, MacLachlan I, Benharouga M and Lukacs GL:** Analysis of differential lipofection efficiency in primary and established myoblasts. *Molecular Therapy*: July 2002: 5: pp 161-169.
- Proctor ML, Traubici J, Langer JC, Gibbs DL, Ein SH, Daneman A, Kim PCW:** Correlation between radiographic transition zone and level of aganglionosis in Hirschsprungs disease: Implications for. *Journal of Pediatric Surgery*: May 2003: 38(5): pp 775-778.
- Proctor ML, Traubici J, Langer JC, Gibbs DL, Ein SH, Daneman A, Kimb PCW:** Correlation between radiographic transition zone and level of aganglionosis in Hirschsprung's disease: implications for surgical approach. *Journal of Pediatric Surgery*: May 2003: 38: pp 775-778.
- Rahman S, Newman C, Ein SH:** Isolated Asternia: A case report. *Pediatric Surgery Int*: July 2002: 18: pp 496-497.
- Rubin DC, Langer JC:** Small intestine: anatomy and structural anomalies. In: *Atlas of Gastroenterology, 3rd edition* (Yamada, et al., eds). Lippincott Williams & Wilkins,; 2003: pp 292-97.
- Teitelbaum DH, Wulkan ML, Georgeson KE, Langer JC:** Hirschsprung's Disease. In: *Operative Pediatric Surgery* (Ziegler MM, ed). McGraw-Hill Professional, Philadelphia: 2003: pp 617-45.
- Temple MJ, Langer JC:** Image-guided surgery for the pediatric patient: ultrasound, computed tomography, and magnetic resonance imaging. *Current Opinion in Pediatrics*: June 2003: 15: pp 256-61.
- Wales PW, Drab S, Connolly B, Kim PCW:** Horseshoe lung in association with other foregut anomalies: What is the significance? *Journal of Paediatric Surgery*: August 2002: 37(8): pp 1205-1207.
- Wales PW, Drab S, Kim PCW:** An unusual case of complete Carney's triad in a 14-year old boy. *Journal of Pediatric Surgery*: August 2002: 37(8): pp 1228-1231.

## Invited Visits to Other Hospitals/Universities

- Ein SH:** Canadian Association of Paediatric Surgeons, Vancouver, British Columbia, September 2002. 34th Annual Meeting.
- Ein SH:** British Association of Paediatric Surgeons, Cambridge, England, July 2002. 39th Annual International Congress.
- Ein SH:** American College of Surgeons, San Francisco, California, October 2002. 88th Annual Clinical Congress.
- Ein SH:** The Hospital for Sick Children, Toronto, Ontario, June 2003. Esophageal Replacement, Division of General Surgery.

**Ein SH:** PICU Nursing Program, George Brown College, The Hospital for Sick Children, Toronto, Ontario, September 2002. GI Anomalies.

**Ein SH:** The Hospital for Sick Children, Toronto, Ontario, June 2003. James Simpson Visiting Lecture - Dr. Robert Shamberger, topic: Cancer Trials & Studies.

**Ein SH:** The Hospital for Sick Children, Toronto, Ontario, May 2003. Josie Walther Awards, Surgical Services Grand Rounds.

**Ein SH:** American Academy of Pediatrics, Boston, Massachusetts, October 2002. Luncheon Clinical Problem, Solving Session, Co-Chair.

**Ein SH:** 88th Annual Clinical Congress, American College of Surgeons, San Francisco, California, October 2002. PG29 -- Pediatric Surgery: Esophageal Disorders and Anomalies in Infancy and Childhood.

**Ein SH:** BC Children's Hospital, Vancouver, British Columbia, June 2003. Pure esophageal atresia - HSC experience over 60 years.

**Ein SH:** The Hospital for Sick Children, Toronto, Ontario, June 2003. Pure esophageal atresia - HSC experience over 60 years.

**Ein SH:** PICU Nursing Program, George Brown City College, The Hospital for Sick Children, Toronto, October 2002. Respiratory Anomalies & NEC.

**Ein SH:** American Academy of Pediatrics, Boston, Massachusetts, October 2002. Section of Surgery.

**Jacob C. Langer:** Surgery of Anorectal Malformations, Schneider Children's Hospital, Long Island, New York, June 2003. Advances in the surgical management of Hirschsprung disease.

**Langer JC:** International Fetal Medicine and Surgery Society, La Malbaie, Quebec, September 2002. Management and outcome of congenital diaphragmatic hernia in 2002: a primer for the fetal doctor.

**Langer JC:** American College of Surgeons, October 2002. Management of the child with a dysfunctional fundoplication.

**Langer JC:** International Pediatric Endosurgical Group, Los Angeles, California, March 2003. Meta-analysis of the literature.

**Langer JC:** Surgery Grand Rounds, Southern Illinois University, Springfield, Illinois, May 2003. New concepts in the management of Hirschsprung disease.

**Langer JC:** American Surgical Association, Washington, District of Columbia, April 2003. One-stage transanal Soave pullthrough for Hirschsprung disease: a multicenter experience with 141 children.

**Langer JC:** British Association of Paediatric Surgeons, Cambridge, United Kingdom, July 2002. Preterm induction of labour for antenatally diagnosed gastroschisis.

**Langer JC:** International Fetal Medicine and Surgery Society, La Malbaie, Quebec, September 2002. Should 37 weeks be considered "term" for fetuses with gastroschisis ?

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

A multi-center group to study acute liver failure in children. (a per/patient-based study). *Ng V, Fecteau A: National Institute of Health (\$400 2003 - 2005).*

A multicenter study of the clinical outcomes of the Nuss and Ravitch procedures for the repair of pediatric pectus excavatum. (A per/patient-based study). *Fecteau, AH, Langer, J: Children's Hospital of the King's Daughters (CHKD) (\$22,050 2003 - 2005).*

Bone mineral density after pediatric liver transplant. *Ng V, Fecteau A, Hawkel G, MacArthur C: Hospital for Sick Children Seed Grant (\$32,232 2001 - 2003).*

Developmental Pathways in Hindgut Embryogenesis. *Kim. PCW: Canadian Institute of Health Research (\$340,000 2002 - 2005).*

Factors Predictive of EBV Lymphoproliferation following Organ Transplantation: Beyond Viral Load. *Upton Allen, Hebert D, Weitzman S, Tellier R, Ngan B, Grant D, Humar A, Stephens D: Canadian Institutes of Health Research* (\$70,000 2003 - 2006).

Inflammatory mediated damage to fetal bowel in gastroschisis. *Langer JC, Allen VM, Ryan G, Moore A: Physician Services Incorporated* (\$50,708 2001 - 2003).

Molecular and Cellular Control of Cardiac Xenograft Rejection. *Kim PCW: Heart and Stroke Foundation of Canada* (\$228,132 2001 - 2004).

Molecular and Cellular Mechanisms of Gut Development. *Kim PCW: March of Dimes Birth Defects Foundation, USA* (\$330,000 2002 - 2005).

Optimizing cyclosporine exposure in paediatric liver transplant patients by the use of c2 monitoring. *Ng V, Fecteau A, Mouat S, Deluca E, Bossert A: Novartis Pharmaceuticals* (\$7,000 2003 - 2004).

Pain in child health research training consortium. *Langer JC, McGrath PJ, et al (PI's); Feldman B, Taddio A, Baruchel S, Brown S, Koren G: Canadian Institute for Health Research* (\$1,800,000 2002 - 2008).

Prevention of Delayed Cardiac Xenograft Rejection by Modulation of the potent FGL2 Prothrombinase Gene. *Grant DR, Levy G, Gorczynski R, Phillips J, Ross H., Marsden, P: Heart and Stroke Foundation of Canada* (\$72,000 2000 - 2002).

Sequencing of VACTERL syndrome. *Kim PCW: The Josie Walther Award* (\$15,000 2002 - 2003).

Surgery for perforate necrotizing enterocolitis in human infants: a randomized trial. *Langer JC, Moore A: National Institutes of Health, R01 HD 38462 (Multicenter Trial)* (\$750 2001 - 2004).

The hemodynamic effects of carbon dioxide pneumoperitoneum in infants. *Langer JC, Kim PCW, Wales PW, Bissonette B, Smallhorn J: Society of American Gastrointestinal Endoscopic Surgeons* (\$15,000 2001 - 2002).

## Honours Received

**Ein SH:** Robert Salter Humanitarian Award- Nominee, May 2003.

**Gerstle JT:** Chief Surgical Residents' Award for the Best Teacher, Hospital for Sick Children, June 2003.

**Kim PCW:** Andrea Hayes-Jordan: Runner up, 2002 Resident Best Paper Award, Canadian Association of Pediatric Surgeons, Vancouver, B.C., September 2002.

**Kim PCW:** Monja Proctor: Best Clinical Research Paper, Canadian Association of Pediatric Surgeons Annual Meeting, Vancouver, B.C., September 2002.

**Kim PCW:** Wei Cheng: 2nd place, Josie Walther Memorial Awards., May 2003.

## Division of Neurosurgery

**Dr. M. Dennis –Professor**

**Dr. P.B. Dirks - Assistant Professor**

**Dr. M. Drake J – Professor (Division Head)**

**Dr. R.P. Humphreys - Professor**

**Dr. J.T. Rutka - Professor**

## Publications

**Chitoku S, Otsubo H, Ichimura T, Saigusa T, Ochi A, Shirasawa A, Kamijo K, Yamazaki T, Pang, E, Rutka, JT, Weiss S, Snead CO:** Characteristics of dipoles in clustered individual spikes and averaged spikes. *Brain and Development*: January 2003: 25: pp 14-21.

**Clarke ID, Dirks PB:** A human tumor derived PDGFR-alpha deletion mutant is transforming. *Oncogene*: February 2003: 22: pp 722-723.

**Gladdy RA, Taylor MD, Williams CJ, Grandal I, Karaskova J, Squire JA, Rutka JT, Guidos CJ, Danska JS:** The RAG-1/2 endonuclease causes genomic instability and controls CNS complications of lymphoblastic leukemia in p53/Prkdc-deficient mice. *Cancer Cell*: January 2003: 3-1: pp 37-50.

**Hader W, Drake JM, Sparrow O, Johnson ES, Kestle J:** Death after late failure of third ventriculostomy in children. Report of three cases. *Journal of Neurosurgery*: July 2002: 97(1): pp 211-215.

**Kestle JRW, Drake JM, Cochrane DD, Milner R, Waler ML, Abbott R, Boop FA:** Lack of benefit of endoscopic ventriculoperitoneal shunt insertion: a multicenter randomized trial. *Journal of Neurosurgery*: February 2003: 98: pp 284-290.

**Langlois A, Lee S, Kim DS, Dirks PB, Rutka JT:** p16Ink4a and retinoic acid modulate rhoA and GFAP expression during induction of a stellate phenotype in U343 MG-A astrocytoma cells. *Glia*: September 2002: 40: pp 85-94.

**Mackay MT, Becker LE, Chuang SH, Otsubo H, Chuang NA, Rutka JT, Ben-Zeev B, Snead OC, Weiss SK:** Malformations of cortical development with balloon cells. *Neurology*: October 2002: 60: pp 580-587.

**McDonald P, Matouk C, Papsin B, Rutka JT:** Clival osteoblastoma in a child: Case Illustration. *Journal of Neurosurgery*: May 2003: 98: pp 25.

**McNeely D, Drake JM:** A systematic review of brachial plexus surgery for birth-related brachial plexus injury. *Pediatric Neurosurgery*: January 2003: 38: pp 57-62.

**Onal C, Otsubo H, Araki H, Chitoku S, Ochi A, Weiss S, Logan W, Elliott I, Snead CO, Rutka JT:** Complications of invasive subdural grid monitoring in children with epilepsy. *Journal Neurosurgery*: May 2003: 98: pp 1017-1026.

**Rashidi M, DaSilva VR, Minagar A, Rutka JT:** Nonmalignant pediatric brain tumors. *Current Neurology Neuroscience Report*: May 2003: 3: pp 200-205.

**Rutka JT:** A Primer in Molecular Medicine. *Neurosurgery*: April 2003: 52 (4): pp 721-722.

**Rutka JT:** Craniopharyngioma. *Journal of Neurosurgery*: July 2002: 97: pp 1-2.

**Tamber S, Mandeep, Rutka James T,:** Pediatric Supratentorial high-grade gliomas. *Neurosurgical Focus*: February 2003: 14: pp 1-8.

**Taylor M, Mainprize T, Rutka JT:** Bioinformatics in Neurosurgery. *Neurosurgery*: April 2003: 52-4: pp 1-8.

## Invited Visits to other Hospitals/Universities

**Dirks PB:** Society for Neuro-oncology, San Diego, California, November 2002. *Cancer Stem Cells in Brain Tumors*.

**Drake J M:** Congres des Sciences Neurologiques du Quebec, Montreal, Quebec, November 2002. *Pediatric hydrocephalus - Managing the risk*.

**Drake J M:** Congress of Neurological Surgeons, Sep. 21-26, 2002, Philadelphia, Pennsylvania, September 2002. *Shunt update: Risk factors for complications*.

**Rutka JT:** AANS/CNS Pediatric Section Annual Meeting, Scottsdale, Arizona, December 2002. Adenoviral BDNF Induces Neostriatal Neuronal Recruitment from Endogenous Progenitor Cells in Transgenic R6/2 Huntington Mice.

**Rutka JT:** International Society of Pediatric Oncology, Porto, Portugal, September 2002. Advances in Neurosurgery.

**Rutka JT:** Congress of Neurological Surgeons, Philadelphia, Pennsylvania, September 2002. Advances in Pediatric Neuro-Oncology Surgery.

**Rutka JT:** 2003 Charles M. Henderson Lecture, Baltimore, Maryland, April 2003. Classification and Management of Brainstem Tumors in Children.

**Rutka JT:** Congress of Neurological Surgeons, Philadelphia, Pennsylvania, September 2002. Complications of Invasive Subdural Grid Monitoring in Children.

**Rutka JT:** The Brain Tumor Foundation, New York, New York, November 2002. Current Advances in Brain Tumor Research.

**Rutka JT:** AANS/CNS Pediatric Section Annual Meeting, Scottsdale, Arizona, December 2002. Immuno-Gene Therapy for Malignant Pediatric Brain tumor.

**Rutka JT:** Congress of Neurological Surgeons, Philadelphia, Pennsylvania, September 2002. Moderator for Luncheon Seminar "Posterior Fossa and brainstem Tumors: Approaches and Complication Avoidance.

**Rutka JT:** Albany Medical College, Albany, New York, July 2002. Molecular Biology in the New Millennium.

**Rutka JT:** RUNN Course, Woods Hole, Massachusetts, October 2002. Molecular Biology of Brain Tumors.

**Rutka JT:** Visiting Professor University of Miami, Department of Neurological Surgery, Miami, Florida, June 2003. Molecular pathogenesis of pediatric brain tumors.

**Rutka JT:** American Academy of Neurological Surgery, Scottsdale, Arizona, October 2002. Multiple Subpial Transections in the Treatment of Pediatric Epilepsy.

**Rutka JT:** Annual 19th J. Garber Galbraith Lecture, Birmingham, Alabama, November 2002. Neurosurgical Treatment of the Child with Epilepsy: The Hospital for Sick Children.

**Rutka JT:** Visiting Professor University of Miami, Department of Neurological Surgery, Miami, Florida, June 2003. Present and future management of craniopharyngioma in children.

**Rutka JT:** Pediatric Brain Tumor Consortium, St. Jude Children's Hospital, St. Louis, Missouri, January 2003. Scientific Committee Advisory Board.

**Rutka JT:** University of San Francisco, San Francisco, California, January 2003. Second Annual Charles B. Wilson Lecturer in Neurosurgery.

**Rutka JT:** Society of Neurological Surgeons, New York, New York, December 2002. Society of Neurological Surgeons Committee Meeting at the Stanhope Hotel.

**Rutka JT:** Annual 19th J. Garber Galbraith Lecture, Birmingham, Alabama, November 2002. The Harold J. Hoffman Slide Collection: Images from 35 years of Pediatric Neurosurgical Experience.

**Rutka JT:** University of Illinois College of Medicine at Peoria, Peoria, Illinois, April 2003. The Molecular Basis of Pediatric Brain Tumors.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

A molecular-epidemiologic case-control study of pediatric brain tumours in Ontario. *McLaughlin J, Malkin D, Rutka J, Wells P, Greenberg M: National Cancer Institute (\$506,237 2001 - 2004).*

Analysis of Stem Cells in Pediatric Brain Tumors. *Dirks P: Hospital for Sick Children Foundation (\$32,000 2002 - 2004).*

Canadian Centre for Applied Cancer genetics. *Malkin D, Rutka JT: Canada Foundation for Innovation (\$2,175,000 2001 - 2005).*

Cytoskeletal: Matrix interactions regulating astrocytoma tumorigenicity. *Rutka JT: Medical Research Council of Canada Scientist Award* (\$300,000 1999 - 2004).

Cytoskeletal: matrix interactions regulating astrocytoma tumorigenicity. *Rutka J, Becker L: Canadian Institute of Health Research* (\$300,000 2001 - 2004).

Determination of brain tumor phenotype by oncogene expression in CNS stem cells. *Dirks PB: National Cancer Institute of Canada* (\$245,529 2000 - 2003).

Mathematical and computer modelling of hydrocephalus. *Sivaloganathan S, Drake JM, Tenti P: NSERC Collaborative Health Research Grant* (\$227,625 2002 - 2005).

Mouse Imaging Centre for Canada. *Henkelman, RM, JT Rutka, C Hui, C McKerlie, FS Foster, J Cuticchia, J Rossant, M Rabinovitch, P Backx, SL Adamson: Canadian Foundation for Innovation, Canadian Institutes of Health Research* (\$5,294,947 2000 - 2005).

Neurobehavioral outcome of head injury in children. *Levin HS, Dennis M, Barnes MA, Rutka JT, MacGregor D, Schachar R, Blaser S, Inwood S, Purvis K, Hanfling M, McCluggage C, Treadwell-Deering D, Valadka A, McCauley S, Song J, Gill A, Wesson D, Brookshire B, Francis D, Davidson K, Kaufman J, Max J, Lansing A, Logan G, Martin R, Chapman S, Mendelsohn D, Bruce D, McColl R, Kowatch R, Roach E, Ewing-Cobbs L, Fletcher J, Clifton G, Saunders A, Yeakley J: National Institutes of Health/National Institute of Neurological Diseases and Stroke* (\$655,223 1998 - 2003).

Novel pharmacological treatment of murine medulloblastoma. *Rutka J, Mainprize T: Brainchild* (\$20,000 2001 - 2002).

Role of Gli transcription factors in the pathogenesis of medulloblastoma. *Taylor M, Rutka J.: Brainchild* (\$50,750 2001 - 2003).

Signaling and degradation network of Toronto, SIDNET. *Rotin D, Rutka JT: Canadian Centre for Applied Cancer Genetics* (\$5,185,329 2002 - 2004).

Sonic hedgehog and WNT signaling blockade as a treatment for paediatric medulloblastoma. *Rutka JT, Hawkins C: Katie's Kids for the Cure ("Foundation")* (\$150,000 2002 - 2004).

The Role of Gli 2 in Medulloblastoma. *Rutka JT, Mainprize T: Pediatric Brain Tumor Foundation of the United States* (\$140,000 2002 - 2003).

The role of human suppressor of fused in medulloblastoma. *Rutka JT, Hogg D: National Cancer Institute of Canada* (\$450,000 2002 - 2004).

Spina bifida: Cognitive and neurobiological variability. *Dennis M, Fletcher JM, Barnes MA, Blanton SH, Blaser S, Brandt ME, Buncic JR, Carlson C, Drake JM, Francis DJ, Hannay HJ, Hetherington R, Inwood S, Kramer LA, Landry SH, MacGregor D, Northrup HL, Scherer S, Townsend I: National Institutes of Health* (\$1,284,320 1998 - 2003).

Spina Bifida: Cognitive and neurobiological variability in Dandy Walker and aqueduct stenosis. *Fletcher JM, Dennis M, Barnes MA, Blanton SH, Blaser S, Brandt ME, Buncic JR, Carlson C, Drake JM, Francis DJ, Hannay HJ, Hetherington R, Inwood S, Kramer LA, Landry SH, MacGregor D, Northrup HL, Scherer S, Townsend I: National Institutes of Health/National Institute of Child Health and Human Development* (\$152,487 2000 - 2002).

Treatment of astrocytomas with verotoxin. *Mainprize T, Rutka JT: Research Fellowship Award National Cancer Institute of Canada* (\$130,000 1999 - 2002).

## Honours Received

**Dirks PB:** Bernard Langer Surgeon Scientist Award, Department of Surgery, University of Toronto, May 2003.

**Rutka JT:** Appointed AANS Board of Directors, April 2003.

**Rutka JT:** Nation Builder Award, Science & Technology, Globe and Mail, July 2002.

**Rutka JT:** Pre-Convocation Ceremony Speaker, June 2003.



## Division of Orthopaedic Surgery

**Dr. B.A. Alman - Associate Professor**

**Dr. W.G. Cole – Professor (Division Head)**

**Dr. D.M. Hedden - Associate Professor**

**Dr. A. Howard - Assistant Professor**

**Dr. U.G. Narayanan - Assistant Professor**

**Dr. R.B. Salter - Professor**

**Dr. J.H. Wedge - Professor**

**Dr. J.G. Wright - Professor**

## Publications

**Alman BA:** A classification system for genetic disorders of interest to orthopaedists. *Clinical Orthopaedics and Related Research*: August 2002: 401: pp 17-26.

**Alman BA:** Genetic etiology does not supplant the need to understand orthopaedic disorders. *Clinical Orthopaedics*: August 2002: 401: pp 2-3.

**Alman, BA:** Oncogenes, In *Molecular Biology in Orthopaedics* (American Academy of Orthopaedic Surgeons, ed): 2003: pp 143-151.

**Ballhausen D, Bonafe L, Terhal P, Unger SL, Bellus G, Classen M, Hamel BC, Spranger J, Zabel B, Cohn DH, Cole WG, Hecht JT, Superti-Furga A:** Recessive multiple epiphyseal dysplasia (rMED): phenotype delineation in eighteen individuals homozygous for DTDST mutation R279W. *Journal of Medical Genetics*: January 2003: 40: pp 65-71.

**Black CE, Huang N, Neligan PC, Forrest CR, Lipa JE, Pang CY:** Vasoconstrictor effect and mechanism of action of endothelin-1 in human radial artery and vein: Implication of skin flap vasospasm. *Journal of Cardiovascular Pharmacology*: 2003: pp 460-467.

**Cole WG:** Advances in osteogenesis imperfecta. *Clinical Orthopaedics and Related Research*: August 2002: 401: pp 6-16.

**Cole WG:** Skeletal dysplasias. In: *Molecular Biology in Orthopaedics* (Rosier RN, Evans CH, eds). American Academy of Orthopaedic Surgeons, Chicago: 2003: pp 87-94.

**Cole WG:** Skeletal dysplasias reveal genes of importance in skeletal development and structure. *Connective Tissue Research*: March 2003: 44: pp 246-249.

**Emam A, Sennah K, Howard AW, Hale I:** Multi-body Dynamic Simulations of Forward Facing Child Occupants Under Varying Crash Pulses. *Proceedings of the Canadian Multidisciplinary Road Safety Conference XIII Banff, Alberta*: 2003.

**Hall CR, Cole WG, Haynes R, Hecht JT:** Reevaluation of a genetic model for the development of exostosis in hereditary multiple exostosis. *American Journal of Medical Genetics*: August 2002: 112: pp 1-5.

**Hecht JT, Hall CR, Snuggs M, Hayes E, Haynes R, Cole WG:** Heparan sulfate abnormalities in exostosis growth plates. *Bone*: July 2002: 31: pp 199-204.

**Howard AW:** Automobile restraints for children: a review for clinicians. *Canadian Medical Association Journal*: October 2002: 167(7): pp 769-73.

**Howard AW, Moses McKeag A, Rothman L, German A, Hale I, Emam A, Altenhof B, Turchi R:** Cervical Spine Injuries in Children Restrained in Forward Facing Child Restraints. *Proceedings of the Canadian Multidisciplinary Road Safety Conference XIII Banff, Alberta*: 2003.

**Howard AW, Rothman L, Moses McKeag A, Pazmino-Canizares J, German A, Monk B, Comeau J, Hale I, Mills D, Blazeski S:** Children in Side Impact Motor Vehicle Crashes: Seating Position and Injury Mechanism. *Proceedings of the Canadian Multidisciplinary Road Safety Conference XIII Banff, Alberta*: 2003.

- Huber AD, Lam P-Y, Duffy CM, Yeung R.S.M., Ditchfield M, Laxer D, Cole WG, Graham HK, Allen RC, Laxer RM:** Chronic recurrent multifocal osteomyelitis: Clinical outcomes after more than five years of follow-up. *Journal of Pediatrics*: August 2002: 141: pp 198-203.
- Le Saux N, Howard AW Barrowman NJ, Gaboury I, Sampson M, Moher D:** Shorter courses of parenteral antibiotic therapy do not appear to influence response rates for children with acute hematogenous osteomyelitis: a systematic review. *BMC Infectious Diseases*: August 2002: 2:16:
- Macpherson AK, To TM, Macarthur C, Chipman ML, Wright JG, Parkin PC:** Impact of mandatory helmet legislation on childhood bicycle-related head injuries: a population-based study. *Pediatrics*: August 2002: 110(5).
- Paluru P, Ronan SM, Heon E, Devoto M, Wildenberg SC, Scavello G, Holleschau A, Makitie O, Cole WG, King RA, Young TL:** New Locus for Autosomal Dominant High Myopia Maps to the Long Arm of Chromosome 17. *Investigative Ophthalmology and Visual Science*: April 2003: 44: pp 1830-1836.
- Plasschaert F, Craig C, Bell R, Cole WG, Wunder JS, Alman BA:** Eosinophilic granuloma. A different behaviour in children than in adults. *Journal of Bone and Joint Surgery (British)*: August 2002: 84: pp 870-872.
- Plasschaert F, Craig C, Cole WG, Bell RS, Wunder J, Alman BA:** Eosinophilic granuloma: A different behaviour in children than adults. *Journal of Bone and Joint Surgery (American)*: August 2002: 84 (6): pp 870-2.
- Purkiss SB, Driscoll B, Cole WG, Alman B:** Idiopathic scoliosis in families of children with congenital scoliosis. *Clinical Orthopaedics and Related Research*: August 2002: 401: pp 27-31.
- Salter RB:** An overview of continuous passive motion (CPM) historical background, the limited potential of articular cartilage to heal or to regenerate. (2003) *Folia Traumatologica Lousniensia* ISNB, 90-908, 659-9-8, Belgium: 2003: pp 29-37.
- Salter RB:** Epiphyseal injuries. (2003) *Folia Traumatologica Lousniensia* ISNB, 90-803, 659-9-8, Belgium: 2003: pp 29-37.
- Salter RB:** The biological concept of continuous passive motion (CPM) of joints for the healing and regeneration of articular cartilage, ligaments and tendons. In: *After Charnley (202) Ed. Faux, JC* McMillian and Co., Preston, United Kingdom: 2003: pp 193-203.
- Tiet TD, Alman BA:** Developmental Pathways in Musculoskeletal Neoplasia: Involvement of the The Indian Hedgehog-Parathyroid Hormone-Related Protein Pathway. *Pediatric Research*: April 2003: 53: pp 539-543.
- Unni G. Narayanan:** Elastic stable (flexible) intramedullary nailing of paediatric femoral fractures. *Canadian Orthopaedic Association Bulletin*: March 2003: 60: pp 31-32.
- Varallo VM, Gan BS, Seney S, Ross DC, Roth JH, Richards RS, McFarlane RM, Alman BA, Howard JC:** Beta-catenin expression in Dupuytren's Disease: A role for cell-matrix interactions in modulating beta-catenin levels. *Oncogene*: June 2003: 22 (24): pp 3680-4.
- Wright JG:** External fixation of paediatric femoral fractures. *COA Bulletin ACO*: February 2003: 60: pp 27-28.
- Wright JG:** Levels of evidence. A step forward on the road to better practice? *AAOS Bulletin*: February 2003: 51(1): pp 11-12.
- Wright JG:** Summarizing the evidence. Gaining confidence in treatment recommendations. *American Association of Orthopaedic Surgeons' Bulletin*: June 2003.
- Yen D and Hedden DM:** Multiple vertebral compression fractures in a patient treated with corticosteroids for cystic fibrosis. *Canadian Journal of Surgery*: October 2002: 45: pp 383-384.

## Invited Visits to other Hospitals/Universities

**Alman BA:** Ontario Orthopaedic Association, Toronto, Ontario, November 2002. 1) Back Pain in Children 2) Developmental Biology 3) Controversies in femur fractures.

**Alman BA:** Ecuador Orthopaedic symposium, Quito, Ecuador, November 2002. 1) Back Pain in children 2) Controversies in Femur Fractures 3) Developmental Biology 4) Children's tumors 5) What's new in Muscular Dystrophy.

**Alman BA:** International Pediatric Orthopaedic Symposium, Florida, December 2002. 1) Steroids in Muscular Dystrophy 2) Fractures and Osteoporosis in neuromuscular disorders 3) The hip in neuromuscular disorders.

**Alman BA:** The Multiple Hereditary Exostoses (NIH sponsored symposium), Arizona, October 2002. Bone Development, Repair and Related Disorders.

**Alman BA:** University of Western Ontario, London, Ontario, February 2003. CIHR Group in Skeletal Development Physiology and Pharmacology Seminar Series, The Gli genes in cartilage development and pathology.

**Alman BA:** Hopital Sainte-Justine, Universite de Montreal, Montreal, Quebec, March 2003. Developmental Biology in Pediatric Orthopaedics.

**Alman BA:** Hopital Sainte-Justine, Universite de Montreal, Montreal, Quebec, March 2003. Genetics in Pediatric Orthopaedics.

**Alman BA:** Hopital Sainte-Justine, Universite de Montreal, Montreal, Quebec, March 2003. Malignant Bone Tumors in Children: Clues to Diagnosis and Management.

**Alman BA:** Pediatric Orthopaedic Society of North America, Florida, May 2003. Of Mice and Men an enchondromatosis Odyssey -- Arthur H. Heune Award Presentation.

**Alman BA:** Institute for Neuromuscular Diseases, Aarhus, Denmark, November 2002. Spinal Surgery of boys with Duchenne muscular dystrophy and the effects of steroid treatment on the development of spinal deformity.

**Alman BA:** University of Leuven, Leuven Belgium, January 2003. Target genes in aggressive fibromatosis.

**Cole WG:** 8th International Conference on Osteogenesis Imperfecta, Annecy, France, September 2002. Opening address: 'Molecular basis of osteogenesis imperfecta'.

**Cole WG:** Conference on Multiple Hereditary Exostoses (National Institutes of Health & The Arizona Cancer Center), Tucson, Arizona, October 2002. Surgical considerations in the excision of exostoses in growing individuals.

**Cole WG:** Boston University, Division of Orthopaedics, Boston, Massachusetts, November 2002. Visiting Speaker, Nov. 4, 2002. Pediatric orthopaedics - Impact of biotechnology and evidence-based medicine.

**Hedden DM:** Alpha Group Annual Meeting, Antigua, West Indies, February 2003. Alternative Funding Plans Are Good For Academic Practice.

**Hedden DM:** Alpha Group Annual Meeting, Antigua, West Indies, February 2003. Scoliosis is a Cosmetic Condition - Agree.

**Hedden DM:** Ste. Justine Paediatric Orthopaedic Review Course, Montreal, Quebec, March 2003. Spondylolysis/Spondylolisthesis: When Is Surgery Necessary?

**Hedden DM:** Canadian Spine Society Annual Meeting, Corner Brook, Newfoundland, March 2003. Surgeon Reliability in Rating Cosmesis in Adolescent Idiopathic Scoliosis.

**Hedden DM:** Ste. Justine Paediatric Orthopaedic Review Course, Montreal, Quebec, March 2003. The Orthopaedic Management of Spinal Dysraphism: Goals and Treatment Options.

**Hedden DM:** Ste. Justine Paediatric Orthopaedic Review Course, Montreal, Quebec, March 2003. What Should You Know About Acute Thoracolumbar Spine Injuries In Children?

**Howard A:** CBC TV-Canada Now and National News, Niagara-on-the-Lake, Ontario, June 2003. Age for Forward-Facing Child Safety Seats (Auto21).

**Howard A:** National Post, Pennsylvania, January 2003. Bodychecking Injuries Up Since Rule Change (Age limit lowered to nine).

**Howard A:** CFTO TV-Regional CTV News, Toronto, Ontario, June 2003. Booster Seats and Toddler Seats (Auto21).

**Howard A:** Toronto District School Board, Toronto, Ontario, March 2003. Does Removal of Play Equipment Make School Yards Safer.

**Howard A:** National Post, Pennsylvania, January 2003. Half-pipe Horrors.

**Howard A:** CFRB, Toronto, Ontario, February 2003. Helmets for Ski/Snowboard.

**Howard A:** AM 990 Radio, Montreal, Quebec, January 2003. Hockey Injuries.

**Howard A:** CJME - John Garley Live, Regina, Saskatchewan, January 2003. Hockey Injuries.

**Howard A:** Canadian International Development Agency, Hull, Quebec, September 2002. Injury Control and International Development - Why?

**Howard A:** Canadian Standards Association, Toronto, Ontario, May 2003. Playground Injuries in Children.

**Howard A:** Canadian Paediatric Society Annual Meeting, Calgary, Alberta, June 2003. Using Car Seats Safely.

**Rang MC:** 6th International Course on Perforator Flap, Taoyuan, Taiwan, October 2002. The human paraumbilical perforator skin flap model for the study of vascular reactivity and territory expansion in skin flap.

**Salter RB:** St. Justine Postgraduate Orthopaedic Review Course (SPORC) Universit  de Montreal, Montreal, Quebec, March 2003. (1) Epiphyseal plate injuries (2) Continuous passive motion of joints - basic research and clinical applications.

**Salter RB:** Postgraduate Course, Catholic University of Louvain, Louvain, Belgium, March 2003. (1) Epiphyseal plate injuries (2) The biological concept of continuous passive motion, from origination to research to clinical applications.

**Salter RB:** Postgraduate Orthopaedic Course, University of Amsterdam, Amsterdam, Holland, November 2002. (1) The 15 to 30 year results of innominate osteotomy in children (2) Innominate osteotomy for residual subluxation of the hip in young adults.

**Salter RB:** Department of Orthopaedic, United States Navy, United States Navy Hospital, San Diego, California, August 2002. (1) The philosophy and nature of surgical research (2) Innominate osteotomy for residual subluxation of the hip in young adults.

**Salter RB:** University of Minnesota Postgraduate Orthopaedic Course, Minneapolis, Minnesota, May 2003. Basic research relevant to development dysplasia of the hip (congenital dislocation) and its clinical applications.

**Salter RB:** Annual Meeting of the International Society of Orthopaedic Research, San Diego, California, August 2002. Continuous passive motion from realistic research to improve patient care.

**Narayanan UG:** Paediatric Orthopaedic Society of India, 9th Annual Conference, Vellore, India, January 2003. Complications of flexible intramedullary nailing. Invited guest lecture.

**Narayanan UG:** Paediatric Orthopaedic Society of India, 9th annual Conference, Vellore, India, January 2003. Elastic stable intramedullary nailing in the management of femur fractures in children. Invited Guest Lecture.

**Narayanan UG:** Paediatric Orthopaedic Society of India, 9th Annual Conference, Vellore, India, January 2003. Workshop on elastic stable intramedullary nailing of long bone fractures in children.

**Wright JG:** Visiting Professor, Upstate Medical University, Syracuse, New York, November 2002. (i) Evidence and the practice of orthopaedics; (ii) Outcomes research, area variation, and disparity in orthopaedic surgery.

**Wright JG:** Society of Military Orthopaedic Surgeons, San Diego, California, December 2002. (i) Femoral shaft fractures in children; (ii) Levels of evidence and the practicing orthopaedic surgeon.

**Wright JG:** Society of Military Orthopaedic Surgeons, San Diego, California, December 2002. (i) Femoral shaft fractures in children; (ii) Levels of evidence and the practicing surgeon.

**Wright JG:** Mt. Sinai Hospital, Toronto, Ontario, October 2002. Alternative Funding Plans. Lessons from the front line.

**Wright JG:** Population Health Sciences, Research Institute, The Hospital for Sick Children, Toronto, Ontario, January 2003. CIHR - How does it work and what is new.

**Wright JG:** Washington University Distinguished Lecturer, St. Louis, Missouri, December 2002. Evidence and the practice of orthopaedic surgeons.

**Wright JG:** Visiting Professor, Dalhousie University, Halifax, Nova Scotia, November 2002. Evidence and the practice of orthopaedics.

**Wright JG:** The Hospital for Sick Children Foundation, Toronto, Ontario, October 2002. Research at The Hospital for Sick Children.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

(Renewal) A randomized trial of casting and external fixation for paediatric femoral fractures. *Wright JG, Wang E, Coyte PC: MRC (\$314,248 1998 - 2002).*

A randomized clinical trial comparing the Moss Miami & Universal Spinal Instrumentation Systems for idiopathic scoliosis. *Wright JG, Hedde DM, Alman BA, Cole WG: Medical Research Council (Grant #MA-15242) (\$13,270 1998 - 2002).*

A randomized clinical trial comparing the Moss Miami and the Universal spinal instrumentation systems for idiopathic scoliosis. *Wright JG, Alman BA, Cole WG, Hedden DM: MRC Industry (\$13,270 1999 - 2002).*

A randomized clinical trial comparing the Moss-Miami and Universal Spinal Instrumentation Systems for idiopathic scoliosis. *Wright JG, Hedden DM, Alman BA, Cole WG: Johnson & Johnson Medical Products (\$25,000 2001 - 2002).*

A randomized trial comparing the Moss Miami & Universal Spinal Instrumentation Systems for idiopathic scoliosis. *Wright JG, Hedden DM, Alman BA, Cole WG: Medical Research Council of Canada (\$66,350 1998 - 2002).*

A randomized clinical trial comparing the Moss-Miami and Universal Spinal Instrumentation Systems for idiopathic scoliosis. *Wright JG, Hedden DM, Alman BA, Cole WG: Synthes (Canada) Ltd (\$50,000 2001 - 2003).*

Analysis of extracellular matrix molecule mutations in individuals with Ehlers-Danlos syndromes. A cause of premature development of osteoarthritis. *Cole WG, Roughley P: Canadian Arthritis Network, Network Centres of Excellence, Medical Research Council of Canada (\$160,000 1999 - 2003).*

Auto21. *Howard AW and 185 other investigators: Networks of Centres of Excellence (\$23,000,000 2001 - 2005).*

Beta-catenin in aggressive fibromatosis: Molecular pathology and implications for therapy. *Alman BA: NCIC* (\$460,000 2001 - 2004).

Canadian children's crash injury research and engineering network site. *Howard AW, Wright JG, German A: Ontario Neurotrauma Foundation* (\$2,000 2000 - 2003).

Canadian children's crash injury research and engineering network site (Declined). *Howard AW, Wright JG, German A: Ontario Neurotrauma Foundation* (\$60,000 2000 - 2003).

Continuous passive motion - an anti-inflammatory signal in an adjuvant-induced model of arthritis. *Agarwal S, Salter RB, Alman B: National Institutes of Health (NIH)* (\$654,000 2001 - 2004).

Contrast - enhanced triggered harmonic sonography for quantification of synovial blood flow in an antigen - induced arthritis model in the rabbit. *Babyn P, Salter B: Intramural Fund in Diagnostic Imaging* (\$50,000 2001 - 2003).

Course of Osteoarthritis (OA): A multidisciplinary programmatic proposal to measure the trajectory of OA. *Badley E, Hawker GA, Abrahamowicz M, Gignac M, Fortin P, Clarke A, Edsaile J, Poole R, Wright JG, Coyte P, Davis A, Mohamed N, Cibere J, Penrod J, Bellamy N, Peterfy C: Canadian Arthritis Network* (\$81,935 2002 - 2003).

Crash protection for children. *Howard AW, Wright JG, Parkin P, Letts RM, Mackay M, German A, Hale I: Ontario Neurotrauma Foundation (grant #ONCO-00042)* (\$231,500 2000 - 2003).

Crash protection for children. *Howard AW, Wright JG, Parkin P, Letts RM, MacKay M, German A, Hale I: Ontario Neurotrauma Foundation* (\$231,700 2000 - 2003).

Crash Protection for Children: Simulation of Real World Crashes. *Howard AW: Ford Motor Company* (\$170,000 2003 - 2006).

Determinants of arthritis disability and joint replacement surgery. *Hawker GA, Wright JG, Coyte PC, Badley EM, Williams JI, Glazier RH, Harvey BJ: MRC* (\$394,330 1999 - 2004).

Development and Validation of Spasticity Measurement System. *Narayanan U, Fehlings D, Morris A, Naumann S, Fehlings D: Bloorview MacMillan Children's Foundation* (\$39,551 2003 - 2004).

Effect of smokeless tobacco on endothelial function. *Pang CY: Smokeless Tobacco Research Council (USA)* (\$38,512 2002).

Electronic measurement of orthopaedic radiographs on PACS compared with conventional films. *Gaine W, Wright JG, Hedden DM: The Hospital for Sick Children Trainee's Start Up Fund* (\$2,000 2002 - 2003).

Fellowship Award. *Groll D, Wright JG (supervisor): MRC* (\$33,000 1999 - 2004).

Fractures in children with spina bifida: Prevention and improved treatment. *Johnson P, Ross M, Biggar D, Wright JG: Bloorview Children's Hospital Foundation* (\$180,584 2003 - 2005).

From Knowledge Generation to Knowledge Translation: A Systems Approach to Reducing the Burden of Injury in Canada. *Raina R, MacArthur C, Philippa, Holowaty H, Howard AW, Morrongiello B, Shannon H, et al: CIHR* (\$750,000 2003 - 2007).

Gene expression of aggrecans and type II collagen in an experimental investigation of chondrogenesis under the influence of continuous passive motion in the rabbit. *Salter RB, Alman B: National Institutes of Health (NIH)* (\$25,000 2001 - 2002).

Global protection of skeletal muscle against ischemic necrosis and vascular dysfunction by non-invasive remote preconditioning: Efficacy and mechanism. *Pang, CY, Forrest, CR, Neligan, PC: agency* (\$37,000 2003).

Interdisciplinary Health Research Team in Musculoskeletal Neoplasia :

Please note this grant is divided into 4 programs and Dr. Alman is the Primary Investigator of 1 of these 4 programs, entitled; Developmental Pathways in Musculoskeletal Neoplasia. *Bell RS, Alman BA, Andrulis I, Bramwell V, Davis A, Greenberg M, Hill R, Kandel R, Malkin D, Masri B, O'Sullivan B, Turcotte R, and Wunder J: Canadian Institutes of Health Research (CIHR) (\$5,995,000 2001 - 2006).*

Molecular mechanisms in wound healing. *Alman, BA: Canadian Institute of Health Research (\$299,340 2002 - 2005).*

Molecular Pathology of Cartilage Neoplasia. *Alman BA, Wunder JS: Candian Institute for Health Research ( CIHR) (\$560,000 2003 - 2008).*

Molecular pathology of cartilage neoplasia : the role of parathyroid hormone related protein and indian hedgehog. *Alman BA and Wunder JS: CIHR (\$318,000 2000 - 2003).*

Molecular pathology of Ehlers-Danlos syndrome and chondrodysplasias. *Cole WG: Canadian Institutes of Health Research (\$1,200,270 1999 - 2004).*

Playground Injuries in Children: The Effect of School Board Action to Remove Schoolground Equipment. *Howard AW, Macpherson A, Rothman L, McKeag M A: Canadian Orthopaedic Foundation (\$5,500 2002 - 2003).*

Randomized Control Trial of casting vs Air-Stirrup ankle brace in children with acute low-risk ankle fractures. *Boutis K, Babyn P, Narayanan UG, Alman BA: Physicians' Services Incorporated Foundation (\$150,500 2003 - 2005).*

Randomized controlled trial of casting versus ankle brace in children with low-risk ankle fractures. *Boutis K, Schuh S, Narayanan UG, Willan A, Alman B, Babyn P: Physicians Services Incorporated Foundation (\$155,000 2003 - 2005).*

Randomized controlled trial of inpatients vs. home based rehabilitation following primary total hip and knee arthroplasty. *Mahomed NN, Wright JG, Hawker GA, Naglie G, Jaglal S, Badley E, Davis AM: Physicians' Services Incorporated Foundation (\$47,000 2001 - 2002).*

Skin flap ischemia: pathophysiology and pharmacological intervention. *Pang, CY, Neligan, PC: CIHR (\$80,000 2001 - 2002).*

The Canadian Arthritis Network. *Cruz TF, Wright JG, 124 other co-investigators: Network Centres of Excellence (\$3,800,000 1998 - 2002).*

The chondrogenic potential for free skeletal muscle and grafts in the healing of major full thickness defects of articular cartilage under the stimulus of continuous passive motion: an experimental investigation in the rabbit. *Salter RB, Alman B: Hospital for Sick Children Fund & Josie Walther Research Fund of the Hospital for Sick Children (\$115,000 2001 - 2004).*

What is the health and quality of life for graduates from children's rehabilitation centre? *Young N, Boydell K, Fehlings D, Law M, McCormick A, Mukherjee S, Rumney P, Steele C, Wedge J, Williams J: Canadian Institutes of Health Research and Bloorview Children's Hospital Foundation (\$400,000 2003 - 2006).*

## Honours Received

**Alman BA:** Arthur H. Heune Award presented at the 2003 Pediatric Orthopaedic Society of North America Annual meeting, May 2003.

**Alman BA:** Premier's Research Excellence Award -- Government of Ontario ( Awarded \$ 150.000 2003-2008), April 2003.

**Salter RB:** Award of Merit from the International Federation of Surgical Colleges, September 2002.

**Salter RB:** Lifetime Achievement Award from the Minnesota State Society of Orthopaedic Surgery, May 2003.

## DIVISION OF PLASTIC SURGERY

Dr. H.M. Clarke - Professor  
 Dr. L.G. Farkas – Associate Professor  
 Dr. D.M. Fisher - Lecturer  
 Dr. C.R. Forrest - Associate Professor (Division Head)  
 Dr. W.K. Lindsay – Professor  
 Dr. C.Y. Pang - Professor  
 Dr. J.H. Phillips - Assistant Professor  
 Dr. G.A. Tait – Assistant Professor  
 Dr. Zuker - Professor

### Publications

**Addison P, Forrst CR, Zhong A, Perri L, Neligan PC, Pang CY:** Acute Adenosine treatment is effective in augmentation of ischemic tolerance in muscle flaps in pig: An Update. *Plastic and Reconstructive Surgery*: January 2003: 111: pp 842-854.

**Armstrong PF, Joughin VE, Clarke HM, Willis RB:** Fractures of the forearm, wrist, and hand. In: *Skeletal Trauma in Children*, 3rd Edition (Green NE, Swiontkowski MF, eds). Saunders, Philadelphia: 2003: pp 166-255.

**Azimi C, Kennedy SJ, Chitayat D, Chakraborty P, Clarke J, Forrest CR, Teebi AS:** Clinical and genetic aspects of trigonocephaly: A study of 25 cases. *American Journal of Medical Genetics*: January 2003: 117A: pp 127-135.

**Barron RP, Kainulanien VT, Forrest CR, Krafchik B, Mock D, Sandor GKB:** Tuberous sclerosis: Clinicopathologic features and review of the literature. *Journal of Craniofacial Surgery*: April 2003: 30: pp 361-366.

**Black CE, Huang N, Neligan PC, Forrst CR, Lipa JE, Pang CY:** Vasoconstrictor effect and mechanism of endothelin-1 (ET-1) in human radial artery and vein: Implication of skin flap vasospasm. *Journal of Cardiovascular Pharmacology*: February 2003: 41: pp 460-467.

**Budai M, Farkas L.G., Tompson B, Katic M, Forrest C.R:** Relation between Anthropometric and Cephalometric Measurements and Proportions of the Face of Healthy Young White Adult Men and Women. *Journal of Craniofacial Surgery*: March 2003: 14(2): pp 154-163.

**Rotenberg BW, James AL, Fisher DM, Anderson J, Papsin BC:** Establishment of a bone-anchored auricular prosthesis (BAAP) program. *International Journal of Pediatric Otorhinolaryngology*: July 2002: 66: pp 273-279.

**Clarke HM:** Personal perspectives on medical education in Korea and Canada. *Korean Journal of Medical Education*: May 2003: 15(Suppl1): pp 51-55.

**Clarke HM:** Personal perspectives on medical education in Korea and Canada. In: *Toward the Better Evaluation System; Clinical Skills Assessment National Health Personnel Licensing Examination Board*, Seoul, Korea: 2003: pp 42-53.

**de Kleer N, Curtis CG, Stephens D, Clarke HM:** Predicting outcome in obstetrical brachial plexus palsy. *Plastic Surgical Forum*: 2002: pp 208-210.

**Farkas L.G, Hreczko T.M., Katic M.J., Forrest C.R:** Proportion indices in the Craniofacial Regions of 284 Health North American White Children Between 1 and 5 years of age. *Journal of Craniofacial Surgery*: January 2003: 14: pp 13-28.

**Farkas LG, Katic MJ, Forrest CR:** Surface anatomy of the face in Down's syndrome: Age-related changes of anthropometric proportion indices in the craniofacial regions. *Journal of Craniofacial Surgery*: July 2002: 13: pp 368-374.

**Fisher DM:** Discussion: Cutting CB, Dayan JH, Lip height and lip width after extended Mohler unilateral cleft lip repair. *Plastic and Reconstructive Surgery*: January 2003: 111(1): pp 24-26.



**Forrest CR:** Discussion: Biomechanical and viscoelastic properties of skin, SMAS and composite flaps as they pertain to rhytidectomy by Saulis AS, Lautenschlager EP and Mustoe TA. *Plastic Reconstructive Surgery*: August 2002: 110(2): pp 599-600.

**La Scala GC, Rice SB, Clarke HM:** Complications of microsurgical reconstruction of obstetrical brachial plexus palsy. *Plastic and Reconstructive Surgery*: April 2003: 111(4): pp 1383-1388.

**Leslie LG, Marko KJ, Forrest CR:** Age-related changes in anthropometric Measurements in the craniofacial regions and in height in down's syndrome. *Journal of Craniofacial Surgery*: September 2002: 13(5): pp 614-622.

**Marcus JR, Clarke HM:** Management of obstetrical brachial plexus palsy: Evaluation, prognosis, and primary surgical treatment. *Clinics in Plastic Surgery*: February 2003: 30(2): pp 289-306.

**Marcus JR, Curtis CG, Clarke HM:** External rotation following suprascapular nerve reconstruction in obstetric brachial plexus palsy: Accessory nerve transfer versus C5 grafting. *Plastic Surgical Forum*: 2002: pp 258-259.

**Matic D, Phillips JH:** A Contraindication for the use of a Hydroxyapatite Cement, Bone Source in the Pediatric Population. *Plastic Reconstructive Surgery*: July 2002: 110(1): pp 1-5.

**Pang CY, Forrest CR:** Pharmacological preconditioning of skeletal muscle against infarction. In: *Skeletal Muscle, Pathology, Diagnosis and Management of Disease* (Preedy VR, Peters TJ, eds). GMM, 2002: pp 623-637.

**Walker DA, Christopher Forrest CR, Nish IA, Tompson B:** Management of Severe Paediatric Mandibular Retrognathia with Distraction Osteogenesis. *Oral and Maxillofacial Surgery*: November 2002: 60(11): pp 1341-1346.

**Walker DA, Forrest CR, Nish IA, Tompson B:** Intraoral bidirectional mandibular distraction osteogenesis. *Craniofacial Surgery 9: Proceedings of the Third International Congress of Cranial and Facial Bone Distraction Processes* (Arnaud, E and Diner PA, eds). Monduzzi Editore, Bologna, Italy: 2002: pp 259-265.

## Invited Visits to other Hospitals/Universities

**Clarke HM:** Department of Plastic and Reconstructive Surgery, College of Medicine, Korea University, Seoul, Korea, May 2003. (1) Congenital hand surgery (2) Obstetrical brachial plexus palsy.

**Clarke HM:** Advances in Brachial Plexus Reconstruction: A Surgical Skills Course, Mayo Clinic, Rochester, Minnesota, May 2003. (1) Peripheral nerve approaches: Demo and lab (2) Pediatric mechanisms, examination key points: Classification schemes (3) Early plexus surgery: Timing, indications, techniques (4) 'Stump the professor' - Obstetrical palsy (with Dr. Peter Waters).

**Clarke HM:** American Society of Plastic Surgeons, San Antonio, Texas, November 2002. Complex reconstruction of the paediatric hand.

**Clarke HM:** 5th Academic Seminar of the National Health Personnel Licensing Examination Board, Seoul, Korea, May 2003. Medical education and assessment in Korea and Canada.

**Clarke HM:** Korean Society of Medical Education, Jeju City, Korea, May 2003. Personal perspectives on medical education in Korea and Canada.

**Fisher DM:** The 17th Annual British Virgin Islands Workshop in Plastic Surgery, Tortola, British Virgin Islands, January 2003. Invited Guest - (1) Management of the cleft lip nasal deformity, (2) The influence of velopharyngeal closure pattern on speech following pharyngeal flap pharyngoplasty.

**Fisher DM:** Operation Smile, Surin, Thailand, October 2002. Member of a team of volunteer plastic surgeons.

**Fisher DM:** Grand Rapids Medical Education & Research Center (G.R.M.E.R.C.) - Grand Rounds, Grand Rapids, Michigan, July 2002. Visiting Professor.

**Fisher DM:** Michigan Cleft Palate Association, East Lansing, Michigan, May 2003. Visiting Professor: (1) Cleft Lip Nasal Deformity - Pathology & Treatment, (2) Bilateral Cleft Lip - Strategies for Reducing Secondary Deformities.

**Forrest CR:** Australian Craniofacial Unit, Adelaide, Australia, May 2003. Application of bone paste in craniofacial Reconstruction.

**Forrest CR:** Annual Scientific Congress, Royal Australasian College of Surgeons, Brisbane, Australia, May 2003. Cranial Panel on Aesthetic Craniofacial Surgery.

- Forrest CR:** Division of Plastic Surgery Rounds, Prince of Wales Hospital, Randwick, Australia, May 2003. Craniofacial Reconstruction.
- Forrest CR:** American College Lecture, Annual Scientific Congress, Royal Australasian College of Surgeons, Brisbane, Australia, May 2003. Craniofacial Reconstruction.
- Forrest CR:** Meet the Masters Session, Annual Scientific Congress, Royal Australasian College of Surgeons, Brisbane, Australia, May 2003. Craniofacial Surgery.
- Forrest CR:** AO ASIF Advanced Symposium: Advances in Craniomaxillofacial Surgery, Tucson, Arizona, February 2003. Distraction Osteogenesis.
- Forrest CR:** Panel on Facial Trauma, Annual Scientific Congress, Royal Australasian College of Surgeons, Brisbane, Australia, May 2003. Facial Trauma.
- Forrest CR:** Division of Plastic Surgery Rounds, Prince of Wales Hospital, Randwick, Australia, May 2003. Management of secondary cleft nasal deformity.
- Forrest CR:** AO ASIF Advanced Symposium: Advances in Craniomaxillofacial Surgery, Tucson, Arizona, February 2003. Osteotomies in Pediatric Craniofacial Surgery.
- Forrest CR:** Royal Children's Hospital, Victoria, Australia, May 2003. Pediatric Facial Fractures.
- Forrest CR:** Annual General Meeting of the ANZ Chapter of the American College of Surgeons, Brisbane, Australia, May 2003. The effect of SARS on Toronto.
- Forrest CR:** American College of Surgeons Symposium, Annual Scientific Congress, Royal Australasian College of Surgeons, Brisbane, Australia, May 2003. The future of heroes in American Surgery.
- Forrest CR:** Australian Craniofacial Unit, Adelaide, Australia, May 2003. The management of orbital floor fractures in children.
- Forrest CR:** Australian Craniofacial Unit, Adelaide, Australia, May 2003. The management of unicoronal synostosis in infancy.
- Forrest CR:** Australian Craniofacial Unit, Adelaide, Australia, May 2003. The role of cytoprotection in the prevention of radiation-induced craniofacial bone growth inhibition.
- Forrest CR:** Basic Science Lecture, Panel on Complex Craniofacial Cases, Annual Scientific Congress, Royal Australasian College of Surgeons, Brisbane, Australia, May 2003. The role of cytoprotection in the prevention of radiation-induced craniofacial bone growth inhibition.
- Forrest CR:** Research Rounds, Prince of Wales Hospital, Randwick, Australia, May 2003. The role of cytoprotection in the prevention of radiation-induced craniofacial bone growth inhibition.
- Forrest CR:** Cabrini Monash University, Malvern, Australia, May 2003. Working with SARS at the Hospital For Sick Children in Toronto.
- John H. Phillips:** Hospital for Sick Children, Toronto, Ontario, September 2002. Role of Distraction Osteogenesis in Hemifacial Microsoma.
- Pang CY:** 6th International Course on Perforator Flap, Taoyuan, Taiwan, October 2002. The human paraumbilical perforator skin flap model for the study of vascular reactivity and territory expansion in skin flap.
- Zuker:** American Alpine Workshop in Plastic Surgery, Squaw Valley, California, February 2003. (1) Amazon River Doctor - Eastern Peru, (2) Congenital facial paralysis.
- Zuker:** American Alpine Workshop in Plastic Surgery, Squaw Valley, California, February 2003. (1) Cheilitis to cheilosis, (2) Extensive nevi.
- Zuker:** Plastic Surgery Educational Foundation Symposium, Phoenix, Arizona, February 2003. (1) Guest Speaker: The treatment of facial paralysis - Case analysis and planning, (2) Panel Discussion: A potpourri of challenging congenital masses and lesions examining treatment options.

**Zuker:** 5th International Moebius Syndrome Conference, St. Charles, Illinois, July 2002. Guest Speaker: Surgery for a smile.

**Zuker:** Operation Smile- World Summit 2002, Limerick, Ireland, October 2002. Guest Speaker: Medical international programs at University of Toronto.

**Zuker:** Primer Simposio Internacional de Paralisis Facial, Bogota, Columbia, April 2003. Invited Guest Speaker - (1) Paralisis facial en ninos, (2) Avances recientes en reconstruccion de cabeza y cuello en ninos, (3) Microcirugia pediatrica - Presented in Spanish.

**Zuker:** 2nd World Cleft Congress of the International Cleft Lip and Palate Foundation, Munich, Germany, September 2002. Invited Lecturer: Operation Smile - The spirit of volunteerism.

**Zuker:** Plastic Surgery Educational Foundation, Symposium, Los Angeles, California, August 2002. Invited Lecturer: Correction of facial paralysis.

**Zuker:** American Society for Reconstructive Microsurgery, Kauai, Hawaii, January 2003. Invited Lecturer: Free muscle transfer and facial palsy.

**Zuker:** North Atlantic Turkish Mobius Seminar (NATMOS), Los Angeles, California, August 2002. Invited Lecturer: Muscle transplantation for facial animation in Moebius syndrome.

**Zuker:** Organizational meeting and Press Conference, Parma, Italy, June 2003. Invited Participant: Moebius syndrome in Europe.

**Zuker:** Second Congress: World Society for Reconstructive Microsurgery, Heidelberg, Germany, June 2003. Invited Speaker: Muscle transplantation for facial paralysis reconstruction in children.

**Zuker:** Cleveland Clinic, Fort Lauderdale, Florida, March 2003. Visiting Professor: Paediatric microsurgery.

**Zuker:** Birmingham Children's Hospital, Department of Plastic and Craniofacial Surgery, West Midlands Post Graduate Training Program, Birmingham, England, June 2003. Visiting Professor: (1) Selection of motor nerves for muscle transplantation in facial paralysis, (2) Conjoined twins - History and personal experience, (3) Hind quarter composite tissue allotransplantation.

**Zuker:** Azienda Ospedaliera di Parma, Department of Maxillo-facial Surgery, Parma, Italy, June 2003. Visiting Professor: Statto de'arte nella chirurgia del sorriso nei pazienti affetti da sindrome di Moebius.

## Research And Investigations

*Senior Investigator's Name Appears in Italics*

Craniofacial Research. *Phillips, JH: Miss. Irene M. Prior* (\$25,000 2002).

Effect of smokeless tobacco on endothelial functions in human skin. *Pang CY: Smokeless Tobacco Research Council* (\$231,072 2000 - 2002).

Genotype and Phenotype of Brainstem Injury in Autism. *Rodier PM, Bryson SE, Figlewicz DA, Gudas LJ, Hyman SL, Stanton ME, Zuker RM: NIH-NICDH* (\$4,219,189 1999 - 2003).

Global protection of skeletal muscle against ischemic necrosis and vascular dysfunction by non-invasive remote ischemic preconditioning: Efficacy and mechanism. *Pang C.Y., Forrest CR, Neligan PC: CIHR Operating Grant* (\$220,000 2003 - 2006).

Investigation of the mechanism of cytoprotection in the prevention of radiotherapy-induced craniofacial bone growth inhibition. *Forrest CR: Plastic Surgery Education Foundation* (\$7,500 2001 - 2002).

Mechanism and pharmacologic intervention of radiation-induced craniofacial bone growth retardation. *Forrest CR, Pang CY: Medical Research Council of Canada - University Industry Program* (\$126,000 2000 - 2002).

Prevention of Positional Plagiocephaly. *Forrest CR, Damignani R, Klar K: The Hospital For Sick Children Foundation* (\$20,000 2002 - 2003).

Skin flap ischemia: pathophysiology and pharmacologic intervention. *Pang CY, Neligan PC: Canadian Institutes of Health Research* (\$80,000 2001 - 2006).

## Honours Received

**Farkas LG:** Best Paper of the Year Journal of Craniofacial Surgery, November 2002.

**Forrest CR:** American College of Surgeons: ANZ Travelling Fellowship, January 2003.

**Forrest CR:** Operation Herbie's Doctor of the Year, December 2002.

**Forrest CR:** Visiting Professor, Division of Plastic Surgery, Yale University Annual Resident Research Day, July 2002.

**Zuker:** American Association of Plastic Surgeons - Annual Meeting - The Leonard Rubin Award for best paper - May 2003.

## Division of Urology

Dr. D.J. Bagli, - Associate Professor

Dr. L.L. Burrows - Assistant Professor

Dr. W. Farhat - Assistant Professor

Dr. A.E. Khoury – Professor (Division Head)

## Publications

**Aboutaleb H, Bolduc S, Upadhyay J, Farhat W, Bagli DJ, Khoury AE:** Subureteral Polydimethylsiloxane Injection Versus Extravesical Reimplantation for Primary Low Grade Vesicoureteral Reflux in children: A Comparative Study. *Journal of Urology*: January 2003: 163: pp 313-316.

**Aboutaleb H, Bolduc S, Upadhyay S, Farhat W, Bagli DJ, Khoury AE:** Subureteral Polydimethylsiloxane Injection Versus Extravesical Reimplantation for Primary Low Grade Vesicoureteral Reflux in Children: A Comparative Study. *Journal of Urology*: January 2003: 169: pp 313-316.

**Bagli DJ:** On the Cell & Molecular Biology of the Posterior Urethral Valve Bladder. In: *Progress in Paediatric Urology* Volume 4 (Bajpai M, Gearhart JP, Hjalmas K, Mitra DK, Radhakrishnan J, Etker S, eds). Penwl Publishers PLC, New Delhi, India: 2002: pp 1-10.

**Bagli DJ:** Tribute for Michael E. Mitchell. In: *Progress In Paediatric Urology* Volume 4 (Bajpai M, Gearhart JP, Hjalmas K, Mitra DK, Radhakrishnan J, Etker S, eds). Penwel Publishers PLC, New Delhi, India: 2002: pp VII.

**Bolduc S, Capolicchio GP, Upadhyay J, Bagli D, Khoury AE, McLorie GA:** The fate of the upper tract in exstrophy. *Journal of Urology*: December 2002: 168: pp 2579-2582.

**Bolduc S, Capolicchio GP, Upadhyay J, Bagli D, Khoury AE, McLorie GA:** The fate of the upper urinary tract in exstrophy. *Journal of Urology*: December 2002: 168: pp 2579-2582.

**Bolduc S, Upadhyay J, Farhat W, Sherman C, Bagli DJ, Mclorie GA, Khoury AE, EL Ghoneimi:** Histology of upper pole is unaffected by antenatal diagnosis in duplex system. *The Journal of Urology*: September 2002: 168(3): pp 1123-1126.

**Bolduc S, Upadhyay J, Farhat W, Sherman C, Bagli DJ, Mclorie GA, Khoury AE, El Ghoneimi A:** Histology of upper pole is unaffected by antenatal diagnosis in duplex system ureteroceles. *The Journal of Urology*: September 2002: 168(3): pp 1123-1126.

**Bolduc S, Upadhyay J, Payton J, Aboutaleb H, Bagli DJ, McLorie GA, Khoury AE, Farhat W:** The Use of tolterodine in children after oxybutinin failure. *British Journal of Urology*: March 2003: 91(4): pp 398-401.

**Bolduc S, Upadhyay J, Payton J, Aboutaleb H, Bagli DJ, McLorie GA, Khoury AE, Farhat W:** The Use of tolterodine in children after oxybutinin failure. *British Journal of Urology*: March 2003: 94(4): pp 398-401.

**Bolduc S, Upadhyay J, Payton J, Aboutaleb H, Bagli DJ, McLorie GA, Khoury AE, Farhat W:** The Use of tolterodine in children after oxybutinin failure. *British Journal of Urology*: March 2003: 91(4): pp 398-401.

**Bolduc S, Upadhyay J, Restrepo R, Sherman C, Farhat W, Bagli D, McLorie GA, Khoury AE, EL Ghoneimi A:** The predictive value of diagnostic imaging ureteroceles. *British Journal of Urology*: May 2003: 91(7): pp 678-682.

**Bolduc S, Upadhyay J, Restrepo R, Sherman C, Farhat W, Bagli DJ, McLorie GA, Khoury AE, EL Ghoneimi A:** The predictive value of diagnostic imaging for histologic lesions of upper poles in duplex systems with ureteroceles. *British Journal of Urology*: June 2003: 3(&): pp 678-682.

**Bolduc S, Upadhyay J, Sherman C, Farhat W, Bagli D, McLorie G, Khoury AE, El Ghoneimi A:** Histology of upper pole is unaffected by prenatal diagnosis in duplex system ureteroceles. *Journal of Urology*: September 2002: 168: pp 1123-1126.

**Burrows LL:** Invited commentary on: "Device Removal". In: Source Control (Schein M, Marshall JC, eds). Springer-Verlag, 2003: pp 51-53.

**El-Ghoneimi A, Farhat W, Bolduc S, Bagli D, McLorie G, Khoury AE:** Retroperitoneal Laparoscopic vs. Open Partial Nephroureterectomy in Children. *British Journal of Urology*: April 2003: 91(6): pp 532-535.

**Farhat W, McLorie GA:** Posterior Urethral Valves. In: Progress in Paediatric Urology Volume 4 (Bajpai M, Gearhart JP, Hjalmas K, Mitra DK, Radhakrishnan J, Etker S, eds). Penwell Publishers PLC, New Delhi, India: 2002: pp 128-137.

**Farhat W, McLorie GA:** Posterior Urethral Valves. In: Progress In Paediatric Urology Volume 4 (Bajpai, M, Gearhart JP, Hjalmas K, Mitra DK, Radhakrishnan J, Etker S, eds). Penwell Publishers PLC, New Delhi, India: 2002: pp 128-137.

**Farhat W, Traubicci J, Sherman C, Williams T, Babyn P, McLorie G:** Reliability of contrast-enhanced sonography with harmonic imaging in detecting early renal scarring in experimental pyelonephritis in porcine model: Preliminary results. *The Journal of Urology*: September 2002: 168(3): pp 1114-1117.

**Finelli A, Gallant CV, Jarvi K, Burrows LL:** In-Biofilm Expression Technology (IBET) approach to identification of genes involved in *Pseudomonas aeruginosa* biofilm development. *Journal of Bacteriology*: May 2003: 185: pp 2700-2710.

**Gardam MA, Burrows LL, Kus JV, Brunton J, Low D, Conly JM, Humar A:** Is surveillance for multidrug-resistant Enterobacteriaceae an effective infection control strategy in the absence of an outbreak? *Journal of Infectious Diseases*: December 2002: 186: pp 1754-1760.

**Hafez A, Bagli DJ, Bahoric A, Aitken K, Smith C, Herz D, Khoury AE:** Aerosol Transfer of Bladder Urothelial and Smooth Muscle Cells (SMCs) Onto-De-Mucosalized Colonic Segments. *Journal of Urology*: June 2003: 169: pp 2316-2320.

**Hafez A, Herz D, Bagli DJ, Smith C, McLorie GA, Khoury AE:** Healing of non-stented tubularized incised plate urethroplasty: Experimental study in a rabbit model. *British Journal of Urology*: January 2003: 91(1): pp 84-88.

**Hafez A, McLorie GA, Bagli DJ, Khoury AE:** Trend analysis with serial ultrasound for high-grade neonatal hydronephrosis. *The Journal of Urology*: October 2002: 168: pp 1518-1521.

**Hafez AT, Bagli DJ, Herz DB, Smith CR, McLorie GA, El-Ghoneimi A, Khoury AE:** Healing of Unstented Tubularized Incised Plate Urethroplasty: An Experimental Study in a Rabbit Model. *British Journal of Urology*: January 2003: 91(1): pp 84-88.

**Hafez At, McLorie GA, Bagli DJ, Khoury AE:** Trend analysis with serial ultrasound for high grade neonatal hydronephrosis. *The Journal of Urology*: October 2002: 168: pp 1518-1521.

**Halachmi S, Chait P, Hodapp J, Bagli DJ, McLorie GA, Khoury AE, Farhat W:** Renal pseudoaneurysm following blunt renal trauma in a pediatric patient; management by angiographic embolization. *Urology*: January 2003: 61: pp 224-226.

**Halachmi S, El-Ghoneimi A, Farhat W:** Successful subcapsular laparoscopic nephrectomy in a child with xanthogranulomatous pyelonephritis. *The Journal of Pediatric Endosurgery & Innovative Techniques/Winter 2002*6(4)269-27211NO: February 2003: 6(4): pp 269-272.

**Hammouda H, EL-Ghoneimi A, Bagli DJ, McLorie GA, Khoury AE:** Tubularized Incised Plate Repair: Functional Outcome After Intermediate Followup. *Journal of Urology*: January 2003: 169: pp 331-333.

**Hirji Z, Saragosa R, Dedier H, Crump M, Franke N, Burrows LL, Jamieson F, Brown S, Gardam MA:** Contamination of bone marrow products with an actinomycete resembling *Microbacterium* spp. and reimplantation into autologous stem cell and bone marrow transplant recipients. *Clinical Infectious Disease*: May 2003: 36: pp e115-e121.

**McLorie GA:** Editorial-Posterior Urethral Valves. In: Progress in Paediatric Urology (Bajpai M, Gearhart JP, Hjalmas K, Mitra DK, Radhakrishnan J, Etker S, eds). Penwel Publishers PLC, New Delhi, India: 2002: pp XIX-XX.

