DEPARTMENT OF SURGERY ANNUAL REPORT

July 1, 2007 – June 30, 2008

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Dr. R.K. Reznick

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REPORT FROM THE **C**HAIR

Richard K. Reznick

R.S. McLaughlin Professor and Chair



As you know, this past year marked a formal review of the Department by Garth Warnock from UBC and Jonathan Meakins from Oxford. When reading the report, I must say I was so proud to be a member of this great Department. Our reviewers commented that the stature of the department remains **extraordinary** as the leading Canadian university Department of Surgery and amongst the top ten internationally. Our department was lauded

for its teaching programs and congratulated for our research accomplishments. Our reviewers were incredibly impressed by the harmony in our collegium and the common ground between our University and our teaching hospitals. So when Dean Whiteside asked if I would accept a re-appointment for another five years, I took a deep breath, prepared myself for another marathon, and gave her a resounding yes.

This past year has been a busy one. We have recruited another nineteen surgeons to the department, making the total number of new faculty in the last six years 74. During this academic period, we have welcomed to this Department Claudio Cina (vascular surgery SMH), Sean Cleary (general surgery UHN), Leodante da Costa, Jr. (neurosurgery SHSC), Ben Deheshi (orthopaedic surgery MSH), Andrew Dueck (vascular surgery SHSC), Darlene Fenech (general surgery SHSC), Rajiv Gandhi (orthopaedic surgery UHN), Ethan Grober (urology WCH and MSH), Stephan Hofer (plastic surgery, UHN), Karen Johnston (neurosurgery TRI), Wolfgang Kuebler (scientist SMH), Loch Macdonald (neurosurgery SMH), Markku Nousiainen (orthopaedic surgery SHSC), Mark Peterson (cardiac surgery SMH), Oleg Safir (orthopaedic surgery MSH), Tom Schweizer (scientist SMH), Shar Shahrokhi (plastic surgery SHSC), John Theodoropoulos (orthopaedic surgery MSH and WCH) and Christian Veillette (orthopaedic surgery UHN).

This past year we celebrated a number of individuals who received academic promotion. Joining the ranks of Professor are Drs. Terry Axelrod, Lee Errett, Avery Nathens and Michael McKee. Promoted to Associate Professor were Drs. David Backstein, Nancy Baxter, Peter Chu, Robert Cusimano, David Fisher, Abhaya Kulkarni, Calvin Law, Robert Nam and Albert Yee. Elevated to the rank of Assistant Professor were Drs. George Vincent, Paul Wong, Amr El-Maraghy, Daniel Whelan and Markku Nousiainen.

This next year will see many challenges. One of the most critical issues will be the process of undergraduate curriculum renewal. It appears that we may be headed for some profound changes. To a large extent, changes will be driven by internal perceptions of our social responsibility. It will also, no doubt, provoke and highlight some inevitable tensions that will shape the debate around a focus for our medical school and what type of physician "product" we hope to produce. We will need to inspect our admission policies. With residency becoming longer and longer, with specialty fellowships becoming the rule rather than the exception, and with second or third entry to our medical school commonplace, we will have to analyze the relative societal merits of graduating older versus younger physicians. We need to examine the focus of a new curriculum with the sharpest debate being the issue of generalism. While we all agree that the shortage of family doctors across Canada is of concern, one has to question if this issue should dominate as we contemplate changes for our future. We currently train more family physicians than any other medical school in the country and yet, unlike many other medical schools, one could argue that given our research and specialty infrastructure, we should be narrowing our focus on the complex. As well, the allocation of a specific number of curricular weeks to a department will be a point of contention. The last wave of curricular change resulted in an element of specialist disenfranchisement when systems-based teaching, for which specialists felt a fair degree of ownership, was replaced by PBL teaching and more generic courses that are taught by a wide spectrum of physicians and non-physicians. Whatever the approach, surgeons need to be vitally engaged in undergraduate education.

Early exposure to junior medical students is critical if we are to continue to attract the best and the brightest to surgery. If we don't interact with them, serving as their advisors, teachers and role models, we will see a diminution in the popularity of surgery as a specialty. Just as important, we have a lot to teach our future colleagues. We have an array of skills that are critical to impart to our students. We know more about trauma, critical illness, cancer, cardiovascular physiology, wound healing, and nutrition than most. There is a closeness to our relationships with patients that is unrivaled in most other domains of medicine. Last, but certainly not least, a surgeon's job is the most exciting and gratifying of any of the medical professions. We need to pass on this excitement to our students.

A final question as we fashion a new curriculum will be whether social issues (the afflictions of hunger, poverty, torture, war, and abuse) should gain further expression in our curriculum and, if so, at the expense of what. For instance, should these issues divert curricular time away from the field of transplantation because, in comparison to the number of individuals who will have transplants, the numbers affected by the above-mentioned afflictions are staggeringly imbalanced? To a large extent, our future curriculum should be dictated by our vision and mission. It is my view that, above all, our goal should be for all of our graduates to have the skills, the potential and the desire to do something special, something unique.

As we approach 2009, it will be time to re-inspect our strategic plan, *Breaking through the Boundaries*. We have begun a process to analyze the extent to which we have reached our stated goals from 2004-2009 and, more importantly, define a measurable agenda for the next 4 years. Many challenges lay ahead. The global financial crisis will no doubt impose restrictions with which will have to cope. We will have to contend with the ramifications of the abolition of mandatory retirement if we want to continue on our torrid pace of recruitment and renewal. We will have to come to grips with the current debate surrounding industry involvement in our academic enterprise. We will need to be creative as we approach an era wherein there will be a blurring of the lines between surgery and other procedure-based interventional specialties. We need to push forward with our research agenda, being mindful that attracting high-level external grants will be increasingly challenging. We need to be successful in mounting our experimental curriculum in orthopaedics which will deploy a competency-based model of education for three residents starting July 2009. We will need to protect our surgical scientist program by elaborating a financially sustainable model combined with ramping up our already substantial fundraising program. We will need to be mindful of our postgraduate training missions, balancing residency education with fellowship training. We will need to continue to keep in sharp focus our principle mission of caring for patients, making their positive outcomes our first priority.

Without a doubt, we can do it. If this past six years as Chair has taught me anything, it is that our most important commodity is our talented and dedicated faculty. We belong to an incredible department. By any benchmark, by any standard, in all of our reviews, this Department stands tall in academic surgery.

Research

Benjamin Alman

Vice-Chair / A.J. Latner Professor and Chair in Orthopaedic Surgery

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Both clinician and non-clinician faculty members in our department continue in our strong tradition of research excellence. There are over forty non-clinician scientists (NCS) appointed in our department. These individuals are working in the broad range of disciplines represented by the full scope of our departmental activities. The accomplishments of our NCS are quite remarkable as they account for a substantial proportion of our total research activities. Andres Kapus our Associate Vice-Chair Research has worked hard to better integrate our NCS in

activities. Andras Kapus, our Associate Vice-Chair Research, has worked hard to better integrate our NCS into our department. He met with all of our NCS and instituted a number of new initiatives which will help build a stronger, more supportive, research environment.

As advances in medicine may come in a variety of forms from a variety of areas, it is important that we take advantage of the broad range of academic endeavors that could strengthen our department and surgery in general. The Scholarship in Surgery program was initiated three years ago to provide graduate level training in non-traditional streams. Five residents have now graduated from the program. One of the graduates, Gilbert Tang, won both the Harvard Business School's annual Business Plan Contest and the MIT \$100K Entrepreneurship Competition for his proposal to develop low cost diagnostics to developing countries based on new technologies.

Research funding is challenging in this era of shortfalls in the amount of funding available from the federal government. Despite such challenges, our research productivity continues to grow at an astonishing pace. There have been hundreds of publications from our faculty members this past year, including some in the highest impact journals. Our faculty has given research presentations throughout the globe and participated in over a hundred national and international research meetings. Despite the increased competitiveness of research funding from the Canadian Institutes of Health Research, the department continues to receive increasing support from this agency, with over \$8,500,000 in funding received this past academic year. Our total research funding continues to exceed that of even many of the Universities in Canada, exceeding \$30,000,000 this year. This funding is not limited to one division or one hospital, but is distributed throughout the faculty, showing the strong integration of research throughout the entire department.

The Surgeon Scientist Program continues to grow, with over forty residents participating this year. Over 80% of our Surgeon Scientist Program participants were successful in receiving full or partial salary support from external granting agencies. Johnson & Johnson Medical Products continues to support the Surgeon Scientist Program, providing funding to four trainees this year (Mitesh Badiwala, Kristen Davidge, Adrian Laxton, Jensen Tan).

The theme for our 34th Gallie Day was oncology research. There were talks by trainees in our Surgeon Scientist Program and non-residents training with our faculty. The broad range of topics and types of trainees highlighted the diverse, yet high quality, research being conducted in our department. Steve Gallinger, Ab Guha, Robert Nam and Jay Wunder spoke at a symposium entitled "Cutting for Cancer: A Role of Surgeons in Oncology Research." The exciting advances in oncology research from our department were complimented by the Gordon Murray Lecturer, Dr. Randy Rossier, from the University of Rochester Medical Center, who spoke on the role of surgeons in basic science research.

The Gallie Bateman Award for best work by a trainee in the Surgeon Scientist Program went to Betty Y.S. Kim "Nanoparticle-mediated cellular response is size-dependent" (Supervisors: Warren C.W. Chan and James T. Rutka), with a three-way tie for second place to Kristen Davidge "Patient expectations for surgical outcome in extremity soft tissue sarcoma" (Supervisor: Aileen Davis); William S. Johnson "Complement mediated organ dysfunction after ruptured abdominal aortic aneurysm: Mechanistic evidence from mice and humans" (Supervisor: Thomas F. Lindsay), and Isaac Moss "Biomechanical and biochemical evaluation of a novel hyaluronan/elastin-like polypeptide composite scaffold for nucleus pulposus tissue engineering" (Supervisors: Kimberly Woodhouse, Cari Whyne, and Albert Yee).

There was a tie for first place for the McMurrich Award, given for the best fundamental science work by any level trainee working with a member of our department. This went to Marcelo Cypel "Ex vivo repair of human donor lungs for transplantation" (Supervisors: Shaf Keshavjee, Mingyao Liu, and Thomas K. Waddell) and Paul Northcott "Multiple recurrent genetic events converge on control of histone lysine methylation in medulloblastoma" (Supervisors: James T. Rutka and Michael D. Taylor).

There was also a tie for second place, with awards give to Kathryn Ottolino-Perry "Spheroids: Characterization of oncolytic vaccinia virus infection and anti-tumour effects in 3-dimensional in vitro tumour models" (Supervisor: J. Andrea McCart) and Amparo Wolf "The glycolytic switch suppresses mitochondrial regulation of apoptosis and oxidative phosphorylation in glioblastoma multiforme" (Supervisor: Abhijit Guha). There was a five-way tie for third place: Yosz Z. Haffani "PLK4 regulates the localization of ECT2 and the activation of RHOA at the spindle midbody to promote cytokinesis" (Supervisor: Carol J. Swallow); Carla Rosario "PLK4 haploinsufficiency mediates chromosomal instability and umorigenicity" (Supervisor: Carol J. Swallow); Elissa Tepperman "The effect of calcineurin inhibition on vasomotor function and visfatin expression" (Supervisor: Vivek Rao); Amy P. Wong "Identification of a novel epithelial-like bone marrow stem cell that can repopulate the airway epithelium" (Supervisor: Thomas K. Waddell); and Colleen Wu "Mesenchymal progenitor cells are involved in the formation of aggressive fibromatosis" (Supervisor: Benjamin A. Alman).

The Wyeth Awards for best clinical epidemiology or education based research poster was awarded to Karen M. Cross "Redefining the gold standard and establishing a grading system for tissue injury" (Supervisor: Joel S. Fish) and Deepa Kattail "The influence of age and comorbidity in the clinical outcomes in patients with acute spine trauma: Experience of a single acute care unit in Ontario" (Supervisor: Michael G. Fehlings).

Faculty accomplishments in the past year were astonishing. There were too many awards and honors to list all of them, and most of the awards are listed in the activities of the individual hospitals and divisions. Some of the highlights from the past year include: Michael D. Taylor who received the Bernard Langer Surgeon Scientist Award (given to the most outstanding graduate of the Surgeon Scientist Program); Cindi Morshead who received the George-Armstrong Peters Prize (awarded to a young investigator); Joel Fish who received the Charles Tator Surgeon Scientist Mentoring Award; and Shaf Keshavjee who received the Lister Award (awarded for excellence in research by a senior investigator).

The Departmental Research Committee continued its strong work on expanding the breadth of research activities in the Department, establishing links to emerging research areas, improving the links with the non-clinician scientists in the Department, developing standardized evaluations for faculty, and reorganizing Gallie Day and research educational activities.

I want to give special thanks to Val Cabral for her co-ordination of all aspects of the Departmental research activities.

Research plays a prominent role in our department and we have made fantastic accomplishments in the past year. In the upcoming years, our research activities will continue to grow with new avenues of investigation being developed and with improvements in our research infrastructure to increase the breadth and depth of our work, ultimately improving the outcome for our patients.

POSTGRADUATE EDUCATION

David A. Latter

Vice-Chair, Education



The 2007-2008 academic year again proved to be a year rich in educational achievement for our department. The 6 direct entry programs (Cardiac Surgery, General Surgery, Neurosurgery, Orthopedic Surgery, Plastic Surgery, and Urology), and our 5 subspecialty surgical programs (Thoracic Surgery, Vascular Surgery, Pediatric General Surgery, Colorectal Surgery, and General Surgery Oncology) all continue to produce the finest surgeon graduates.

The Program Directors and the Program Coordinators of our 11 programs merit recognition of their efforts. This list includes: Dr. David Latter and Ms. Willa Hart of Cardiac Surgery, Dr. Najma Ahmed and Ms. Miriam Strzinar of General Surgery, Dr. Chris Wallace and Ms. Sandi Amaral of Neurosurgery, Dr. Bill Kraemer and Mr. Dan Stojimirovic of Orthopedic Surgery, Dr. Mitch Brown and Ms. Kathy Pavlovic of Plastic Surgery, Dr. Robert Stewart and Ms. Maria Tersigni of Urology, Dr. Gail Darling and Ms. Lisa Spatafora of Thoracic Surgery, Dr. Thomas Lindsay and Ms. Leah Gabriel of Vascular Surgery, Dr. Ted Gerstle and Ms. Shannon Hannah of Pediatric General Surgery, Dr. Marcus Burnstein and Ms. Wendy Bell of Colorectal Surgery, and Dr. Carol Swallow and Ms. Jane Hanes of General Surgery Oncology. Dr. Ronald Levine, who serves as the Postgraduate Director, oversees this dedicated team.

All 6 of our direct entry program easily filled their 46 PGY 1 CaRMS match positions. The majority of our matches were with our top ranked applicants. Our subspecialty programs also had no problem attracting the top students in the country for our programs. The IMG program continues to grow and this past year we had applicants enter our teaching programs. Visa trainees also continue to grow in numbers in our department. With Canadian medical school graduates, Canadians from international medical schools and visa trainees, the department has 46 PGY 1 residents, with a total of 247 residents in training. This represents the largest training program in the country.

The educational curriculum extended to our residents is impressive. Each program has its own program of lectures, visiting professors, special educational events, and other innovative teaching endeavours. The reports from the 2007 Royal College Accreditation Visit and the October 2007 External Review Report of University of Toronto Department of Surgery both confirmed the exceptional quality of our teaching programs. This is further confirmed by the high success rate at Royal College exams and the successful careers, both clinical and academic, that our graduates have developed.

The University of Toronto Surgical Skills Centre at Mount Sinai Hospital continues to offer excellent teaching of surgical skills to our residents. Dr. Helen MacRae and the skills centre manager, Lisa Satterthwaite and her team, work hard to assist the acquisition of surgical skills by our trainees in an environment outside of the OR. All PGY 1s and 2s take the Principles of Surgery Core Surgery Lecture Series which is managed by Dr. Robert Mustard. The high success rate of our students at the Principles of Surgery Exam is a testament to the hard work of all who participate in the preparation of the Core Surgery Lectures for PGY 1s and 2s, and the POS practice exam. All PGY 1s also take the highly successful Advanced Trauma Life Support course run by Dr. Jameel Ali.

A series of education days such as Orientation for PGY 1s (run by Dr. Ron Levine), Surgeon in Society (run by Dr. Ron Levine), and Surgeon as Teachers for PGY 1s and 3s (run by Drs. Nicki Woods and John Murnaghan), are given to our residents to better prepare them for their careers in surgery.

The Surgeon Scientist Program continues to deliver world class educations in basic science, clinical epidemiology, and education research. These SSP residents earn higher level degree MSc or PhDs. The achievements of our surgeon scientist residents are celebrated at our annual Gallie Day.

The relatively new Surgeon Scholar Program is proving to be successful. This program is available for the surgery resident student who wishes to pursue scholarly achievement in non "scientific," non traditional fields of study, such as MBA, law, or other fields.

Our **Postgraduate Web Evaluation and Registration system** (POWER) is proving to be effective in its mandate to insure that all postgraduate student evaluation and teacher evaluations are done in a timely and effective fashion. It has improved our ability to track performance achievements of students and teachers by allowing the systematic review of Intraining Evaluation Reports (ITERs) of students, and the Teaching Effectiveness Scores (TES) of our teachers. It is only with a better understanding of our strengths and weaknesses that we can improve our teaching. Dr. Nicki Woods, the department's Director of Education Evaluation, assists us in achieving our educational mission.

The Department of Clinical Fellowship, established in 2006, is maturing in its educational mandate. The Department of Surgery has approximately 150 clinical fellows and some 30-40 research fellows at any one time. These fellows come from the four corners of the world. Their achievements, as a clinical fellow here in Toronto, and later as a surgeon in their home country, reflects directly on the University of Toronto. And so, appropriately, the education of the clinical fellows is now a more recognized contribution of our department members. On November 4, 2007, the Department of Clinical Fellows hosted the first Clinical Fellow's Education Day. The event was well attended by over 60 fellows who heard insightful messages from Drs. Ori Rotstein, Hugh Scully and Robert Buckman. A new achievement award specifically for clinical fellows, sponsored by Dr. Zane Cohen, will be awarded for the first time this year.

The Centre for Faculty Development is a resource that members of our faculty continue to use. Many department members enroll in the various workshops, while some of our more energetic faculty enter the Stepping Stones Program or the Education Scholars Program. Dr. Pippi Salle is a proud graduate of the Education Scholars Program for 2008. I hope that more of our faculty will avail themselves of this important resource.

Dr. Ronald Kodama was awarded the 2008 Bruce Tovee Award for Postgraduate Teaching, while Dr. Peter Ferguson won the 2008 Bruce Tovee Award for Undergraduate Teaching. Dr. John Murnaghan won the 2008 Clinical Skills Centre Distinguished Educator Award. The 2008 D.R. Wilson Award for resident teaching of medical students was won by Dr. Melfort Boulton. Members of our faculty continue to win many educational awards from outside institutions and I will make special effort to track these accomplishments and report them to you in future annual reports.

The Banting Postgraduate Office has hired Robert Gardin to fulfill the role of Postgraduate Assistant looking after resident and clinical fellow affairs. Tess Weber, the Postgraduate Coordinator, continues to deftly manage all the issues of our postgraduate office. Carmela Calorendi looks after the undergraduates. Jean DeFazio has retired after many years of dedicated service.

Finally, we must recognize the contribution of Dr. John Bohnen who held the post of Vice-Chair of Education for many years before moving into the Dean's office as Vice-Dean of Clinical Affairs. John was tireless in his work and deserves much credit for our present status as one of the premier sites in the world for surgical education.

UNDERGRADUATE EDUCATION

David Backstein

Director



The Surgical Undergraduate Education Committee (UEC) continued working on several ongoing, long-term projects as well as taking on many newer issues, throughout the 2007-08 academic year.

The Surgical UEC continued to work on the development of a program of objectives which will be incorporated into a more robust e-log system and achieve compliance with the educational directives (ED-2) of the LCME. With the help of several faculty members, objectives for all subspecialties have now been written.

A new mid-term feedback form was developed, approved and implemented this year. Faculty are asked to complete this simple form midway through all rotations. Mid-term feedback was mandated by the last LCME accreditation.

The Surgical UEC continued to monitor all post-rotation debriefings collected by Dr. Nicole Woods. A student driven "handbook of innovation" will be compiled using feedback from these interactions.

The UEC membership itself was re-evaluated this year and a series of new appointments were made. This was done in an effort to improve representation of all subspecialties on the Committee. New members include:

- Dr. Eric Massicotte (Neurosurgery)
- Dr. Melinda Musgrave (Plastic Surgery)
- Dr. Robert Mustard (General Surgery)
- Dr. George Christakis (Cardiac Surgery)

The Bruce Tovee Award in Undergraduate Teaching went to Dr. Peter Ferguson this year. The UEC congratulates Dr. Ferguson on this well deserved achievement.

Finally, the Surgical UEC would like to thank our two student representatives, Jennifer Boyd and Ron Somogyi. Both Jenn and Ron worked very hard this year in communicating the needs of their fellow students to us, and we are most grateful for their hard work.

DIVISION OF ANATOMY

Michael J. Wiley

Chair



The total research funding in the Division grew this year with new awards given to Paulo Koeberle from The Canada Foundation for Innovation Leadership Opportunity Fund, the Connaught New Staff Matching Fund and, in collaboration with Dr. Michael Fehlings, grants from the Canadian Institutes of Health Research and the Sangamo Pharmaceuticals Research and Development Fund. Dr. Koeberle's lab focuses on the molecular mechanisms

underlying neuronal degeneration and regeneration in the central nervous system. Dr. Cindi Morshead and her collaborators obtained new funding from The Heart and Stroke Foundation, the National Sciences and Engineering Research Council of Canada and the National Sciences and Engineering Research Council/Canadian Institutes of Health Research, Collaborative Health Research Projects Program (NSERC/CIHR, CHRP) for their work on the therapeutic potential of neural stem cells.

Dr. Cindi Morshead successfully underwent tenure review and was promoted to the rank of Associate Professor with tenure. Searches were begun to fill a tenure track position at the rank of Assistant Professor and a position in the Lecturer stream.

Retirement

Dr. Pat Stewart retired from the Anatomy Division as Professor Emerita after 31 years of distinguished service to the Faculty of Medicine. She is well known as a neuroscientist, and co-author of the texts Cranial Nerves in Health and Disease, and Autonomic Nerves: Functional Anatomy and Clinical Comments. Dr. Stewart served as co-Course Director for the Brain and Behaviour course in the medical program as well as Course Director for Neuroanatomy courses given to students in the Department of Speech and Language Pathology and in the Faculty of Arts and Science. She has been a faculty leader in developing multimedia to support medical education and has been a recipient of the John Ruedy Award for Innovation in Medical Education, the W.T Aikens Award for the Development and Use of Innovative Instructional Methods, and the Award for Excellence in Undergraduate Teaching in Life Sciences.

Awards

At the faculty's annual Educational Achievement Celebration, Dr. Ian Taylor received the Harry Whittaker Memorial Teaching Award, Dr. Mike Wiley received the W.T Aikens Award for the Development and Use of Innovative Instructional Methods, and Dr. Patricia Stewart was given the Award for Excellence in Undergraduate Teaching in Life Sciences. Dr. Cindi Morshead was awarded the George Armstrong-Peters Prize at the Gallie Day Celebration of the Department of Surgery.

DIVISION OF CARDIAC SURGERY

Richard Weisel

eisel Chair

Introduction

As I approach the end of my ten-year tenure as Chairman of the Division, I can safely report that Cardiac Surgery in Toronto remains a world leader in clinical care, research and teaching.

Clinical Care

The Division underwent turbulent times. The clinical volume of cardiac surgery increased and then decreased. Due to an unprecedented demand for cardiac surgical procedures, the Division increased the number of procedures performed at all three adult hospitals until resources were strained at these institutions. Because wait times remained unacceptably long, the Division assisted the Ministry in opening three new centres in Central Ontario which required ten years. Drug eluting stents became popular at the same time that the new centres opened and the combination resulted in a significant decline in the number of coronary bypass procedures performed at the three adult hospitals. The number of valve procedures has increased significantly and the total volume of cardiac procedures has plateaued over the last three years. In addition, the surgeons developed new minimally invasive cardiac procedures. Surgery for arrhythmias has been expanded at all three institutions and has been championed by Dr. Gideon Cohen at Sunnybrook. Drs. Tirone David and Chris Feindel have pioneered minimally invasive aortic valve replacement (transapical and transvascular) at the Toronto General Hospital. All three institutions have expanded the indications for valve repair and have incorporated minimally invasive approaches. Robotic assisted and image-guided valve repair and replacement is being evaluated. Cardiac surgeons have developed catheter skills and embraced transvascular approaches to a variety of cardiac and vascular diseases. Our recent recruits are performing procedures we did not imagine ten years ago and their case mix is dramatically different. Hybrid procedures were first introduced at the Hospital for Sick Children and now are common at all of our institutions. We envision that the next generation will be cardiovascular interventionalists who will employ a combination of open, thorascopic, transvascular and image-guided procedures to minimally invasively repair and replace diseased vessels and organs to permit patients to return home within a week and return to work within a month. The new era in cardiac surgery promises to be very exciting.

Research

Cardiac surgical research has expanded exponentially during the decade. The Division dedicated the training program to produce outstanding academic surgeons and we have been extraordinarily successful. Clinical research has been coordinated by Dr. Stephen Fremes at Sunnybrook. The Hospital for Sick Children was awarded the Congenital Heart Surgeon's Database, and Dr. Eugene Blackstone (a world-renowned clinical epidemiologist) was appointed to our Division. Basic research has been located at UHN (regenerative medicine) and St. Michael's Hospital (vascular biology). Drs. Chris Caldarone and John Coles have productive basic research laboratories at HSC. The surgeons and scientists at all four hospitals publish extensively and have attracted outstanding peer-reviewed funding. In addition, CFI funding to our institutions has dramatically expanded the facilities and equipment available for our research.

Teaching

The Division has an extensive training program for one resident and a dozen fellows each year. Dr. David Latter has provided exceptional leadership for both the residency and the fellowship programs in Cardiac Surgery. The residents receive extensive academic training and every graduating resident has found a position in academic cardiac surgery in Canada or in the USA.

Summary

The Division overcame significant challenges with the decreases in volumes and elimination of the waiting lists for cardiac procedures. However, case numbers have stabilized and the surgeons have developed new minimally invasive procedures. The Division remains the most academically productive cardiac surgical unit in the world. Our residency program has produced a generation of surgeon scientists and the older surgeons continue to innovate and educate the world. We have extensive breadth and depth to our academic programs. However, we have changed the procedures we perform and, with our new recruits, we are performing an array of new, hybrid procedures. Our residents and fellows will continue to establish a new specialty of cardiovascular interventions.

Recruitment and Promotion

Dr. Mark Peterson was recruited to St. Michael's Hospital in July, 2007. He completed his academic training with Dr. Tom Waddell and then pursued a fellowship in intravascular interventions in Phoenix. He has established a combined program in cardiovascular intervention with Vascular Surgery and Radiology at SMH. Dr. Lee Errett, the Head at SMH, was promoted to Full Professor and Robert J. Cusimano at TGH was promoted to Associate Professor.

Royal College Fellowship

Drs. Nimesh Desai and Abdullah Alghamdi successfully passed their Royal College Fellowships.

Staff Appointments

Dr. George Christakis was appointed Director of Undergraduate Teaching for the Division of Cardiac Surgery and Dr. Subodh Verma received a Tier II Canada Research Chair in Atherosclerosis at the University of Toronto.

Resident Awards

Dr. Anusha Jega was awarded the John W. Kirklin Fellowship at the Hospital for Sick Children and Drs. Mitesh Badiwala and Khaled Al-Garni received Resident Travel Awards.

Visiting Professors

Drs. Dennis T. Mangano, a cardiac anesthesiologist, and Eugene Braunwald, a legendary cardiologist, gave lectures in October. Dr. John Ikonomidis returned to Toronto as a Visiting Professor in April. John completed his General Surgery training and his PhD in Toronto and is now a rising star in academic cardiac surgery. Dr. T. Bruce Ferguson, the Director of the Society of Thoracic Surgery Database, visited in May. Dr. Joseph Wu, a cardiologist and molecular imaging expert, visited in June. The Terrence Donnelly Cardiac Surgery Residents Research Day was a resounding success in April.

DIVISION OF GENERAL SURGERY

Zane Cohen

Bernard and Ryna Langer Chair

Accomplishments

The most significant change in our administrative structure was the appointment of Najma Ahmed as the new Program Director in General Surgery. Stan Feinberg was appointed as the Assistant Program Director, and Ms. Miriam Strzinar is our new Administrative Coordinator. We thank Lorne Rotstein for his seven-year service as the Program Director in General Surgery as well as Jaime Feeglen and Jan McEyoy as the former Assistant Program Director.

the Program Director in General Surgery as well as Jaime Escallon and Jan McEvoy as the former Assistant Program Director and Administrative Coordinator, respectively.

Najma has already made significant structural changes in the program. She has developed a new rotation template that is now in place and which has added a degree of security and transparency within the program.

Resident Training

The CaRMS Match took place in February/March 2008 and successfully attracted 12 of our highest ranked students from literally across the country. Included in this group of individuals are two international medical graduates. In addition, we took two transfers into our PGY II class as well as one practice-ready individual.