**Pepperell C, Kus JV, Gardam MA, Humar A, Burrows LL:** Low-virulence *Citrobacter* spp. encode resistance to multiple antimicrobial classes. *Antimicrobial Agents and Chemotherapy*: November 2002: 46: pp 3555-3560.

**Richardson DC, Burrows LL, Korithoski B, Salit IE, Butany J, David TE, Conly JM:** *Tropheryma whippelii* as a cause of afebrile culture-negative endocarditis: the evolving spectrum of whipple's disease. *Journal of Infectious Diseases*: May 2003: 47.

**S. Halachmi, P. Chait, J. Hodapp, D. Bagli, GA. McLorie, AE Khoury, W Farhat:** Renal pseudoaneurysm following blunt renal trauma in a pediatric patient; management by angiographic embolization. *Urology*: January 2003: 61: pp 224-226.

**Upadhyay J, Aitken K, Gu J, Damdar C, Bolduc S, Bagli DJ:** Integrins are coordinately expressed with bladder extracellular matrix following stretch injury in VIVO and mediate bladder smooth muscle cell growth in VITRO. *Journal of Urology*: February 2003: 169: pp 750-755.

**Upadhyay J, Bolduc S, Bagli D, McLorie GA, Khoury AE, Farhat W:** Natural history of neonatal reflux associated with antenatal hydronephrosis long-term results of a prospective study. *Journal of Urology*: May 2003: 169(5): pp 1837-1841.

**Upadhyay J, Bolduc S, Bagli DJ, McLorie GA, Khoury AE, Farhat W:** Use of the Dysfunctional Voiding Symptom Score to Predict Resolution of Vesicoureteral Reflux in children with Voiding Dysfunction. *Journal of Urology*: May 2003: 169(5): pp 1842-1846.

**Upadhyay J, Restrepo R, Hebert D, Chait P, McLorie GA:** Long term outcome of bilateral autotransplantation in a child with Tekayasu's disease. *The Journal of Urology*: December 2002: 168: pp 2566-2567.

## Invited Visits to other Hospitals/Universities

**Bagli, DJ:** International Bladder Research Symposium NIDDK (NIH) and National Bladder Foundation (US), Washington, District of Columbia, March 2003. Mechanical and Matrix Signaling Induction in Bladder Smooth Muscle.

**Burrows LL:** Department of Microbiology and Immunology, University of Western Ontario, London, Ontario, November 2002. Genes involved in development *Pseudomonas aeruginosa* biofilms.

**Burrows LL:** Materials and Manufacturing Ontario- Project Group Meeting University of Guelph, Guelph, Ontario, November 2002. Polymer and Biofilm Modification of Surfaces: Emerging Materials Knowledge Title: Formation of *Pseudomonas* biofilms and antibiofilm strategies.

**Khoury AE:** North shore-Long Island Jewish Medical Center, New York, New York, May 2003. Contemporary studies in bladder reconstruction: New directions from Toronto.

**Khoury AE:** Pediatric Surgery at the Universidade Catolica de Curitiba, Curitiba, Brazil, July 2002. Correction of a female Pseudohemafroditism.

**Khoury AE:** 2nd International Symposium on Exstrophy & Epispadias, Baltimore, Maryland, October 2002. Is there a need for bladder neck reconstruction in exstrophy.

**Khoury AE:** 2nd International Symposium on Exstrophy & Epispadias, Baltimore, Maryland, October 2002. Moderator/ Cloacal Exstrophy.

**Khoury AE:** North Shore-Long Island Jewish Health System, New York, New York, May 2003. Principles and applications of reconstructive techniques in hypospadias surgery.

**Khoury AE:** Mansoura University/Urology & Nephrology Center, Mansoura, Egypt, February 2003. Recent trends in pediatric urology.

**Khoury AE:** Mansoura University/Urology & Nephrology Center, Mansoura, Egypt, February 2003. Renal transplantation in children.

**Khoury AE:** Societe Internationale D'Urologie, Stockholm, Sweden, September 2002. SIU International Course on The Management of Hypospadias.

**Khoury AE:** Pediatric Surgery at the Universidade Catolica de Curitiba, Curitiba, Brazil, July 2002. Surgical Treatment of Intersex (Ambiguous Genitalia).

**Khoury AE:** Pediatric Surgery at the Universidade Catolica de Curitiba, Curitiba, Brazil, July 2002. Surgical treatment of the bladder exstrophy today.

**Khoury AE:** Pediatric Surgery at the Universidade Catolica de Curitiba, Curitiba, Brazil, July 2002. Surgical Treatment of the Epispadias.

**Khoury AE:** Pediatric Surgery at the Universidade Catolica de Curitiba, Curitiba, Brazil, July 2002. Surgical treatment of urinary incontinence.

**McLorie GA:** 2nd International Symposium on Exstrophy & Epispadias, Baltimore, Maryland, October 2002. Determinants of success in bladder exstrophy repair.

**McLorie GA:** 2nd International Symposium on Exstrophy & Epispadias, Baltimore, Maryland, October 2002. Moderator/Bladder Exstrophy-Surgical Management.

**McLorie GA:** Children's Hospital of Michigan, Detroit, Michigan, November 2002. The Complexity of Neurogenic Bladder.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

A prospective randomized open label study to compare ciprofloxacin (intravenous sequential IV-Oral versus IV cefotaxime with or without IV gentamicin or oral TMP/SMX in the therapy of older infants, children and adolescents with complicated urinary tract infections or pyelonephritis. *Khoury AE, Herz D: Bayer Inc.* (\$80,000 2000 - 2002).

Acellular Matrix Scaffolds with Bioactive Peptides for Bladder Augmentation. *Woodhouse K, Bagli D, Ringutte M: CIHR* (\$87,000 2003 - 2005).

Antimicrobial activity of novel membrane-active peptides and synergy with conventional antibiotics. *Burrows LL, Deber CM: Canadian Infectious Diseases Society (CIDS/Janssen-Ortho Antimicrobial Resistance Research Grant)* (\$45,000 2002 - 2003).

Development of antimicrobial coatings for peritoneal catheters suitable for simultaneous exchange. *Antoine Khoury, Burrows LL, DiCosmo F: The Kidney Foundation of Canada* (\$96,088 2002 - 2004).

Development of antimicrobial liposomal silver formulations for medical devices. *Burrows LL: UroTeq Inc.* (\$30,000 2002 - 2003).

Feasibility Of Contrast-Enhanced Sonography to Detect Pyelonephritis In a Pig Model. *McLorie G, Farhat W: Hospital For Sick Children Research Institute- Seed Grant* (\$30,000 2002 - 2004).

Feasibility of contrast-enhanced sonography to detect pyelonephritis in a pig model. *McLorie G, Farhat W: Research Institute- Seed Grant* (\$15,000 2002 - 2004).

Influence of cell surface mutations on Pseudomonas aeruginosa biofilm formation. *Burrows LL: Canadian Institutes of Health Research* (\$78,767 2001 - 2003).

Novel adhesion-reducing biomaterials. *Khoury AE, Burrows LL: Interface Biologics Inc. (sponsored research agreement)* (\$20,000 2002 - 2003).



Novel peptide antibiotics against pseudomonas aeruginosa. *Burrows LL, Deber CM: NIH SCOR Pilot Project Program (\$97,600 2002).*

Pseudomonas aeruginosa biofilm gene expression. . *Burrows LL: Natural Sciences and Engineering Research Council of Canada (\$35,000 2001 - 2004).*

The role of Erk MAP kinase in bladder smooth muscle cell response to injury. *Bagli DJ: CIHR (\$250,000 2002 - 2005).*

Type IV pilus biogenesis in *Pseudomonas aeruginosa*. *Howell PL, Burrows LL: PENCE (Protein Engineering Centre of Excellence), New Ideas Program (\$40,000 2003 - 2004).*

Use of tolterodine in treatment of neuropathic overactive bladders in children. *Khoury AE, Farhat W: Pharmacia-Upjohn Canada (\$63,700 2000 - 2003).*

## Honours Received

**Bagli, DJ:** 1st prize Basic Science-Robson Research Day for Stat 3 Kinase in Bladder Stretch Injury (Sarel Halachmi presented), March 2003.

**Bagli, DJ:** 2nd Prize Basic Science-Robson Research Day for Dissociated autologous urothelial grafting for bladder augmentation in a porcine model (John Hodapp presented), March 2003.

**Bagli, DJ:** 2nd Prize Clinical Research-Robson Research Day for The role of bacterial infection in pediatric acute epididymo-orchitis (Sarel Halachmi presented), March 2003.

**Burrows LL:** Claude Gallant- won 3rd place (Basic Research) in the HSC Josie Walther Memorial Surgical Services competition "Using the IBET approach to monitor gene expression in Pseudomonas aeruginosa biofilms" (Dr. Lori Burrows-supervisor), May 2003.

arch Day for The role of bacterial infection in pediatric acute epididymo-orchitis (Sarel Halachmi presented), March 2003.

**Khoury AE:** 2nd Prize Basic Science-Robson Research Day for Dissociated autologous urothelial grafting for bladder augmentation in a porcine model (John Hodapp presented), March 2003.

**Khoury AE:** 2nd Prize Clinical Research-Robson Research Day for The role of bacterial infection in pediatric acute epididymo-orchitis (Sarel Halachmi presented), March 2003.



Dr. Zane Cohen  
Surgeon-in-Chief

## Heads of Divisions

**Dr. R.S. McLeod – General Surgery**

**Dr. A. E. Gross – Orthopaedic Surgery**

**Dr. K. Jarvi - Urology**

The Department of Surgery at Mount Sinai Hospital consists of three major divisions – those being General Surgery, Orthopaedic Surgery and Urology. The following annual report provides just an outline of the significant activities that make the Department of Surgery as a whole, at Mount Sinai Hospital, a leader in complex clinical care and academic activity, in basic and clinical research and education.

## General Surgery

During the academic year 2002-2003, we have had two new members join the Division of General Surgery. Dr. Alexandra Easson joined the division at the rank of Lecturer, on July 1, 2002 and Dr. Robert Gryfe joined the division as Assistant Professor, on January 1, 2003. Other members of the Division who are cross-appointed to the University Health Network, include the following: Drs. Alan Dackiw, Jaime Escallon,



Steve Gallinger, Wey Leong, David McCready and Lorne Rotstein. This past academic year has also seen the promotions of Drs. Helen MacRae and Carol Swallow, who were both promoted to the rank of Associate Professor.

The priority areas within general surgery, continue to focus on four areas of expertise:

Colorectal Surgery with a particular interest in Inflammatory Bowel Disease, Gastrointestinal Oncology, Breast Disease and Head and Neck Endocrine Surgery. Some highlights of our division's clinical activities include:

- Continued interaction of the clinical activities of the Marvelle Koffler and Princess Margaret Hospital breast units with surgical oncology coverage provided by the same team at both sites.
- The sarcoma program is a multi-disciplinary program with surgical, medical and radiation oncologists that is gaining a national and international reputation.

In education, there is a full complement of general surgery residents at Mount Sinai Hospital. In addition, the colorectal surgery program is accredited by the Royal College of Physicians and Surgeons of Canada and the American Board of Colorectal Surgery. The Surgical Oncology Program is accredited by the Royal College of Physicians and Surgeons, without certification. Some highlights in the area of education include Dr. Carol Swallow, receiving the Wightman-Berris Academy Anderson Award for Innovation and Program Development.

Several members of the division have major clinical, basic science or education research programs. The following received grants:

- Dr. Rob Gryfe – Charles Hollenberg Translational Research Senior Fellow/Clinician Scientist Award, Eli Lilly Canada, Cancer Care Ontario CIHR (2002-2007) - "A synthetic lethal approach to cancer therapy." OCRN (co-investigator). Ontario registryFor studies of familial colorectal cancer. NIH (co-investigator).
- Dr. Andrea McCart – "Preclinical assessment of vaccinia virus for functional tumour imaging."University of Toronto, Faculty of Medicine. "Preclinical assessment of Vaccinia virus for cancer gene therapy and functional tumour imaging." OCRN.

- Dr. Robin McLeod – “RCT comparing two different anastomotic techniques in Crohn’s Disease.” CCFA (continuation). “The effect of the patient doctor relationship on colorectal cancer screening.” (PSI – Tracey Asano; McLeod-supervisor). “The effect of patient doctor relationship on colorectal cancer screening.” American Society of Colon and Rectal Surgeons Research Foundation.
- Carol Swallow – “Polo kinases in mitosis and cancer progression.” NCIC (co-investigator). “A population based study of the outcomes of transanal resection for rectal cancer.” NCIC (co-investigator).

The following members of the division supervised research fellows:

Dr. Steve Gallinger – Kouros Moozar & Sean Cleary;  
Dr. Helen MacRae – Laura Musselman;  
Dr. Robin McLeod – Tracey Asano & Mary Ann Aarts and Paul Johnson;  
Dr. Carol Swallow – Michael Ko; Dr. Irving Rosen – Julio Furlan.

The following members of the Division of Surgery have significant administrative duties within the hospital and university setting:

Dr. Zane Cohen – Surgeon-in-Chief, Mount Sinai Hospital; Chair, Division of General Surgery University of Toronto.  
Dr. Steve Gallinger – Head, Division of General Surgery Research Committee.  
Dr. Helen MacRae – Director, Surgical Skills Laboratory, University of Toronto & Mount Sinai Hospital.  
Dr. Carol Swallow – Head, Surgical Oncology Fellowship Program, University of Toronto.  
Dr. David McCready – Head, Breast Program, Princess Margaret Hospital.

Honour highlights of this academic year were the following:

- Dr. Zane Cohen – was the 2002 honoree for Ben-Gurion University of the Negev.
- Dr. Alexandra Easson – completed the first part of her thesis as part of the Clinical Epidemiology program.
- Dr. Erin Kennedy – (supervised by Robin McLeod) won the best prize at the Canadian Society of Colon and Rectal Surgeons Meeting, London, ON., September 2002.

## Orthopaedic Surgery

During this academic year 2002-2003, there were 33 publications in peer-reviewed journals and two new research awards, to go along with the many already existing, research awards. One was from the Dean’s Excellence Fund, awarded to Dr. David Backstein, for \$15,000 to evaluate the effectiveness of video feedback in the development of technical skills, in surgical residents. The other was awarded to Drs. Robert Bell and Jay Wunder as part of a multi-disciplinary health research team. This is a team of 13 investigators looking at musculoskeletal neoplasia. The award is from the Canadian Institutes of Health Research for \$6,000,000.00 from 2002-2005.

Dr. Peter Ferguson was appointed to the Division of Orthopaedic Surgery specializing in musculoskeletal neoplasms.

Three hip revision courses were held at the Mount Sinai Hospital, using the motorskills lab with live surgery from the operating room. As well, the division had 14 visiting orthopaedic surgeons from various countries.

Here are some of the highlights in honours and awards for this past academic year:

Dr. Erin Boynton won the Samson Award in recognition of her research in the role of the Macrophage and polyethylene surface chemistry in total joint replacement. This award is Granted by the Canadian Orthopaedic Association. It is an annual award, given to only one individual, in recognition of their research, and it is considered to be the most prestigious research award of the Canadian Orthopaedic Association.

Dr. Jay Wunder was awarded the Wightman-Berris Academy Teaching Award in 2003, for individual teaching excellence. In addition, he was rated as the number one teacher in the Orthopaedic Division of the University of Toronto and was also in the top ten, for the entire Department of Surgery.

Dr. Robert Bell was the scientific honoree of the Israeli Cancer Research Society, for 2003, with a dinner held on May 29, 2003.

Dr. Allan Gross was given the President’s Award of the Canadian Orthopaedic Association, for excellence in recognition of outstanding contribution, to Orthopaedic Surgery, in June 2002.

## Urology

Over the past year, the division has been quite active academically. The Urology program's research focus has been in multiple areas. From fertility, research has included studies on genetics of male infertility, sperm SNA fragmentation, varicocele repairs, bacteriospermia and studies on the use of microsurgical training for microsurgery novices through CRE. Funding for this work has come from the National Institutes of Health, the Physicians Services Incorporated, and industrial support from Solvay Pharmaceuticals, Pfizer Incorporated and Organon Canada. In the past year, articles have been published or have been submitted in all the above areas. Articles have been published in the Journal of Urology, the Journal of Bacteriology, Biochemistry and Research Communications and the Journal of Andrology. In addition, to the peer-reviewed publications, presentations have been made at the Canadian Urology Association, American Urology Association and the American Society For Reproductive Medicine, the Canadian Fertility and Andrology Society. Members of the division have been invited speakers at different academic meetings, in both Canada and in Europe. Ethan Grober (co-supervised by Dr. Jarvi) has finished his research projects in microsurgical training.

Over the past year, we have had significant change in the Urology facilities. We have opened up a new facility at the Mount Sinai Hospital with a substantial donation from Mr. Murray Koffler. With over 8,400 square feet of clinical space, this helps to provide on-site ultrasound imaging, as well as blood tests and semen analysis. The plans are to expand this facility with close to 8,000 square feet of research space, that will be adjacent to it. This new space has allowed us to expand our clinical and research areas in infertility, sexual dysfunction and expand into the entirely new area of prostatitis. This Prostatitis Clinic will be run in conjunction with the pain service or the Wasser Clinic and will include initial assessments, investigation, physiotherapy, psychotherapy, pain management and surgical management if appropriate.

Dr. Zini continues his role in the Canadian Andropause Society as Secretary Treasurer and Dr. Jarvi continues to be a Member of the Society for Studies in Men and Reproduction Board. Divisional members are also ad hoc reviewers for the following journals: the Journal of American Medical Association, Journal of Urology, Fertility and Sterility and the Journal of Andrology. Dr. Jarvi is also an Advisor to the Reproductive Biology Task Force of the Government of Canada. This task force will be providing the advice to the government for plans for control of reproductive technologies, for the years to come. Both Drs. Jarvi and Zini are ad hoc reviewers for peer-reviewed organizations. Dr. Jarvi is on The Kidney Foundation Review panel and both have reviewed for the CIHR.

In the past year, Dr. Jarvi has run the University of Toronto, Urology Research Day and both Drs. Jarvi and Zini have helped to organize the University of Toronto, Urology Update Program, in November 2002.

The SARS outbreak has placed a significant degree of stress on our membership during this past academic year. From mid-March until the end of June of 2003, our total activities have been jeopardized, while our attempts at clinical care activities have decreased to the point where there has been a unanimous agreement by our departmental members, that an alternate funding program is of prime necessity. Therefore, the continuing negotiations for a Phase One Agreement with the Ministry of Health and Long Term Care, to the end of June of 2003, have taken on abnormal proportions and in some ways, have become the most important administrative activity not only for our own Department of Surgery at Mount Sinai Hospital but for all within the Department of Surgery, at the University of Toronto. Phase One Agreement for the Mount Sinai Hospital/University Health Network Alternate Funding Program, was reached in the summer of 2003 and the coming academic year of 2003-2004 will bring further negotiations towards a full Alternate Funding Plan. The Department of Surgery Practice Plan at Mount Sinai Hospital has continued to provide a significant collaborative bond between all the members. We will go forward, hopefully, into a full Alternate Funding Program as one Practice Plan.

## Division of General Surgery

**Dr. Z. Cohen - Professor**

**Dr. S. Gallinger - Professor**

**Dr. M.R. Goldberg - Associate Professor**

**Dr. R. Gryfe – Assistant Professor**

**Dr. I.H. Koven - Associate Professor**

**Dr. H.M. MacRae - Associate Professor**

**Dr. J.A. McCart - Assistant Professor**

**Dr. R.S. McLeod - Professor (Division Head)**

**Dr. I. Rosen – Professor**

**Dr. S. Sidlofsky - Assistant Professor**

**Dr. C.J. Swallow - Associate Professor**

## Publications

**Albright SV, McCart JA, Libutti SK, Bartlett DL, Alexander HR, Sampson ML, Ruddel ME, Remaley AT:** Rapid measurement of insulin using the Abbott IMx: application to the management of insulinoma. *Annals of Clinical Biochemistry*: September 2002: 39: pp 513-515.

**Carpten JD, et al including Rosen IB, Jackson CE, Hobbs MR:** HRPT2, encoding parafibromin, is mutated in hyperparathyroidism-jaw tumor syndrome. *Nature Genetics*: December 2002: 32 (4): pp 676-80.

**Chan TC, Libutti SK, McCart JA, Chen C, Khan A, Skarulis MK, Weinstein LS, Doppman JL, Marx SJ, Alexander HR:** Persistent primary hyperparathyroidism caused by adenomas identified in pharyngeal or adjacent structures. *World Journal of Surgery*: May 2003: 27.

**Evans J, Brown M, Wilkes GH, Cohen Z, McLeod RS:** Revising the troublesome stoma : Combined abdominal wall recontouring and revision of stomas. *Diseases of the Colon and Rectum*: January 2003: 46 (1): pp 122-126.

**Evans J, O'Connor BI, Steinhart AH, Cohen Z, McLeod RS:** Home total parenteral nutrition : an alternative to early surgery for complicated inflammatory bowel disease. *Journal of Gastrointestinal Surgery*: May 2003: 7 (4): pp 562-6.

**Evans S, Steinhart H, Cohen Z, McLeod R:** Home TPN - An alternative to early surgery for complicated Inflammatory Bowel Disease. *Journal of Gastrointestinal Surgery*: January 2003: 7 (4): pp 562-565.

**Gooden E, Witterick IJ, Hacker D, Rosen IB, Freeman JL:** Parotid gland tumors in 255 consecutive patients: Mount Sinai Hospital's quality assurance review. *Journal of Otolaryngology*: December 2002: 31 (6): pp 351-4.

**MacLean AR, O'Connor BI, Parkes R, Cohen Z, McLeod RS:** Reconstructive surgery for failed ileal pouch-anal anastomosis : a viable surgical option with acceptable results. *Diseases of the Colon and Rectum*: July 2002: 45 (7): pp 880-6.

**MacRae H, Poritz L, Evans J:** Influence of experience on laparoscopic ileocolic resection for Crohn's disease. *Diseases of the Colon and Rectum*: December 2002: 45(12): pp 1595-600.

**McCart JA, Wang ZH, Xu H, Hu Y, Park B, Alexander HR, Bartlett DL:** Development of a melanoma-specific adenovirus. *Molecular Therapy*: October 2002: 6: pp 471-480.

**McLeod RS:** Evidence based surgery. In: *Essential practice of surgery - Basic science and clinical evidence* (Norton JA, Bollinger RR, Chang AE, Lowry SF, eds). Springer-Verlag, New York: 2003: pp 3-13.

**McLeod RS:** Surgery for Crohn's disease. In: *IBD : From Bench to Bedside* (Targan S, Shanahan F, eds). Kluwer Academic Publishers, Dordrecht: 2003: pp 681-697.

**Ravid A, Richard CS, Spencer LM, O'Connor BI, Kennedy ED, Mukraj D, MacRae HM, Cohen Z, McLeod RS:** Pregnancy, delivery and pouch function after ileal pouch-anal anastomosis for ulcerative colitis. *Diseases of the Colon and Rectum*: October 2002: 45 (10): pp 1283-8.

**Richard CS, Nason RW, McLeod RS and the CAGS Evidence Based Reviews in Surgery Group:** Canadian Association of General Surgeons Evidence Based Reviews in Surgery. 4. Decision analysis of total thyroidectomy versus thyroid lobectomy in low-risk, differentiated thyroid cancer. *Canadian Journal of Surgery*: December 2002: 45 (6): pp 450-2.

**Richard CS, Phang PT, McLeod RS and the Canadian Association of General Surgeons Evidence Based Reviews in Surgery Group:** Canadian Association of General Surgeons Evidence Based Reviews in Surgery. 5. Need for preoperative radiation in rectal cancer. Preoperative radiotherapy combined with total mesorectal excision for resectable cancer. Canadian Journal of Surgery: February 2003: 46 (1): pp 54-56.

**Rosen IB:** Expatriate creativity and the Holocaust. Annals of the Royal College of Physicians and Surgeons of Canada: December 2002: 35 (8): pp 509-512.

**Silverberg MS, Mirea L, Bull SB, Murphy JE, Steinhart AH, Greenberg GR, McLeod RS, Cohen Z, Wade JA, Siminovitch KA:** A population and family based study of Canadian families reveals association of HLA DRB1\*0103 with colonic involvement in inflammatory bowel disease. Inflammatory Bowel Diseases: January 2003: 9 (1): pp 1-9.

**Taylor MC, Grieg PD, Detsky AS, McLeod RS, Abdoh A, Krahn MD:** Factors associated with the high cost of liver transplantation in adults. Canadian Journal of Surgery: December 2002: 45: pp 425-434.

**Ward M, MacRae HM, Schlachta C, Mamazza J, Poulin E, Reznick RK, Regehr G:** Resident Self-Assessment of Operative Performance. American Journal of Surgery: June 2003: 185: pp 521-524.

## Invited Visits to other Hospitals/Universities

**Cohen Z:** Surgery Grand Rounds - Penn State Milton S. Hershey Medical Centre, Hershey, Pennsylvania, September 2002. 20 years experience with the pelvic pouch procedure.

**Cohen Z:** American Society of Colon and Rectal Surgeons, New Orleans, Louisiana, June 2003. Anal Intraepithelial Neoplasia - What is it? and How Should We Treat It? - Panel Moderator.

**Cohen Z:** Shanghai 2nd Medical University Hospital, Beijing, Hong Kong, November 2002. GI Complications of HIV.

**Cohen Z:** 18th World Congress of Digestive Surgery - 9th Hong Kong International Cancer Congress, Hong Kong, China, December 2002. IBD: Current Trends in Surgical Treatment.

**Cohen Z:** Beijing University, Beijing, Hong Kong, December 2002. IBD: Current Trends in Surgical Treatment.

**Cohen Z:** 6th Annual Meeting Collaborative Group of the Americas Conference on Inherited Colorectal Cancer, Baltimore, Maryland, October 2002. Panelist - Serving on the Faculty.

**Cohen Z:** First International Course of Colon, Rectum & Anus and the First International Course of General Surgery, Mexico City, Mexico, January 2003. Perianal and Crohn's Disease.

**Cohen Z:** 2nd Annual Interdisciplinary Forum in GI Medicine, Vancouver, British Columbia, October 2002. Perianal Crohn's Disease in the Era of Biological Agents (Remicade).

**Cohen Z:** First International Course of the Colon, Rectum & Anus and the First International Course of General Surgery, Mexico City, Mexico, January 2003. Surgery for Ulcerative Colitis.

**MacRae HM:** Canadian Surgery Forum, London, Ontario, September 2002. Debate Bowel Prep Colon - NO.

**MacRae HM:** 2002 Update in Minimally Invasive Surgery, Toronto, Ontario, November 2002. Laparoscopic Surgery for Crohn's Disease.

**MacRae HM:** The Surgical Simulation Workshop @ MMVR, Newport Beach, California, January 2003. The Objective Structured Assessment of Technical Skills (OSATS).

**McLeod RS:** Cleveland Clinical Florida, 14th Annual International Colorectal Disease Symposium, Fort Lauderdale, Florida, February 2003. (1) Quality of life following ileal pouch anal anastomosis - compared to what else? (2) Perianal disease - treating for symptomatic relief or cure. (3) Primary prevention of polyps.

**McLeod RS:** Canadian Association of General Surgeons, Spring Meeting, Halifax, Nova Scotia, June 2003. (1) Rectal Cancer - Quality of life and outcome following APR and anterior resection (2) CAGS Presidential Address.

**McLeod RS:** El Instituto Nacional de Ciencias Medicas y Nutricion Salvador Zubiran, Mexico City, January 2003. (1) The Dr. Hector Orozco Zepeda Lecture, Evidence Based Surgery (2) Diagnosis and treatment of ileo pouch complications (3) Surgical treatment of familial adenomatous polyposis (4) Surgical alternatives for rectal cancer (5) Quality of life following surgery for ulcerative colitis (6) Diagnosis and treatment of recto-vaginal fistula.

**McLeod RS:** University of Ottawa, IBD Forum - “IBD for all ages”, Ottawa, Ontario, May 2003. A surgeon’s approach to strictures in Crohn’s disease.

**McLeod RS:** American Society of Colon and Rectal Surgeons Clinical Research Seminar, New Orleans, Louisiana, June 2003. Is this ethical? Money, fame and conflicts of interest.

**McLeod RS:** American College of Surgeons Clinical Congress, San Francisco, California, October 2002. Local excision of rectal tumors.

**McLeod RS:** National Cancer Institute of Canada, Toronto, Ontario, April 2003. Lunch & Learn - Colorectal Cancer Screening.

**McLeod RS:** DDW Combined Clinical Symposium, DDW 2003, Orlando, Florida, May 2003. Perianal disorders.

**McLeod RS:** National Institutes of Health, Bethesda, Maryland, January 2003. Prevention of post-operative recurrence.

**McLeod RS:** Collins Surgical Day, Department of Surgery, University of Ottawa, Ottawa, Ontario, May 2003. Teaching Critical Appraisal Skills to Practicing Surgeons and Residents.

**McLeod RS:** Surgical Grand Rounds, University of Medicine & Dentistry of New Jersey, New Brunswick, New Jersey, June 2003. Teaching critical appraisal skills to practicing surgeons and residents.

**McLeod RS:** American College of Surgeons-Division of Education Task Force on Practice-Based Learning and Improvement, Chicago, Illinois, January 2003. Teaching critical appraisal skills to surgeons and residents.

**Swallow CJ:** CSSO Symposium Canadian Surgery Forum, Symposium Organizer and Chair, London, Ontario, September 2002. “Hot Topics in Cancer Surgery”.

**Swallow CJ:** Surgical Oncology Network Symposium, Chair, Toronto, Ontario, October 2002. Endocrine Oncology Session.

**Swallow CJ:** University of Western Ontario, London, Ontario, April 2003. Inhibiting Cancer Progression by Blocking TGF-beta.

**Swallow CJ:** Princess Margaret Hospital Conference, Toronto, Ontario, September 2002. New Developments in Cancer Management. Adjuvant treatment of upper gastrointestinal malignancies. Chair.

**Swallow CJ:** Roswell Park Cancer Institute, Buffalo, New York, May 2003. Update on the Combined Management of Retroperitoneal Sarcoma.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

A program of inter-disciplinary and population-based studies of the determinants and impact of colorectal cancer-A genetic-epidemiological approach. *McLaughlin J, Gallinger S, Bapat B, Cotterchio M and 15 others: Canadian Institutes of Health Research (\$1,069,000 2001 - 2006).*

Developing the critical appraisal skills of surgeons. *MacRae H, McLeod R, Regehr G: The Physicians's Services Incorporated Foundation (\$30,800 2001 - 2002).*

Expression patterns of TGF-B regulated genes as a guide to anti-TGF-B cancer therapy. *Swallow CJ: Ontario Cancer Research Network (pending) (\$150,000 2002).*

Gender differences in pain and analgesic response to kappa & mu opioids after surgery. *Katz J, Gagliese L, Snijdelaar D, Stewart D, MacRae H, Taddio A, Sandler AN: Medical Research Council of Canada (\$92,052 2000 - 2003).*

Genetic predisposition to colorectal cancer caused by weakly penetrant APC alleles. *Gallinger S M, Redston J Knight: National Cancer Institute of Canada (\$400,000 2000 - 2003).*

Intimidation and harassment and the surgical environment: What is it and what does it do to the educational atmosphere. *Laura Musselman, MacRae HM, Reznick R, Lingard L: The Physicians's Services Incorporated Foundation (\$15,000 2002 - 2003).*

Multi-Centre Randomized Controlled Trial to Compare Stapled Functional End-to-End Anastomosis With Sutured End-to-End Anastomosis Following Resection for Primary or Recurrent Ileocolonic Crohn's Disease. *McLeod RS, Wolff BG, Ross S, Reznick R, Phang T, Buie D, Silverman R, Plewes A, Taylor B, Richard C, Belliveau P, Gregoire R, MacDonald H, Vasilevsky C, Schoetz D, Strong S, Fleshman J: Canadian Institutes of Health Research (\$345,000 2001 - 2004).*

Polo kinases in mitosis and cancer progression. *Dennis JW, Swallow CJ: National Cancer Institute of Canada (\$411,000 2002 - 2005).*

Preclinical assessment of vaccinia virus for cancer gene therapy and functional tumour imaging. *McCart JA, Reilly R: Ontario Cancer Research Network (\$451,538 2002 - 2005).*

Preclinical assessment of vaccinia virus for functional tumour imaging. *McCart JA: University of Toronto, Faculty of Medicine, Dean's Fund (\$9,997 2002 - 2007).*

Role of the mitotic regulator Sak in colorectal carcinogenesis. *Swallow CJ: Body 'N Soul Colorectal Cancer Research Fund (\$44,000 2002).*

Standard-Setting in a Multiple-Competency Assessment of Senior General Surgery Residents. *MacRae HM, Sidhu R, Rotstein L, Reznick R: (\$24,993 2002 - 2003).*

The Effects of Progressively More Challenging Practice on the Acquisition of Laparoscopic Suturing. *MacRae HM, Dubrowski A: The Physicians's Services Incorporated Foundation (\$16,000 2003).*

Tumor microsatellite instability as a molecular prognostic marker in colorectal cancer. *Gallinger, S: Premier's Research Excellence Award (\$100,000 2000 - 2005).*

Tumor microsatellite instability, chemosensitivity and patient outcome. A molecular reanalysis of randomized trials of adjuvant 5FU/leucovorin in colorectal cancer. *Gallinger, S., M. Cotterchio, M. Moore, M. Redston, C. Ribic: National Cancer Institute of Canada (\$210,000 2001 - 2003).*

## Honours Received

**Cohen Z:** 2002 Honoree for Ben-Gurion University of the Negev, September 2002.

**Swallow CJ:** The Wrightman-Berris Academy Anderson Award for Innovation and Program Development, University of Toronto, June 2003.



## Division of Orthopaedic Surgery

**Dr. D. Backstein - Assistant Professor**

**Dr. R.S. Bell - Professor**

**Dr. E.L. Boynton - Assistant Professor**

**Dr. P.C. Ferguson - Assistant Professor**

**Dr. A.E. Gross – Professor (Division Head)**

**Dr. D. MacIntosh - Associate Professor**

**Dr. E.A. Silverstein - Assistant Professor**

**Dr. J.S. Wunder - Associate Professor**

## Publications

**Backstein D, Agnidis Z:** Review of the Literature: Video Feedback in Conjunction with Bench Models in the Development of Technical Skills in Surgical Trainees. Focus (Association for Surgical Education Journal): December 2002: 20: pp 21-23.

**Backstein D, Shasha N, Krywaluk S, Pressman A, Gross A:** Long Term Follow up of Fresh Osteochondral Allografts for Failed Tibial Plateau Fractures. Journal of Bone and Joint Surgery (American): April 2003: 85A, S2: pp 33-39.

**Backstein D, Hutchison C, Gross A:** Septic arthritis of the hip after percutaneous femoral artery catheterization. The Journal of Arthroplasty: December 2002: 17, No. 8: pp 1074-1077.

**Brown A, Parsons JA, Martino C, Griffin AM, Bell RS, Wunder JS, Davis AM:** Work status after distal femoral Kotz reconstruction for malignant tumors of bone. Archives of Physical Medicine and Rehabilitation: January 2003: 84(1): pp 62-68.

**David AM, O’Sullivan B, Bell RS, Turcotte R, Catton CN, Wunder JS, Chabot P, Hammond A, Benk V, Isler M, Freeman C, Goddard K, Bazjak A, Kandel RA, Sadura A, Day A, James K, Tu D, Pater J, Zee B:** Function and health status outcomes in a randomized trial comparing preoperative and postoperative radiotherapy in extremity soft tissue sarcoma. Journal of Clinical Oncology: November 2002: 20(22): pp 4472-2277.

**Davis AM, O’Sullivan B, Bell RS, Turcotte R, Catton CN, Wunder JS, Chabot P, Hammond A, Benk V, Isler M, Freeman C, Goddard K, Bezjak A, Kandel RA, Sadura A, Day A, James K, Tu D, Pater J, Zee B:** Function and Health Status Outcomes in a Randomized Trial Comparing Preoperative and Postoperative Radiotherapy in Extremity Soft Tissue Sarcoma. Journal of Clinical Oncology: November 2002: 20: pp 4472-4477.

**Deitel K, Dantzer D, Ferguson P, Pollak M, Beamer W, Andrulis I, Bell R:** Reduced growth of human sarcoma xenografts in hosts homozygous for the lit mutation. Journal of Surgical Oncology: October 2002: 81(2): pp 75-9.

**Dilkas S, Khan M:** The Musculoskeletal Exam. In: Essentials of Clinical Examination Handbook (Butalia S, Ko H, Lam C, Tan J, eds). The Medical Society, Faculty of Medicine, University of Toronto, Toronto: 2002: pp 115-138.

**Gerrand CH, Bell RS, Wunder JS, Kandel RA, O’Sullivan B, Catton CN, Griffin AM, Davis AM:** The influence of anatomic location on outcome in patients with soft tissue sarcoma of the extremity. Cancer: January 2003: 97(2): pp 485-492.

**Gross AE:** Cages are the preferred treatment for large acetabular defects. Orthopaedics: April 2003: 26, No. 4: pp 378.

**Gross AE:** Cartilage resurfacing. The Journal of Arthroplasty: April 2003: 18, No. 3: pp 14-17.

**Gross AE:** Revision arthroplasty of the acetabulum with restoration of bone stock. In: Hip Replacement - Current Trends and Controversies (Sinha RK, ed). Marcel Dekker, Inc., New York: 2002: pp 213-231.

**Gross AE (Also Guest Editor - Special Focus: Cartilage Grafting):** Repair of cartilage defects in the knee. The Journal of Knee Surgery: July 2002: 15, No. 3: pp 167- 169.

**Gross AE, Wong PKC, Hutchison CR, King AE:** Onlay cortical strut grafting in revision arthroplasty of the hip. The Journal of Arthroplasty: April 2003: 18, No. 3: pp 104-106.

**Kauzman A, Li SQ, Bradley G, Bell RS, Wunder JS, Kandel RA:** Cyclin alterations in giant cell tumour of bone. Modern Pathology: March 2003: 16(3): pp 210-218.

**Plasschaert F, Craig C, Bell R, Cole WG, Wunder JS, Alman BA:** A different behaviour in children than in adults. Journal Bone Joint Surg Br: August 2002: 2002: pp 870-2.

**Plasschaert F, Craig C, Bell RS, Cole WG, Wunder JS, Alman BA:** Eosinophilic granuloma. A different behaviour in children than in adults. *Journal of Bone and Joint Surgery (British)*: August 2002: 84(6): pp 870-872.

**Shasha N, Gross AE:** Allograft transplantation for articular defects of the knee. In: *Master Techniques in Orthopaedic Surgery: Reconstructive Knee Surgery, Second Edition* (Thompson RC Jr., ed). Lippincott Williams & Wilkins,; 2002: pp 391-404.

**Shasha N, Krywulak S, Backstein D, Pressman A, Gross AE:** Long-term follow-up of fresh tibial osteochondral allografts for failed tibial plateau fractures. *Journal of Bone and Joint Surgery (Supplement 2)*: March 2003: 85-A: pp 33-39.

**Toms AP, White LM, Kandel RA, Bell RS:** Low-grade liposarcoma with osteosarcomatous dedifferentiation: Radiological and histological features. *Skeletal Radiology*: May 2003: 32(5): pp 286-289.

## Invited Visits to other Hospitals/Universities

**Backstein D:** Canadian Orthopaedic Association Meeting-Postponed due to SARS, Toronto, Ontario, June 2003. Unicompartmental Arthroplasty Workshop Panel.

**Backstein D:** Colombian Orthopaedic Society, Bogota, Colombia, August 2002. Update on Bone Grafting Procedures in Revision Arthroplasty, Fresh Osteochondral Allografts in the Post Traumatic Knee.

**Backstein D:** Organon Sanofi-Syhelabo Canada Presentation at the Ontario Orthopaedic Association Annual Meeting, Toronto, Ontario, November 2002. Update on Orthopaedic Anticoagulation.

**Bell RS:** Association of Bone and Joint Surgeons, Workshop on Metastatic Bone Disease, Tampa, Florida, November 2002. Breakout Session: Treatment of Spine and Pelvic Metastases.

**Bell RS:** Japanese Hip Society, Sapporo, Japan, September 2002. Management of soft tissue sarcoma at the hip.

**Bell RS:** Association of Bone and Joint Surgeons, Workshop on Metastatic Bone Disease, Tampa, Florida, November 2002. Periacetabular Metastases: Indications for Surgical Treatment, Techniques and Results.

**Bell RS:** Japanese Hip Society, Sapporo, Japan, September 2002. Reconstruction for bone sarcoma arising in Zone II of the pelvis.

**Bell RS:** William B. Ersill Memorial Lecture at Queen's University, Annual Department of Surgery Retreat., Kingston, Ontario, March 2003. The Interdisciplinary Health Research Team in Musculoskeletal Neoplasia: Chips, Hedgehogs, Micronuclei and Patients.

**Gross AE:** 2nd International Symposium on Pelvic Reconstruction, Mayo Clinic, Rochester, Minnesota, May 2003. Acetabular deficiencies - Classification and treatment options.

**Gross AE:** International Update on Osteoarthritis of the Knee, Dallas, Texas, June 2003. Articular cartilage injury in the athlete: Treatment options in 2003 (2) Osteotomy about the knee for osteoarthritis (3) Revision arthroplasty of the knee with restoration of bone stock.

**Gross AE:** Current Issues in Revision Hip and Knee Arthroplasty, Forest of Arden, Birmingham, England, October 2002. Classification and treatment guide to bone stock deficiency in revision arthroplasty of the acetabulum (2) A classification and treatment of bone defects in revision of the knee (3) Proximal femoral allografts and cortical struts for reconstruction of bone stock in revision arthroplasty of the hip.

**Gross AE:** Northwestern University, The Feinberg School of Medicine, Department of Orthopaedic Surgery, Chicago, Illinois, June 2003. Grand Rounds - Revision arthroplasty of the hip: Classification and treatment guide.

**Gross AE:** Swedish Orthopaedic Association, Boras, Sweden, September 2002. Honorary Guest Lecturer, The challenge of revision surgery in total hip arthroplasty.

**Gross AE:** 3rd Annual Minnesota Arthroplasty Course: Primary Hip, University of Minnesota, Minneapolis, Minnesota, May 2003. Modular stems (2) Keynote Address: Principles & outcomes of THR in the DDH patient.

**Gross AE:** 2002 V Simposium Internacional de Reemplazos Articulares, Caracas, Venezuela, November 2002. Principles for the difficult primary hip replacement (2) Total hip replacement for dysplasia (3) Osteotomy about the knee for osteoarthritis (4) Fresh osteochondral allografts for posttraumatic defects of the knee (5) Revision arthroplasty of the acetabulum with restoration of bone stock (6) Revision arthroplasty of the femur with restoration of bone stock (7) Revision arthroplasty of the knee with restoration of bone stock (8) A new modular femoral prosthesis for femoral revision.

**Gross AE:** Visiting Scholar in Orthopaedic Surgery - Boston University School of Medicine (Lahey Clinic), Burlington, Massachusetts, March 2003. Revision arthroplasty of the hip classification and treatment guide.

**Wunder JS:** ASTRO's Symposium, New Orleans, Louisiana, October 2002. Microarray analysis of sarcomas.

**Wunder JS:** Connective Tissue Oncology Program Retreat, Ann Arbor, Michigan, March 2003. Predicting Outcomes in Osteosarcoma.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

Hedgehog signaling in cartilaginous neoplasia: Implications for treatment. *Wunder JS, Alman BA: Canadian Institutes of Health Research - CIHR (\$159,332 2003 - 2008).*

Interdisciplinary Health Research Team (IHRT) in Musculoskeletal Neoplasia. *Bell RS, Alman B, Andrusis IL, Bramwell V, Davis AM, Greenberg M, Hill R, Kandel RA, Malkin D, Masri B, O'Sullivan B, Turcotte R, Wunder JS: Canadian Institutes of Health Research (\$6,136,475 2001 - 2005).*

Macrophages and the role of PE chemistry in total joint replacement failure. *Boynton EL: The Arthritis Society (\$45,000 1999 - 2003).*

Molecular pathology of cartilage neoplasia: The role of parathyroid hormone related protein and Indian hedgehog. *Wunder JS, Alman BA: Medical Research Council of Canada (\$103,774 2000 - 2003).*

Predictors of disability outcomes following revision total knee arthroplasty. *Davis A, Mohammed N, Gross AE, Szalai J, Schemitsch E, Kreder H, Macdonald SJ, Gignac M, Garbuz D, Sekundiak T, Bogoch E, Davey JR: Canadian Institutes of Health Research (\$68,365 2001 - 2004).*

The Effectiveness of Video Feedback in the development of Technical Skills in Surgical Residents. *Backstein D, Agnidis Z, Reznick R, Regher G: University of Toronto, Faculty of Medicine (\$15,500 2002 - 2003).*

The role of the macrophage in polyethylene mediated total joint replacement failure. *Boynton EL: The Arthritis Society (\$80,377 2001 - 2004).*

## Honours Received

**Backstein D:** John Insall Travelling Knee Fellowship, January 2003.

**Wunder JS:** Award For Individual Teaching Excellence - The Wightman-Berris Academy, May 2003.

## Division Of Plastic Surgery

Dr. N.H. McKee - Professor

### Publications

**Agur A, Ng-Thow-Hing V, Ball K, Fiume E and McKee N:** Documentation and three-dimensional modelling of human soleus muscle architecture. *Clinical Anatomy*: June 2003: 16 (4): pp 285-93.

### Research And Investigations

*Senior Investigator's Name Appears in Italics*

Microbiological studies related to silicone gel filled breast implants. *Smith DC, Burrows L, Boynton E, Esterby S, Khory T, Fornasier V, Lugowski S, Peters WJ, Semple JL: Dow Corning Corporation* (\$124,000 2000 – 2004).

Muscle architecture in children with spastic diplegia and Duchenne muscular dystrophy. *McKee NH, Agur AM, Biggar D, Fiume E: KidsAction* (\$54,402 2000 - 2003).

Muscle architecture in children with spastic diplegia and Duchenne muscular dystrophy. *McKee NH, Agur AM, Biggar D, Fiume E: Hospital for Sick Children Foundation* (\$52,814 2000 - 2003).

## Division of Urology

**Dr. M.B. Buckspan - Associate Professor**

**Dr. K. Jarvi - Associate Professor (Division Head)**

**Dr. P.G. Klotz - Associate Professor**

**Dr. A. Zini - Associate Professor**

## Publications

**Andonian S, Jarvi K, Zini A, Hermo L:** Ultrastructural features of the vas deferens from patients undergoing vasectomy and vasectomy reversal. *Journal of Andrology*: December 2002: 23: pp 691-7.

**Finelli A, Gallant CV, Jarvi K, Burrows LL:** Use of in-biofilm expression technology to identify genes involved in pseudomonas aeruginosa biofilm development. *Journal of Bacteriology*: May 2003: 185 (9): pp 2700-10.

**Keith J:** What is the urologist's role in the era of ICSI? *Urology Times of Canada*: May 2003: 11: pp 9.

**Lazarou S, Fischer MA, Jarvi K:** Renal colic and torsion: case report and review. *Canadian Journal of Urology*: December 2002: 9 (6): pp 1702-3.

**Xuan W, Lamhonwah AM, Librach C, Jarvi K, Tein I:** Characterization of organic cation/carnitine transporter family in human sperm. *Biochemistry, Biophysics Research Community*: June 2003: 306 (1): pp 121-8.

**Zini A, Fischer MA, Mak V, Phang D, Jarvi K:** Catalase-and superoxide dismutase-like antioxidant activities in human seminal plasma. *Urological Research*: October 2002: 30(5): pp 691-701.

**Zini A, Fischer MA, Sharir S, Shayegan B, Phang D, Jarvi K:** Prevalence of abnormal sperm DNA denaturation in fertile and infertile men. *Urology*: December 2002: 60 (6): pp 1069-1072.

## Invited Visits to other Hospitals/Universities

**Jarvi K:** Canadian Andropause Society, Toronto, Ontario, March 2003. *Prostate Health*.

**Jarvi K:** Toronto, Ontario, November 2002. *WB C and Bacteria in Sperm*.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

A microbiological and epidemiological study on prostatitis. *Nickel C, Jarvi K, Mittelman M: National Institute of Health* (\$238,000 1998 - 2003).

Development of a microsurgical training program for Novice Micro Surgeons. *Grober E, Jarvi K: PSI* (\$15,000 2002 - 2003).



Dr. L.C. Smith  
Surgeon-in-Chief

At St. Joseph's Health Centre, our vision is to become the best community teaching hospital in Canada. In the Department of Surgery, we take this vision very seriously. Currently, we have full residency training programs in general surgery and plastic surgery. In orthopaedics, we have junior residents on an ongoing basis. We also accept University of Toronto post-graduate fellows in vascular, thoracic, minimally invasive and general surgery. We currently are ramping up to take post-graduate fellows in surgical oncology and urology.

In November of 2002, we opened two state-of-the-art, minimally invasive surgical suites, which are shared by the various divisions of surgery. These will facilitate post-graduate courses with complete teleconferencing capabilities.

Dr. Ronald Levine continues as Program Director for the Division of Plastic Surgery at the University of Toronto. Dr. Tom Harmantas is Medical Chief of Staff at St. Joseph's Health Centre. Dr. Douglas Wooster is Chairman of the Standards Committee, Royal College of Physicians & Surgeons.

In terms of post-graduate courses, Dr. Wooster is Course Coordinator for the Vascular Imaging Toronto Course and the American College of Surgeons Post-graduate Course, in Vascular Surgery. Dr. Lloyd Smith organized a course in Laparoscopic Ventral Hernia Repair, for Community General Surgeons.



On June 30/03, Dr. Michael Kliman completed his term as Head of the Service of Orthopaedic Surgery at St. Joseph's. Dr. Martin Roscoe was appointed Head of Orthopaedics, effective July 1/03.

In June of 2003, Dr. Robert Louch retired from the Division of Vascular Surgery, after 35 years of service to St. Joseph's Health Centre and the University of Toronto.

Looking to the future, we hope to continue to provide excellence in teaching and clinical surgery.



## **Division of General Surgery**

Dr. M. Baida – Assistant Professor  
Dr. A. Harmantas – Assistant Professor (Division Head)  
Dr. R. Hart - Lecturer  
Dr. D. Lindsay - Lecturer  
Dr. D.L. Smith – Assistant Professor

## **Division of Orthopaedic Surgery**

Dr. A. ElMaraghy – Lecturer  
Dr. M. Kliman – Lecturer (Division Head)  
Dr. M. Roscoe - Lecturer  
Dr. G. Vincent - Lecturer  
Dr. M. Wood - Lecturer

## **Division of Plastic Surgery**

Dr. C. Fielding – Lecturer  
Dr. L. Kasrai – Assistant Professor  
Dr. R. Knowlton - Lecturer  
Dr. Levine – Associate Professor (Division Head)

## **Division of Thoracic Surgery**

Dr. C. Compeau - Lecturer  
Dr. E. Spratt – Associate Professor (Division Head)

## **Division of Urology**

Dr. A Marcuzzi – Lecturer (Division Head)  
Dr. J. Wait - Lecturer

## **Division of Vascular Surgery**

Dr. R. Louch - Lecturer  
Dr. D. Szalay – Assistant Professor  
Dr. D. Wooster – Associate Professor (Division Head)

## **Publications**

**Wooster DL, Parboosingh JT, Badat MC:** Individualized learning strategies. In: The Continuing Professional Development of Physicians (Davis D, Barnes BE, Fox R, eds). AMA Press, Chicago: 2003: pp 145-169.

## **Invited Visits to other Hospitals/Universities**

**Wooster DL:** American Association of Vascular Surgery, Bethesda, Maryland, April 2003. Program Directors In-training Evaluation Examination.

**Wooster DL:** American Board of Surgery, Philadelphia, Pa., March 2003. Vascular Examination Board.



Dr. J.L. Mahoney  
Acting Surgeon-in-Chief

## HEADS OF DIVISION

- Dr. L. Errett – Cardiac Surgery**
- Dr. C. Schlachta – General Surgery**
- Dr. R. Moulton – Neurosurgery**
- Dr. E. Schemitsch – Othopaedic Surgery**
- Dr. J.L. Mahoney – Plastic Surgery**
- Dr. J. Honey - Urology**
- Dr. Michael Ameli – Vascular Surgery**

This was a year of disruption at St. Michael's Hospital, with the development of SARS. SARS had a significant effect, resulting in the cancellation of most elective surgery for three months; in addition planned education events were either cancelled or postponed. We were also saddened with the passing of Dr. Leo Mahoney. However, with determination and perseverance, the six programs defined last year continue to grow, with the Department of Surgery playing a necessary and important role.

Dr. Eric Poulin left St. Michael's Hospital to pursue his career in Ottawa. The Department would like to thank him for his many years of service, both here at St. Michael's and Wellesley. The Hospital is in the process of a search for a new Surgeon-in-Chief.



This summer, we saw the opening of the new surgical wing and the opening of The Terrence Donnelly Day Surgery Centre. This new centre provides integrated perioperative services, all on one floor and is a welcoming, pleasant environment, which reduces stress and anxiety for patients and their families. The centre includes a 10-bed ambulatory recovery room, and 39 patient care areas. Approximately 45 patients will come through the unit each day, for ambulatory surgery in six ambulatory operating rooms. The 17 core in-patient operating rooms, will be designated for more serious, longer cases, for patients requiring more intensive surgery.

With improvements in infrastructure our work has been invigorated; the new strategic planning process has been initiated and will be completed in early 2004. Our surgical staff continues to excel. In Neurosurgery, Dr. Richard Perrin, was nominated to the position of Treasurer of the World Federation of Neurosurgical Societies.

**In the Division of Urology**, Dr. Kenneth Pace has assumed the position of Supervisor of the Year IV Surgical OSCE Examination, commencing September 2003. He also won a Canadian Urological Association (CUA) Scholarship. Dr. John Honey was appointed Chair of the Scientific Program Committee, for the 2003 World Congress of Endourology. Dr. Robert Stewart won the Faculty Teaching Award from University of Toronto Division of Urology and The Clarice Chalmers Teaching Award.

**In the Division of Cardiovascular Surgery**, Dr. David Latter is the Chief Examiner for the Royal College of Physicians and Surgeons of Canada and he became the Program Director of the Division of Cardiac Surgery, University of Toronto. Dr. Daniel Bonneau is also an examiner with the Royal College. Drs. Yves Leclerc and Lee Errett have established links to the international cardiac surgical fellowship and are helping in the development of a cardiac surgical division, in the Dominican Republic, Trinidad and Cuba. Research interests focus on nutrition of the heart, with multi-centre trials funded by two successful CHIR grants. Despite SARS, the Terrence Donnelly Cardiac Research Day was a success and attracted many of the cardiac surgical residents in Canada, for our Annual Research Day. Dr. Gary Salasidis has left the Division to join a new cardiac program in St. Mary's General Hospital, in Kitchener. We would like to wish him great success.



**The Division of Vascular Surgery** is involved in training senior Residents/Fellows at both the National and International level. They are actively looking for a third vascular surgeon to join the Service in 2003-2004.



**In the Division of Plastic Surgery**, we are recruiting new staff to join in 2004. The Wound Healing and Skin Ulcer Prevention Program, held a very successful multi-disciplinary conference this fall, which attracted participants from across Canada.

**From the Division of General Surgery**, Christopher Schlachta was appointed Head, Division of General Surgery, St. Michael's Hospital, and Appointed Chair of the Canadian Association of General Surgeons Committee on Endoscopy and Laparoscopic Surgery. He received the Fitzgerald Academy Outstanding Clerkship Teacher Award and the University of Toronto Surgical Skills Centre Distinguished Education Award, for Contributions in Surgical Skills Education. Dr. Najma Ahmed organized the First Annual Visiting Professors in Trauma Surgery in November 2002. Dr. Marcus Burnstein was appointed chair of the Royal College specialty committee, for Colorectal Surgery and re-appointed chair of the Awards committee, of the American Society of Colon & Rectal Surgeons and to the Examination Board of the American Board of Colon & Rectal Surgery. Dr. Joseph Mamazza was the course co-director for the 2002 Update in Minimally Invasive Surgery and Dr. Robert Mustard received the E. Bruce Tovee Award for Undergraduate Education

**The Division of Orthopaedic Surgery** flourished with basic and clinical continuing research. Dr. Tim Daniels has received a research grant from the Canadian Orthopaedic Foundation, for his research entitled; "A randomized controlled trial of 1<sup>st</sup> MTP joint arthrodesis compared to 1<sup>st</sup> MTP joint hemiarthroplasty in severe hallux rigidus." Dr. Michael McKee was awarded the R.B. Salter Award for excellence in Teaching, as voted by the Orthopaedic residents.

Other research grants received this year include; Dr. John Bohnen (General Surgery) and co-applicant Lorelei Lingard (Paediatrics) received a PSI Foundation Grant for their project, "Team Talk: An Intervention to structure information-sharing and promote patient safety in the operating room" (shared funding with a two-year Canadian Institutes in Health Research (CIHR) grant). From neurosurgery, Dr. Michael Cusimano received an operating grant from the Ontario Neurotrauma Foundation, for his research titled; "Winning at all costs – Barriers to injury prevention knowledge transfer in minor league hockey in Canada."

Dr. Christopher Schlachta (General Surgery/Minimally Invasive Surgery), was awarded the Physicians' Services Incorporated Foundation Grant award, for his research entitled, "Optimizing recovery after laparoscopic colon surgery (ORAL-CS): The effect of intravenous ketorolac on length of hospital stay".

We look forward to new challenges in the coming year.

## Division of Cardiac Surgery

**Dr. D. Bonneau - Associate Professor**

**Dr. D. Courtman – Assistant Professor**

**Dr. L.E. Errett – Associate Professor (Division Head)**

**Dr. D.A. Latter - Associate Professor**

**Dr. L. LeClerc – Associate Professor**

## Invited Visits to other Hospitals/Universities

**Errett LE:** Memorial University, Continuing Medical Education, “A Medical Potpourri”, St. John’s, Newfoundland, August 2002. Emergent surgical treatment options for heart patients.

**Errett LE:** 3rd Annual Cardiac Team Meeting: Minimizing blood loss and exposure to blood products., Montebello, Quebec, September 2002. Moderator: Case study interactive discussions.

**Errett LE:** Queen’s University Continuing Medical Education, Third Annual CME at Sea held in the Holland American Cruise Lines on the Carribean, Kingston, Ontario, February 2003. New approaches for treatment of heart failure.

## Research and Investigations

*Senior Investigator’s Name Appears in Italics*

Gene therapy: to assess the efficacy and safety of CI-1023 delivered through minimally invasive surgery versus maximum medical treatment in patients with severe angina, advanced coronary artery disease, and no options for revascularization. *Stewart D, Errett L, Latter D: Parke-Davis Pharmaceutical Research (\$350,000 1999 - 2002).*

Ischemia management with Accupril post bypass graft via inhibition of converting enzyme (IMAGINE): An evaluation of the effect of 12 to approximately 24 months treatment with Quinapril 40 mg QD post CABG surgery on ischemic events. *Moe, G, Latter D, Fitchett D, Errett L: Parke-Davis Pharmaceutical Research (\$200,000 2000 - 2002).*

Molecular Epidemiology of aneurysm. *Lossing A, Errett L: Cellex-C (\$1,000,000 1999 - 2002).*

Myovive Clinical Study: Multi-centre Randomized Trial. *Errett L, Peniston C, Quantz M, Fremes S: Numico (\$300,000 2001 - 2003).*

The “ADVANTAGE “ heart valve study. *Errett LE, Bonneau D, Latter D, Leclerc Y, Salasidis G: Medtronic of Canada Ltd. (\$600,000 2001 - 2003).*

# Division of General Surgery

Dr. N. Ahmed - Assistant Professor

Dr. J. Ali - Professor

Dr. J.M.A. Bohnen - Associate Professor

Dr. M.J. Burnstein - Associate Professor

Dr. J. Koo - Associate Professor

Dr. L.J. Mahoney - Associate Professor

Dr. J. Mamazza - Assistant Professor

Dr. R. Mustard - Assistant Professor

Dr. E.C. Poulin – Professor

Dr. C.M. Schlachta - Assistant Professor (Division Head)



## Publications

**Chiasson PM, Pace DE, Schlachta CM, Mamazza J, Poulin EC:** Minimally invasive surgery training in Canada. *Surgical Endoscopy*: November 2002.

**Chiasson PM, Pace DE, Schlachta CM, Mamazza J, Poulin EC:** The role of the Minimally Invasive Surgeon in Canadian Academic Surgery: A survey of General Surgery Division Heads. *Annals of the Royal College of Physicians and Surgeons*: December 2002: 35(8): pp 463-466.

**Doran I, Baker DM, Murray GR, Bohnen JM, Zahn J, Sidani C, S., & Carryer, J:** Achieving clinical improvement: An interdisciplinary intervention. *Health Care Management Review*: November 2002: 27: pp 42-56.

**Azcona L, Gutierrez G, Fernandez C, Natera O, Ruiz-Speare O, Ali J:** Attrition of Advanced Trauma Life Support (ATLS) Skills among ATLS Instructors and Providers in Mexico. *Journal of the American College of Surgeons*: September 2002: 195: pp 372-377.

**Pace D, Seshadri P, Chiasson PM, Poulin EC, Schlachta CM, Mamazza J:** Early experience with laparoscopic ileal pouch-anal anastomosis for ulcerative colitis. *Surg Laparosc Endosc*: October 2002: 12(5): pp 337-341.

**Pace DE, Chiasson PM, Schlachta CM, Mamazza J, Poulin EC:** Laparoscopic splenectomy for ITP: Long-term follow-up data. *Canadian Journal of Surgery*: January 2003: 17: pp 95-98.

**Pace DE, Seshadri PA, Chiasson PM, Poulin EC, Schlachta CM, Mamazza J:** Early experience with laparoscopic ileal pouch-anal anastomosis for ulcerative colitis. *Surgical Laparoscopy, Endoscopy, and Percutaneous Techniques*: October 2002: 12(5): pp 337-41.

**Pace KT, Dyer SJ, Phan V, Poulin EC, Schlachta CM, Mamazza J, Stewart RJ, Honey RJ:** Laparoscopic versus open donor nephrectomy: A cost-utility analysis of the initial experience at a tertiary centre. *J Endourol*: September 2002: 16(7): pp 495-508.

**Pace KT, Dyer SJ, Phan V, Poulin EC, Schlachta CM, Mamazza J, Stewart RJ, Honey RJ:** Laparoscopic versus open donor nephrectomy: A final cost-utility analysis. *Surg Endosc*: October 2002.

**Pace KT, Dyer SJ, Stewart RJ, Honey RJ, Phan V, Poulin EC, Schlachta CM, Mamazza J:** Health-related Quality of Life (HRQL) following laparoscopic and open nephrectomy. *Surg Endosc*: October 2002.

**Poulin EC, Schlachta CM, Mamazza J:** Surgical Anatomy in Surgical Diseases of the Spleen (Eds Katkhouda N, Soper N). *Problems in General Surgery*: September 2002: 19(3): pp 16-23.

**Schlachta CM, Mamazza J, Gregoire R, Burpee SE, Pace KT, Poulin EC:** Predicting conversion in laparoscopic colorectal surgery: Fellowship training may be an advantage. *Surgical Endoscopy*: May 2003: Online:

**Ward M, MacRae H, Schlachta C, Mamazza J, Poulin E, Reznick R, Regehr G:** Resident self-assessment of operative performance. *American Journal of Surgery*: May 2003: 185: pp 512-4.

## Invited Visits to other Hospitals/Universities

**Ali J:** Health Sciences Centre (Children's), Winnipeg, Manitoba, November 2002. Advanced Trauma Life (ATLS) Program, Instructor Course.

**Ali J:** Sunnybrook and Women's College Health Science Centre, Toronto, Ontario, October 2002. Advanced Trauma Life Support (ATLS) Program, Instructor Course.

**Ali J:** American College of Surgeons, Chicago, Illinois, July 2002. Advanced Trauma Life Support (ATLS) Program, Update.

**Ali J:** University of West Indies, Trinidad & Tobago, February 2003. Advanced Trauma Life Support and Prehospital Trauma Life Support, Instructor Update - Trinidad & Tobago Faculty.

**Ali J:** University of West Indies, Trinidad and Tobago, February 2003. Advanced Trauma Life Support Instructor Course For Jamaica Faculty.

**Ali J:** University of West Indies, Trinidad & Tobago, February 2003. Advanced Trauma Life Support Update, Jamaica Faculty.

**Ali J:** University of West Indies, Trinidad & Tobago, February 2003. Advanced Trauma Life Support, Instructor Course.

**Ali J:** St. George's University, Grenada, February 2003. Advanced Trauma Life Support, Provider Course.

**Ali J:** St. George's University, Grenada, February 2003. Prehospital Trauma Life Support Program.

**Bohnen JMA:** Second Halifax Symposium on Healthcare Error, Dalhousie University Club, Halifax, Nova Scotia, October 2002. A framework for physician accountability.

**Bohnen JMA:** Seattle Surgical Society Annual Meeting, Seattle, Washington, January 2003. Antibiotics for surgical infections: do they make a difference?

**Bohnen JMA:** Canadian Infectious Disease Society Meeting Satellite Symposium, Quebec City, Quebec, March 2003. Community Acquired Intra-Abdominal Infections: A Multidisciplinary Approach.

**Bohnen JMA:** Ontario Association of General Surgeons Annual Meeting, Toronto, Ontario, November 2002. Management of ICU Patients with Abdominal Infection.

**Bohnen JMA:** Canadian Surgery Forum Satellite Symposium, London, Ontario, September 2002. Necrotizing Infections.

**Bohnen JMA:** Seattle Surgical Society Annual Meeting, Seattle, Washington, January 2003. New technology: is it safe, does it work?

**Bohnen JMA:** American College of Surgeons, San Francisco, California, October 2002. Panel Moderator: Managing the Spectrum of Surgical Pain.

**Perrin RG:** The Neurosurgical Society of America, Annual Meeting, Sunriver, Oregon, Sunriver, Oregon, June 2003. Anterior Cervical Reconstruction and Interbody Fusion Using Titanium HARMS Cages with Anterior Plating.

**Perrin RG:** CNS Annual Meeting, Philadelphia, Pennsylvania, September 2002. Approaches to Spinal Neoplasms - General Management Strategies.

**Perrin RG:** CNS Annual Meeting, Philadelphia, Pennsylvania, September 2002. CNS International Report - General Scientific Session III.

**Perrin RG:** IVth Pan Arab Congress of Neurosurgery, Fez, Morocco, October 2002. Transthoracic approach of the spinal lesions - Cadaver demonstration.

**Perrin RG:** IVth Pan Arab Congress of Neurosurgery, Fez, Morocco, October 2002. Transthoracic approach of the thoracic spinal tumors.

**Poulin EC:** Canadian Surgery Forum canadien de chirurgie, London, Ontario, September 2002. Chair - Poster Session.

**Poulin EC:** The Brantford General Hospital, Brantford, Ontario, October 2002. Feasibility of Laparoscopic surgery in non-teaching centers.



**Poulin EC:** Canadian Surgery Forum canadien de chirurgie, London, Ontario, September 2002. Laparoscopic Adrenalectomy: Pathology Determines Outcomes.

**Poulin EC:** Canadian Surgery Forum canadien de chirurgie, London, Ontario, September 2002. Laparoscopic Heller Myotomy: Is an anti-reflux procedure a pre-requisite?

**Poulin EC:** Canadian Surgery Forum canadien de chirurgie, London, Ontario, September 2002. Laparoscopic Surgery in Benign Colorectal Disease. Post-graduate Course, Laparoscopic Colorectal Surgery.

**Poulin EC:** The Brantford General Hospital, Brantford, Ontario, October 2002. Preventing first entry injury.

**Schlachta CM:** Operating Room Nurses of Greater Toronto (ORNGT), Toronto, Ontario, October 2002. Minimally Invasive Surgery: Where are we and where are we going?

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

Laparoscopic vs. open donor nephrectomy a prospective cohort study of donor and graft outcomes. *Honey RJ, Pace K, Mamazza J, Schlachta CM, Stewart R, Saltzman J: Kidney Foundation of Canada (\$93,958 2001 - 2003).*

Laparoscopic vs. open donor nephrectomy a prospective cohort study of donor and graft outcomes *Pace K, Honey RJ, Stewart RJ, Mamazza J, Poulin EC, Schlachta CM, Zaltzman J, McFarlane P, Prasad R: Kidney Foundation of Canada, Biomedical Research Grant (\$93,958 2001 - 2003).*

NSABP P-2: Study of Tamoxifen and Raloxifene for the Prevention of Breast Cancer The STAR Trial. *Koo J, Mahoney L, Haq R: NSABP and NCI (\$600,000 1999 - 2004).*

Nutrition-related factors in breast cancer: A prospective cohort study. *Goodwin PJ, Pritchard S, Trudeau M, Koo J, Ennis M: CBCRI (\$264,252 2001 - 2004).*

Nutrition related factors in breast cancer: A prospective cohort study. *Goodwin PJ, Prichard K, O'Malley F, Fantus G, Trudeau M, Koo J, Ennis M: CBCRI (\$273,232 2001 - 2003).*

Optimizing recovery after laparoscopic colon surgery (ORAL-CS): The effect of intravenous Ketorolac on length of hospital stay. *Schlachta CM, Burpee S, Chan B, Barr A, Mamazza J, Poulin EC: Physicians' Incorporated Foundation (\$108,000 2002 - 2004).*

STAR (Study of Tamoxifen and Raloxifene) in the prevention of breast cancer. *Koo J, Mahoney L, General Surgery R. Haq, Oncology: NSABP (National Surgical Adjuvant Breast & Bowel Project) NCI (National Cancer Institute (\$500,000 1999 - 2004).*

Team Talk: Structured Interventions to Promote Patient Safety in the Operating Room. *Lingard L, Baker R, Doran D, Orser B, Bohnen J, Reznick R, Grober E, Espin S: Canadian Institutes of Health Resesarch (\$124,917 2002 - 2004).*

Team Talk: Structured Interventions to Promote Patient Safety in the Operating Room. *Lingard L, Baker R, Doran R, Orser B, Bohnen J, Reznick R, Regehr G, Grober E,: The Physician's Services Incorporated Foundation (\$25,355 2002 - 2003).*

Testing of a prototype ultrasound scanner for high resolution 3-D holographic imaging in patients who are undergoing stereotactic breast biopsy or needle localization and lumpectomy procedures. *Koo J, Zalev A, Wall J, Goldberg F: Midipattern Corporation Private, Toronto technology company (\$50,000 2001 - 2002).*

## Honours Received

**Bohnen JMA:** Honary Member, Seattle Surgical Society, January 2003.

**Bohnen JMA:** Seattle Surgical Society Visiting Professor, January 2003.

**Mamazza J:** Physician of S.S. John Paul II, Papal Visit, World Youth Day, Toronto, Ontario, July 2002.

**Mustard, MD FRCS(C) FACS:** Tovee Award for Undergraduate Teaching for 2002/2003, May 2003.

**Poulin EC:** Physician of S.S. John Paul II, Papal Visit, World Youth Day, Toronto, Ontario, July 2002.

**Schlacta CM:** The University of Toronto Surgical Skills Centre Distinguished Educator Award for Outstanding Contributions to Surgical Skills Education, May 2003.

## Division of Neurosurgery

**Dr. M.D. Cusimano - Associate Professor**

**Dr. R.J. Moulton - Associate Professor (Division Head)**

**Dr. P.J. Muller – Professor**

**Dr. R.G. Perrin – Associate Professor**

**Dr. W.S. Tucker - Associate Professor**

## Publications

**Al-Ghatany M, Bilbao J, Kovacs K, Marotta T, Cusimano M, Singer Wm:** Brown Tumors of the Skull Base. Case Report and Literature Review. *Journal of Neurosurgery*: February 2003: 98: pp 417-420.

**Boulton MR, Cusimano, MD:** Foramen Magnum Meningiomas: Concepts, classifications, and nuances. *Neurosurgical Focus*: June 2003: 14 (6): pp Article 10.

**Cusimano MD, Suhardja A, Agur A:** The Anatomical Basis of Approaches to Foramen Magnum and Lower Clival Meningiomas: A Comparison of the Retrosigmoid and the Transcondylar Approaches. *Neurosurgical Focus*: June 2003: 14(6): pp Article 9.

**Fong IW, Chiu B, Viira E, Tucker W, Wood H, Peeling RW:** Chlamydia Heat Shock Protein-60 antibody and correlation with Chlamydia pneumoniae in atherosclerotic plaques. *Journal of Infectious Disease*: October 2002: 186: pp 1469-73.

**Laxton AW, Perrin RG:** The relationship between social support, life stress and quality of life following spinal decompression surgery. *Spinal Cord*: December 2002: 29(Sup.1): pp S71.

**Muller P, Wilson B, Lilge L, Yang V, Varma A, Bogaars A, Hetzel F, Chen Q, Fullagar T, Fenstermaker R, Selker R, Abrams J:** Clinical studies of photodynamic therapy for malignant brain tumors: Karnofsky scores and neurological scores in patients with recurrent gliomas treated with Photofrin-PDT. *Progress in Biomedical Optics and Imaging. Proceedings of SPIE*: October 2002: 4612: pp 40-47.

**Perrin RG, Laperriere DA, Loblaw DA and Laxton A:** Spinal Axis Metastases. In: *Cancer in the Nervous System, Second Edition* (Victor A. Levin, ed). Oxford University Press, New York: 2002: pp 321-41.

**Yang V, Muller P, Wilson B, Herman P:** A multispectral fluorescence imaging system: Design and initial clinical tests in intraoperative photofrin-photodynamic therapy of brain tumors. *Lasers in Surgery and Medicine*: June 2003: 32: pp 224-232.

## Invited Visits to other Hospitals/Universities

**Cusimano MD:** Rogers Cable, Toronto, Ontario, September 2002. Goldhawk Live.

**Cusimano MD:** Ontario Neurotrauma Foundation, Toronto, Ontario, January 2003. Is active consent always the best policy?--A comparison of two consent approaches used in a large-scale, randomised control study.

**Cusimano MD:** St. Michael's Hospital, Toronto, Ontario, November 2002. Lunch N' Learn Presentation--Neurosurgery.

**Cusimano MD:** Ontario Neurotrauma Foundation, Toronto, Ontario, January 2003. Overview of the Think First for Kids Injury Prevention Evaluation.

**Cusimano MD:** Ontario Neurotrauma Foundation, Toronto, Ontario, January 2003. Smart Hockey, can a multimedia educational tool influence knowledge and behaviour in hockey?

**Cusimano MD:** Ontario Neurotrauma Foundation, Toronto, Ontario, January 2003. The Community Readiness Model as a Tool for Injury Prevention Knowledge Transfer.

**Muller PJ:** Olivecrona Lectureship, Karolinska Hospital, Stockholm, Sweden, December 2002. Photodynamic therapy of brain tumors.

**Tucker WS:** Provincial Counsel Continuing Medical-Legal Education Conference, Montebello, Quebec, June 2003. Neurosurgery Workshop Leader.

# Research and Investigations

*Senior Investigator's Name Appears in Italics*



(1) Photodynamic therapy: Basic and clinical science studies, (2) Prospective clinical trials in the use of photodynamic therapy (PDT) for the treatment of malignant brain tumors. *Muller PJ, Hetzel F, Chopp M, Hitchcock M, Patterson M, Singh G, Wilson B: National Institute of Health (\$6,641,179 1997 - 2003).*

Implementation and evaluation of a neurtrauma injury prevention program into Ontario's healthy living curriculum: A controlled trial. *Cusimano MD, Chipman M, Kalnins I, Freedman B: Ontario Neurotrauma Foundation (\$600,000 2003 - 2004).*

Nutritional Status and Body Composition of Patients with Brain Tumors Awaiting Surgical Resection. *McCall M, Cusimano M: Canadian Foundation for Dietetic Research (\$10,000 2001 - 2002).*

Skull Base Surgery and the Internet. *Cusimano MD, Agur, A: McGraw-Hill Ryerson Teaching Technology Integration Fund (\$1,000 2003 - 2005).*

Winning at all costs: Barriers to injury prevention knowledge transfer in minor league hockey in Canada. *Cusimano MD, Chipman, M; Volp, R; Donnely, P; Tator, C: Ontario Neurotrauma Foundation (\$75,092 2002).*

## Honours Received

**Cusimano MD:** Dr. Clarice Chalmers Teaching Award--\$10,000, March 2003.

## Division of Orthopaedic Surgery

**Dr. E.R. Bogoch - Professor**

**Dr. T.R. Daniels - Assistant Professor**

**Dr. D. E. Hastings - Professor**

**Dr. R.J. McBroom - Assistant Professor**

**Dr. M.D. McKee - Associate Professor**

**Dr. E.H. Schemitsch - Professor (Division Head)**

**Dr. J.P. Waddell - Professor**

## Publications

**Balakrishnan A, Schemitsch EH, Pearce D, McKee MD:** Distinguishing transient osteoporosis of the hip from avascular necrosis. *Canadian J Surg*: June 2003; 3: pp 187-192.

**Beimers L, Kreder HJ, Berry GK, Stephen DJG, Schemitsch EH, McKee MD, Jaglal S:** Subcapital hip fractures: the Garden classification should be replaced, not collapsed. *Can J Surg*: December 2002; 45, No.6: pp 411-414.

**Bhandari M, Guyatt G, Swiontkowski M, Tornetta P III, Sprague S, Schemitsch EH:** A lack of consensus in the assessment of fracture healing among orthopaedic surgeons. *Journal of Orthopaedic Trauma*: December 2002; 16(8): pp 562-566.

**Bogoch ER, Judd MGP:** The hand: The second Face? *Journal of Rheumatology*: December 2002; 29: No.12: pp 2477-2483.

**Brown Jacques P, Josse Robert G., et al for the Scientific Advisory Council of the Osteoporosis Society of Canada:** 2002 clinical practice guidelines for the diagnosis and management of osteoporosis in Canada. *Canadian Medical Association Journal*: November 2002; Nov. 12/02: pp S1-S34.

**Daniels TR:** 1) Ankle biomechanics and gait analysis; and 2) Ankle arthroplasty: Indications, techniques, and clinical outcomes. *Audio-Digest Orthopaedics*: July 2002; 25, Issue7: pp 1-4.

**Daniels TR, Waddell JP:** Musculoskeletal images: Charcot Arthropathy. *Canadian Journal of Surgery*: October 2002; 45, No. 5: pp 363-364.

**Gilchrist AD, McKee MD:** Valgus instability of the elbow due to medial epicondyle nonunion: Treatment by fragment excision and ligament repair. *J Shoulder Elbow Surg*: October 2002; 11, No.5: pp 493-497.

**Hawker G, Ridout R, Ricupero M, Jaglal S, Bogoch E:** The impact of a simple fracture clinic intervention in improving the diagnosis and treatment of osteoporosis in fragility fracture patients. *Osteoporosis International*: February 2003: pp 2-20.

**Jolles BM, Bogoch ER:** Consensus recommendations for rheumatoid arthritis therapy: A blind spot for osteoporosis prevention and treatment. *Journal of Rheumatology*: September 2002; 29:9: pp 1814-1817.

**Lobo J, McKee MD:** Musculoskeletal images: Chronic osteomyelitis. *Canadian Journal of Surgery*: February 2003; 46, No.1: pp 47-48.

**McKee MD, Pugh DMW, Richards RR, Pedersen E, Jones C, Schemitsch EH,:** Effect of humeral condylar resection on strength and functional outcome after semi-constrained total elbow arthroplasty. *Journal Bone Joint Surg (Am)*: May 2003; 85A, No.5: pp 802-807.

**McKee MD, Wild LM, Schemitsch EH:** Midshaft malunions of the clavicle. *Journal Bone Joint Surgery(A)*: May 2003; 85A, No.5: pp 790-797.

**McKee MD, Wild LM, Schemitsch EH, Waddell JP:** The use of an antibiotic impregnated, osteoconductive bioabsorbable bone substitute in the treatment of infected long bone defects. *Journal of Orthopaedic Trauma*: October 2002; 16: pp 622-627.

**O'Driscoll SW, Jupiter JB, Cohen MS, Ring D, McKee MD:** Difficult elbow fractures: Pearls and Pitfalls. In: *AAOS Instructional Course Lectures Vol52 2003* (Ferlic DC, ed). AAOS, Rosemont Illinois: 2003: pp 113-134.



**Sprague S, Bhandari M, Devereaux PJ, Swiontkowski MF, Tornetta P, Cook DJ, Dirschl D, Schemitsch EH, Guyatt G:** Barriers to full-text publication following presentation of abstracts at annual orthopaedic meetings. *Journal of Bone and Joint Surgery American* Volume: January 2003: 85A(1): pp 158-163.



**Stephen DJG, Kreder HJ, Schemitsch EH, Conlan LB, Wild LM, McKee MD:** Femoral intramedullary nailing: Comparison of fracture-table and manual traction, A prospective randomized study. *Journal Bone Joint Surg (A)*: September 2002: 84-A, No.9: pp 1514-1521.

**Thivaos G, McKee MD:** Sliding osteotomy for deformity correction following malunion of volarly displaced distal radial fractures. *Journal of Orthopaedic Trauma*: May 2003: 17: pp 326-333.

**Thomas RH, Daniels TR:** Ankle arthritis: Current concepts review. *Journal of Bone and Joint Surgery*: May 2003: 85-A: pp 923-936.

**Thomas RH, Daniels TR:** Primary fusion as salvage following talar neck fracture: A case report. *Foot & Ankle International*: April 2003: 24, No. 4: pp 368-371.

**Waddell JP, Daniels TR:** Musculoskeletal images: Silicone synovitis. *Canadian Journal of Surgery*: April 2003: 46, no.2: pp 120.

**Wedge JH, Bogoch ER:** The surgical management of juvenile arthritis. In: *Textbook of Orthopaedics* (Bulstrode C, ed). Oxford Press, Bristol, Great Britain: 2002: pp 2433-2446.

**Wong T, Majchrzak B, Bogoch E, Keystone CE, Fish EN:** Therapeutic implications for interferon in arthritis: A pilot study. *Journal of Rheumatology*: May 2003: 2003:30:5: pp 934-940.

## **Invited Visits to other Hospitals/Universities**

**Bogoch ER:** Family Practice Rounds, Oakville Trafalgar Memorial Hospital, Oakville, Ontario, November 2002. "Bridging the Gap", What to do after fragility fracture.

**Bogoch ER:** Regional Family Practice Rounds, Peterborough, Ontario, October 2002. Fragility fracture patient in Family Practice.

**Bogoch ER:** Partners in Aging - Falls Prevention Conference '02, Peterborough, Ontario, October 2002. Fragility Fractures in Older Adults.

**Bogoch ER:** The Osteoporosis Society of Canada Peterborough Chapter, Lindsay, Ontario, October 2002. Fragility Fractures in Older Adults.

**Bogoch ER:** Wood Professor Lecturer, University of Calgary, Calgary, Alberta, April 2003. My Aching Hip.... Today's medical / surgical management.

**Bogoch ER:** Canadian Arthritis Network Special Research Initiative in OA Workshop, Calgary, Alberta, September 2002. Orthopaedic approaches to the management of OA.

**Daniels TR:** University of Saskatchewan, Orthopaedic Rounds, Saskatoon, Saskatchewan, July 2002. 1) Ankle arthrodesis - Gait analysis and functional outcomes; 2) Management of stage II posterior tibial tendon dysfunction.

**Daniels TR:** COA - Instructional course lecture, Toronto, Ontario, June 2003. 1) Arthroscopic debridement and mosaicplasty of talo-osteochondral lesions; 2) Moderator for "Ankle Arthritis".

**Daniels TR:** New Zealand Continual Education Meeting, Taupo, New Zealand, May 2003. 1) Management of osteochondral lesion of talus; 2) Os calcis osteotomy for posterior tibial tendon dysfunction; 3) Management of recurrent ankle and subtalar instability; 4) Rheumatoid forefoot reconstruction; 5) Management of ankle arthritis - Current concept; 6) Late reconstruction of tarsometatarsal injuries; 7) Management of adult club foot (complications following correction in infancy).

**Daniels TR:** Canadian Orthopaedic Foot and Ankle Society Annual Symposium, Simon Fraser University at Harbour Centre, Vancouver, British Columbia, April 2003. 1) Surgical treatment of the ulcerated and charcot foot; 2) Acute management of midfoot fracture dislocations.

**Daniels TR:** Wound Care Conference, St. Michael's Hospital, Toronto, Ontario, March 2003. Acute care of diabetics admitted to hospital: Indications for surgery.

**Daniels TR:** Canadian Orthopaedic Foot and Ankle Society Symposium, Vancouver, British Columbia, April 2003. Ankle biomechanics and gait analysis -- Zimmer Speaker.

**Daniels TR:** St Michael's Hospital Medical Imaging In-Service Lecture, Toronto, Ontario, October 2002. Radiological views of the foot and ankle: Standing views, hindfoot views, etc.

**Daniels TR:** St. Michael's Hospital in partnership with Smith & Nephew Canada - Wound Care Internship Program, Toronto, Ontario, February 2003. The neuropathic foot: Surgical management.

**McKee MD:** AO Course - Advanced controversies in fracture care, Toronto, Ontario, November 2002. 1) Humeral shaft fractures 2) Fracture-dislocation of the elbow 3) Biologics in orthopaedic trauma 4) Upper extremity case discussions.

**McKee MD:** Emerging Trends - Orthopaedic Symposium, Whistler 2003, Whistler, British Columbia, March 2003. 1) TEA for supracondylar fracture 2) Elbow fracture-dislocations 3) Bone substitutes - when and how 4) External fixator for plafond fractures.

**McKee MD:** AO North America Visiting Professor, University of Saskatchewan, Saskatoon, Saskatchewan, January 2003. 1) Distal biceps tendon ruptures 2) Terrible triad of the elbow 3) Bone substitutes 4) Vascularized fibular grafts for AVN of the hip.

**McKee MD:** Surgical Advances in Trauma, Deerhurst, Ontario, June 2003. 1) Fractures of the distal humerus 2) The use of biological osteoinductive materials.

**McKee MD:** 17th Annual Vail Orthopaedic Symposium, Vail, Colorado, January 2003. 1. Biceps tendon ruptures 2. TEA for supracondylar humeral fractures 3. Debate: Scaphoid fractures ORIF 4. Scaphoid fractures: classification and natural history 5. Bennett's fracture: How I treat it.

**McKee MD:** Fracture Forum, Beaver Creek, Colorado, January 2003. Debate: Synthetic bone graft substitutes.

**McKee MD:** 2002 OTA Residents Basic Fracture Course, Toronto, October 2002. Fractures of the humeral shaft.

**McKee MD:** Annual Meeting of the Newfoundland and Labrador Orthopaedic Society, Port Blanchford, Newfoundland, September 2002. Royal College Visiting Professor.

**McKee MD:** Orthopaedic Trauma Association Annual Meeting, Toronto, October 2002. Symposium: Complex Elbow Injuries.

**McKee MD:** 8th meeting of the ISFR, Toronto, October 2002. Trauma applications of BMP- a symposium.

**Schemitsch EH:** 17th Annual Vail Orthopaedic Symposium, Vail, Colorado, January 2003. 1. Adult Supracondylar Humerus Fractures: ORIF. 2. Keynote address: Forearm function and biomechanics. 3. Plating of humeral shaft fractures is better than IM fixation.

**Schemitsch EH:** Ecuador Society of Orthopaedics and Traumatology (Visiting Professor), Quito, Ecuador, November 2002. 1. Current concepts in the treatment of open tibial fractures. 2. Nailing versus plating of humeral shaft fractures. 3. Retrograde nailing of femoral fractures. 4. Periprosthetic femur fractures. 5. Current concepts in the treatment of elbow trauma. 6. Is there anything new in the treatment of femur fractures.

**Schemitsch EH:** Joint and Bone Preservation Surgery of the Hip., Montreal, Quebec, June 2003. 1. Intracapsular fractures of the proximal femur: head and neck fractures. 2. THA after free vascularized fibular graft.

**Schemitsch EH:** AO Advanced Fracture Course, Toronto, Ontario, November 2002. 1. Is there a role of plating of tibial shaft fractures.

**Schemitsch EH:** AO Basic Fracture Course, Toronto, Ontario, November 2002. 1. Moderator 2. Bone: Response to fracture and implant. 3. Diaphyseal fractures: Principles of management.



**Schemitsch EH:** Orthopaedic Trauma Association, Toronto, Ontario, October 2002. 1. Moderator 2. Symposium: Fracture healing biological supplementation and nonunions. 3. Symposium: Clinical Research Advisory Panel.

**Schemitsch EH:** SICOT Annual Meeting. Instructional Course, San Diego, California, August 2002. 1. Subtrochanteric fractures: Reconstruction nailing. 2. Subcapital fractures: Replacement.

**Schemitsch EH:** Contemporary and Future Concepts of Total Hip and Knee Arthroplasty, Whistler, British Columbia, February 2003. 1. Surface replacement THA-What a great idea. 2. Extensively porous coated stems. 3. Modularity in TKR - Friend or Foe?

**Schemitsch EH:** Surgical Advances in Total Hip, Knee and Trauma., Deerhurst, Ontario, June 2003. 1. Trauma Co-Chairperson. 2. Retrograde Nailing of the distal femur. 3. Open tibial fractures. 4. Trauma and Arthroplasty (session moderator). The case of ceramic on ceramic in the 50-year-old requiring THA.

**Schemitsch EH:** Emerging Trends Whistler 2003 Orthopaedic Symposium Lower Extremity Trauma Update., Whistler, British Columbia, February 2003. 1. Antegrade vs retrograde femoral nailing. 2. Retrograde femoral nailing: Treatment of choice in supracondylar femur fractures.

**Schemitsch EH:** International Society for Fracture Repair, Toronto, Ontario, October 2002. 1. Moderator 2. Symposium: T2 Nailing Workshop.

**Schemitsch EH:** AAOS Annual Meeting., New Orleans, Louisiana, February 2003. Instructional Course. 1. Tibial shaft fractures update Part II: Challenges, complications and management of tibial shaft fractures.

**Waddell JP:** SICOT – Association for the Rational Treatment of Fractures Program (1) Moderator: Femoral Fracture Session (2) Reduction & Fixation of Femoral Neck Fractures. San Diego, California, August 27, 2002.

**Waddell JP:** SICOT – CURRENT TRENDS SESSION – Subtrochanteric Hip Fractures (Chairperson). San Diego, California, August 28 (Chairperson).

**Waddell JP:** Bone & Joint Decade Annual Meeting of Network Coordinators. Total Hip Replacement. Rio De Janeiro, Brazil, September 14, 2002.

**Waddell JP:** Hip 2002. Hip Pain With or Without Total Hip Arthroplasty – Moderator. Toulouse, France, October 2, 2002.

**Waddell JP:** Hip 2002. Round Table “Perioperative and Early Complications of Total Hip Arthroplasty” – Thrombosis and Pulmonary Embolism. Toulouse, France, October 4, 2002.

**Waddell JP:** 8<sup>th</sup> Meeting of the International Society for Fracture Repair. Breakout Session “Anticoagulation and Trauma: When Is It Appropriate?” Toronto, Ontario, October 10, 2002.

**Waddell JP:** Orthopaedic Trauma Association 2002 Resident’s Basic Fracture Course. Closed Reduction and Treatment of Common Fractures – Principles. Toronto, Ontario, October 10, 2002.

**Waddell JP:** American Academy of Orthopaedic Surgeons. Instructional Course Lecture – Rotational Pelvic Osteotomies for Symptomatic Dysplasia and Perthes in Adults: Indications and Surgical Techniques. New Orleans, Louisiana, February 6, 2003.

**Waddell JP:** 3<sup>rd</sup> Combined Arthroplasty and Knee Surgery Congress. (1) Cemented vs. Cementless Cup Study. (2) Cementless Primary and Revision Hip Replacements (presentation and hands-on workshop). (3) Management of Periprosthetic Fractures Following Total Hip Replacement. Drakensberg, South Africa, April 10, 2003.

**Waddell JP:** 3<sup>rd</sup> Combined Arthroplasty and Knee Surgery Congress. (1) The Use of Reconstruction Rings in the Management of Acetabular Defects. Drakensberg, South Africa, April 11, 2003. (2) Total Hip Replacement Following Pelvic Osteotomy. Drakensberg, South Africa, April 10, 2003.

**Waddell JP:** EFORT (European Federation of National Associations of Orthopaedics & Traumatology) – Specialty Day. Plating Humeral Shaft Fractures. Helsinki, Finland, June 8, 2003.

**Waddell JP:** 2<sup>nd</sup> Symposium on Joint and Bone Preserving Surgery of the Hip in Conjunction with the 2<sup>nd</sup> International Conference on Metal-Metal Hip Prostheses: Past Performance and Future Directions. Total Hip Replacement Following Pelvic Osteotomy. Montreal, Quebec, June 20, 2003.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

A multicenter prospective randomized trial of conservative treatment vs plate fixation for displaced fractures of the clavicular shaft. *McKee MD, Schemitsch EH: University of Toronto, Division of Orthopaedic Surgery Research Committee.* (\$10,000 2001 - 2002).

A multicenter prospective randomized trial of conservative treatment vs. operative plate fixation for displaced fractures of the clavicular shaft. *McKee MD, Schemitsch EH: Canadian Orthopaedic Trauma Society: Orthopaedic Trauma Association* (\$30,000 2001 - 2003).

A multicenter prospective randomized trial of open reduction and internal fixation vs. total elbow arthroplasty for severe fractures of the distal humerus in elderly patients. *McKee MD, Schemitsch EH: Canadian Orthopaedic Trauma Society, Orthopaedic Trauma Association* (\$30,000 2001 - 2003).

A randomized, prospective clinical trial of arthroplasty versus internal fixation for comminuted fractures of the distal humerus in elderly patients. *McKee MD, Canadian Orthopaedic Trauma Society: Zimmer Canada Ltd.* (\$20,000 2001 - 2003).

A randomized, prospective clinical trial of operative versus conservative treatment for displaced mid-shaft fractures of the clavicle. *McKee MD, Canadian Orthopaedic Trauma Society: Orthopaedic Trauma Association* (\$30,000 2001 - 2003).

An in-vivo evaluation of graft materials using a canine metaphyseal defect model. *Schemitsch EH: Stryker Howmedica Osteonics* (\$199,000 2001 - 2003).

Clinically important venous thromboembolism following lower extremity fractures: Epidemiology and prevention. *Selby R, Geerts W, Kreder H, Oh P, Szalai S, Hamilton P, Crowther M, Schemitsch EH, McKee MD: Canadian Institutes of Health Research/Industry Pharmacia* (\$66,679 2001 - 2003).

How are you now? Testing a model of recovery from patient's perspective one year after a traumatic fracture of an extremity. *Beaton D, Schemitsch EH, Franche RL, Gignac M, Kreder H, Davis A: Canadian Institutes of Health Research* (\$75,000 2002).

Identification of fragility fracture patients in two Fracture Clinics of St. Michael's Hospital. *Bogoch ER, Josse R, Murray T: Merck Frosst Canada Inc* (\$50,000 2002 - 2003).

Immunoassays and imaging for the analysis of synthesis and degradation of cartilage in vitro and in vivo. *Poole AR, Bogoch E, Cruz T, Fitzcharles MA, Hartmann N, Keystone, Laverty S, Menard H, Mort J, St-Pierre Y: Canadian Arthritis Network* (\$27,000 1999 - 2003).

Insulin-like growth factors modulate fracture healing following intramedullary reaming. *Bhandari M, Schemitsch EH: Regional Medical Associates* (\$4,300 2001 - 2002).

Integrated Post-Fracture Care. *Susan Jaglal, Hawker G, McIsaac W, Davis D, Carroll J, Jaakkimainen L, Cadarette S, Bogoch E: Ontario Women's Health Council* (\$192,635 2002).

Martin Family Centre for Arthritis Care Research. *Bogoch ER, Shupak R, Johnstone B: Martin Family* (\$500,000 2000 - 2005).

New quantitative imaging techniques for arthritis. *Foster S, Bogoch E, Buschmann M, Kirkley A, Holdsworth D, Poole AR, Webber C: Canadian Arthritis Network* (\$27,000 1999 - 2003).

Ontario Orthopaedic Association, Prevention of Osteoporotic Fragility Fractures. *Bogoch ER: Procter & Gamble Pharmaceuticals* (\$165,000 2001 - 2003).

Osteoclastic Resorption in Inflammatory Arthritis: Mechanisms and Pharmacological Regulation. *Dixon J, Bogoch E, de Brum-Fernandes A, Heersche J, Sims S: Canadian Arthritis Network* (\$27,000 1998 - 2003).

Osteoclastic Resorption in inflammatory arthritis: Mechanisms and Pharmacological regulation (Project code 01-CEL-08 renewal). *Bogoch ER, Sims S, Dixon J, Heersche J, De Brum Fernandes A: Canadian Arthritis Network (CAN)* (\$16,500 2001 - 2002).

Outcome following experimental production of pulmonary fat embolism. *Schemitsch EH: University of Toronto Research Committee* (\$12,500 2003 - 2004).

Pilot study for a randomized controlled trial of standardized arthroscopic debridement protocol (SADP) versus total knee arthroplasty (TKA) for advanced knee osteoarthritis. *Mahomed N, Schemitsch EH, University of Toronto, Arthroplasty Committee: University of Toronto, Division of Orthopaedic Surgery Research Committee.* (\$10,000 2001 - 2002).



Predictor of disability outcomes following revision total knee arthroplasty. *Davis A, Mahomed NN, Gross AE, Szalai J, Schemitsch EH, Kreder HJ, MacDonald SJ, Gignac MAM, Garbuz D, Sekundiak T, Bogoch ER, Davey JR: Canadian Institute for Health Research (CIHR)* (\$68,365 2001 - 2004).

Predictors of disability outcomes following revision total knee arthroplasty. *Davis A, Mahomed N, Gross A, Szalai J, Schemitsch EH, Kreder H, MacDonald S, Gignac M, Garbuz D, Sekundiak T, Bogoch E, Davey JR: Canadian Institutes of Health Research* (\$68,000 2001 - 2003).

Predictors of outcome following revision total hip arthroplasty. *Davis A, Gross AE, Davey JR, Mahomed N, Szalai J, Schemitsch EH, Badley EM, Kreder HJ, Saleh KJ, Hutchison C: Arthritis Society* (\$78,024 2001 - 2003).

Prospective randomized trial of indomethacin versus control in prevention of functionally disabling ectopic bone formation following musculoskeletal injury in association with traumatic brain injury. *Lundon K, McKee MD, Schemitsch EH, Baker A: PSI Foundation* (\$87,000 2001 - 2003).

Prospective randomized clinical study to evaluate the effects of less invasive stabilization plating techniques in distal femoral fractures. *Leighton R, O'Brien P, Buckley R, McKee MD, Schemitsch EH, Stephen DJ, Sanders D, McCormack D: AO Foundation and Synthes Canada* (\$294,400 2002 - 2004).

Randomized trial of reamed versus non reamed nails in tibial fractures. *Guyatt G, Bhandari M, Walter S, Leighton R, Kreder H, Schemitsch EH, O'Brien B: Canadian Institutes of Health Research* (\$710,000 2001 - 2003).

Randomized trial of reamed versus non reamed nails in tibial fractures. *Guyatt G, Bhandari M, Walter S, Leighton R, Kreder H, Schemitsch EH, O'Brien B: Canadian Orthopaedic Trauma Study: Orthopaedic Trauma Association.* (\$75,000 2002 - 2003).

Study of prospectively evaluate reamed intramedullary nails in tibial fractures. A multi-centre randomized trial. *Swiontkowski M, Guyatt G, Bhandari M, Tornetta P, Schemitsch EH and the Sprint Study Group: NIH* (\$1,500,000 2002 - 2005).

Technical considerations in intramedullary nailing of tibial shaft fractures. *Bhandari M, Guyatt G, Swiontkowski M, Tornetta P, Schemitsch EH: Canadian Orthopaedic Foundation* (\$2,100 2001 - 2002).

The effect of low pressure lavage with various irrigating solutions on contaminated tibiae. *Schemitsch EH, Bhandari M: University of Toronto Research Committee* (\$10,000 2002 - 2003).

The effect of pulsatile irrigation on cortical bone blood flow and fracture healing: A canine study using laser doppler flowmetry. *Schemitsch EH, Bhandari M: University of Toronto, Division of Orthopaedic Surgery Research Committee* (\$10,000 2001 - 2002).

The role of pressure irrigation in modulating cytokines. *Bhandari M, Schemitsch EH: Canadian Orthopaedic Foundation* (\$2,700 2001 - 2002).

## Honours Received

**Daniels TR:** Nomination as International Scientist of the Year 2003 (International Biographical Centre Cambridge, England), June 2003.

**McKee MD:** "Highlight Paper" OTA Annual Meeting 2002 - "The effect of rhBMP-7 on nhealing of open tibial shaft fractures: a multi-center RCT", December 2002.

**McKee MD:** Edwin G. Bovill Award - Most Outstanding Papaer - OTA Specialty Day 2003 - "The effect of rhBMP-7 on nhealing of open tibial shaft fractures: a multi-center RCT", February 2003.

**McKee MD:** Robert B. Salter Award in Excellence for Teaching, October 2002.

**Schemitsch EH:** Best Poster, International Society for Fracture Repair, Toronto., October 2002.

**Schemitsch EH:** Orthopaedic Trauma Association Annual Meeting Highlight Paper, October 2002.

## Division of Urology

**Dr. R.J.D. Honey - Associate Professor (Division Head)**

**Dr. A.G. Keresteci - Associate Professor**

**Dr. KT Pace - Assistant Professor**

**Dr. R.J. Stewart - Assistant Professor**

## Publications

**Bilasem S, Pace KT, Dyer S, Honey RJD:** Erect and supine radiographs to assess effectiveness of SWL for stones in a caliceal diverticulum or dilated calix. *Journal Of Endourology*: February 2003: 17(1): pp 7 - 9.

**Bilasem S, Pace KT, Dyer SJ, Honey RJ:** Erect and supine x-rays to assess the effectiveness of SWL for stones in a calyceal diverticulum or dilated calyx. *Journal of Endourology*: January 2003: 17(1): pp 7-9.

**Pace KT, Dyer SJ, Phan V, Poulin EC, Schlachta CM, Mamazza J, Stewart RJ, Honey, RJ:** Laparoscopic vs open donor nephrectomy: a cost-utility analysis. *Surgical Endoscopy*: October 2002.

**Pace KT, Dyer S, Harju M, Honey RJ:** A randomized, double-blinded comparison of side and end-hole versus end-hole ureteral catheters. *J Endourol*: January 2003.

**Pace KT, Dyer SJ, Phan V, Pouline EC, Schlachta CM, Mamazza J, Stewart RT, Honey RJ:** Laparoscopic versus open donor nephrectomy: a cost-utility analysis of the initial experience at a tertiary-care center. *Journal of Endourology*: September 2002: 16(7): pp 495-508.

**Pace KT, Dyer SJ, Stewart RJ, Honey RJ, Poulin EC, Schlachta CM, Mamazza J:** Health-related quality of life after laparoscopic and open nephrectomy. *Surgical Endoscopy*: September 2002.

**Pace KT, Dyer SJ, Weir MJ, Honey RJ:** Health-related quality of life after laparoscopic and open nephrectomy. *Surgical Endoscopy*: October 2002.

**Pace KT, Honey RJ:** Unique methodological issues facing randomized controlled trial of endourologic procedures. *Journal of Endourology*: December 2002: 16: pp 457.

**Pace KT, Honey RJ:** Unique methodological issues facing randomized controlled trials of endourologic procedures. *Journal of Endourology*: November 2002: 16(7): pp 457-63.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

Evaluation and development of a computerized endourology simulator. *Honey J, Pace K: Cook (Canada) Inc.* (\$75,000 2001 - 2004).

Laparoscopic versus open donor nephrectomy: A prospective cohort analysis. *D'A RJ, Honey J, Pace K, Stewart RJ, Poulin EC, Schlacta C, Mamazza J: Kidney Foundation of Canada* (\$104,000 2001 - 2003).

Laparoscopic versus open donor nephrectomy: A prospective cohort study of donor and graft outcomes. *Pace KT, Schlachta C, Poulin E, Zaltzman J, McFarlane P, Prasad R, Honey RJ: Kidney Foundation of Canada Biomedical Research Grant* (\$108,000 2001 - 2003).

Laparoscopic vs Open Donor Nephrectomy: A prospective Cohort Study of Donor and Graft Outcomes. *Honey RJ, Pace KT, Stewart RS, Mamazza J, Poulin E, Schlachta C, Zaltzman J, McFarlane P, Prasad R: Kidney Foundation of Canada, Biomedical Research Grant* (\$93,975 2001 - 2003).

## Honours Received

**Honey RJD:** Best Poster: "Shock wave lithotripsy: A randomized single-blinded trial to compare shock wave frequencies of 60 and 120 hertz". American Urological Association Annual Meeting, Chicago, April 2003.

**Honey RJD:** Best Poster: "Shock wave lithotripsy: Interim results for a randomized single-blinded trial of compare shock wave frequencies of 60 and 120 hertz" Societie International d'Urologie Meeting, Stockholm, September 2002.

## **Division Of Plastic Surgery**

**Dr. J. L. Mahoney – Associate Professor (Division Head)**

**Dr. G. Papsin - Lecturer**

**Dr. W. Peters – Professor**



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## **Division Of Vascular Surgery**

**Dr. F.M. Ameli - Associate Professor (Division Head)**

**Dr. A.G. Lossing - Associate Professor**

## **Publications**

**Kapral M, Wang H, Austin PC, Fang J, Kucey DS, Bowyer B, Tu JV:** Gender Differences in Carotid Endarterectomy Outcomes: Results from the Ontario Carotid Endarterectomy Registry. *Stroke*: May 2003; 34(5): pp 1120-05.

## **Invited Visits to other Hospitals/Universities**

**Lossing AG:** Windsor Academy of Surgery, Windsor, Ontario, November 2002. Endoluminal graft abdominal aortic aneurysm.



Dr. Robin Richards  
Surgeon-in-Chief

## Heads of Divisions

**Dr. S. Fremes – Cardiac Surgery**

**Dr. A. Smith – General Surgery**

**Dr. M. Schwartz – Neurosurgery**

**Dr. T. Axelrod – Orthopaedic Surgery**

**Dr. J. Semple – Plastic Surgery**

**Dr. L. Klotz – Urology**

**Dr. R. Maggisano – Vascular Surgery**

The Department had an eventful and productive academic year. The Hospital welcomed a new CEO, Mr. Leo Steven, in the early part of the year. The Hospital requested and underwent a ministerial operational review, with a subsequent increase in the base budget of the Hospital. The Hospital continues to operate at three sites with many Department members, particularly in the Divisions of General Surgery, Plastic Surgery, Orthopaedic Surgery and Urology active, at more than one site.



## New Staff

The Department welcomed five new staff members during the academic year. Dr. Gideon Cohen, who received the Fellow of the Year award at the Cleveland Clinic, joined the Division of Cardiac Surgery. Dr. Cohen holds a Ph.D. and is involved in clinical studies of valvular heart surgery. Dr. Cohen is also developing a program of minimally invasive valve surgery. Dr. Robert Nam, 2002 winner of the Canadian Urological Association Young Investigators Award, was welcomed to the Division of Urology. Dr. Nam holds an M.Sc. in Clinical Epidemiology and has an interest in the genetic basis of prostate cancer progression. Dr. Nam has established a laboratory and a clinical practice specializing in urologic oncology. Dr. Farhad Pirouzmand joined the Division of Neurosurgery. Dr. Pirouzmand is working towards an M.Sc. degree in Community Health and Epidemiology and was the Program Director at the University of Saskatchewan. Dr. Pirouzmand's role will be that of Surgeon-Teacher and he will have a research interest in epidemiology and orbital surgery. Dr. Sandro Rizoli was welcomed into the Division of General Surgery. Dr. Rizoli holds a Ph.D. and has initiated a clinical and laboratory research program on the role of hypertonic saline in fluid resuscitation. Dr. Rizoli is cross-appointed to the Department of Critical Care Medicine. Dr. Lorraine Tremblay was welcomed into the Division of General Surgery. Dr. Tremblay holds a Ph.D. and has a clinical and laboratory interest, in acute lung injury and critical care basic science research. Dr. Tremblay has established a laboratory research program and is cross- appointed to the Department of Critical Care Medicine.

## Appointments and Promotions

Dr. Sherif Hanna retired as Head of the Division of General Surgery, having demonstrated excellent leadership and recruitment skills. In January, Dr. Andrew Smith was appointed Head of the Division of General Surgery and the Divisional Director of Process and Quality Improvement. Dr. David Stephen was appointed Medical Director of the Orthopaedic Trauma Service and continues in his role as Chief Examiner of Orthopaedic Surgery for the Royal College of Physicians and Surgeons of Canada.

Dr. Lesley Carr was promoted to Assistant Professor in the Division of Urology. Dr. Carr continues her work directing the Women's Pelvic Health Centre. Dr. Calvin Law was promoted to Assistant Professor. Dr. Law received his Masters of Public Health Diploma from the School of Public Health at Harvard University.



## Educational Activity and Awards

Three Sunnybrook surgeons (Drs. R. Kodama, L. Klotz and P. Binhammer) were amongst the top ten post-graduate teachers according to the University Departmental TES scores. Another four staff members (Drs. C. Law, R. Kodama, G. Hiraki and S. Herschorn) were amongst the top ten clerkship teachers. Dr. Calvin Law received a Clinical Teaching award from the Peters-Boyd Academy. Dr. Midha directed the Second Annual University of Toronto Peripheral Nerve Symposium. Dr. Paul Binhammer won the Freiberg Teaching Excellence Award of the University Division of Plastic Surgery. Dr. Joel Fish won the Bruce Tovee Teaching Award. Dr. John Murnaghan was elected President of the Association for Surgical Education. Drs. Mark Angelini, Aaron Blumenfeld, Tony Finelli and William Andrade received A.W. Harrison awards, for excellence in teaching. Dr. Andrew Smith received an Excellence in Continuing Education Teaching award, from the Peters-Boyd Academy. Dr. Ron Kodama, once again, won the A.W. Bruce Undergraduate Teaching Award, for the Division of Urology. Dr. Robert Nam received the PGY – 5 Surgical Teaching Award, for the University Division of Urology.

Drs. Andy Smith, Claire Holloway, Lavina Lickley, Ted Ross, Peter Chu, Fred Brenneman, Lorraine Tremblay, Sandro Rizoli and Dr. Calvin Law participated in the Update in General Surgery 2003. The 19<sup>th</sup> Annual Upper Extremity Update, co-chaired by Dr. Richards, unfortunately had to be cancelled due to SARS. Dr. Ted Ross continued to direct the Surgical Clerkship and completed the development of 30 web-based seminars for the Phase I clerkship.

## Research Activity and Awards

Dr. Martin Barkin, an Emeritus member of the Department, completed a term as the inaugural Chair of the Amalgamated Institution. A University of Toronto Research Chair was created in honour of Dr. Barkin to support urologic research and education. Dr. Sender Herschorn will be the first holder of the Dr. Martin Barkin Chair. A Chair in Orthopaedic Clinical Epidemiology was established by the Orthopaedic and Arthritic Institute. Dr. Hans Kreder was appointed to this Chair and also won the Edmond G. Bovill award, for the best paper presented at the Annual Orthopaedic Trauma Association meeting.

Dr. Calvin Law received a Canadian Cancer Society research grant for his project on a population-based study, of the outcomes of transanal resection for rectal cancer. Dr. Law also received research funding from The National Cancer Institute of Canada (NCIC). Dr. Raj Midha received funding for the Canadian Institutes of Health Research (CIHR), the National Science and Engineering Research Council (NSERC) and the Physicians' Services Incorporated Foundation (PSI), for his studies of nerve grafts. Drs. Semple, Fish and Midha continued their work in advanced regenerative tissue engineering, a project supported by the Ontario Research Development Challenge Fund. Drs. Lavina Lickley and Claire Holloway continued their nationally-funded breast cancer research.

Dr. Laurence Klotz received multiple grants from the Ontario Cancer Research Network and the Prostate Cancer Research Foundation of Canada, for his research in the field of prostate cancer. Dr. Klotz continued his work as Editor for the Canadian Journal of Urology and led National and International genitourinary oncology research organizations. Drs. Andy Smith and Calvin Law received funding from the Ontario Cancer Research Network and the Change Foundation, to improve the colon cancer staging through a multimodal knowledge translation program. Dr. Geoff Fernie received CIHR funding for a study of wheelchair mobility and long-term care residents. Dr. Fernie also received funding from CIHR for a "Robo-Nurse" – a new concept for helping caregivers lift patients. Dr. Kucey received a (PSI) Foundation grant for a study on ruptured aortic aneurysms. Dr. Kucey supervised M.Sc. student Dr. Andrew Dueck, in his study of the incidence and outcome of ruptured aneurysms in Ontario.

Dr. Oleh Antonyshyn received the University Divisional Award in Excellence in Promotion of Research Award. Dr. Mark Pelletier received Dean's funding, for his funding of marrow stromal cell transmigration post myocardial infarction. Dr. Steve Fremes received a five-year CIHR grant for his multicentre project on radial artery patency.

## Other Awards and Activity

Drs. Lavina Lickley and Glen Taylor received Marvin Tile awards for outstanding contributions to the Department. Drs. Massey Beveridge and Peter Chu remained active in International Surgery. Drs. Fred Brenneman, John Cameron and Sherif Hanna continued their leadership in the Institution of Trauma, Musculoskeletal and Surgical Oncology Programs Respectively. Dr. Cecil Rorabeck reviewed the Division of Orthopaedic Surgery and Dr. Renn Holness, reviewed the Division of Neurosurgery.

Dr. John Cameron completed his term as Chair of the Medical Advisory Committee. Dr. Richard Holtby was elected President of the Medical-Dental-Midwifery Staff Association. Drs. Hamilton-Hall, Robin Richards and Marvin Tile, joined the Board of the Sunnybrook and Women's Foundation, upon the amalgamation of the Foundations of the legacy Institutions. Dr. Claire Holloway sat on the Board of the Women's College Ambulatory Care Centre. Dr. R. Maggisano was active on the provincial Alternate Funding Plan (AFP) Steering Group. At the end of the year the Department voted to join Phase I of the AFP proposed by the Ministry of Health and Long-Term Care.

## Conclusion

Sunnybrook and Women's College Health Sciences Centre played a major leadership role in the management of the SARS I epidemic, caring for approximately one-half of the patients admitted in the Province. Despite this added stress, surgical activity continued and at the conclusion of the year, the Department was fully engaged in an Institutional focused strategic planning exercise. The Department and the Institution look forward to capital redevelopment and the continued opportunity to play a major role in providing surgical services to patients in the Province with clinical problems relating to trauma, burns, cancer, cardiac, musculoskeletal and neural disorders. In addition the Department endeavours to make a substantive and abiding contribution to the academic life of our University.

# Division of Cardiac Surgery

**Dr. G.T. Christakis - Associate Professor**

**Dr. G. Cohen - Assistant Professor**

**Dr. B.S. Goldman - Professor**

**Dr. S.E. Fremes – Professor (Division Head)**

**Dr. M.P. Pelletier - Assistant Professor**

## Publications

**Abramov D, Tamariz M, Fremes S, Tobe S, Christakis G, Guru V, Goldman B:** Impact of Preoperative Renal Dysfunction on Cardiac Surgery Results. *Asian Cardiovascular Thoracic Annals*: March 2003; 11(1): pp 42-7.

**Beimers L; Kreder HJ, Gregory MP Berry K, David JG, Stephen JG, Schemitsch EH, McKee M, Jaglal S:** Subcapital hip fractures: the Garden classification should be replaced, not collapsed. *Canadian Journal of Surgery*: December 2002; 45, No. 6: pp 411-414.

**Fazel S, Mallidi HR, Pelletier MP, Sever JY, Christakis GT, Goldman BS, Fremes SE:** Radial Artery Use is Safe in Patients with Moderate to Severe Left Ventricular Dysfunction. *Annals of Thoracic Surgery* 2003: December 2002; 75: pp 1414-21.

**Fazel S, Pelletier MP, Goldman BS:** Substrate enhancement in cardioplegia. In: *Modern Myocardial Protection*. (Salerno T, Ricci M, eds). Blackwell Publishing, 2003.

**Mallidi HR, Sever J, Tamariz M, Singh S, Hanayama N, Christakis GT, Bhatnagar G, Cutrara CA, Goldman BS, Fremes SE:** The short-term and long-term effects of warm or tepid cardioplegia. *Journal of Thoracic and Cardiovascular Surgery* 2003: March 2003; 125(3): pp 711-20.

**Nadareishvili ZG; Beletsky V; Black SE; Fremes SE; Freedman M; Jurzman D; Leach L; Norris JW:** Is cerebral microembolism in mechanical prosthetic heart valves clinically relevant? *Journal of Neuroimaging*: October 2002; 12(4): pp 310-5.

**Rubens FD; Ruel M; Fremes SE:** A new and simplified method for coronary and graft imaging during CABG. *Heart Surgery Forum*: September 2002; 5(2): pp 141-4.

**Fazel S, Mallidi RH, Pelletier MP, Sever JY, Christakis JT, Goldman BS, and Fremes SE:** Radial Artery Use is Safe in Patients with Moderate to Severe Left Ventricular Dysfunction. *Annals of Thoracic Surgery*: June 2003; 75: pp 1414-21.

**Tracey JF, Colella RN, Turner S, Bernard RS, Goldman S:** So You're having Heart Bypass Surgery (Helen Byrt, Jenny Lass, eds). Script Medical Press, Inc., Toronto: 2003: pp 164.

## Invited Visits to other Hospitals/Universities

**Cohen G:** New Era Cardiac Technologies Meeting, Laguna Beach, California, January 2003. Indocyanine green laser angiography: A novel method of patency assessment.

**Cohen G:** Cardiothoracic Techniques and Technologies, Miami, Florida, March 2003. Intraoperative patency assessment using indocyanine green laser angiography.

**Cohen G:** American Association of Thoracic Surgeons Annual Meeting, Boston, Massachusetts, May 2003. Late outcomes in patients with uncorrected mild-moderate mitral regurgitation at the time of isolated coronary artery bypass grafting.

**Fremes SE:** Sunnybrook & Women's College Health Sciences Centre, Toronto, Ontario, September 2002. Contemporary Cardiac Care.

**Goldman BS:** CTT Annual Meeting, Miami Beach, Florida, March 2003. Indocyanine Green Laser Coronary Angiography: A Novel Method of Intraoperative Patency Assessment.

**Goldman BS:** Fifth International Symposium on Redo Cardiac Surgery in Adults, Boston, Mass, May 2003. Redo Coronary Artery Bypass: Disciplined Approach to Improve Outcomes.

**Pelletier MP:** New Era Cardiac Technologies Meeting, Laguna Beach, California, January 2003. Indocyanine Green Laser Angiography: A novel method of patency assessment.

**Pelletier MP:** Fontainebleau Hilton Hotel, Miami Beach, Florida, March 2003. Indocyanine Green Laser Coronary Angiography: A Novel Method of Intraoperative Patency Assessment.

**Pelletier MP:** American Association of Thoracic Surgeons Annual Meeting, Boston, Massachusetts, May 2003. Late outcomes in patients with uncorrected mild-moderate mitral regurgitation at the time of isolated coronary artery bypass grafting.

**Pelletier MP:** McGill Stikeman Cardiac Surgery Research Day, Montreal, Quebec, May 2003. Late outcomes in patients with uncorrected mild-moderate mitral regurgitation at the time of isolated coronary artery bypass grafting.

**Pelletier MP:** Young Cardiac Surgeons of Canada Meeting, Edward Lifesciences Inc., Turks and Caicos, April 2003. Surgical options for atrial fibrillation.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

A Phase III Randomized Parallel, Double-Blind, Multi-Centre, Placebo-Controlled Study of the Effects of Pexelizumab on All-Cause Mortality and Myocardial Infarction in Patients Undergoing Coronary Artery Bypass Graft (CABG) Surgery With Cardiopulmonary Bypass. *Fremes S E., Multi-Centre Collaboration: Proctor & Gamble (Quintiles) (\$170,000 2002 - 2003).*

Blood Conservation Using Antifibrinolytics: A Randomized Trial in High Risk Cardiac Surgery -- The BART Trial. *Hebert PC, Multi-Centre Study Participants (including Fremes SE): Canadian Institutes for Health Research (\$1,000,000 2002 - 2005).*

Canadian Cardiovascular Outcomes Research Team. *Tu, J, Fremes SE: CIHR - Interdisciplinary health research team (\$5,000,000 2001 - 2005).*

Imaging Research Centre For Cardiac Intervention -- IRCCI. *Rowlands J, Keep D, Burns P, Chauhan V, Cohen E, Fort S, Foster S, Fremes SE, Stewart D, Wilson B, Wright G: Canada Foundation for Innovation (\$15,000,000 2002 - 2005).*

Improving Cardiac Function and Exercise Tolerance in Patients Undergoing Coronary Artery Bypass Surgery Who Receive a Nutritional Supplement: MyoVive. *Fremes SE, Christakis GT, Goldman BS, Pelletier MP: Numico Inc, The Netherlands (\$100,000 2002 - 2003).*

Multicentre Radial Artery Patency Study: 5 Year Results. *Fremes, SE, Multi-Centre Radial Artery Study Participants: Canadian Institutes for Health Research (\$1,000,000 2002 - 2006).*

Stem Cell Chemotaxis in Acute Myocardial Infarction. *Pelletier M: Schulich Heart Program, Tanna Schulich Scholarship (\$90,000 2001 - 2004).*

Stem Cell Chemotaxis in Acute Myocardial Infarction. *Pelletier M: Research Institute, Sunnybrook and Women's College Health Sciences Centre (\$50,000 2001 - 2003).*

Surgical Treatment for Ischaemic Heart (STICH) Failure Trial. *Rao V, STICH study investigators: University Health Network/Toronto General Division (\$1 2003 - 2004).*

The EXPEDITION Trial (Na<sup>+</sup>/H<sup>+</sup> Exchange Inhibition to Prevent Events in Acute Cardiac Conditions). *Fremes, SE (site): Aventis Pharmaceuticals, Inc* (\$100,000 2001 - 2002).

Women's recovery from sternotomy (WREST) study. *King, K M, Wrest Study Co-Investigators: University of Calgary* (\$394,726 2003 - 2006).

## Honours Received

**Goldman BS:** Tanya Shulich Award (Clinical Research), June 2003.

**Goldman BS:** Teaching Award in Cardiac Surgery, October 2002.

**Pelletier MP:** Clinical Integrative Biology, Research Summer Studentship Program, July 2002.

**Pelletier MP:** Rx&D Health Research Foundation, supervisor for Varun Kapila, \$5, 048, June 2003.

**Pelletier MP:** Senior Author, C. Walton Lellehei Resident Forum finalist, May 2003.

## Division of General Surgery

**Dr. F.D. Brenneman - Assistant Professor**  
**Dr. P.T. Chu - Assistant Professor**  
**Dr. S.S. Hanna – Assistant Professor**  
**Dr. G.Y. Hiraki - Assistant Professor**  
**Dr. C.M.B. Holloway - Assistant Professor**  
**Dr. C.H.L. Law - Assistant Professor**  
**Dr. L. Lickley - Professor**  
**Dr. H.A.B. Miller - Associate Professor**  
**Dr. S. Rizoli – Assistant Professor**  
**Dr. T.M. Ross – Associate Professor**  
**Dr. A. Smith - Assistant Professor (Division Head)**  
**Dr. G.A. Taylor - Associate Professor**  
**Dr. L. Tremblay – Assistant Professor**

## Publications

- Gagliardi A, Smith A, Goel V, DePetrillo D:** Feasibility Study of Multidisciplinary Oncology Rounds by Videoconference for Surgeons in Remote Locales. *BMC Medical Informatics and Decision Making*: June 2003; 3: pp 7.
- Govindarajan, A, Ilk, L, Ahmed, N, Smith AJ:** General Surgery. In: U of T MCCQE 2003 Notes U of T 2003 Class of Medicine, Toronto: 2003: pp GS1-GS67.
- Metcalf KA, Goel V, Lickley L, Semple J, Narod SA:** Prophylactic bilateral mastectomy: patterns of practice. *Cancer*: July 2002; 95(2): pp 236-42.
- Parry NG, Rozycki GS, Feliciano DV, Tremblay L, Cava RA, Voeltz Z, Carney J:** Traumatic rupture of the urinary bladder: Is the suprapubic tube necessary? *Journal of Trauma*: January 2003; 54(3): pp 431-436.
- Rizoli SB:** Crystalloids and colloids in trauma resuscitation: a brief overview of the current debate. *Journal of Trauma*: May 2003; 54(S5): pp 82-88.
- Ross TM, Brenneman FD:** Rectovaginal Fistulas and Intraoperative Bowel Injury. In: *Female Pelvic Medicine and Reconstructive Pelvic Surgery* (Drutz HP, Herschorn S, Diamant NE, eds). Springer-Verlag, London Limited Publishers, Godalming, Surrey, UK: 2003: pp 481-491.
- Ryan MF, Hamilton P, Smith AJ, Khalifa M:** Radiologic features of pancreatic lipoma. *Canadian Association of Radiologists Journal*: February 2003; 54: pp 41-4.
- Smith AJ, Law CH, Khalifa M, Hsieh E, Wright F, Poldre P:** Multimodal CME for surgeons and pathologists improved colon cancer staging. *Journal of Cancer Education*: June 2003.
- Tien HCN, Rizoli SB:** A review of the anti-inflammatory and immunological effects of hypertonic saline resuscitation in trauma. *The Netherlands Journal of Critical Care*: April 2003; 7(3): pp 9-13.
- Tremblay L, Miatto D, Hamid Q, Govindarajan A, Slutsky AS:** Injurious ventilation induces widespread pulmonary epithelial expression of TNF $\alpha$  and IL-6 mRNA. *Critical Care Medicine*: August 2002; 30(8): pp 1693-1700.
- Tremblay LN, Feliciano DV, Rozycki GS:** Assessment of initial base deficit as a predictor of outcome: mechanism of injury does make a difference. *American Journal of Surgery*: August 2002; 68(8): pp 689-693.
- Tremblay LN, Feliciano DV, Rozycki GS:** Secondary extremity compartment syndrome. *Journal of Trauma*: November 2002; 53(5): pp 833-837.

**Vallis KA , Lickley HLA:** Local-regional control and survival in breast cancer. Oncology Exchange: July 2002: 1(1): pp 12-15.

**Warner E, Carroll JC, Heisey RE, Goel V, Meschino WS, Lickley HLA, Doan B, Chart P, Orr V, Lothian S:** Educating Women about breast cancer. An intervention for women with a family history of breast cancer. Canadian Family Physician: January 2003: 49: pp 56-63.

## Invited Visits to other Hospitals/Universities

**Chu P:** Central Surgical Association, Toronto, Ontario, March 2003. Combining Resident Teaching and International Surgery.

**Hanna SS:** Lecture to Grand Oncology Rounds at Trillium Health Centre, Mississauga General site, Mississauga, Ontario, June 2003. Advances in the management of hepatocellular carcinoma.

**Holloway CMB:** Ontario Clinical Oncology Group, Hamilton, Ontario, November 2002. Radioguided Surgery for DCIS of the Breast.

**Holloway CMB:** Roche - Presentation to Advisory Board, Toronto Ontario, October 2002. Radioguided Surgery of DCIS.

**Holloway CMB:** Surgical Oncology Network Symposium, Toronto Ontario, October 2002. Sentinel Node Biopsy for Breast Cancer.

**Ross TM:** London Convention Centre, London, Ontario, September 2002. Proctology and Management of Common Benign Colorectal Diseases-Colon Prep.

**Smith A J:** Genesis Research Foundation, Toronto, Ontario, October 2002. Colon Cancer Awareness.

**Smith A J:** Lakeridge Health Annual Oncology Conference, Toronto, Ontario, November 2002. Colon Cancer- Surgical Options.

**Smith A J:** World Ostomy Day- United Ostomy Association, Toronto, Ontario, September 2002. Colorectal Cancer Prevention.

**Smith A J:** American Association of Cancer Education, Toronto, Ontario, November 2002. MultiModal CME for Surgeons and Pathologists improved colon cancer staging.

**Smith A J:** Society of Pelvic Surgeons, Tucson, November 2002. Optimizing Staging of Colon Cancer.

**Smith A J:** Surgical Oncology Network Symposium (Cancer Care Ontario), Toronto, Ontario, October 2002. The perfect pathology report....for colorectal cancer.

## Research And Investigations

*Senior Investigator's Name Appears in Italics*

A Population Based Study of the Outcome of Surveillance Mammography after Treatment for Primary Breast Cancer.

*Paszat L, Bondy S, Coyle D, Grunfeld E, Holowaty E, Benk V, Tu D, Holloway C, Shumak R, Sawka C, Van Walraven C, Vallis K: Canadian Breast Cancer Research Initiative. (\$286,180 2000 - 2002).*

A population based study of the outcomes of transanal resection for rectal cancer. *Law C, Paszat L, Klar N, Stern H, Swallow C, Smith A: NCIC (\$172,000 2002 - 2004).*

A prospective study of intervals and delays in the diagnosis of breast and colon cancer. *Bondy S, Angus J, Benk V, Grunfeld E, Hodgson D, Holowaty E, Iscoe NA, Kim J-H J, Loblaw DAB, Paszat L, Smith AJ: CIHR (\$645,605 2002 - 2005).*

Breast Cancer Imaging and Therapeutics: Research and Clinical Opportunities. *Plewes DP, Yaffe M, Holloway CMB, Causer P, Jong R: Den Haag Foundation (\$18,100,000 2003 - 2008).*

Department of Critical Care Medicine Academic Enrichment Fund. *Tremblay L: Sunnybrook and Women's College Health Sciences Centre.* (\$10,000 2002 - 2003).

Endovascular thoracic aneurysm repair at Sunnybrook & Women's College Health Sciences Centre. *Pelletier M, Kucey D, Maggisano R: Sunnybrook & Women's College Health Sciences Centre Foundation* (\$250,000 2002 - 2004).

Identifying the Educationally Influential Oncologic Surgeons and Pathologists in Ontario Hospitals. *Smith AJ, Wright FC, Law CHL (co-investigator),: University of Toronto, Faculty of Medicine (Continuing Education)* (\$5,000 2002).

Improving Colon Cancer Staging Through a Blended Knowledge Translation Program aimed at Surgeons and Pathologists. *Smith AJ, Ryan DP, Wright FC, Law CHL: The Change Foundation* (\$100,000 2002 - 2004).

Improving colon cancer staging through a multimodal knowledge translation program aimed at surgeons and pathologists. *Smith A, Wright F, Law C, Ryan D, Stern H: Ontario Cancer Research Network* (\$246,633 2002 - 2004).

Mechanisms of modulation of the host inflammatory and immune response by mechanical ventilation. *Tremblay L: Sunnybrook Trust for Medical Research Grant* (\$22,587 2002 - 2003).

Mechanisms of modulation of the host inflammatory and immune response by mechanical ventilation. *Tremblay L: Physicians Services Incorporated Grant* (\$35,000 2002 - 2003).

Mechanisms of modulation of the host inflammatory and immune response by mechanical ventilation. Start-up funds. *Tremblay L: Sunnybrook and Women's College Health Sciences Centre* (\$100,000 2002 - 2003).

Multimodal change initiative to improve colorectal cancer staging in Ontario. *Smith AJ, Wright F, Law C, Ryan D: Change Foundation* (\$100,000 2002 - 2003).

Novel Radiopharmaceuticals for Radioguided Surgery of Ductal Carcinoma in Situ of the Breast. *Reilly RM, Holloway C, Charles Catzavelos, Jasbir Sandhu and Aaron Hendler: US Army Diagnostic and Surgical Breast Imaging Award* (\$364,410 2000 - 2003).

Novel Radiopharmaceuticals for Radioguided Surgery of Ductal Carcinoma in Situ of the Breast. *Reilly RM, Claire Holloway, Charles Catzavelos, Jasbir Sandhu, Aaron Hendler: Canadian Breast Cancer Research Initiative (CBCRI)(Declined)* (\$232,043 2000 - 2003).

Operating Funds. *Tremblay L: Sunnybrook and Women's College Health Sciences Centre, Department of General Surgery* (\$60,000 2002 - 2006).

Quality Initiative in Rectal Cancer (QIRC) Trial. *Simunovic M, Levine M, Goldsmith C, Whelan T, McLeod R, Browman G, Stern H, Riddell R, Smith A (Steering Committee): CIHR* (\$786,124 2001 - 2005).

Quantitative histopathology of breast carcinoma in situ. *Axelrod DE, Chapman JW, Miller NA, Lickley HLA, Hanna WM: New Jersey Commission on Cancer Research* (\$99,000 2001 - 2003).

Radioguided Surgery of Ductal Carcinoma in Situ of the Breast. *Reilly RM, Charles Catzavelos, Holloway C, Sandhu C: Susan G. Komen Breast Cancer Foundation. (USA) (Declined)* (\$215,386 2000 - 2003).



Sunnybrook and Women's College Health Sciences Centre-Comprehensive Multidisciplinary Breast Cancer Research Centre. *Pritchard KI, Hanna WM, Lickley HLA, Narod S, Plewes D, Sawka C, Seth A, Slingerland J, Warner E, Yaffe M, Kahn H, Wright B, Catzavelos C, Holloway C, Vargidis D, Sutherland D, Rakevitch E, Taylor G, Blondal J, Semple J, Roche K, Paszat L, Trudeau M, Bronskill M, Chart P, Burns P, Shumak R, Jong R, Berry S, Samuels T, Goel V: Canadian Foundation for Innovation and OIT (\$11,250,000 2000 - 2004).*

Ten-year breast cancer survival: at what cost in human and physical terms?: A case-control study of long-term survivors of breast cancer and their physical and functional well-being. *Trudeau ME, Blondal J, Lickley HLA, Narod S, Sawka C, Hawker G, Rubin L, Chiamvimonvat V De Boer G: National Cancer Institute of Canada (\$167,926 2001 - 2003).*

The role of angiogenesis in tumor cell invasion. *Lickley HLA, Seth A, Hanna WM, Catzavelos C: Bennett Family Foundation (\$250,000 2000 - 2005).*

## Honours Received

**Law CHL:** Peters Boyd Academy Teaching Award (Undergraduate Clinical Teaching), May 2003.

**Smith A J:** McMurrich Award, Gallie Day- for poster Microsatellite Instability occurs at low frequency in resected CRC hepatic metastases (supervisor), May 2003.

**Smith A J:** Peters-Boyd Award for Excellence in Continuing Education (SWCHSC), May 2003.

## Division of Neurosurgery

**Dr. M. Fazl - Assistant Professor**  
**Dr. D.A. Houlden - Assistant Professor**  
**Dr. R. Midha - Associate Professor**  
**Dr. D.W. Rowed - Associate Professor**  
**Dr. M.L. Schwartz – Professor (Division Head)**  
**Dr. F. Pirouzmand – Assistant Professor**

## Publications

**Anastakis DJ, Wanzel KR, Brown M, Herold J, McIlroy J, Hamstra S, Ali J, Hutchison C, Murnaghan J, Reznick R, Regehr G:** Evaluating the effectiveness of a 2-year curriculum in a surgical skills center. *American Journal of Surgery*: March 2003: 185(4): pp 378-85.

**Mahmood F, Juan MB, O'Donovan D, Antonyshyn O :** Solitary Fibrous Tumor of the Orbit. *Journal of Craniofacial Surgery*: September 2002: 13: pp 641-644.

**Mangels JA, Craik FI, Levine B, Schwartz ML, Stuss DT:** Effects of divided attention on episodic memory in chronic traumatic brain injury: a function of severity and strategy. *Neuropsychologia*: December 2002: 40(13): pp 2369-85.

**Midha R, Fehlings MG:** Comment: Polyglycol rapidly restores physiological functions in damaged sciatic nerves of guinea pigs by et al. *Neurosurgery*: December 2002: 50: pp 156-157.

**Rowed DW:** MCCQE review notes 2003. In: *MCCQE Notes Ltd.* (Lala P, Waddel A, eds). *MCCQE Notes Ltd.*, Toronto: 2003: pp NS1-NS40.

**Szumacher E, Schwartz ML, Tsao M, Jaywant S, Franssen E, Wong CS, Ramaseshan R, Lightstone AW, Michaels H, Hayter C, Laperriere NJ:** Fractionated stereotactic radiotherapy for the treatment of vestibular schwannomas: combined experience of the Toronto-Sunnybrook Regional Cancer Centre and the Princess Margaret Hospital. *International Journal of Radiation Oncology, Biology, Physics*: July 2002: 15: pp 987-991.

**Szumacher E, Schwartz ML, Tsao M, Jaywant S, Franssen E, Wong CS, Ramaseshan R, Lightstone AW, Michaels H, Hayter C, Laperriere NJ:** Fractionated stereotactic radiotherapy for the treatment of vestibular schwannomas: combined experience of the Toronto-Sunnybrook Regional Cancer Centre and the Princess Margaret Hospital. *International Journal of Radiation Oncology, Biology, Physics*: July 2002: 53(4): pp 987-91.

**Tsao MN, Schwartz ML, Bernstein M, Halliday WC, Lightstone AW, Hamilton MG, Jaywant S, Laperriere N:** Capillary hemangioma of the cavernous sinus. Report of two cases. *Neurosurgery*: January 2003: 98(1): pp 169-74.

## Invited Visits to other Hospitals/Universities

**Midha R:** AANS/CNS Spine and Peripheral Nerves, 19th Annual meeting, Tampa, Florida, March 2003. Course Director, Special Course III, Peripheral nerve comprehensive review.

**Midha R:** USUHS, 15th Annual Bethesda Spine & Peripheral Nerve Workshop, Bethesda, Maryland, June 2003. Lecturer, Principles of nerve regeneration & repair, 2 day faculty for cadaveric nerve dissection & nerve repair course.

**Midha R:** AANS/CNS Spine and Peripheral Nerves, 19th Annual Meeting, Tampa, Florida, March 2003. Moderator, Scientific Session II, Peripheral Nerve Tumors.

**Schwartz ML:** WSIAT (Workplace Safety and Insurance Appeals Tribunal), Toronto, Ontario, September 2002. Head Injury.

**Schwartz ML:** Workplace Safety and Insurance Appeals Tribunal Training Day, Toronto, Ontario, September 2002. The Pathophysiology of Traumatic Brain Injury with Particular Reference to Persisting Evidence of Injury.

**Schwartz ML:** Trauma Association of Canada, Banff, Alberta, March 2003. What's new in head injury management?

## Research And Investigations

*Senior Investigator's Name Appears in Italics*

Bioengineered alternatives to nerve graft for repair of peripheral nerve injuries. *Midha R, Shoichet MS: PSI Foundation* (\$136,000 2001 - 2003).

Bioengineered nerve grafts (Declined). *Midha R, Shoichet MS: Hospital for Sick Children Foundation* (\$129,858 2001 - 2003).

Lymphatic drainage of the central nervous system: Relevance to pediatric hydrocephalus. *Johnston MG, Midha R, Flessner MF: Medical Research Council of Canada* (\$482,234 1999 - 2004).

Quantitative magnetic resonance of tissue following trauma. *Stanisz, GJ, Midha R: CIHR* (\$224,349 2002 - 2005).

The investigation of psychological predictors of functional outcome following traumatic brain injury: A prospective study. *Dawson DR, Stuss DT, Winocur G, Schwartz ML: Ontario Neurotrauma Foundation* (\$209,780 2001 - 2004).

Tissue engineering cell culture facility. *Shoichet, MS, Midha, R; Sefton, MV and Tator CH: NSERC* (\$88,670 2002 - 2003).

Use of synthetic nerve grafts to improve nerve regeneration. *Midha R: Ontario Government, Premier's Research Excellence Award* (\$150,000 2001 - 2006).

## Division of Orthopaedic Surgery

**Dr. T.S. Axelrod - Associate Professor (Division Head)**  
**Dr. H.U. Cameron - Associate Professor**  
**Dr. J.C. Cameron – Assistant Professor**  
**Dr. G.R. Fernie - Professor**  
**Dr. J.A. Finkelstein - Assistant Professor**  
**Dr. M.H. Ford - Assistant Professor**  
**Dr. J.D. Gollish - Assistant Professor**  
**Dr. H. Hall - Professor**  
**Dr. R.M. Holtby - Assistant Professor**  
**Dr. G.A. Hunter - Professor**  
**Dr. H.J. Kreder - Associate Professor**  
**Dr. B.E. Maki – Professor**  
**Dr. B. W. Malcolm - Assistant Professor**  
**Dr. P.H. Marks - Assistant Professor**  
**Dr. J.J. Murnaghan – Assistant Professor**  
**Dr. R.R. Richards - Professor**  
**Dr. J. Schatzker - Professor**  
**Dr. D.G.S. Stephen - Assistant Professor**  
**Dr. M. Tile - Professor**  
**Dr. C. Whyne - Assistant Professor**  
**Dr. C.S. Wright - Assistant Professor**  
**Dr. A.J.M. Yee - Assistant Professor**

## Publications

**Biemers L, Kreder HJ, Berry GK, Stephen DJG, Schemitsch EH, McKee MD, Jaglal S:** Subcapital Hip Fractures: The Garden Classification Should be Replaced, not Collapsed. *Canadian Journal of Surgery*: December 2002: 45(6): pp 411-414.

**Bouillon B, Kreder HJ:** Quality of Life in Patients with Multiple Injuries. *Restor. Neurol. Neurosci*: November 2002: 20 (3,4): pp 125-134.

**Boyer MI, Axelrod TS:** Injuries of the distal radio-ulnar joint. In: *Oxford Textbook of Orthopaedics and Trauma* (Bulstrode, Buckwalter, Crr, Marsh, Fairbank, Wilson-MacDonald, Bowden., eds). Oxford University Press, New York: 2002: pp 1929-42.

**Stephen DJ, Kreder HJ, Schemitsch EH, Conlan LB, Wild L and McKee MD:** Femoral intramedullary nailing: Comparison of fracture-table and manual traction. A prospective, randomized study. *Journal of Bone and Joint Surgery (American)*: September 2002: 84-A: pp 1514-1521.

**ElMarraghy A, Berry G, Kreder HJ:** Irreducible Lateral Patellar Dislocation with Vertical Axis Rotation: Case Report and Review of the Literature. *Journal of Trauma*: September 2002: 53: pp 131-132.