Accepted into the PGYI year are the following

Nathalie Adabachi	Universite de Sherbrooke	
Thamer al Abassi	National University of Ireland (Dublin)	
Gregory Bodie	University of Sydney, Australia	
Christopher Daigle	Memorial University of Newfoundland	
Charles de Mestral	McGill University	
Milan Ernjakovic	University of Novi Sad, Serbia	
Nicholas Gaudet	Dalhousie University	
Hameed Usmann	University of British Columbia	
Marvin Hsaio	University of Toronto	
Stewart Lo	University of Toronto	
Chloe McAlister	Dalhousie University	
Megha Suri	University of Western Ontario	
Luke Szbota	Queen's University	
Julian Winocur	McGill University	
Boris Zevin	University of Toronto	
The two transfers into our PGYII class were:		
Steve MacLellan	University Western Ontario	

Carmen Mueller University of Toronto

The practice ready surgeon is Maghsood Seddigh, from Shiraz University (Iran).

Congratulations to all of our General Surgery residents who not only completed the General Surgery Training Program for 2007-2008 but also passed their Royal College examinations. These are Zohair Al-Hariri, Tim Cheang, Eda Deliallisi, Frank Eng, Philippe Garzon, Veena Guru, Michael Ko, Steven Lopushinsky, Ahmed Nasr, Brian Pinchuk, George Rabbat, Sundeep Rai, Danny Ramzy, Tanya Zakrison.

New Faculty

Recruitment is still active this year in our division. The following members were recruited during the 07-08 year.

Sean Cleary	University Health Network
Darlene Fenech	Sunnybrook Health Sciences Centre
Sharifa Himidan	Hospital for Sick Children/North York General Hospital

I omitted Sharifa in last year's report as this is her second year.



Promotions 07-08

To Associate Professor Claire Holloway Robert Mustard Sandro Rizoli Lloyd Smith

To Assistant Professor Stan Feinberg

Promotions 08-09

To Associate Professor Nancy Baxter Calvin Law Peter Chu

To Full Professor

Avery Nathens

Gallie Day Awards 2008 McMurrich Awards- Poster Competion

Kathryn Ottolino-Perry	Supervisor: J. Andrea McCart
Yosz Z. Haffani	Supervisor: Carol J. Swallow
Carla Rosario	Supervisor: Carol J. Swallow

Faculty Honours/ Awards/ Positions Held

Paul E. Bernick: Dr. John H. Fowler Excellence in Teaching Award Marcus Burnstein: President of the Canadian Society of Colon and Rectal Surgeons Mark Cattral: Promoted to the rank of Senior Scientist with the Toronto General Research Institute Jaime Escallon: Masters of Columbian Surgery Annie Fecteau: American Pediatric Surgical Association - Chair, Ethics and Advocacy Committee David Grant: President, International Intestine Transplant Society Richard Hart: Ernie Spratt Resident Teaching Award - St. Joseph's Health Centre Peter C.W. Kim: Advanced Health Leadership Program Scholarship at the Rotman School of Business; Vice-Chair, Section on Surgery Program Committee, American Academy of Pediatrics Bernard Langer: Global Impact Award from University Health Network John Marshall: President of the Surgical Infection Society; Chair, International Sepsis Forum; Chair, Canadian Critical Care Trials Group J. Andrea McCart: Patent - Combined growth factor-deleted and thymidine kinase-deleted vaccinia virus vector, United States of America Robin S. McLeod: 2nd Vice President, American Surgical Association (ASA); Treasurer, Society for Surgery of the Alimentary Tract Avery Nathens: Medical Director of Criticall Ontario; Chair, National Trauma Databank (American College of Surgeons) Allan Okrainec: Frank Mills Award for Excellence in Teaching by a General Surgery Faculty Member Michael Reedijk: Scientist, Campbell Family Institute for Breast Cancer Research/Ontario Cancer Institute and Department of Medical Biophysics; University Health Network Society of University Surgeons Junior Faculty Award Richard Reznick: Re-appointed as R.S. McLaughlin Professor and Chair; Chair, Board of Directors, Association for Surgical Education Sandro Rizoli: de Souza Chair in Trauma Research, Sunnybrook Health Sciences Centre and University of Toronto Best Speaker Award

for the Principles of Surgery Lecture Series, Department of Surgery; CIHR/SME (Canadian Institutes of Health Research/Small and Medium Enterprise) New Investigator Award; Chair of the Committee on Trauma, American College of Surgeons; Secretary, Trauma Association of Canada (TAC) Ori Rotstein: Institute of Medical Sciences (IMS) Course Lecturer Award

Andrew J. Smith: Marvin Tile Award for distinguished service in surgery; Chair, Colorectal Cancer Management Team, Cancer Care Ontario

Lloyd Smith: Best Surgical Teacher Award for the Family Medicine Department; St. Joseph's Hospital Teaching Award for Surgery

Homer Tien: National Practice Leader, Trauma, Canadian Forces, Ottawa; Chair, Medical Advisory Committee for Special Operations, Department of National Defense, Canada

David R. Urbach: Program Chair, Canadian Surgery Forum, Canadian Association of General Surgeons (CAGS); Renewal of appointment as Scientist for three years with the Toronto General Research Institute

Paul Wales: Best Clinical Paper - Canadian Association of Paediatric Surgeons (CAPS), 39th Annual Meeting

Resident Honours, Awards and Positions Held

Anna Bendzsak: Ontario Medical Association Resident Achievement Award

Ivan Diamond (supervised Paul Wales and Brian Feldman): First Prize – Josie Walther Memorial Clinical Science Research Competition, The Hospital for Sick Children; 2nd prize - Resident Clinical Paper Award, Canadian Paediatric Surgical Association

Varun Kapila: Harrison Award for Resident Teaching (Sunnybrook)

Steve Lopushinsky: Covidien Resident Award for Teaching Excellence (Canadian Association of General Surgeons); Harrison Award for Undergraduate Teaching (Sunnybrook)

Alexandra Mihailovic (supervised by Peter Coyte): 1st Prize at the Annual Resident Trauma Papers Competition held by the American College of Surgeons Committee on Trauma

Ahmed Nasr: Resident Award for Teaching Excellence (Canadian Association of General Surgeons)

Brian Pinchuk: Bernard Ghert Award for Resident Excellence in Patient Focused Care

Jensen Tan (supervised by Calvin Law): Canadian Society of Surgical Oncology Best Paper Award; The Physicians' Services Incorporated Foundation Resident Research Award; Joseph M. West Family Memorial Fund Award; Gifford Scholarship

Patrick Tawadros (supervised by Ori Rotstein): Starr Medal by the Postgraduate Medicine Awards Committee, University of Toronto; 1st Place, Oral Presentation Award, Surgical Infection Society; 2nd Place, American College of Surgeons Trauma Resident Paper Competition, Basic Science Category; Postgraduate Medicine Awards Committee; Chisholm Memorial Fellowship; Elizabeth Arbuthnot Dayson Fellowship; Nellie L. Farthing Fellowship; William S. Fenwick Fellowship; Miriam Neveren Memorial Award; Joseph M. West Family Memorial Fund Award

Faculty and Resident Grant Capture

Canadian Institutes of Health Research:

Nancy Baxter (2x), John Bohnen, Sean Cleary, Ivan Diamond (supervisors: Wales P, Feldman B), Anna Gagliardi (2x), Steven Gallinger (2x), Robert Gryfe (2x), Peter Kim, Wey Leong, Gergely Lukacs (2x); John Marshall, Ian McGilvray, Sandro Rizoli, Ori Rotstein, Carol Swallow, David Urbach (2x), Paul Wales

National Cancer Institute of Canada:

Natalie Coburn/Calvin Law, Steven Gallinger, Carol Swallow

Georges Azzie: Society of American Gastrointestinal and Endoscopic Surgeons Nancy Baxter: National Institute of Health, Ontario Ministry of Research and Innovation Natalie Coburn: University of Toronto Anna Gagliardi: Cancer Care Ontario, University of Toronto (x2) Steven Gallinger: Lustgarten Foundation for Pancreatic Cancer Research, Reginald Gorczynski: Heart and Stroke Foundation of Ontario, Public Works and Government Services Canada David Grant: Heart and Stroke Foundation of Ontario Claire Holloway: Ontario Cancer Research Network Andras Kapus: Kidney Foundation (2x), Premier's Research Excellence Award, National Sciences and Engineering Research Council Calvin Law: Ministry of Health and Long Term Care Wey Leong: Genome Canada, Canadian Breast Cancer Foundation Andrea McCart: The National Colorectal Cancer Campaign Avery Nathens: Canada Research Chair, Public Service Improvement Framework Allan Okrainec: Canadian Association of General Surgeons, Society of the American Gastrointestinal and Endoscopic Surgeons, Health Technology Exchange and National Research Council

May Lynn Quan: Cancer Care Ontario, Canadian Breast Cancer Research Alliance, Canadian Breast Cancer Foundation (2x)

Michael Reedijk: Canadian Breast Cancer Foundation (2x), Weekend Walkers Breast Cancer Innovation Fund

Sandro Rizoli: National Institute of Health/Defence Research Development Canada; Defence Research Development Canada; The Physicians' Services Incorporated Foundation, Novo Nordisk A/S; National Heart and Lung Blood Institute/Canadian Institutes of Health Research/Defence Research Development Canada/Heart and Stroke Foundation of Canada/National Institute of Health

Ori Rotstein: American College of Surgeons, National Institute of Health, University of Toronto

Katalin Szaszi: National Sciences and Engineering Research Council, The Kidney Foundation of Canada (2x)

Bryan Wells (supervised May Lynn Quan and David Urbach): Canadian Breast Cancer Foundation

Events

Our 42nd Update Course for General Surgeons and Residents was held on April 17-19, 2008. We had 494 registrants plus 54 speakers. Over 550 individuals took part. I want to thank our entire faculty for their outstanding presentations at our Update Course over the years. This course has become the largest general surgery meeting in the country. This year, Dr. Peter Marcello was our outstanding visiting speaker from the Lachey Clinic in Boston.

Once again, the Update Course in General Surgery Oncology in the Fall of 2007 was held at the Granite Club and drew excellent registration. The course was highly evaluated. I want to thank Andy Smith, Carol Swallow, Andrea McCart and those who participated in supervising the poster sessions. Jaime Escallon involved himself again this year in organizing the review course in surgery for senior residents from around the country. This course, for the third year in a row, has been held in conjunction with McMaster University. Our major academic event was the Annual Assembly for General Surgeons and Residents. This was held on May 29th at the South Building of the Metro Toronto Convention Centre. Dr. Norman Kneteman was the E.B. Tovee Lecturer. This year, awards for oral presentation and poster presentation were achieved by Jensen Tan, Lynn Mikula, Wigdan Al-Sukhni and Ivan Diamond. In addition, two new awards recognizing outstanding achievement by a resident member in our General Surgery Residency Program were awarded to Ivan Diamond and Anna Bendzsak.

Initiatives

Robin McLeod, once again, reported on the Best Practice in General Surgery Committee. This committee aims to develop and standardize evidence-based practices in the adult academic teaching hospitals. The committee members are Darlene Fenech, Anna Gagliardi, Avery Nathens, Marg McKenzie (Coordinator) as well as resident representatives, namely: Cagla Eskicioglu and Sean Forbes. Robin, Lorne Rotstein, Allan Okrainec, Paul Bernick and David Lindsay are the local hospital champions who filter information from the committee out to the teaching hospitals.

The goals of this committee are to standardize practices for residents and faculty where possible, by using collaborative, inclusive, best-evidence, multiple-iterrative strategies for the implementation of evaluative component and research component for each of the initiatives involved. Initially, the committee will be looking at ways to standardize and reduce the incidences of surgical site infection, thrombo-embolic disease as well as wound closure techniques and bowel preparation.

We have also honoured our commitment to the surgical skills centre educational expansion for PGYII-V residents. The Skills Centre is under the direction of Helen MacRae. This year, there have been four PGYII Anatomy sessions, a PGYIII and IV Head and Neck session, Atom sessions, certification for the centre, and a PGYIII-IV Nissen and Foregut session.

Planned for the next academic year are the following: a PGYII-III Fundamentals of Laparoscopic Surgery certification, PGYII anatomy sessions and a PGYIII-IV Lap Colon, Lap Ventral Hernia, and Axillary Dissection courses.

The General Surgery Division at the University of Toronto remains outstanding in breadth and depth. It remains extremely strong and, certainly, the best of its kind in the country. I wish to personally thank all of the members for their cooperation and collaboration during this past academic year.

DIVISION OF NEUROSURGERY

James T. Rutka

Leslie Dan Professor and Chair



Resident Achievements

Royal College Examinations:

Fellows of the Royal College of Surgeons of Canada (FRCSC): Dr. Mel Boulton, Dr. Frank Farhadi, Dr. Bradley Jacobs, Dr. Todd Mainprize, Dr. Cian O'Kelly, and Dr. Mandeep Tamber.

Resident Research Awards (International/National):

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

Ratan Bhardwaj has been awarded the Krieg Cortical Kudos Award.

David Cadotte received the Fitzgerald Academy, Faculty of Medicine, Resident Teacher Excellence Award.

Greg Hawryluk obtained a 2-year renewal on a grant from the Craig H. Neilsen Foundation with Michael Fehlings; CNS/Synthes Spine Fellowship; Synthes CMF Neurosurgical Resident Travel Grant.

Betty Kim received a National Cancer Institute of Canada Diamond Anniversary Student Research Award; AANS/NREF Research Fellowship Award; K.G. McKenzie Memorial Prize for Basic Science Research.

Paul Kongkham won the Resident Research Award Competition of the American Academy of Neurological Surgery; and received 3-year grant from the National Cancer Institute of Canada with James Rutka and Michael Taylor.

Karim Mukhida won the Stem Cell Network Cross-Disciplinary Internship Award.

Cian O'Kelly received a Congress of Neurological Surgeons (CNS)/Micrus Endovascular Neurosurgery Fellowship.

Ann Parr won the Mayfield Basic Science Award, AANS/CNS Section on Disorders of the Spine and Peripheral Nerves. **Scellig Stone** received a CIHR Fellowship.

Resident Research Awards (University of Toronto):

Mel Boulton won the D.R. Wilson Award for Best Undergraduate Teacher.

D.J. Cook won the Alan R. Hudson Neurosurgery Resident Teaching Award.

Betty Kim received a Joseph M. West Family Memorial Fund; Charles F. Fell Fund; Chisholm Memorial Fellowship; Javenthey Soobiah Scholarship; Pricewaterhouse Cooper Award; Dr. Thomas L. Friedlich Award; Restracomp Fellowship Award from The Hospital for Sick Children; first place Morley Prize; Gallie-Bateman First Prize Award for best resident research paper and presentation.

Paul Kongkham tied for first place for the Morley Prize.

Adrian Laxton received a Miriam Neveren Memorial Award; a Joseph M. West Family Memorial Fund; won the 1st place Horsey Prize.

Demitre Serletis received a Chisholm Memorial Fellowship; the Elizabeth Arbuthnot Dayson Fellowship; the Nellie L. Farthing Fellowship; the William S. Fenwick Fellowship; the Miriam Neveren Memorial Award; a Joseph M.West Family Memorial Fund; the second place Morley Prize.