**Eugene KW, Finkelstein JA, Tangente RP, Holden L Edward Chow MR, Ford M, Yee A:** Quality of life in surgical treatment of metastatic spine disease. *Spine*: March 2003: 28: pp 508-12.

**Wetzel FT, Hall H:** Introduction: Interventional management of Chronic Benign Spinal Pain. *Spine*: November 2002: 27(22): pp 2524-2525.

**Hall H:** Does Lateral Recess Scarring Cause Back Pain? *Patient Care*: April 2003: 14/4: pp 40.

**Hall H:** A Consultation With The Back Doctor. McClelland and Stewart, Publ. Toronto: 2003: pp 338.

**Hall H:** Point of View: The Effect of McKenzie Therapy as compared with that of Intensive Strengthening Training for the Treatment of Patients with Subacute or Chronic Low Back pain: A Randomized Controlled Trial. *Spine*: August 2002: 27(16): pp 1709.

**Kreder H, Grosso P, Williams J, Jaglal S, Axcell T, Wai EK, Stephen, DJ:** Provider volume and other predictors of outcome after total knee arthroplasty: A population study in Ontario. *Canadian Journal of Surgery*: February 2003: 46. No. 1: pp 15-22.

**Hudak PL, Clark JP, Hawker GA, Coyte PC, Mahomed NN, Kreder HJ, Wright J,:** You're perfect for the procedure. Why don't you want it? Elderly arthritis patients' unwillingness to consider total joint arthroplasty surgery: A qualitative study. *Medical Decision Making*: July 2002: 22: pp 272-78.

**JA Finkelstein, MD, E Wai, MD, S Jackson, MD, H Ahn, MD, M Brighton-Knight, MD:** Single level fixation for flexion distraction injuries. *Journal of Spine Disorders and Techniques*: June 2003: 16 (3).

**Jain R, Basinski A, Kreder HJ:** Non-operative Treatment of Hip Fractures. *International Orthopaedics*: March 2003: 27(1): pp 11-17.

**Jain R, Koo M, Kreder HJ, Schemitsch EH, Davey JR, Mahomed NN:** Comparison of Early versus Delayed Fixation of Subcapital Hip Fractures in Patients 60 Years of Age or Less. *Journal of Bone and Joint Surgery*: September 2002: 84-A: pp 1605-1612.

**Finkelstein JA, Gillies C:** The Bone Metastases Clinic: A Multidimensional Management Approach. *Oncology Exchange*: February 2003: 2 No. 1: pp 14-18.

**Kreder HJ:** Commentary: Evidence on Surgical Interventions for Distal Radius Fractures is Inconclusive. *ACP Journal Club/Annals of Internal Medicine*: May 2002: 136(3): pp 112.

**Kreder HJ:** Commentary: Arthroplasty led to fewer failures and more complications than internal fixation for displaced fractures of the neck of femur. *Journal of Bone and Joint Surgery (American)*: November 2002: 84-A (11): pp 2108.

**Kreder HJ:** Commentary: Physiotherapy or a wait and see policy were the best options for lateral epicondylitis at one year. *ACP Journal Club/Annals of Internal Medicine*: September 2002: 137: pp 65.

**Kreder HJ, Wai E, Axcell T, Williams JI, Jaglal S, Grosso P, Stephen DJG:** Provider Volume and other Predictors of Outcome after Total Knee Arthroplasty: A Population Study in Ontario. *Canadian Journal of Surgery*: February 2003: 46(1): pp 15-22.

**Holden L, Chueng G, Chow E, Finkelstein J, Danjoux C:** Prospective evaluation of functional status and quality of life in patients undergoing percutaneous vertebroplasty. *International Journal of Cancer*: August 2002: Suppl. 13: pp 135.

**Ling A, Rubenstein J, Christakis M, Kreder HJ, Koren S, Chow E:** A Case of Pelvic Stress Fracture. *University of Toronto Medical Journal*: December 2002: 80(1): pp 45.

**Maki BE and McIlroy WE:** Effects of aging on control of stability. In: *Textbook of Audiological Medicine: Clinical Aspects of Hearing and Balance* (Luxon L, Furman J, Martini A, Stephens D, eds). Martin Dunitz, London: 2003: pp 671-690.

**Maki BE, McIlroy WE and Fernie GR:** Change-in-support reactions for balance recovery: control mechanisms, age-related changes and implications for fall prevention. *IEEE Engineering in Medicine and Biology Society*: December 2003: 22(2): pp 20-26.

**McIlroy WE, Bishop DC, Staines WR, Nelson AJ, Maki BE and Brooke JD:** Modulation of afferent inflow during the control of balancing tasks using the lower limbs. *Brain Research*: May 2003: 961: pp 73-80.

**McKee MD, Pugh DM, Richards RR, Pederson E, Schemitsch EH:** The effect of humeral condylar resection on strength and functional outcome following semi-constrained total elbow arthroplasty. *Journal of Bone and Joint Surgery (American)*: May 2003: 85: pp 802-807.

**Mihailidis A and Fernie G:** Using computerized cognitive devices to increase the independence of people with dementia: present and future. *Designing for Diversity in Dementia Care - special conference of the Alzheimer Society of Ontario*. Toronto: 2002: pp 177-184.

**Mihailidis A and Fernie GR:** An intelligent cognitive orthosis for persons with moderate-to-severe dementia: results and recommendations. *Annual Conference of the Rehabilitation Engineering and Assistive Technology Society of North America (RESNA)*. Minneapolis: 2002: pp 14-16.

**Mihailidis A and Fernie GR:** The importance of using "context-aware" design principles when developing cognitive assistive devices for older adults. *Gerontechnology*: December 2002: 2(2): pp 173-188.

**Norrie RG, Maki BE, Staines WR and McIlroy WE:** The time course of attention shifts following perturbation of upright stance. *Experimental Brain Research*: September 2002: 146: pp 315-321.

**Richards R:** Tendon Transfers for Failed Nerve Reconstruction. *Clinics in Plastic Surgery* (Susan E. MacKinnon, ed). W.B. Saunders Company, Philadelphia: 2003: pp 223-245.

**Stephen DJG:** Foot and ankle injuries. In: *Orthopaedic Knowledge Update: Trauma 2* American Academy of Orthopaedic Surgeons, Rosemont, Illinois: 2002.

**Stephen DJG, Kreder HJ, Schemitsch EH, Wild L, Conlan L, McKee MD:** Femoral Intramedullary Nailing: Comparison of Fracture-Table and Manual Traction: A Prospective Randomized Study. *Journal of Bone and Joint Surgery (American)*: September 2002: 84-A: pp 1514-1521.

**Tile, M:** Fractures of the pelvis & acetabulum (Lippencott, ed). Williams & Williams: 2003.

**Wai EK, Finkelstein JA, Tangente RP, Holden L, Chow E, Ford M, Yee A:** Quality of Life in Surgical Treatment of Metastatic Spine Disease. *Spine*: March 2003: 28: pp 508-512.

**Whyne C, Hu S, Lotz J:** Biomechanically derived guideline equations for burst fracture risk prediction in the metastatically involved spine. *Journal of Spinal Disorders and Techniques*: April 2003: 16(2): pp 180-5.

**Whyne C, Hu S, Lotz J:** Burst fracture in the metastatically involved spine. Development, validation, and parametric analysis of a three-dimensional poroelastic finite element model. *Spine*: April 2003: 28(7): pp 652-60.

**Yee AJ, Yang BL, Finkelstein J, Wai E and Wang BB:** The role of matrix molecules and mechanical forces in mediating chondrocyte function and metabolism. In: *Recent Research Development Biology Chemistry 1(2003)* (S.G. Pandalai, ed). Research Signpost, Kerala, India: 2002: pp 57-71.

**Zettel JL, McIlroy WE and Maki BE:** Can stabilizing features of rapid triggered stepping reactions be modulated to meet environmental constraints? *Experimental Brain Research*: July 2002: 145: pp 297-308.

**Zettel JL, McIlroy WE and Maki BE:** Environmental constraints on foot movement reveal the capacity for modulation of anticipatory postural adjustments during rapid triggered stepping reactions. *Experimental Brain Research*: September 2002: 146: pp 38-47.

## Invited Visits to other Hospitals/Universities

**Axelrod TS:** AO North America Continuing Medical Education, Toronto, Ontario, November 2002. AO Advanced Controversies in Fracture Care: Course Chairman.

**Axelrod TS:** AO North America Continuing Medical Education, Toronto, Ontario, November 2002. AO Advanced Controversies in Fracture Care: Laboratory; Pre-operative Planning of Forearm Fracture Internal Fixation.

**Axelrod TS:** AO North America Continuing Medical Education, Toronto, Ontario, November 2002. AO Advanced Controversies in Fracture Care: Lectures: The Role of Primary Arthroplasty in Distal Humerus Fractures, Is There Still a Role for Autogenous Bone Grafting?

**Axelrod TS:** Orthopaedic Trauma Association, Toronto, Ontario, October 2002. Orthopaedic Trauma Association Resident Basic Fracture Course: Closed Management of Distal Radius Fractures, Lecture and Hands-on Workshop.

**Fernie GR:** CIHR Institute of Musculoskeletal Health and Arthritis, Calgary, Alberta, January 2003. Assistive technology and rehabilitation (invited panel presentation) Special conference "IMHA On the Move".

**Fernie GR:** IMHA Stakeholders' Meeting, Calgary, Alberta, February 2003. CIHR Mobility Consensus Workshop Report.

**Fernie GR:** Gerontechnology, Miami, Florida November 2002. Does sideways movement increase mobility and manoeuvrability in a powered wheelchair?

**Fernie GR:** Population Health Initiative on Falls: Making the Connections to Take Stairs and Grab Bars, Ottawa, Ontario, March 2003. Handrails and Grab Bars.

**Fernie GR:** University of Western Ontario, London, Ontario, September 2002. LifeRail.TechMed 2002.

**Fernie GR:** Colin McLaurin International Exchange, 26th Annual International Conference of RESNA, Atlanta, Georgia, June 2003. Northern exposure: an overview of rehabilitation engineering in Canada (Invited panel presentation).

**Fernie GR:** National Seniors' Forum on Research, Ottawa, Ontario, May 2003. Overview of Research on Aging: Maintenance of Functional Autonomy (invited panel presentation).

**Fernie GR:** 27th Annual Conference of the Canadian Medical and Biological Engineering Society (CMBEC27), Ottawa, Ontario, November 2002. Rehabilitation Engineering.

**Fernie GR:** CIHR Consensus Workshop, Vancouver, British Columbia, June 2003. Technology to present falls: opportunities for research (invited presentation). Defining Canadian Research Direction: Prevention of Injurious Falls.

**Ford MH:** Dewar Orthopaedic Society, Halifax, Nova Scotia, September 2002. Cervical Spondylotic Myelopathy - A Comparison of Circumferential vs. Anterior only Surgery.

**Ford MH:** Pain Perceptorship Program - TSRCC, Toronto, Ontario, April 2003. Surgical Intervention.

**Gollish JD:** Minimally Invasive Solutions and Emerging Technologies in Total Hip and Knee Replacement, Markham, Ontario, September 2002. [Course Director] 1.Minimal incision approach to THR 2.Deep flexion in TKR.

**Gollish JD:** Minimally Invasive Solutions in Hip and Knee Arthroplasty, Toronto, Ontario, November 2002. [Course Director] 1.MIS-THA Anterolateral surgical technique 2.MIS-THA Post-operative considerations and therapy 3.UKA patient selection 4.MIS-UKA post-operative considerations and therapy.

**Gollish JD:** Emerging Trends 2003 Orthopaedic Symposium - Knee and Hip Arthroplasty, Whistler, British Columbia, March 2003. [Knee course director] 1.Mobile bearing TKR-wear issues and outcomes 2.Sequential approach to Revision TKR 3. Moderator - New techniques and technologies.

**Gollish JD:** Ecuadorian Society of Orthopaedics and Traumatology - 9th International Course, Canadian School, Quito, Ecuador, November 2002. [Visiting Professor] 1.Restoration of joint kinematics in total knee replacement 2.Management of significant deformities in total knee replacement 3.Fundamentals of revision TKA 4.Restoration of hip mechanics in total hip replacement 5.THA for the dysplastic hip 6.Management of the recurrently dislocating total hip.

**Hall H:** Industrial Accident Prevention Association, Toronto, Ontario, April 2003. A Consultation With The Back Doctor.

**Hall H:** CBI Health, Whitby, Ontario, June 2003. Back Injuries in Family Practice.

**Hall H:** WSIB Pension Appeals Board, Government of Ontario, Toronto, Ontario, March 2003. Back Pain.

**Hall H:** CBI Health, London, Ontario, September 2002. Back Pain in Family Practice.

**Hall H:** Thunder Bay Medical Society, Thunder Bay, Ontario, September 2002. Back Pain: Impairment or Disability.

**Hall H:** Medisys / Canada Post National Conference, Montreal, Quebec, May 2003. Best Practices for Disability Case Management.

**Hall H:** CBI Health, Sudbury, Ontario, October 2002. Diagnosis and Treatment of Back Pain: Patterns of Pain.

**Hall H:** CBI Health, Edmonton, Alberta, October 2002. Diagnosis of Back Pain.

**Hall H:** Royal Group, Woodbridge, Ontario, July 2002. Early and Safe Return to Work.

**Hall H:** Star Rehabilitation, Regina , Saskatchewan, February 2003. Effective Use of Rehabilitation.

**Hall H:** CBI Health, Kitchener, Ontario, April 2003. Investigating Back Pain.

**Hall H:** WSIB Ontario, Hamilton, Ontario, February 2003. Investigating Back Pain in a Compensation Setting.

**Hall H:** CBI Health, Cambridge, Ontario, April 2003. Management of Back Pain in Family Practice.

- Hall H:** CBI Health, Quebec City, Quebec, April 2003. Managing the Pain Focused Patient.
- Hall H:** IAPA / CBI Health, Scarborough, Ontario, April 2003. Managing Workplace Injuries.
- Hall H:** Wellserve, Cambridge, Ontario, November 2002. Medical Indications for Job Restriction.
- Hall H:** Canada Pension Plan Appeals Board, Ottawa, Ontario, July 2002. Neck and Back Pain.
- Hall H:** Borgess Health Alliance, Kalamazoo, Michigan, September 2002. Neurosymposium 2002: Spine Centre Concept.
- Hall H:** Star Rehabilitation, Saskatoon, Saskatchewan, February 2003. Resuming Normal Activity after Injury.
- Hall H:** WSIB Ontario, London, Ontario, September 2002. Return to Work Issues in WSIB Cases.
- Hall H:** CBI Health, Kitchener, Ontario, October 2002. Return to Work with Pain.
- Hall H:** Optimal Performance Consultants, Toronto, Ontario, December 2002. Return to Work with Pain.
- Hall H:** WSIB, Sudbury, Ontario, March 2003. Returning the WSIB Patient to Work.
- Hall H:** CBI Health, Cambridge, Ontario, September 2002. Shoulder Injuries.
- Hall H:** Center for Neuroscience, Orthopedics and Spine, Chamberlain, South Dakota, October 2002. Spinal Horizons Symposium: Rehabilitation after Spinal Surgery.
- Hall H:** CBI Health, Barrie, Ontario, September 2002. The family doctor's role in return to work.
- Hall H:** CBI Health, Scarborough, Ontario, September 2002. Work Related Injuries.
- Kreder HJ:** AO / ASIF Principles of Fracture Management, Toronto, Ontario, November 2002. Absolute Stability in Fracture Fixation: Practical Exercise.
- Kreder HJ:** Quebec Orthopaedic Association Meeting, Montreal, Quebec, May 2003. Acetabular Fracture: Concepts of Management & Minimally Invasive Surgery.
- Kreder HJ:** AO / ASIF Advanced Controversies in Fracture Management, Toronto, Ontario, November 2002. Acetabular Fractures: Diagnosis and Emergency Management.
- Kreder HJ:** AO / ASIF Advanced Controversies in Fracture Management, Toronto, Ontario, November 2002. Acetabular Fractures: The Role of Primary Arthroplasty.
- Kreder HJ:** Quebec Orthopaedic Association, Montreal, Quebec, May 2003. Acetabular Fractures: Functional Outcome of Fractures Involving the Posterior Wall.
- Kreder HJ:** Programme D'Orthopedie Edouard Samson, Hopital Sainte-Justine, Universite de Montreal, Montreal, Quebec, May 2003. Common Mistakes in AO Technique: How Not to do AO.
- Kreder HJ:** AO ASIF Principles of Fracture Management, Toronto, Ontario, November 2002. Computer Assisted Surgery: Current Status.
- Kreder HJ:** Alpha Group, Antigua, February 2003. Current Management of Open Fractures.
- Kreder HJ:** Programme D'Orthopedie Edouard Samson, Hopital Maisonneuve-Rosemont, Universite de Montreal, Montreal, Quebec, May 2003. Evidence Based Surgery & Critical Appraisal of the Literature.
- Kreder HJ:** AO / ASIF Advanced Controversies in Fracture Management, Toronto, Ontario, November 2002. Femoral Fracture Management: Session Moderator.
- Kreder HJ:** Programme D'Orthopedie Edouard Samson, Hopital Du Sacre Coeur, Universite De Montreal, Montreal, Quebec, May 2003. Management of Femoral Neck Fractures.
- Kreder HJ:** Programme D'Orthopedie Edouard Samson, Hopital Du Sacre Coeur, Universite de Montreal, Montreal, Quebec, May 2003. Management of Supracondylar Femur Fractures: Minimally Invasive Plating.
- Kreder HJ:** Surgical Advances in Total Hip, Knee and Trauma, Huntsville, Ontario, June 2003. Pelvic & Acetabular Fractures: Initial Management.



**Kreder HJ:** AO/ASIF Principles of Fracture Management, Toronto, Ontario, November 2002. Percutaneous Pinning Techniques: Upper Extremity.

**Kreder HJ:** AO / ASIF Advanced Controversies in Fracture Management, Toronto, Ontario, November 2002. Tibial Shaft Fracture Management: Session Moderator.

**Kreder HJ:** Programme D'Orthopedie Edouard Samson, Hopital Du Sacre Coeur, Universite de Montreal, Montreal, Quebec, May 2003. Visiting Professor.

**Kreder HJ:** Quebec Orthopaedic Association, Montreal, Quebec, May 2003. Visiting Professor.

**Maki BE:** CIHR-sponsored symposium entitled Defining Canadian Research Direction: Prevention of Injurious Falls, Vancouver, British Columbia, June 2003. Assessment of balance control: what do we really need to measure?

**Maki BE:** AGILE Conference on Exercise and the Older Person, Chartered Society for Physiotherapy, Portsmouth, United Kingdom, September 2002. Control of rapid limb movements for balance recovery: age-related impairment and the implications for fall prevention.

**Maki BE:** Falls and Mobility Network, Toronto, Ontario, November 2002. Gait assessment for fall prediction: how much equipment do you really need?

**Murnaghan JJ:** Rocky Mountain Trauma Society, Aspen, Colorado, January 2003. Musculoskeletal Complications Following Below Knee Amputation.

**Richards RR:** Alpha Club, Antigua, February 2003. (1) Multidirectional Shoulder Instability, (2) Surgical Treatment of Fractures of the Humeral Shaft.

**Richards RR:** The Mayo Clinic, Rochester, Minnesota, May 2003. 1. Critical Overview of Total Elbow Arthroplasty: 2003 Assessment of Recently Developed Implants. 2. Moderator - Complications of Total Elbow Arthroplasty. 3. Lab Instructor - Mayo-Modified Coonrad Prosthesis, Kudo Prosthesis and Acclaim Prosthesis.

**Richards RR:** Department of Orthopaedics, Faculty of Medicine, The University of British Columbia, Vancouver, British Columbia, May 2003. 1. Orthopaedic Surgery - A Job or A Way of Life?, 2. Fractures of the Distal Humerus. 3. Instructor - LISS - Femur and Tibia.

**Richards RR:** American Society for Surgery of the Hand, New Orleans, Louisiana, February 2003. ASSH Specialty Day. Humeral Shaft Fracture - Rod vs. Plate.

**Richards RR:** SICOT/SIROT XXII World Congress, San Diego, California, August 2002. Management of Complex Problems About the Elbow.

**Richards RR:** American Society for Surgery of the Hand, New Orleans, Louisiana, February 2003. The Upper Extremity: Current Controversies on Techniques. Humeral Shaft Fracture - Rod Versus Plate.

**Richards RR:** Annual Basic Science Course, Ottawa, Ontario, November 2002. Treatment of Avascular Necrosis - Child and Adult.

**Schatzker J:** Annual AO course, Davos, Switzerland, December 2002. Auditor Pelvic and Acetabular course. Presentation: Osteotomy of distal femoral malunion.

**Schatzker J:** Advanced AO course, Krakow, Poland, May 2003. Chairman and lecturer.

**Schatzker J:** AO Principles course, Warsaw, Poland, October 2002. Course chairman and lecturer. Presentations: History of AO. Principles of articular fracture care. Supracondylar fractures of the humerus. Supracondylar fractures of the femur. Fractures of the tibial plateau. Influence of implants on bone.

**Schatzker J:** Principles and Advanced AO course, Toronto, Ontario, November 2002. Course Director and lecturer. Presentations: Fracture Classification as an aid in decision making.

**Schatzker J:** AAOS, New Orleans, Louisiana, February 2003. Instructional course: The biomechanical basis for the rationale for intertrochanteric osteotomies.

**Schatzker J:** Kelowna, British Columbia, January 2003. Kelowna Update Seminar for Orthopaedic Surgeons of the interior.

**Schatzker J:** EFFORT Instructional Course, Krakow, Poland, October 2002. Presentation: Fractures of the distal humerus.

**Schatzker J:** Vancouver General Hospital, Vancouver, British Columbia, January 2003. Visiting Professor.

**Stephen DGS:** AO North America, Orthopaedic Trauma Visiting Professor, London, Ontario, April 2003. "Less invasive stabilization system for distal femur and proximal tibia fractures" + case presentations.

**Stephen DGS:** Fracture Forum, Beaver Creek, Colorado, January 2003. Case Complications.

**Stephen DGS:** 70th Annual Meeting of the Academy of Orthopaedic Surgeons, New Orleans, Louisiana, February 2003. Controversies in femoral nailing.

**Stephen DGS:** Fracture Forum, Beaver Creek, Colorado, January 2003. Debate: High energy periarticular fractures new generation plating vs. external fixation.

**Stephen DGS:** Emerging Trends, Orthopaedic Symposium, Whistler, British Columbia, March 2003. Difficult ankle fractures: trimalleolar and syndesmosis disruptions.

**Stephen DGS:** Emerging Trends, Orthopaedic Symposium, Whistler, British Columbia, March 2003. External fixation in the treatment of periarticular knee fractures.

**Stephen DGS:** Vancouver Orthopaedic Course, Vancouver, British Columbia, September 2002. Lab - Tibial Nailing.

**Stephen DGS:** Ontario Orthopaedic Association, Toronto, Ontario, November 2002. Management of metastatic extremity lesions - principals and review of the Ontario experience.

**Stephen DGS:** Ontario Orthopaedic Association, Toronto, Ontario, November 2002. Minimally invasive surgery for the treatment of periarticular knee fractures - fad or here to stay?

**Stephen DGS:** AO ASIF Principles for Fracture Management Course for Residents, Milwaukee, Wisconsin, July 2002. Nonunion and Malunion.

**Stephen DGS:** 4th Annual Chicago Trauma Symposium, Chicago, Illinois, August 2002. Resuscitation in Pelvic Ring Disruptions.

**Stephen DGS:** Vancouver Orthopaedic Course, Vancouver, British Columbia, September 2002. Techniques for closed nailing of mid-shaft femur fractures (starting point, remaining, nail insertion, locking).

**Stephen DGS:** Vancouver Orthopaedic Course, Vancouver, British Columbia, September 2002. The short distal fragment - Reduction and antegrade nailing.

**Stephen DGS:** Ontario Orthopaedic Association, Toronto, Ontario, November 2002. The use of bone graft substitute in orthopaedic trauma.

**Stephen DGS:** AO ASIF Orthopaedic Trauma: Team Approach to Intramedullary Nailing and External Fixation, Ottawa, Ontario, August 2002. Tibial Metaphyseal Fractures: Proximal Treatment Options.

**Tile M:** University of Pennsylvania Trauma Course, Snowmass, Colorado, June 2003. (1) Fracture care (2) Pelvic trauma (3) Acetabular trauma.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

A comparison of the functional outcome of mobile bearing to fixed bearing TKR. *Gollish JD: O&A Foundation* (\$3,500 2001 - 2002).

Activities following total hip arthroplasty - which are safe? *Weller I, Gollish JD, Kreder H, Schatzker J, Scafesi O, Payne N: University of Toronto - Zimmer Research Partnership Program* (\$12,500 2002 - 2004).

An economic evaluation of internal fixation as compared with bipolar hemiarthroplasty for displaced femoral neck fractures. Grant awarded in U.S. dollars. *Jaglal S, Kreder HJ, Goel V, Schatzker J: Orthopaedic Trauma Association* (\$30,000 1998 - 2002).

An investigation of the relationship between self-report (WOMAC) and physical performance measures (fast self-paced walk, TUG, stair climb) pre-operatively. *Pagura S, Kennedy D, Gollish J, Woodhouse L, Stafford P: O&A Foundation* (\$10,250 2001 - 2002).

Assistive technology for mobility. *Fernie GR: Ontario Ministry of Enterprise, Opportunity & Innovation and Ontario Rehabilitation Technology Consortium* (\$78,586 2002 - 2003).

Assistive technology for mobility. *Fernie GR: Ontario Ministry of Enterprise, Opportunity & Innovation and Ontario R Clinical trials stage of "SoleSensor": a balance-enhancing shoe insert. Perry SD, Fernie GF, Maki BE: Canadian Institutes of Health Research (CIHR)* (\$97,538 2002 - 2003).

Assistive technology for mobility. *Fernie GR: Ontario Ministry of Enterprise, Opportunity & Innovation and Ontario R ehabilitation Technology Consortium* (\$153,850 2003 - 2004).

Balance. *Maki BE, Fernie GR: Medical Research Council of Canada* (\$340,000 1999 - 2004).

Clinical trials stage of SoleSensor: A balance-enhancing shoe insert. *Fernie GR, Perry SD, Maki BE: Canadian Institutes of Health Research* (\$99,964 2002 - 2003).

Control of limb movements to recover balance: effect of environment and activity. *Maki BE, McIlroy WE, Fernie GR: Medical Research Council of Canada* (\$368,160 1999 - 2004).

Control of limb movements to recover balance: effect of environment and activity. *Maki BE, Fernie GR, McIlroy WE: Canadian Institutes of Health Research (CIHR)* (\$368,160 1999 - 2004).

Biomechanical comparison of intramedullary nail and blade plate fixation for tibiototalcaneal arthrodesis. *Whyne C, Stephen D: University of Toronto, Zimmer Funds* (\$10,000 2002 - 2003).

Biomechanical comparison of intramedullary nail and blade plate fixation for tibiototalcaneal arthrodesis. *Whyne C, Stephen D: Synthes* (\$10,000 2002 - 2003).

Biomechanical stability of intramedullary nailed high proximal low-density tibial fractures with cement augmented proximal screws. *Whyne C, Kreder H: Connaught New Staff Matching Grants* (\$16,500 2002 - 2003).

D-KAF: Dalteparin versus Usual Care in Knee to Ankle Fractures for the prevention of clinically important thrombosis. *Geerts Wm, Kreder HJ, Selby R: CIHR Rx&D* (\$903,560 2001 - 2003).

Development & validation of radiologic predictors of spinal stability in an in vivo metastatic model. *Mousavi P, Whyne C (Advisor): NSERC Summer Student Research Award* (\$5,625 2002).

Development of a metastatic femur model to study pressurization during prophylactic fixation. *Whyne C, Kreder H: Dean's Fund, University of Toronto* (\$10,000 2001 - 2002).

Enabling safe independent powered wheelchair mobility in long term care residents with cognitive and other impairments that currently limit powered mobility use. *Fernie GR, Cott CA, Herrmann N, Jutai JW: Canadian Institutes of Health Research (CIHR)* (\$348,571 2002 - 2005).

Examining the relationship between evidence-based practice and patient opinion. *Wright JG, Kreder HJ, Coyte PC, Glazier RH, Mahomed NN, Hawker GA: Arthritis Society* (\$21,667 1999 - 2002).

Health care, technology and place: An interdisciplinary capacity enhancement team. *Coyte PC and McKeever PD, Fernie GR et al: Canadian Institutes of Health Research (CIHR)* (\$1,980,000 2003 - 2007).

Health care, technology, and Place: A CIHR/IPPH centre for research development. *Coyte PC and McKeever PD, Fernie GR et al: Canadian Institute of Health Research (CIHR)* (\$10,000 2002 - 2003).

Health care, technology, and place: A transdisciplinary research training program. *McKeever PD, Fernie GR et al: Canadian Institutes of Health Research (CIHR)* (\$616,000 2002 - 2008).

How are you now? Testing a model of recovery from the patient's perspective one year after traumatic injury of an extremity. *Beaton D, Schemitsch EH, Gignac M, Davis A, Devins G, Kreder HJ, Franche R, Bombardier C, Reardon R: CIHR* (\$72,339 2002 - 2003).

- Innovative approaches to optimizing balance and mobility in older adults. *Maki BE, McIlroy WE, Fernie GR, Popovic M, Lui B, Fisher R: Canadian Institutes of Health Research (\$1,101,385 2002 - 2007).*
- Innovative approaches to optimizing balance and mobility in older adults. *Maki BE, Fernie GR, Liu B, McIlroy WE, Popovic MR et al: Canadian Institutes of Health Research (CIHR) (\$467,267 2002 - 2007).*
- Integrin mediated mechanotransduction of cyclic hydrostatic pressure in rabbit intervertebral disc cells cultured in vitro. *Yee A, Johnston M., Yang B., Whyne C., Johnstone B: Dean's Fund (\$10,000 2001 - 2002).*
- Integrin mediated mechanotransduction of cyclic hydrostatic pressure in rabbit intervertebral disc cells cultured in vitro. *Yee A., Johnston M., Yang B., Whyne C., Johnstone B: Sunnybrook Trust (\$45,000 2001 - 2002).*
- Integrin mediated mechanotransduction of cyclic hydrostatic pressure in rabbit intervertebral disc cells cultured in vitro. *Yee A, Johnston M., Yang B., Whyne C., Johnstone B: North American Spine Society (\$81,000 2001 - 2002).*
- Modes of Failure in Total Knee Replacement. *Gollish J, Kincaid R: O&A Institute Research Fund (\$1,000 2002).*
- Outcome of revision of unicompartmental knee replacement. *Gollish JD, Hockings M: Orthopaedic and Arthritic Foundation (\$1,000 2003).*
- Percutaneous photodynamic therapy for the treatment of metastatic breast carcinoma to the spine: A novel application. *Yee AJ, Co-Investigators: Whyne C, Finkelstein J: Canadian Breast Cancer Research Initiative; April 2002 IDEA grant competition (\$50,000 2002 - 2003).*
- Percutaneous photodynamic therapy for the treatment of metastatic breast carcinoma to the spine: A novel application. *Yee A, Finkelstein J, Whyne C: Canadian Breast cancer Research Initiative (\$50,000 2002 - 2003).*
- Pre-commercialization stage of "LifeRail": a new concept for helping people at risk of falls and with mobility limitations to safely ascend and descend stairs. *Fernie GR, Maki BE: Canadian Institutes of Health Research (CIHR) (\$99,850 2001 - 2002).*
- Pre-commercialization stage of "RoboNurse": a new concept for helping caregivers lift and move patients. *Fernie GR: Canadian Institutes of Health Research (\$99,182 2002 - 2003).*
- Prediction of burst fracture risk in the metastatic thoracic spine with finite element analysis. *Whyne C: NSERC (\$96,000 2001 - 2005).*
- Planning and organizing Canadian Institutes of Health Research Mobility Consensus Conference, Toronto. *Fernie GR, Richards C, Olney S, Hebert R, Frank J, Frank C: Canadian Institutes of Health Research (\$150,000 2002).*
- Predictors of disability following revision total knee arthroplasty. *Davis A, Mahomed N, Kreder HJ, Gross A, Schemitsch E, Davey JR, Bogoch E: CIHR (\$84,194 2001 - 2004).*
- Predictors of Disability Outcomes Following Revision Total Knee Arthroplasty. *Davis A., Gross AE, Davey JR, Mahomed N, Kreder HJ, Schemitsch EH, Szalai JP, MacDonald S, Gignac M, Garbuz D, Sekundiak T, Bogoch E.; Canadian Institute of Health Research (\$68,000 2001 - 2003).*
- Predictors of disability outcomes following total knee revision arthroplasty. *Davis AE, Mahomed NN, Gross AE, Schemitsch EH, Kreder HJ, Gollish JD et al: CIHR (\$80,290 2001 - 2004).*
- Predictors of Outcome Following Revision Total Hip Arthroplasty. *Davis A., Gross AE, Davey JR, Mahomed N, Szalai JP, Kreder HJ, Schemitsch EH, Badley EH, Saleh KJ, Hutchinson C: Arthritis Society (\$78,024 2001 - 2004).*
- Predictors of outcome following revision total hip arthroplasty. *Gross AE, Davis A, Gollish JD, Waddell JP, Mohamed N, Schemitsch E: The Arthritis Society (\$310,000 1998 - 2004).*

Profiling function pre and post-operatively in the total hip and knee arthroplasty population. *Gollish, JD, Kennedy D, Stratford P, Pagura S, Woodhouse L: Orthopaedic and Arthritic Foundation* (\$24,000 2001 - 2003).

Quality of life before and after below knee amputation for limb ischemia. *Fairley K, Murnaghan, J: Practice Based Research Sunnybrook and Women's College Health Sciences Centre* (\$7,506 2003 - 2004).

Senior Scientist career award. *Maki BE: Medicinal Research Council of Canada* (\$350,000 1999 – 2004).

Stair safety and stair use among community-dwelling seniors. *Edwards NC, Lockett DM, Sveistrup H, Maki BE, Robitaille Y, Scott VJ, Trickey F, Rail G: Canadian Institutes of Health Research* (\$256,944 2001 - 2003).

The Canadian Arthritis Network. *Cruz TF, Kreder HJ, 124 other co-investigators: Network Centres of Excellence* (\$3,800,000 1998 - 2002).

The development of an intelligent cognitive orthosis to facilitate independent toileting in Alzheimer's Disease. *Fernie GR, Mihailidis A: Alzheimer's Society of Canada* (\$101,483 2002 - 2004).

The Generation of an Electronic Record for Image Enhanced Operative and Other Technical Procedures. *Holtby R: Sunnybrook & Women's College Health Science Center* (\$200,000 2001 - 2002).

The impact of hip and knee replacements and other new techniques on physican requirements for orthopaedic surgery. *Chan B, Williams J, Hawker G, Kreder HJ, Buske L, Rorabeck CH: CHSRF* (\$161,000 2002 - 2006).

The validation of a classification for work-related disorders of the shoulder and elbow. *Beaton D, Richards R, Hogg-Johnson S: Research Advisory Council, Workplace Safety and Insurance Board of Ontario* (\$103,356 2002 - 2004).

Thromboprophylaxis with Low Molecular Weight Heparin (Fragmin) vs Warfarin in Patients Undergoing Primary Total Knee Replacement. *Gollish JD, Cameron H, Cameron J, Ford M, Murnaghan J, Holtby R, Wright CS: Pharmacia Corporation Canada* (\$240,000 2002 - 2003).

## Honours Received

**Fernie GR:** Award of Recognition by MEDEC presented at the TechMed Conference at the University of Western Ontario for “exceptional accomplishments, exemplary leadership and tireless commitment to the advancement of medicine in Canada and internationally”., June 2003.

**Kreder HJ:** Chair, Orthopaedic Clinical Epidemiology, Orthopaedic & Arthritic Institute, Sunnybrook & Women's College Hlth Sci Ctr., University of Toronto, September 2002.

**Kreder HJ:** The Edwin G. Bovill Award for best paper presented at the Annual Orthopaedic Trauma Association Meeting, February 2003.

**Richards RR:** R. W. McGraw Lecturer, University of British Columbia, May 2003.

**Yee AJM:** Canadian Back Institute Award, 2002 Kennedy Visiting Professorship Day, Division of Orthopaedic Surgery, University of Toronto “Photodynamic Therapy: Potential Use in Spinal Metastases” Shane Burch, Albert Yee, Joel Finkelstein, Brian Wilson, November 2002.

## Division of Plastic Surgery

**Dr. O. Antonyshyn - Associate Professor**

**Dr. M. Beveridge - Assistant Professor**

**Dr. P. Binhammer - Lecturer**

**Dr. M.H. Brown - Assistant Professor**

**Dr. R.C. Cartotto - Assistant Professor**

**Dr. A. J. Fialkov - Assistant professor**

**Dr. J.S. Fish - Associate Professor**

**Dr. J.L. Semple - Associate Professor (Division Head)**

## Publications

**Cartotto RC, Choi J, Gomez M, Cooper AB:** Prospective Study on the relevance of the base deficit during fluid resuscitation. *Journal of Burn Care and Rehabilitation*: April 2003: 24: pp 75-84.

**Cartotto RC, Innes M, Musgrave MA, Gomez M, Cooper AB:** How well does the Parkland Formula estimate actual fluid resuscitation volumes? *Journal of Burn Care and Rehabilitation*: August 2002: 23: pp 258-265.

**Cooper AB, Islur A, Gomez M, Goldenson G, Guest C, Cartotto RC:** Hypercapnic respiratory failure and partial upper airway obstruction during high frequency oscillatory ventilation in an adult burn patient. *Canadian Journal of Anaesthesia*: August 2002: 49: pp 724-728.

**Mandelcorn E, Gomez M, Cartotto RC:** Work-related burn injuries in Ontario, Canada: Has anything changed in the last 10 years? *Burns*: January 2003: 29: pp 469-472.

**Martin D, Umraw N, Gomez M, Cartotto RC:** Changes in subjective vs. objective burn scar ratings over time: Does the patient agree with what we think? *Journal of Burn Care and Rehabilitation*: June 2003: 24: pp 239-244.

**Metcalf KA, Goel V, Lickley L, Semple JL, Narod SA:** Prophylactic bilateral mastectomies; patterns of practice. *Cancer* 2002, July 15: July 2002: 95: pp 236-342.

**O'Donovan DA, Bilbao JM, Fazl M, Antonyshyn OM:** Solitary fibrous tumor of the orbit. *J Craniofac Surg*: September 2002: 13(5): pp 641-644.

**Redlick F, Cooke A, Gomez M, Banfield J, Cartotto RC, Fish JS:** A survey of risk factors for burns in the elderly and prevention strategies. *Journal of Burn Care and Rehabilitation*: September 2002: 23: pp 351-356.

**Strumas N, Antonyshyn O, Caldwell CB, Mainprize J:** Multimodality imaging for precise localization of craniofacial osteomyelitis. *J Craniofac Surg*: March 2003: 14(2): pp 215-219.

**Andrade WN, Semple JL:** Patient self-assessment of the cosmetic results of breast reconstruction. *The Canadian Journal of Plastic Surgery*: June 2003: 11: pp 105.

## Invited Visits to other Hospitals/Universities

**Antonyshyn O:** AO ASIF Advanced Symposium: Advances in the Management of Craniomaxillofacial Surgery, Tucson, Arizona, February 2003. Fireside Discussion: Facial Paralysis.

**Antonyshyn O:** University of Calgary, Division of Plastic Surgery and Dept of Radiology, Calgary, Alberta, September 2002. Imaging in the Planning of Craniofacial Surgery.

**Antonyshyn O:** AO ASIF Advanced Symposium: Advances in the Management of Craniomaxillofacial Surgery, Tucson, Arizona, February 2003. Keynote Address: Optimizing repair of nasoethmoid fractures.

**Antonyshyn O:** University of Calgary, Division of Plastic Surgery, Calgary, Alberta, September 2002. Maxillofacial reconstructive challenges.

**Antonyshyn O:** AO-ASIF Principles of Operative Treatment of Craniomaxillofacial Trauma and Reconstruction, Tampa, Florida, October 2002. Nasal and nasoethmoidal fractures.

**Antonyshyn O:** Alberta Society of Plastic Surgeons Annual Meeting, Canmore, Alberta, September 2002. Outcomes of Craniofacial Skeletal Reconstruction.

**Antonyshyn O:** AO ASIF Advanced Symposium: Advances in the Management of Craniomaxillofacial Surgery, Tucson, Arizona, February 2003. Panel Discussion: Orbital Complications.

**Antonyshyn O:** AO-ASIF Principles of Operative Treatment of Craniomaxillofacial Trauma and Reconstruction, Tampa, Florida, October 2002. Panfacial fractures and planning: Midface and mandible sequencing.

**Beveridge M:** Ninewells Hospital and Medical School, Dundee, Scotland, October 2002. An Introduction to International Surgery.

**Beveridge M:** Ontario Association of General Surgeons, Toronto, Ontario, November 2002. An Introduction to International Surgery.

**Beveridge M:** International Committee of the Red Cross (War Surgery Seminar), London, England, October 2002. Burn Treatment with Scarce Resources.

**Beveridge M:** Rui Jin Hospital, Shanghai, China, November 2002. Contemporary Treatment of Burns in the Elderly.

**Beveridge M:** CIDA (Canadian International Development Agency), Ottawa, Ontario, September 2002. Ethics & Effectiveness: Prevention, Treatment and Research for the Global Pandemic of Injury.

**Beveridge M:** Canadian Red Cross - Annual General Meeting, Toronto, Ontario, May 2003. Even Wars Have Limits: Child Soldiers.

**Beveridge M:** UNESCO and CODATA (International Committee on Data for Science and Technology, Paris, France, March 2003. The Ptolemy Project: Delivering Full Text Health Information in Africa.

**Beveridge M:** British Red Cross Surgical Training Initiative - British Red Cross, London, England, October 2002. Tropical Surgery.

**Cartotto, RC:** Critical Care Registered Dieticians Conference, Sunnybrook & Women's College Health Sciences Centre, Toronto, Ontario, February 2003. Metabolism and Nutritional Support after Burn Injury.

**Sample JL:** University of Alberta, Department of Surgery, Edmonton, Alberta, February 2003. Creativity and Innovation in Surgical Research.

**Sample JL:** University of Alberta, Department of Surgery, Edmonton, Alberta, February 2003. Novel 3D Constructs in Tissue Engineering.

**Sample JL:** Sunnybrook & Women's College Health Sciences Centre, Toronto, Ontario, March 2003. Presentation at Workshop on "Future Directions of Surgery Services".

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

Advanced Facial Modeling for Computer-Aided Simulation and Planning of Craniofacial Surgical Procedures.

*Terzopoulos D, McInerney T, Antonyshyn O: CITO (Communications and Information Technology Ontario) (\$240,000 1998 - 2003).*

BoneSource survival following applications in craniofacial surgery: An invivo study of volume retention and revascularization. *Antonyshyn O, Fialkov J, Caldwell C: Stryker Canada (\$59,600 1999 - 2002).*

Economic evaluation of intervenous immune globulin treatment in patients with toxic epidermal necrolysis. *Fish J, Shear N, Knowles S, Gomez M: partnership fund competition (\$30,000 2001 - 2002).*

Educational Funding - Craniofacial Skills Lab. *Fialkov JA: Liebingner- Stryker (\$50,000 2002 - 2003).*

Implant modeling and rapid prototyping in facial asymmetry correction. *Antonyshyn O, Edwards G, Mainprize M: Stryker/Liebingner Inc (\$38,500 2002 - 2004).*

Is Patient Satisfaction Altered by Knowledge of Their Post-Ablative Deformity. *Rice S, Fialkov JA: Educational Foundation of the Canadian Society of Plastic Surgery (\$10,000 2002 - 2003).*

Research Summer Studentship Award: Investigation of Morphing as a Tool for Assessing Morphological Outcomes of Facial Surgery. *Antonyshyn O, Pahuta M, Edwards G, Mainprize M: Sunnybrook Research Foundation (\$1,600 2003).*

Role of IVIG in the treatment of TENS. *Cartotto RC, Shortt R: Bayer Inc. Summer Student Grant (\$2,000 2002).*

## Honours Received

**Antonyshyn O:** W.K. Lindsay Research Supervisor Award, March 2003.

## Division of Urology

**Dr. L.K. Carr – Assistant Professor**

**Dr. S. Herschorn – Professor**

**Dr. L.H. Klotz – Professor (Division Head)**

**Dr. R.T. Kodama – Associate Professor**

**Dr. R.K. Nam - Assistant Professor**

## Publications

**Bunting PS, DeBoer G, Choo R, Danjoux C, Klotz L, Fleshner N:** Intraindividual variation of PSA, free PSA and complexed PSA in a cohort of patients with prostate cancer managed with watchful observation. *Clinical Biochemistry*: November 2002; 35: pp 471-5.

**Carroll PR, Kantoff PW, Balk SP, Brown MA, D'Amico AV, George DJ, Grossfeld GD, Johnson CS, Kelly WK, Klotz L:** Overview: Consensus statement on androgen deprivation therapy in prostate cancer. *Urology*: September 2002; 60(3A): pp 1-6.

**Carroll PR, Kantoff PW, Balk SP, Brown MA, D'Amico AV, George DJ, Grossfeld GD, Johnson CS, Kelly WK, Klotz L, Lee WR, Lubeck DP, McLeod DG, Oh WK, Pollack A, Sartor O, Smith MR, Hart C:** Overview consensus statement. Newer approaches to androgen deprivation therapy in prostate cancer. *Urology*: September 2002; 60(3): pp 1-6.

**Chodak GW, Keane T, Klotz L:** Critical evaluation of hormonal therapy for carcinoma of the prostate. *Urology*: August 2002; 60(2): pp 201-208.

**Choo R, Herschorn S, DeBoer G, Danjoux C, Morton G, Cheng CH, Barak I, Preiner J:** Urodynamic changes at 18 months post-therapy in patients treated with external beam radiotherapy for prostate carcinoma. *International Journal of Radiation Oncology, Biology, Physics*: July 2002; 53: pp 290-296.

**Do V, Choo R, DeBoer G, Herschorn S, Danjoux C, Morton G, Cheng CH, Barak I:** Urodynamic findings 3 months after radiotherapy in patients treated with conformal external beam radiotherapy for prostate carcinoma. *British Journal of Urology*: July 2002; 90: pp 62-67.

**Drutz H, Herschorn S, Diamant N:** Female pelvic medicine and reconstructive surgery (Drutz H, Herschorn S, Diamant N, eds). Springer-Verlag, London, Ontario: 2002.

**Feifer A, Fleshner N, Klotz L:** Analytical accuracy and reliability of commonly used nutritional supplements in prostate disease. *The Journal of Urology*: July 2002; 168: pp 150-154.

**Grimaldi JP, Fleshner N, DeBoer G, Choo R, Klotz L:** Outcomes of 200 patients with localized prostate cancer enrolled in a watchful waiting protocol. *UroOncology*: July 2002; 2(2): pp 93-94.

**Herschorn S:** Videourodynamic studies. In: Female pelvic medicine and reconstructive surgery (Drutz H, Herschorn S, Diamant N, eds). Springer-Verlag, London, Ontario: 2002: pp 107-119.

**Herschorn S, Carr LK:** Endoscopic Suspension. In: Female Pelvic Medicine and Reconstructive Surgery (Drutz H, Herschorn S, Diamant N, eds). Springer-Verlag, London: 2002: pp 345-353.

**Herschorn S, Jolivet-Tremblay M:** Artificial sphincters. In: Female pelvic medicine and reconstructive surgery (Drutz H, Herschorn S, Diamant N, eds). Springer-Verlag, London, Ontario: 2002: pp 369-378.

**Herschorn S, Jolivet-Tremblay M:** Urethral syndrome. In: Female pelvic medicine and reconstructive surgery (Drutz H, Herschorn S, Diamant N, eds). Springer-Verlag, London, Ontario: 2002: pp 193-198.

**Herschorn S, Lee P:** Bulking agents. In: Female pelvic medicine and reconstructive surgery (Drutz H, Herschorn S, Diamant N, eds). Springer-Verlag, London, Ontario: 2002: pp 389-397.

**Herschorn S:** Cardiovascular safety of PDE5 inhibitors. *Canadian Journal of Urology*: July 2002; 10(1): pp 23-28.

**Herschorn S:** Incontinence: The silent scourge of the young and old. *Canadian Journal of CME*: July 2002; 14: pp 65-70.



**Hurtado-Coll A, Goldenberg SL, Gleave ME, Klotz L:** Intermittent Androgen Suppression in prostate cancer: The Canadian experience. *Urology*: September 2002: 60(3a): pp 52-56.

**Hurtado-Coll A, Goldenberg SL, Klotz L, Gleave ME:** Preoperative neoadjuvant androgen withdrawal therapy in prostate cancer: The Canadian Experience. *Urology*: September 2002: 60(3A): pp 45-51.

**Jenkins DJ, Kendall CW, D'Costa MA, Jackson CJ, Vidgen E, Singer W, Silverman JA, Koumbridis G, Honey J, Rao AV, Fleshner N, Klotz L:** Soy consumption and phytoestrogens: effect on serum prostate specific antigen when blood lipids and oxidized low-density lipoprotein are reduced in hyperlipidemic men. *Journal of Urology*: February 2003: 169(2): pp 507-11.

**Jewett MA, Fleshner N, Klotz LH, Nam RK, Trachtenberg J:** Radical prostatectomy as treatment for prostate cancer. *Canadian Medical Association Journal*: January 2003: 1: pp 44-45.

**Jewett MA, Fleshner N, Klotz LH, Nam RK, Trachtenberg J:** Radical prostatectomy as treatment for prostate cancer. *Canadian Medical Association Journal*: January 2003: 168(1): pp 44-5.

**Klotz L:** A close up view of the evidence for early hormonal treatment. *Our Voice*: October 2002: Fall 2002: pp 6-9.

**Klotz L:** Adjuvant hormonal therapy in prostate cancer. *Oncology Exchange*: August 2002: 1(1): pp 4-7.

**Klotz L:** Back to nephrectomy for patients with metastatic renal cancer. *Lancet*: September 2002: 358(9286): pp 948-9.

**Klotz L:** Reaction to errors in Surgery. *Lancet*: December 2002: 360(9348): pp 1869.

**Klotz L:** Calcium supplementation and LHRH analogues. *Our Voice*: August 2002: pp 5.

**Klotz L:** Expectant management with selective delayed intervention for favorable risk prostate cancer. *Urologic Oncology*: October 2002: 7(5): pp 175-180.

**Klotz L:** Expectant management with selective delayed intervention for favorable risk prostate cancer. *Urologic Oncology*: October 2002: 7: pp 175-179.

**Klotz L:** Laparoscopic nephroureterectomy (CD). *Audio-Digest Urology*: October 2002: 25(10): pp 17.

**Klotz L:** Zoledronic Acid for Hormone Refractory Prostate Cancer: Commentary. *Oncology Exchange*: December 2002: 1(2): pp 24.

**Klotz L:** Prostate supplements: active ingredient amounts vary. *Medical Post*: July 2002.

**Klotz L:** Expectant management with selective delayed intervention for favorable-risk prostate cancer. *Canadian Journal of Urology*: July 2002: 9(3): pp 2-7.

**Klotz L, Fradet Y:** Controversies in the management of localized prostate cancer: consensus development by Canadian urologists. *Canadian Journal of Urology*: July 2002: 9(3): pp 30-5.

**Klotz L:** New technologies and traditional skills. *Canadian Journal of Urology*: August 2002: 9(4): pp 1572-3.

**Klotz L: Can Jrl. Urol. 2002 Jun;9(3):1504-5:** "Sheepish about being Bullish". Our public stance on prostate cancer screening. *Canadian Journal of Urology*: July 2002: 9(3): pp 1504-5.

**Krahn MD, Bremner KE, Asaria J, Alibhai SMH, Nam R, Tomlinson G, Jewett MAS., Warde P, and Naglie G:** The 10-year rule revisited: Accuracy of clinicians' estimates of life expectancy in patients with localized prostate cancer. *Urology*: July 2002: 60: pp 258-263.

**Nam RK, Zhang WW, Trachtenberg J, Diamandis EP, Toi A, Emami M, Tsihlias J, Sweet J, Evans A, Jewett, MAS, Narod SA:** A Single Nucleotide Polymorphism of the Human Kallikrein-2 Gene (KLK2) Highly Correlates with Serum HK2 Levels and in Combination Enhances Prostate Cancer Detection. *Journal of Clinical Oncology*: June 2003: 21: pp 2312-2319.

**Venkateswaran V, Fleshner NE, Klotz LH:** Modulation of cell proliferation and cell cycle regulators by vitamin E in human prostate carcinoma cell lines. *Journal of Urology*: October 2002: 168:4(1): pp 1578-82.

## Invited Visits to other Hospitals/Universities

**Herschorn S:** McGill University Advanced Course in Urogynecologic Surgery, Montreal, Quebec, December 2002. 1. Is there a place for conservative treatment of prolapse and incontinence. 2. Evaluation, testing, and new avenues of medical treatment for overactive bladder, 3. Surgery for overactive bladder.

**Herschorn S:** Canadian Continence Foundation/Canadian Urodynamics Professionals, Montreal, Quebec, June 2003. 1. Nocturia 2. Update on slings for female stress incontinence 3. Male slings for stress incontinence.

**Herschorn S:** Victoria area urologists and gynaecologists, Victoria, British Columbia, October 2002. Vaginal tape procedure for stress urinary incontinence.

**Klotz LH:** Long Island Medical College, Brooklyn, New York, January 2003. Active surveillance with selective intervention for localized prostate cancer.

**Klotz LH:** Reunion de la asociacion nacional de urologos egresados del centro medico la raza, Mexico City, Mexico, January 2003. Adjuvant therapy for localized prostate cancer.

**Klotz LH:** Australian 3rd National Prostate Cancer Symposium, Melbourne, Australia, August 2002. Invited Guest Speaker.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

A Double blind, placebo controlled, randomized study of combination Vitamin E, selenium and soy product in patients with high-grade prostatic intraepithelial neoplasia. *Fleshner N, Klotz L, Redelmeier D, Szalai J: NCIC (\$430,000 2000 - 2003).*

A prospective phase 3 randomized trial comparing intermittent versus continuous androgen suppression for patients with PSA progression in the clinical absence of distant metastases following radiotherapy for prostate cancer. *Klotz LH, Crook J: National Cancer Institute of Canada/Hoechst Marion Roussel (\$2,800,000 1997 - 2002).*

Differential gene expression in prostate cancer. *Squire Jeremy, Klotz L, Zielenska M, Sweet J, Jewett M, Kapuska L, Trachtenberg J: NCIC (\$377,000 2000 - 2003).*

Effectiveness of PSA screening in preventing metastatic prostate cancer: A population-based case-control study. *Fleshner N, Goel V, Kopec J, Bunting P, Warde P: National Cancer Institute of Canada (\$420,595 1999 - 2002).*

Genetic and Serological Testing for Prostate Cancer. *Nam, R.K. (P.I.), Jewett, M.A.S. (Co-Applicant), Trachtenberg, J. (Co-Applicant), Klotz, L. (Co-Applicant): National Cancer Institute of Canada - PCRI (\$50,000 2002 - 2003).*

Micronutrient and Molecular Prostate Cancer Network. *Fleshner N, Bristow R, Klotz L, Rennie P, Gleave M, Squire J, Khokka R: National Cancer Institute of Canada (\$3,200,000 2001 - 2005).*

Phase III Study of Soy, Selenium and Vitamin E in Patients With Prostatic Intraepithelial Neoplasia. *Fleshner N, Redelmeier D, Klotz L, Kapusta L, Rao AV, Szalai JP: National Cancer Institute of Canada (\$417,679 2000 - 2003).*

SELECT Trial (Vitamin E and Selenium for Prevention of Prostate Cancer: A randomized trial. Funded at \$170,000,000. over 10 years. *Coltman, C.,* Many co-investigators with the South Western Oncology Group including Klotz LH: *NIH (\$170 1999 - 2009).*

Women's Pelvic Health Centre -- Pilot Project. *Carr LK, Meschino D, Reicher A, Kung R, Lie K, Lee P, Holzapfel S, Richardson B, Blake J, Herschorn S: Sunnybrook & Women's College Health Sciences Centre Innovation Fund (\$692,000 2001 - 2003).*

## Honours Received

**Klotz LH:** Visiting Professor, Division of Urology, University of Western Ontario, May 2003.

**Nam RK:** Canadian Urological Association Scholarship Award, June 2003.

**Nam RK:** University of Toronto, Division of Urology, Postgraduate Teaching Award, June 2003.

## Division of Vascular Surgery

Dr. D.S. Kucey - Assistant Professor

Dr. R. Magissano – Assistant Professor (Division Head)

## Publications

**Kapral M, Wang H, Austin PC, Fang J, Kucey DS, Bowyer B, Tu JV:** Gender Differences in Carotid Endarterectomy Outcomes: Results from the Ontario Carotid Endarterectomy Registry. *Stroke*: May 2003; 34(5): pp 1120-05.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

A Regional Assessment of Outcomes following Ruptured Abdominal Aortic Aneurysms. *Kucey DS, Dueck AD, Laupacis A: Physicians Services Incorporated* (\$16,500 2002 - 2003).

Carotid Endarterectomy Health Services Research Program. *Tu, Jack V, Kucey, DS, Anderson G, Perry M: Heart and Stroke Foundation of Ontario, Grant #T 4495* (\$180,000 1999 - 2003).

## Honours Received

**Kucey DS:** Blair - Gore Research Award, Canadian Society for Vascular Surgery, October 2002.



Dr. Laura Tate  
Surgeon-in-Chief

The Toronto East General surgical program was dramatically affected by SARS I, with our elective surgical practice on hold for weeks, as we went from a level 2 to 1 and finally 0. Only emergency or time-sensitive urgent patients were accommodated. Being an East Toronto hospital, our emergency department saw record volumes of patients with SARS 2 and this led to increased admissions which overflowed into the surgical beds, again affecting surgery; this time inversely allowing day surgery to continue but limited surgical admissions for the more complicated cancer and orthopaedic patients. It has been a challenge in communication, fair allocation of resources and a shortage of intensive care beds.

Fortunately the Toronto East General Hospital has been able to open an extra OR this September, bringing our number to 12 OR theatres five days a week. This will help with our backlog. We have a healthy Anaesthesia department at present and hope to address some of the inequities suffered during SARS.



Dr. Marc Dupere joined our surgical department in November 2002, as our fifth Plastic Surgeon. Marc obtained his MD in Montreal and completed his Plastic Surgical training, in the University of Toronto Gallie Program. Marc spent a travelling fellowship in France, to augment his interest in reconstructive breast surgery.

This year we have had three busy fellowships in Urology, Orthopaedics and General Surgery. Our Urology division is now experienced in laproscopic nephrectomy.

## Division Of General Surgery

Dr. P. Bernick - Assistant Professor  
 Dr. T. Gilas – Lecturer  
 Dr. B. MacKenzie – Assistant Professor  
 Dr. P. Sullivan – Lecturer

## Division Of Orthopaedic Surgery

Dr. T.W. Barrington - Assistant Professor – Senior Staff  
 Dr. M. Catre - Lecturer  
 Dr. D.C. Evans - Assistant Professor  
 Dr. I.J. Harrington - Associate Professor – Senior Staff  
 Dr. W.J. Kraemer - Lecturer  
 Dr. G.L. Maistrelli - Associate Professor (Division Head)  
 Dr. P.J. Weiler – Assistant Professor  
 Dr. P. Wong - Lecturer

## Publications

**Harrington IJ, Sekyi-Otu A, Barrington TW, Evans DC:** The functional outcome with metallic radial head implants in the treatment of unstable elbow fractures: a long term review. *Wheeless: Textbook of Orthopaedics* [www.ortho-u.net/o2/1360.htm](http://www.ortho-u.net/o2/1360.htm) - 10k -: July 2002.

**Harrington IJ, Sekyi-Otu A, Barrington TW, Evans DC:** The functional outcome with metallic radial head implants in the treatment of unstable elbow fractures: a long term review. *Year Book of Orthopaedics*: July 2002: pp 247-249.

**Maistrelli G:** Valgus Deformity in Total Knee Arthroplasty. *Minerva Ortopedica E Traumatologica*: April 2003: 54(2): pp 167-169.

## **Invited Visits to other Hospitals/Universities**

**Harrington IJ:** Workplace Safety and Insurance Board, Appeals Tribunal, Toronto, Ontario, April 2003. Does an injury to one leg cause damage to the other lower limb?

**Maistrelli GL:** University of Bari, Visiting Professor, Bari, Italy, June 2003. 1) Bone Grafting The Deficient Acetabulum  
2) The Role Of HA Coatings.

**Maistrelli GL:** Northern Italian Orthopaedic Society 50th Annual Meeting, Pavia, Italy, June 2003. 1) Knee Deformities  
In Total Knee Arthroplasty 2) Advances In Cementless Sockets.

## **Division Of Plastic Surgery**

Dr. T. M. Born – Lecturer

Dr. H.C. Hall – Assistant Professor

Dr. L. Tate – Lecturer – (Chief Surgeon)

## **Invited Visits to other Hospitals/Universities**

**Born TM:** 29th Educational Symposium Annual Meeting CSA(C)PS, Toronto, Ontario, October 2002. Micro fat grafting  
and facial contouring.

## **Division of Thoracic Surgery**

Dr. B. Zeldin - Assistant Professor (Division Head)

## **Division of Urology**

Dr. B. MacMillan - Assistant Professor

Dr. R. Singal - Lecturer (Division Head)

## **Division of Vascular Surgery**

Dr. V. Campbell - Lecturer

Dr. W. Tanner - Lecturer



Dr. Bryce Taylor  
Surgeon-in-Chief

## Heads Of Division

- Dr. T. David – Cardiac Surgery**
- Dr. O. Rotstein – General Surgery**
- Dr. C. Wallace – Neurosurgery**
- Dr. R. Davey – Orthopaedic Surgery**
- Dr. P. Neligan – Plastic Surgery**
- Dr. N. Fleshner – Urology**
- Dr. W. Johnston – Vascular Surgery**



## Clinical Activities

The members of Surgical Services actively participated in our seven program groupings. In Cardiac Surgery, despite many pressures, surgeons carried out 2,166 open-heart procedures, 20 transplants, and a variety of other important cardiac operations.

The Transplant Program was very active again this year, with 260 major solid organ transplants. The Living Related Program in both liver and kidney once again was extremely successful, and the Left Ventricular Assist Device (LVAD) Program in Cardiac Surgery, continued in a controlled fashion because of designated budgetary controls.

Surgical Oncology was represented by general surgery (head and neck, Hepatopancreatobiliary (HPB) and breast), urology (prostate and kidney), gynecologic oncology, otolaryngology (head and neck), and thoracic surgery at the Toronto General/Princess Margaret Hospitals site. Neuro-oncology continued to be a major focus in the Neural and Sensory Program at the Toronto Western Hospital site. A system of waiting time capture was instituted, and this matured during the year. Waiting times were assessed (from decision to operate □ surgery and from referral □ surgery). Throughout the year, these average times actually climbed from unacceptable levels to even less acceptable levels, related to problems with budgetary constraints and the SARS crisis. The members of surgical services contributed to a proposal of \$9.117 million dollars, for increased surgical oncology funding, and approximately \$6.1 million dollars was granted in early May, 2003, resulting in increased surgical oncology operating time.

The MIS element of community and population health was happy to recruit Dr. Todd Penner at the Toronto Western site, an expert in minimally invasive surgery.

## Education

All divisions in the Department of Surgery contributed in major ways to both volume and quality of teaching in the 2002-2003 fiscal year. A number of surgeons were important educational administrators as well, with surgical clerkships being handled by Dr. Charles Peniston (Toronto General Hospital) and Dimitri Anastakis (Toronto Western Hospital), the Director of Surgical Education Dr. Richard Reznick, the Director of University Health Network Postgraduate Education Dr. Magdy Hassouna, and the Director of Undergraduate Surgical Education, Dr. Michele Carr - (ENT). Our surgeons are in general highly-rated in terms of both TES scores and the winning of teaching awards:

**Teaching Prizes were won by the following:**

Dr. R.J. Cusimano – Anderson Award.  
Dr. Ian McGilvray – Undergraduate Education Award from Wightman-Berris Academy.  
Dr. Fred Gentili – Wightman-Berris Academy Individual Teaching Award and UHN Ross Flemming Teaching Award.  
Dr. Mark Bernstein – Wightman-Berris Academy Award.  
Dr. Chris Wallace – Wightman-Berris Academy Award.  
Dr. Tom Waddell – Undergraduate Teaching Award from the Wightman-Berris Academy and Dr. Bob Ginsberg - Division of Thoracic Surgery's R.J. Ginsberg Award, for the best postgraduate teacher.  
Dr. Michael Jewett – Urology Division Postgraduate Teaching Award.

**Research**

The research accomplishments of members of the Department of Surgery have been outstanding in terms of papers published, invited talks and grants held. Dr. Chris Paige also provided a bibliometric analysis for 2003 of all University Health Network surgeons, attesting to the large number of citations. A number of research awards were also given to members of the department:

Dr. Dick Weisel – inaugural winner of the Charles Tator Surgeon-Scientist Mentoring Award.  
Dr. Tirone David – Golden Hippocrates International Award Recognizing Excellence in Medicine.  
Dr. Richard Reznick – Gallie Lecturer at the Royal College Meeting.  
Dr. David Urbach – Career Scientist Award from the Ministry of Health, Health Research Personnel Development Program.  
Dr. Michael Tymianski – George Armstrong Peters Prize for 2003 as well as the Royal College Medal in Surgery.  
Dr. Andrei Krassioukov – Larson Award from the American Association of Neurological Surgeons.  
Dr. Andres Lozano – named to the Science Advisory Council of Neuroscience Canada.  
Dr. Nizar Mahomed – American-British-Canadian Travelling Fellowship of the Canadian Orthopaedic Association (COA).  
Dr. Rod Davey – Hong Kong Ambassador of the Canadian Orthopaedic Association (COA) for 2003.  
Dr. Peter Neligan – Visiting Professor of the Plastic Surgery Educational Foundation 2003.  
Dr. Ralph Manktelow – establishment of the Ralph T. Manktelow Lectureship in Hand Surgery.  
Dr. John Trachtenberg – recognized by the Canadian Society for the Weizmann Institute of Science.

**Promotions**

In July 2002, Dr. Raj Rampersaud was promoted to Assistant Professor, and Drs. Michael Tymianski, Andres Kapus, William Hutchison, and Neil Fleshner were all promoted to Associate Professor. Full Professor status was awarded to Drs. Peter Neligan, Chris Feindel, Tony Miniaci, Shaf Keshavjee, Lorne Rotstein and Ren-Ki Li. As of July 1<sup>st</sup>, 2003, Drs. Terry Yau, Dimitri Anastakis, Rod Davey, Andrei Krassioukov and Nizar Mahomed were promoted to Associate Professor.

**Endowed Chairs**

Members of University Health Network Surgical Services now have 16 endowed chairs. The most recent appointments were Dr. Nizar Mahomed as the first recipient of the Smith & Nephew Chair in Orthopedic Research, Dr. David McCready as the first holder of the Gattuso Chair in Breast Surgical Oncology, and Dr. Ab Guha as the inaugural holder of the Susan and Alan Hudson Chair in Neuro-Oncology. An additional chair, the Tyco Chair in Minimally Invasive Surgery was funded, and will be searched when adequate hospital resources can be confirmed for the first holder.

**Reviews**

There were a number of formal reviews of our divisions carried out in the past year. The Cardiac Division under Dr. Tirone David was reviewed by Dr. Eric Rose from Columbia University and was regarded as “the leading academic cardiothoracic unit in Canada and amongst the handful of leading units in North America”. In addition, the University of Toronto Cardiac Division, under the chairmanship of Dr. Dick Weisel, was reviewed and both Drs. Weisel and David were enthusiastically supported for reappointment.

General Surgery was reviewed by Dr. Nicolas Christou, Chair of General Surgery at McGill University, who stated “I was extremely impressed with the performance of the division under Dr. Ori Rotstein’s outstanding leadership”. Dr. Rotstein was reappointed as well.

The Neurosurgical Division was reviewed by Dr. Mitch Berger from San Francisco who indicated “the overall program is widely regarded as a dominant force in academic surgery, especially in the areas of neuro-oncologic surgery, including skull base, movement disorders, cerebrovascular surgery, neurospinal disorders, and pituitary surgery”.

The Division of Orthopaedic Surgery and its leadership under Dr. Rod Davey, was reviewed by Dr. Bob Bourne from the University of Western Ontario. He stated that “Dr. Davey has earned a great deal of respect in his role as division head, has unified the division and has recruited well”. Dr. Davey was also recommended to continue for another five-year term as division head.

The Vascular Surgery Program was reviewed at the beginning of the fiscal year by Dr. Ken Harris, Chair of Surgery at University of Western Ontario, who reported “the previous review stated that Vascular Surgery at University of Toronto, was the premier vascular training program in Canada. This remains true and the program is one of the top academic programs in North America”. Dr. Wayne Johnston came to the end of his University Health Network division headship and chairmanship at University of Toronto and those positions are currently being searched.

## **Recruitment and Departures in the Department of Surgery**

During the 2002-2003 fiscal year, there were six important recruits. Dr. Todd Penner came as an expert in minimally invasive surgery to the Division of General Surgery, at the Toronto Western Hospital site. Dr. Eric Massicotte was recruited as a spine surgeon in the Division of Neurosurgery and the Spine Program. Dr. Johnny Lau came as a foot and ankle specialist to the Division of Orthopaedics at the Toronto Western Hospital. Dr. Neil Fleshner was recruited from Sunnybrook and Women’s Health Sciences Centre to be the head of urology at the University Health Network and a significant contributor to the Surgical Oncology Program. Dr. Andrew Pierre was recruited as a specialist in minimally invasive surgery, transplant and surgical oncology, based at the Toronto General/Princess Margaret Hospital sites. Finally, Dr. Michael Borger was recruited as a cardiac surgeon interested in minimally invasive and robotic surgery, as well as complex valve surgery.

Drs. Kamal Thapar and Phil Porter left University Health Network in October 2002, as they were recruited to Eau Claire, Wisconsin to set up a new neurosurgical unit there. In the first quarter of the academic year, Drs. John Tsihlias (urology – Trillium Health Sciences Centre in Mississauga) and Dr. Phil Haigh (general surgery – California), both surgical oncologists, left University Health Network. At the end of the fiscal year, Dr. Tony Miniaci, a valued member of the Musculoskeletal Health & Arthritis (MHA) Program (arthroscopy and other procedures), announced his acceptance of a position as Director of sports medicine, at the Cleveland Clinic.

The Division of Thoracic Surgery and the Department lost a world-class surgeon, investigator, teacher and friend, when Bob Ginsberg died on March 1. He was honoured at a wonderful day of tribute three weeks before his death, when surgeons from across the world came to honour this great man. He will be missed.

**AFP Discussions** – Drs. Barry Rubin and Bryce Taylor were involved in Alternate Funding Plan discussions for the whole year. As of July 1, 2003, it is hoped that Phase I agreements, will be signed by all surgeons in the coming weeks.

## **Recent SARS Crisis**

The SARS crisis obviously hit all surgical services in downtown Toronto very hard and University Health Network activities were compromised to no greater degree than those at other centers such as St. Michael’s Hospital and Sunnybrook and Women’s Health Sciences Centre. However, because of the previous cutbacks that were not experienced by other hospitals the SARS crisis was particularly devastating.

Despite the challenges facing surgery at University Health Network during the 2002-2003 year, the academic and clinical productivity of surgeons was admirable.



# Division of Cardiac Surgery

**Dr. M.A. Borger - Assistant Professor**  
**Dr. S.J. Brister - Associate Professor**  
**Dr. R.J. Cusimano - Assistant Professor**  
**Dr. T.E. David – Professor (Division Head)**  
**Dr. C.M. Feindel - Professor**  
**Dr. J. Ivanov - Assistant Professor**  
**Dr. R.K. Li - Professor**  
**Dr. L. Mickleborough - Professor**  
**Dr. C.M. Peniston - Assistant Professor**  
**Dr. A.C. Ralph-Edwards - Lecturer**  
**Dr. V. Rao - Assistant Professor**  
**Dr. H.E. Scully - Professor**  
**Dr. R.D. Weisel - Professor**  
**Dr. T.M. Yau - Associate Professor**

## Publications

- Ahluwalia MS, Butany J, Cloutre HP, Silverside C, Ralph-Edwards AC:** Ulcerated aortic atheromatous plaque causing amaurosis fugax. *Canadian Journal of Cardiology*: March 2003: 19-3: pp 313-15.
- Akhyari P, Fedak PWM, Weisel RD, Lee TYJ, Verma S, Mickle DAG, Li R-K:** Mechanical stretch enhanced the formation of bioengineered autologous cardiac muscle grafts. *Circulation, Surgical Supplement*: September 2002: 106: pp 1137-1142.
- Battellini R, Borger MA, Climente C, Mohr FW:** Extending the in-situ right internal mammary artery graft with retrocaval positioning. *Annals of Thoracic Surgery*: April 2003: 75: pp 1335-36.
- Billia F, Carter K, Rao V, Gorczynski R, Feindel C, Ross H:** Transforming growth factor-beta expression is significantly lower in hearts preserved with blood/insulin versus crystalloid cardioplegia. *Journal of Heart Lung Transplantation*: August 2002: 21(8): pp 918-22.
- Borger MA, Yau TM, Rao V, Scully HE, David TE:** Reoperative mitral valve replacement: importance of preservation of the subvalvular apparatus. *Annals of Thoracic Surgery*: November 2002: 74(5): pp 1482-7.
- Bucerius J, Gummert JF, Borger MA, Walther T, Doll N, Onnasch JF, Metz S, Falk V, Mohr FW:** Stroke after cardiac surgery - a risk factor analysis in 16,184 consecutive adult patients. *Annals of Thoracic Surgery*: February 2003: 75: pp 472-8.
- Butany J, Ahn C, Leask RL, Graba J, David T, Ahluwalia MS:** Stentless porcine valves: new mode of failure. *Canadian Journal of Cardiology*: February 2003: 19(2): pp 185-6.
- Butany J, Scully HE, Van Arsdell G, Leask R:** Prosthetic heart valves with silver coated sewing cuff fabric: early morphologic features in two patients. *Canadian Journal of Cardiology*: July 2002: 18: pp 733-738.
- David TE:** Dilation of the ascending aorta due to medial degeneration. *Journal of Heart Valve Disease*: March 2003: 12(2): pp 124-6.
- David TE, Ivanov J, Armstrong S, Feindel CM, Webb GD:** Aortic valve-sparing operations in patients with aneurysms of the aortic root or ascending aorta. *Annals of Thoracic Surgery*: November 2002: 74 (5): pp S1758-61.
- David TE, Ivanov J, Armstrong S, Rakowski H:** Late outcomes of mitral valve repair for floppy valves: Implications for asymptomatic patients. *Journal of Thoracic and Cardiovascular Surgery*: May 2003: 125(5): pp 1143-52.
- de Oliveira NC, David TE, Ivanov J, Armstrong S, Eriksson MJ, Rakowski H, Webb G:** Results of surgery for aortic root aneurysm in patients with Marfan syndrome. *Journal of Thoracic and Cardiovascular Surgery*: April 2003: 125(4): pp 789-96.
- Delgado DH, Rao V, Ross HJ:** Donor management in cardiac transplantation. *Canadian Journal of Cardiology*: September 2002: 18: pp 1217-1223.

- Dellgren G, David TE, Raanani E, Armstrong S, Ivanov J, Rakowski H:** Late hemodynamic and clinical outcomes of aortic valve replacement with the Carpentier Edwards pericardial bioprosthesis. *Journal of Thoracic and Cardiovascular Surgery*: July 2002: 124(1): pp 146-154.
- Dhillon B, Badiwala MV, Li S-H, Li R-K, Weisel RD, Mickle DAG, Fedak PWM, Rao V, Verma S:** Caveolin: A key target for modulating nitric oxide availability in health and disease. *Molecular and Cellular Biochemistry*: May 2003: 247 (1-2): pp 101-109.
- Dhillon B, Badiwala MV, Maitland A, Rao V, Le S-H, Verma S:** Tetrahydrobiopterin attenuates homocysteine induced endothelial dysfunction. Invited Publication. *Molecular Cellular Biochemistry*: May 2003: 247: pp 223-227.
- DiGiorgi P, Rao V, Oz MC,:** Which patient, which pump? *Journal of Heart Lung Transplantation*: April 2003: 22: pp 221-235.
- Doll N, Borger MA, Fabricius A, Stephan S, Gummert J, Mohr FW, Hauss J, Kottkamp H, Hindricks G:** Esophageal perforation during left atrial radiofrequency ablation: Is the risk too high? *Journal of Thoracic and Cardiovascular Surgery*: April 2003: 125: pp 836-42.
- Doll N, Borger MA, Hain J, Bucerius J, Walther T, Gummert JF, Mohr FW:** Minimal access aortic valve replacement: Effects on morbidity and resource utilization. *Annals of Thoracic Surgery*: October 2002: 74: pp S1318-22.
- Doll N, Walther T, Falk V, Binner C, Bucerius J, Borger MA, Gummert JF, Mohr FW, Kostelka M:** Secundum ASD closure using a right lateral minithoracotomy: five year experience in 122 patients. *Annals of Thoracic Surgery*: May 2003: 75: pp 1527-30.
- Fedak PW, Verma S, David TE, Leask RL, Weisel RD, Butany J:** Clinical and pathophysiological implications of a bicuspid aortic valve. *Circulation*: August 2002: 106(8): pp 900-4.
- Fedak PWM, Altamentova SM, Weisel RD, Nili N, Ohno N, Verma S, Lee T-YJ, Kiani C, Mickle DAG, Strauss BH, Li R-K:** Matrix remodeling in experimental and human heart failure: a possible regulatory role for TIMP-3. *American Journal of Physiology*: January 2003: 284: pp H626-H634.
- Feindel CM, Sung Y:** Prosthetic aortic graft cannulation: a simply technique to secure hemostasis. *Annals of Thoracic Surgery*: September 2002: 73(3): pp 937-8.
- Feindel, CM:** Mitral valve replacement in patients with mitral annulus abscess. In: *Operative Techniques in Thoracic and Cardiovascular Surgery - A comparative atlas* (James L. Cox, ed). W.B. Saunders - Elsevier Science, Philadelphia, PA: 2003: pp 14-26.
- Gyenes G, Lazzam C, Feindel CM, Roth SL:** Successful treatment of a saphenous vein graft pseudoaneurysm with PTFE-covered JoStents. *Canadian Journal of Cardiology*: April 2003: 19.No 5: pp 569-571.
- Kohli M, Yuan L, Escobar M, David T, Gillis G, Comm B, Garcia M, Conly J:** A risk index for sternal surgical wound infection after cardiovascular surgery. *Infection Control and Hospital Epidemiology*: January 2003: 24(1): pp 17-25.
- Kukuy EL, Goldstein DJ, Rao V, Edwards NM, Naka Y:** A simple method of creating LVAD outflow tract aortic anastomosis. *Heart Surgery Forum*: May 2003: 6: pp 53-54.
- Li, R-K, Weisel, RD, Fedak PWM, Mickle DAG:** Invited commentary; successful cellular cardiomyoplasty in canine idiopathic dilated cardiomyopathy. *Annals of Thoracic Surgery*: July 2002: 74: pp 298-299.
- Liu P, Arnold I, Belenkie C, Demers P, Dorian N, Gianetti H, Haddad J, Rao V et al:** The 2002/03 Canadian Cardiovascular Society Consensus Guideline Update for the Diagnosis and Management of Heart Failure. *Canadian Journal of Cardiology*: June 2003: 19: pp 347-356.
- Mikhail P, Verma S, Fedak PWM, Weisel RD, Li R-K,:** Does ischemic preconditioning afford clinically relevant cardioprotection? *American Journal of Cardiovascular Drugs*: January 2003: 3 (1): pp 1-11.



**Ohno N, Fedak PWM, Weisel RD, Komeda M, Mickle DAG, Li R-K:** Cell transplantation in non-ischemic dilated cardiomyopathy: a novel biological approach for ventricular restoration. *Japanese Journal of Thoracic and Cardiovascular Surgery*: December 2002: 50(II): pp 457-460.

**Omran AS, Woo A, David TE, Feindel CM, Rakowski H, Siu SC:** Intraoperative transesophageal echocardiography accurately predicts mitral valve anatomy and suitability for repair. *J. American Society of Echocardiography*: September 2002: 15(9): pp 950-7.

**Ozawa T, Mickle DAG, Weisel RD, Koyama N, Ozawa S, Li R-K:** The optimal biomaterial for creation of autologous cardiac grafts. *Circulation, Surgical Supplement*: September 2002: 106: pp 176-182.

**Ozawa T, Mickle DAG, Weisel RD, Koyama N, Wong H, Ozawa S, Li R-K:** Histologic changes of non-biodegradable and biodegradable biomaterials used to repair right ventricular heart defects in rats. *Journal of Thoracic and Cardiovascular Surgery*: December 2002: 124 (6): pp 1157-64.

**Ozawa, T, Li R-K:** Regeneration of myocardium. In: *Cutting-edge engineering for regenerative medicine* (Yoshito Ikada, ed). CMC Publishing Co. Ltd., Japan: 2002: pp 139-146.

**Privitera S, Butany J, Cusimano RJ, Silversides C, Ross H, Leask R:** Images in cardiovascular medicine. Alfieri mitral valve repair: clinical outcomes and pathology. *Circulation*: November 2002: 106(21): pp e173-4.

**Raj SR, Weisel RD, Verma S:** Coenzyme Q-10 and congestive heart failure: what is the verdict? *Canadian Journal of Cardiology*: October 2002: 18: pp 1054-1058.

**Ranjit J, Lietz K, Schuster M, Naka Y, Rao V, Mancini DM, Ros EA, Smith CR, Oz MC, Edwards NM, Itescu S:** Immunologic sensitization in recipients of left ventricular assist devices. *Journal of Thoracic and Cardiovascular Surgery*: June 2003: 125: pp 578-591.

**Rao V, Oz MC, Flannery MA, Catanese KA, Argenziano M, Naka Y:** Revised screening scale to predict survival following left ventricular assist device insertion. *Journal of Thoracic and Cardiovascular Surgery*: June 2003: 125: pp 855-862.

**Ross HJ, Hendry PJ, Dipchand AI, Giannetti N, Hirsch, Isaac D, Rao V. et al:** 2001 Canadian Cardiovascular Society Consensus Conference on Cardiac Transplantation. *Canadian Journal of Cardiology*: June 2003: 19: pp 620-654.

**Sakakibara Y, Tambara K, Lu F, Nishina T, Sakaguchi G, Nagaya N, Nishimura K, Li R-K, Weisel RD, Komeda M:** Combined procedure of surgical repair and cell transplantation for left ventricular aneurysm: an experimental study. *Circulation, Surgical Supplement*: September 2002: 106: pp 193-197.

**Szmitko PE, Fedak PWM, Weisel RD, Stewart DJ, Kutryk MJB, Verma S:** Endothelial progenitor cells: new hope for a broken heart. *Circulation*: June 2003: 107: pp 3093-3100.

**Verma S, Wang C-H, Li S-H, Dumont AS, Fedak PWM, Badiwala MV, Dhillon B, Weisel RD, Li R-K, Mickle DAG, Stewart DJ:** A self-fulfilling prophecy: C-reactive protein attenuates nitric oxide production and inhibits angiogenesis. *Circulation*: August 2002: 106: pp 913-919.

**Verma S, Wang C-H, Weisel RD, Dadiwala MV, Li S-H, Fedak PWM, Li R-K, Mickle DAG:** Hyperglycemia potentiates the proatherogenic effects of c-reactive protein: reversal with rosiglitazone. *Rapid Publication (J Mol Cell Cardiol)*: April 2003: 35 (4): pp 417-419.

**Verma S, Weisel RD, Li R-K:** Invited commentary; gene transfer to coronary artery bypass conduits. *Annals of Thoracic Surgery*: September 2002: 74: pp 1161 -1166.

**Wang C-H, Li S-H, Weisel RD, Fedak PWM, Dumont AS, Szmitko P, Li R-K, Mickle DAG, Verma S:** C-reactive protein upregulates angiotensin type 1 receptors in vascular smooth muscle. *Circulation*: March 2003: 107 (13): pp 1783-90.

**Wang C-H, Weisel RD, Liu PP, Fedak PWM, Verma S:** Glitazones and heart failure: critical appraisal for the clinician. *Circulation*: March 2003: 107: pp 1350-1354.

**Weisel RD, Li R-K, Mickle DA, Yau TM:** Cell transplantation comes of age. *Journal of Thoracic and Cardiovascular Surgery*: March 2003: 125: pp S53-S54.

**Wijesundera DN, Rao V, Beattie WS, Ivanov J, Karkouti K:** Validation of calculated creatinine clearance as a measure of renal insufficiency after cardiac surgery. *Anesthesia and Analgesia*: January 2003: 96: pp 1265-1273.

**Wijesundera DN, Rao V, Beattie WS, Ivanov J, Karkouti K:** Evaluating surrogate measures of renal dysfunction after cardiac surgery. *Anesthesia and Analgesia*: April 2003: 96: pp 1265-73.

**Yau TM:** Defining the role of anastomotic devices in coronary bypass surgery [editorial]. *Journal of Thoracic and Cardiovascular Surgery*: January 2003: 125: pp 27-29.

**Yau TM, Tomita S, Weisel RD, Jia Z-Q, Tumiati LC, Mickle DAG, Li R-K:** Beneficial effect of autologous cell transplantation on infarcted heart function: comparison between bone marrow stromal cells and heart cells. *Annals of Thoracic Surgery*: January 2003: 75: pp 169-177.

**Yokomuro H, Mickle DAG, Weisel RD, Li R-K:** Optimal conditions for heart cell cryopreservation for transplantation. *Molecular and Cellular Biochemistry*: January 2003: 242 (1-2): pp 109-114.

**Yoo K-J, Li R-K, Weisel RD, Mickle DAG, Tomita S, Ohno N, Fujii T:** Smooth muscle cells transplantation is better than heart cells transplantation for improvement of heart function in dilated cardiomyopathy. *Yonsei Medical Journal*: July 2002: 43 (3): pp 296-303.

## Invited Visits to other Hospitals/Universities

**Borger MA:** Young Cardiac Surgeons of Canada, Providenciales, Turks and Caicos, April 2003. Left ventricular reconstruction.

**Borger MA:** Pioneering Techniques in Cardiac Surgery (3rd Meeting), Leipzig, Germany, December 2002. New techniques in extra-corporeal circulation.

**Brister SJ:** St. Michael's Hospital, Toronto, Ontario, December 2002. Antiplatelet Agents in Cardiac Surgery: Is the risk real or imagined?

**Cusimano RJ:** Canadian Cardiovascular Society, Edmonton, Alberta, October 2002. Early graft loss after off pump coronary bypass: Potential etiology and modes of failure.

**Cusimano RJ:** American Heart Association, Chicago, Illinois, November 2002. Novel methods of myocardial revascularization.

**David TE:** NewEra Cardiac Care 2003 (in cooperation with the University of California), Irvine College of Medicine, Dana Point, California, January 2003. (1) Cardiac care in Canada; (2) Bioprosthetic valves.

**David TE:** Harvard Medical School, Boston, Massachusetts, October 2002. (1) Marfan's syndrome: When to operate? What to do? Valve Sparing?; (2) Aortic endocarditis: Choice of operation, choice of valve.

**David TE:** American Society of Echocardiography, Las Vegas, Nevada, June 2003. (1) Surgery for complications of myocardial infarction; (2) Surgical management of mitral valve disease: State of the art; (3) Clinical decision-making with structural mitral valve disease: Illustrative cases; (4) Mitral annular reconstruction.

**David TE:** Italian Society of Cardiac Surgery, Rome, Italy, November 2002. Aortic valve and ascending aorta reconstruction vs cryopreserved allografts in the treatment of the ascending aorta pathologies.

**David TE:** The Canadian Marfan Association, Halifax, Nova Scotia, June 2003. Cardiovascular surgery in patients with the Marfan syndrome.

**David TE:** The Royal Society of Medicine, London, England, November 2002. Evolving concepts in aortic root surgery.

**David TE:** Annual Cardiac Surgery Symposium for Thoracic Surgery Residents, Minneapolis, Minnesota, March 2003. Functional anatomy of the aortic root and its implications in surgery.

**David TE:** New Technology Committee of EACTS, Monte Carlo, Monaco, September 2002. Keynote lecture: Repetition is the mother of skill.



**David TE:** St. Jude Medical Europe, Monte Carlo, Monaco, September 2002. Rationale for biological heart valve usage.

**David TE:** Society of Cardiac Surgeons, Magog, Quebec, June 2003. The challenge of valve sparing in aortic surgery.

**David TE:** University of Ottawa Heart Institute, Ottawa, Ontario, September 2002. The rationale for mitral valve repair in asymptomatic patients with mitral regurgitation.

**David TE:** Sorin Biomedica Cardio, Monte Carlo, Monaco, September 2002. What have we learned about AVR with stentless bioprosthetic valves?

**Feindel CM:** New Brunswick Heart Centre, St. John, New Brunswick, September 2002. Cardiac Surgery - "A decade of experience" at the NBHC: How future advances will affect our patients.

**Feindel CM:** Medico-Legal Society of Toronto, Toronto, Ontario, November 2002. Heartwines.

**Feindel CM:** Peak Performance XVI, Whistler, British Columbia, February 2003. Session Chair - The Changing Face of Cardiac Surgery (Two case presentations).

**Feindel CM:** SATS - 52nd Annual Meeting, Turku, Finland, June 2003. Surgery of the Aortic Root and Valve Sparing Operations.

**Feindel CM:** STS/AATS, San Diego, California, January 2003. Video Symposium in Aortic Valve Surgery. "The Toronto SPV Implantation Technique".

**Li R-K:** Cardiovascular Developmental Biology Center Symposium, Charleston, South Carolina, March 2003. Cell Transplantation to Restore Cardiac Function: Mechanism of Benefit (invited speaker).

**Li R-K:** 8<sup>th</sup> Symposium on Myocardial Ischemia, Korea University, Seoul, Korea, October 2002. Stem cell and myocardial regeneration (invited speaker).

**Mickleborough LL:** Cleveland Clinic Heart Failure Summit, Cleveland, Ohio, August 2002. LV reconstruction for ischemic cardiomyopathy.

**Mickleborough LL:** Canadian Society of Cardiac Surgeons Postgraduate Course 2002, Edmonton, Alberta, October 2002. Surgery for congestive heart failure. Latest techniques.

**Peniston CM:** 55th Annual Meeting of the Japanese Association for Thoracic Surgery, Fukuoka, Japan, October 2002. "The Current Problems Our Society is Facing" Professional Accountability: The New Ability - Special Symposium.

**Peniston CM:** Congress Peru, Monterrico Lima San Pablo, August 2002. (1) Aortic Dissection-Lecture. (2) Aortic Surgery in Patients with Marfan's Syndrome - Lecture. (3) Cerebral Protection - Lecture.

**Peniston CM:** 55th Annual Meeting of the Japanese Association for Thoracic Surgery, Fukuoka, Japan, October 2002. Evidence Based Planning of Cardiac Services. The Ontario Experience 1990-2002 - Luncheon Seminar.

**Peniston CM:** 6th Annual GTACC Retreat: Partners in Care, Huntsville, Ontario, June 2003. On or Off Pump - Surgical Debate.

**Peniston CM:** 55th Annual Meeting of the Japanese Association for Thoracic Surgery, Fukuoka, Japan, October 2002. Paradise Lost - 40 Years of Toronto-Japan Cardiovascular Surgical Heritage (Dr. A.S. Trimble, presenting)-Dr. C. M. Peniston - Commentator.

**Rao V:** 18th Annual Cardiovascular Conference, Lake Louise, Alberta, March 2003. Ethical issues with mechanical circulatory support.

**Rao V:** Toronto Critical Care Symposium, Toronto, Ontario, November 2002. Extracorporeal cardiac support.

**Rao V:** 18th Annual Cardiovascular Conference., Lake Louise, Alberta, March 2003. Heart transplantation: Where we are...where we're going.

**Rao V:** Canadian Society of Clinical Perfusion, Edmonton, Alberta, October 2002. Mechanical circulatory support.

**Rao V:** Canadian Cardiovascular Society, Edmonton, Alberta, October 2002. Mechanical circulatory support: Establishing new programs and funding.

- Rao V:** Montreal Heart Institute, Grand Rounds, Montreal, Quebec, September 2002. Reperfusion strategies for cardiac surgery using enhanced cardioplegia: The RESCUE Trial.
- Rao V:** 3rd Annual Durham Cardiology Day, Whitby, Ontario, June 2003. Surgery for congestive heart failure: Before transplantation.
- Rao V:** Heart and Stroke Foundation, North Region, Volunteers Association, Toronto, Ontario, October 2002. The Heart Transplant/LVAD Research Program at the Toronto General Hospital.
- Rao V:** Options and Outcomes (Medtronic), Toronto, Ontario, August 2002. Twenty year experience with the Hancock II bioprosthesis.
- Scully HE:** Canadian Medical Forum, Ottawa, Ontario, December 2002. "Cash Contributions to Task Force Two".
- Scully HE:** CMA/Public Policy Forum, Ottawa, Ontario, December 2002. "Turning the Corner".
- Scully HE:** Canadian Cardiovascular Society, Edmonton, Alberta, October 2002. Annual General Meeting.
- Scully HE:** Canadian Medical Association, St. John, New Brunswick, August 2002. Annual General Meeting.
- Scully HE:** Royal College of Physicians and Surgeons of Canada, Ottawa, Ontario, September 2002. Annual General Meeting.
- Scully HE:** Canadian Medical Association, Ottawa, Ontario, October 2002. CMA Leaders' Forum.
- Scully HE:** World Medical Association, Washington, District of Columbia October 2002. General Assembly.
- Scully HE:** Canadian Medical Association/Task Force Two, Ottawa, Ontario, December 2002. HRDC Intersectorial Communication Strategy Group.
- Scully HE:** The Society of Obstetricians and Gynaecologists of Canada, Toronto, Ontario, September 2002. National Specialties Societies Meeting.
- Scully HE:** CMA/Task Force Two, Toronto, Ontario, November 2002. National Summit on Innovation and Learning.
- Scully HE:** Canadian Medical Association/Task Force Two, Ottawa, Ontario, November 2002. Nursing Sector Study.
- Scully HE:** Canadian Medical Association, Task Force Two, Chair, Toronto, Ontario, September 2002. School of Health Policy Management, University of Toronto.
- Weisel RD:** National Institutes of Health and National Heart, Lung and Blood Institute, Bethesda, Maryland, June 2003. Adjuncts to cardiac surgery.
- Weisel RD:** Stem Cells in Clinical Practice Session of the American College of Surgeons, San Francisco, California, October 2002. Cardiac regeneration with adult stem cells.
- Weisel RD:** Update on Cardiopulmonary Bypass Annual Meeting, Snowmass, Colorado, March 2003. Cell and gene therapy for heart failure.
- Weisel RD:** Japanese Society of Regenerative Therapy for Cardiovascular Surgery, Sapporo, Japan, May 2003. Cell transplantation therapy for tissue engineering of functional myocardium.
- Weisel RD:** Beth Israel Deaconess Medical Center, Boston, Massachusetts, October 2002. Cell transplantation to prevent heart failure.
- Weisel RD:** Cell Transplantation Society, Atlanta, Georgia, March 2003. Cell transplantation to prevent heart failure.
- Weisel RD:** Institute of Cardiovascular Sciences, Winnipeg, Manitoba, October 2002. Cell transplantation to prevent heart failure.
- Weisel RD:** Mayo Clinic, Rochester, MN, January 2003. Cell transplantation to prevent heart failure.



**Weisel RD:** New Era Cardiac Care Symposium, Dana Point, California, January 2003. Cell transplantation to prevent heart failure.

**Weisel RD:** Western Thoracic Surgical Association, Carlsbad, California, June 2003. Cell transplantation to prevent heart failure.

**Weisel RD:** Transplantation Society, Miami, Florida, August 2002. Cell transplantation to restore cardiac function.

**Weisel RD:** Heart Failure Society of America, Boca Raton, Florida, September 2002. Cell transplantation: toward cardiac repair, not replacement.

**Weisel RD:** Symposium "Perioperative MI in Patients Undergoing CABG Surgery: Is It More Common Than We Realize?", Miami Beach, Florida, April 2003. Future novel approaches to preventing myocardial infarction in CABG patients.

**Weisel RD:** New Era Cardiac Care Symposium, Dana Point, California, January 2003. How to obtain grant funding as an academic surgeon.

**Weisel RD:** San Diego Cardiothoracic Surgery Symposium, San Diego, California February 2003. Myocardial protection.

**Weisel RD:** Redo Cardiac Surgery in Adults Symposium, Boston, Massachusetts May 2003. Myocardial protection in redo cardiac surgery.

**Weisel RD:** Cardiac BioInterventions, San Francisco, California, October 2002. Myogenesis and angiogenesis.

**Weisel RD:** Update on Cardiopulmonary Bypass Annual Meeting, Snowmass, Colorado, March 2003. Reoperative revascularization: surgical issues (repeat sternotomy, on-off pump, protection).

**Weisel RD:** Controversies in Adult Cardiac Surgery Symposium, Los Angeles, California October 2002. Stem cells and angiogenesis.

**Yau TM:** Canadian Cardiovascular Society, Edmonton, Alberta, October 2002. Cardiovascular care in the elderly.

**Yau TM:** 21st Century Cardiac Surgical Society, Lake Buena Vista, Florida, February 2003. VEGF transgene and receptor expression in cell-based gene therapy.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

A prospective evaluation of the St. Jude Inc., Cardiovascular Group Aortic Connector. *Yau, TM: St. Jude Medical Inc.* (\$76,000 2000 - 2004).

Angiogenesis by uterine cell transplantation. *Li R-K: The Heart and Stroke Foundation of Ontario* (\$155,478 2001 - 2003).

Autologous tissue-engineered grafts for congenital heart surgery. *Li R-K: The Heart and Stroke Foundation of Ontario* (\$121,372 2001 - 2003).

BARI 2D: A Trial of Revascularization and Glycemic Control in NIDDM. *Schwartz, L, Steiner G, David TE, Ralph-Edwards AC, Cusimano RJ, Yau T, Feindel CM: National Institute of Health* (\$35,000,000 2000 - 2004).

C-Reactive Protein: A Predictor of Adverse Outcome Following CABG? *Dr. M.J. Albanna, Dr. S.J. Brister, Supervisor: The Physicians' Services Incorporated Foundation* (\$20,000 2003 - 2004).

C-reactive protein: biochemical, cellular and pharmacological perspectives. *Verma S, Weisel RD: CIHR* (\$80,000 2002 - 2003).

Cell transplantation for cardiovascular disease. *Li R-K: Heart and Stroke Foundation of Ontario (Personnel Support)* (\$381,250 2001 - 2006).

Cell transplantation for diabetic cardiomyopathy. *Li R-K: Canadian Diabetes Association* (\$125,628 2002 - 2004).

Cell transplantation to improve heart function. *Li R-K: Ontario Ministry of Energy, Science and Technology* (\$150,000 2001 - 2006).

Endothelial preservation for cardiac transplantation. *Rao V: Dean's Fund, University of Toronto* (\$10,000 2002 - 2003).

- Endothelial preservation for cardiac transplantation. *Rao V: Connaught Foundation* (\$30,000 2002 - 2004).
- Endothelin, perioperative ischemia and diabetes. *Weisel RD, Verma S: Canadian Diabetic Association* (\$70,163 2002 - 2003).
- Endothelin, perioperative ischemia and diabetes. *Weisel RD, Rao V: Canadian Diabetes Association* (\$138,536 2001 - 2003).
- Evaluation of Empiric Programming to Improve Patient Management. *Cameron D, Brister S, Ralph-Edwards A, Cusimano RJ: Medtronic, Inc (Total amount is \$1,000.00 per patient)* (\$1,000 2003).
- EXPEDITION Trial (Na<sup>+</sup>/H<sup>+</sup> exchange inhibitor to prevent coronary events in acute cardiac conditions. *Yau TM, Weisel RD: Aventis Pharma* (\$130,200 2001 - 2003).
- Insulin cardioplegia for poor left ventricular function. *Yau TM, Weisel RD: Heart and Stroke Foundation of Ontario* (\$39,271 2002 - 2003).
- Insulin cardioplegia for poor left ventricular function. *Yau TM, Weisel RD: Canadian Institutes of Health Research* (\$70,192 2001 - 2003).
- Intimal Hyperplasia: Will Inhibition of Matrix Metalloproteinase Inhibit it?. *Tang G, Brister SJ, Supervisor: The Physicians' Services Incorporated Foundation* (\$20,000 2003 - 2004).
- Magnetic resonance imaging for ischemic heart disease. *Merchant N, Mickleborough LL: Medical Research Council of Canada* (\$37,612 2002 - 2003).
- Minimal invasive cardiac surgery: Is it safe for the brain? *Borger M: Connaught New Staff Matching Grant, University of Toronto* (\$10,000 2003 - 2005).
- Myocardial transgene expression in transplanted cells. *Yau TM: Heart & Stroke Foundation of Ontario* (\$98,665 2002 - 2004).
- Pharmacokinetics of Recombinant Human Erythropoietin in Patients Undergoing Cardiac Surgery with Cardiopulmonary Bypass. *McLuskey S, Ralph-Edwards AC, Yeo E, Djaiani G, Karkouti K, Fedorko L: Ortho Biotech* (\$133,000 2003).
- Preservation of endothelial function following prolonged storage of cardiac allografts with shed donor blood. *Feindel CM, Rao V: Heart and Stroke Foundation of Ontario* (\$221,319 2001 - 2004).
- Prevention of the progressive cardiac failure of dilated cardiomyopathy by gene-transfected cell transplantation. *Li RK: Canadian Institute of Health Research* (\$288,697 2001 - 2004).
- Protection from perioperative ischemia. *Weisel RD: Heart and Stroke Foundation of Ontario* (\$64,035 2002 - 2003).
- Quest Trial. *Weisel RD, Rao V, Yau TM: Quest Medical, Inc.* (\$50,000 2001 - 2005).
- Surgical treatment for ischemic heart (STICH) failure trial. *Mickleborough LL (for Canada), Multi centre trial across North America: NIH U.S.* (\$16,000,000 2001 - 2004).
- The efficacy of two modalities - intravenous iron and recombinant erythropoietin for treatment of profound postoperative anemia". *Karkouki, Keyvan, Yau TM: Physician's Services Incorporated Foundation* (\$99,500 2001 - 2003).
- The impact of continuous flow cell-saver on neurocognitive decline after cardiac surgery. *Djaiani G, Borger MA, Fedorko L, Green RE, Davy C.H. Cheng: Heart and Stroke Foundation of Canada* (\$200,000 2002 - 2004).

## Honours Received

**David TE:** Golden Hippocrates International Award, April 2003.

**David TE:** Honorary Member, Italian Society for Cardiac Surgery, November 2002.

**Weisel RD:** Council on Cardiothoracic and Vascular Surgery Mentor Award, American Heart Association, November 2002.

**Weisel RD:** John Foerster Lecturer Award, Institute of Cardiovascular Sciences Awards, Winnipeg, Manitoba, October 2002.



# Division of General Surgery

Dr. M.S. Cattral - Associate Professor

Dr. A. Dackiw - Assistant Professor

Dr. A. Easson – Lecturer

Dr. R. Gorczynski - Professor

Dr. D. Grant - Professor

Dr. P.D. Greig - Professor

Dr. H.S. Himal -Associate Professor

Dr. A. Kapus - Associate Professor

Dr. B. Langer - Professor

Dr. J.C. Marshall - Professor

Dr. R.E. Mathews - Assistant Professor

Dr. D.R. McCready - Associate Professor

Dr. I. McGilvray - Assistant Professor

Dr. T. Penner – Assistant Professor

Dr. R.K. Reznick - Professor

Dr. L.E. Rotstein - Professor

Dr. O.D. Rotstein - Professor (Division Head)

Dr. B.R. Taylor – Professor

Dr. D.R. Urbach - Assistant Professor



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## Publications

**Aarts MA, Marshal JC:** Empiric antibiotics in critical illness: Do they help or harm? In: 2003 Yearbook of Intensive Care and Emergency Medicine (Vincent JL, ed). Springer, Berlin: 2003: pp 219-228.

**Aarts MA, Marshall JC:** In defense of evidence. The continuing saga of selective decontamination of the digestive tract. American Journal of Respiratory and Critical Care Medicine: October 2002: 166: pp 1014-1015.

**Anastakis DJ, Wanzel KR, Brown MH, Herold McIlroy J, Hamstra S, Ali J, Hutchison CR, Murnaghan J, Reznick RK, Regehr G:** Evaluating the Effectiveness of a Two-Year Curriculum in a Surgical Skills Centre. American Journal of Surgery: April 2003: 185(4): pp 378-85.

**Bain VG, Wong WW, Greig PD, Yoshida EM:** Hepatology and the Canadian gastroenterologist: Interest, attitudes and patterns of practice: Results of a national survey from the Canadian Association of Gastroenterology. The Canadian Journal of Gastroenterology: January 2003: 17: pp 25-29.

**Borenstein S, Diamond IR, Grant DR, Greig PD, Jones N, Ng V, Roberts E, Fecteau A:** Outcome of pediatric live-donor liver transplantation-the Toronto experience. Journal of Pediatric Surgery: February 2003: 38: pp 668-71.

**Borenstein S, Diamond I, Grant D, Greig P, Jones N, Ng V, Roberts E, Fecteau A:** Outcome of pediatric Live-donor liver transplantation - The Toronto Experience. Journal of Pediatric Surgery: May 2003: 38, No 5: pp 668-671.

**Boushey RP, Dackiw APB:** Carcinoid tumors. Current Treatment Options Oncology: August 2002: 3(4): pp 319-26.

**Carr MM, Hewitt J, Scardamalia M, Reznick RK:** Internet-based otolaryngology case discussions for medical students. Journal of Otolaryngology: August 2002: 31(4): pp 201-211.

**Cervini P, Smith LL, Urbach DR:** The surgeon on call is a strong determinant of using a laparoscopic approach for appendectomy. Surgical Endoscopy: December 2002: 16: pp 1774-1777.

**Cervini PN, Smith LC, Urbach DR:** The effect of intraoperative bupivacaine administration on narcotic analgesic use after laparoscopic appendectomy. Surgical Endoscopy: November 2002: 16: pp 1579-1582.

**Chan CW, Kay LS, Khadaroo RG, Chan MWC, Lakatoo S, Young KJ, Zhang L, Gorczynski RM, Cattral M, Rotstein OD, Levy GA:** Soluble fibrinogen-like protein 2/fibroblast growth factor-2 exhibits immunosuppressive properties: Suppressing T cell proliferation and inhibiting maturation of bone marrow-derived dendritic cells. Journal of Immunology: March 2003: 170: pp 4036-4044.

**Chan CW, Kay LS, Khadaroo RG, Chan MW, Lakatoo S, Young KJ, Zhang L, Gorczynski RM, Cattral MS, Rotstein O:** Soluble fg12/fibroleukin exhibits immunosuppressive properties: suppressing T cell proliferation and inhibiting maturation of bone marrow-derived dendritic cells. *Journal of Immunology*: April 2003: 170: pp 4036-4044.

**Chan Y, Irish JC, Wood SJ, Rotstein LE, Brown DH, Gullane PJ and Lockwood GA:** Patient education and informed consent in head and neck surgery. *Archives of Otolaryngology-Head and Neck Surgery*: November 2002: 128: pp 1269-1274.

**Chan TC, Libutti SK, McCart JA, Chen C, Khan A, Skarulis MK, Weinstein LS, Doppman JL, Marx SJ, Alexander HR:** Persistent primary hyperparathyroidism caused by adenomas identified in pharyngeal or adjacent structures. *World Journal of Surgery*: May 2003: 27.

**Dackiw APB, Clark OH:** Computer assisted evoked eletromyography with stimulating surgical instruments for recurrent/external laryngeal nerve identification and preservation in thyroid and parathyroid surgery. *Surgery*: December 2002: 132(6): pp 1100-08.

**Dackiw APB, Kruerer HM, Clark OH:** Current health insurance policies for prophylactic thyroid cancer surgery. *World Journal of Surgery*: August 2002: 26 (8).

**Di Ciano C, Nie Z, Szaszi K, Lewis R, Uruno T, Zhan X, Rotstein OD, Mak A, Kapus A:** Osmotic stress-induced remodelling of cortical cytoskeleton. *American Journal of Physiology and Cell Physiology*: July 2002: 283: pp C850-C865.

**Dixon E, Vollmer CM, Greig PD, Gallinger S:** HPB Clinics around the world - The University of Toronto HPB Program at the Toronto General Hospital. *HPB Surgery*: May 2003: 5: pp 39-42.

**Fan J, Kapus A, Marsden PA, Li YH, Oreopoulos G, Marshall JC, Frantz S, Kelly A, Medzhitov R, Rotstein OD:** Regulation of Toll-like receptor-4 expression in the lung following hemorrhagic shock and lipopolysaccharide. *Journal of Immunology*: July 2002: 168: pp 5252-5259.

**Fischer S, Lapinsky SE, Weshler J, Howard F, Rostein LE, Cohen Z and Stewart, TE:** Surgical procedure logging with use of a hand-held computer. *Canadian Journal of Surgery*: October 2002: 45(5): pp 345-50.

**Gorczynski RM, Hadidi S, Yu G, Clark DA:** The same immunoregulatory molecules contribute to successful pregnancy and transplantation. *American Journal of Reproductive Immunology*: July 2002: 48(1): pp 18-26.

**Gerlach H, Dhainaut JF, Harbarth S, Reinhart K, Marshall JC, Levy M:** The PIRO concept: R is for response. *Critical Care*: June 2003: 7: pp 256-259.

**Ghanekar A, Lajoie G, Luo Y, Yang H, Choi J, Garcia B, Cole EH, Greig PD, Cattral MS, Phillips MJ, Cardella CJ, Levy GA, Zhong R, Grant DR:** Improvement in rejection of human decay accelerating factor transgenic pig-to-primate renal xenografts with administration of rabbit antithymocyte serum. *Transplantation*: July 2002: 15: pp 28-35.

**Ghanekar A, Jajoie G, Luo Y, Yang H, Choi J, Garcia B, Cole E, Greig PD, Cattral MS, Phillips MJ, Cardella CJ, Levy GA, Zhong R, Grant DR:** Improvement in rejection of human decay accelerating factor transgenic pig-to-primate renal xenografts with administration of rabbit antithymocyte serum. *Transplantation*: July 2002: 74: pp 28-35.

**Greig P, Lilly L, Scudamore C, Erb S, Yoshida E, Kneteman N, Bain V, Ghent C, Marotta P, Grant D, Wall W, Tchervenkov J, Barkun J, Roy A, Marleau D, McAlister V, Peltekian K:** Early steroid withdrawal after liver transplantation: The Canadian tacrolimus versus microemulsion cyclosporin a trial: 1-year follow-up. *Liver Transplantation and Surgery*: June 2003: 9: pp 587-95.



- Greig PD, Lilly L, Scudamore C, Siegfried Erb, Yoshida E, Kneteman N, Bain V, Ghent C, Marotta P, Grant D, Wall W, Tchervenkov J, Barkun J, Roy A, Marleau D, McAlister V, Peltekian K:** Early steroid withdrawal following liver transplantation: The canadian tacrolimus vs. microemulsion cyclosporin A trial 1 year follow up. *Liver Transplantation*: June 2003: 9: pp 587-595.
- Hebert PC, Cook DJ, Wells G, Marshall JC:** The design of randomized controlled trials in critically ill patients. *Chest*: October 2002: 121: pp 1290-1300.
- Humar A., Malkan G., Moussa G., Greig P., Levy G., Mazzulli T:** Human herpes virus-6 is associated with cytomegalovirus reactivation in liver transplant recipients. *Journal of Infectious Diseases*: April 2000: 181: pp 1450-1453.
- Imai Y, Parodo J, Kajikawa O, de Perrot M, Fischer S, Edwards V, Cutz E, Liu M, Keshavjee S, Martin TR, Marshall JC, Ranieri VM, Slutsky AS:** Injurious Mechanical Ventilation and End-Organ Epithelial Cell Apoptosis and Organ Dysfunction in an Experimental Model of Acute Respiratory Distress Syndrome. *JAMA*: April 2003: 289: pp 2104-2112.
- Kellersmann R, Lazarovits A, Grant D, Gracia B, Chan B, Kellersmann A, Wang H, Jevnikar A, Wagner N, Werner M, Ulrichs K, Thiede A, Zhong R:** Monoclonal antibody against b7 integrins, but not b7-deficiency attenuates intestinal allograft rejection in mice. *Transplantation*: November 2002: 15: pp 1327-34.
- Khadaroo RG, Lu Z, Kapus A, Powers KA, Rotstein OD:** Impaired upregulation of mitogen activated protein kinases following hemorrhagic shock. *Surgery*: July 2002: 132: pp 360-364.
- Khadaroo RG, Rotstein OD:** Are clinician-scientists an endangered species? Barriers to clinician-scientist training. *Clinical and Investigative Medicine*: July 2002: 25: pp 260-261.
- Ko BCB, Lam AKM, Kapus A, Fan J, Chung SK, and Chung SSM:** Fyn and p38 signaling are both required for maximal hypertonic activation of OREBP/TonEPB. *Journal of Biological Chemistry*: November 2002: 277: pp 46085-92.
- Kumar D, Cattral MS, Robicsek A, Gaudreau C, Humar A:** Outbreak of pseudomonas aeruginosa via multiple organ transplantation from a common donor. *Transplantation*: April 2003: 75: pp 1053-1055.
- Kummer C, Spencer Netto F, Marshall JC:** The immunomodulatory effects of anesthetic and analgesic agents. In: *Yearbook of Intensive and Critical Care Medicine* (Vincent JL, ed). Springer-Verlag, Berlin: 2002: pp 150-162.
- Leong WL, Ghazarian DM, McCready DR:** Previous wide local excision of primary melanoma is not a contraindication for sentinel lymph biopsy of the trunk and extremity. *Journal of Surgical Oncology*: March 2003: 82(3): pp 143-146.
- Levy GA, Lilly LB, Girgrah N, Cattral MS:** Immunologic Aspects of Liver Disease. In: *Schiff's Diseases of the Liver* (Schiff ER., Sorrell MF., Maddrey WC., eds). Lippincott, Williams & Wilkins, Philadelphia, PA: 2003: pp 987-1000.
- Levy MM, Fink M, Marshall JC, Abraham E, Angus D, Cook DJ, Cohen J, Opal SM, Vincent JL, Ramsay G (for the International Sepsis Definitions Conference):** 2001 SCCM/ESICM/ACCP/ATS/SIS International sepsis definitions conference. *Critical Care Medicine*: April 2003: 31: pp 1250-1256.
- Lewis A, Di Ciano C, Rotstein OD, Kapus A:** Osmotic stress activates Rac and Cdc42 in neutrophils: Role in hypertonicity-induced actin polymerization. *American Journal of Physiology - Cell. Physiol*: October 2001: 282: pp C271-279.
- Macdonald PE, Wang G., Tsuk S., Dodo C, Kang Y, Tang L, Wheeler MB, Cattral MS, Lakey JR., Salapatek Am, Lotan I, Gaisano HY:** Synaptosome-associated protein of 25 kilodaltons modulates Kv2.1 voltage-dependent K(+) channels in neuroendocrine islet beta-cells through an interaction. *Molecular endocrinology*: November 2002: 16: pp 2452-61.
- Marshall JC:** A risk index with 14 variables predicted 30-day postoperative pneumonia after major non-cardiac surgery. *ACP Journal Club*: July 2002: 137: pp 36.

**Marshall JC:** Clinical trials in sepsis. Recent data. In: Sepsis: Pathophysiologic Insights and Current Management (Levy MM, Vincent JL, eds). Society of Critical Care Medicine, Chicago: 2003: pp 57-64.

**Marshall JC:** Control of the source of sepsis. In: The Sepsis Text (Vincent JL, Carlet J, Opal SM, eds). Kluwer Academic Press, Boston: 2002: pp 525-538.

**Marshall JC:** Microbial translocation: From myth to mechanism. In: Sepsis and Organ Dysfunction: From Chaos to Rationale. (Baue AE, Berlot G, Gullo A, Vincent JL, eds). Springer, Milano: 2002: pp 121-129.

**Marshall JC:** Modulation of the systemic inflammatory response in sepsis: current status, future prospects. *Medicina Critica*: December 2002: 3: pp 16-21.

**Marshall JC:** Multisystem organ dysfunction: Can we make a difference? In: Sepsis: Pathophysiologic Insights and Current Management (Levy MM, Vincent JL, eds). Society of Critical Care Medicine, Chicago: 2003: pp 123-129.

**Marshall JC:** Such stuff as dreams are made on: Mediator-directed therapy in sepsis. *Nature Reviews Drug Discovery*: May 2003: 2: pp 391-405.

**Marshall JC:** The International Sepsis Forum's Controversies in sepsis: How will sepsis be treated in 2051? *Critical Care*: July 2002: 6: pp 465-467.

**Marshall JC:** The multiple organ dysfunction syndrome (MODS). In: Shock (Dias F, ed). EDIPUCRS, Porto Alegre, Brazil: 2002: pp 375-386.

**Marshall JC, Jia S, Taneja R:** Dysregulated neutrophil apoptosis in the pathogenesis of organ injury in critical illness. In: Mechanisms of Organ Dysfunction in Critical Illness (Fink MP, Evans TW, eds). Springer-Verlag, Berlin: 2002: pp 110-123.

**Marshall JC, Romaschin AD, Foster DM, Paice J, Harris D, Ribeiro M, Walker PM:** Rapid assay of endotoxin in the intensive care unit. *Critical Care*: August 2002: 6: pp 342-348.

**Marshall JC, Spencer-Netto F:** Secondary Bacterial Peritonitis. In: Problems in General Surgery, Vol. 19 (Malangoni M, ed). Lippincott, Williams & Wilkins, Philadelphia: 2002: pp 53-64.

**Marshall JC, Taneja R:** Terminology and conceptual challenges. In: Sepsis and Multiple Organ Dysfunction: A multidisciplinary approach. (Deitch EA, Vincent JL, Windsor ACJ, eds). W.B. Saunders, London: 2002: pp 12-18.

**Marshall JC, Vincent JL, Fink MP, Cook DJ, Rubenfeld G, Foster D, Fisher CJ, Faist E, Reinhart K:** Measures, markers, and mediators: Towards a staging system for clinical sepsis. *Critical Care Medicine*: May 2003: 31: pp 1560-1567.

**Marshall JC, Vincent JL, Fink MP, Cook DJ, Rubenfeld G, Foster D, Fisher CJ, Faist E, Reinhart K:** Measures, markers, and mediators: Towards a staging system for clinical sepsis. *Intensive Care Medicine*: April 2003: 29: pp 530-538.

**Marshall, JC:** Strategies for Surgical Treatment. In: Pathologies Infectieuses en Reanimation (Charbonneau P, Glauser MP, Praz G, eds). Elsevier, Paris: 2002: pp 154-164.

**Masszi A, Di Ciano A, Sirokmany G, Arthur WT, Rotstein OD, Wang J, McCulloch CAG, Rosivall L, Mucsi I, Kapus A:** Central Role for Rho in TGF $\beta$ -Induced Epithelial-Myofibroblast Transdifferentiation in Proximal Tubular Cells. *American Journal of Physiology*: May 2003: 284: pp G911-924.

**Masszi A, Di Ciano C, Sirokmany G, Arthur WT, Rotstein OD, Wang J, McCulloch CA, Rosivall L, Mucsi I, Kapus A:** Central role for Rho in TGF-( $\beta$ )1-induced smooth muscle actin expression during epithelial-mesenchymal transition. *American Journal of Physiology and Renal Physiology*: December 2002: 12: pp epub.



**McGilvray I, Lajoie G., Humar A., Cattral MS:** Polyomavirus infection and acute vascular rejection in a kidney allograft: Coincidence or mimicry? *American Journal of Transplantation*: April 2003: 3: pp 501-504.

**McGilvray ID, Greig P:** Critical care of the liver transplant patient. *Current opinions in Critical Care*: July 2002: 8: pp 178-182.

**McGilvray ID, Tsai V, Lu Z, Dackiw A, Kapus A, Rotstein O:** Monocyte transendothelial migration induces tissue factor: Role of the map kinases. *Shock*: July 2002: 18: pp 51-57.

**McGilvray ID, Tsai V, Marshall JC, Dackiw APB, Kapus A, Rotstein OD:** Monocyte adhesion and transmigration induce tissue factor expression: Role of the mitogen-activated protein kinases. *Shock*: July 2002: 18: pp 51-57.

**Papia G, Marshall JC:** Deciding on the extent of surgical therapy. In: *Source Control: Principles and Practice of Surgical Therapy* (Schein M, Marshall JC, eds). Springer-Verlag, New York: 2002: pp 62 – 67.

**Patterson EJ, Urbach DR, Swanstrom LL:** A comparison of diet and exercise therapy versus laparoscopic Roux-en-Y gastric bypass for morbid obesity: A decision analysis. *Journal of the American College of Surgeons*: March 2003: 196: pp 379-384.

**Patterson EJ, Urbach DR, Swanstrom LL:** Continuing Medical Education Program. *Journal of the American College of Surgeons*: March 2003: 287(15): pp 1938-1939.

**Petrik D, McCready DR, Goel V, Sawka C:** The association between extent of axillary lymph node dissection and patient, tumor, surgeon and hospital factor in patients with early breast cancer. *Journal of Surgical Oncology*: February 2003: 82: pp 84-90.

**Powers KA, Fan J, Kapus A, Khadaroo RG, Papia G and Rotstein OD:** 25% albumin prevents lung injury by modulating adhesive interaction between neutrophils and the endothelium. *Surgery*: August 2002: 132: pp 391-398.

**Rizoli SB, Rotstein OD, Sibbald WJ:** The immunological effects of hypertonic saline. In: *2002 Yearbook of Intensive Care and Emergency Medicine* (Vincent J-L, ed): 2002: pp 446-453.

**Rotstein OD:** Reoperation after source control surgery for intraabdominal infection. In: *Source Control: A Guide to the Management of Surgical Infections* (Schein M, Marshall JC, eds). Springer, Berlin Heidelberg New York: 2002: pp 300-308.

**Tang BQ, Urbach DR:** The diagnosis and management of gallstones in the elderly. *Geriatrics and Aging*: March 2003: 6: pp 21-25.

**Taylor B., Langer, B:** Biliary Tract Procedures. In: *ACS Surgery* (Wilmore D., Cheung L.Y., Harken A.H., Holcroft J., Meakins J., eds). Web MD Inc., New York: 2002: pp 735-752.

**Taylor MC., Greig PG, Detsky AS., McLeod RS., Abdoh A., Krahn MD:** Factors associated with the high cost of liver transplantation in adults. *Canadian Journal of Surgery*: December 2002: 45: pp 425-434.

**Urbach DR, Bell CM, Austin PC:** Differences in perioperative mortality between high- and low-volume hospitals in Ontario following 5 major surgical procedures: Estimating the number of potential lives saved due to regionalization. *Canadian Medical Association Journal*: May 2003: 168: pp 11.

**Urbach DR, Bell CM, Swanstrom LL, Hansen PD:** Cohort study of surgical bypass to the gall bladder or bile duct for the palliation of jaundice due to pancreatic cancer. *Annals of Surgery*: January 2003: 237: pp 86-93.

**Editor:** *Source Control: Principles and Practice in the Management of Surgical Infection* (Schein M, Marshall JC, eds). Springer-Verlag, Berlin: 2002.

**Editor:** *Update in Intensive Care and Emergency Medicine* (Marshall JC, Cohen J, eds). Springer-Verlag, New York: 2002: pp Vol. 31.

**Vincent JL, Wendon J, Groeneveld J, Marshall JC, Streat S, Carlet J:** The PIRO Concept: O is for organ dysfunction. *Critical Care*: June 2003; 7: pp 260-264.

**Yap KPL, McCready DR, Narod S, Manchul LA, Trudeau M, Fyles A:** Factors influencing arm and axillary symptoms after treatment for breast cancer. *Cancer*: March 2003; 97(6): pp 1369-1375.

**Zhong R, Luo Y, Yang H, Garcia B, Ghanekar A, Luke P, Chakrabarti S, Lajoie G, Phillips MJ, Katopodis AG, Duthaler RO, Cattral MS, Wall W, Jevnkikar A, Bailery M, Levy GA, Grant DR:** Improvement in human decay accelerating factor transgenic porcine kidney xenograft rejection iwth intravenous administration of gas914, a polymeric form of alphaGAL. *Transplantation*: January 2003; 75: pp 10-19.

## Invited Visits to other Hospitals/Universities

**Cattral MS:** 7th International Symposium on Dendritic Cells, Bamberg, Germany, September 2002. Dendritic cells.

**Dackiw:** Endocrine Surgery Session, Society of Surgical Oncology, Los Angeles, California, March 2003. Chair.

**Dackiw:** 88th Annual Clinical Congress, American College of Surgeons, San Francisco, California, October 2002. Correlative Clinic: Case No. 1 - Primary Hyperparathyroidism 2002.

**Grant D:** University of Pittsburgh, Pittsburgh, September 2002. "Intestinal Transplantation In Children."

**David R. Urbach:** Society for Gastrointestinal Endoscopic Surgeons Foregut Surgery Course, Cincinnati, Ohio, May 2003. Gastroesophageal reflux disease: Indications and Interventions.

**Greig PD:** BON MOTS, London, Ontario, March 2003. Cardiovascular risk profile following liver transplantation - 3 year results of the Canadian Prograf vs Neoral steroid withdrawal trial.

**Greig PD:** Sangstat, Miami Beach, Florida, January 2003. Clinical Trial Advisory Panel - The use of thymoglobulin in Liver Transplantation.

**Greig PD:** American Transplant Congress, Washington, District of Columbia, June 2003. Liver 1: Infections, recurrent disease and pediatrics - Chair.

**Greig PD:** American Hepato-Pancreato-Biliary Association, Miami, Florida, February 2003. Liver Transplantation: the marginal graft - (Session Moderator).

**Greig PD:** Canadian Society of Transplantation, Lake Louise, Alberta, March 2003. The Canadian Society Transplant Study Group Meeting.

**Langer B:** Hong Kong Academy of Medicine, Hong Kong, December 2002. CPD: Good for the physician and the patient.

**Langer B:** Department of Visceral and Transplant Surgery, University of Zurich, Zurich, Switzerland, June 2003. Expectations of the 21st century surgeon - beyond knowledge and skills.

**Marshall JC:** 8th Annual Update Course, Dalhousie Division of General Surgery, Halifax, Nova Scotia, November 2002. 1. Hepatobiliary quandaries in the ICU. 2. Sepsis.

**Marshall JC:** 17th Symposium on Critical Care Medicine: APICE, Trieste, Italy, November 2002. 1. Definitions of sepsis revisited: The 2001 Washington Conference. 2. After SIRS, Then .... 3. Mortality/Morbidity, and Costs of ICU-acquired infections. 4. What is the motor of Sepsis/MODS?

**Marshall JC:** Combined Pulmonary and Intensive Care Congress, Sun City, Africa, July 2002. 1. Iatrogenesis in the ICU. 2. Management of severe sepsis. 3. Rapid assay of endotoxin. 4. Principles of source control. 5. Management of severe pancreatitis. 6. Immune response in critical illness.



**Marshall JC:** 28th National Congress of the Colombian Surgical Society, Cartagena, Colombia, August 2002. 1. Management of necrotizing pancreatitis. 2. The gut in critical illness. 3. Apoptosis for the surgeon.

**Marshall JC:** 2nd Cambridge Colloquium, Cambridge, United Kingdom, June 2003. 1. Outcome measures in sepsis. 2. Measuring morbidity in sepsis.

**Marshall JC:** Visiting Professor, McGill University, Montreal, Quebec, October 2002. 1. Sepsis and septic shock. 2. Sepsis: Evolving concepts, emerging therapies.

**Marshall JC:** 7th Annual Toronto Critical Care Medicine Symposium, Toronto, Ontario, October 2002. 1. Sepsis: Is it enough to show a biologic effect? 2. Innate Immunity. 3. Empiric antibiotics in the ICU: Con.

**Marshall JC:** 32nd Annual Congress, Society of Critical Care Medicine, San Antonio, Texas, January 2003. 1. The ISF Debates: Empiric antibiotics for suspected nosocomial infection: CON. 2. Iatrogenesis in the ICU. 3. Endotoxemia: Detection and clinical significance. 4. Minimizing antibiotic use in the ICU. 5. Cellular mechanisms of delayed neutrophil apoptosis in sepsis. 6. The stratification and staging of sepsis.

**Marshall JC:** 7th Congress of Asian Pacific Society of Respiriology, Taipei, Taiwan, October 2002. 1. The multiple organ dysfunction syndrome. 2. Definitions and classifications for sepsis: Are they useful?

**Marshall JC:** Jornadas de Medicina Intensiva da Primavera, Porto, Portugal, May 2003. 1. Damage control in trauma 2. Measuring organ dysfunction in critical illness.

**Marshall JC:** 23rd International Symposium of Intensive Care and Emergency Medicine, Brussels, Belgium, March 2003. 1. Lipopolysaccharide: endotoxin or exohormone? 2. Empiric antibiotics in the ICU: More harm than good? 3. Pre-B cell colony-enhancing factor. 4. Management of severe pancreatitis. 5. Source control 6. Targeting apoptosis in sepsis. 7. Are we ready for the clinical trial? 8. The PIRO model.

**Marshall JC:** Ontario Association of General Surgeons, Annual Meeting, Toronto, Ontario, November 2002. Critical care survey: Results of an OAGS Survey.

**Marshall JC:** Critical Care Rounds McMaster University, Hamilton, Ontario, September 2002. Evolving concepts in the description of sepsis.

**Marshall JC:** Visiting Professor, University College, Dublin, Ireland, April 2003. From SIRS to SARS: Reflections on host-microbial interactions.

**Marshall JC:** Visiting Professor, University of Calgary, Calgary, Alberta, December 2002. Hope, hype, and Hippocrates: The ongoing challenges of clinical research.

**Marshall JC:** 43rd Update Course in General Surgery, University of Toronto, Toronto, Ontario, April 2003. SARS: The anatomy of an epidemic.

**Marshall JC:** Center for Critical Care Excellence, Toronto, Ontario, October 2002. Sepsis update.

**Marshall JC:** American College of Surgeons, New Treatment Options in Surgical Infections: Appendicitis to Pancreatitis, San Francisco, California, October 2002. Source control in intra-abdominal infections.

**Marshall JC:** MO Iype Lecture, Department of Surgery, Saint John, New Brunswick, June 2003. Why do critically ill patients die?

**McCready DR:** American College of Surgeons Postgraduate Course in Breast Cancer, San Francisco, California, October 2002. Difficult cases in breast cancer local recurrence.

**McCready DR:** Canadian Association of Plastic Surgeons Educational Symposium of Canada 2003 - Breast Reconstruction, Whistler, Vancouver, British Columbia, June 2003. Implications for reconstruction in the current management of breast cancer - Oncologic consideration for immediate breast reconstruction.

**McCready DR:** Canadian association Plastic Surgeon Educational Symposium of Canada 2003 - Breast Reconstruction, Whistler, Vancouver, British Columbia, June 2003. Implications for reconstruction in the current management of breast cancer.

**McCready DR:** Canadian Society of Surgical Oncology Symposium, London, Ontario, September 2002. Theory and practice of sentinel node biopsy for breast cancer.

**McGilvray I:** ERBE Corporate Symposium, Atlanta, Georgia, September 2002. A brief history of liver surgery.

**McGilvray I:** Toronto Critical Care Conference, Toronto, Ontario, October 2002. Critical care of the liver transplant patients.

**Reznick RK:** 1st Annual Surgical Education Grand Rounds Visiting Professor, Stanford University, Palo Alto, California, November 2002. Born to be Good, Train to be Great.

**Reznick RK:** Regina Qu'Appelle Health Region Medical Education Visiting Professor, Regina, Saskatchewan, January 2003. Born to be good, train to be great.

**Reznick RK:** L.B. Sanders Memorial Lecture, Lahey Clinic, Burlington, Massachusetts, February 2003. Born to be good, trained to be great.

**Reznick RK:** Special Session at the Royal College of Physicians and Surgeons of Canada Annual Meeting, Ottawa, Ontario, September 2002. Can He Operate on Your Mother? Objectifying the Assessment of Technical Skills.

**Reznick RK:** American College of Surgeons Annual Meeting, San Francisco, California, October 2002. From Competence to Virtuosity with Axel Strauss, Jim Otto, and Janet Starks.

**Reznick RK:** Gordon Bethune Visiting Professor, Dalhousie University, Halifax, Nova Scotia, May 2003. Our bench is a skills lab, our bedside is the surgical resident.

**Reznick RK:** Gallie Lecture, The Royal College of Physicians and Surgeons of Canada Annual Meeting, Ottawa, Ontario, September 2002. Perfect Practice Makes Perfect.

**Reznick RK:** 10th Ottawa Conference on Medical Education, Ottawa, Ontario, July 2002. Plenary Wrap-Up.

**Reznick RK:** McMaster University Department of Obstetrics and Gynecology Regional Grand Rounds, Hamilton, Ontario, January 2003. See one, do one thousand, teach one.

**Reznick RK:** Northwestern University Visiting Professor, Chicago, Illinois, November 2002. See one, do one thousand, teach one.

**Reznick RK:** McGill University, Montreal, Quebec, October 2002. Special Lectureship in Medical Education: A Road Less Traveled By.

**Reznick RK:** Regina Qu'Appelle Health Region Medical Education Visiting Professor, Regina, Saskatchewan, January 2003. Surgical Education - The road less traveled by.

**Reznick RK:** The Royal College of Surgeons of England, Raven Department of Education, London, England, July 2002. The qualities of a surgeon, we know what they are but can they be measured?

**Rotstein OD:** Merck Laboratories - Ertapenem Launch in Southeast Asia, Taipei, Taiwan, October 2002. Simplified management of intraabdominal infection.

**Taylor BR:** The Canadian Association of University Surgeons Symposium on Burning Platforms for Surgery in Canadian Society, London, Ontario, September 2002. Ontario Wait List (OWL): A Comparison of Patients and Physicians' Rating of Urgency of Care.

**Taylor BR:** Osler Health Sciences Centre, Toronto, Ontario, October 2002. The Role of Doctors in Hospital Administration.



# Research and Investigations

*Senior Investigator's Name Appears in Italics*



University Health Network

A measure of acute health status following abdominal surgery. *Urbach DR, Streiner DI, Herold-McIlroy J: Physicians' Services Incorporated Foundation (\$133,000 2001 - 2003).*

A randomized trial of regional radiation therapy in early breast cancer. *Whelan, TJ, Olivotto I, Kirkbride P, Craighead P, Benk V, Pritchard K, Levine M, McCready DR, Shepherd L, Tu D, Coyle D, Lewis MJ: Canadian Breast Cancer Research Initiative (\$916,313 2000 - 2003).*

A randomized, phase III clinical trial to compare sentinel node resection to conventional axillary dissection in clinically node-negative breast cancer patients. *McCready DR: National Surgical Adjuvant Breast and Bowel Project B-32 (\$200,000 2001 - 2003).*

Albumin as an immunomodulatory agent in hemorrhagic shock: Studies in a model of post-shock lung injury. *Rotstein OD: Plasma Protein Therapeutic Association (PPTA - USA) (\$89,540 2000 - 2005).*

CCURE: Critical Care from Cell to Society. *Arthur S. Slutsky, Cook D, Martin P, Baker A, Stewart D, Sibbald W, Marshall J, Downey G, Hawryluck L, Marsden P: Canadian Foundation for Innovation (CFI) (\$4,600,000 2002 - 2007).*

Cellular mechanisms of lipopolysaccharide-induced lung injury following shock. *Rotstein OD: Canadian Institutes of Health Research - Renewal (\$451,715 2000 - 2005).*

Clinically Important DVTs in the ICU Survey. *Cook, DJ, Co-Investigators: Crowther M, Meade M, Guyatt G, Geerts W, Marshall J: Leo Pharma (\$15,000 2002 - 2003).*

Determinants of Superior Performance on Spatially Complex Surgical Procedures. *Wanzel, KR, Hamstra SJ, Caminiti MF, Anastakis DJ, Reznick RK: The Physician's Services Incorporated Foundation (\$19,733 2001 - 2002).*

Does training on a colonoscopy simulator transfer to real patients? *Musselman L, Reznick RK, MacRae H, Hamstra S, Rossos P: Royal College of Physicians and Surgeons of Canada (\$24,250 2002 - 2003).*

Endotoxin Measurements in Early Sepsis Patients using Endotoxin Activity Assay (EAA) and Limulus Amebocyte Lysate (LAL) Assay: Method Comparison Study. *Marshall J C: GlaxoSmithKline (\$113,700 2003).*

Evaluative Research in Surgical Procedures and New Health Technologies: Ensuring Quality, Access and Sustainability for Surgical Care in Ontario. *Urbach DR: Ontario Ministry of Health and Long-Term Care, Health Research Personnel Development Program (\$250,000 2002 - 2007).*

Factors Predictive of EBV Lymphoproliferation following Organ Transplantation: Beyond Viral Load. *Upton Allen, Hebert D, Weitzman S, Tellier R, Ngan B, Grant D, Humar A, Stephens D: Canadian Institutes of Health Research (\$70,000 2003 - 2006).*

Fiberoptic ductoscopy of the breast for the management of nipple discharge. *Easson AM, Leong, W, McCready DR: Den Haag Breast Cancer Foundation (\$31,000 2002 - 2003).*

Hierarchical statistical methods for analyzing surgical outcome data. *Urbach DR, Austin P: Institute for Clinical Evaluative Sciences in Ontario (ICES) (\$6,113 2001 - 2002).*

Immunologic Effects of Fgl-2. *McGilvray I: CIHR/Wyeth Ayerst Research Fellowship (\$80,000 2002 - 2004).*

Immunomodulation of pancreatic islets by adenoviral gene transfer of CD200. *Catral, M: Public Health Service National Institute of Health (\$150,000 2002 - 2004).*

Improving care and research in pancreas cancer in Ontario - A population-based study. *Gallinger S, Urbach DR, Cotterchio M, Holowaty E, Moore M: Ontario Cancer Research Network (\$371,860 2002 - 2005).*

Intimidation and harassment and the surgical environment: What is it and what does it do to the educational environment? *Lingard LA, Musselman L, MacRae H, Reznick RK: Physician Services Incorporated Foundation (\$19,000 2002 - 2003).*

- Making medical meaning: Cognitive, social and educational implications of the computerized patient record. *Kushniruk A, Lingard LA, Reznick RK, Smith C: Social Sciences and Humanities Research Council of Canada* (\$106,640 2002 - 2005).
- Measuring dysphagia in patients with achalasia. *Urbach DR, Martino R, Diamant N: Canadian Association of General Surgeons (CAGS)* (\$10,000 2002 - 2003).
- Mechanism of Tolerance Induction in Humans. *Catral M: Reginald Gorczynski, W.P. Min: PSI* (\$146,000 2001 - 2003).
- Novel approaches to prevent islet allograft rejection. *Catral MS: Medical Research Council* (\$229,026 2000 - 2003).
- Novel mechanisms of prolonged neutrophil survival in human sepsis: A bedside-to-bench approach. *Marshall JS: Canadian Institutes of Health Research* (\$543,565 2003 - 2008).
- Osmotic stress and the cytoskeleton: signaling pathways linking cell volume to cell structure. *Kapus A: Canadian Institutes of Health Research* (\$469,148 2001 - 2006).
- Perception of Three-Dimensional Structure from Two-Dimensional Images in Endovascular Training. *Sidhu RS, Hamstra SJ, Jang RW, Reznick RK, Johnston KW: Physician Services Incorporated* (\$20,000 2002 - 2003).
- Perioperative ischemic evaluation study (POISE study). *Yang, Homer, Multidisciplinary Research Group (Canada-wide) - Rotstein OD (co-investigator): Canadian Institutes of Health Research* (\$5,306,074 2001 - 2006).
- Preclinical assessment of vaccinia virus for cancer gene therapy and functional tumour imaging. *McCart JA, Reilly R: Ontario Cancer Research Network* (\$451,538 2002 - 2005).
- Preclinical assessment of vaccinia virus for functional tumour imaging. *McCart JA: University of Toronto, Faculty of Medicine, Dean's Fund* (\$9,997 2002 - 2007).
- Prevention of Delayed Cardiac Xenograft Rejection by Modulation of the potent FGL2 Prothrombinase Gene. *Grant DR, Levy G, Gorczynski R, Phillips J, Ross H., Marsden, P: Heart and Stroke Foundation of Canada* (\$72,000 2000 - 2002).
- Prevention of Delayed Cardiac Xenograft Rejection by Modulation of the Potent FGL2 Prothrombinase Gene. *Grant DR, Gorczynski R, Levy G: Heart & Stroke Foundation of Ontario* (\$215,158 2002 - 2005).
- Protocol M67012 - Evaluation of Renal Function in Liver Transplant Recipients Receiving Daclizumab (Zenapax) and Mycophenolate Mofetil (Cellcept, MMF) and a Delayed Lower Dose of Tacrolimus vs. a Standard Dose Tacrolimus-based Regimen. *Greig P: Hoffmann LaRoche* (\$184,000 2002 - 2003).
- Randomized trial of post-mastectomy radiotherapy in stage II breast cancer in women with one to three positive axillary nodes. *NCIC CTG Chairs, McCready DR, Whelan TJ: National Cancer Institute of Canada* (\$5,000 2002 - 2003).
- Regulation of neutrophil programmed cell death (apoptosis) in clinical and experimental inflammation. *Marshall JC: Medical Research Council of Canada* (\$270,000 1999 - 2002).
- Resident Self-Assessment of Technical Performance and Knowledge. *Ward M., Regehr G, Dackiw A, Rotstein L, MacRae H: The Physicians' Services Incorporated Foundation* (\$14,500 2002).
- Standard setting in a multiple-competency assessment of senior general surgery residents. *Sidhu R., Rotstein L, Reznick R, Regehr G: Royal College of Physicians & Surgeons of Canada* (\$25,000 2002 - 2003).

Standard-setting in a multiple-competency assessment of senior general surgery residents. Sidhu R, MacRae H, Regehr G, Herold-McIlroy J, Rotstein LE, Reznick RK: *The Royal College of Physicians and Surgeons of Canada* (\$24,993 2002 - 2003).