Scellig Stone received a Joseph M. West Family Memorial Fund and the Warren Ho Memorial Scholarship Award.

Sarah Woodrow won the 2nd place Horsey Prize.

Faculty Achievements

Honours and Awards

Michael Cusimano won the John Provan Outstanding Educator Award and the Alan R. Hudson Neurosurgery Faculty Teaching Award.

Peter Dirks received an NCIC Award of Excellence in Cancer Research, The Terry Fox Young Investigator Award, and a 5-year grant from CIHR. **Michael Fehlings** was a co-PI on an AOSpine North American Young Investigator Research Grant awarded to Dr. Mark Erwin; awarded a two-year AOSpine North America Fellowship Award with Eric Massicotte; one-year grant from the McLaughlin Centre for Molecular Medicine; Basic Science Award, first and second place, from the Cervical Spine Research Society; first place Research Award in the Interurban Spinal Cord Injury Conference; 2-year grant from the Cervical Spine Research Society; 5-year award from the National Institutes of Health; obtained a 2-year renewal on a grant from the Craig H. Neilsen Foundation with Greg Hawryluk; 1-year grant from the Rick Hansen Man in Motion Foundation; 3-year award from the Heart and Stroke Foundation with Alexander Velumian; Wightman-Berris Academy Award for Individual Teaching Excellence, University of Toronto; 2-year grant from The Physicians' Services Incorporated Foundation. Ab Guha received a 1-year grant from National Brain Tumor Foundation; a 3-year NCIC grant; a 5-year grant from CIHR; a 2-year grant from the Brain Tumor Society (BTS) of North America; an RTOG Translational Research Seed Grant; a Schering-Plough Canada Unrestricted Educational Grant; a b.r.a.i.n. Child grant; a 4-year Ontario Institute of Cancer Research (OICR) grant; the Top 40 Alumni – 40 Year Anniversary, The University of Toronto, Mississauga; and a 2-year NCIC Grant.

Robin Humphreys won the Lifetime Achievement Award, AANS/CNS Section on Pediatric Neurological Surgery.

Karen Johnston has been elected to the position of President of Think First Canada.

Soheila Karimi received a Young Investigator Research Grant Award from the AO Spine North America (AOSNA);

Abhaya Kulkarni received a 5-year grant from the National Cancer Institute of Canada; 2-year PSI Foundation Grant.

Andres Lozano received The Order of Spain.

Loch Macdonald received a 1-year grant from the N.I.H.; a 2-year Physicians' Services Incorporated Foundation Award; and another grant from The Physicians' Services Incorporated Foundation.

Eric Massicotte was awarded a two-year AOSpine North America Fellowship Award with Michael Fehlings; 3-year CIHR operating grant.

James Rutka received a 3-year grant from the National Cancer Institute of Canada with Michael Taylor and Paul Kongkham.

Charles Tator is the recipient of the Arbor Award, University of Toronto; Think First Canada has established an annual Lecture Series entitled the "Dr. Charles Tator Annual Summit/Lecture Series on Injury Prevention;" 1-year grant from the McLaughlin Centre for Molecular Medicine with Michael Fehlings; 2-year Research Grant from the Multiple Sclerosis Society of Canada; Distinguished Service Award from the Think First Foundation.

Michael Taylor received a 3-year Sontag Foundation Distinguished Scholar Award; 3-year grant from the National Cancer Institute of Canada with James Rutka and Paul Kongkham; and the Bernard Langer Surgeon-Scientist Award.

Bill Tucker has been appointed as President of the Canadian Medical Protective Association; received an Arbor Award, University of Toronto.

Alexander Velumian received a 3-year award from the Heart and Stroke Foundation with Michael Fehlings; NSERC Grant.

Chris Wallace won an Aikins Award for undergraduate teaching, University of Toronto.

Gelareh Zadeh received a 3-year CIHR Award.

U of T Neurosurgery Lectureships

Dr. Douglas Kondziolka, University of Pittsburgh. Botterell Lectureship.

Dr. Serge Rossignol, University of Montreal. Charles H. Tator-Barbara Turnbull Lectureship.

Dr. Jacques Brotchi, President of the World Federation of Neurosurgical Societies. Keith Lectureship.

Dr. Ann Christine (Tina) Duhaime, Dartmough-Hitchcock Medical Center, Lebanon, New Hampshire. Hendrick Lectureship.

Dr. Peter Carmel, Professor and Chair of the Department of Neurological Surgery, University of Medicine and Dentistry of New Jersey, Guest Speaker. The Hospital for Sick Children.

City-Wide Rounds

Dr. Kim Burchiel, University of Oregon, Toronto Western Hospital.

Dr. Ben Warf, A.I. DuPont Hospital for Children, Wilmington, Delaware, The Hospital for Sick Children.

Dr. Gail Rosseau, The Chicago Institute of Neurosurgery and Neuroresearch, Toronto Western Hospital.

Dr. Robert Harbaugh, Penn State University and Milton S. Hershey Medical Center, Pennsylvania, Sunnybrook Health Sciences Centre. **Dr. Robert Rosenwasser**, Thomas Jefferson University Hospital, Philadelphia, St. Michael's Hospital.

Courses Offered at the Surgical Skills Centre

Lougheed Microvascular Course, April 7-11, 2008. Dr. Michael West, University of Manitoba, Guest Professor.

Neuro-endoscopy Course, February 29, 2008, Dr. Ben Warf, Instructor, A.I. DuPont Hospital for children, Wilmington, Delaware.

Spine Course, June 9-11, 2008. Dr. Eric Massicotte, Course Leader.

Publications by neurosurgery faculty and residents: 164

Visiting Professorships by U of T Faculty: 152

DIVISION OF ORTHOPAEDIC SURGERY

Ben Alman

A.J. Latner Professor and Chair in Orthopaedic Surgery



The 2007-2008 academic year marked a time of strengthening of our division's plans to better integrate fundamental research into the orthopaedic division, and to develop a new educational curriculum. We had a record number of new recruits in the previous year, and these individuals are already working to improve our clinical, educational,

and academic output. We welcomed two new recruits at the end of this academic year, Diane Nam and Jeremy Hall. Both are well known to most of the faculty as former residents in our program. Diane is an accomplished musician, having played with the Toronto Symphony Orchestra. In addition to all of these accomplishments, she has a master's degree, and is completing postdoctoral training into the role of immune modulators in bone repair. She will be working at Sunnybrook, treating trauma, with a special interest in the upper extremity and will continue her research into the fracture repair mechanisms. Jeremy has been working as a clinical associate during the past few years at St. Mike's. He is developing a research program using new image-guided approaches to trauma. Jeremy's practice will focus on trauma, especially on pelvic fractures. We all welcome Diane and Jeremy to our faculty.

Congratulations to our faculty who were successful at academic promotion this year at the university. Mike McKee and Terry Axelrod were promoted to Full Professor; David Backstein and Albert Yee were promoted to Associate Professor; and Paul Wong and George Vincent were promoted to Assistant Professor.

Bill Cole and Cari Whyne, as co-Chairs of our Research Committee, are working hard at organizing the first cohort of residents who will enter their integrated research and clinical year. These residents can use this time towards a graduate degree in the surgeon-scientist program, thus providing a new path for an integrated graduate research training program.

The division continues to excel in publications and presentations, and faculty members had over 250 publications or presentations this academic year. Research funding remains steady, but given the current realities of Canadian Institutes of Health Research (CIHR) funding, our divisional members are continuing to seek alternative funding sources. Despite these challenges, we were successful in receiving 2.9 million dollars in new grant funding. Issac Moss received second prize in the Gallie-Bateman competition this year, for his work on a novel scaffold for tissue engineering an intervertebral disc (supervised by Kimberly Woodside, Cari Whyne, and Albert Yee.)

Our Graduation Day Visiting Professor was Daniel Berry from the Mayo clinic. He gave a fascinating glimpse into new advances in hip arthroplasty bearing surfaces at his Salter lecture. Graduating residents presented their research work to him during the main Graduation Day activities.

We presented two inaugural awards this year. The Lawson Award for Best Academic Resident, as adjudicated by a committee, went to Khaled Elfallah. Venessa Stas received the Messiemi Award for Most Compassionate Resident, voted on by the faculty; and the R.I. Harris Award for the Best Presentation at Graduation Day. The James Waddell Award for the Best PGY 4 Resident was awarded to Bill Ristevski. Unni Narayanan received the Divisional Award for Best Teacher as voted by the residents.

Kurt Spindler (Vanderbilt); Mark Erwin (Toronto); Nick Clarke (Salter visiting professor, Southampton General Hospital, UK); Brian Cole (Chicago); David Pichora (Queens); Kevin Hildebrand (Calgary); Darren Drosdowech (London); Jay Parvizi (Jefferson); John Birch (rank lecturer, TSRH); Graham King (London); and Rami Mosheiff (Hadassah University Hospital) all visited Toronto this year and gave University-wide grand rounds. In addition, Randy Rosier (Rochester University, Department of Orthopaedics) was the department's Gordon Murray speaker at Gallie day this year.

We selected a new name for our Friday morning educational sessions: "Orthopaedic Principles" or "OP Day." This was selected from submissions by Stewart Wright, Richard Hurley and Marilyn Heng (Up Day, Principles of Orthopaedics, and Bone Up Days - note that "OP" sounds like "UP.") We also selected a new symbol/logo for the division, based on a previous design distributed by John Murnaghan, and drafted by Andrew Cabral.

Our faculty received a large number of awards which are too many to mention here, but one special award worth noting was the naming of Joe Schatzker to the order of Canada. We now have three of our divisional members who received this honor, more than any other orthopaedic division in the country.

Bill Kraemer is continuing his stellar job as our Program Director. In addition to recruiting stellar new residents, maintaining a topnotch residency, and a high pass rate at the Royal College examination, he worked to develop a new competency-based curriculum. This has been approved by the University and The Royal College and is on target for a 2009 start. I want to take this opportunity to thank Bill and all of our faculty members who worked on this initiative. This will be the first such curriculum, which will likely be a fundamental improvement over our current residency training model. We continue to have excellent fellowship programs, and there are more clinical fellows training in the division than residents. Albert Yee (Fellowship Director, Sunnybrook) implemented a number of new initiatives to streamline the various fellowship programs and improve integration of the fellows into the University community. The University of Toronto's Division of Orthopaedic Surgery is continuing its long history of excellence in clinical care, teaching, and research. In upcoming years, the division will be working towards developing the first competency-based curriculum, increasing participation in research activities by its faculty and trainees, improved integration of clinical care across the city, and the development of novel improved educational approaches to clinical training.

DIVISION OF PLASTIC SURGERY

Dimitri Anastakis

Chair

The Division of Plastic Surgery has seen a great deal of activity and continued academic success in the past year. As one of the largest Divisions of Plastic and Reconstructive Surgery in North America, we continue to make significant contributions to and lead in the areas of plastic surgery research, education and clinical practice.

Appointments

Congratulations go to:

- Dr. Shar Shahrokhi appointed as Lecturer and Burn Surgeon at the Ross Tilley Burn Centre at Sunnybrook Health Sciences Centre
- Dr. Brett Beber at Toronto East General Hospital for his appointment as Lecturer
- Dr. Paul Binhammer appointed as Head of Plastic Surgery at Sunnybrook Health Sciences Centre
- Dr. Stefan Hofer appointed as Head of Plastic Surgery University Health Network; Wharton Chair in Head and Neck Reconstruction; and Associate Professor, Department of Surgery
- Dr. Leila Kasrai appointed as Head of Plastic Surgery at St. Joseph's Health Centre
- Dr. Mitchell H Brown for taking over from Dr. Ronald Levine as Program Director, Division of Plastic Surgery
- Dr. Joel Fish who took over from Dr. John L Semple as Research Director, Division of Plastic Surgery
- Dr. Dimitri Anastakis for being appointed Vice-Chair Specialty Committee in Plastic Surgery, RCPSC

Awards

Dr. Ronald M. Zuker won the 2007 Art of Listening Award. Dr. Zuker was nominated by the Moebius Syndrome Foundation and was selected from over 50 nominations of different positions.

Dr. Dimitri Anastakis received the 2008 Canadian Association for Medical Education Certificate of Merit Award for his contributions to medical education.

Dr. Joel Fish received the 2008 Charles Tator Award for Research at this year's Gallie Day.

Dr. Karen Cross won (tie for 1st prize) the 2008 Wyeth Award: (Clinical Epidemiology/Education), Supervisor: Dr. Joel Fish, Title: "Redefining the gold standard and establishing a grading system for tissue injury." Dr. Karen Cross also received Honourable Mention in the 2008 Gallie Bateman Award Competition, for the same project.

Dr. Kristen Davidge won second prize in the 2008 Gallie Bateman Award Competition. Supervisor: Dr. Aileen Davis, Title: "Patient expectations for surgical outcome in extremity."

Accomplishments

Dr. Cho Pang (Hospital for Sick Children) had his Canadian Institutes of Health Research (CIHR) grant renewed in the recent CIHR operation grant competition. In this recent round, CIHR only funded the top 16.1% of the applications. Dr. Pang's grant was ranked in the top 7% and was renewed for 5 years!

2008 Hoyle Campbell Visiting Professor

This year's Hoyle Campbell Visiting Professor was Dr. Steven J. McCabe from the University of Louisville.

At this year's Visiting Professor, the award for Best Clinical Paper went to Dr. Laura Snell for her project titled: "Breast Implant Capsules and Subclinical Infection" and the Mentor Best Science Paper Award went to Dr. Vivek Panchapakesan for his project titled: "Level of Evidence in Plastic Surgery Journals."

The recipients of this year's Divisional awards included Dr. Mitchell Brown who received the W.K Lindsay Research Award and Dr. Oleh Antonyshyn who received the Arnis Freiberg Teaching Award.

Continuing Medical Education

The 38th Annual University of Toronto Symposium on Aesthetic Plastic Surgery was held from April 18-19, 2008 at The Sutton Place Hotel. The 8th Annual Toronto Breast Surgery Symposium was held on April 17, 2008 wherein Dr. J. Namnoum was the Royal College of Physicians and Surgeons of Canada lecturer and Dr. S. Spear was the Michael Drever Annual Lecturer. Both of these events were extremely well received and drew large gatherings.

The 2nd Craniofacial Symposium was held on the 9th and 10th of November 2007. The live surgery sessions were held at Sunnybrook Health Sciences Centre and the Hospital for Sick Children while the didactic sessions took place at the Westin Harbour Castle Hotel. The symposium was a great success.

This year's Ralph T. Manktelow Hand Surgery Day was held on October 19, 2007. Dr. Kevin Chung was this year's Visiting Professor.

Website launched

www.uoftplasticsurgery.ca was launched on Friday – May 30, 2008. The website caters to members of the general public, media, corporate stakeholders, faculty, residents, fellows, staff, medical students and prospective students.

Training Program

All four residents graduated from the Program this year. They are Drs. Alexander Golger, Laura Snell, Nasser Al Hodaib and Vivek Panchapakesan.