Team Talk: An intervention to structure information sharing and promote patient safety in the operating room. Lingard LA, Regehr G, Baker R, Orser B, Doran D, Reznick RK, Grober E: *Canadian Institutes of Health Research* (\$124,918 2002 - 2004).

The AATICC Trial: Appropriate antimicrobial therapy in critical care - a pilot study. Marshall JC, Aarts MA: *Physician's Services Incorporated Foundation* (\$82,500 2002 - 2003).

The effect of increased cholecystectomy use on the incidence of acute complications of gallbladder disease. Urbach DR, Austin P: *Surgical Infection Society* (\$120,000 2002 - 2004).

The ENHANCE Trial - An Open Labeled Study of Recombinant Human Activated Protein C in Severe Sepsis. Marshall JC: *Eli Lilly Canada Inc.* (\$95,000 2001 - 2002).

The molecular mechanisms of graft injury after liver and bowel transplantation: A proposal to use microarray analysis to identify targets for novel therapies. Grant D, McGilvray I, Rotstein O, Edwards A, Levy G: *Fujisawa* (\$600,000 2002 - 2005).

The Molecular Mechanisms of Organ Injury After Liver Transplantation: Potential Strategies for Prevention. McGilvray I, Grant D, Rotstein O: *Physicians Services Incorporated of Ontario* (\$160,000 2002 - 2005).

Toronto Hospital/Ontario Cancer Institute centralized flow cytometry facility. Julius MH, Rotstein O: *Medical Research Council of Canada* (\$641,895 1999 - 2004).

Volume-dependent reorganization of the cytoskeleton. Kapus A: *Natural Sciences & Engineering (NSERC)* (\$120,000 2000 - 2004).

## Honours Received

**Urbach DR:** Abstract Winner (Health Informatics), University Health Network Research Day, November 2002.

**Urbach DR:** Ontario Ministry of Health and Long-Term Care, Career Scientist Award, July 2002.

**Kapus A:** Premier Research Excellence Award: The role of cortactin in cell migration and tumor invasiveness, March 2003.

**Langer B:** Honorary Fellowship, Academy of Medicine of Singapore, Singapore, August 2002.

**Rotstein OD:** Charles A. Tator Mentoring Program Award, May 2003.

**Rotstein OD:** Northrope Frye Award - Surgeon Scientist Program, March 2003.

## Division of Neurosurgery

**Dr. M. Bernstein - Professor (Division Head – July 02)**

**Dr. K.D. Davis - Associate Professor**

**Dr. J.E. Eubanks - Associate Professor**

**Dr. M.G. Fehlings - Professor**

**Dr. F. Gentili - Associate Professor**

**Dr. A. Guha - Professor**

**Dr. A. Krassioukov - Associate Professor**

**Dr. A.M. Lozano – Professor**

**Dr. E. Massicotte – Assistant Professor**

**Dr. J.A. Saint-Cyr - Professor**

**Dr. C.H. Tator - Professor**

**Dr. M. Tymianski - Associate Professor**

**Dr. M.C. Wallace – Professor (Division Head – July 03)**

## Publications

**Abosch A, Hutchison WD, Saint-Cyr JA, Dostrovsky JO, Lozano AM:** Movement-related neurons of the subthalamic nucleus in patients with Parkinson's disease. *Journal of Neurosurgery*: November 2002: 97(5): pp 1167-1172.

**Abosch A, Lang AE, Hutchison WD, Lozano AM:** Subthalamic deep brain stimulation for Parkinson's disease. In: *Surgical Treatment of Parkinson's Disease and Other Movement Disorders* (Tarsey, Vitek & Lozano, eds). Humana Press, 2002: pp 175-188.

**Abosch A, Lozano AM:** Stereotactic neurosurgery for movement disorders. *Canadian Journal of Neurological Science*: March 2003: 30(Supp 1): pp S72-S82.

**Abosch A, Vitek JL, Lozano AM:** Pallidotomy and pallidal deep brain stimulation for dystonia. In: *Surgical Treatment of Parkinson's Disease and Other Movement Disorders* (Tarsey, Vitek & Lozano, eds). Humana, 2002: pp 265-274.

**AL-Shafia, N, Guha, A:** Management of malignant peripheral nerve sheath tumor. In: *Peripheral nerve surgery* (Midha, R, eds). Being published in 2002, 2002.

**Bampoe J, Bernstein M:** Surgical management of intracranial metastases. In: *Indian Clinical Neurosurgery. Volume II, Malignant Brain Tumors* (Singh Ak, Sinha S, Singh D, Gupta V, Goyal A, eds). CBS Publishers, New Delhi, India: 2002.

**Bampoe J, Siomin V, Bernstein M:** Quality of life assessment in neurosurgery patients. *Neurosurgery Quarterly*: October 2002: 12: pp 132-141.

**Bhardwaj RD, Bernstein M:** A prospective feasibility study of outpatient stereotactic brain lesion biopsy. *Neurosurgery*: October 2002: 51: pp 358-364.

**Chen R, Garg RR, Lozano AM, Lang AE:** Effects of internal globus pallidus stimulation on motor cortex excitability. *Neurology*: February 2003: 58(2): pp 669-670.

**Davis KD, Bushnell MC, Strigo IA, Duncan GH, Kwan CK, Diamant N, Sarkar S, Gregory L, Aziz Q:** Imaging visceral sensations. In: *Proceedings of the 10th World Congress on Pain* (Dostrovsky JO, Carr DB, Koltzenburg M, eds). IASP Press, Seattle: 2003: pp 261-276.

**Davis KD, Pope GE:** Noxious cold evokes multiple sensations with distinct time courses. *Pain*: July 2002: 98: pp 179-185.

**Davis KD, Pope GE, Crawley AP, Mikulis DJ:** Neural correlates of prickle sensation: a percept-related fMRI study. *Nature Neuroscience*: November 2002: 5: pp 1121-1122.



**Edwards L, Krassioukov A, Fehlings MG:** Importance of access to research information among individuals with spinal cord injury: results of an evidenced-based questionnaire. *Spinal Cord*: October 2002; 40 (10): pp 529-35.

**Fehlings MG:** Point of View: Administration of Corticosteroids for Acute Spinal Cord Injury: The current practice of trauma medical directors and emergency medical system physician advisors. *Spine*: January 2003; 28(9): pp 947 PA

**Fehlings MG, Dandie GS, Ng WP:** Chapter 135: Clinical syndromes in spine disease. In: *Textbook of Neurological Surgery*, Vol. 2 (Batjer HH, Loftus CM, eds). Lippincott Williams & Wilkins, Philadelphia, PA: 2003: pp 1577-1584.

**Feldkamp, M, Lau, N, Guha, A:** Growth factor regulation of human astrocytomas. In: *Recent research developments in cancers*. Transworld Research Network-4:25-5 ISBN:81,; 2002: pp 7895-051-0.

**Goetz CG, Koller WC, Poewe W, Lozano AE, Rascol O, Sampaio C, Lozano A et al:** Management of Parkinson's disease: An evidence-based review. *Movement Disorders*: December 2002; 17(Sup4): pp 51-166.

**Govender PV, Rampersaud YR, Rickards L, Fehlings MG:** Use of osteogenic protein-1 in spinal fusion: literature review and preliminary results in a prospective series of high-risk cases. *Neurosurg. Focus*: December 2002; 13 (6): pp 1-6.

**Gutmann, D, Rasmussen, S, Wolkenstein, P, Maccollin, M, Guha, A, Inskip, P, North, K, Plyhonen, M, Birch, P, and Friedman, J:** Gliomas presenting after age 10 in individuals with neurofibromatosis type 1 (NF1). *Neurosurgery*: September 2002; 59 (5): pp 759-61.

**Hayes KC, Wolfe DL, Hsieh J, Potter P, Krassioukov AV, Durham CE:** Clinical correlates of quantitative sensory testing in patients with incomplete spinal cord injury. *Archives of Physical Medicine and Rehabilitation*: November 2002; 83: pp 1612-1619.

**Hebb MO, Fletcher PH, Chambers JW, Lang AE, Lozano AM:** Neonatal ablation of the nigrostriatal dopamine pathway does not influence limb development in rats. *Experimental Neurology*: October 2002; 177(2): pp 547-556.

**Jung BP, Jugloff DG, Zhang G, Logan R, Brown S, and Eubanks JE:** The Expression of Methyl CpG Binding Factor MeCP2 Correlates with Cellular Differentiation in the Developing Rat Brain and In Cultured Cells. *Journal of Neurobiology*: February 2003; 55: pp 86-96.

**Jung BP, Zhang G, Nitsch R, Trogadi J, Nag S, and Eubanks JE:** Differential Expression of Methyl CpG Binding Domain-Containing Factor MBD3 in the Developing and Adult Rat Brain. *Journal of Neurobiology*: April 2003; 55: pp 220-232.

**Jung BP, Zhang G, Ho W, Francis J, and Eubanks JE:** Transient Forebrain Ischemia Alters the mRNA Expression of Methyl DNA-Binding Factors in the Adult Rat Hippocampus. *Neuroscience*: October 2002; 115: pp 515-524

**Shen H, Zhang L, Yeun D, Logan R, Jung BP, Zhang G, and Eubanks JH:** Expression and Function of A1 Adenosine Receptors in the Rat Hippocampus Following Transient Forebrain Ischemia. *Neuroscience*: September 2002; 114: pp 547-556.

**Hunter JP, Katz J, Davis KD:** The effect of tactile and visual sensory inputs on phantom limb awareness. *Brain*: March 2003; 126: pp 59-589.

**Hutchinsonk WD, Lang AE, Dostrovsky JO, Lozano AM:** Pallidal neuronal activity: Implications for models of dystonia. *Annals of Neurology*: April 2003; 53(4): pp 480-488.

**Kaplan DM, Hehar SS, Tator CH, Guha A, Laperriere N, Bance M, Rutka JA:** Hearing loss in acoustic neuromas following stereotactic radiotherapy. *Journal of Otolaryngology*: February 2003; 32: pp 23-32.

**Kaplitt M, Hutchinson WD, Lozano AM:** Target localization in movement disorders surgery. In: *Surgical Treatment of Parkinson's disease and Other Movement Disorders* (Tasay, Vitek, Lozano, eds). Humana Press,; 2002: pp 87-98.

- Kiss Z, Davis KD, Tasker RR, Lozano AM, Hu B, Dostrovsky JO:** Kinaesthetic neurons in thalamus of humans with and without tremor. *Experimental Brain Research*: May 2003: 150(1): pp 85-94.
- Kline, D, Hudson, AR, Tiel, R, Guha, A:** Management of peripheral nerve tumors. In: Youmans Neurological surgery - 5TH Edition (W.B. Saunders, ed). Harcourt Health Sciences- Being published in 2002.
- Krassioukov AV, Ackery A, Schwartz G, Adamchik Y, Liu Y, Fehlings MG:** An in vitro model of neurotrauma in organotypic spinal cord cultures from adult mice. *Brain Research Protocols*: December 2002: 10: pp 60-68.
- Krassioukov AV, Louissi S, Sarjeant R, Arkia H, Fehlings MG:** Medical Co-morbidities, Secondary Complications and Mortality in Elderly with Acute Spinal Cord Injury. *Journal of Neurotrauma*: April 2003: 20 (4): pp 391-399.
- Landry M, Aman K, Dostrovsky J, Lozano AM, Carlstedt T, Spenger C, Josephson A, Wiesenfeld-Hallin Z, Hokfelt T:** Galanin expression in human dorsal root ganglion neurons-initial observations. *Neuroscience*: April 2003: 117(4): pp 795-809.
- Lang AE, Kleiner-Fisman G, Saint-Cyr JA, Miyasaki J, Lozano AM:** Subthalamic DBS replaces levodopa in Parkinson's disease: Two-year follow up. *Neurology*: January 2003: 60(1): pp 154-155.
- Lau, N, Uhlmann, EJ, Von Lintig, FC, Nagy, A, Boss, G, Gutmann, DH, Guha, A:** RAP 1 Activity is elevated in malignant astrocytomas independent of tuberous sclerosis complex -2 gene expression. *INT J. Oncology*: January 2003: 22: pp 195-200.
- Leehey MA, Munhoz RP, Lang AE, Brunberg JA, Greco C, Jacquemont S, Tassone F, Lozano AM, Hagerman PJ, Hagerman RJ:** The fragile X premutation presenting as essential tremor. *Archives of Neurology*: January 2003: 60(1): pp 117-121.
- Levy R, Hutchison WD, Lang AE, Lozano AM, Dostrovsky JO:** Acute effects of levodopa and pallidotomy on bimanual and repetitive arm movements in patients with Parkinson's disease. In: *The Basal Ganglia Volume 1* (Graybiel, Delong, Kitai, eds). Kluwer Academic/Plenum, 2003: pp 43-50.
- Levy R, Lang AE, Hutchison WD, Lozano AM, Dostrovsky JO:** Simultaneous repetition movements following pallidotomy or subthalamic deep brain stimulation in patients with Parkinson's disease. *Experimental Brain Research*: December 2002: 147(3): pp 322-331.
- Lozano AM:** Surgery for Parkinson's disease, the five W's: Why, Who, What Where and When. *Advances in Neurology* 91303-30711NO<sup>n</sup> the treatment of Parkinson's Disease", *Moderator, Scientific S*: January 2003: 91: pp 303-307.
- Lozano AM, Carella F:** Physiologic studies in the human brain in movement disorders. *Parkinson's Disease and Related Disorders*: September 2002: 8(6): pp 455-458.
- Lozano AM, Dostrovsky JO, Chen R, Ashby P:** Deep brain stimulation for Parkinson's disease: Disrupting the disruption. *The Lancet Neurology*: August 2002: 1(4): pp 225-231.
- Lozano AM, Hutchison WD, Levy R, Lang AE, Dostrovsky JO:** Pathophysiology of the internal segment of the globus pallidus in Parkinson's disease. In: *The Basal Ganglia Volume 1* (Graybiel, Delong, Kitai, eds). Kluwer Academic/Plenum, 2003: pp 15-22.
- Mailis-Gagnon A, Giannoylis I, Downar J, Kwan CL, Mikulis DJ, Crawley AP, Nicholson, K, Davis KD:** Altered central somatosensory processing in chronic pain patients with "hysterical" anesthesia. *Neurology*: May 2003: 60: pp 1501-1507.
- Feldkamp M, Lau N and Guha A:** Growth factor regulation of human astrocytomas. *Transworld Research Network*: November 2002: pp 25-51.



**Mayberg HS, Lozano AM:** Penfield Revisited? 21st century phenomenology in the era of DBS for Parkinson's disease. *Neurology*: November 2002: 59(9): pp 1289-1299.

**Aarts M, Liu Y, Liu L, Besshoh S, Arundine M, Gurd JW, Wang YT, Salter MW, Tymianski M:** Treatment of Ischemic Brain Damage by Perturbing NMDA Receptor-PSD-95 Protein Interactions. *Science* 298: July 2002: 5594: pp 846-850.

**Midha R, Munro CA, Dalton PD, Wong MKK, Tator CH, Shoichet MS:** Novel biocompatible tube enhanced with growth factors supports peripheral nerve regeneration. *Journal of Reconstructive Microsurgery*: October 2002: 18: pp 629.

**Nutt JG, Burchiel K, Comella CL, Jankovic J, Lang AE, Laws E, Lozano AM, Penn R, Simpson R, Stacy M, Wooten GF, ICV GDNF Study Group:** Randomized, double-blind trial of glial cell line-derived neurotrophic factor (GDNF) in Parkinson's disease. *Neurology*: January 2003: 14(60): pp 69-73.

**Saint-Cyr JA, Hoque T, Pereira LCM, Dostrovsky JO, Hutchison WD, Mikulis DM, Abosch A, Sime E, Lang AE, Lozano AM:** MRI localization of clinically effective stimulating electrodes in the human subthalamic nucleus. *J Neurosurg*: November 2002: 97: pp 1152-1166.

**Satomi J, Mount RJ, Toporsian M, Paterson AD, Wallace MC, Harrison RV, Letarte M:** Cerebral vascular abnormalities in a murine model of hereditary hemorrhagic telangiectasia. *Stroke*: March 2003: 34, No. 3: pp 783-789.

**Satomi J, van Dijk JMC, ter Brugge KG, Willinsky RA, Wallace MC:** Benign cranial dural arteriovenous fistulas: Outcome of conservative management based on the natural history. *Journal of Neurosurgery*: October 2002: 97: pp 767-770.

**Schwartz G, Fehlings MG:** Ch.14. Secondary injury mechanisms of spinal cord trauma: a novel therapeutic approach for the management of secondary pathophysiology with the sodium channel blocker Riluzole. In: CD Book: Progress in Brain Research, 137; September 30, 2002 - Spinal Cord Trauma: Regeneration, Neural Repair and Functional Recovery. <http://www.elsevier.com/locate/isbn/0-444-50817-1> (Mckerracher L, Doucet G, Rossignol S, eds). Elsevier Science, New York, NY: 2002: pp 177-190.

**Schwartz G, Fehlings MG:** Secondary mechanisms of spinal cord trauma: a novel therapeutic approach for the management of secondary pathophysiology with the sodium channel blocker riluzole. *Progr. Brain Research*: October 2002: 137: pp 177-190.

**Shaf GS, Bouclaous CH, Fehlings MG:** Review Article: Treatment of spontaneous and post-operative pyogenic spondylodiscitis. *Pan Arab Journal of Neurosurgery*: April 2003: 7 (1): pp 1-11.

**Singh SK, Rickards L, Apfelbaum RI, Hurlbert J, Maiman D, Fehlings MG:** Occipitocervical reconstruction with the OMI Loop: Results of a multicenter trial in 30 cases. *Journal of Neurosurgery*: April 2003: 98 (4): pp 238-244.

**Singhal A, Bernstein M:** Outpatient lumbar microdiscectomy: A prospective study in 122 patients. *Canadian Journal of Neurological Sciences*: October 2002: 29: pp 249-252.

**Woods SA, E Marmor E, Feldkamp M, Lau N, Apicelli AJ, Boss G, Gutmann DH, Guha A:** Aberrant G Protein Signaling in Nervous System Tumors. *Journal Neurosurgery* 97: September 2002: pp 627-642.

**Woods SA, McGlade CJ, Guha A:** Phosphatidylinositol 3' - Kinase and MAPK/ERK Kinase 1/2 differentially regulate expression of vascular endothelial growth factor in human malignant astrocytoma cells1. *Neuro-Oncology*: October 2002: 4(4): pp 242-252.

**Nag S, Eskandarian MR, Eubanks JH:** Differential Expression of Vascular Endothelial Growth Factors A and B after Brain Trauma. *Journal of Neuropathology and Experimental Medicine* 61: November 2002: 61: pp 97-104.

**Tator CH:** Strategies for recovery and regeneration after brain and spinal cord injury. *Injury Prevention*: December 2002: 8 Suppl 4: pp IV33-6.

- Tsao MN, Schwartz ML, Bernstein M, Halliday WC, Lightstone AW, Hamilton MG, Jaywant S, Laperriere N:** Capillary hemangioma of the cavernous sinus: Report of two cases. *Journal of Neurosurgery*: October 2002; 98: pp 169-174.
- Vitale M, Guha A, Skaggs D:** Orthopaedic manifestations of neurofibromatosis in children. *Clinical Orthop*: August 2002; 401: pp 107-18.
- Weiss W, Israel M, Cobbs C, Holland E, James D, Louis D, Marks C, McClatchey A, Roberts T, Van Dyke T, Wetmore C, Chiu I-M, Giovannini M, Guha A, Higgins R, Marino S, Adovanovic I, Reilly K, Aldape K:** Neuropathology of genetically engineered mice: Consensus report and recommendation from an international forum. *American Heart Journal*: October 2002; 21: pp 7453-7463.
- Wennberg R, Pohlmann-Eden B, Chen R, Lozano AM:** Combined scalp-thalamic EEG recording in sleep and epilepsy. *Clinical Neurophysiology* 113:1867-1871 (NOËgical treatment of Parkinson's disease 4) *Surgical treatment*: December 2002; 113: pp 1867-1871.
- Zadeh G, Guha, A:** Oncogenic signalling pathways in human astrocytomas. In: *Oncogenic-Targeted therapies* (RAK, J, eds). Humana Press-chapter 18.,: 2002: pp 363-382.
- Zadeh G, Guha, A:** Neoangiogenesis in human astrocytomas: Expression and functional role of angiopoietins and their cognate receptors: *Frontieres in bioscience research encyclopedia in neuro-oncology*. *Oncology*: January 2003; 8: pp E128-E137.
- Zadeh G, Guha, A:** Biological targeted therapies in human astrocytomas. In: *Indian clinical neurosurgery: Volume 11: Malignant brain tumors* (Singh, A, eds). CBS Publishers & Distributors - Chapter 27, New Delhi, India: 2002: pp 257-280.
- Zadeh G, Guha, A:** The Neurosurgical implication of neurofibromatosis. In: *Textbook of Neurological surgery*. (Batjer, H. Loftus, C, eds). Lippincott Williams & Wilkins VOL 2- Chapter 126,: 2002: pp 1502-1506.
- ### Invited Visits to other Hospitals/Universities
- Bernstein M:** Algonquin Health Services, Huntsville, Ontario, June 2003. (1) Bioethics 101 ; (2) How should AHS handle bioethics?
- Bernstein M:** Invited Lecturer at National neurosciences Center, Medical College of Kolkata, Kolkata, India, October 2002. (1) Image- and function-guided surgery for brain tumours; (2) Ethical issues in neuro-oncology ; (3) Neurosurgery post-graduate training in Canada.
- Bernstein M:** Canadian Congress of Neurological Sciences, Quebec City, Quebec, June 2003. (1) Surgical management of gliomas: Current approaches and future directions ; (2) What's new in brain tumour surgery?
- Bernstein M:** Invited Lecturer to University of Manitoba, Winnipeg, Manitoba, November 2002. A Neurosurgeon Can Rant and Chant About Kant, Can't He?
- Bernstein M:** Ontario Patient Representative Association, Toronto, Ontario, February 2003. Bioethical Dilemmas.
- Bernstein M:** CBC Radio Interview, Toronto, Ontario, May 2003. Ethical issues raised by SARS.
- Bernstein M:** Invited Lecture to Clinical Engineering Society of Ontario, Oakville, Ontario, January 2003. Patient Safety.
- Davis KD:** Inst. of Physiology and Experimental Pathophysiology AND Central Inst. of Mental Health Mannheim workshop: Evaluation of functional fMRI data - more than modern phrenology? (sponsored by Siemens), Erlangen, Germany, October 2002. Extracting brain responses related to pain percepts with fMRI.





**Davis KD:** International Association For The Study of Pain, 10th World Congress, San Diego, California, August 2002. Imaging visceral sensations (workshop).

**Davis KD:** Canmore Conference; University of Calgary, Department of Clinical Neuroscience, Canmore, Alberta, February 2003. Keynote lecture: A new approach to imaging pain with “percept-related fMRI”.

**Davis KD:** Canadian Pain Society, annual meeting: symposium: Maladaptive versus adaptive brain plasticity, Toronto, Ontario, May 2003. Maladaptive versus adaptive brain plasticity: The role of pain.

**Davis KD:** National Center on Addiction and Substance Abuse: CASA conference on Feeling No Pain: Substance Abuse, Addiction and Pain Management, New York, New York, February 2003. Pain and Addiction: is it all in the brain?

**Davis KD:** DFG Interest Group Symposium: Past and future of interoception and interoceptive learning. The legacy of Gyorgy Adam, Berlin, Germany, September 2002. Percept-related fMRI of visceral sensations.

**Davis KD:** Canadian Pain Society, annual meeting - Keynote Lecture, Toronto, Ontario, May 2003. The brain according to pain: Functional brain imaging of pain percepts.

**Davis KD:** University of Calgary, Neuroscience Research Group, Calgary, Alberta, February 2003. The meaning of fMRI blobs? What you feel is what you “should” get.

**Fehlings MG:** American Spine Injury Association (ASIA), 29th Annual Scientific Meeting, Key Biscayne, Florida, April 2003. (1)Co-Chair, Spine Trauma Study Group. (2) Co-Chair, Surgical Challenges in the Treatment of Spine Trauma.

**Fehlings MG:** North American Spine Society 17th Annual Meeting, Montreal, Quebec, October, 2002. Concurrent Session 1- Complex Cervical Reconstruction: Reconstruction of Complex Craniocervical Pathology with Transarticular Screws: Assessment of Long-Term Follow-up and Quantitative Evaluation of Screws. Fehlings M, Goulet, B.

**Fehlings MG:** American Association of Neurological Surgeons, Annual Meeting, San Diego, California, April 2003. (1) Craniovertebral junction surgical approaches, stabilization techniques and complications. (2) General Session: Scientific Session II, Discussant, for Abstract submission.

**Fehlings MG:** First Joint Meeting of the National and International Neurotrauma Societies, Tampa, Florida, October 2002. Critical Care in SCI.

**Fehlings MG:** Congress of Neurological Surgeons, Philadelphia, Pennsylvania, September 2002. Faculty: Practical Course PC22, Cervical Spine Stabilization.

**Fehlings MG:** Peterborough County Medical Society, Lakefield, Ontario, February 2003. Grand Rounds: “Indications for surgical approach to cervical and lumbar disc prolapse with radiculopathy.

**Fehlings MG:** AO-ASIF, Sun Valley, Idaho, February 2003. Interactive Course: a) Timing of Surgery; b) Management of Type C Injuries. Moderator Interactive Course: Nondegenerative Cervical Spine: Discussion and Case presentations: a) Vertical Migration of the Odontoid Myelopathy. b) Approach to vertical migration of the odontoid with myelopathy. Comprehensive Course presentation: Rheumatoid Arthritis.

**Fehlings MG:** Toronto Rehabilitation Institute, Lyndhurst Site, Toronto, Ontario, January 2003. Keynote Address at Official Launch of the National Rick Hansen Wheels in Motion Campaign.

**Fehlings MG:** Ontario Neurotrauma Foundation, Toronto, Ontario, January 2003. Keynote Address: Neuroprotection of the injured spinal cord: From bench to bedside.

**Fehlings MG:** American Association of Neurological Surgeons Section on Disorders of the Spine and Peripheral Nerves Annual Meeting, Tampa, Florida, March 2003. Larson Award: Establishment of a Database of Potential Donors for a Canadian Spinal Cord Tissue Bank. (2) Scientific Sessions #3: Neuroprotection of the injured spinal cord: where do we go from Methylprednisolone?

**Fehlings MG:** Neurological Institute of New Jersey, Newark, New Jersey, April 2003. Medtronic Visiting Lecturer in Neurosurgery: New frontiers in spinal cord injury research: from molecule to man.

**Fehlings MG:** Congress of Neurological Surgeons, Philadelphia, Pennsylvania, September 2002. Moderator: Luncheon seminar T35 Odontoid Fractures: Surgical Options.

**Fehlings MG:** AO North America-CASS, Banff, Alberta, March 2003. Moderator: Presentations by Fellows. The Toronto Western Hospital/University of Toronto Spinal Fellowship Program. (2) Spinal Cord Injury Research Update.

**Fehlings MG:** National Institutes of Health, Washington, District of Columbia, October 2002. National Institutes of Health: Member of Scientific Review Group NSD "A" 1, Section Review 2002/10.

**Fehlings MG:** NIH/NINDS, Bethesda, Maryland, February 2003. NIH Conference on Translational Opportunities in Spinal Cord Injury. Guest speaker/facilitator: 1) Neuroprotection of spinal cord injury. 2) Opportunities for clinical trials.

**Fehlings MG:** American Academy of Neurological Surgeons, Scottsdale, Arizona, October 2002. Novel Molecular Mechanisms in Cervical Spondylotic Myelopathy: Implications for Innovative Therapeutic Intervention.

**Fehlings MG:** American Association of Neurological Surgeons, Annual Meeting, San Diego, California, April 2003. Nurse practical clinic, pathophysiology of neurotrauma, presenting signs and symptoms and pre-hospital management.

**Fehlings MG:** Ontario Neurotrauma Foundation, Toronto, Ontario, January 2003. Oral Paper presented: "Age-related differences on secondary complications, medical co-morbidities and mortality in individuals with acute spinal cord injury" J.C. Furlan, M.G. Fehlings, and A.V. Krassioukov.

**Fehlings MG:** American Spine Injury Association (ASIA), 29th Annual Scientific Meeting, Key Biscayne, Florida, April 2003. Overview and case presentation. Spinal Cord Injury Update.

**Fehlings MG:** Neurological Institute of New Jersey, Newark, New Jersey, November 2002. Spinal Cord Injury: The future of Spinal Cord Injury Treatment.

**Fehlings MG:** Congress of Neurological Surgeons, Philadelphia, Pennsylvania, September 2002. Synthes Residents' Seminar - University of Toronto Spinal Neurosurgery Fellowship Program.

**Fehlings MG:** Wayne State University, Detroit, Michigan, February 2003. Visiting Professor: Neuroprotection of the injured spinal cord. Visiting Professor: Reconstruction of cervical spine, state of the art - innovations and new horizons.

**Fehlings MG:** University of Pennsylvania, Philadelphia, Pennsylvania, September 2002. Visiting Professor: "Neuroprotection of the injured spinal cord: from molecule to man".

**Fehlings MG:** Univ. of Louisville, Louisville, Kentucky, March 2003. Visiting Professor: Neuroprotection of the Injured spinal cord: from bench to bedside.

**Fehlings MG:** University of British Columbia and International Collaboration on Repair Discoveries (ICORD), Vancouver, British Columbia, June 2003. Visiting Professor: Neuroprotection of the Injured spinal cord: from gene to the operating room.

**Fehlings MG:** Miami Project to Cure Paralysis, Miami, Florida, April 2003. Visiting Professor: Neuroprotection of the injured spinal cord: from Molecule to Man.

**Fehlings MG:** Spine Trauma Study Group: Member of Organizing Committee Pre-ASIA Meeting Miami, April 5, 2003, Dana Point, California, November 2002. Working Meeting of Spine Trauma Study Group on "Surgical Challenges in the Treatment of Spine Trauma - Key controversies in Spine Trauma Management".



**Guha A:** MD Anderson Brain Tumor Center Lecturer, Houston, Texas, June 2003. Aberrant signalling complexes in gliomas.

**Guha A:** ISREC-INST. OF Switzerland Research Experimental in cancer, Geneva, Switzerland, January 2003. Aberrant signalling complexes in human malignant astrocytomas.

**Guha A:** Cancer Brain Tumor Consortium, Calgary, Alberta, February 2003. Advances in the Management of Glioma.

**Guha A:** CCNS, Quebec City, June 2003. (1) Analysing tumor vascularity with use of small animal imaging. Animal Models of nervous system tumors. Neurooncology Symposia. (2) Astrocyte specific knockout of tumor suppressor PTEN/MMAC1 in transgenic mouse model. (3) Effect of new anti-angiogenic compound on astrocytomas.

**Guha A:** AANS-JT. Tumor section, Chicago, Illinois, September 2002. Angiopoietins in astrocytoma angiogenesis. Animal models of brain tumors.

**Guha A:** Wayne State Neurosurgical, Detroit, Michigan, September 2002. Anti-angiogenesis strategies in gliomas.

**Guha A:** ASCO, Chicago, Illinois, May 2003. CNS tumor section: Aberrant signal complexes in gliomas, Marker and targeted therapy.

**Guha A:** Society of Neurooncology, San Diego, California, November 2002. Expression of EGFRvIII is a better prognostic marker for GBM than either EGFR expression or the Ki-67 labeling index.

**Guha A:** The University of Texas M.D. Anderson Cancer Centre, Houston, Texas, February 2003. First Course on Molecular Mechanisms in Brain Tumor.

**Guha A:** CCNS, Quebec City, Quebec, June 2003. GBM xenografts as a model for studying the amplification of EGFR in gliomas. (2) . Mass spectrometric analysis of aberrant signaling complexes mediated through wild-type and mutant epidermal growth factor receptors in human glioblastoma multiforme. (3) P13Kinase and MAPKinase activation as prognostic indicators of glioblastoma multiforme. (4) Role of angiopoietins in astrocytoma angiogenesis. (5) Transgenic mouse models of astrocytomas.

**Guha A:** Society of Neurooncology, San Diego, California, November 2002. (1) Inhibition of TIE2 Receptorin intracranial GBMs Decreases Tumor Growth and Prolongs survival. (2) Investigation of EGFR Amplification in xenografts and their derived cell lines established from human glioblastomas.

**Guha A:** International neurooncology symposium, Kolkata, India, October 2002. Management of peripheral nerve tumors.

**Guha A:** The Silver Jubilee, Chennai, India, February 2003. Management of peripheral nerve tumors. VHS Neurosurgical Unit.

**Guha A:** All India Institute of Medical Sciences:Department of pathology grand rounds, Delhi, India, October 2002. Molecular biology of astrocytomas. (2) Neurosurgical Rounds: Management of peripheral nerve tumors.

**Guha A:** International Neurooncology Symposium, Kolkata, India, October 2002. Molecular biology of astrocytomas.

**Guha A:** Schering-Plough: Neurooncology, New Delhi, India, October 2002. Molecular biology of astrocytomas.

**Guha A:** University of Calcutta, India, August 2002. Molecular biology of CNS Tumors-Post Grad Research seminar.

**Guha A:** MD ANDERSON, Del Lago, Texas, February 2003. Molecular biology of gliomas: Transgenic mouse models of gliomas.

**Guha A:** AANS, Tampa, Florida, March 2003. Molecular biology of peripheral nerve tumors. Joint section on spine & peripheral nerves.

**Guha A:** Society of Neurooncology, San Diego, California, November 2002. Signalling pathways of two mutant EGFRs, EGFRvIII and EGFRc958, found in GBMs.

**Guha A:** Mata Chandani Hospital, New Delhi, India, February 2003. Surgical Rounds: Management of peripheral nerve tumors.

**Guha A:** AANS, Chicago, Illinois, September 2002. Tie 2 Signalling and astrocytoma angiogenesis.

**Guha A:** NCIC-CTG Brain tumor strategic planning retreat, Toronto, Ontario, July 2002. What are the most promising cellular targets.

**Hutchison WD:** Intraoperative Neurophysiological Monitoring in Neurosurgery Symposium, Beth Israel Medical Center—Singer 170 East End Avenue 10128, New York, New York, 10128, November 2002. Intraoperative Microelectrode Recordings of Thalamic Neurons & Responses during Reaching.

**Krassioukov A:** The Johns Hopkins University, Department of Biomedical Engineering, School of Medicine, Baltimore, Maryland, October 2002. Abnormal cardiovascular control after spinal cord injury.

**Lozano AM:** Congress of Neurological Surgeons 52nd Annual Meeting, Philadelphia, Pennsylvania, September 2002. 1) Course Co-Director, Movement Disorders: Pathophysiology, Diagnosis and Treatment. 2) Moderator, Surgical Management of Tremor: Role of thalamotomy, chronic thalamic stimulation and stereotactic radiosurgical thalamotomy.

**Lozano AM:** XVth Congress of the European Society for Stereotactic and Functional Neurosurgery, Toulouse, France, October 2002. 1) Speaker, “Movement Disorders Surgery: Peering into the crystal ball” 2) Co-Chair, “Dystonia”.

**Lozano AM:** Wayne State University, Gurdjian Lecture, Detroit, Michigan, December 2002. Advances in Functional Neurosurgery.

**Lozano AM:** Neurosurgery Grand Rounds and Surgical Management of Movement Disorders, Neurology Grand Rounds, Yale University, New Haven, Connecticut, September 2002. Functional Neurosurgery: Where are we headed?

**Lozano AM:** American Academy of Neurology, Honolulu, Hawaii, March 2003. Gene therapy and trophic factor therapy for Parkinson’s disease.

**Lozano AM:** Institute of Movement Neuroscience Workshop, Queens Square. Function and Dysfunction of the Basal Ganglia, London, United Kingdom, October 2002. How does deep brain stimulation work?

**Lozano AM:** American Academy of Neurological Surgery, Phoenix, Arizona, October 2002. Neurosurgery for restoring and optimizing function: The future is not what it used to be.

**Lozano AM:** National Institute of Health, Bethesda, Maryland, July 2002. Parkinson’s disease Coordination Summit.

**Lozano AM:** Parkinson’s disease: Life Cycle of the Dopamine Neuron. New York Academy of Sciences, New York, September 2002. Physiology and Pathophysiology of Parkinson’s disease.

**Lozano AM:** Sixieme Seance du club des Mouvements anormaux, Montreal, Quebec, November 2002. Speaker “impact theorique et clinique de la neurochirurgie dans les troubles du mouvement.

**Lozano AM:** 7th International Congress of Parkinson’s disease and Movement Disorders, Miami, Florida, November 2002. Speaker: “Surgical treatment of movement disorders”.

**Lozano AM:** Worldwide Dystonia Patient Symposium, Miami, Florida, November 2002. Speaker: “Pallidal stimulation for dystonia”.

**Lozano AM:** Federation on Latin American Neurosurgical Societies, Lima, Peru, October 2002. The surgery of dystonia.

**Lozano AM:** Harvard University, Brigham and Women's College and Children's Hospital, Boston, Massachusetts, February 2003. Visiting Professor: Neurosurgery to restore brain function: Gazing into the crystal ball.

**Tator CH:** National and International Neurotrauma Societies, Tampa, Florida, October 2002. A novel delivery system for treatment of spinal cord injury.

**Tator CH:** Ontario Neurotrauma Foundation Conference on SCI and TBI, Toronto, Ontario, January 2003. A novel intrathecal drug delivery system for treatment of spinal cord injury.

**Tator CH:** Canadian Paraplegic Association (Ontario), Toronto, Ontario, March 2003. Current research and clinical trials in spinal cord injury. Spinal Cord Injury Conference.

**Tator CH:** American Association of Neurological Surgeons, San Diego, California, April 2003. Functional locomotor recovery after spinal cord transection and repair correlates with regeneration of cortical spinal tract axons into grey matter.

**Tator CH:** Minor Hockey Festival, Coaches Helping Coaches, Toronto, Ontario, September 2002. Head and spinal injuries in hockey.

**Tator CH:** Society for Neuroscience, Orlando, Florida, October 2002. In situ delivery of growth factors to the injured rat spinal cord.

**Tator CH:** American Association of Neurological Surgeons, San Diego, California, April 2003. Management and treatment of traumatic cervical spinal cord injury. Moderator.

**Tator CH:** American Association of Neurological Surgeons, San Diego, California, April 2003. Spinal Cord Injuries: Guidelines and treatment. Moderator.

**Tator CH:** The Canadian Institute - Litigating Traumatic Brain and Spinal Cord Injuries, Toronto, Ontario, March 2003. The legal significance of recent medical breakthroughs in spinal cord injury.

**Tator CH:** Congresso Gaucho de Neurologia a Porto Alegre, Brazil, March 2003. Visiting Professor - 1. Think First Foundation: Experience in the USA and Canada, 2. Cervical spondylosis: Surgical Aspects, 3. Treatment of syringomyelia, 4. Treatment modalities for cerebellopontine angle tumours.

**Tator CH:** Canadian Spine Society, Corner Brook, Newfoundland, March 2003. Visiting Professor - the essence of a surgeon.

**Tymianski M:** Heart and Stroke Foundation of Ontario, Mississauga, Ontario, January 2003. "Modern Approaches to Stroke treatment".

**Tymianski M:** Erasmus University, Dept of Neurosciences, The Netherlands, June 2003. "Molecular mechanisms of ischemic and traumatic neuronal injury: A modern perspective on excitotoxicity".

**Tymianski M:** Canadian Trigeminal Neuralgia Association, Toronto, Ontario, January 2003. "Surgical Treatment of Trigeminal Neuralgia." Invited Lecturer.

**Wallace MC:** The Havergal College Health Symposium, Toronto, Ontario, February 2003. Brain death and organ donation.

**Wallace MC:** 52nd Annual Meeting of the Congress of Neurological Surgeons, Philadelphia, Pennsylvania, September 2002. Luncheon Seminar: Posterior Circulation Aneurysms: Issues and Controversies.

**Wallace MC:** 6th Joint Meeting of the AANS/CNS Section on Cerebrovascular Surgery and the ASITN, Phoenix, Arizona, February 2003. Moderator, Management of posterior circulation aneurysms.

**Wallace MC:** 6th Joint Meeting of the AANS/CNS Section on Cerebrovascular Surgery and the ASITN, Phoenix, Arizona, February 2003. Special Seminar: 1.) Prevention and treatment of complications in the management of cerebral aneurysms 2.) Treatment of aneurysm rupture and other technical complications during clipping.

**Wallace MC:** Visiting Lecturer, Sydney, Brisbane, Melbourne, Australia and Auckland, New Zealand, July 2002. Strategies for intracranial aneurysm treatment.

**Wallace MC:** 4th Annual Interventional Neuroradiology Symposium, Montreal, Quebec, September 2002. Surgical perspective for unruptured intracranial aneurysms.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

(Renewal) Investigation of Experimental Cerebral Ischemia. *Wallace MC: Rothman, Bensons & Hedges Incorporated* (\$25,000 2000-2004)

(Renewal) Ependymal stem cells for spinal cord repair. *Tator CH: Ontario Neurotrauma Foundation* (\$220,181 2001 - 2004).

An investigation of the neuroprotective effect of inhibition of post-traumatic FAS and p75 initiated apoptosis in the spinal cord (FA2-0102-2). *Fehlings MG: Christopher Reeve Paralysis Foundation* (\$114,293 2001 - 2003).

Apoptosis after Spinal Cord Injury: The role of Fas, p75NTR, and NF-kappaB (INO-60945). *Fehlings MG, Barker PA: Canadian Institutes of Health Research* (\$87,430 2002 - 2003).

Attention-related responses in the human cingulate cortex. *Davis KD: Ontario Mental Health Foundation* (\$119,900 2001 - 2003).

Attention-related responses in the human cingulate cortex. *Davis KD: Ontario Mental Health Foundation* (\$85,127 2003 - 2005).

Cellular Mechanisms of Secondary Traumatic Neuronal Injury. *Tymianski M: CIHR grant MOP 53353* (\$315,000 2002 - 2005).

Characterization and identification of oncogenic receptor protein tyrosine kinase signalling complexes in malignant astrocytomas. *Guh A, Moran M: OCRN* (\$110,000 2003 - 2005).

CIHR Clinician Scientist Phase II Salary Award. *Tymianski M: CIHR* (\$165,000 2000 - 2002).

Clinician Scientist Award Phase II 3 year renewal. *Tymianski M: CIHR* (\$165,000 2003 - 2005).

Clinician Scientist Phase II Operating Funds. *Tymianski M: CIHR* (\$120,000 2000 - 2002).

Codman Award to B. Jacobs: The role of the p75NTR death receptor pathway in apoptosis after spinal cord injury. *Jacobs B: Codman Neurotrauma Research Award* (\$40,000 2002 - 2003).

Complications of Brain AVM Surgery. *Tymianski M, Moosavian M: Ontario Heart & Stroke John D. Schultz Scholarship* (\$4,000 2002).

Composition and molecular organization of postsynaptic densities following transient global ischemia. *Gurd JW, Wallace MC: Heart and Stroke Foundation of Ontario* (\$225,000 2001 - 2004).

Correction of Rett Phenotype By Exogenous Gene Delivery. *Eubanks JH, W. McIntyre Burnham and O. Carter Snead III: Canadian Institutes of Health Research* (\$224,315 2002 - 2004).

Cortical plasticity following thumb amputation, toe transfer and rehabilitation. *Anastakis DJ, Mikulis D, Chen R, Davis K, Chang M: American Association For Surgery of the Hand* (\$3,000 2002 - 2003).

Cytoskeletal regulation of traumatic brain injury. *Tymianski M, Arundine M: CIHR INMHA Doctoral Award* (\$20,500 2002 - 2005).

Cytoskeletal regulation of traumatic brain injury *Tymianski M, Arundine M: Ontario Neurotrauma Foundation Doctoral Award (Declined)* (\$20,000 2002 - 2005).

Development and characterization and of transgenic mouse models of astrocytomas. *Guha A: NCIC* (\$125,500 2002 - 2007).

Development of Mouse Models of Human Astrocytomas. *Gutmann, D., Guha, A: NIH: R01* (\$1,341,280 2001 - 2005).

Development of neurotrophic factor-enhanced guidance channels for spinal cord injury repair and a commercial embodiment of this technology. *Shoichet MS, Tator CH: Canadian Institutes of Health Research* (\$100,000 2002 - 2003).

Doctoral training award to Lori Mutsaers (MD-PhD student) "Role of voltage dependent K<sup>+</sup> channels in posttraumatic axonal dysfunction: Molecular and immunocytochemical studies". *Fehlings MG: Medical Research Council of Canada* (\$129,201 1998 - 2004).

Early versus Later Decompression of Cervical Spinal Cord Injuries with Spinal Cord Compression. *Massicotte EM, Schwartz G, Fehling MG: Cervical Spine Research Society* (\$30,000 2002 - 2003).

Enhancing axonal regeneration following spinal cord injury by in situ delivery of neurogenerative factors. *Shoichet M, Tator CH: Canadian Institutes of Health Research* (\$101,000 2001 - 2003).

Enhancing axonal regeneration following spinal cord injury by in situ delivery of neurogenerative factors. *Shoichet M, Tator CH: Canadian Institutes of Health Research* (\$317,387 2001 - 2004).

Establishment of a Database of Potential Donors for a Canadian Spinal Cord Tissue Bank. *Krassioukov AV, Fehlings MG: Joint Section of the Spine and Peripheral Nerves of the AANS/CNS. 2002 Larson Award* (\$24,000 2002 - 2004).

Expression and functional role of angiopoietins in human astrocytomas. *Guha A: Medical Research Council of Canada* (\$270,000 1999 - 2002).

Fellowship award to PhD student Steven Casha (Role of the FAS and p75 death receptor pathways in apoptosis after spinal cord injury). *Fehlings MG: Canadian Institutes of Health Research (CIHR)* (\$150,000 2000 - 2003).

Fellowship Award to Soheila Karimi-Abdolrezaee for "Involvement of potassium channel subunits Kv 1.1 and Kv 1.2 in posttraumatic axonal dysfunction after spinal cord injury". *Fehlings MG: Neurosciences, Mental Health and Addiction of the Canadian Institute of Health Research* (\$41,500 2002 - 2003).

Finding cures for glioblastomas: characterization of a mouse transgenic astrocytoma model as a therapeutic testing platform. *Guha, A: Cleveland Clinic Foundations: (\$95,000 2002).*

fMRI investigation of the temporal changes that occur in cerebral sensorimotor cortex following cervical spinal cord injury (ONAO-00157). *Mikulis D, Fehlings MG, McIlroy W, Verrier M: Ontario Neurotrauma Foundation/Rick Hansen Institute* (\$165,000 2000 - 2003).

Gender differences in child development: vulnerability to chronic pain. *McGrath PA, Davis KD, Katz J, Brown SC, Geist R: CIHR - New Emerging Team* (\$1,478,735 2003 - 2008).

Hospital For Sick Childrens Translational Research Grant: VEGF Expression and Ras Activation in Progressive Neurofibromas. *Baruchel s, Guha A, Martin, P, Guedensheit B: Hospital For Sick Children* (\$40,000 2000 - 2002).

Human studies of pain perception. *Davis KD, Diamant NE: Canadian Institutes of Health Research* (\$539,925 2002 - 2007).

Human sympathetic preganglionic neurons and abnormal cardiovascular control after spinal cord injury. *Krassioukov AV, Fehlings MG: Connaught New Staff Matching Grant, University of Toronto* (\$29,167 2001 - 2003).

Immune function and secondary complications in patients with spinal cord injury. *Hayes K, Popovich P, Reid G, Fehlings M, Dekaban G, Duggal N, Krassioukov A, Potter P, Smith K: Ontario Neurotrauma Foundation* (\$100,000 2002-2004 #02082).

Investigation and treatment of traumatic axonal dysfunction after spinal cord injury (MOP-14459). *Fehlings MG: Canadian Institutes of Health Research (CIHR)* (\$346,632 2000 - 2003).

Kindling-Induced Changes in Gene Expression: A Study Involving mRNA Differential Display. *W. McIntyre Burnham, Eubanks JE: Medical Research Council of Canada* (\$165,774 1999 - 2002).

Larson Award: Establishment of a Database of Potential Donors for a Canadian Spinal Cord Tissue Bank. *Krassioukov AV, Fehlings MG: 2002 Larson Award - AANS/CNS* (\$15,000 2002 - 2003).

Mechanism of Action of Deep Brain Stimulation. *Dostrovsky J, Hutchison WD, Saint-Cyr J, Lozano A: CIHR/NIH joint* (\$125,000 2001 - 2004).

Mechanisms of deep brain stimulation for Parkinson's disease. *Dostrovsky JO, Hutchison WD, Lozano AM: National Institute of Health* (\$375,000 2001 - 2003).

Mechanisms of non-excitotoxic neuronal death in anoxia. *Tymanski M: Ontario Heart and Stroke Foundation Grant NA4820* (\$130,000 2001 - 2003).

Molecular Mechanisms of Calcium Neurotoxicity. *Tymianski M: National Institutes of Health Grant RO1 NS 39060* (\$550,000 2000 - 2002).

Molecular Mechanisms of Neuronal Injury. *Tymianski M: 12 investigators across Canada: Canadian Stroke Networks* (\$765,000 2003 - 2005).

Mouse Astrocytoma Model: Astrocyte Specific Knockout of PTEN/MMAC1. *Guha A: The Cancer Research Society* (\$100,000 2000 - 2002).

MRC Clinician Scientist Award: Phase 2. *Guha A: Medical Research Council of Canada* (\$302,400 1999 - 2002).

Multi-User Operating Grant--Centralized Flow Cytometry: OCI/PMH. *Guha A and Group: Medical Research Council of Canada* (\$641,895 1999 - 2004).

Neovascularization in Cerebral Ischemia. *Guha A, Nagy A, Wallace C: Heart and Stroke Foundation* (\$372,000 2000 - 2003).

Neovascularization in cerebral ischemia. *Guha A, Wallace MC, Nagy A: Heart & Stroke Foundation of Ontario* (\$246,428 1998 - 2004).

Neurophysiological studies of human subthalamic nucleus. *Dostrovsky JO, Hutchison WD, Lozano AM, Saint-Cyr J: Canadian Institute of Health Research* (\$252,531 2000 - 2003).

Neuroprotection of the injured spinal cord: strategies to target death receptor mediated apoptosis (PSI #02-24). *Fehlings MG: Physicians Services Incorporated Foundation* (\$135,600 2002 - 2004).

Operating Grant. *Guha A: National Cancer Institute of Canada* (\$447,000 1999 - 2002).

Pilot trial of thalamic stimulation for epilepsy. *Fisher RS, Dichter M, Lesser R, Henry T, Lozano AM: National Institute of Health* (\$1,256,307 2000 - 2003).



Plastic changes in human sympathetic circuits after spinal cord injury: implications for abnormal cardiovascular control. *Krassioukov AV, Fehlings MG, Shannon P: Heart and Stroke Foundation of Ontario* (\$112,940 2002 - 2004).



Plastic changes in sympathetic spinal circuits after human spinal cord injury: Implications for abnormal cardiovascular control (NA4951). *Krassioukov AV, Fehlings MG, Shannon P: Heart and Stroke Foundation of Ontario* (\$109,546 2002 - 2004).

Post-doctoral Fellowship Award to Bradley Jacobs for “The role of FAS and p75 death receptor pathways in apoptosis after spinal cord injury”. *Fehlings MG: Canadian Institutes of Health Research* (\$253,125 2001 - 2006).

Postdoctoral Fellowship Award to Gordon Chu (The role of AMPA/Kainate receptors in spinal cord injury). *Fehlings MG: CIHR* (\$151,125 2001 - 2004).

Postdoctoral Fellowship Award to Soheila Karimi (Involvement of K<sup>+</sup> channel subunits kv1.1 and kv1.2 in posttraumatic axonal dysfunction after spinal cord injury). *Fehlings MG: CIHR* (\$38,000 2002 - 2003).

Pre-clinical Studies on treatment of Stroke with inhibitors of NMDA receptor-PSD-95 interaction *Tymianski M, Salter MW, Wang YT, Gurd JW, Tasker A: Canadian Stroke Networks* (\$500,000 2003 - 2005).

Preclinical Mouse Models for Human Astrocytomas. *Gutmann D, Guha A: American Cancer Society* (\$675,000 2000 - 2003).

Protein-Protein interactions in the postsynaptic density. *Tymianski M, Aarts M: Ontario Heart & Stroke Fellowship* (\$33,500 2001 - 2003).

Recordings of Movement-Related Neurons in Parkinsonian Patients During Movement Disorders Surgery. *Hutchison WD: Parkinson Society Canada* (\$82,384 2001 - 2003).

Role of a Novel Ischemia-Induced Gene in Neuronal Death. *Wallace C, Eubanks J: Heart and Stroke Foundation of Ontario* (\$121,050 2001 - 2003).

Role of a novel ischemia-induced gene in neuronal death. *Wallace MC, Eubanks J: Heart & Stroke Foundation of Ontario* (\$121,000 2001 - 2003).

Role of FAS activated caspases in the pathophysiology of spinal cord injury. *Fehlings MG: Premier's Research Excellence Award* (\$148,850 1999 - 2002).

Role of glial AMPA/Kainate receptors in neurotrauma (MRC/CNRP 1999-01). *Fehlings MG, Zhang L, Eubanks J, Gurd J, Carlen P, Baker A: Medical Research Council of Canada/Canadian Neurotrauma Research Program* (\$279,000 1999 - 2002).

Role of Glial AMPA/Kainate Receptors in Traumatic CNS White Matter Injury. *Fehlings MG, Baker A, Carlen PA, Eubanks JH, Gurd J and Zhang L: Medical Research Council of Canada* (\$279,000 1999 - 2002).

Role of the mGluR1 metabotropic glutamate receptor in the pathophysiology of central nervous system trauma (ONAO-00166). *Fehlings MG, Baker A: Ontario Neurotrauma Foundation/Rick Hansen Institute* (\$163,300 2000 - 2003).

Studentship Award to A. Ackery: Use of sodium channel blockers to protect the injured spinal cord. *Ackery A, Fehlings MG: Ontario Neurotrauma Foundation (01016-S)* (\$60,000 2001 - 2003).

Studentship award to graduate student Mital Joshi (The use of genetically engineered mice to probe the excitatory hypothesis of spinal cord injury). *Fehlings MG: Ontario Neurotrauma Foundation/Rick Hansen Institute* (\$60,000 2000 - 2003).

Studentship Award to J. Zhang: Mechanisms of Excitotoxic Injury to Spinal Cord White Matter: Role of Glur6. *Zhang J, Fehlings MG: Ontario Neurotrauma Foundation (#01017-S)* (\$60,000 2001 - 2003).

Synaptic Protein-protein interactions as potential therapeutic targets in stroke. *Tymianski M, Salter MW, Wang YT Gurd JW, Tasker A: Canadian Stroke Networks* (\$250,000 2000 - 2003).

The fate of human sympathetic preganglionic neurons after spinal cord injury. *Krassioukov AV, Fehlings MG, Norenberg M, Shannon P: Christopher Reeve Paralysis Foundation, USA (\$66,300 2001 - 2003).*

The fate of human sympathetic preganglionic neurons after spinal cord injury. *Krassioukov AV, Fehlings MG, Shannon P, Norenberg, M (University of Miami School of Medicine, Miami, FL): Christopher Reeve Paralysis Foundation (\$72,000 2001 - 2002).*

The fate of human sympathetic preganglionic neurons after spinal cord injury (KB2-003-2). *Krassioukov AV, Fehlings MG, Shannon P, Norenberg M (University of Miami School of Medicine, Miami, FL): Christopher Reeve Paralysis Foundation (\$43,950 2000 - 2002).*

Tissue Engineering Cell Culture Facility. *Shoichet MS, Tator CH: Natural Sciences and Engineering Research Council of Canada (\$88,670 2002 - 2003).*

Tissue engineering repair strategies for spinal cord injury. *Shoichet M, Tator CH: Natural Sciences and Engineering Research Council of Canada (\$135,644 2001 - 2003).*

Tissue engineering repair strategies for spinal cord injury. *Shoichet M, Tator CH: Natural Sciences and Engineering Research Council of Canada (\$460,257 2002 - 2003).*

Transgenic Mouse Modeling of Malignant Astrocytomas. *Guha A: Premiers Research Excellence Award (\$150,000 2000 - 2003).*

Vascular Growth Factor Receptors as a Target for Auger Electron Radiotherapy of Malignant Astrocytomas. *Sandhu J/Guha A, Reilly R: NSERC (\$239,607 1999 - 2002).*

## Honours Received

**Bernstein M:** Wightman-Berris Academy Award for Education Administration, May 2003.

**Fehlings MG:** Award for Individual Teaching Excellence, 2002-2003, The Wightman-Berris Academy, University of Toronto., May 2003.

**Guha A:** Alan & Susan Hudson Chair in Neurooncology, November 2002.

**Lozano AM:** Best Doctors in Canada, January 2003.

**Lozano AM:** Penfield Lecture, Congress of Neurological Surgeons, January 2003.

**Tator CH:** Grass Prize for Research - Society of Neurological Surgeons, July 2002.

**Tator CH:** Lifetime Achievement Award - Canadian Spine Society, February 2003.

**Tator CH:** Salute to the City Award Receptient - The Cadillac Fairview Corporation Ltd., August 2002.

**Tator CH:** The Annual Charles Tator Surgeon Scientist Mentoring Award-established by the Dept of Surgery, University of Toronto, July 2002.

**Tymianski M:** Clinician Scientist Award, Phase II (Three Years) Medical Research Council of Canada, April 2003.

**Tymianski M:** Royal College of Physicians and Surgeons of Canada Gold Medal in Surgery, March 2003.

**Wallace MC:** Wightman- Berris Academy Anderson Award for Undergraduate Education, June 2003.

# Division of Orthopaedic Surgery

**Dr. J. R. Davey - Associate Professor (Division Head)**

**Dr. B. A. Graham - Assistant Professor**

**Dr. J. Lau - Assistant Professor**

**Dr. S. J. Lewis - Assistant Professor**

**Dr. N. Mahomed - Associate Professor**

**Dr. K.W. Marshall - Assistant Professor**

**Dr. A. Miniaci - Professor**

**Dr. D. J. Ogilvie-Harris - Associate Professor**

**Dr. Y. R. Rampersaud - Assistant Professor**

**Dr. H. P. von Schroeder - Assistant Professor**



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## Publications

**Bridwell KH, Lewis SJ, Lenke LG, Baldus C, Blanke K:** Pedicle subtraction osteotomy for the treatment of fixed sagittal imbalance. *Journal of Bone and Joint Surgery (American)*: March 2003: 85: pp 454-463.

**Phillips CB, Barrett JA, Losina E, Mahome NN, Lingard EA, Guadagnoli E, Baron JA, Harris WH, Poss R, and Katz JN:** Incidence Rates of Dislocation, Pulmonary Embolism, and Deep Infection During the First Six Months After Elective Total Hip Replacement. *Journal of Bone and Joint Surgery (American)*: January 2003: 85: pp 20-26.

**Cunningham BW, Lewis SJ, Long J, Dmitriev AE, Linville DA, Bridwell KH:** Biomechanical evaluation of lumbosacral reconstruction techniques for spondylolisthesis: an in vitro porcine model. *Spine*: November 2002: 27(21): pp 2321-2327.

**Govender PV, Rampersaud YR, Rickards L, Fehlings MG:** Use of osteogenic protein-1 in spinal fusion: literature review and preliminary results in a prospective series of high-risk cases. *Neurosurgery Focus*: December 2002: 13: pp 1-6.

**Long J, Lewis S, Kuklo T, Zhu Y, Riew KD:** The effect of cyclooxygenase-2 inhibitors on spinal fusion. *Journal of Bone and Joint Surgery (American)*: October 2002: 84: pp 1763-1768.

**MacDermid JC, Roth JH, Rampersaud YR, Bain GI:** Trapezial arthroplasty with silicone rubber implantation for advanced osteoarthritis of the trapeziometacarpal joint of the thumb. *Canadian Journal of Surgery*: April 2003: 46: pp 103-10.

**Matsen FA, Katz JN, Losina E, Phillips CB, Mahomed NN, Lew RA, Harris WH, Poss, R. Baron JA, Fossel AH, Maher N, Barrett J, Tullar J:** The relationship of surgical volume to quality of care: scientific considerations and policy implications. *Journal of Bone and Joint Surgery (American)*: August 2002: 84A: pp 1482-85.

**Naglie G, Tansey C, Kirkland JL, Ogilvie-Harris DJ, Detsky AS, Etchells E, Tomlinson G, O'Rourke K, Goldlist B:** Interdisciplinary inpatient care for elderly people with hip fracture: a randomized controlled trial. *Canadian Medical Association Journal*: July 2002: 167: pp 25-32.

**Mahomed N, Barrett JA, Kat JN, Phillip CB, Losina E, Lew RA, Guadagnoli E, Harris WH, Poss R, and Baron JA:** Rates and Outcomes of Primary and Revision Total Hip Replacement in the United States Medicare Population. *Journal of Bone and Joint Surgery (American)*: January 2003: 85: pp 27-32.

**Recht M, White LM, Winalkli CS, Miniaci A, Minas T, Parker RD:** MR imaging of cartilage repair procedures *National Library of Medicine* April 2003: Vol 32(4): pp 185-200.

**Riew KD, Long J, Rhee J, Lewis SJ:** Time-dependent inhibitory effects of indomethacin on spine fusion. *Journal of Bone and Joint Surgery, AM*: April 2003: 85(4): pp 632-634.

**Zhang H, Liew CC and Marshall KW:** Microarray analysis reveals the involvement of beta -2 microglobulin (B2M) in human osteoarthritis. *Osteoarthritis and Cartilage*: 10: pp 950-960, 2002.

**Zhang H., Marshall .W., Tang H., Hwang D.M., Lee M., Liew C.C:** Profiling genes expressed in human fetal cartilage using 13,155 expressed sequence tags. *Osteoarthritis and Cartilage*: May 2003: 11(5): pp 309-319.

## Invited Visits to other Hospitals/Universities

**Davey JR:** Emerging Trends Whistler 2003 Orthopaedic Symposium, Whistler, British Columbia, March 2003. 1. Femoral offset in primary total hip replacement. 2. A nasty acetabulum treated with a protrusio cage and why.

**Davey JR:** Hips and Knees in Pinehurst, Pinehurst, North Carolina, October 2002. 1. Ideal cemented femoral technique 2. Antibiotic bone cement.

**Davey JR:** Emerging Trends in Hip and Knee, Pinehurst, North Carolina, September 2002. 1. Importance of femoral offset 2. Approaches for revision total hip.

**Davey JR:** Practice management and total joint arthroplasty, Key Largo, Florida, December 2002. 1. Lateralization and the mallory-head primary stem 2. Surgical approaches and the mallory head revision hip system.

**Davey JR:** Principles and Techniques in Revision Hip Arthroplasty, Whistler, British Columbia, March 2003. 1. Surgical approaches for revision total hip arthroplasty. 2. Principles using rings and cages. 3. Trabecular metal revision acetabulum. 4. Cemented femoral revisions. 5. A modular revision hip system. 6. A technique using proximal femoral allografts. 7. Dislocation following total hip arthroplasty. 8. Nerve palsies following total hip arthroplasty.

**Davey JR:** 13th Annual Winter Total Joint and Sports Medicine Symposium, Park City, Utah, January 2003. 1. The importance of femoral offset. 2. Current design issues in cemented total hip replacement.

**Davey JR:** Advances in Hip Revision Surgery, Chicago, Illinois, May 2003. 1. Combination acetabular defects. 2. Continuum of constraint: Range of motion versus stability. 3. Modularity in revision hip arthroplasty.

**Davey JR:** Hong Kong Orthopaedic Association, Hong Kong, November 2002. Femoral offset, a canine cementless total hip model.

**Davey JR:** American Academy of Orthopaedic Surgeons Annual Meeting, New Orleans, Louisiana, February 2003. Instructional course lecture: Soft tissue balancing in total hip arthroplasty.

**Lewis SJ:** Canadian Spine Society, Annual Meeting, Cornerbrook, Newfoundland, March 2003. (1) Surgical Management of Adult Spinal Deformity. (2) Surgical Treatment of High Grade Spondylolisthesis.

**Miniaci A:** The University of Wisconsin, Department of Orthopedics and Rehabilitation-2002 Fall Visiting Professor, Madison, Wisconsin, October 2002. 1) Osteochondral Defects of the Knee 2) The Athlete's Shoulder 3) Multidirectional Shoulder Instability: Decision-Making and Management 4) Failed Shoulder Instability Diagnosis and Management.

**Miniaci A:** BC Orthopaedic Interior Meeting, Kamloops, British Columbia, September 2002. 1) Osteochondral Injuries of the Knee 2) Failed Shoulder Instability Surgery 3) Proximal Humeral Fractures.

**Miniaci A:** National Articular Cartilage Course for Sports Medicine Fellows: "Comprehensive Approaches to Articular Cartilage Repair and Management", Santa Monica, California, December 2002. 1) Skills Session: Workshop Lecturer 2) Osteochondral Grafts: Techniques and Outcomes 3) Panel discussion.

**Miniaci A:** Emerging Trends Whistler 2003 Orthopaedic Symposium, Whistler, British Columbia, March 2003. 1) Upper Extremity Sessions-Course Director 2) Failed Instability-Causes and Treatment 3) HHR for Four-Part Fractures.

**Miniaci A:** The Edinburgh Advanced Shoulder Arthroscopy Course--International Faculty, Edinburgh, Scotland, October 2002. 1) Arthroscopic soft tissue reconstruction: tacks vs. sutures for rotator cuff repair 2) Bioabsorbable tacks do not provide a reliable fixation for rotator cuff repair-debate 3) The indications for thermal capsulorrhaphy in glenohumeral instability 4) Arthroscopic stabilization using the Caspari technique 5) Arthroscopic assessment and surgical management of the sportsman's shoulder-returning to competition.

**Miniaci A:** ISAKOS, Auckland, New Zealand, March 2003. Articular Cartilage Injuries - Clinical Treatment Options and Basic Science - Symposium.



**Miniaci A:** ISAKOS, Auckland, New Zealand, March 2003. Comparison of the Load to Failure of a Cannulated Tack (Suretac II) and a Suture Anchor (Mitek) in Rotator Cuff Repair.

**Miniaci A:** American Orthopaedic Society for Sports Medicine Specialty Day, New Orleans, Louisiana, February 2003. Current Management of Unstable OCD Lesions of the Knee-Spotlight on Surgical Techniques.

**Miniaci A:** ISAKOS, Auckland, New Zealand, March 2003. Decision Making in Multidirectional Shoulder Instability.

**Miniaci A:** American Academy of Orthopaedic Surgeons, New Orleans, Louisiana, February 2003. MDI: Choice of thermal, arthroscopic plication, or open techniques (Cook, Crimp or Cut?).

**Miniaci A:** American Academy of Orthopaedic Surgeons 70th Annual Meeting, New Orleans, Louisiana, February 2003. (1) Minimally-Invasive versus Open Approaches in Shoulder Surgery: Current Controversies - Symposium. (2) The surgical treatment of articular defects of the knee-Instructional course lecture.

**Miniaci A:** Medical & Surgical Approaches to Articular Cartilage Disorders of the Knee. The Cleveland Clinic, Section of Sports Medicine, Cleveland, OHIO, April 2003. Osteochondritis Dissecans (OCD).

**Miniaci A:** ISAKOS, Auckland, New Zealand, March 2003. (1) Osteochondritis Dissecans - Clinical Treatment Options. (2) Shoulder Instability Treatment: Use of Thermal Capsulorrhaphy as an Adjunct to Labral Repair.

**Miniaci A:** DePuy, Toronto, Ontario, March 2003. Surgical Management of Rotator Cuff Arthropathy - Co-Chairman, 1) Surgical demonstration.

**Rampersaud YR:** Current Spine -Spinal Science Advancement Foundation, Kuala Lumpur, Malaysia, November 2002. (1) Advanced posterior cervical fixation techniques.: Occipital-cervical, upper cervical, cervicothoracic. (2) Screw insertion techniques for the cervical spine. (3) Surgical decision making for cervical degenerative disc disease.

**Rampersaud YR:** 15th Annual Ski with the Spine Center, Whistler, British Columbia, January 2003. (1)Lumbar Discography. (2) Postraumatic syrinx.

**Rampersaud YR:** Innovative Techniques in Bone Fusion, Medtronic Sofamor Danek, Mexico City, Mexico, September 2002. rhBMP and PLIF: Interim clinical results and implications.

**Rampersaud YR:** American Spinal Injury Association, Miami, Florida, April 2003. Surgical challenges in spinal trauma - posterior surgical management of thoracolumbar burst fractures.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

Characterization of intracellular pathways necessary for osteoblastic differentiation. *von Schroeder HP: Zimmer of Canada* (\$10,000 2003).

Determining the validity and reliability of commonly used knee scoring systems. *Mahomed N, Schemitsch E, Davey JR, Waddell JP: Division of Orthopaedic Surgery, Dept of Surgery, University of Toronto* (\$10,000 2002 - 2003).

Elucidating differences in activity and activation mechanisms between large and small osteoclasts and between osteoclasts originating from diseased and healthy bone: implications for pharmacological intervention. *Heersche JN, Bogoch ER, Manolson MF, von Schroeder HP: Canadian Institutes of Health Research* (\$95,091 2002 - 2004).

Evaluation of commonly used knee rating systems. *Lau J, Koo J, Davey JR, Waddell JP, Mahomed N: Canadian Orthopaedic Foundation Research Grant* (\$10,000 2001 - 2002).

Lateral epicondylitis:Prospective assessment of two therapeutic modalities. *von Schroeder, HP, Chapelle, S: Ontario College of Massage Therapists* (\$30,000 2001 - 2002).

Mid-Term Followup of Primary and Revision Total Hip Arthroplasty. *Katz JN, Mahomed NN, Harris WH, Phillips CS, Baron J: The Arthritis Foundation (US)* (\$450,000 2000 - 2005).

Predictors of Disability Outcomes Following Revision Total Knee Arthroplasty. *Davis A, Mahomed N, Davey R, Schemitsch E, Grabuz D, Sczali J, Gignac M, Waddell J, Gross A, MacDonald S, Sekundiak T: Canadian Institutes for Health Research* (\$195,000 2001 - 2004).