DIVISION OF THORACIC SURGERY

Shaf Keshavjee

F.G. Pearson - R.J. Ginsberg Chair in Thoracic Surgery

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 Canada. The Toronto Lung Transplant Program continues to be an international leader in clinical activity and

outcomes, having performed over 100 lung transplants in a year. 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 expand activity and expertise in early diagnosis, staging and treatment of early thoracic malignancies, and has continued to advance minimally invasive surgery, for the management of both benign and malignant thoracic conditions.

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 coordination of Dr. Gail Darling, Program Director. The *FG Pearson Award for Best Resident/Fellow Teacher* was awarded to Dr. Pankaj Sengar. The *RJ Ginsberg Award for Best Postgraduate Teacher* was awarded to Dr. Andrew Pierre. The *GE Darling Award for Excellence in Undergraduate Teaching* was also awarded to Dr. Andrew Pierre. The Ross Fleming Surgical Educator Award at University Health Network for 2007-08 was awarded to Dr. Andrew Pierre. The 4th *Annual Pearson Day* was a tremendous success – highlighting the breadth of clinical and basic science research activity in the division. The award for *Best Basic Science Paper* was awarded to Dr. Masaki Sato for his project entitled "The lung becomes a lymphoid tissue after transplantation: A novel paradigm in transplant immunology." (Supervisor: S. Keshavjee). The *McMurrich Award* was awarded to Dr. Marcelo Cypel for his project entitled "Ex-vivo repair of human donor lungs for transplantation." (Supervisor: S. Keshavjee). Dr. Keshavjee was presented with the Lister Prize in Surgery at the 34th Annual Gallie Day.

The Latner Thoracic Research Laboratories continue to be very successful with grant capture and publications. The principal investigators: Keshavjee, Liu, Waddell, de Perrot and Hwang (Pathology) work in areas of lung injury and repair, tissue regeneration, lung transplantation and thoracic oncology. Drs. Keshavjee, Liu and Waddell each maintain highly ranked Canadian Institutes of Health Research operating grants, for their respective research projects. Drs. Marc de Perrot and David Hwang (Pathology) have continued to add significant strength and activity in the group with grant capture and research productivity. Our laboratory program continues to provide an exciting and productive research training environment for graduate students and residents in the Surgical-Scientist Program (MSc, PhD) and for numerous postgraduate fellows from all over the world. Dr. Keshavjee has been awarded the Wyeth Pharmaceutical/ CIHR Research & Development Clinical Research Chair in Transplantation for studies on "Ex-vivo Gene Repair of Injured Donor Lungs for Transplantation."

Our Clinical Research Program also continues to be very productive. Members of our group are significantly involved in clinical trials in lung cancer, benign and malignant esophageal disease, and lung transplantation, with our division members being principal or coprincipal investigators on a number of national and international multicentre trials.

Recruitment, Promotion and Honours

We continue to rebuild the Division with strong recruits and increased cross division academic and service initiatives between the three University hospital divisions, namely: Toronto General, St. Joseph's and Toronto East General Hospitals. Dr. Kazuhiro Yasufuku has been appointed to the position of Assistant Professor in the Division of Thoracic Surgery, University Health Network.

Additional Information

The visiting Professors to the Division of Thoracic Surgery for 2007-08 academic year were as follows:

February 15, 2008

Joel D. Cooper, MD Chair, Division of Thoracic Surgery University of Pennsylvania Philadelphia, Pennsylvania



March 7, 2008 Philippe Dartevelle, MD Head and Director, Department of Thoracic and Vascular Surgery & Heart Lung Transplantation Marie Lannelongue Hospital Paris, France

May 23, 2008 Jean Deslauriers, MD Professor, Division of Thoracic Surgery Faculty of Medicine Laval University Laval, PQ

June 13, 2008 Carolyn E. Reed, MD Professor of Surgery Chief, Section of General Thoracic Surgery Medical University of South Carolina Charleston, South Carolina

DIVISION OF UROLOGY

Sender Herschorn

Martin Barkin Chair in Urological Research

Academic Promotion

Dr. Rob Nam was promoted to Associate Professor.

Transitions

Dr. Tony Khoury left Sick Kids after 20 years for a position at the University of California, Irvine. **Dr. Ethan Grober** joined the division at Mount Sinai and Women's College after completing a fellowship in Andrology at Baylor in Houston, Texas.

SickKids

Dr. Joao Pippi-Salle became the Site Chief of Urology at Sick Kids. He was an invited speaker, surgeon, and visiting professor in many locations around the world. These included Columbia, Kosovo, Brazil, Argentina, Italy, United States and Canada.

He also continued as Director of Continuing Professional Development for the Department of Surgery. He chaired the Annual Sick Kids Pediatric Urology Symposium.

Dr. Darius Bagli received funding for his project entitled "Epigenetic changes in uroepitelium following e-coli infection: New keys to understanding urinary tract infection susceptibility from the Hospital for Sick Children - Research Institute." He was also the invited Slotkin Lecturer at the Northeastern Section of the American Urological Association's Annual Meeting in Rochester, New York.

He became the Deputy Chief of Surgery at Sick Kids and staff coordinator of Urology Resident Research.

Dr. Walid Farhat continued his work in tissue engineering. He received financial support for several of his projects - from the UofT Dean's Fund and Sick Kids Foundation for "Quantitative MRI of Angiogenesis and Cellularization in Tissue Regeneration," from the Cleveland Clinic Foundation for "Biologically Enhanced Fascia Lata for Soft Tissue Repair," from the Ontario Research Fund for the Center for Computer-Assisted Intervention and Innovation; from BioDiscovery Toronto (BDT) for Physiologic Urinary Bladder Simulator (PUBS): novel urinary bladder bioreactor.

He organized and directed the Second Annual North American Pediatric Fellows Laparoscopy Course. He won the A.W. Bruce Faculty Undergraduate Teaching Award.

He was also an invited speaker in Finland and Calgary.

Dr. Armando Lorenzo continued his work in Clinical Epidemiology and minimally invasive pediatric surgery. He was an invited speaker in Argentina and Brazil. He won a Canadian Urological Association Scholarship Award for his project entitled: Patient Satisfaction and Predictors of Outcome in Hypospadias Repair: A Prospective Assessment.

MSH

Dr. Ethan Grober joined the staff at Mount Sinai and Women's College and will focus on Andrology and research in education. He received a Canadian Urological Association Scholarship Award for his project entitled Intra-Operative Objective Structured Assessment of Technical Skill (OSATS): Correlation with Operative and Clinical Patient Outcomes

Dr. Keith Jarvi, site chief at MSH, continued the Male Infertility Program and as Director of the **The Murray Koffler Urologic Wellness Centre (MKUWC)**. Dr. Jarvi again organized with **Dr. Kirk Lo** the Annual Robson Research Day Resident and Fellow scientific presentation contest. He addressed the Canadian Fertility and Andrology Society in Halifax.

He continued work on his project entitled "Use of seminal fluid protein patterns as biomarkers for diseases in the male reproductive tract: Prediction of spermatogenesis in men with azoospermia," funded by the Physicians' Services Incorporated. His co-investigators are **K. Lo, E. Diamandis** and **B. Mullen**.

Dr. Kirk Lo successfully passed his 3-year review and continued his basic infertility research in stem cells. He addressed the Reproductive Endocrinology Fellows in Training Enrichment (REFINE) Program in Banff, Alberta.

Dr. Alexandre Zlotta continued his position as Associate Editor of European Urology, one of the premier international journals in urology.

He was invited speaker and Visiting Professor in France, Greece, Spain, Czech Republic, Italy, Switzerland, Israel and the United States. He won Third Prize for the Best Abstract for Oncology at the European Association of Urology Conference in Milan, Italy.

Prostate Cancer Research Foundation of Canada funded his project entitled, Prevalence and age distribution of prostate cancer carcinoma and its precursor lesions in Caucasion, African and Asian men in autopsy specimens: A prospective comparative international study with central pathology review. His co-investigators are F. Montorsi, A. Alcaraz, D. Pushkar, S. Egawa, C. Schulman, F. Kyabu, **N. Fleshner**, T. Van der Kwast, **T. Finelli** and **K. Jarvi**.



Sunnybrook

Dr. Lesley Carr continued her work as an investigator in an NIH grant to evaluate the efficacy of amitriptyline for the treatment of painful bladder syndrome, and in an industry grant for the use of muscle stem cells in stress urinary incontinence. Dr. Carr was in charge of Journal Seminars for Urology residents.

Dr. Sender Herschorn continued as the Martin Barkin Chair in Urology.

He continued his clinical research in urinary incontinence, neurogenic bladder overactivity and erectile dysfunction. He was invited speaker and lecturer in North America, Brazil, China, Malaysia, Spain, Italy and The Netherlands. He also directed the 15th annual U of T Urology Update. He won two awards for presentations at the Canadian Urological Association Meeting in Edmonton, Alberta.

He was elected Vice-President of the Canadian Urological Association and the Canadian Male Sexual Health Council.

Dr. Laurence Klotz, site chief at Sunnybrook, continued his research in Uro-oncology and his appointments including Editor-in-Chief of the Canadian Urological Association Journal. He continued as Chair of the CURC and the World Uro Oncology Federation, (WUOF).

He continued his many peer-reviewed research projects as well as initiated new work in prostate cancer with funding from NCIC, Ontario Cancer Research Network, CURC, CPCRF, CIHR. He was guest speaker and visiting professor in North America, the Philippines, France, Spain, UK, and Brazil.

He was elected President of the Canadian Urological Association.

Dr. Ron Kodama was appointed Interim Program Director. He organized the 5th Annual Resident Basic Science Course in February. He also directed the annual Urology Fair 2008. He also won the Bruce Tovee Postgraduate Resident Teaching Award, the Peters-Boyd Clinical Teaching/Supervision Award, the Postgraduate Resident Teaching Award – Clinical, and the A.W. Bruce Undergraduate Teaching Award

Dr. Robert Nam was promoted to Associate Professor and continued his research in the genetics of prostate cancer. He was an invited speaker at the SIU GU Oncology Conference in Cape Town, South Africa, and at an educational forum of the CUA in Quebec City.

He continued his work on his peer-reviewed projects and also received new grants. His current funding comes from NCIC and CIHR.

He received the prestigious Early Research Award from the Ministry of Research and Innovation of Ontario, for three years. He won the Royal College of Physicians and Surgeons of Canada College Medal Award in Surgery. He also won the Urology Faculty Postgraduate Teaching Award and the first Michael Jewett Postgraduate Lecture Award.

Dr. Vasundara Venkateswaran continued her basic research in prostate cancer projects funded by CIHR, CPCRF, and NCIC.

UHN - TGH and PMH

Dr. Neil Fleshner continued as site chief at the UHN. He continued his clinical and basic research in prostate cancer with many major peer-reviewed grants from DOD (CDMRP), Ontario Cancer Research Network, CIHR, OICR, CPCRF, CUA/CUOG and NIH.

He was invited speaker at meetings in the United States and Italy. He was on the Scientific Committee of the First World Congress on Controversies in Urology, Barcelona, Spain.

Dr. Michael Jewett continued his clinical and research work in many peer-reviewed funded projects in Uro-Oncology. He continued his work under the CUA/CUOG Bayer Kidney Cancer Fellowship award for renal cell carcinoma. Other projects are funded by CIHR and ORCP 'BioDiscover' Stage I Business and Development.

He was awarded the Wyeth/CIHR Clinical Research Chair in Oncology. He was an invited speaker and/or visiting professor in Canada, the United States, Brazil, Italy, Switzerland, France, and Mexico.

A new divisional award for Best Lecturer to Residents at Urology School was named in his honour. Dr. Rob Nam was the first recipient.

Dr. Michael Robinette continued as the major individual contributing to the multi-organ transplant program at the UHN, specifically in kidney transplants.

Dr. John Trachtenberg continued his active research into novel therapies for prostate cancer with grants from PMH, NCIC, NIH, CPRF and industry. He was invited speaker and Visiting Professor in New York, Austria, and Vancouver.

He co-chaired the 15th Annual Issues and Controversies in Prostate Care in Cancun, Mexico.

Dr. Tony Finelli successfully passed his three-year review. He continued his research projects in renal cancer and in men with negative biopsies for prostate cancer. He also received funding from the Faculty of Medicine for his project entitled "Does directed self-audit of urologists stimulate reflection and improved lymph node retrieval in patients with bladder cancer?"

He was invited speaker in Canada and Venezuela.

UHN - TWH

Dr. Magdy Hassouna continued his basic and clinical work in neurourology and neuromodulation. He was invited speaker at a meeting in Mexico and Visiting Professor in Quebec City. He received funding from the Ontario Neurotrauma Foundation.

Dr. Sidney Radomski, continued his role as the Urology co-ordinator in the Surgical Skills Lab. He conducted hands on sessions for the residents in various minimally invasive topics during the year. He continued his work in peer-review and industry funded grants in incontinence, overactive bladder and erectile dysfunction.

He won the Wightman-Berris Academy Award for Individual Teaching Excellence.

St. Michael's Hospital

Dr. John Honey, site chief at St. Michael's, continued his work as Director of Endourology and the Stone Treatment Centre at SMH. He continued his clinical research studies in lithotripsy. He was course director at a hands-on course at the American Urological Association (AUA) Meeting in Anaheim, California.

Dr. Kenneth Pace continued his work in clinical epidemiology, and on Stone disease and Minimally Invasive Surgery. Dr. Pace directed the 3rd Annual Advanced Laparoscopic Urology Course in advance of Urology Update 2007. He continued as the Fellowship Coordinator for the division of urology.

Dr. Robert Stewart continued as the principal urologist in the kidney transplantation program. He became Urology Residency Program Director and continued as Director of Undergraduate Surgery Education at St. Michael's Hospital.

Academic Events & Awards

The **Annual Charles J. Robson Research Day** was held on April 3rd. The Visiting Professor was Dr. Dan Theodorescu, Professor of Urology at the University of Virginia in Charlottesville and a graduate of the University of Toronto Urology Residency Program.

There were over 25 presentations. Resident Clinical 1st Prize winners were Melise Keays, Bryce Weber and Robert Hamilton. Resident Clinical Honourable Mention Clinical were Sanoj Punnen and Paul Toren. Resident Basic 1st Prize were Sanoj Punnen and Girish Kulkarni. Fellow Clinical 1st Prize went to Geneviève Patry and Luis Braga. Fellow Basic 1st Prize went to Mireia Musquera and Fellow Basic Honourable Mention went to Ahmed Haddad.

The Patrick Harty Award for Excellence in Patient Care was awarded to Dr. Michael Kogon.

Drs. Doreen Chung, Jonathan Chan and Michael Kogon passed their Royal College Examinations.