Predictors of disability outcomes following revision total knee arthroplasty. *Mahomed NN, Davis A, Davey JR, Schemitsch E, Grabuz D, Sczali J, Gignac M, Waddell JP, Gross AE, MacDonald S, Sekundiak T: Canadian Institutes for Health Research (\$195,000 2001 - 2004).*

Randomized Controlled Trial of Inpatient vs Home Based Rehabilitation Following Primary Total Joint Arthroplasty (a One year follow-up). *Mahomed NN, Wright J, Hawker G, Badley L, Davis A Coyte P, Naglie G, Fried S, Jaglal S, Kreder HJ: Physicians Services Incorporated (\$42,000 2001 - 2002).*

Randomized Controlled Trial of Three Bearing Surfaces in Primary Total Hip Arthroplasty of Patients Under the Age of 65. *Mahomed N, Waddell JP: Supported by Smith and Nephew Canada (\$50,000 2001 - 2002).*

Randomized Multicentre Study of NexGen LPS - Flex Knee. *Mahomed NN, Davey JR: Zimmer Cannada (\$25,000 2002).*

Technician Support. *von Schroeder, HP: University Health Network and Department of Surgery (\$32,000 2002 - 2003).*

The Effect of Hospital and Surgeon Procedure Volume on the Outcomes of Primary and Revision Total Knee Replacement: Magnitude and Mechanisms. *Katz JN, Baron J, Mahomed NN, Liang M, Barrett J, Guadiganoli E, Daltroy L: National Institutes of Health (\$1,500,000 2001 - 2006).*

The efficacy of two modalities - intravenous iron and recombinant erythropoietin for the treatment of profound postoperative anemia. *Karkouti K, Quirt I, McCluskey S, Rampersaud R, Yau T: PSI (\$99,500 2001 - 2003).*

Understanding Early OA. *Gignac M, Davis A, Badley E, Hawker G, Mahomed N: Canadian Arthritis Network (\$20,484 2002 - 2003).*

Validity and reliability study of OA biomarkers. *Fortin P, Cibere J, Hawker G, Mahomed N, Abrahamowicz, Poole R: Canadian Arthritis Network (\$20,484 2002 - 2003).*

## Honours Received

**Davey JR:** COA Hong Kong Ambassador 2002, November 2002.

**Lau J:** Roger H Michael/Johnson & Johnson Research Award (Union Memorial Hospital), July 2002.

**Mahomed N N:** American British Canadian (ABC) Orthopaedic Travelling Fellowship, July 2002.

**Miniaci A:** John Joyce Award - Best Research Paper - ISAKOS, March 2003.

# Division of Plastic Surgery

Dr. D.J. Anastakis - Associate Professor

Dr. T.A.B. Bell – Lecturer

Dr. P. Bray - Assistant Professor

Dr. A. Freiberg - Professor

Dr. J.E. Lipa - Assistant Professor

Dr. R.T. Manktelow - Professor

Dr. P.C. Neligan - Professor (Division Head)



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## Publications

**Addison P, Neligan PC, Forrest C, Zhong A, Perri L, Pang CY:** Acute adenosine treatment is effective in augmentation of ischemic tolerance in muscle flaps in the pig: an update. *Plastic Reconstructive Surgery*: February 2003: 111: pp 842-845.

**Addison PD, Beausang ES, Neligan PC:** Malignant fibrous histiocytoma arising in a faraffinoma of the breast. *Canadian Journal of Plastic Surgery*: November 2002: 10: pp 215-216.

**Addison PD, Neligan PC, Ashrafpour H, Khan A, Zhong A, Moses M, Forrest CR, Pang CY:** Non-invasive remote ischemic preconditioning for global protection of skeletal muscle against infarction. *American Journal of Physiology*: October: 285(4) pp 435-443.

**Anastakis DJ:** Negotiation skills for physicians. *American Journal of Surgery*: January 2003: 185/1: pp 74-78.

**Anastakis DJ, Wanzel KR, Brown MH, McIlroy J, Hamstra S, Ali J, Hutchison CR, Murnaghan J, Regehr G, Reznick RK:** Evaluating the effectiveness of a two-year curriculum in a surgical skills centre. *American Journal of Surgery*: April 2003: 185/4: pp 378-385.

**Ang E, Black C, Irish J, Brown DH, Bulland PG, O'Sullivan B, Neligan PC:** Reconstructive options in the treatment of osteoradionecrosis of the craniomaxillofacial skeleton. *British Journal of Plastic Surgery*: March 2003: 56: pp 92-99.

**Black CE, Huang N, Neligan PC, Forrest CR, Lipa JE, Pang CY:** Vasoconstrictor effect and mechanism of action of endothelin-1 (ET-1) in human radial artery and vein: implication of skin flap vasospasm. *Journal of Cardiovascular Pharmacology*: March 2003: 41(3): pp 460-7.

**Bray PW, Neligan PC, Bowen CV, Danska JS, Boyer MI:** Development and validation of new model for microvascular transplantation of epiphyseal plate allografts with minimal adjoining epiphyseal and metaphyseal bone. *Microsurgery*: March 2003: 23 (2): pp 153-63.

**Geddes CR, Morris SF, Neligan PC:** Perforator Flaps: Evolution, classification and applications. *Annals of Plastic Surgery*: January 2003: 50: pp 900-99.

**Lipa JE, Youssef AA, Kuerer HM, Robb GL, Chang DW:** Breast Reconstruction in Older Women: Advantages of Autogenous Tissue. *Plastic and Reconstructive Surgery*: March 2003: 111(3): pp 1110-21.

**Manduch M, Bezuhly M, Anastakis DJ, Crawley AP, Mikulis DJ:** Serial fMRI assessment of the primary motor cortex following thumb reconstruction. *Neurology*: October 2002: 59 (8): pp 1278-81.

**Neligan PC:** Head and neck reconstruction. *Oncology*: November 2002: pp 1-7.

**Neligan PC:** Head and neck reconstruction. In: *Reconstructive Microsurgery* (Malizos KN, ed). Landes Bioscience, Georgetown, Texas: 2003: pp 222-232.

**Neligan PC:** Planning your complications - How to avoid complications by planning them. *Proceedings of 2nd Congress of the World Society for Reconstructive Microsurgery* (Germann G, Steinau HU., eds). Monduzzi Editore, International Proceedings Division, Bologna Italy, 2003: pp 79-83.

**Neligan PC, Gullane PJ:** Reconstruction of the oral cavity and oropharynx. In: Principles and practice of Head and Neck Oncology (Rhys Evans PH, Montgomery PQ, Gullane PJ, eds). Martin Dunitz, London and New York: 2003: pp 529-542.

**Neligan PC, Gullane PJ, Gilbert RW:** Functional reconstruction of the oral cavity. World Journal of Surgery: June 2003: e-pub: pp pre-print.

**O'Sullivan B, Gullane P, Irish J, Neligan P, Gentili F, Mahoney J, Sellmann S, Catton C, Waldron J, Brown D, Witterick I, Freeman J, Bell R:** Pre-operative radiotherapy for adult head and neck soft tissue sarcoma: Assessment of wound complication rates and cancer outcome in a prospective series. World Journal of Surgery: June 2003: e-pub: pp pre-print.

**Pathak I, Carroll CMA, O'Sullivan B, Neligan PC, Gullane PJ:** Sarcomas of the Head and Neck. In: Head and Neck Oncology (Rhys Evans PH, Montgomery PQ, Gullane PJ., eds). Martin Dunitz, London and New York: 2003: pp 529-542.

**Wanzel KR, Anastakis DJ, Brown M, Regehr G:** Reconstructive breast surgery: Referring physician knowledge and learning needs. Plastic Reconstructive Surgery: November 2002: 110 (6): pp 1441-54.

**Zhong T, Gullane PJ, Neligan PC:** Double latissimus dorsi flaps for reconstruction of extensive scalp defects. The Canadian Journal of Plastic Surgery: June 2003: 11(2): pp 79-82.

### **Invited Visits to other Hospitals/Universities**

**Anastakis DJ:** Association for Surgical Education, 23rd Annual Meeting, Vancouver, British Columbia, May 2003. Why visual-spatial ability might be important in surgical training and how to measure it.

**Lipa JE:** American Society For Reconstructive Microsurgery, Koloa, Kauai, Hawaii, January 2003. Instructional Course: Filling Black Holes - Managing Large Complex Defects.

**Neligan PC:** Canadian Society of Plastic Surgeons, Whistler, British Columbia, June 2003. (1) Educational Foundation Symposium: Perforator Flaps - Are the benefits worth the effort? (2) Preparing a PowerPoint Presentation (1hr Eye-opener session).

**Neligan PC:** American Society of Plastic Surgeons, San Antonio, Texas, November 2002. 1. Instructional Course: Lip reconstruction following tumor resection. 2. Instructional Course: Multimedia computerized presentations for education. 3. Moderator: 2001 PSEF research grant session. 4. Panel: Personal digital assistants: Holding your practice in the palm of your hand. 5. Panel: Economic survival for head and neck reconstruction.

**Neligan PC:** University of British Columbia, Vancouver, British Columbia, May 2003. AD Courtemanche Visiting Professor: 1. Role of the plastic surgeon in managing skin cancers: A shifting paradigm. 2. Research and the plastic surgeon: not just for academics. 3. Reconstructive plastic surgery: Current status and future directions.

**Neligan PC:** American Society for Reconstructive Microsurgery, Kauai, Hawaii, January 2003. Co-Moderator: The temporoparietal free flap for reconstruction of the larynx in the radiation failure setting. 2. Instructional Course: Filling black holes - managing large complex defects.

**Neligan PC:** World Society for Reconstructive Microsurgery, Heidelberg, Germany, June 2003. II Congress: (1) Complications in Microvascular Surgery; Session Moderator. (2) Planning your complications: avoiding complications by planning them.

**Neligan PC:** Canadian Society of Otolaryngology, Calgary, Alberta, May 2003. Reconstruction of the orbit following maxillectomy.

**Neligan PC:** Workshop in Plastic Surgery, British Virgin Islands, January 2003. The versatility of perforator flaps in reconstructive surgery. 2. Remote preconditioning and the induction of ischemic tolerance.





**Neligan PC:** University of Wisconsin, Madison, Wisconsin, April 2003. Visiting Professor: 1. Surgical management of complex wounds. 2. Head and neck reconstruction.

**Neligan PC:** Memorial Sloan Kettering Cancer Center, New York, New York, October 2002. Visiting Professor: Advances in microsurgical oncologic reconstruction.

**Neligan PC:** University of California, Irvine, California, May 2003. Visiting Professor: Advances in reconstructive microsurgery.

**Neligan PC:** University of Western Ontario, London, Ontario, May 2003. Visiting Professor: Managing complex wounds.

**Neligan PC:** University of Southern California, Los Angeles, California, May 2003. Visiting Professor: Reconstruction of the pelvis and trunk.

**Neligan PC:** Loma Linda University, Loma Linda, California, May 2003. Visiting Professor: Relevance of research to clinical practice. 2. Current status of reconstructive microsurgery. 3. Management of complex wounds.

**Neligan PC:** Medical College of Wisconsin, Milwaukee, Wisconsin, June 2003. Visiting Professor: (1) Microsurgery in the new millennium. (2) Plastic Surgery Research: Relevance to Clinical Practice.

**Neligan PC:** University of Rochester, Rochester, New York, June 2003. Visiting Professor: (1) Reconstruction of the trunk and pelvis. (2) Current status and future directions of reconstructive microsurgery.

## Research And Investigations

*Senior Investigator's Name Appears in Italics*

Cortical mapping of surgical residents on tasks of surgical and mental rotations. *Wanzel KR, Anastakis DJ, Hamstra SJ, Mikulis D, McAndrews MP: Centre for Excellence in Surgical Education, Research and Training (CESERT) (\$26,787 2002 - 2003).*

Cortical plasticity following thumb amputation, toe transfer and rehabilitation. *Anastakis DJ, Mikulis D, Chen R, Davis K, Chang M: American Association for Hand Surgery (\$3,000 2002 - 2003).*

Determinants of superior performance on spatially complex surgical procedures. *Anastakis DJ, Wanzel KR, Hamstra SJ, Caminiti MF, Reznick RK: Physician's Services Incorporated Foundation - Resident Research (\$19,734 2002).*

Development of a scoring system for evaluation of facial paralysis. *Manktelow RT, Zuker RM, Binhammer P, Lipa JE, Tomat L: The Physicians' Services Incorporated Foundation (\$47,600 2002 - 2003).*

Diversity practices at University Health Network: A needs assessment. *Guruge S, Silvera J, Sidani S, Ferguson-Pare M, Anastakis DJ: Nursing, University Health Network (\$4,305 2003 - 2004).*

Global protection of skeletal muscle against ischemic necrosis and vascular dysfunction by non-invasive remote ischemic preconditioning: Efficacy and mechanism. *Pang, CY, Forrest CR, Neligan, PC: Canadian Institutes for Health Research (\$72,648 2003 - 2006).*

Head and Neck Cancer Research. *Neligan PC, Gullane PJ: RE Wharton Esq (\$1,200,000 2002 - 2012).*

Ischemic preconditioning of human skeletal muscle. *Lipa JE, O'Blencs C: The Physicians Services Incorporated Foundation (\$20,000 2002).*

Mechanism of Action of VEGF in Augmentation of Skin Flap Viability. *Neligan PC, Pang CY, Addison P: Plastic Surgery Educational Foundation (\$5,000 2001 - 2002).*

Needs assessment and development of an educational tool for reconstructive breast surgery. *Wanzel KR, Brown MH, Anastakis DJ, Regehr G: Mentor Medical Supplies (\$5,000 2001 - 2002).*

Needs assessment and development of an educational tool for reconstructive breast surgery. *Wanzel KR, Brown MH, Anastakis DJ, Regehr G: CE Research and Development Grant, University of Toronto (\$3,919 2001 - 2002).*

Qualitative measures across peripheral nerve lesions using the DASH and SF-36. *Asaria J, Anastakis DJ: The Toronto Hospital Research Institute. University of Toronto, Faculty of Medicine (\$4,000 2002).*

Regional anesthesia versus general anesthesia for ambulatory upper limb surgery. *McCartney, C, Anastakis D, Chan V, Graham B, Katz J, von Schroeder H: Physician's Services Incorporated Foundation (\$43,685 2002 - 2003).*

Skin flap ischemia: Pathophysiology and pharmacological intervention. *Pang CY, Neligan PC: CIHR (\$402,800 2001 - 2006).*

## Honours Received

**Anastakis DJ:** Best Meeting Abstract, American Society for Regional Anaesthesia, Spring Meeting. San Diego, California. Regional anesthesia versus general anesthesia for ambulatory hand surgery. Award received by Dr. Richard Brull, April 2003.

**Neligan PC:** Plastic Surgery Educational Foundation Visiting Professor, January 2003.

# Division of Thoracic Surgery

**Dr. G.E. Darling - Associate Professor**

**Dr. R.J. Ginsberg – Professor (Division Head – 2002)**

**Dr. M.R. Johnston - Associate Professor**

**Dr. S. Keshavjee - Professor (Division Head - 2003)**

**Dr. M.F. McKneally - Professor**

**Dr. M. Liu – Associate Professor**

**Dr. A.F. Pierre - Assistant Professor**

**Dr. T.K. Waddell - Assistant Professor**



University Health Network

## Publications

**Bains MS, Stojadinovic A, Minsky B, Ginsberg RJ et al:** A phase II trial of preoperative combined-modality therapy for localized esophageal carcinoma: Initial results. *Journal of Thoracic and Cardiovascular Surgery*: August 2002: 124(2): pp 270-277.

**Darling GE, Downey GP, Herridge MS:** Bacterial Infections of the lung. *Thoracic Surgery*: July 2002: 2nd Ed: pp 520-547.

**Darling, GE:** The Impact of clinical practice guidelines and clinical trials on treatment decisions. In: *Surgical Oncology* (Norton, JA, Bundred, NJ, eds). Publications Expediting Inc., New York: December 2002: 11: pp 255-262.

**de Perrot M, Fisher S, Brundler M, Sekine Y, Keshavjee S:** Solitary fibrous tumors of the pleura. *Annals of Thoracic Surgery* 2002 Jul: 74(1): pp 285-93 **CPA**

**De Perrot M, Fischer S, Waddell TK, Strueber M, Harringer W, Pierre AF, Spiliopoulos A, Haverich A, Keshavjee S:** Management of lung transplant recipients with bronchogenic carcinoma in the native lung. *Journal of Heart and Lung Transplantation*: January 2003: 22: pp 87-89.

**De Perrot M, Imai Y, Ranieri VM, Waddell TK, Liu M, McRae K, Zhang H, Slutsky AS, Keshavjee S:** Impact of ventilator induced lung injury on the development of reperfusion injury in a rat lung transplant model. *Journal of Thoracic and Cardiovascular Surgery*: December 2002: 124: pp 1137-1144.

**De Perrot M, Imai, Volgyesi GA, Waddell TK, Liu M, Mullen JB, McRea K, Zhang H, Slutsky AS, Ranieri VM and Keshavjee S:** Effect of ventilator-induced lung injury on the development of reperfusion injury in a rat lung transplant model. *Journal of Thoracic and Cardiovascular Surgery*: December 2002: 124(6): pp 1137-1144.

**de Perrot M, Keshavjee S:** Lung preservation. *Annals of Thoracic Surgery* 2002 Aug: 74(2): pp 629-31. **SRI**

**de Perrot M, Liu J, Bril V, McRae K, Bezjak A, Keshavjee :** Prognostic significance of thymomas in patients with myasthenia gravis. *Annals of Thoracic Surgery* 2002 Nov: 74(5): pp 1658-62. **SRI**

**de Perrot M, Liu M, Waddell TK, Keshavjee S:** Ischemia-reperfusion induced lung injury. *American Journal of Respiratory and Critical Care Medicine*: February 2003: 167: pp 490-511.

**dePerrot M, Fischer S, Liu M, Imai Y, Martyins S, Sakiyama S, Tabata T, Bai X-H, Waddell TK, Davidson BL, Keshavjee S:** Impact of human interleukin-10 on vector induced inflammation and early graft function in rat lung transplantation. *American Journal of Respiratory Cell and Molecular Biology*: May 2003: 28(5): pp 616-625.

**de Perrot M, Waddell TK, Chamberlain D, Hutcheon M, Keshavjee S:** De novo pulmonary capillary hemangiomatosis occurring rapidly after bilateral lung transplantation. *Journal of Heart and Lung Transplantation*: June 2003: 22: pp 698-700.

**dePerrot M, Wigle DA, Pierre AF, Tsao M, Waddell TK, Todd TRJ, Keshavjee SH:** Primary bronchogenic carcinoma following solid organ transplantation. *Annals of Thoracic Surgery*: February 2003: 75: pp 367-371.

- Ding Z, Issekutz TB, Downey GP, Waddell TK:** L-selectin stimulation upregulates CXCR4 expression and enhances lymphocyte response to SDF-1: a new mechanism of the interaction of adhesion molecules and chemokines. *Blood*: June 2003: 101: pp 4245-4252.
- Downey RJ, Ng KK, Kris MG, Ginsberg RJ et al:** A phase II trial of chemotherapy and surgery for non-small cell lung cancer patients with a synchronous solitary metastasis. *Lung Cancer*: November 2002: 38: pp 193-197.
- Gillijam M, Chapparo C, Tullis E, Chan C, Keshavjee S, Hutcheon M:** Gastrointestinal complications after lung transplantation in patients with cystic fibrosis. *Chest* 2003 Jan: 123(1): pp 37-41. **C**
- Ginsberg RJ:** Review: Lung cancer surgery: acceptable morbidity and expected results and quality control. *Surgical Oncology*: December 2002: 11(4): pp 263-266.
- Goldstein RS, Todd TRJ, Guyatt G, Dolmage T, van Rooy S, Keshavjee S, Krip B, Maltais F, LeBlanc P, Pakhale S, Waddell TK:** The influence of lung volume reduction surgery (LVRS) on health related quality of life in patients with chronic obstructive pulmonary disease. *Thorax*: May 2003: 58: pp 405-410.
- Imai Y, Ranieri VM, Parodo J, Kajikawa O, de Perrot M, Fischer S, Edwards V, Cutz E, Liu M, Keshavjee S, Martin TR, Marshall JC, Slutsky AS:** Injurious mechanical ventilation enhances end organ epithelial cell apoptosis and organ dysfunction. *JAMA*: April 2003: 289(16): pp 2104-12.
- Johnston MR:** Lung cancer in the 21st century, editorial. *Surgical Oncology*: December 2002: 11(4): pp 165.
- Liu J, Johnston MR:** Animal models for studying lung cancer and evaluating novel intervention strategies. *Surgical Oncology*: December 2002: 11(4): pp 217-227.
- Lodyga M, X. H. Bai, Mourgeon E, Han B, Keshavjee S, and Liu M:** Molecular cloning of rat actin filament associated protein: a putative adaptor protein for stretch-induced Src activation. *American Journal of Physiology*: August 2002: 283(2): pp L265-L274.
- Long IS, Han K, Li M, Shirasawa S, Sasazuki T, Johnston MR, Tsao MS:** Met receptor overexpression and oncogenic Ki-ras mutation cooperate to enhance tumorigenicity of colon cancer cells in vivo. *Molecular Cancer Research*: March 2003: 1: pp 393-401.
- McKneally MF:** Is it safe to train residents to perform cardiac surgery? *Annals of Thoracic Surgery*: October 2002: 74: pp 1049.
- McKneally MF:** Witnessing death as lifesaving treatment is withheld. *Annals of Thoracic Surgery*: November 2002: 74: pp 1430-31.
- Mead MO, Granton JT, Matte-Martyn A, McRae K, Weaver B, Cripps P, Keshavjee S:** A randomized trial of inhaled nitric oxide to prevent reperfusion injury following lung transplantation. *American Journal of Respiratory and Critical Care Medicine* 2003 Jun: 11: pp 1483-9. **SRI**
- Norton JA, Bundred NJ, Johnston MR:** *Surgical Oncology*, A review journal of cancer management and research: Special Issue: Lung Cancer in the 21st Century (Norton JA, Bundred NJ, Johnston MR (Guest Editor), eds). Elsevier Science, New York: 2002.
- Oldenhof, A. D., O. P. Shynlova, M. Liu, L. Langille, and S. J. Lye:** Mitogen-activated protein kinases mediate stretch-induced c-fos mRNA expression in myometrial smooth muscle cells. *American Journal of Physiology*: November 2002: 283(5): pp C1530-C1539.
- Pierre AF, Keshavjee SH, Ginsberg RJ:** Flexible and rigid bronchoscopy. In: *Thoracic Surgery* (Pearson FG, Deslauriers J, Ginsberg RJ, Hiebert CA, Cooper JD, Patterson GA, Urschel HC, eds). Churchill Livingstone, New York: 2002: pp 83-98.



**Pierre AF, Luketich JD, Fernando CF, Buenaventura P, Christie NA, Litle V, Schauer PR:** Results of laparoscopic repair of giant paraesophageal hernias: 200 consecutive cases. *Annals of Thoracic Surgery*: December 2002: pp 1909-1916.

**Pierre AF, Sekine Y, Hutcheon MA, Waddell TK, Keshavjee SH:** Marginal donor lungs: a re-assessment. *Journal of Thoracic and Cardiovascular Surgery*: July 2002: 123: pp 421-427.

**Sakiyama S, de Perrot M, Han B, Wise Y, Waddell TK, Keshavjee SH, Liu M:** Ischemia-reperfusion decreases protein-tyrosine phosphorylation and P38 MAPK phosphorylation in rat lung transplants. *Journal of Heart and Lung Transplantation*: March 2003: 22(3): pp 338-346.

**Sekine Y, Fischer S, de Perrot M, Pierre AF, Keshavjee SH:** Bilateral lung transplantation using a donor with a tracheal right upper lobe bronchus. *Annals of Thoracic Surgery*: July 2002: 73: pp 308-310.

**Seiler MP, Luner P, Moninger TO, Karp PH, Keshavjee S, Zabner J:** Thixotropic solutions enhance viral mediated gene transfers to airway epithelia. *American Journal of Respiratory Cell Molecular Biology* 2002 Aug; 27(2): pp 133-40.  
C

**Shargall Y, Johnston MR:** Lung cancer screening and management in the elderly patient. *Geriatrics & Aging*: November 2002: 5(9): pp 23-28.

**Slinger PD, Johnston MR:** Preoperative evaluation of the thoracic surgery patient. *Seminars in Anesthesia, Perioperative Medicine Pain*: September 2002: 21(3): pp 168-181.

**Szczesny TJ, Szczesna A, Shepherd FA, Ginsberg RJ:** Surgical treatment of small cell lung cancer. *Seminars in Oncology*: February 2003: 30 (1): pp 47-56.

**Tabata, T., M. de Perrot, S. Keshavjee, M. Liu, G. P. Downey, and T. K. Waddell:** Accommodation after lung xenografting from hamster to rat. *Transplantation*. *Transplantation*: March 2003: 75(5): pp 607-612.

**Waddell TK:** Treatment of patients with lung cancer and severe emphysema. *Surgical Oncology*: December 2002: 11: pp 201-206.

**Waddell TK, Bennett L, Kennedy R, Todd TRJ, Keshavjee SH:** Heart-lung or lung transplantation for Eisenmenger's syndrome. *Journal of Heart Lung Transplantation*: July 2002: 21: pp 731-737.

**Waddell TK, Goldstein RJ:** Chronic obstructive pulmonary disease: What is the role of surgery? In: *Chronic obstructive pulmonary disease: critical debates* (Pearson M, Wedzicha W, eds). Blackwell Publishing, Oxford: 2003: pp 182-191.

**Wang KK, Liu N, Radulovich N, Wigle DA, Johnston MR, Shepherd FA, Minden M, Tsao MS:** Novel candidate tumor marker genes for lung adenocarcinoma. *Oncogene*: November 2002: 21: pp 7589-7604.

**Wigle D, Jurisica I, Radulovich N, Pintilie M, Rossant J, Liu N, Lu C, Woodgett J, Seiden I, Johnston M, Keshavjee S, Darling G, Winton T, Breikreutz B, Jorgenson P, Tyers M, Shepherd F, Tsao M:** Molecular Profiling of Non-Small Cell Lung Cancer and Correlation with Disease-free Survival. *Cancer Research* 623005-300811YESv 1997/09/29@The future of clinical research in thoracic surgery in C: April 2002: 62: pp 3005-3008.

**Zellos LS, Ragaz J, Ginsberg RJ:** Diffuse malignant mesothelioma of the pleural space and its management. *Oncology*: July 2002: 16: pp 916.

## **Invited Visits to other Hospitals/Universities**

**Darling GE:** The Princess Margaret Hospital, New development in Cancer Management, Toronto, Ontario, September 2002. *Esophageal Cancer: Surgical considerations relating to adjuvant therapy*.

**Darling GE:** Thoracic Refresher Course, Toronto, Ontario, September 2002. *Management of Malignant Pleural Effusion*.

**Darling GE:** Thoracic Refresher Course, Toronto, Ontario, September 2002. Prophylactic Antireflux Surgery in Barrett's Esophagus. What are the Indications?

**Johnston MR:** American College of Chest Physicians, Cancun, Mexico, December 2002. Chest wall and mediastinal tumours.

**Johnston MR:** Better Breathing Conference, Ontario Respiratory Care Society, Marriott Hotel, Toronto, Ontario, January 2003. Lung Cancer Treatment Strategies.

**Johnston MR:** Taiwan Lung Cancer Society - Workshop on Management of Locally Advanced Non Small Cell Lung Cancer, Taipei, Taiwan, October 2002. The role of neo-adjuvant therapy in NSCLC.

**Johnston MR:** American Society of Chest Physicians, Cancun, Mexico, December 2002. Treatment of N2 Disease: Where are we?

**Keshavjee S:** 16th Annual North American Cystic Fibrosis Meeting, New Orleans, Louisiana, Oct 2, 2002-Oct 5, 2002. 1. Lung transplant surgery: more than just a 12 hour project, 2. Outcomes of lung transplantation in cystic fibrosis patients with burkholderia cepacia.

**Keshavejee S:** Brazilian Congress of Pulmonary Medicine, Sao Paulo, Brazil, Oct 15, 2002-Oct 19, 2002. 1. Management of prolonged air leaks after lung volume reduction surgery, 2. Indications for lung volume reduction vs. lung transplantation, 3. Videothoroscopic thymectomy, 4. Lung transplantation for non-obstructive pulmonary disease, 5. Lung volume reduction surgery: indications and results, 6. Neoadjuvant chemotherapy in the management of lung cancer.

**Keshavjee S:** Ontario Medical Association, Toronto, Ontario, Nov 13, 2002. A day in the life of an academic thoracic surgeon.

**Keshavjee S:** Cardiothoracic Transplantation 2003, University of Colorado, Vail, Colorado, Feb 22, 2003-Feb 26, 2003. 1. Life and death in transplantation: the cell death story, 2. Donor scoring in lung transplantation, 3. Gene therapy in transplantation: are we ready for the bedside?

**Keshavjee S:** Society of Cardiovascular Anesthesiologists, 25th Annual Meeting, Miami, Florida, Apr 28, 2003. The future of lung transplantation.

**Keshavjee S:** American Association for Thoracic Surgery Annual Meeting, Boston, Massachusetts, May 4, 2003. Lung transplantation for non-infectious lung disease: bilateral lung is preferred.

**Keshavjee S:** The Toronto Lung Transplant Civitan Club Annual Meeting, Toronto, Ontario June 12, 2003. Lung transplantation and organ donation.

**McKneally MF:** Canadian Bioethics Society, Victoria, British Columbia, October 2002. "Leadership".

**McKneally MF:** Harvard University Kennedy School of Government Skills for the New World of Health Care Course, Boston, Massachusetts, May 2003. "Managing SARS in Toronto: Lessons in Biosecurity".

**McKneally MF:** Harvard University Kennedy School of Government Skills for the New World of Health Care Course, Boston, Massachusetts, May 2003. "The Focused Hospital: Lessons from the Shouldice and St. Michael's Hospital".

**McKneally MF:** University of Missouri--Columbia Surgery Grand Rounds, Columbia, Missouri, December 2002. "Trust me, I'm your surgeon".

**McKneally MF:** Canadian Association of Thoracic Surgeons, London, Ontario, September 2002. "Trust".

**Liu M:** National Symposium of Advances in Respiratory Diseases, Invited Speaker, Shanghai, P. R. China, November 2002. (1) Alveolar epithelial cells and acute inflammatory responses. (2) Cytokines and ventilator-induced acute lung injury.



**Liu M:** Second Shanghai International Pediatrics Symposium, Invited Speaker, Shanghai, P. R. China, October 2002. Cytokines and ventilator-induced acute lung injury.

**Liu M:** Department of Public Health, Wuxi, Jiangsu, P. R. China, Invited Speaker, Wuxi, Jiangsu, P. R. China, November 2002. How to do medical research.

**Liu M:** University of Pittsburgh, Invited Speaker, Pittsburgh, November 2002. Mechanotransduction: ventilator-induced acute lung injury.

**Pierre AF:** University of Pittsburgh Medical Center, Minimally Invasive Surgery for Esophageal Cancer Course, Pittsburgh, Pennsylvania, November 2002. (1) Laparoscopic jejunostomy and lateral pharyngostomy. (2) Starting a minimally invasive surgery program.

**Pierre AF:** St. Joseph's Hospital, McMaster University, Surgery Grand Rounds, Hamilton, Ontario, June 2003. (1) Minimally invasive foregut surgery. (2) Biosynthetic mesh repair of the diaphragm.

**Ginsberg RJ:** Canadian Association of Thoracic Surgeons, London, Ontario, September 2002. CATS F. G. Pearson Lectureship: Educating the thoracic surgeon: Past, present and future.

**Ginsberg RJ:** Innovations in Oncology, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania, September 2002. The intergroup trial for esophageal cancer: Future directions for neoadjuvant therapy.

**Waddell TK:** The Transplantation Society, Miami, Florida, August 2002. Lung Preservation.

**Waddell TK:** Imperial College Tissue Engineering Group, London, England, October 2002. Lung Replacement, Repair and Regeneration.

**Waddell TK:** American Association for Thoracic Surgery, Boston, Massachusetts, May 2003. Pulmonary xenotransplantation.

**Waddell TK:** American Association for Thoracic Surgery, Boston, Massachusetts, May 2003. Technical advances in lung reduction.

**Waddell TK:** Canadian Critical Care Society Annual Meeting, Toronto, Ontario, October 2002. Transplantation Immunology.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

A Phase I study to evaluate the safety and efficacy of the Broncus Exhale system in patients with emphysema. *Waddell TK, Keshavjee S: Broncus Technologies Inc* (\$113,590 2001 - 2003).

A phase III comparison between concurrent chemotherapy plus radiotherapy and concurrent chemotherapy and radiotherapy followed by surgical resection for Stage IIIa (N2) nonsmall cell lung cancer (BR13). *Darling G, co-chair: National Cancer Institute of Canada* (\$70,000 1997 - 2002).

A Phase III Prospective Randomized, Double-Blind, Placebo-Controlled Trial of the Epidermal Growth Factor Receptor Antagonist, ZD1839 (IRESSA) in Completely Resected Primary Stage IB, II and IIIA Non-Small Cell Lung Cancer ( BR-19). *Darling GE, National Cancer Institute of Canada* (\$10,000 2002 - 2003).

A prospective feasibility study to evaluate the safety and performance of the Exhale system with stents in patients with emphysema. *Waddell TK, Keshavjee S: Broncus Technologies Inc* (\$165,070 2003 - 2004).

A randomized double-blind placebo-controlled study comparing basiliximab plus standard triple immunosuppression to standard triple immunosuppression alone for the prevention of acute rejection and bronchiolitis syndrome in bilateral lung and single lung transplant patients. . *Waddell TK, Keshavjee S, Chapparo C: Novartis Canada Inc* (\$120,000 2002 - 2003).

A Randomized Phase III Trial of Surgery Alone or Surgery -Plus Preoperative Paclitaxel/Carboplatin in Clinical Stage IB (T2N0,) II (T1-2N1, T3N0) and Selected IIIA (T3N1) Non-small Cell Lung Cancer (BR-22) (SWOG 9900). *Darling GE*: National Cancer Institute of Canada (\$13,000 2002 - 2003).

A randomized trial of mediastinal lymph node sampling versus complete lymphadenectomy during pulmonary resection in the patient with N0 or N1 (less than hilar) nonsmall cell lung cancer (ZOO30). *Allen M, Darling G, Ginsberg R*: American College of Surgeons Oncology Group (\$160,000 2000 - 2003).

A Randomized, Double Blind, Placebo Controlled, Multi-Center Study of Simulect for the Prevention of Acute Rejection and Bronchiolitis Obliterans Syndrome Lung Transplant Patients. *Waddell T, Keshavjee S, Chaparro C, Hutcheon M*: Novartis (\$1,300,000 2001 - 2003).

Endothelial glycosylation, monocyte adhesion, and delayed xenograft rejection. *Waddell TK*: Canadian Cystic Fibrosis Foundation (\$207,000 2003 - 2006).

Gene expression in xenograft accommodation. *Waddell TK*: Physician Services Incorporated Foundation (\$123,321 2001 - 2003).

Gene therapeutic applications in transplant related acute lung injury. *Keshavjee S*: Canadian Institutes of Health Research (\$268,413 2000 - 2003).

Health related quality of life in advanced lung disease and transplantation. *Singer L, Waddell TK, Granton J, Tullis E, Krahn M*: Physician Services Incorporated Foundation (\$154,000 2002 - 2004).

Leukocyte-endothelial interactions in xenotransplantation. *Waddell TK*: American Association for Thoracic Surgery, Second Alfred Blalock Research Scholarship (\$165,000 2000 - 2002).

Mechanisms of tumour cell invasion and metastasis of lung cancer cells. *Hu J, Johnston MR, Tsao M*: Grant Miller Cancer Research Fund (\$20,000 2001 - 2003).

Mechanotransduction and ventilator-induced acute lung injury. *Liu M*: Canadian Institutes of Health for Research, Operating Grant, MOP-13270 (\$600,000 2001 - 2006).

Novel Biomarkers and Screening Strategies in Early Lung Detection of Lung Cancer. *Tsao, MS, Minden M, Banerjee D, Johnston MR, Shepherd F*: Clinical Impact Team, University Health Network 04/03 (\$300,000 2000 - 2003).

Nutritional Factors and Gene-environment Interactions in the Etiology of Adenocarcinoma of the Esophagus. *Birkett N, Maziak D, Labuda D, Sinnett D, Darling G, Inculet R, Guindi M, McKeown-Eyssen G, Ambrosone C, Casson A*: Cancer Research Society (\$5,000 2000 - 2003).

Role of cytoskeleton in cytokine production from lung alveolar epithelial cells. *Liu M*: Canadian Institutes of Health for Research, Operating Grant, MOP-42546 (\$196,194 2000 - 2003).

The role of Bcl-2 family proteins in TNF-mediated NF-KB activation. *Waddell TK*: The Thoracic Surgery Foundation for Research and Education (\$90,000 2000 - 2002).

Xenotransplantation. *Waddell TK*: Canadian Foundation for Innovation, New Opportunities Grant (\$150,000 2000 - 2003).

## Honours Received

**Ginsberg RJ**: President, Canadian Association of Thoracic Surgeons, September 2002.

**Waddell TK**: CIHR New Investigator Award, April 2003.



# Division of Urology

**Dr. N. Fleshner – Associate Professor (Division Head)**  
**Dr. M.M. Hassouna - Associate Professor**  
**Dr. M.A.S. Jewett - Professor**  
**Dr. S.B. Radomski - Associate Professor**  
**Dr. M. Robinette - Associate Professor**  
**Dr. J. Trachtenberg - Professor**

## Publications

**Chung P, Parker C, Panzarella T, Gospodarowicz MK, Jewett MAS, Milosevic MF, Catton CN, Bayley AJ, Tew-George B, Moore M, Sturgeon JF, Warde P:** Surveillance in stage I testicular seminoma - risk of late relapse. *Canadian Journal of Urology*: October 2002: 9: pp 1637-1640.

**Jewett MA, Fleshner N, Klotz LH, Nam RK, Trachtenberg J:** Radical Prostatectomy as treatment for prostate cancer. *Canadian Medical Association Journal*: January 2003: 168 (1): pp 44-45.

**Krahn M, Ritvo P, Irvine J, et. al:** Patient and Community Preferences for Outcomes in Prostate Cancer: Implications for Clinical Policy. *Medical Care*: January 2003: 41 (1): pp 153-164.

**Krahn MD, Bremner KE, Asaria J, Alibhai SMH, Nam R, Tomlinson G, Jewett MAS, Warde P, Naglie G:** The ten-year rule revisited: accuracy of clinicians' estimates of life expectancy in patients with localized prostate cancer. *Urology*: August 2002: 60: pp 258-263.

**Abdelhady M and Hassouna M:** Voiding dysfunction after Pelvic Surgery. *Clinics in Colon and Rectal Surgery*: May 2003: 16: pp 13-17.

**Nam RK, Jewett MAS, Krahn MD, Robinette MA, Tshilias J, Toi A, Ho M, Evans A, Sweet J, Trachtenberg J:** Delay in surgical therapy for clinically localized prostate cancer and biochemical recurrence after radical prostatectomy. *Canadian Journal of Urology*: June 2003: 10: pp 1891-1898.

**Nam RK, Zhang WW, Trachtenberg J, Diamandis E, Toi A, Emami M, Minnie HM, Tshilias J, Sweet J, Evans A, Jewett MAS, Narod SA:** Single nucleotide polymorphism of the human kallikrein-2 gene highly correlates with serum human kallikrein-2 levels and in combination enhances prostate cancer detection. *Journal of Clinical Oncology*: June 2003: 21: pp 2312-2319.

**Parker C, Milosevic M, Panzarella T, Banarjee D, Jewett M, Catton C, Tew-George B, Gospodarowicz W, Warde P:** The prognostic significance of the tumour infiltrating lymphocyte count in stage I testicular seminoma managed by surveillance. *European Journal of Cancer*: October 2002: 38: pp 2014-2019.

**Radomski SB:** Urodynamics of the Female Lower Urinary Tract, Resting and Stress Urethral Pressure Profiles and Leak Point Pressure. In: *Female Pelvic Medicine and Reconstructive Pelvic Surgery* (Drutz HP, Herschorn S and Diamant NE, eds). Springer-Verlag London Ltd, Surrey, UK: 2002: pp 91-105.

**Trachtenberg J, Blackledge G:** Looking to the Future: Advances in the Management of Hormone-Refractory Prostate Cancer. *European Urology Supplements*: October 2002: 1 (2002): pp 44-53.

**Worthington AE, Trachtenberg J, Sherar MD:** Ultrasound properties of human prostate tissue during heating. *Ultrasound Medical Biology*: October 2002: 28 (10): pp 1311-1318.

**Zhou Y, Wang Y, Abdelhady M, Mourad S and Hassouna, M:** Change of Vanilloid Receptor1 following neuromodulation in rats with spinal cord injury. *Journal of Surgical Research*: August 2002: 107: pp 140-44.

## Invited Visits to other Hospitals/Universities

**Hassouna MM:** Functional Electric Stimulation Center Case Western Reserve University, Cleveland Veterans administration Medical center and Metrohealth Medical Center, Cleveland, Ohio, April 2003. *Sacral Neuromodulation: Techniques, Instrumentations and Outcomes.*

**Jewett MAS:** Mexican Society of Urology Annual Meeting, Guadalajara, Mexico, November 2002. (1) Bladder Cancer: Common clinical problems, discussion of controversial cases. (2) Small renal masses: treatment options.

**Jewett MAS:** Mexican Society of Urology Annual Meeting, Guadalajara, Mexico, November 2002. Debate on radical prostatectomy.

**Jewett MAS:** Newmarket Prostate Cancer Support Group, Newmarket, Ontario, January 2003. Laparoscopic Radical Prostatectomy.

**Jewett MAS:** Societe International d'Urologie 26th Congress, Stockholm, Sweden, September 2002. Plenary Session: Quality of life issues in cancer treatment choice: testis cancer.

**Jewett MAS:** Mexican Society of Urology Annual Meeting, Guadalajara, Mexico, November 2002. T1 Bladder Tumor: Cystectomy or TUR.

**Jewett MAS:** Visiting Professor, University of Washington, Seattle, Washington, October 2002. Testis Cancer: Strategies to Minimize Morbidity of Treatment.

**Trachtenberg J:** University of Miami, Coral Gables, Florida, November 2002. New Concepts In Hormone Therapy of Prostate Cancer.

**Trachtenberg J:** University of British Columbia, Vancouver, British Columbia, July 2002. New Concepts In Hormone Therapy Of Prostate Cancer, Results of EPC Trial.

**Trachtenberg J:** CaPCure, Washington, District of Columbia, September 2002. Novel salvage therapies for recurrent prostate cancer.

**Trachtenberg J:** World Congress of The International Photodynamic Association, Miyazaki, Japan, May 2003. Photodynamic Therapy for Recurrent or Persistent Prostate Cancer Following Failed Radiation Therapy.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

A phase II study of R115777 (Zarnestra) in superficial transitional cell carcinoma of bladder. *Chin, JL, Jewett MAS, Whelan P: NCI (US) Phase II Consortium (\$30,000 2002 - 2004).*

A randomized controlled trial of an antiandrogen in patients with prostatic intraepithelial neoplasia; molecular correlates. *Trachtenberg J, Squire J, Brown TJ, Sweet J, Stewart R: AstraZeneca (\$300,000 2000 - 2003).*

Canadian Study of the effectiveness of Alfuzocin 10 mg once daily in improving lower urinary symptoms and maintaining sexual function in patients with BPH. *Hassoun M: Sanofi-Synthelabo Canada Inc (\$5,000 2002 - 2003).*

Cialis and Radical Prostatectomy Patients. *Radomski S: Industry: Eli Lilly (\$40,000 2002 - 2003).*

Couple's Decision-Making and Adaptation in Prostate Cancer Treatment. *Ritvo P, Mathew A, Irvine J, Trachtenberg J, Jewett M, Shaw B, Krahn M: Canadian Prostate Cancer Research Initiative (\$49,887 2003 - 2004).*

Development and evaluation of Internet training courses for cancer patients. *Eysenbach G, Catton P, Gospodarowicz M, Jadad A, Jewett MAS, Trachtenberg J: Change Foundation (\$100,000 2002 - 2003).*

Development and evaluation of Internet training courses in cancer patients. *Eysenbach G, Jewett MAS, Trachtenberg JT, Gospodarowicz MR, Catton P, Jadad A: The Change Foundation (\$200,000 2002 - 2004).*

Development of a prostate cancer prevention clinic. *Trachtenberg J, Ritvo P, Paterson A, Squire J, Yue C, Matthew AG: Princess Margaret Hospital Foundation (\$1,000,000 2000 - 2010).*

Development of Novel Minimally Invasive Surgical Techniques. *Trachtenberg J: Princess Margaret Hospital Foundation (\$2,500,000 2003 - 2008).*

Differential Gene Expression in Prostate Cancer. *Squire J, Zeielensa M, Sweet J, Jewett MAS, Trachtenberg J., Klotz L, Kapusta L: National Cancer Institute of Canada (\$366,550 2000 - 2003).*

Differential gene expression in prostate cancer. *Squire J, Jewett M, Kapusta L, Trachtenberg J, Klotz L: National cancer Institute of Canada (\$377,000 2000 - 2003).*



Effects a taxoid agent in combination with androgen deprivation therapy prior to radical prostatectomy in men with localized prostate cancer. *Gleave ME, Chi K, Goldenberg SL, Trachtenberg J, Klotz L, Chin J, Fradet Y, Saad F: NCI/Aventis* (\$60,000 2002 - 2003).

Effects of an alpha adrenergic blocker in men with a first episode of acute urinary retention. *Trachtenberg J: Sanofi-SyntheLabo* (\$30,000 2002 - 2003).

Effects of an endothelin inhibitor on hormone naive prostate cancer. *Trachtenberg J: Abbott Laboratories* (\$36,000 2002 - 2003).

Effects of an endothelin inhibitor on hormone refractory prostate cancer. *Trachtenberg J: Abbott Laboratories* (\$48,000 2002 - 2003).

Effects of photodynamic therapy on recurrent or persistent localized prostate cancer following radiation therapy failure. *Trachtenberg J, Wilson BC, Haider M: Negma Lerads* (\$375,000 2002 - 2003).

Efficacy of EB1089 enteric-coated capsules (5 ug) or placebo in inducing apoptosis in patients with prostate cancer. *Klotz L, Jewett MAS, Morash D: Leo Pharmaceuticals* (\$16,000 1999 - 2003).

Flourescence-guided radical prostatectomy. *Trachtenberg J, Wilson B, Sharir S, Bogaards A, Evans A: National Cancer Institute of Canada* (\$49,951 2003 - 2004).

Genetic immunotherapy of cancer. *Alexander Keith Stewart, Gauldie J, Graham FL, Hitt MM, Trachtenberg J: CIHR* (\$843,500 2001 - 2005).

Identification of preoperative prognostice factors for small RCC. *Rendon R, Nassar, Jewett MAS, Klotz LH: Capital District Health Authority Research Foundation* (\$100,000 2003 - 2005).

Novel Minimally Invasive Surgery for GU Tumours. *Sherar MD, Trachtenberg J, Wilson BC: Ontario Consortium Image Guided Therapy & Surgery* (\$1,000,000 2003 - 2004).

Population-based Estimates of Cost and Quality of Life in Prostate Cancer Survivors. *Krahn M, Holowaty E, Naglie I, Irvine MJ et al: CIHR* (\$106,196 2002 - 2007).

Preference functions for a health state classification system for prostate cancer. *Krahn M, Bezjak A, Irvine J, Naglie G, Ritvo P, Tomlinson G, Torrance G, Trachtenberg J, Warde P: Canadian Institutes of Health Research* (\$121,000 2000 - 2002).

The role of serum IGF-1 levels and androgen receptor genotype in prostate cancer diagnosis. *Narod SA, Nam RK, Pollak M, Jewett MA, Trachtenberg J, Fleshner N, Toi A, Girardi S: National Cancer Institute of Canada* (\$560,000 1999 - 2002).

The SELECT Trial. *Trachtenberg J, Jewett M, Tshilias J: National Cancer Institute (USA), SWOG* (\$250,000 2000 - 2009).

## Honours Received

**Jewett MAS:** Societe International d'Urologie 26th Congress Plenary Session: Highlights of Kidney Cancer Research, September 2002.

**Jewett MAS:** Supervised Dr Sharon Sharir, UofT UroOncology Fellow, 1st Prize for Clinical Research Robson Research Day for "Database-generated real time graphic flow chart for patients with bladder cancer", March 2003.

**Jewett MAS:** Visiting Professor, Department of Urology, University of Washington, October 2002.

**Jewett MAS:** Visiting Professor, Society of Mexican Urology Annual Meeting, November 2002.

## Division Of Vascular Surgery

**Dr. K.W. Johnston – Professor (Division Head)**

**Dr. T.F. Lindsay - Associate Professor**

**Dr. B. B. Rubin - Associate Professor**

**Dr. Y. Sternbach - Assistant Professor**

## Publications

**Brewster DC, Cronenwett JL, Hallett JW, Johnston KW, Krupski WC, Matsumura JS:** Guidelines for the treatment of abdominal aortic aneurysms. *Journal of Vertebral Subluxation Research*: May 2003: 37(5): pp 1106-1117.

**Degousee N, Martindale J, Stefanski E, Cieslak M, Lindsay T, Thuerlauf D, Glembotski C, Rubin B:** The MAP kinase 6 - p38 MAP kinase signaling cascade regulates cyclo oxygenase-2 expression in cardiac myocytes in vitro and in vivo. *Circulation Research*: April 2003: 92(7): pp 757-64.

**Kalman PG, Johnston KW.** Sigmoid ischemia after aortic surgery. In *Decision Making in Vascular surgery*. Ed. Cronenwett JL, Rutherford RB. WB Saunders, Philadelphia, 2003.

**Sidhu RS, Lindsay TF, Rubin BB, Johnston KW, Walker PM, Kalman PG.** Aortic and iliac reconstruction after kidney transplantation: Experience with an algorithm for renal protection. *Annals of Vasc Surg* 17(2): 165-70, 2003.

**Penetcost MJ, Criqui MH, Dorros G, Goldstone J, Johnston KW, Martin EC, Ring EJ, Spies JB.** Guidelines for peripheral percutaneous transluminal angioplasty of the abdominal aorta and lower extremity vessels. *J Vasc Interv Radiol* 14: (9 Pt 2) S495-515, 2003.

**Kalman PG, Johnston KW:** Sigmoid ischemia after aortic surgery. In: *Decision Making in Vascular Surgery* (Cronenwett JL, Rutherford RB, eds). WB Saunders, Philadelphia: 2003: pp 118-19.

**Polk HC Jr, Bowden TA Jr, Rikkers LF, Johnston KW et al:** Scientific data from clinical trials: Investigators' responsibilities and rights. *Journal of Vascular Surgery*: October 2002: 35(6): pp 1303-4.

**Rutherford RB, Johnston KW:** Protecting the rights of investigators in industry-supported clinical research. *Journal of Vascular Surgery*: September 2002: 35(5): pp 1036-40.

**Sean Lyden, JoAnne McNamara, Yaron Sternbach, Karl Illig, David Waldman, Richard Green:** Technical considerations for late removal of aortic endografts. *Journal of Vascular Surgery*: October 2002: 36(4): pp 674-678.

**Sidhu RS, Lindsay TF, Rubin BB, Johnston KW, Walker PM, Kalman PG:** Aortic and iliac reconstruction after kidney transplantation: Experience with an algorithm for renal protection. *Annals of Vascular Surgery*: April 2003: 17: pp 165-70.

**Sternbach Y, Jacob A, Reddy G, Storey G, Williams J, Schell M, Waldman D, Rubin P, Green R, Okunieff P:** Benefits of external beam irradiation for peripheral arterial bypass: preliminary report on a phase I study. *International Journal of Radiation Oncology, Biology, Physics*: November 2002: 54(4): pp 1174-9.

**Sternbach Y:** Complications in Vascular and Endovascular Surgery. In: *Textbook Review, Journal of Cardiac Surgery* (Alain Branchereau and Michael Jacobs, ed). Toronto: 2002: Vol. 18 (1) pp 92-95.

**Veith FJ, Johnston KW:** Reply to Letter to the Editor. *Journal of Vascular Surgery*: January 2003: 37(1): pp 243.



## Invited Visits to other Hospitals/Universities

**Johnston KW:** Society for Vascular Medicine and Biology, Chicago, Illinois, June 2003.

Issues in publishing: An ex-editor's perspective.

**Johnston KW:** Japanese Society for Vascular Surgery. Invited lecturer. July 10 – 11, 2003, Kanazawa City, Japan.

**Johnston KW:** American College of Surgeons. Invited program participant. Argument favouring open repair of abdominal aortic aneurysms. Oct, 21, 2003, Chicago, Illinois.

**Sternbach Y:** Co-Director, IELC, Quebec City, Quebec, May 2003. International Endovascular Laparoscopic Congress.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

Biological functions of secretory phospholipase A2 enzymes in human neutrophils. *Rubin, B: Physicians Services Incorporated Foundation* (\$160,000 2001 - 2003).

Fundamental Ultrasound Studies. *Johnston KW, Cobbold RSC: CIHR* (\$320,880 2003 - 2007).

Fundamental Ultrasound Studies. *Johnston KW, Cobbold RSC: Medical Research Council* (\$368,225 1997 - 2002).

Hemodynamic factors prime the NF-kB signal transduction pathway to initiate human atherosclerosis. *Jain N, Cybulsky M, Johnston KW: Physicians Services Inc. (PSI)* (\$16,500 2002 - 2003).

Magnetic resonance imaging for ischemia. *Wright G, Rubin B: Naeem Merchant: Medical Research Council of Canada* (\$468,000 2000 - 2004).

Molecular regulation of myocardial cyclooxygenase-2 expression and prostaglandin biosynthesis in neonatal rat cardiac myocytes (this grant was declined as I was accepted by the CIHR for a 5 year grant award for the same project). *Rubin B: Heart & Stroke Foundation of Canada* (\$190,000 2002 - 2005).

Molecular regulation of myocardial cyclooxygenase-2-expression and prostaglandin biosynthesis in neonatal rat cardiac myocytes. *Rubin B: Canadian Institutes of Health Research* (\$461,000 2002 - 2007).

Peri operative ischemic evaluation study. *Yang H, Rubin B et al: CIHR* (\$1,700,000 2001 - 2004).

## Honours Received

**Johnston KW:** Honorary member, Society of Clinical Vascular Surgery, October 2002.

**Johnston KW:** R. Fraser Elliott Chair in Vascular Surgery (reappointed), July 2002.

**Dr. S.J. Hamstra - Assistant Professor**

**Dr. G. Regehr - Associate Professor**

## Publications

**Anastakis DJ, Wanzel KR, Brown MH, Herold McIlroy J, Hamstra SJ, Ali J, Hutchison CR, Murnaghan J, Regehr G, Reznick RK:** Evaluation of the Effectiveness of a Two-Year Curriculum in a Surgical Skills Center. *American Journal of Surgery*: April 2003: 185(4): pp 378-85.

**Bandiera G, Morrison L, Regehr G:** Predictive validity of the global assessment form used in a final-year undergraduate rotation in emergency medicine. *Academic Emergency Medicine*: September 2002: 9: pp 889-895.

**Bandiera G, Regehr G. (in press):** Evaluation of a structured application assessment instrument for assessing applications to Canadian postgraduate training programs in emergency medicine. *Academic Emergency Medicine*: June 2003: 10(6): pp 594-598.

**Friedlich M, Shami F, Wood T, Regehr G:** A structured assessment of minor surgical skills for clerkships. *Academic Medicine*: October 2002: 77: pp S39-S41.

**Ginsburg S, Regehr G, Lingard L. (in press):** To be and not to be: The paradox of the emerging professional stance. *Medical Education*: April 2003: 37(4): pp 350-357.

**Ginsburg S, Regehr G, Stern D, Lingard L:** The anatomy of the professional lapse: Bridging the gap between traditional frameworks and students' perceptions. *Academic Medicine*: June 2002: 77: pp 516-522.

**Hanson M, Tiberius R, Hodges B, MacKay S, McNaughton N, Dickens S, Regehr G:** Adolescent standardized patients (SPs), suicidality simulations and suicide contagion. *Academic Medicine*: October 2002: 77: pp S100-S102.

**Hanson M, Tiberius R, Hodges B, McKay S, McNaughton N, Dickens S, Regehr G:** Adolescent standardized patients: An assessment of benefits & risks. *Teaching and Learning in Medicine*: October 2002: 14: pp 104-113.

**Herold-McIlroy J, Hodges B, Regehr G, McNaughton N:** The effect of candidate perception of evaluation method on reliability of checklist and global rating scores in an objective structured clinical examination. *Academic Medicine*: July 2002: 77: pp 725-728.

**Hodges B, McNaughton N, Hanson G, Regehr G, Abbey S:** Creating, maintaining and improving a psychiatry OSCE: A guide for faculty. *Academic Psychiatry*: September 2002: 26: pp 134-161.

**Hodges B, McNaughton N, Regehr G, Tiberius R, Hanson M:** The challenge of creating new OSCE measures to capture the characteristics of expertise. *Medical Education*: August 2002: 36: pp 742-748.

**Regehr C, Regehr G, Leeson M, Fusco J:** Setting priorities for learning in the field practicum: A comparative study of students and field instructors. *Journal of Social Work Education*: February 2002: 38: pp 55-65.

**Regehr G, Colliver J. (in press):** On the equivalence of ROC and Loss in sequential testing modeling. *Academic Medicine*: April 2003: 78(4): pp 361-364.

**Regehr G:** The experimental tradition. In: *International Handbook of research in medical education for the 21st century*. (In GR Norman, C vanderVleuten, D Newble (Eds.), eds). Kluwer: Maastricht, Nlds, Chapter 1., Maastricht, Nlds, 5-44 Chickens: 2002: pp 5-44.

**Rogers DA, Regehr G, MacDonald J:** A role for error training in surgical technical skill instruction and evaluation. *American Journal of Surgery*: March 2002: 183: pp 242-245.

**Wanzel KR, Brown MH, Anastakis DJ, Regehr G:** Reconstructive breast surgery: Referring physician knowledge and learning needs. *Journal of Plastic and Reconstructive Surgery*: November 2002: 110: pp 1441-1450.

**Ward M, Gruppen L, Regehr G:** Research in self-assessment: Current state of the art. *Advances in Health Sciences Education*: March 2002: 7: pp 63-80.

**Ward M, MacRae H, Schlachta C, Mamazza J, Poulin E, Reznick R, Regehr G. (submitted):** Resident self-assessment of operative performance. *American Journal of Surgery*: June 2003: 185(6): pp 521-524.

## **Invited Visits to oither Hospitals/Universities**

**Hamstra SJ:** Imperial College of Science, Technology & Medicine, London, United Kingdom, September 2002. Applications of visual perception research to problems in surgery.

**Hamstra SJ:** Columbia University Health Sciences Center, New York, New York, June 2003. Technical Skills Training in Surgery: Visuospatial and Psychomotor Aspects.

**Hamstra SJ:** Imperial College of Science, Technology & Medicine, London, United Kingdom, September 2002. Unpacking Technical Skills Instruction in Surgery: Psychomotor and Visuospatial Components.

**Regehr G:** University of British Columbia, Paediatrics and Medical Education Grand Rounds, Vancouver, British Columbia, October 2002. "Kids these days": Promoting and exploiting adult learning in medical students. Why is measuring the soft so hard? Confessions and reflections of a "numbers guy".

**Regehr G:** University of Maastricht Working Conference on New Directions in University Education, Invited Plenary and Workshop, Maastricht, Netherlands, December 2002. From curriculum to learner: Where can cognitive psychology contribute? "Kids these days": Promoting and exploiting adult learning in medical students.

## **Research and Investigations**

*Senior Investigator's Name Appears in Italics*

Applications of spatial vision research to problems in surgery. *Hamstra, S.J.: NSERC (\$15,000 2003 - 2004).*

*Assessing the Assessors: Attending Physicians' Perceptions of Professionalism in Medical Students. Ginsburg S, Regehr G, Lingard L: Medical Council of Canada. (\$25,000 2002 - 2003).*

Determinants of Superior Performance on Spatially Complex Surgical Procedures. *Wanzel, K.R., Anastakis, D.J., Hamstra, S.J., Caminiti, M.F., Reznick, R.K: Physicians' Services Incorporated Foundation - Resident Research Competition (\$19,733 2002 - 2003).*

Development of a Microsurgical Training Program for Novice Microsurgeons. *Grober, E.D., Hamstra, S.J., Jarvi, K.A., Reznick, R.K., Wanzel, K.W. & Matsumoto, E.D: Physicians' Services Incorporated - Resident Research Competition (\$14,909 2002 - 2003).*

Does Training on a Colonoscopy Simulator Transfer to Real Patients? *Musselman, LJ, Hamstra, S.J., Reznick, R.K., Rossos, P.G., & MacRae, H: Royal College of Physicians and Surgeons of Canada - Resident Research Competition (\$15,000 2002 - 2003).*



Dr. M.J. Wiley  
Professor  
(Division Head)

- Dr. A. Agur - Associate Professor**
- Dr. B. Ballyk - Lecturer**
- Dr. B. Liebgott - Professor**
- Dr. C.M. Morshead - Assistant Professor**
- Dr. J.A. Saint-Cyr - Professor**
- Dr. P.A. Stewart - Professor**
- Dr. I.M. Taylor - Professor**

## Publications

- Abosch A, Hutchison HD, Saint-Cyr JA, Dostrovsky JO, Lozano AM:** Movement related neurons of the subthalamic nucleus in patients with parkinson's disease. *Neurosurgery*: November 2002: 97: pp 1167-1172.
- Agur AM, Ng-Thow-Hing V, Ball KA, Fiume E, and McKee NH:** Documentation and three-dimensional modelling of human soleus muscle architecture. June 2003. *Clinical Anatomy*, 16(4):285-293.
- Lang AE, Kleiner-Fisman G, Saint-Cyr JA, Miyasaki J, Lozano A:** Subthalamic DBS replaces levodopa in parkinson's disease: two year follow-up. *Neurology*: February 2003: 60(1): pp 154-5.
- Morshead CM, Garcia AD, Sofroniew MV, and van der Kooy D:** The ablation of FAP positive cells from the adult CNS results in the loss of forebrain neural stem cells but not retinal stem cells. July 2003. *European Journal of Neuroscience*, 18:1-9.
- Robinson P, White LM, Agur A, Wunder J, and Bell RS:** Obturator externus bursa: Anatomic origin and MR imaging features of pathologic involvement. July 2003. *Radiology*, 228(1):230-234.
- Rosenblatt A, Guttman M, Sethna R, Saint-Cyr JA et al:** Psychiatric manifestations of huntington's disease. In: *Mental and behavioral dysfunction in movement disorders* (M . A . Bedard, Y. Agid, S. Chouard, S. Fahn, A D Korczyn and P Lesperance, eds). Humana Press, Totowa, New Jersey: 2003.
- Saint-Cyr JA:** Cognitive consequences of neurosurgery for parkinson's disease. In: *Mental and behavioral dysfunction in movement disorders* (M . A . Bedard, Y. Agid, S. Chouard, S. Fahn, A D Korczyn and P Lesperance, eds). Humana Press, Totowa, New Jersey: 2003: pp 211-220.
- Saint-Cyr JA, Bronstein YL, Cummings JL:** Neurobehavioral consequences of neurosurgical treatments and focal lesions of frontal-subcortical circuits. In: *Principles of frontal lobe function* (D.T. Stuss and R.T. Knight, ed). Oxford University Press, Oxford: 2002: pp 408-427.
- Saint-Cyr JA, Hoque T, Pereira L, Dostrovsky JO, Hutchison WD, Mikulis DJ, Abosch A, Sime E, Lang AE, Lozano A:** Neuropsychology for movement disorders surgery. *Canadian Journal of Neurological Sciences*: March 2003: 30 (1): pp S83-S93.
- Saint-Cyr JA, Tasnuva H, Pereira L, Dostrovsky JO, Hutchison, WD, Mikulis DJ, Abosch A, Sime E, Lang AE, Lozano AM:** The MRI localization of clinically effective stimulating electrodes in the human subthalamic nucleus. *Journal of Neurosurgery*: November 2002: 97: pp 1152-1166.
- Saint-Cyr JA:** Frontal-striatal circuit functions: context, sequence and consequence. *Journal of the International Neuropsychological Society*: January 2003: 9: pp 103-127.
- Suhardja A, Agur A, Cusimano M:** Anatomical basis of approaches to foramen magnum and lower clival meningiomas: Comparison of retrosigmoid and transcondylar approaches. June 2003.. *Neurosurgical Focus*. 14(6). <http://www.neurosurgery.org/focus/>.



## Books or Chapters of Books

**Moore KL, Agur AM:** Essential Clinical Anatomy. 2003 Lippincott Williams & Wilkins, Philadelphia, PA. 687 pages.

## Invited Visits to other Hospitals/Universities

**Agur A.** Mayo Clinic, Rochester, Minnesota, USA. Clinical anatomy of the leg. November 2002.

**Morshead CM:** Janssen-Ortho (Johnston-Merck), Toronto, Ontario, Canada, June 2003. Adult neural stem cells in vivo and in vitro.

**Morshead CM:** Society for Neuro-oncology, 7th Annual Scientific Meeting, San Diego, California, USA, November 2002. Clues from stem cells for brain tumours: Identification and transformation of adult neural stem cells.

**Morshead CM:** Canadian Stroke Network Annual General Meeting, Network for Centres of Excellence, St. Andrews, New Brunswick, Canada, May 2003. Neural stem cells in stroke: Retroviral lineage tracing in vivo.

**Saint-Cyr JA:** University of Medicine and Dentistry of New Jersey, New Brunswick, NJ, November 2002. Deep brain stimulation in the subthalamic nucleus for the treatment of pd: neuroanatomical and neuropsychological perspectives.

**Saint-Cyr JA:** Movement Disorders Society, Miami, Florida, November 2002. Deep brain stimulation is not neuropsychologically benign for all patients.

**Saint-Cyr JA:** Parkinson Society of Ottawa, Ottawa, Ontario, November 2002. Wired for life: current advances in deep brain stimulation.

**Saint-Cyr JA:** Parkinson Society Ottawa, Ottawa, Ontario, November 2002. Wired for life: current advances in deep brain stimulation.

**Stewart P.** University of Ottawa, Ottawa, Ontario, Multimedia in medical education – things we learned the hard way. June 2003.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

Adult stem cells to treat stroke. *Miller F, Weiss S, Morshead CM, Bhatia M, Slack R: Stem Cell Network - NCE (\$698,200 2003 - 2005).*

An analysis of the fundamental properties of stem cells in the adult mammalian eye: A source of new cells for retinal regeneration. *Morshead CM: E.A. Baker Foundation - CNIB (\$31,327 2001 - 2003).*

Deep brain stimulation effects on task-driven fMRI. *Saint-Cyr JA, McAndrews M-P, Mikulis DJ: Natural Sciences and Engineering Research Council (\$64,000 2000 - 2004).*

Do serotonin transporter gene polymorphisms influence serotonin transporter expression in human brain? *Kish SJ, Guttman M, Houle S, Saint-Cyr JA: CIHR (\$332,883 2001 - 2004).*

Examining the regulation and modification of neural stem cell behaviour. *Morshead, CM: Connaught Award - University of Toronto (\$10,000 2003 - 2005).*

Functional anatomy of the human larynx. *Wiley MJ, Liebgott B, Stewart PA. The Provost's Information Technology Development Fund, University of Toronto, (\$20000 2002-2003).*

Long term imaging and cell tracking for stem cell lineage analysis. *Morshead CM, Jervis E: Stem Cell Network - NCE (\$473,000 2003 - 2005).*

Long term imaging and cell tracking for stem cell lineage analysis. *Morshead\_CM, Eric Jervis. Stem Cell Network – NCE. (2003-2005. \$685,000).*

Mechanisms of DBS. *Doistrovsky, Hutchison HD, Lozano A, Saint-Cyr JA, Chen: NIH (\$375,000 2001 - 2002).*

Muscle architecture in children with spastic diplegia and Duchenne muscular dystrophy. *Agur A, McKee N, Biggar D, Fiume E, Leekam D, Salonen D. Hospital for Sick Children Foundation. (\$53,727 2000-2002).*

Muscle architecture in children with spastic diplegia and Duchenne muscular dystrophy. *Agur A, McKee N. Biggar D, Fiume E, Leekam R. Salonen. Kids Action Research (Easter Seal Society). (\$27,201 2000-2002).*

Neurons – animated cellular and molecular concepts. *Stewart PA, Wilson-Pauwels L. Dean's Excellence Fund/Information Technology Courseware Development Fund. (\$30,000 2002-2003).*

Neurophysiological studies in human subthalamic nucleus. *Dostrovsky, Saint-Cyr JA, Hutchison HD, Lozano, A: CIHR (\$262,801 2000 - 2003).*

Neurophysiological studies in human subthalamic nucleus. *Saint-Cyr JA, Hutchison WD, Lozano AM: CIHR (\$262,801 2000 - 2003).*

Radiological and clinical evaluation of STNDBS. *Saint-Cyr JA: PDF of Canada (\$57,000 2001 - 2003).*

Seotonin transporter in parkinson's disease. *Kish, Guttman M, Houle S, Saint-Cyr: M.J. Fox Foundation (\$200,000 2001 - 2003).*

Stem cell plasticity. *Aubin J, van der Kooy D, Morshead CM, Dick J, Eaves C, Iscove N, Miller F, Nagy A, Rossant J, Ossi J, Rancourt D, Roskams J, Underhill M, Hassell N: Stem Cell Network - NCE (\$1,069,600 2003 - 2005).*

Teaching technology integration fund. *Agur A, Cusimano M. McGraw-Hill Ryerson. \$1,000 2003-2004.*

The identification and regulation of neural stem cells. *Morshead CM: CIHR - Neurosciences A (\$174,104 2002 - 2004).*

The therapeutic potential of adult neural stem cells. *Morshead CM: Connaught Grant - University of Toronto (\$20,000 2003 - 2005)*

## Honours Received

**Liebgott B:** Teacher of the Year. Awarded by the first year class of the Faculty of Dentistry. June 2003.

**Ballyk, B:** Favourite Teacher Award. Awarded by the first year class of the Faculty of Physical and Health Education. June 2003.



Dr. L. Wilson-Pauwels  
Professor  
(Division Head)

**D. Aldrich - Assistant Professor**  
**K. Brine - Assistant Professor**  
**K. Chorney - Lecturer**  
**S. Gilbert - Professor Emeritus**  
**C. Godkin - Associate Professor**  
**J. Jenkinson – Assistant Professor**  
**N. Joy - Professor Emeritus**  
**L. Lax - Assistant Professor**  
**M. Mackay - Professor**  
**D. Mazierski - Associate Professor**  
**S. Nancekivell - Assistant Professor**  
**P. Reid – Lecturer**  
**Dr. J. Semple - Associate Professor**  
**Dr. S. Tulk - Assistant Professor**  
**T. Watkinson - Assistant Professor**

## Journal Illustrations

Fitchett D, MacFarlane PA, Drouin D. Clinical Focus: Cardiovascular Issues in Diabetes. *The Medical Post*. 2002; 38(42): supplement (Illustrated by **Tulk S**)

Zhanel GG, Davidson R, Dion H. Clinical Focus: Issues in Macrolide Resistance. *The Medical Post*. 2003; 39(2): supplement (Illustrated by **Tulk S**)

Gupta M, Conway JR. Clinical Focus: New Issues in the Management of Hypertension. *The Medical Post*. 2003, 39(17): supplement (Illustrated by **Tulk S**)

**Woolridge N, Friesen L.** Illustration of the general topology and regulatory sites of the Na<sup>+</sup>/H<sup>+</sup> exchanger. In *Na<sup>+</sup>/H<sup>+</sup> exchange: molecular regulation to therapeutic development*. Sheldon C, Church J. *Clinical Investigative Medicine Dec.* 2002;25(6): 229-32, 2002

**Woolridge N, Friesen L.** Illustration of the role of Na<sup>+</sup>/H<sup>+</sup> exchange in determining myocardial survival after ischemia. In *Na<sup>+</sup>/H<sup>+</sup> exchange: molecular regulation to therapeutic development*. Sheldon C, Church J. *Clinical Investigative Medicine Dec.* 2002;25(6): 229-32, 2002

**Woolridge N, Friesen L.** Illustration of the mechanisms believed to underlie atrial fibrillation. In *New insights into the mechanisms and management of atrial fibrillation*. Khairy P, Nattel S. *Canadian Medical Association Journal.* October 29, 2002; 167 (9): 1012-1020, 2002

## Medical Legal Illustration

Concepts of VACTERL syndrome and other birth anomalies. Toronto Law Firm / Artery Studios Inc., Toronto, 2002. 30X40" courtroom exhibit. (**Chorney K:** 1 panel-size illustration).