Visiting Professors

Guests this year included Richard J. Babaian, MD (University of Texas), Gerry Brock, MD, (University of Western Ontario), Francois Haab, MD (University of Paris), Steven Kaplan, MD (Columbia), Pierre Karakiewicz, MD (University of Montreal), John N. Kreiger, MD (University of Washington), Victor W. Nitti, MD (New York University), Michael A. O'Donnell, MD (University of Iowa), Stephen Pautler, MD (University of Western Ontario), Claus Roehrborn, MD (Dallas Southwestern Medical School), Mark Soloway, MD (University of Miami), Urs E. Studer, MD (University of Switzerland).

SURGICAL ALUMNI ASSOCIATION

Dr. Charles H. Tator

President



Thank you. These are the words I express time and again to all of our tremendous supporters who make our success possible. I am referring especially to the success of our surgical trainees in the Surgeon Scientist Program and their supervisors. This past academic year, this support has been manifest in many ways. From the generous donation of an alumni who gives in gratitude for the start in life his education afforded him, to the grateful patient who gives in recognition of the life changing efforts of her surgeon to the retired surgeon who returns to Gallie Day to join in celeb

recognition of the life changing efforts of her surgeon, to the retired surgeon who returns to Gallie Day to join in celebration. All of this support drives our capacity for excellence in research, education and clinical practice.

The Surgical Alumni Association serves two roles: it strives to unite our valued alumni to strengthen their relationship with the University and each other, and it works in a fundraising capacity, raising funds for the renowned Surgeon Scientist Program and other campaigns so crucial to driving our collective success. This past academic year has seen renewed support from many of our alumni helping us to grow financially. For this we thank you and encourage you to continue your support.

This year we have seen yet more gifts by way of bequests and gifts of securities. This year the Department celebrated a \$1,100,000 bequest to the Division of Orthopaedic Surgery from a very generous benefactor, a testament to the enormous impact we can make by leaving a legacy to surgical excellence. As more and more supporters become familiar with these powerful philanthropic tools with their attractive tax and estate benefits, we will likely trend toward more donations in this arena.

My years of service as President of the Surgical Alumni Association have been an honour. While my time as President is over, I am very pleased to continue my involvement under the leadership of our new Surgical Alumni President, Dr. Martin Barkin.

We are immensely fortunate to have such a renowned healthcare leader at the helm of the Association. Dr. Barkin was both President and CEO at Sunnybrook Health Sciences Centre and Chair of the Board. He has served on numerous boards and also played key roles in government, serving as Deputy Minister of Health (1987-1991) and as Secretary of the Premier's Council on Health Strategy. Dr. Barkin also showed excellence in his own research efforts as a trainee and faculty member of the Department of Surgery. Dr. Barkin has already assembled a new slate of members to the Surgical Alumni Association's Advisory Group with representation from each of our surgical specialties, and I look forward to many successful years ahead.

The Surgical Alumni Association is grateful to all of our supporters. Because of the strength of support from our outstanding alumni, as well as current and past Faculty, we continue to thrive and strive in our vision of international leadership in health research, education and surgical practice. One of the jewels in our crown is the Surgeon Scientist Program, and I am confident that it will continue to thrive under Dr. Barkin's leadership of the Surgical Alumni Association.

DIVISION OF VASCULAR SURGERY

Thomas Lindsay

Chair



Introduction

This academic year has witnessed new recruitment efforts at all sites. At St. Michael's Hospital, Dr. Claudio Cina succeeded Dr. Michael Ameli as the Division Head. Dr. Ameli had been the Division Head since the closure of the Wellesley Hospital and the movement of the Division to St. Michael's Hospital. Dr. Cina joined the Division at the

rank of full professor. His academic promotion coincided with his recruitment. Dr. Andrew Dueck returned from an advanced endovascular and interventional fellowship at the Arizona Heart Institute to join the Division of Cardiac and Vascular Surgery at Sunnybrook Health Science Center as an Assistant Professor. The shift to endovascular therapy for all types of aneurysm repair continues to evolve. Advanced endovascular grafts are being introduced at both University Health Network and St. Michael's this year. Branched iliac grafts, fenestrated aortic grafts and branched endovascular cases have already take place. The combined Division of Cardiac and Vascular Surgery at Sunnybrook are also performing endovascular repairs and continue to seek Ministry of Health funding for this activity.

Administration

Dr. Johnston completed a highly successful term as the President of the Society for Vascular Surgery at the June 2008 meeting in San Diego. He is the first Canadian surgeon to hold this post. Dr. Johnston also continues as R. Fraser Elliott Chair in Vascular Surgery and is the co-editor of the new edition of Rutherford's Vascular Surgery. Dr. Daryl Kucey became President of the Canadian Society for Vascular Surgery at the October 2007 meeting in Montreal, Quebec. Dr. Lindsay continues being a member of the Vascular Surgery Examination Board at the Royal College of Physicians and Surgeons. Dr. Rubin continues as the Chairman and CEO for the Mount Sinai Hospital/University Health Network Academic Medical Organization and the University Health Network Mount Sinai Hospital Health Practitioners Funding Group. In addition, he was elected Chair of the Academic Health Science Centre Alternative Funding Plan (AHSC AFP) Governance Organizations and the AHSC AFP Governance Chairs representative on the Academic Medicine Steering Committee which reports to the Physician Services Committee. Dr. Rubin continues as Head of the Division of Vascular Surgery at University Health Network. Dr. Tanner continues as the Head of the Section of Vascular Surgery and the co-Chair of the Hospital On Call Coverage program at the Ontario Medical Association and as a member of the Physician Services Committee. Dr. Andrew Dueck was chosen to be the Vascular Surgery representative on the tariff committee at the Ontario Medical Association. Dr. Rubin continues as a member of the Research and Education committee of the Society for Vascular Surgery, and is a founding member of the Audit Committee. Dr. Lindsay completed his term on the Editorial Board of the Journal of Vascular Surgery and remains a member of the Editorial Board of the Annals of Vascular Surgery and remains a member of the Editorial Board of the Annals of Vascular Surgery.

Graduates

Dr. Giuseppe Papia completed his fellowship training in Vascular Surgery and Critical Care and is pursuing additional training at the Arizona Heart Institute prior to returning to the University of Toronto. Dr. Daragh Moneley completed his fellowship training and returned to Ireland to begin practice. Dr. Nahar Al Nezi completed his fellowship training and is returning to Saudi Arabia to begin practice. Dr. Christiane Werneck also completed her fellowship and will be pursuing further academic training prior to initiating practice.

Education

The Division's Residency Training committee has consolidated both residency and fellowship training applications at all training sites for Vascular Surgery in Toronto. A formal incorporation of certification of vascular trainees in vascular lab investigations has occurred. Dr. Werneck passed the registered vascular technologist (RVT) examination and Dr. Al Nezi passed the vascular interpretation course. Training in interventional techniques continues with Dr. Ron Colapinto at the Toronto Vascular Institute. Dr. Vern Campbell and Dr. Lindsay both continue as the resident and fellow training coordinators at St. Michael's Hospital and the University Health Network. Dr. Oreopoulos continues as the coordinator of the Vascular Surgical resident seminar series.

Research

Dr. Rubin has maintained two major grants from the Canadian Health Institutes of Research and the Heart and Stroke Foundation. Dr. Lindsay's The Physicians' Services Incorporated Foundation (PSI) grant to study complement activation in ruptured abdominal aortic aneurysm in both humans and animals continues. Dr. Wooster received the John L. Provan Award from the Canadian Society for Vascular Surgery for a Canadian Vascular Education Resource Inventory. In addition, he received a University of Toronto Continuing Education Research Grant in regards to AAA screening guideline implementation. Dr. Johnston continues to collaborate with Professor Richard Cobbold (Biomedical Engineering) in Doppler ultrasound and in hemodynamics studies which continues as his major research endeavor. Drs. Lossing and David Courtman are continuing their Heart and Stroke funded research examining the AAA matrix and its function.

Awards

Dr. Vern Campbell won the Donald J. Currie Undergraduate Teaching Award at St. Michael's Hospital for 2007-08. Dr. Lindsay was recognized for this undergraduate teaching by winning a Wightman Berris Academy Undergraduate Teaching Award. Dr. Wooster was awarded both the Donald Fear Fellowship in Continuing Education and the Colin Wolfe Award for long-term contributions to continuing education. Dr. William Johnston presented at the Department of Surgery's Gallie Day Resident research competition and tied for second prize. His talk was titled "Complement Mediated Organ Dysfunction after Ruptured Abdominal Aortic Aneurysm: Evidence from Mice and Humans." His Master's thesis supervisor is Dr. Lindsay.

External Visits and Visitors

Dr. Lindsay was an invited speaker at the Second Scientific Meeting of the Saudi Society for Vascular Surgery in conjunction with the 7th International Symposium on Vascular Surgery Update in Riyadh, Saudi Arabia in January 2008. He presented on Advanced Endovascular Aneurysm Repair and Training Standards for Vascular Fellowship training. Drs. Lindsay and Kucey presented at the Winnipeg Vascular Surgery course in April, 2008. Dr. Wooster presented on the applications of Duplex ultrasound at the VITO meeting in Toronto in April 2008 and was as an invited guest at the University of Rochester Vascular Course in May 2008.

SURGICAL ONCOLOGY

Andy Smith

Head, University of Toronto Surgical Oncology Umbrella Committee



University of Toronto Surgical Oncologists continue to contribute to the academic mandate of the Department of Surgery at the University of Toronto as well as play major roles in helping shape the future of cancer care in Ontario through extensive involvement with Cancer Care Ontario (CCO) programs. A few highlights of the past academic year are outlined below and are reflective of the breadth of activity in cancer surgery in our Department.

Educational efforts continue to thrive at all levels. Dr. Peter Ferguson won the Bruce Tovee Undergraduate Teaching Award. In addition, Peter founded and became the inaugural president of the Canadian Orthopaedic Oncology Society. Fellowship programs continue to thrive and surgical oncologists at all sites continue to be involved in continuing education efforts through the U of T Update in Surgical Oncology and other speciality courses. Drs. Calvin Law, David Urbach and others teach graduate studies in the Faculties of Medicine and HPME. Their efforts in the classroom and as supervisors comprise part of the enterprise focused on training a series of Surgeon Scientists pursuing research in Surgical Oncology.

Dr. Robin McLeod has been extraordinarily active in her leadership role in the Surgical Oncology Program at CCO. Her expertise in evidence-based medicine and implementation has spearheaded ongoing successes for cancer care improvement in Ontario. Several Cancer Care Ontario guidelines bear the imprint of leadership of U of T Surgical Oncologists. Guidelines on prostate cancer, thoracic surgery, colorectal cancer and multidisciplinary case conferences, together with the knowledge translation efforts linked to them, are reflective of a sustained effort to implement evidence-based, best oncological practice widely. Dr. Robert Zeldin has led the development of a Thoracic Surgery centre of excellence at Toronto East General Hospital. TEGH has been designated as a Level 1 Thoracic Centre and the group is also part of the Division of Thoracic Surgery at U of T. Hepatobiliary centres of excellence at UHN and Sunnybrook care for an increasingly complex subset of oncological patients.

In the research domain, U of T Surgical Oncologists contribute substantially and lead nationally. Dr. Laurie Klotz became the Chairman of the World Uro-Oncology Federation and also the President of the Canadian Urological Association. Dr. Robert Nam won the RCPSC Gold Medal for his research on molecular markers which predict the recurrence of prostate cancer. Several investigators continue to amass substantial peer-reviewed awards. Dr. Natalie Coburn has received \$550,000 in NCIC funding to examine optimization of care for gastric cancer patients. Natalie also garnered a career scientist award from the Ministry of Health & Long-Term Care to spearhead improvement of surgical gastric cancer care. Dr. Nancy Baxter received a CIHR operating grant to evaluate outcomes of young adults who develop cancer. Dr. Michael Jewett was awarded a CIHR Chair in Kidney Cancer research.

Finally, human and robotic resource has expanded in U of T Surgical oncology. Dr. Ralph George, a national leader in breast cancer surgery, was recruited to SMH. Dr. Darlene Fenech joined the Colorectal Cancer team at Sunnybrook and Dr. Rebecca Gladdy has joined the ranks of surgical oncologists at Mount Sinai Hospital and will bolster the excellence in sarcoma care in that group. Finally, St. Michael's Hospital and UHN have acquired a robotic surgical system for use in oncological surgery.

CONTINUING PROFESSIONAL DEVELOPMENT

Joao L. Pippi Salle

Director

Continuing professional development [CPD] continues to be a major focus within the department. Most members participate actively in educational programs of all descriptions.

During the period 2007 - 2008, members of the Department of Surgery of the University of Toronto produced the following educational related activities:

Educational related publications: 33

Grants received for educational activities: 30

Honors received by members of department related to their educational activities: 7

The Department of Surgery sponsored 22 continuing educational events managed by the Office of Continuing Education and Professional Development during this period. Traditional events such as The Update in General Surgery 2007, The 48th Annual Course for Practicing Surgeons, Urology Update 2007, The Update in Surgical Oncology 2007, The 8th Biennial Canadian Orthopaedic Foot and Ankle Symposium 2008, The 24th Annual Upper Extremity Update 2008, The 38th Annual Symposium, The Update on Current Topics in Thoracic Surgery and The Update in Aesthetic Plastic Surgery continued to attract a great number of attendees and receive excellent evaluations.



HOSPITAL FOR SICK CHILDREN

Heads of Divisions

Dr. G. Van Arsdell – Cardiac Surgery Dr. J. Langer – General Surgery Dr. J.M. Drake – Neurosurgery Dr. B. Alman – Orthopaedic surgery Dr. C. Forrest – Plastic Surgery Dr. J. Pippi Salle – Urology

James Wright

Surgeon-in-Chief/ Robert B. Salter Chair in Surgical Research



The Department of Surgery at SickKids has six divisions: Cardiovascular Surgery, General Surgery, Orthopaedic Surgery, Neurosurgery, Plastic Surgery and Urology. These divisions are engaged in teaching at all levels, basic and clinical research, and the care of children with complex conditions from Ontario, Canada and worldwide.

The Department of Surgery has had a highly successful year. First, SickKids continues to lead the Canadian Paediatric Surgical Wait Time Project. Health Minister Tony Clement announced in June of 2008 \$9.8M funding for Stage II of the Project to measure wait times for children's surgery in all clinical areas at the 16 paediatric academic Health Sciences Centres across Canada, to expand data collection to community partners, to perform capacity analysis, to develop surgical indications and to share learning on efficiency initiatives.

Second, Premier Dalton McGuinty and Minister of Health and Long-Term Care George Smitherman came to SickKids in 2007 to announce the addition of children's surgery to the Provincial Wait Time Strategy with approximately \$10M in 2008-2009 to perform additional paediatric surgeries across Ontario.

Third, SickKids successfully completed an Alternate Funding Plan renegotiation including funding for a taskforce to develop appropriate acuity measures for complex paediatric care.

New Staff

No new staff came to SickKids in 2007.

Departures

Dr. Tony Khoury, Head, Division of Urology, after a distinguished career at SickKids left to develop a new unit of Paediatric Urology at University of California, Irvine.

Appointments and Promotions

Dr. Darius Bagli was appointed Associate Chief (Clinical) in the Department of Surgery from April 1, 2008 - April 2011.

Dr. Annie Fecteau became Chair of the Ethics Committee at the American Pediatric Surgical Association.

Dr. Ted Gerstle was appointed President of the Medical Staff Association at SickKids on January 25, 2008.

Dr. Abhaya Kulkarni was promoted to Associate Professor, and Scientist in the SickKids Research Institute.

Dr. Joao L. Pippi Salle was appointed Head, Division of Urology at SickKids in April 2008 and Chair of the 3rd International Congress of the International Society of Hypospadias and Intersex Disorders in 2008.

Dr. Michael Taylor was promoted to Scientist in the SickKids Research Institute.

Division of Cardiac Surgery

The Division was a major contributor to the Adult Congenital Heart Symposium that is held in Toronto every three years. Drs. Caldarone and Van Arsdell each lead a multi-disciplinary team to two different cities in China for operative, anesthesia, ICU, and nursing education. A team from Chengdu, China (one of the Chinese sites) spent four weeks observing and interacting at SickKids. Dr. Caldarone published an innovative method for arch repair in hypoplastic left heart stage II hybrid surgery. Dr. Caldarone was appointed to the editorial board of the Journal of Thoracic and Cardiovascular Surgery. Dr. Van Arsdell was appointed to the editorial board of the The Annals of Thoracic Surgery. Each of the three senior Division members continues to hold Heart and Stroke grants. Dr. Coles holds a Canadian Institutes of Health Research (CIHR) grant. Members of the Division published 24 papers.



Division of Neurosurgery

Dr. Michael Taylor is the recipient of a three-year Sontag Foundation Distinguished Scholar Award. Dr. James Rutka has been appointed as a Honourary Member of The Japan Neurosurgical Society. Dr. Peter Dirks received a National Cancer Institute of Canada (NCIC) Award of Excellence in Cancer Research, The Terry Fox Young Investigator Award. Dr. Drake was re-appointed to a second five-year term after a very favorable review by Dr. Jean Pierre Farmer, Surgeon-in-Chief, Montreal Children's Hospital. Members of the Division published 62 papers and presented a total of 33 invited lectures.

Division of Urology

Dr. Joao L. Pippi Salle successfully completed a two-year educational scholarship program (ESP) with the University of Toronto's Continuing Professional Development Program in June 2008. Dr. Darius Bagli successfully completed the Office of Teaching Advancement "The Fundamentals of University Teaching" course in April 2008. Dr. Armando Lorenzo won the Family Advisory Humanitarian award in May 2008. Dr. Walid Farhat was awarded the A.W. Bruce Faculty Undergraduate Teaching Award 2008 from the University of Toronto. Members of the Division published 18 papers and presented a total of 42 invited lectures worldwide.

Division of General Surgery

Dr. Jack Langer received a Schwartz-Reisman traveling fellowship. Dr. Georges Azzie established a tele-mentoring program in collaboration with the University of Botswana. Dr. Peter Kim received renewed funding from CIHR, as well as preliminary funding for the Centre for Image-Guided Innovation and Therapeutic Intervention (CIGITI). Members of the Division published 31 papers and delivered 25 invited lectures worldwide.



Division of Orthopaedic Surgery

The Division of Orthopaedic Surgery celebrated with former patients and their families on November 15, 2007 - its 50th anniversary of being established as a separate division in 1957. The Bone Health Centre was approved in 2008 by the hospital executive. The Centre will be led by Dr. Ben Alman of Orthopaedic Surgery and Dr. Etienne Sochett of Endocrinology. The University of Toronto named Dr. Robert Salter "Giant of Biomedical Science," adding him among those who already hold the title. Dr. Salter is immortalized with a lifesize, bronze bust in the foyer of the Terrence Donnelly Centre for Cellular and Biomolecular Research. Dr. Robert Salter received an Honorary Prime Mentor Award from the Prime Mentors of Canada. Members of the Division published 21 papers.

Division of Plastic Surgery

The Division of Plastic Surgery was saddened to hear of the passing of Dr. W.K. Lindsay in February 2008. Dr. Lindsay was the Division Chief from 1958 to 1986 and worked at SickKids for 47 years. Educational activities during the past year included the 5th Annual Lindsay-Thomson Symposium in Pediatric and the second annual Pediatric/Adult Advanced Craniomaxillofacial Surgery Symposium. Drs. Zuker and Fisher participated in Operation Smile missions to India and Southeast Asia. Dr. Ronald M. Zuker was the co-editor of the second edition of Principles & Practice of Pediatric Plastic Surgery that was published in early 2008. The Division of Plastic Surgery, under the leadership of Dr. Christopher Forrest, underwent a highly successful five-year review by Dr. Bruce Bauer from Children's Memorial Hospital in Chicago. During the past academic year, Divisional members published 27 peer-reviewed papers and participated in 28 invited lectures.

Education

The hospital continues to have an active education program training 139 fellows and residents originating from 31 countries worldwide.

Research

Of 31 surgeons, 21 have funded research programs. The Department is engaged in a wide variety of clinical and basic research supervising many fellows and graduate students.

DIVISION OF CARDIAC SURGERY

Dr. O. Al-Radi – Lecturer Dr. C. Caldarone – Associate Professor Dr. J.G. Coles – Professor Dr. G.S. Van Arsdell – Professor (Division Head) Dr. W.G. Williams – Professor Dr. C. Wittnich – Professor

Publications

Alghamdi AA, Hickey EJ, Williams WG, Dipchand A, Caldarone CA, Coles JG, Oechslin E, Elmi M, Redington AR, Van Arsdell GS: "Inoperable" cyanotic congenital heart disease managed with palliative arteriovenous fistulae can achieve survival in excess of 27 years. Canadian Journal of Cardiology: October 2007: 27: pp 276C.

Alghamdi AA, Van Arsdell GS: Replacement of aortic root and ascending aorta in adult congenital heart disease. Expert Review of Cardiovascular Therapy: November 2007: 5(6): pp 1087-1094.

Alsoufi B, Al-Radi OO, Nazer RI, Gruenwald C, Foreman C, Williams WG, Coles JG, Caldarone CA, Bohn DG, Van Arsdell GS: Survival outcomes after rescue extracorporeal cardiopulmonary resuscitation in pediatric patients with refractory cardiac arrest. Journal of Thoracic and Cardiovascular Surgery: October 2007: 134(4): pp 952-959.e2.

Alsoufi B, Cai S, Coles JG, Williams WG, Van Arsdell GS, Caldarone CA: Outcomes of different surgical strategies in the treatment of neonates with aortic coarctation and associated ventricular septal defects. The Annals of Thoracic Surgery: October 2007: 84(4): pp 1331-1337.

Alsoufi B, Cai S, Van Arsdell GS, Williams WG, Caldarone CA, Coles JG: Outcomes after surgical treatment of children with partial anomalous pulmonary venous connection. The Annals of Thoracic Surgery: December 2007: 84(6): pp 2020-2026.

Alsoufi B, Cai S, Williams WG, Coles JG, Caldarone CA, Redington AM, Van Arsdell GS: Improved results with single-stage total correction of Taussig-Bing anomaly. European Journal of Cardiothoracic Surgery: February 2008: 33(2): pp 244-250.

Arab S, Konstantinov IE, Boscarino C, Cukerman E, Mori A, Li J, Liu PP, Redington AN, Coles JG: Early gene expression profiles during intraoperative myocardial ischemia-reperfusion in cardiac surgery. Journal of Thoracic and Cardiovascular Surgery: July 2007: 134(1): pp 74-81.

Bradley TJ, Karamlou T, Kulik A, Mitrovic B, Vigneswaran T, Jaffer S, Glasgow PD, Williams WG, Van Arsdell GS, McCrindle BW: Determinants of repair type, reintervention, and mortality in 393 children with double-outlet right ventricle. Journal of Thoracic and Cardiovascular Surgery: October 2007: 134(4): pp 967-973.

Caldarone CA, Al-Radi OO: The limits of confidence: At what price a baby's life? Pediatric Cardiology: March 2008.

Caldarone CA, Benson L, Holtby H, Li J, Redington AN, Van Arsdell GS: Initial experience with hybrid palliation for neonates with single ventricle physiology. The Annals of Thoracic Surgery: October 2007: 84(4): pp 1294-1300.

Caldarone CA, Honjo O, Benson LN, Van Arsdell GS: Modification of stage II procedure after hybrid palliation (bilateral) pulmonary artery banding and ductal stenting for hypoplastic left-sided heart syndrome: Modified arch reconstruction with retained stented ductus patch. Journal of Thoracic and Cardiovascular Surgery: December 2007: 134(6): pp 1588-1589.

Dohlen G, Chaturvedi RR, Benson LN, Ozawa A, Van Arsdell GS, Fruitman DS, Lee KJ: Stenting of the right ventricular outflow tract in the symptomatic infant with tetralogy of fallot. Heart: E-published March 10, 2008.

Herrera P, Caldarone CA, Forte V, Campisi P, Holtby H, Chait P, Chiu P, Cox P, Yoo SJ, Manson D, Kim PC: The current state of congenital trachael stenosis. Pediatric Surgical International: November 2007: 23(11): pp 1033-1044.

Hickey EJ, Caldarone CA, Blackstone EH, Lofland GK, Yeh T, Pizarro C, Tchervenkov CI, Pigula F, Overman DM, Jacobs ML, McCrindle BW, and the Congenital Heart Surgeons' Society: Critical left ventricular outflow tract obstruction: The disproportionate impact of biventricular repair in borderline cases. Journal of Thoracic and Cardiovascular Surgery: December 2007: 134(6): pp 1429-1436.

Hickey EJ, McCrindle BW, Blackstone EH, Yeh T, Pigula F, Clarke D, Tchervenkov CI, Hawkins J: Jugular venous valved conduit (Contegra®) matches allograft performance in infant truncus arteriosus repair. European Journal of Cardiothoracic Surgery: May 2008: 33(5): pp 890-898.

Hickey EJ, Wong H, Van Arsdell GS, Williams WG, Caldarone CA, Manlhiot C, McCrindle BW: Determinants of survival and surgical intervention in congenital supra-valvular aortic stenosis: A thirty year experience. Canadian Journal of Cardiology: October 2007: 23: pp 275C.

Honjo O, Merklinger S, Poe J, Gueguerian AM, Alghamdi AA, Takatani S, Van Arsdell GS: A novel mechanical lung assist system sustains primary bidirectional cavopulmonary shunt circulation in pigs. ASAIO (American Society for Artificial Internal Organs): December 2007: 53: pp 720-724.

Karamlou T, Gurofsky R, Bojcevski A, Williams WG, Caldarone CA, Van Arsdell GS, Paul T, McCrindle BW: Prevalence and associated risk factors for intervention in 313 children with subaortic stenosis. The Annals of Thoracic Surgery: December 2007: 84(3): pp 900-906.

Li J, Zhang G, Cai S, Humpl T, Holtby H, Van Arsdell GS, Redington AN, Caldarone CA: Comparison of the profiles of postoperative systemic hemodynamics and oxygen transport in neonates after the hybrid or the Norwood procedure. Circulation: September 2007: 116(11): pp 1179-1187.

Li J, Zhang G, Herridge J, Holtby H, Humpl T, Redington AN, Van Arsdell G: Energy expenditure and caloric and protein intake in infants following the Norwood procedure. Pediatric Critical Care Medicine: January 2008: 9(1): pp 55-61.

Li J, Zhang G, Holtby H, Guerguerian A, Cai S, Humpl T, Caldarone CA, Redington A, Van Arsdell GS: The influence of systemic hemodynamics and oxygen transport on cerebral oxygen saturation in neonates after the Norwood procedure. Journal of Thoracic and Cardiovascular Surgery: January 2008: 135(1): pp 83-90.

Oka N, Wang L, Mi W, Caldarone C: Inhibition of mitochondrial remodeling by Cyclosporin A preserves myocardial performance in a neonatal rabbit model of cardioplegic arrest. Journal of Thoracic and Cardiovascular Surgery: March 2008: 135(3): pp 585-593.

Osaki M, Caldarone CA, Dipchand AI: Extended aortic dissection following aortic cannulation in an infant. Pediatric Cardiology: January 2008: 29(1): pp 232-233.

Osaki M, McCrindle BW, Van Arsdell G, Dipchand AI: Anomalous origin of a coronary artery from the opposite sinus of valsalva with an interarterial course: Clinical profile and approach to management in the pediatric population. Pediatric Cardiology: January 2008: 29(1): pp 24-30.

Quaglietta D, Belanger MP, Wittnich C: Ventricle specific metabolic differences in the newborn piglet myocardium in vivo and during arrested global ischemia. Pediatric Research: January 2008: 63(1): pp 15-19.

Soric S, Askin N, Belanger MP: Female sex hormones modulate liver tissue acidosis during ischemic stress – a study in rats. Transplantation: September 2007: 84(6): pp 763-770.

Soric S, Belanger MP, Wittnich C: A method for decontamination of animals involved in floodwater disasters. Journal of the American Veterinary Medical Association: January 2008: 232(3): pp 364-370.

Soric S, Belanger MP, Wittnich C: Commentary to letter to the editor. Journal of the American Veterinary Medical Association: April 2008: 232(3).

Vogt KN, Manlhiot C, Van Arsdell GS, Russell JL, Mital S, McCrindle BW: Somatic growth in children with single ventricle physiology impact of physiologic state. Journal of the American College of Cardiology: December 2007: 50(19): pp 1876-1883.

Walsh MA, Benson LN, Dipchand AI, Redington AN, Caldarone CA, Van Arsdell GS, Kantor PF: Surgical repair of the mitral valve in children with dilated cardiomyopathy and mitral regurgitation. The Annals of Thoracic Surgery: June 2008: 85(6): pp 2085-2088.

Wittnich C, Belanger MP: How is animal welfare addressed in Canada's emergency response plans? Journal of Applied Animal Welfare Science: April 2008: 11(2): pp 125-132.

Wong D, Benson LN, Van Arsdell GS, Karamlou T, McCrindle BW: Balloon angioplasty is preferred to surgery for aortic coarctation. Cardiology Young: February 2008: 18(1): pp 79-88.

Invited Visits

Caldarone C: 18th International Symposium on Adult Congenital Heart Disease, Toronto, ON, June 2008. (1) Congenital coronary anomalies, (2) Meet the expert session on evolving interventions: Hybrid procedures – are two heads better than one?

Caldarone C: 19th Scientific Sessions of the American Society of Echocardiographers, Toronto, ON, June 2008. Experts session: Corrected transposition of the great arteries: Surgical strategies.

Caldarone C: American College of Cardiology, Meet the Experts Session: Surgical Options for the Child with Pulmonary Vein Stenosis, Chicago, Illinois, March 2008. Evaluation and management of options for the child with pulmonary vein stenosis.