Concepts of cecostomy tube bowel care. Toronto Law Firm / Artery Studios Inc., Toronto, 2002. 20X30" courtroom exhibit. (**Chorney K:** 2 illustrations).

Concepts of fundoplication surgery. Toronto Law Firm / Artery Studios Inc., Toronto, 2002. 20X30" courtroom exhibit. (**Chorney K:** 4 illustrations).

Concepts of anorectal surgery. Toronto Law Firm / Artery Studios Inc., Toronto, 2002. 30X40" courtroom exhibit. (**Chorney K:** 10 illustrations).

Concepts of ptosis surgery. Toronto Law Firm / Artery Studios Inc., Toronto, 2002. 20X30" courtroom exhibit. (**Chorney K:** 8 illustrations).

Concepts of infarction injury. Ontario Law Firm / Artery Studios Inc., Toronto, 2002. 20X30" courtroom exhibit. (**Chorney K:** 4 illustrations).

Long-term compromise to vision and communication. Ontario Law Firm / Artery Studios Inc., Toronto, 2002. 30X40" courtroom exhibit. (**Chorney K:** 6 illustrations).

Clinical signs of brain injury. Ontario Law Firm / Artery Studios Inc., Toronto, 2002. 20X30" courtroom exhibit. (**Chorney K:** 2 illustrations).

Concepts of surgeries and complications following motor vehicle accident. Toronto Law Firm / Artery Studios Inc., Toronto, 2002. 12-panel courtroom exhibit. (**Chorney K:** 18 illustrations).

Concepts of surgeries for burn injuries. Ontario Law Firm / Artery Studios Inc., Toronto, 2003. 6 panels of 12-panel courtroom exhibit. (**Chorney K:** 30 illustrations).

Long-term spinal complications. Ontario Law Firm / Artery Studios Inc., Toronto, 2003. 20X30" courtroom exhibit. (**Chorney K:** 1 illustration).

Findings of fibromyalgia. Ontario Law Firm / Artery Studios Inc., Toronto, 2003. 20X30" courtroom exhibit. (**Chorney K:** 1 illustration).

Concepts of surgical repair of head injuries. Toronto Law Firm / Artery Studios Inc., Toronto, 2003. 30X40" courtroom exhibit. (**Chorney K:** 7 illustrations).

de Bono JS, Rowinsky EK. Molecular-targeted therapies. *Emergency Therapy in Oncology*. 2002; 1:3-10. B.C. Decker Inc, Hamilton. (**Mazierski D:** 4 illustrations)

Raut V, Rutka J. The Toronto meatoplasty: enhancing one's results in canal wall down procedures. *The Laryngoscope* 2002; 112:2093-2095. Lippincott Williams & Wilkins Inc, Philadelphia. (**Mazierski D:** 6 illustrations)

## Book Illustrations

Woods, S. 2002. *Jack, The Story of a Beaver*, Fitzhenry & Whiteside, Toronto, 2002. (**Godkin, C:** 22 illustrations)

## Textbook Illustrations

Hall H, *A Consultation with the Back Doctor*, Chapter 4 and 7, McLelland and Stewart Ltd., 2002 (**Mackay MB:** 11 illustrations)

Mah K, Martha J, McClelland L, Milross J, Neal J, Sandner L: *Science in Action 9*, 2003. Addison Wesley, Don Mills. (**Mazierski D:** 42 illustrations)

Mah K, Martha J, McClelland L, Milross J, Neal J, Sandner L: *Science in Action 10*, 2002. Addison Wesley, Don Mills. (**Mazierski D:** 12 illustrations)

van Kessel H, Jenkins F, Davies L, Plumb D, Tompkins D, Di Giuseppe M, Lantz O: *Nelson Chemistry 12*, 2002. Nelson Thompson Learning, Scarborough. (**Mazierski D:** 10 illustrations)

Vavitsas A, Ritter B, Fraser D, Lisser B, Di Giuseppe M: *Nelson Biology 11*, 2002. Nelson Thompson Learning, Scarborough. (**Mazierski D:** 18 illustrations)

McDonnell J, The gift of the microscope. *Casi 6 Junior Reading Assessments*, 2003. Nelson Thompson Learning, Scarborough. (**Mazierski D:** 5 illustrations)

Shulman, J, *Winning the Food Fight*, 2003, John Wiley & Sons Canada Ltd, Toronto. (**Mazierski D:** 1 illustration)

Hansen A, Puder M, *Manual of Neonatal Surgical Intensive Care*, 2002, B.C. Decker Inc, Hamilton. (**Mazierski D:** 6 illustrations)

## New Media

Brierley M, **Jenkinson J**, McCready D, Wilson-Pauwels L, Woolridge N. CPD Online: Sentinel node biopsy. A RCPSC accredited continuing professional development course. University of Toronto, 2002. [<http://bul/med.utoronto.ca/cpd/>]

Brierley M, Heisey R, **Jenkinson J**, Wilson-Pauwels L, Woolridge N. Breastmatters: Information about breast cancer. University of Toronto, 2002. [<http://www.bmc.med.utoronto.ca/breastmatters/>]

## Video

Van Furth, W, Cusimano, M., Agar, A. Woolridge, N.: Orbital Zygomatic Craniotomy (**Mackay MB**: 3 illustrations).

## Animation

### *Feature Film /Storyboards:*

Gordon, D., **Brine K**: New York Minute, Warner Bros., 2003

### *TV Movie Storyboards:*

**Surjik, S.**, *Brine K: Wild Card, Lifetime, 2003*

Eisner, B., **Brine K**: Thought Crimes, USA Network, 2002

DeCarlo, M., **Brine K**: Hemingway vs. Callaghan, CBC, 2002

### *TV Series Storyboards:*

**Ryerson S**, *Brine K: Soul Food, Paramount, 2003*

**Surjik, S.**, **Brine K**: Da Vinci's Inquest, CBC, 2002

**Woolridge N**, van Furth W, Agar A, Cusimano M. The Orbito-zygomatic approach. A video (including extensive 3D animations) of the Orbito-zygomatic approach to skull-base surgery, 2003

**Woolridge N**, Lumsden CJ. Conceptual 3D animation: Past and future evolution in the landscape of social organization. In Lumsden CJ., Sociobiology. In the on-line edition of the Encyclopedia of Neuroscience, 3rd Edition. Adelman G. and Smith, BH., editors. Elsevier Science, 2003. [<http://www.bmc.med.utoronto.ca/sociobiology/>]

### *Medical Legal Animation:*

Traumatic brain injury issues. 5-minute animation on video. Ontario Law Firm / Artery Studios Inc., Toronto, 2002. (**Chorney K**: Animation director).

Complications from injuries to right foot. 10-minute animation on DVD. Ontario Law Firm / Artery Studios Inc., Toronto, 2003. (**Chorney K**: Animation director).

Complications from right knee injury. 12-minute animation on DVD. Ontario Law Firm / Artery Studios Inc., Toronto, 2003. (**Chorney K**: Animation director).

Complications from right knee injury. 10-minute animation on DVD. Toronto Law Firm / Artery Studios Inc., Toronto, 2003. (**Chorney K**: Animation director).

Concepts of temporomandibular joint injury. 10-minute animation on DVD. Ontario Law Firm / Artery Studios Inc., Toronto, 2003. (**Chorney K**: Animation director).

Complications from whiplash injury. 10-minute animation on DVD. Ontario Law Firm / Artery Studios Inc., Toronto, 2003. (**Chorney K**: Animation director).

## Patient Education

I-Acquire medical device (image acquisition) software. Cedara Software Corporation, Mississauga, 2003. Approx. 25 icons for software interface, **Mazierski D.**

Department of Medicine web site. Department of Medicine, University of Toronto, 2002. Web site design, graphical implementation and templates, **Mazierski D.**

Imageless total knee replacement surgical navigation. Cedara Software Corporation, Mississauga, 2002. Approx. 50 knee anatomy illustrations for use in software interface, **Mazierski D.**

Rehabilitation Education Program for Stroke (REPS) web site. Department of Occupational Therapy, Faculty of Medicine, University of Toronto, and Heart and Stroke Foundation of Ontario, 2002. Web site design and graphical implementation, **Mazierski D.**

## Invited presentations

**Jenkinson J**, Intermediate Flash MX Pre-conference Workshop. Slice of Life Conference. Drexel University/University of Pennsylvania, Pennsylvania, June 24-28, 2003.

**Lax L**, Watt-Watson J, Pennefather P, Hunter J, Scardamalia M. Idea Diversity for Collective Advancement of Knowledge and Understanding. The Centre for Applied Cognitive Science, OISE/UT, Knowledge Forum Summer Institute, Toronto, Ontario, August 7, 2002.

**Nancekivell S**, 2003 Annual Meeting of the Mid-American Chapter of the American Medical Writers Association, St Louis, Missouri, Organizing the Biomedical Paper, April 26, 2003.

**Nancekivell S**, The ABCs of Effective Patient Education Materials. The Hospital for Sick Children, Toronto, Ontario, January 17-February 14, 2003.

**Nancekivell S**, Preparing and Publishing a Paper. Ophthalmology Grand Rounds, The Hospital for Sick Children, Toronto, Ontario, January 24, 2003.

**Nancekivell S**, Writing the Scientific Article. Research Training Centre Lecture Series, Research Institute, The Hospital for Sick Children, Toronto, Ontario, November 13, 2002.

**Nancekivell S**, Preparing and Publishing a Paper. Research Training Centre Lecture Series, Research Institute, The Hospital for Sick Children, Toronto Ontario, October 23, 2002.

**Woolridge N**, Kreindler D, Lumsden CJ. Unlocking Mood Disorders with 3D Character Animation. Siggraph Toronto, Ontario, October 22, 2002.

**Woolridge N**. Organic 3D Modeling with Subdivision Surfaces. Association of Medical Illustrators Annual Meeting. Austin, Texas. July 26, 2002.

**Woolridge N**, Kreindler D, Lumsden, CJ. Experiential design in virtual character system for exploring mood dynamics and affective disorders. Third International Conference on Design and Emotion. Burleigh Court, Loughborough, United Kingdom, 1-3 July 2002.

## Abstracts, Posters and/or Papers Read

Pennefather J, Watt-Watson J, Hunter JP, Librach L, **Lax L**, Raman-Wilms L, Schreiber M, Stinson J, Gordon A, Dao T, Mock D. "Pain Week: An Interfaculty, Interprofessional Education Program Dealing with the Multidimensional Issues of Pain Assessment and Management Program", No. 22.56 2002 *Abstract Viewer/Itinerary Planner*, Washington, District of Columbia: Society for Neuroscience, 2002. Online.

Watt-Watson J, Hunter J, Pennefather P, Librach L, Raman-Wilms L, Schreiber M, **Lax L**, Stinson J, Dao T, Gordon A, Mock D. "Undergraduate Interprofessional Pain Education Curricula: A Model for Six Health Science Faculties." American Pain Society, 22<sup>nd</sup> Annual Scientific Meeting, #724, Chicago, Illinois, March 20-23, 2003.

**Lax L**, Watt-Watson J (presenter), Pennefather P, Hunter J, Scardamalia M. "Pain Week E-Learning Project: An Undergraduate Interprofessional Knowledge Building Initiative". American Pain Society, 22<sup>nd</sup> Annual Scientific Meeting, #726, Chicago, Illinois., March 20-23, 2003.

Watt-Watson J, Hunter J, Pennefather P, Librach L, Raman-Wilms L, Schreiber M, **Lax L**, Stinson J, Dao T, Gordon A, Mock D. "Undergraduate Interprofessional Pain Education Curricula: A Model for Six Health Science Faculties". American Pain Society 22<sup>nd</sup> Annual Scientific Meeting, #724, Chicago, Illinois., March 20-23, 2003.

**Lax L** (presenter), Watt-Watson J, Pennefather P, Hunter J, Scardamalia M. "E-Learning for Strategic Clinical Management: Advancing Beyond Identification of Students Conceptions/Misconceptions". Facilitated poster session: Topic - "Education Technology". Association of Canadian Medical Colleges – Canadian Association of Medical Education Annual Meeting, Quebec City, Quebec, April 27-29, 2003.

**Lax L** (presenter), Watt-Watson J, Pennefather P, Hunter J, Scardamalia M. "E-Learning to Advance Interprofessional Undergraduate Health Sciences Education", Association of Canadian Medical Colleges – Canadian Association for Medical Education Annual Meeting. Facilitated poster session: Topic - "Educational Technology", Quebec City, Quebec, April 27-29, 2003.

**Lax L**, Hunter JP, Watt-Watson J, Langlands S, Watertson R, Pennefather P, Scardamalia M. "UofT Pain Week E-Learning Project: A Two Year Overview of Interprofessional Collaborative Knowledge Building through Diversity", The Nexus Conference: Connecting Teaching, Technology and Inclusive Learning. Topic: Linking Teaching Practice and Research. RCAT/UofT/McGraw-Hill Ryerson, May 8-9, 2003.

**Lax L** (presenter), Watt-Watson J, Pennefather P, Hunter J, Scardamalia M. "E-Learning to Advance Interprofessional Undergraduate Health Sciences Education", Tech\_Know\_File.03 Conference, The Resource Centre for Academic Technology, University of Toronto, Toronto, Ontario, May 13-14, 2003

Watt-Watson J, Hunter J, Pennefather P, Librach L, Raman-Wilms, Schreiber L, **Lax L**, Stinson J, Dao T, Gordon A, Mock D. "Developing and Implementing an Interprofessional Pain Education Curriculum for Six Health Science Faculties", Canadian Pain Society Annual Meeting, Toronto, Ontario, May 22-24, 2003

**Lax L** (presenter), Watt-Watson J, Pennefather P, Hunter J, Scardamalia M. "Educational Outcomes of the Pain Week Interprofessional E-Learning Initiative". Canadian Pain Society Annual Meeting, Toronto, Ontario, May 22-24, 2003.

Raman-Wilms L, Watt-Watson J, **Lax L**, Librach L, Regehr G, Hunter J, Pennefather P. "Evaluation of an Interdisciplinary, Undergraduate Pain Education Program for Health Professional Students" Association of Faculties of Pharmacy of Canada, Montreal, Quebec, May 29-June 1, 2003.

Raman-Wilms L, Watt-Watson J, **Lax L**, Librach L, Regehr G, Hunter J, Pennefather P. "Evaluation of an Interdisciplinary, Undergraduate Pain Education Program for Health Professional Students" American Association of Colleges of Pharmacy, Minneapolis Minnesota, July 2003

## Honours and Awards

Brierley M, **Jenkinson J**, **Wilson-Pauwels L**, **Woolridge N**: Applied Arts Magazine Design Annual, Educational New Media Award, January 2003.

**Chorney K**: Certificate of Appreciation for Excellence in Teaching. Division of Biomedical Communications, Department of Surgery, Faculty of Medicine, University of Toronto, April 2003.

**Jenkinson J**: Certificate of Appreciation for Excellence in Teaching. Division of Biomedical Communications, Department of Surgery, Faculty of Medicine, University of Toronto, April 2003

**Mackay MB**: Certificate of Merit in Continuous Tone, Association of Medical Illustrators, Austin, TX., August 2002.

**Wilson-Pauwels L**: Certificate of Merit Medical Textbook, *Cranial Nerves*, Association of Medical Illustrators, Austin, TX., August 2002.

## Research Grants

**Lax L**, Watt-Watson J, Pennefather P, Hunter J, Scardamalia M. “Advancing Pain Management Through Interprofessional Collaborative Knowledge Building”. One of multiple international projects funded within grant awarded to: Scardamalia M. “Beyond best practice: Research-based innovation in learning and knowledge work”, Social Sciences and Humanities Research Council Program: Initiatives for a New Economy, 2003. Educational research matched funding. (SSHRC \$7,000.00)

**Lax L**, Watt-Watson J, Pennefather P, Hunter J, “Effective Pain Management Through Interprofessional Collaborative Knowledge Building”. University of Toronto Centre for the Study of Pain, Dr. Mike Salter (Director), University of Toronto, 2002-2003, Educational research matched funding (UTCSP \$7,000.00)

Scardamalia M, Lamon M, Russell A, Melnick B, Larosa S, McQuire J, **Lax L**. “Interprofessional Knowledge Building in Healthcare”, Hamilton Health Sciences IP/KB Initiative, January 2002 – March 2003 (CANARIE \$25,000.00)

**Wilson-Pauwels L** (co-P.I.), Bajcar J (co-P.I.), **Jodie Jenkinson**, **Nick Woolridge**. Merck Frosst development funding to create a prototype for “PharmaPlanner, a data-structured retrieval system that generates a pictorial PharmaMenu for the management of medication” (\$50,000.00)

Salter M (P.I.), Bushnell C, Choinière M, Coderre T, Collet J, Davis K, De Koninck Y, Dostrovsky J, Henry J, Katz J, Lavigne G, Mogil J, Ribeiro-Da-Silva A, Seguela P, Sessle B, Stevens B, **Wilson-Pauwels L**. CIHR Grant, “Pain Research from Molecules to Community – Collaborative National Training Program” (\$336,240.00)

**Wilson-Pauwels L** (P.I). Bell University Laboratories at the University of Toronto Equipment Grant, 2002 (\$141,177.45)



**Dr. P.A. Arnold – Assistant Professor (University Health Network)**

**Dr. Alan Campbell – Assistant Professor (St. Michael's Hospital)**

**Dr. Andrew Donald – Assistant Professor (Sunnybrook & Women's College Health Sciences Centre)**

**Dr. J.C. Fallis – Assistant Professor (The Hospital for Sick Children)**

**Dr. L. Fulton – Lecturer (Sunnybrook & Women's College Health Sciences Centre)**

**Dr. B.A. McLellan – Associate Professor (Sunnybrook & Women's College Health Sciences Centre)**

**Dr. D. Saslove – Instructor (St. Michael's Hospital)**

**Dr. Brian Steinhart – Instructor (St. Michael's Hospital)**

No submissions available for 2002 - 2003

- Dr. A.J. Baker - Assistant Professor (Anesthesia)**
- Dr. B.V. Bapat - Assistant Professor (Laboratory Medicine and Pathobiology)**
- Dr. P. Birek - Associate Professor (Dentistry)**
- Dr. A. Campbell - Lecturer (Medicine)**
- Dr. J. Carson - Assistant Professor (Family and Community Medicine)**
- Dr. A. Daar – Professor (Public Health Sciences)**
- Dr. A. Damyanovich - Assistant Professor (Medical Imaging)**
- Dr. J.E. Davies - Associate Professor (Dentistry)**
- Dr. A.M. Davis - Assistant Professor (Physical Therapy)**
- Dr. W.A. Demajo - Assistant Professor (Anesthesia)**
- Dr. D. DePetrillo - Professor (Obstetrics and Gynaecology)**
- Dr. F. DiCosmo - Associate Professor (Botany)**
- Dr. R.J. Eby - Lecturer (Medicine)**
- Dr. V.L. Fornasier - Associate Professor (Laboratory and Pathobiology)**
- Dr. R. Gilbert - Assistant Professor (Otolaryngology)**
- Dr. M. Greenberg - Associate Professor (Pediatrics)**
- Dr. M.D. Grynepas - Associate Professor (Laboratory Medicine and Pathobiology)**
- Dr. P.J. Gullane - Professor (Otolaryngology)**
- Dr. B. Harvey - Assistant Professor (Public Health Sciences)**
- Dr. J. Irish – Associate Professor – (Department of Otolaryngology)**
- Dr. G. Jackowski - Assistant Professor (Laboratory Medicine and Pathobiology)**
- Dr. M.G. Johnston - Associate Professor (Laboratory Medicine and Pathobiology)**
- Dr. W. Kucharczyk - Professor (Medical Imaging)**
- Dr. M. Lee - (Anatomy)**
- Dr. G.A. Levy - Professor (Medicine)**
- Dr. C. Lumsden - Professor (Medicine)**
- Dr. A. McDonald - Assistant Professor (Medicine)**
- Dr. D.A.G. Mickle - Professor (Laboratory Medicine and Pathobiology)**
- Dr. M. Milner - Professor (Rehabilitation Science)**
- Dr. W. Montanera - Assistant Professor (Medical Imaging)**
- Dr. S. Narod - Associate Professor (Public Health Sciences)**
- Dr. C.D. Naylor - Associate Professor (Medicine)**
- Dr. M. Ojha - Assistant Professor (Rehabilitation Sciences)**
- Dr. K.P.H. Pritzker - Professor (Laboratory Medicine and Pathobiology)**
- Dr. G. Regehr – Assistant Professor (Psychiatry)**
- Dr. P. Ritvo - Assistant Professor (Public Health Sciences)**
- Dr. A. Romaschin - Associate Professor (Laboratory Medicine and Pathobiology)**
- Dr. A. Slutsky – Professor (Medicine)**
- Dr. B. Steinhart - Instructor (Medicine)**
- Dr. D.E. Stewart - Professor (Psychiatry)**
- Dr. K.G. terBrugge - Professor (Medical Imaging)**
- Dr. Q. Wan – Assistant Professor (Physiology)**
- Dr. R. Willinsky - Associate Professor (Medical Imaging)**
- Dr. G.J. Wilson - Professor (Laboratory Medicine and Pathobiology)**
- Dr. T.W. Wu - Professor (Laboratory Medicine and Pathobiology)**

## Publications

**Ai J, Baker A:** Presynaptic hyperexcitability at cerebellar synapses in traumatic injury rat. *Neuroscience Letters*: August 2002: 332(3): pp 155-158.

**Alam F, Kehinde OE, Al Bar M, Daar AS:** Ethical considerations in the management of a true hermaphrodite presenting at 24 years of age in an Islamic country. *British Journal of Sexual Medicine*: January 2003: 26(1): pp 24-26.

- Anderson T, vanDijk JMC, Williansky R:** Venous manifestation of spinal arteriovenous fistulas. In: *Neuro Imaging Clinics of North America. Venous Disorders of the Central Nervous System* (Willinsky R, Guest Editor, eds). W.B. Saunders Company, A Division of Elsevier Science, Philadelphia, USA: 2003: pp 73-93.
- Banse X, Devogelaer JP, Lafosse A, Sims TJ, Grynepas M, Bailey AJ:** Cross-link profile of bone collagen correlates with structural organization of trabeculae. *Bone*: July 2002: 31(1): pp 70-76.
- Benatar SR, Daar AS, Singer PA:** Global health ethics: the rationale for mutual caring. *International Affairs*: January 2003: 79(1): pp 107-138.
- Bergman B, Ahmad F, Stewart DE:** Physician health, stress and gender at a university hospital. *Journal of Psychosomatic Research*: February 2003: 54: pp 171-178.
- Bonyadi M, Waldman SD, Liu D, Aubin JE, Grynepas MD, Stanford WL:** Mesenchymal progenitor self renewal deficiency leads to age dependent osteoporosis in Sca-1/Ly-6A null mice. *Proceedings of the National Academy of Science*: July 2002: 100(10): pp 5840-5845.
- Cerroni, MA, Tomlinson GA, Turnquist JE, Grynepas MD:** Effect of parity on bone mineral density in female rhesus macaques from Cayo Santiago. *AJPA*: July 2002: 121: pp 252-269.
- Cheng KC, Zhang H, Lin CY, Slutsky AS:** Ventilation with negative airway pressure induces a cytokine response in isolated mouse lung. *Anesthesia and Analgesia*: September 2002: 94: pp 1577-1582.
- Choudhry S, Daar AS, Radcliffe Richards J, Guttman RD, Hoffenberg R, Lock M, Sells RA, Tilney N:** Unrelated living organ donation: ultra needs to go. *Journal of Medical Ethics*: June 2003: 29(3): pp 169-70.
- Daar AS:** Paid organ donation and organ commerce: continuing the ethical discourse. *Transplantation Proceedings*: May 2003: 35: pp 1207-1209.
- Daar AS, Merali Z:** Infertility and social suffering: the case of assisted reproductive technologies (art) in developing countries. In: *Current Practices and Controversies in Assisted Reproduction World Health Organization*, Geneva: 2002: pp 15-21.
- Daar AS, Sheremata L:** The science of stem cells: some implications for law and policy. *Health Law Review*: January 2003: 11(1): pp 5-13.
- Daar AS, Singer PA:** Encyclopedia of life support systems. In: *Global perspectives of health Eolss Publishers*, Oxford, Uk: 2002.
- Daar AS, Thorsteinsdottir H, Martin DK, Smith AC, Nast S, Singer PA:** Top 10 biotechnologies for improving health in developing countries. *Nature Genetics*: October 2002: 32(2): pp 229-232.
- Daar AS:** Strangers, intimates, and altruism in organ donation. *Transplantation*: August 2002: 15:74(3): pp 424-425.
- Dowdeswell E, Daar AS, Singer PA:** Bridging the genomics divide. *Global Governance*: January 2003: 9(1): pp 1-6.
- Evan AP, Lingeman JE, Parks JH, Bledsoe SM, Shao Y, Sommer A, Paterson R, Kuo R, Grynepas MD, Coe PL, Randall:** Plaque of patients with nephrolithiasis begins in basement membranes of thin loops of henle. *Journal of Clincial Investigation*: July 2002: 3(5): pp 607-616.
- Farb RI, Scott JN, Willinsky RA, Montanera WJ, Wright GA, terBrugge K:** Intracranial venous system: gadolinium-enhanced three-dimesional MR venography with auto-triggered elliptic centric ordered sequence - initial experience. *Radiology*: January 2003: 226 (1): pp 203-9.
- Farb RI, Vanek I, Scott JN, Mikulis DJ, Willinsky RA, Tomlinson G, terbrugge K:** Idiopathic intracranial hypertension: the prevalence and morphology of sinovenous stenosis. *Neurology*: May 2003: 13;60 (9): pp 1418-24.

- Fornasier V, Pritzker KPH, Bridge JA:** Desmoplastic fibroma of bone. In: Pathology & Genetics: Tumours of Soft Tissue and Bone (Fletcher CDM, Unni KK, Mertens F, eds). International Agency for Research on Cancer Press, Lyon, France: 2002: pp 288.
- Gold ER, Castle D, Cloutier LM, Daar AS, Smith PJ:** Needed: models of biotechnology intellectual property. Trends in Biotechnology: August 2002: 20(8): pp 327-329.
- Guha A, Siomin V, Shannon P, Willinsky R:** Metaplastic bone formation in a low-grade glioma. Neuro-oncology: May 2003: 63 (3): pp 275-80.
- Hare GMT, Mazer D, Mak W, Gorczynski RM, Hum KM, Kim SY, Wyard L, Barr A, Qu R, Baker A:** Hemodilutional anemia is associated with increased cerebral cortical nNOS gene expression. Journal of Applied Physiology: January 2003: 94(4): pp 2058-2067.
- Haw C, Sarma D, terBrugge K:** Co-existence of mandibular arteriovenous malformation and cerebellar arteriovenous malformations. An example of cerebrofacial arteriovenous metameric syndrome Type III. Interventional Neuroradiology: January 2003: 9: pp 71-74.
- CB, Mazer CD, Mehta S, Stewart TE, Barr A, Cook D, Slutsky AS for the Canadian Critical Care Trials Group:** One-year outcomes in survivors of the acute respiratory distress syndrome. New England Journal of Medicine: February 2003: 348(8): pp 683-693.
- Katz M, Irish J, Devins G, Rodin G, Gullane P:** Psychosocial adjustment in head and neck cancer: the impact of disfigurement, gender and social support. Head and Neck Journal: February 2003: pp 103-112.
- Kim BS, Lee SK, terBrugge K,:** Endovascular treatment of congenital arteriovenous fistulae of the internal maxillary artery. Neuroradiology: June 2003: 45 (7): pp 45-50.
- Knox-Macauley H, Ayyaril M, Nusrat N, Daar AS:** Global health ethics: the rationale for mutual caring. International Affairs: January 2003: 79(1): pp 93-95.
- Lapinsky S, Slutsky AS:** Pulmonary Manifestations of Systemic Conditions: Pregnancy. In: Comprehensive Respiratory Medicine (Albert RK, Spiro SG, Jett JR, eds). Mosby, Philadelphia: 2002: pp 54.1-54.8.
- Lin CY, Zhang H, Cheng KC, Slutsky AS:** Mechanical ventilation may increase susceptibility to the development of bacteremia. Critical Care Medicine: May 2003: 31(5): pp 1429-1434.
- Lee SK, terBrugge K:** Cerebral venous thrombosis in adults: the role of imaging evaluation and management. In: Neuro Imaging Clinics of North America. Venous Disorders of the Central Nervous System (Willinsky, R, Guest Editor, eds). W.B. Saunders Company, A Division of Elsevier Science, Philadelphia, USA: 2003: pp 139-52.
- Lee SK, terBrugge K:** Radiologic findings and clinical significance of venous compartment of brain arteriovenous shunts. In: Neuro Imaging Clinics of North America. Venous Disorders of the Central Nervous System (Willinsky R, Guest Editor, eds). W.B. Saunders Company, A Division of Elsevier Science, Philadelphia, USA: 2003: pp 95-114.
- Magistretti AI, Stewart DE, Brown AD:** Performance measurement in women's health: The Women's Health Report, Hospital Report 2001series, a Canadian experience. Women's Health: July 2002: 12: pp 327-337.
- Makitie A, Irish J, Gullane P:** Pharyngocutaneous fistula. Current opinion in otolaryngology. Head and Neck Surgery: April 2003: 11: pp 78-84.
- Masia L, Fedorko L, terBrugge K, Filippini C, Pizzio M, Ranieri VM, Wallace MC:** The accuracy of transcranial Doppler to detect vasospasm in patients with aneurismal subarachnoid hemorrhage. Intensive Care Medicine: May 2003: 29 (7): pp 1088-94.

- Matthay MA, Zimmerman GA, Esmon C, Bhattacharya J, Collier B, Doerschuk CM, Fioros J, Gimbrone MA Jr, Hoffman E, Hubmayr RD, Leppert M, Matalon S, Munsford R, Parsons P, Slutsky AS, Tracey KJ, Ward P, Gail DB, Harabin AL:** Future research directions in acute lung injury: Summary of a National Heart, Lung, and Blood Institute working group. *American Journal of Respiratory and Critical Care Medicine*: April 2003: 167(7): pp 1027-35.
- McGoveran BM, Pritzker KPH, Shasha N, Price J, Gross AE:** Long-term chondrocyte viability in a fresh osteochondral allograft. *J Knee Surg*: December 2002: 15(2): pp 97-100.
- Midmer D, Carroll J, Stewart DE:** From research to application: The development of an antenatal psychosocial health assessment tool. *Canadian Journal of Public Health*: July 2002: 93: pp 291-296.
- Mnyusiwalla A, Daar AS, Singer PA:** Mind the gap: science and ethics in nanotechnology. *Nanotechnology*: March 2003: 14(3): pp R9-13.
- Nulman I, Rovet J, Stewart DE:** Child development following exposure to tricyclic antidepressants or fluoxetine throughout fetal life: A prospective controlled study. *American Journal of Psychiatry*: November 2002: 159: pp 1889-1895.
- Poutanen SM, Low DE, Henry B, Finkelstein S, Rose D, Green K, Tellier R, Draker R, Adachi D, Ayers, Chan A, Skowronski DM, Salit I, Simor AE, Slutsky AS, Doyle PW, Krajden M, Petric M, Brunham RC, McGeer AJ for the National Medical Laboratory, Canada, and the Canadian SARS Study Team:** Identification of Severe Acute Respiratory Syndrome in Canada. *The New England Journal of Medicine*: March 2003: 348(20): pp 1995-2005.
- Pritzker KPH:** Pathology of osteoarthritis. In: *Osteoarthritis*, 2nd Edition (Brandt KD, Doherty M, Lohmander S, eds, eds). Oxford University Press, Oxfordshire, England: 2002: pp 50-61.
- Rivera P, Willinsky R, Porter P:** Intracranial cavernous malformations. In: *Neuro Imaging clinics of North America. Venous Disorders of the Central Nervous System* (Willinsky, R, Guest Editor, eds). W.B. Saunders Company, A Division of Elsevier Science, Philadelphia, USA: 2003: pp 27-40.
- Rucker J, Tesler J, Fedorko L, Takeuchi A, Mascia L, Veseley A, Kobrossi S, Slutsky AS, Volgyesi G, Iscoe S, Fisher JA:** Normocapnia improves cerebral oxygen delivery during conventional oxygen therapy in carbon monoxide-exposed research subjects. *Annals of Emergency Medicine*: December 2002: 40(6): pp 611-618.
- Satomi J, van Dijk JMC, terBrugge KG, Willinsky RA, Wallace MC:** Benign cranial dural arteriovenous fistulas: Outcome of conservative management based on the natural history. *Neurosurgery*: October 2002: 97: pp 767-770.
- Scales DC, Abrahamson S, Brunet F, Fowler R, Costello J, Granton JT, McCarthy MK, Sibbald WJ, Slutsky AS:** The ICU outreach team. *Journal of Critical Care*: June 2003: 18(2): pp 95-106.
- Scott JA, Marsden PA, Slutsky AS:** What lessons can we learn from NOS knockout mice in acute pulmonary disease? *Critical Care Medicine*: September 2002: 30(9): pp 2143-2145.
- Singhal A, Baker A, Fehlings MG:** Spinal cord injury management. In: *Intensive care in neurosurgery* Thieme, New York: 2003: pp 137-143.
- Singhal A, Baker AJ, Hare GMT, Reinders FX, Schlichter LC, Moulton RJ:** Association between cerebrospinal fluid interleukin-6 concentrations and outcome following severe human traumatic brain injury. *Journal of Neurotrauma*: August 2002: 19(8): pp 929-937.
- Slutsky AS:** Hot new therapy for sepsis and the acute respiratory distress syndrome (Commentary). *The Journal of Clinical Investigation*: September 2002: 110(6): pp 737-739.
- Slutsky AS, Drazen JM:** Ventilation with small tidal volumes (Perspective re HFV papers in *The New England Journal of Medicine*). *The New England Journal of Medicine*: August 2002: 347(9): pp 630-631.
- Slutsky AS, Russell J:** Genetics of critical illness: Methodological issues. *Critical Care Medicine*: October 2002: 30(10): pp 2382-2383.

**Steiner M, Brown E, Trzepacz P, Dillon J, Berger C, Carter D, Reid R, Stewart DE:** Fluoxetine improves functional work capacity in women with premenstrual dysphoric disorder. *Archives of Women's Mental Health*: June 2003: 6: pp 71-77.

**Stewart DE:** How to improve women's mental health. *Psychiatria et Neurologia Japonica*: February 2003: 105: pp 165-170.

**Stewart DE:** Menopause in highland Guatemala Mayan women. *Maturitas*: March 2003: 44: pp 293-297.

**Thorsteinsdottir H, Daar AS, Smith RD, Singer PA:** Genomics knowledge. In: *Health economic and public health perspectives* (Smith RD, Beaglehole R, Woodward D, Drager N, eds). Oxford University Press, New York: 2002.

**Thorsteinsdottir H, Daar AS, Smith RD, Singer PA:** Genomics-a global public good? *Lancet*: March 2003: 361: pp 891-892.

**vanDijk JMC, Willinsky R:** Venous congestive encephalopathy related to cranial dural arteriovenous fistulas. In: *Neuro Imaging Clinics of North America. Venous Disorders of the Central Nervous System* (Willinsky, R, Guest Editor, eds). W.B. Saunders Company. A Division of Elsevier Science, Philadelphia, USA: 2003: pp 55-72.

**Vigod SN, Stewart DE:** Management of abnormal uterine bleeding by northern, rural and isolated primary care physicians: Part I: How are we doing? *Biomed Central Women's Health*: November 2002: 2: pp 10.

**Vigod SN, Stewart DE:** Management of abnormal uterine bleeding by northern, rural and isolated primary care physicians: Part II: What do we need? *Biomed Central Women's Health*: November 2002: 2: pp 11.

**Waldman S, Grynepas M, Pilliar R, Kandel R:** The use of specific chondrocyte populations to modulate the properties of tissue-engineered cartilage. *Journal of Orthopaedic Research*: July 2002: 21(1): pp 132-138.

**Waldman SD, Grynepas M, Pilliar R, Kandel R:** Characterization of cartilagenous tissue formed on calcium polyphosphate substrates in vitro. *Journal of Biomedical Materials Research*: December 2002: 62(3): pp 323-330.

**Waldman SD, Spiteri CG, Grynepas MD, Pilliar RM, Hong J, Kandel R:** Effect of biomechanical conditioning on cartilaginous tissue formation in vitro. *Journal of Bone Joint Surgery*: July 2002: 85A Suppl2: pp 101-105.

**Waldman SD, Spiteri CG, Grynepas MD, Pilliar RM, Kandel R:** Long term intermittent shear deformation improves the quality of cartilaginous tissue formed in vitro. *Journal of Orthopaedic Research*: July 2002: 21: pp 590-596.

**Whitehead T, Slutsky AS:** The pulmonary physician in critical care 7: Ventilator induced lung injury. *Thorax*: July 2002: 57(7): pp 635-642.

**Willinsky RA, Taylor SM, terBrugge K, Farb RI, Tomlinson G, Montanera W:** Neurologic complications of cerebral angiography: prospective analysis of 2899 procedures and review of the literature. *Radiology*: May 2003: 227 (2): pp 522-8.

**Wright L, Daar AS:** Ethical aspects of living donor kidney transplantation and recipient non-adherence to treatment. *Progress in Transplantation*: June 2003: 13(2): pp 105-109.

**Zerath E, Grynepas M, Holy X, Viso M, Buckendahl P, Marie P:** Spaceflight affects bone formation in rhesus monkeys: a histological and cell culture study. *Journal of Applied Physiology*: July 2002: 93(3): pp 1047-56.

**Zhang H, Downey GP, Suter PM, Slutsky AS, Ranieri VM:** Conventional mechanical ventilation is associated with bronchoalveolar lavage-induced activation of polymorphonuclear leukocytes: A possible mechanism to explain the systemic consequences of VILI in pts with ARDS. *Anesthesiology*: December 2002; 97(6): pp 1426-1433.

**Zhang H, Voglis S, Kim CH, Slutsky AS:** Effects of albumin and Ringer's lactate on production of lung cytokines and hydrogen peroxide after resuscitated hemorrhage and endotoxemia in rats. *Critical Care Medicine*: May 2003; 31(5): pp 1515-1522.

**Zobel C, Cho HC, Nguyen TT, Pekhletski R, Diaz RJ, Wilson G, Backx PH:** Molecular dissection of the inward rectifier potassium current (IK1) in rabbit cardiomyocytes: evidence for heteromeric co-assembly of Kir2.1 and Kir2.2. *Physiology*: June 2003.

## **Invited Visits to other Hospitals/Universities**

**Baker AJ:** ICP International Critical Care Congress 2003 & 9th Annual Conference of Indian Society of Critical Care Medicine, Jaipur, India, February 2003. 1. Neurocritical care monitoring beyond 2. Neurotrauma resuscitation with special reference to hypertonic saline.

**Baker AJ:** Critical Care Medicine Symposium, Toronto, Ontario, November 2002. 1. Traumatic brain injury: Goal directed therapy 2. Traumatic brain injury: Pharmacotherapy.

**Baker AJ:** Society of Neurosurgical Anesthesia and Critical Care, Orlando, Florida, October 2002. Parallel session problem based learning discussion.

**Baker AJ:** Anesthesia Practice 2002 Clinical Anaesthesia, Toronto, Ontario, November 2002. Why anesthesiologists make a difference for patients with head injury.

**Daar, A:** Rockefeller Foundation, Cape Town, South Africa, March 2003. 1. Innovation working group 2. Joint learning executive on human resources for health care.

**Daar, A:** International Congress of the German Transplantation Society, Munich, Germany, December 2002. 1. Paid organ donation-are there any ethical ways of moving forward 2. Aspects of regenerative medicine today.

**Daar, A:** Institute of Medicine of the National Academies of Sciences, Washington, District of Columbia June 2003. Bioethics, genomics, and public health.

**Daar, A:** Arizona Biomedical Institute, Phoenix, Arizona, November 2002. Developing ethical guidelines for plant-made vaccines.

**Daar, A:** HUGO, Cancun, Mexico, April 2003. Genomic databases as global public goods.

**Daar, A:** Genome Canada, Montreal, Quebec, February 2003. Genomics in a global context: a programmatic approach to avoiding a genomics divide.

**Daar, A:** Europäische Akademie, Bad Neuenahr, Germany, April 2003. GMOs and the world nutrition problem.

**Daar, A:** Centre for Surveillance Coordination/Health Canada, Ottawa, Ontario, October 2002. International conference on post market surveillance of genetically modified foods: Genomics, biotechnology, and global health equity: a programmatic approach.

**Daar, A:** Pan American Health Association/WHO, Brasilia, Brazil, October 2002. International guidelines: genomics and global health.

**Daar, A:** Transplantation Society - International Conference, Miami, Florida, August 2002. Living unrelated donors and organ commerce.

**Daar, A:** Institute on Governance, Ottawa, Ontario, June 2003. Opportunities: why biotechnology matters to developing countries and why it should matter to us.

**Daar, A:** University of Alberta Health Law Institute, Edmonton, Alberta, September 2002. The science of stem cells: some implications for law and policy.

**Daar, A:** Canadian Institutes of Health Research, National Research Council, Natural Sciences and Engineering Research Council of Canada, Montreal, Quebec, February 2003. Workshop - Establishing an innovative research agenda for Canada.

**dos Santos C, Chant G, Slutsky AS:** Pharmacotherapy of acute respiratory distress syndrome (a review). Expert Opinion Pharmacotherapy: July 2002: 3(7): pp 875-888.

**Grynbas MD:** International Ceramic Congress and Forum on New Materials, Florence, Italy, July 2002. Structure property relations of ageing bone.

**Grynbas MD:** Massachusetts General Hospital, Boston, Massachusetts, February 2003. What can mouse model tell us about the skeleton.

**Gullane PJ:** 57th Annual Meeting Canadian Society of Otolaryngology - H & N Surgery, Calgary, Alberta, May 2003. (1) Management of H & N oncology problems for the practicing otolaryngologist (2) Lip reconstruction after cancer treatment.

**Gullane PJ:** AAO HNS Meeting, San Diego, California, September 2002. (1) Panel: Don't miss the early detection of H & N cancer (2)Co-moderator: Oropharyngeal cancer etiology diagnosis, management, reconstructive options and rehabilitation.

**Gullane PJ:** 16th Annual Cherry Blossom Conference, Arlington, Virginia, March 2003. (1) The classic anterior craniofacial resection (2)Panel: Management of the carotid artery in H & N cancers.

**Gullane PJ:** 12th Annual Percy Ireland Day, Toronto, Ontario, April 2003. Overview of Department of Otolaryngology University of Toronto.

**Gullane PJ:** XXVIII Congress on Pan American Head and Neck Society, San Francisco, California, July 2002. Panel: (1) Thyroid parathyroid and parotid lesions. (2) Endoscopic surgery and anterior skull base.

**Gullane PJ:** COSM Meeting, Nashville, Tennessee, May 2003. Panel: Management of the difficult airway.

**McDonald A:** North York Hospital, Emergency Medicine Update, Toronto, Ontario, May 2003. Cases in blood and fluid management.

**Pritzker KPH:** Pfizer Research Laboratories, Groton, Connecticut, July 2002. (1) Dimethyl-difuro-pyrone (DDP): An osteoarthritis biomarker? (2) Calcium pyrophosphate dihydrate crystal arthropathy: A therapeutic challenge.

**Pritzker KPH:** Sysmex Central Research Laboratory, Kobe, Japan, September 2002. Clinical laboratory challenges 2007.

**Pritzker KPH:** Department of Pathology, University of Lausanne, Switzerland, March 2003. Preclinical laboratory services.

**Pritzker KPH:** Vancouver Coastal Health Authority, Vancouver, British Columbia, February 2003. Regional laboratory service planning.

**Pritzker KPH:** Department of Pathology, University of Bern, Bern, Switzerland, May 2003. SARS and the single hospital.

**Slutsky AS:** 7th State of the Art Interdisciplinary Review Course on Pulmonary and Critical Care Medicine, Athens, Greece, April 2003. (1) Aliko Perroti Lecture: Respiratory and critical care research in the post-genomic era; (2) Lung protection in ARDS: Mechanisms of decreased mortality; (3) SARS: Update on a growing epidemic.



**Slutsky AS:** 15th Annual Congress European Society of Intensive Care Medicine, Barcelona, Spain, September 2002. (1) Biotrauma: A primer on ventilator-induced inflammatory reaction - Introduction and From VILI to MOSF: Mechanisms and importance, (2) Iatrogenic complications in acute respiratory failure: Can mechanical ventilation cause non-respiratory organ injury? (3) Round Table: Statistics and methodology applied to critical care: Critical review of mechanical ventilation trials.

**Slutsky AS:** SMART 2003 (Simposio e Mostra di Anestesia Rianimazione e Terapia Intensiva), Milan, Italy, May 2003. (1) Debate: Recruitment maneuvers are beneficial in ARDS, (2) PEEP: Good for what?

**Slutsky AS:** Toronto Critical Care Medicine Symposium 2002, Toronto, Ontario, October 2002. (1) Member of the Conference Organizing Committee, (2) Chair, session on “Mechanical Ventilation”, (3) presentation, Mechanical ventilation: A possible way to prevent MSOF.

**Slutsky AS:** CHEST 2002 - American College of Chest Physicians, San Diego, California, November 2002. (1) Moderator: Canadian Thoracic Society Christie Memorial Lecture, (2) Panel Discussion: ARDS: Current Concepts: Ventilator-induced lung injury and conventional ventilator strategies, (3) Panel Discussion Moderator: Life-threatening asthma, (4) Presentation: ARDSnet: New and old.

**Slutsky AS:** 23rd International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 2003. (1) Report of the Round Table Conference on Mechanical Ventilation, (2) VILI: An update: Extrapulmonary consequences.

**Slutsky AS:** American Thoracic Society 99th International Conference, Seattle, Washington, May 2003. (1) Speaker and Co-Chair: Volotrauma and Biotrauma; (2) Chair: Clinical Trials in ICU - Challenges; (3) Speaker: Adult Clinical Trials of HFOV; (4) Speaker: High PEEP should be used to reduce ventilator induced lung injury.

**Slutsky AS:** 9th International Conference on Mechanical Ventilation, Santiago de Compostela, Spain, April 2003. Co-Director of Course: (1) Debate Chair, The prone position; (2) From lung rest to hummingbirds: HFV is here to stay.

**Slutsky AS:** Atlantic Health Sciences Corporation: Research Focus Workshop, Saint John, New Brunswick, February 2003. Facilitator.

**Slutsky AS:** Vienna International Symposium on Mechanical Ventilation, Vienna, Austria, June 2003. Impact of PEEP on decreasing ventilator-induced lung injury.

**Slutsky AS:** 7th International Congress on Pediatric Emergency and Paediatric Intensive Care, Padova, Italy, October 2002. Mechanical ventilation and lung injury: New strategies for new theories.

**Slutsky AS:** 32nd Society of Critical Care Medicine Congress, San Antonio, Texas, January 2003. Mechanical ventilation and multiple organ dysfunction: What’s the link?

**Slutsky AS:** Ontario Thoracic Society, Better Breathing 2003 Conference, Toronto, Ontario, January 2003. Respiratory Research: Current break-throughs and future challenges.

**Slutsky AS:** Hospital Universitario de Getafe: Management of the patients with respiratory failure evidence based approach, Madrid, Spain, November 2002. Where should we direct our effort of research in the management and diagnosis of respiratory failure?

**Stewart DE:** Netherlands National Workshop, Ede, Netherlands, May 2003. (1) Curriculum development for women’s health, (2) Gender mainstreaming in medical curricula.

**Stewart DE:** American Psychiatric Association Annual Meeting, San Francisco, California, May 2003. (1) Depression in perimenopausal women, (2) How to improve international women’s mental health.

**Stewart DE:** Canadian Psychiatric Association, Banff, Alberta, October 2002. (1) Depression surveillance in women, (2) Physical symptoms in depression, (3) Gender issues in depression.

**Stewart DE:** World Psychiatric Congress, Yokohama, Japan, August 2002. (1) Improving international women's mental health, (2) Depression and Anxiety, (3) Perimenopausal depression, (4) Premenstrual dysphoric disorder, (5) Perinatal psychiatry.

**Stewart DE:** World Federation of Mental Health, Melbourne, Australia, February 2003. (1) Margaret Mead Memorial Lecture: International women's health, (2) Physical symptoms in depression.

**Stewart DE:** Marce International Congress, Sydney, Australia, September 2002. (1) Plenary address: From research to policy -the development of an antenatal psychosocial screening policy, (2) Infanticide in Canada.

**Stewart DE:** Peruvian/Chilean/Bolivian Psychiatric Congress, Lima, Peru, October 2002. (1) Rosas Congress plenary address: Psychosocial screening and perinatal psychiatry, (2) Menopause and mood plenary address, (3) Women and depression: International challenges.

**Stewart DE:** Amsterdam Consortium, Amsterdam, Holland, May 2003. Clinical guidelines for women's health.

**Stewart DE:** World Congress on Gender and Health, Vienna, Austria, September 2002. Hysterectomy: Data versus policies.

**Stewart DE:** Academy of Medicine, Toronto, Ontario, May 2003. The legacy of Augusta Stowe Gullen.

**terBrugge KG:** 4th Annual Canadian Interventional Neuroradiology Symposium, Montreal, Quebec, September 2002. Aneurysm pathophysiology.

**terBrugge KG:** 4th Annual Neurointerventional Peer Review, Pretoria, South Africa, September 2002. Aneurysms, brain, and spinal AVMs.

**terBrugge KG:** LINC Course 2002, Endovascular Neuroradiology Workshop and Live Cases, Houston, Texas, October 2002. Angioarchitecture of cerebral AVMs.

**terBrugge KG:** ASNR 2003, Washington, District of Columbia, April 2003. Cerebral venous occlusive disease.

**terBrugge KG:** 11th Zurich Course on International Neuroradiology, Zurich, Switzerland, March 2003. Clinical-angioarchitectural correlations in cerebral AVM, venous high-flow angiopathy in brain AVMs, correlative clinical-angioarchitectural classification and natural history of intracranial dural AVFs.

**terBrugge KG:** XVIIth Symposium Neuroradiologicum, Paris, France, August 2002. Embolisation of small AVM-prediction of morphological outcome, embolisation of large AVM - long term outcome.

**terBrugge KG:** 38th Meeting of the Canadian Congress of Neurological Sciences, Quebec City, Quebec, June 2003. Endovascular role in venous disease.

**terBrugge KG:** HHT 5th Scientific Conference, Bonaire Dutch Antilles, April 2003. Hereditary Hemorrhagic telangiectasia affecting the central nervous system.

**terBrugge KG:** National Seminar on Intervential Neuroradiology, Brno, Ceska Rcpublika, September 2002. Imaging and management of B-AVM in adults and children, imaging and management of D-AVM in adults and children, imaging and management of arterial and venous cerebral ischemia.

**terBrugge KG:** 17th Annual Organ Imaging Review, Toronto, Ontario, September 2002. Imaging and management of cerebral venous ischemia.

**terBrugge KG:** 2001-2002 International Master Degree in Neurovascular Diseases, Chiangmai, Thailand, November 2002. Imaging strategies, ante-natal neuroradiology and vascular lesions, pail AVMs management, aneurysms in children, imaging strategies.

**terBrugge KG:** 38th Meeting of the Canadian Congress of Neurological Sciences, Quebec, Quebec, June 2003. Interventional neuroradiology/endovascular activity in Canada.

**terBrugge KG:** National Interventional Neuro Symposium, Johannesburg, South Africa, September 2002. Management of spinal vascular malformations, management of intracranial venous vascular disease.

**terBrugge KG:** ABC/WIN 2003, Val d'Isere, France, January 2003. Spinal cord ischemia clinical aspects.

**terBrugge KG:** The 6th Joint Meeting of the AANS/CNS Section on Cerebrovascular Surgery and the American Society of Interventional and Therapeutic Neuroradiology, Phoenix, Arizona, February 2003. Spinal vascular procedures-indications and techniques.

**Willinsky R:** 10th Annual HHT Conference, Baltimore, MD, October 2002. Cerebral AVMs and HHT.

## Research and Investigations

*Senior Investigator's Name Appears in Italics*

A program of inter-disciplinary and population-based studies of the determinants and impact of colorectal cancer- A genetic-epidemiological approach. *McLaughlin J., Bapat B et al: Canadian Institutes of Health Research (CIHR) (\$5,106,885 2001 - 2006).*

Acellular matrix: Tissue engineering approaches for pediatric cardiovascular reconstruction. *Wilson GJ, Courtman DW: Medical Research Council of Canada/Canadian Institutes of Health Research (\$236,811 2000 - 2003).*

An evaluation of the potential for organ and tissue donation at four Canadian tertiary health care centres. *Baker A, Beed S, Boiteau P, Fenwick J, Shepherd J: Clarica Life Insurance Company (\$50,000 2002 - 2004).*

An evidence-based health services evaluation of informational and management continuity in heart patients. *Stewart DE, Grace SL, Abramson B, Brooks D, Jaglal S, Scholey P, Suskin N, Arthur H, Evindar E: Canadian Health Services Research Foundation (\$196,994 2003 - 2006).*

Applied ethics and biotechnology. *Singer PA, Daar AS: Ontario Research and Development Challenge Fund (\$5,800,000 2001 - 2008).*

Biotrauma: physiological mechanisms, biological consequences. *Slutsky AS: Medical Research Council of Canada (\$579,651 1999 - 2004).*

Bridging the genomics divide. *Singer PA, Daar AS: Genome Canada (\$2,830,006 2002 - 2004).*

Canadian program in genomics and global health. *Singer PA, Daar AS: Genome Canada (\$7,200,000 2001 - 2005).*

Canadian Women's Health Surveillance Report: A multidimensional look at the health of Canadian women. *Semeules M, Stewart DE, Payne J, Vissandjee B, Kazanjion A, Maclean H, Mao Y: Canadian Population Health Initiative (\$125,000 2001 - 2003).*

Cellular and molecular mechanisms of organ injury. *Levy GA, Cybulsky M, Downey G, Marsden P, Rotstein O, Zhang L: Canadian Institutes of Health Research (\$587,578 2000 - 2004).*

Clinical significance of molecular genetic profiles of endometrial cancer. *Bapat B: Concern Foundation (\$100,000 2000 - 2002).*

Clinical trial of raloxifen use in the heart (RUTH). *Cheung A, Stewart DE, Liu P, Abramson B: Eli Lilly (\$500,000 1998 - 2003).*

Community outreach and heart health risk reduction trials (COHRT): (1) Component study 2: Cultural and sociogeographic moderators of risk factor reduction (2) Component study 3: Gender-based mediators of risk factor reduction. *Nolan RP, Ruckholm E, Stewart DE, Angus J, Rouleau JL, Franche RL, Rosser W, Alter D, Picard L, Michel I, Crichton T, Haider L, Micevski V, Grace SL: Toronto Rehabilitation Research Institute (\$21,450 2002 - 2006).*

Community outreach and heart health risk reduction trials (COHRT): Component study 1: Efficacy of group outreach methodology. *Nolan RP, Ruckholm E, Stewart DE, Angus J, Rouleau JL, Franche RL, Rosser W, Alter D, Picard L, Michel I, Crichton T, Haider L, Micevski V, Grace SL: Heart and Stroke Foundation of Ontario* (\$1,164,283 2002 - 2006).

Course of osteoarthritis (OA): a multidisciplinary programmatic proposal to measure the trajectory of OA. *Badley E., Davis A, Gignac M, Mahomed N, Fortin P, Hawler G: Canadian Arthritis Network* (\$112,500 2001 - 2002).

Critical Care Unit for Research Excellence (CCURE) [Group grant including approximately 20 critical care physicians/specialists from southern Ontario]. *Slutsky AS, St. Michael's Hospital: Canada Foundation for Innovation (CFI) (40%) and Ontario Innovative Trust (60%)* (\$4,588,720 2002 - 2006).

Cytokines and oxygen free radicals. *Slutsky AS, Zhang H: Plasma and Protein Therapeutics Association (PPTA)* (\$42,763 2002 - 2003).

Developing and operating an internet-based interactive genetics service to health care providers in Ontario. *Wyatt P, Pritzker KPH: The Change Foundation* (\$1,000,000 2000 - 2002).

Development of antimicrobial coatings for peritoneal catheters suitable for simultaneous exchange. *Khoury AE., Burrows L, DiCosmo F: Kidney Foundation of Canada* (\$144,132 2002 - 2004).

Development of migration and reproductive health studies. *Gagnon AJ, Oxman-Martinez J, Janssen PA, Stewart DE, Wahoush O, et al: Canadian Institutes for Health Research* (\$100,000 2003 - 2004).

Disability outcome following revision total knee arthroplasty. *Davis A., Mahomed N, Davey R, Schemitsch E, Kreder H, Garbuz D, McDonald S, Gross AE, Szalai JP, Gignac M: Canadian Institutes of Health Research* (\$68,345 2001 - 2004).

Effect of vanadium treatment on bone loss and bone quality in rat models of osteoporosis and diabetes. *Gryn timer M: Canadian Institutes of Health Research CIHR* (\$125,426 2002 - 2005).

Effects of aryl hydrocarbon receptor ligands on osteoporosis and reproductive function. *Casper R, Gryn timer MD, Savouret JF: Medical Research Council of Canada* (\$200,000 1998 - 2003).

Establishment of an advanced biomaterials and regeneration surgery research unit. *Davies JE: ORDCF Match, 3I Implant Innovations Inc* (\$728,830 1999 - 2004).

Establishment of an advanced biomaterials and regenerative surgery research unit in the dental research institute. *Davies JE, Heersche J, Clokie C, Deporter DA, Pilliar RM: Ontario Research and Development Challenge Fund* (\$812,525 1999 - 2003).

Formation of functional tissue engineered spinal disk unit. *Hunter G, Kandel R, Gryn timer M, Pilliar: Arthritis Society of Canada* (\$75,000 2002 - 2005).

Fullerene based photodynamic therapy. *Wilson B, Pritzker K, Chiang L: C 60, Inc.* (\$420,000 2001 - 2004).

Fullerene based photodynamic therapy. *Pritzker KPH, Chiang L, Wilson B: C 60 Inc.* (\$675,000 2000 - 2004).

Functional imaging research network. *Kucharczyk W, Stuss D, Henkelman M, Vaccarino F: Canadian Foundation for Innovation/Ontario Institute for Technology* (\$6,200,000 2000 - 2005).

Gender differences in pain and analgesic response to kappa and mu opioids after surgery. *Katz J, Gagliese L, Snijdelaar D, Stewart DE, Macrae H, Taddio A, Sandler P: Canadian Institutes for Health Research* (\$90,000 2000 - 2003).

Genomics and global health: Developing a global CIHR network to address ethical, policy and regulatory issues. Daar A, Gold R, Knoppers BM, Singer P: *Canadian Institutes for Health Research* (\$62,700 2003 - 2004).

How are you now? Testing a model of recovery from patient's perspective one year after traumatic fracture of an extremity. Beaton D., Davis A, Franche RL, Kreder H, Gignac M, Devins G, Schemitsch E: *Canadian Institutes of Health Research* (\$145,730 2002 - 2004).

Immunopathogenesis of viral hepatitis. Levy GA, Clark DA: *Canadian Institutes of Health Research* (\$186,419 2000 - 2005).

Importance of harikiri in regulation of oocyte and embryo survival. Jurisicova A, Grynopas M: *Canadian Institutes of Health Research CHIR* (\$90,326 2002 - 2006).

Ischemic preconditioning of the myocardium: role of cell volume regulation. Wilson GJ, Back PH: *Heart and Stroke Foundation of Ontario* (\$473,730 2002 - 2006).

Maintenance and support for the advance bioimaging centre. Grynopas M, Adamson SL, Quaggin S, Wrana J, Bazett-Jones D, Klip A, Keeley F, Yip C, Goh M: *Canadian Institutes of Health Research CHIR* (\$100,000 2003 - 2006).

Mechanisms of degradation of calcium polyphosphates. Grynopas M: *National Science Engineering and Research Council of Canada* (\$30,800 2002 - 2007).

Mechanisms of inhibition of hydroxyapatite formation by osteopontin. Hunter G, Goldberg H, Grynopas M: *Medical Research Council of Canada* (\$89,000 2002 - 2003).

Mechanisms of neuroprotection by albumin following traumatic brain injury. Mazer D, Baker AJ, Tian GF, Hare G: *Bayer Health Care Division* (\$189,614 2002 - 2004).

Mechanisms of traumatic brain injury: excitotoxicity and energy metabolism. Tian G-F, Baker AJ: *Ontario Neurotrauma Foundation, National Rick Hansen Neurotrauma Initiative* (\$238,200 2000 - 2003).

MHSc in international bioethics. Singer PA, Daar AS: *Fogarty International Centre, US National Institutes of Health* (\$1,800,000 2000 - 2004).

Microsatellite instability in young patients with head and neck squamous cell carcinoma. Kamel-Reid S., Gullane P, Irish J, MacMillan C: *Canadian Institutes of Health (CIHR)* (\$308,772 2002 - 2005).

Modulation of GABA-A receptor by melatonin in suprachiasmatic nucleus. Wan Q: *Canadian Institutes of Health Research (CIHR)* (\$225,000 2000 - 2003).

Molecular mechanism of AMPA receptor-mediated excitotoxicity. Wan Q: *Heart & Stroke Foundation of Canada (HSF)* (\$140,000 2000 - 2005).

Needs of refugee mothers after pregnancy (NORMAP-ERS) Phase 1. Gagnon AJ, Oxman-Martinez J, Stewart DE: *Canadian Institutes for Health Research* (\$235,229 2002 - 2003).

New emerging team: aging. Grynopas M, Kandel R, Grynopas M, Pilliar: *Canadian Institutes of Health Research (CHIR)* (\$239,000 2002 - 2007).

Ontario rehabilitation technology consortium. Milner M, Cleghorn W, Fernie GR, Jamieson D, Naumann S, Shein F, Strong G, Zaiee S: *Ministry of Enterprise, Opportunity and Innovation* (\$1,500,000 2003 - 2004).

Ontario rehabilitation technology consortium. Milner MM, Fernie GR, Jamieson D, Naumann S, Olney S, Ryan S, Strong G, Shein F: *Ministry of Health* (\$15,000,000 1992 - 2002).

Ontario rehabilitation technology consortium. Milner M, Cleghorn W, Fernie GR, Jamieson D, Naumann S, Shein F, Strong G, Zaiee S: *Ministry of Health and Long-Term Care, Ministry of Enterprise, Opportunity and Innovation and Ministry of Citizenship* (\$756,000 2002 - 2003).

POGO operating grant for Centre of Comprehensive Research in Childhood Cancer. *Greenberg C, Barr R, Greenberg M: Ministry of Health (\$600,000 1997 - 2003).*

Population based estimates of cost and quality of life in prostate cancer survivors. *Krahn M, Holowaty E, Naglie G, Irvine J, Ritvo P: Canadian Institutes of Health Research (CIHR) (\$520,474 2002 - 2007).*

Popular health promotion strategies among Chinese and East Indian immigrant women. *Stewart DE, Ahmad F: Social Sciences and Humanities Research Council (\$57,750 2001 - 2003).*

Predicting emotional distress in family caregivers: Analysis of the longitudinal National Population Health Survey data. *Cheung AM, Cameron JI, Hyman I, Franche RL, Stewart DE: National Health Research and Development Program (\$24,020 2000 - 2003).*

Predictors of outcome following revision total hip arthroplasty. *Davis AM, Gross AE., Badley E, Davey R, Gafni A, Gollish J, Kreder H, Saleh K, Mahomed N, Schemitsch E, Szalai JP, Waddell J: The Arthritis Society (\$184,000 2001 - 2004).*

Pregnancy and childbearing in refugees: Transitional health (PACBIRTH) phase 1. *Gagnon AJ, Oxman-Martinez J, Stewart DE: Canadian Institutes for Health Research (\$289,265 2002 - 2003).*

Prevention of delayed cardiac xenograft rejection by modulation of the potent fg12 prothrombinase gene. *Grant D, Gordzynsky R, Levy G, Phillips MJ: Heart and Stroke Foundation of Canada (\$131,000 2000 - 2002).*

Psychological factors and platelet activation: Predictors and mechanisms of re-stenosis. *Reid G., Irvine J, Kop WJ, Lau HK, Nolan RP, Schwartz L, Seidelin P, Strauss P, Yeo EL: Canadian Institutes of Health Research (CIHR) (\$250,230 2001 - 2003).*

Psychosocial determinants of attrition in diabetes education service use. *Stewart DE, Gucciardi E: Canadian Diabetes Association (\$19,983 2003 - 2005).*

Psychosocial determinants of attrition in diabetes education service use and its impact on diabetes management outcomes. *Stewart DE, Gucciardi E: Canadian Diabetes Association (\$87,539 2003 - 2005).*

Randomised controlled trial of inpatients vs. home-based rehabilitation following primary total hip and knee arthroplasty: Two year follow-up. *Mahomed N., Badley E, Fried S, Coyte P, Davis A, Jaglal S, Hawker G, Naglie G, Wright J: Physicians' Services Incorporated Foundation (\$47,000 2001 - 2002).*

Randomized controlled trial of inpatient vs. home-based rehabilitation following primary total hip and knee arthroplasty. *Mahomed N., Badley E, Fried S, Coyte P, Davis A, Jaglal S, Hawker G, Naglie G, Wright J: Physicians' Services Incorporated Foundation (\$65,000 2001 - 2002).*

Reconciling growth with ethics: Models of intellectual property protection for biotechnological innovation. *Gold ER, Daar AS: Canadian Institutes for Health Research (\$281,802 2002 - 2005).*

Reducing environmental tobacco smoke exposure in private places: A qualitative study of postpartum women, partners, and tobacco control advocates. *Stewart DE, Bercovitz K, Poland BD, Cohen JE, Selby PL, Ferrence RG: Canadian Tobacco Research Initiative (SSHRC) (\$145,869 2001 - 2004).*

Role of glial AMPA/kainate receptors in traumatic CHS white matter injury. *Fehlings MG, Zhang L, Eubanks J, Carlen P, Gurd J, Baker AJ: Medical Research Council of Canada/Canadian Neurotrauma Research Program, Partnership Programme, Ontario Neurotrauma Foundation (\$279,000 1999 - 2002).*

Role of glial AMPA/kainate receptors in traumatic CNS white matter injury. *Fehlings MG, Zhang L, Eubanks J, Carlen P, Gurd J, Baker AJ: Medical Research Council of Canada/Ontario Neurotrauma Foundation (\$279,000 1999 - 2002).*

Role of the mGluR1 metabotropic glutamate receptors in the pathophysiology of central nervous system trauma. *Fehlings MG, Baker AJ: Ontario Neurotrauma Foundation, National Rick Hansen Neurotrauma Initiative* (\$163,300 2000 - 2003).

Role of phosphatase PTEN in traumatic spinal cord injury. *Wan Q: Christopher Reeve Paralysis Foundation (CRPF)* (\$197,492 2002 - 2004).

Significance of modifier genes in alternative genetic pathways of colon cancer development. *Bapat B, Knight J: Canadian Institutes of Health Research (CIHR)* (\$301,527 2001 - 2004).

Structure-function analysis of the APC tumor protein. *Bapat B, Hannigan G: Medical Research Council of Canada* (\$301,374 1999 - 2002).

The cumulative effects of ingested fluoride on bone quality. *Grynepas M, Pritzker KPH: Medical Research Council of Canada* (\$246,900 2000 - 2003).

The relationship between socio-economic status, quality of care, and outcomes following acute myocardial infarction. *Alter DA., Morgan CD, Naylor C, Irvine J, Tu J, Williams J, Mustard C, Wheaton B, Autin PC: Canadian Institutes of Health Research (CIHR)* (\$373,803 2001 - 2004).

The role of stem cell antigen (Sca-1) in bone development and homeostasis. *Stanford WI, Aubin J, Grynepas M: Canadian Institutes of Health Research (CHIR)* (\$123,987 2002 - 2006).

The role of susceptibility genes and dietary risk factors in the etiology of mutator versus suppressor pathway of colon cancer. *Bapat B, Knight J: American Institute of Cancer Research* (\$83,350 2000 - 2002).

The use of community newspaper to promote breast cancer screening among South Asian women. *Stewart DE, Ahmad F: Ontario Breast Cancer Foundation* (\$34,000 2000 - 2003).

Three dimensional polymer matrices for bone tissue engineering. *Davies JE, Shoichet MS: BoneTec Corporation* (\$112,774 1998 - 2004).

Tissue engineered for cartilage repair. *Grynepas M, Pillar RM, Grynepas M, Kandel R: National Science Engineering Research Council* (\$189,000 2002 - 2005).

Towards a comprehensive speech rehabilitation for glossectomy patients: tongue sharpe, tongue motility and speech intilibility following partial glossectomy surgery. *Bressmann T, Irish J, Gilbert R, Gullane P, Brown D, Neligan P: Canadian Institutes of Health Research* (\$330,000 2003 - 2006).

When home care ends and institutional care begins: A longitudinal study of stroke survivors and their family caregivers. *Cheung AM, Cameron JI, Stewart DE, Coyte PC, Streiner DL, Feldberg GD: Social Sciences and Humanities Research Council* (\$121,820 2001 - 2004).

## Honours Received

**Gullane PJ:** Canadian Representative, Pan American Association, July 2002.

**Gullane PJ:** Distinguished Service Award - American Academy of Otolaryngology, January 2003.

**Gullane PJ:** President - Elect, North American Head and Neck Society, July 2002.

**Gullane PJ:** President - Elect, North American Skull Base Society, January 2003.

**Milner M:** John Whittaker Memorial Award for contributions to research relating to persons with cerebral palsy. Ontario Association of Children's Rehabilitation Centres, October 2002.

**Stewart DE:** Chair of World Psychiatric Association Section on Women's Mental Health (1999-present), December 2002.

**Stewart DE:** Distinguished Fellow of the American Psychiatric Association (2003-present), May 2003.

**Stewart DE:** Fellow of the Academy of Psychosomatic Medicine (1993-present), December 2002.

**Stewart DE:** Fellow of the American College of Psychiatrists (1995-present), December 2002.

**Stewart DE:** Fellow of the International College of Psychosomatic Medicine (1992-present), December 2002.

**Stewart DE:** Honourary Fellow of the Ontario Allergy Society (1988-present), December 2002.

**Stewart DE:** Honourary Member of the Australian Society for Psychosomatic Obstetrics and Gynecology (1991-present), December 2002.

**Stewart DE:** Margaret Mead Memorial Award and Lecture, April 2003.

**Stewart DE:** Symonds Award, American Psychiatric Association, May 2003.