Caldarone C: Society of Thoracic Surgeons, Fort Lauderdale, Florida, January 2008. Experts section: Determination of two-ventricle repair versus single ventricle palliation.

Caldarone C: Sibley Heart Center, Atlanta Children's Hospital, Atlanta, Georgia, November 2007. Single ventricle palliation with a hybrid management strategy: Revising the paradigm.

Caldarone C: Congenital Heart Surgeon's Society, Chicago, Illinois, October 2007. Current studies in the CHSS datacenter.

Caldarone C: Symposium on Evolving Concepts in Management of Congenital Heart Disease, San Diego, California, October 2007. Pulmonary vein stenosis: Prevention and treatment.

Caldarone C: Congenital Heart Surgeon's Society, Warsaw, Poland, September 2007. Timing of intervention for second stage procedures in single ventricle palliation.

Caldarone C: 56th Annual Scientific Sessions, 2007 Annual Meeting, New Orleans, July 2007. Experts session on pulmonary vein stenosis.

Caldarone C: 21st Annual European Association of Cardiac and Thoracic Surgery Meeting, Geneva, Switzerland, July 2007. Sutureless primary repair of TAPVD and sutureless repair of pulmonary vein stenosis.

Coles JG: Sickkids Foundation, Launching of the Canadian Imperial Bank of Commerce (CIBC) Sickkids Leaders Program, Toronto, ON, September 2007. Speaker.

Van Arsdell GS: International Symposium of King Abdulaziz Cardiac Centre, Riyadh, Saudi Arabia, February 2008. (1) Decisions on the margins - small left heart and small right heart, (2) Optimal organization design for congenital cardiac program, (3) Tetralogy of fallot (TOF) annulus preservation alters mid-term outcome.

Wittnich C: Canadian Veterinary Medicine Association (CVMA), Summit, Ottawa, ON, July 2007. A national Canadian animal disaster plan.

Research and Investigations

Senior Investigator's Name Appears in Italics

A transatlantic network to define the mechanisms, mediators and clinical applications of remote ischemic preconditioning. *Redington AR*, Caldarone CA: *Leducq Foundation*. (\$6,523,095 2006 - 2011.)

Analysis of the mechanisms of altered systemic and cerebral oxygen transport in children with hypoplastic left heart syndrome undergoing stage I palliation. *Van Arsdell GS*, Redington A, Li J: *Heart and Stroke Foundation*. (\$235,000 2006 - 2009.)

Apoptosis-related mitochondrial dysfunction in the neonate after cardioplegic arrest. *Caldarone CA: Heart and Stroke Foundation of Ontario*. (\$233,655 2007 - 2009.)

Assessment of heavy metal toxins in Canadian marine mammals. *Wittnich C: Oceanographic Environmental Research Society* (OERS) Seed Grant. (\$15,000 2005 - 2008.)

Device implantation for catheter laboratory completion of the Fontan operation. *Caldarone C: Labatt Family Heart Centre Innovation Fund.* (\$10,000 2008.)

Gender and sex hormones in the heart. Wittnich C: Heart and Stroke Foundation of Ontario. (\$270,000 2004 - 2008.)

Impact of gender on myocardial pathology and ischemia/reperfusion (renewal). *Wittnich C: Heart and Stroke Foundation of Ontario*. (\$249,000 2004 - 2008.)

Kids with coarctation. Caldarone C: Labatt Family Heart Centre Innovation Fund. (\$30,600 2008.)



Late functional status and health-related quality of life in a cohort of survivors with pulmonary atresia intact ventricular septum from the Congenital Heart Surgeons Society Study. *McCrindle BW*, Caldarone CA: *The Children's Heart Foundation*. (\$86,308 2007 - 2009.)

Oxygen stress in the newborn heart. Wittnich C: Heart and Stroke Foundation of Ontario. (\$320,000 2002 - 2007.)

Role of integrin-linked kinase (ILK) in tetralogy of fallot. Coles JG: Canadian Institutes of Health Research. (\$400,700 2008 - 2012.)

The influence of postoperative systemic oxygen transport on neurologic outcomes in infants undergoing the Norwood procedure with a modified Blalock-Taussig shunt or a right ventricle-to-pulmonary artery shunt. *Van Arsdell GS*, Li J, Laughlin S, Christian AM: *Heart and Stroke Foundation of Ontario.* (\$119,000 2007 - 2009.)

The regulation of cellular signaling in cardiac progenitor cells. Coles JG, Hannigan G: Heart and Stroke Foundation. (\$153,599 2006 - 2008.)

The role of sex hormones in myocardial hypertrophy. Wittnich C: Heart and Stroke Foundation of Ontario. (\$270,000 2004 - 2008.)

Honours Received

Caldarone C: Editorial Board, Journal of Thoracic and Cardiovascular Surgery. July 2007.

Caldarone C: Honorary Professorship, Xingxiang University Hospital, Henan Province, China. April 2008.

Wittnich C: Excellence in Undergraduate Teaching in Life Sciences Award, 2008. May 2008.

DIVISION OF GENERAL SURGERY

Dr. G. Azzie – Assistant Professor Dr. P.L. Chiu – Assistant Professor Dr. S.H. Ein – Associate Professor Dr. A.H. Fecteau – Assistant Professor Dr. J.T. Gerstle – Assistant Professor Dr. D. Grant – Professor Dr. P.C.W. Kim – Associate Professor Dr. J.C. Langer – Professor (Division Head) Dr. G.L. Lukacs – Associate Professor Dr. P. Wales – Assistant Professor

Publications

Avitzur Y, Ngan B, Lao V, Ng V, Fecteau H: Prospective evaluation of the prevalence and clinical significance of positive autoantibodies after pediatric liver transplantation. Journal of Pediatric Gastroenterology and Nutrition: August 2007: 45(2): pp 222.

Bonnard A, Zamakhshary M, de Silva N, Gerstle JT: Non-operative management of gastroschisis: A case-matched study. Pediatric Surgery International: June 2008: 24: pp 767-771.

Bonnard A, Zamakhshary M, Ein S, Moore A, Kim P: The utility of the score for neonatal acute physiology-perinatal extension (SNAPP-PEII) in perforated necrotizing enterocolitis: Could it guide therapy in newborns less than 1500g? Journal of Pediatric Surgery: June 2008: 43(6): pp 1170-1174.

Bonnard A, Zamakhshary M, Wales PW: Outcomes and management of rectal injuries in children. Pediatric Surgery International: November 2007: 23(11): pp 1071-1076.

Brindle M, Langer JC: Reoperation after failed fundoplication and other gastric surgeries. In: Reoperative Pediatric Surgery: (Teich S, Caniano DA, eds.) Humana Press, Totowa, New Jersey: 2008: pp 207-218.

Chiu P: Primary survey, secondary survey and adjuncts. In: The SickKids Pediatric Trauma Handbook: (Mikrogianakis A, Cheng, Valani AR, eds.) Lippincourt, Philadelphia: 2007.

Chiu P, Azzie G: Experience of moral distress among pediatric surgery trainees. Journal of Pediatric Surgery: June 2008: 43(6): pp 986-993.

Chiu P, Langer JC: Mediastinal cysts and duplication in infants and children. In: Pearson's Thoracic and Esophageal Surgery, Third Edition: (Pearson FG, Patterson GA, Cooper J, Deslaurier J, Lerut T, Luketich J, Rice T, eds.) Elsevier Health Sciences, Philadelphia: 2008: pp 1562-1580.

Christison-Lagay ER, Hall JF, Wales PW, Bailey K, Terluk A, Goldstein AM, Ein SH, Masiakos PT: Nonoperative management of perianal abscess in infants is associated with decreased risk of fistula formation. Pediatrics: September 2007: 120(3): p3092; E-published August 6, 2007: pp e548-e552.

Crawford MW, Shichor T, Engelhardt T, Adamson G, Bell D, Carmichael FJ, Kim P: The novel hemoglobin-based oxygen carrier, HRC-101, improves survival in murine sickle cell disease. Anaesthesiology: August 2007: 2: pp 281-287.

Diamond IR, Hayes-Jordan A, Phillips MJ, Langer JC: Crohn's disease in a Meckel's diverticulum: Report of a case. Pediatric Surgery International: March 2008: 24(3): pp 361-363. E-published June 20, 2007.

Dasgupta R, Langer JC: Evaluation and management of the child with persistent problems after surgery for Hirschsprung disease. Journal of Pediatric Gastroenterology and Nutrition: January 2008: 46: pp 140-146.

Diamond IR, Fecteau AH, Millis JM, Losanoff JE, Ng V, Anand R, Song C: Impact of graft type on outcome in pediatric liver transplantation: A report from Studies of Pediatric Liver Transplantation (SPLIT). Annals of Surgery: August 2007: 246(2): pp 301.

Diamond IR, Sterescu A, Pencharz PB, Wales PW: The rationale for the use of parenteral omega-s lipids in children with short bowel syndrome and liver disease. Pediatric Surgery International: May 2008: 24(7): pp 773-778.

Draper H, Diamond IR, Temple H, John P, Ng V, Fecteau AH: Multi-modal management of endangering hepatic hemangioma: Impact on transplant avoidance: A descriptive case series. Journal of Pediatric Surgery: January 2008: 43: pp 120-126.



Ein SH, Brindle M: The best 10 clinical articles for the last 50 years from the Division of General Surgery, Hospital for Sick Children, Toronto, Ontario, Canada. Journal of Pediatric Surgery: April 2008: 43: pp 734-739.

Ein SH, Wales PW, Langer JC, Daneman A: Is there a role for routine abdominal imaging in predicting postoperative intraabdominal abscess formation after appendectomy for pediatric ruptured appendix? Pediatric Surgery International: March 2008: 24(3): pp 307-309.

Fecteau AH: Canadian Association of Pediatric Surgeons' position paper on the pediatric surgeon and blood-borne pathogens. Journal of Pediatric Surgery: May 2008: 43(5): pp 936-937.

Fecteau AH: The 39th annual meeting of the Canadian Association of Pediatric Surgeons. Journal of Pediatric Surgery: May 2008: 43(5): pp 940.

Gerstle JT: Perforated appendicitis in children. Audio Digest: May 2008: 55(9).

Herrera P, Caldarone C, Forte V, Campisi P, Holtby H, Chait P, Chiu P, Cox P, Yoo SJ, Manson D, Kim PC: The current state of congenital tracheal stenosis. Pediatric Surgery International: November 2007: 23(11): pp 1033-1044. E-published August 22, 2007.

Jaeggi E, Chitayat D, Golding F, Kim P, Yoo S-J: Prenatal diagnosis of topsy-turvy heart. Cardiology in the Young: June 2008: 18(3): pp 337-342.

Kelly Jr RE, Shamberger RC, Mellins RB, Mitchell KK, Lawson ML, Oldham K, Azizkhan RG, Hebra AV, Nuss D, Goretsky MJ, Sharp RJ, Holcomb 3rd GW, Shim WK, Megison SM, Moss RL, Fecteau AH, Colombani PM, Bagley TC, Moskowitz AB: Prospective multicenter study of surgical correction of pectus excavatum: Design, perioperative complications, pain, and baseline pulmonary function facilitated by internet-based data collection. Journal of the American College of Surgeons: August 2007: 205(2): pp 205-216.

Lausman A, Langer JC, Tai M, Pinnock-Ramsaran C, Van Eyk N, Chitayat D, Seaward PGR, Windrim R, Kelly E, Ryan G: Gastroschisis: What is the gestational age of spontaneous labor? Journal of Pediatric Surgery: November 2007: 42: pp 1816-1821.

Lopushinsky SR, Fowler RA, Kulkarni GS, Fecteau AH, Grant DR, Wales PW: The optimal timing of intestinal transplantation for children with intestinal failure: A Markov analysis. Annals of Surgery: December 2007: 246(6): pp 1092-1099.

Mager DR, Marcon M, Wales PW, Pencharz PB: Use of N-acetyl cysteine for the treatment of parenteral nutrition-induced liver disease in children receiving home parental nutrition. Journal of Pediatric Gastroenterology and Nutrition: February 2008: 46(2): pp 220-223.

Masiakos PT, Goldstein AM, Christison-Lagay ER, Ein SH, Wales PW: Perianal abscesses: In reply. Pediatrics: February 2008: 121(2): pp 447-448.

Nasr A, Ein SH: Postoperative pyloric stenosis in the newborn: A forgotten problem. Journal of Pediatric Surgery: August 2007: 42(8): pp 1409-1411.

Nasr A, Ein SH, Connolly B: Recurrent pyloric stenosis: To dilate or operate? A preliminary report. Journal of Pediatric Surgery: March 2008: 43: pp E17-E21.

Ng V, Anand R, Martz K, Fecteau AH: Liver retransplantation in children: A SPLIT database analysis of outcome and predictive factors for survival. American Journal of Transplantation: February 2008: 8(2): pp 386.

Oliveira C, Zamakhshary M, Marcon P, Kim PC: Eosinophilic esophagitis and intermediate esophagitis after tracheoesophageal fistula repair. Journal of Pediatric Surgery: May 2008: 43(5): pp 810-814.

Olivera C, Zamakhshary M, Abdallah MR, Miller SF, Wales PW, Langer JL, Dasgupta R: Lung torsion after tracheoesophageal fistula repair: A case report and review of literature. Journal of Pediatric Surgery: November 2007: 42(11): pp E5-E9.

Orzech N, Zamakhshary M, Langer JC: Level of evidence in pediatirc miminal access surgery. Laparoendoscopic and Advanced Surgical Techniques: February 2008: 18: pp 140-146.

Chiu P, Langer JC: Mediastinal cysts and duplication in infants and children. In: Pearson's Thoracic and Esophageal Surgery, Third Edition: (Pearson FG, Patterson GA, Cooper J, Deslaurier J, Lerut T, Luketich J, Rice T, eds.) Elsevier, Philadelphia: 2008: pp 1562-1580.

Perger L, Watch L, Weinsheimer R, Fahl J, Azzie G: Laparasocopically supervised peg at time of Nissen fundoplication: A safe option. Journal of Laparoendoscopic and Advanced Surgery Techniques. Part A: February 2008: 18(1): pp 136-139.

Pomerantz BJ, Anupindi S, Wales PW, Doody DP, Masiakos PT: Radiographic reduction of intussusception in patients with cystic fibrosis. Pediatric Surgery International: August 2007: 23(8): pp 763-765.

Samonte VA, Sherman PM, Taylor GP, Carricato MN, Fecteau AH, Ling SC, Ng VL: Scurvy diagnosis in a pediatric liver transplant patient awaiting combined kidney and liver retransplantation. Pediatric Transplantation: April 2008: 12: pp 363.

Skarsgard ED, Claydon J, Bouchard S, Kim PC, Lee SK, Laberge JM, McMillan D, von Dadelszen P, Yanchar N, Canadian Pediatric Surgery Network: A population-based pediatric surgery network and database for analyzing surgical birth defects. The first 100 cases of gastrochisis. Journal of Pediatric Surgery: January 2008: 43(1): pp 30-34.

Wales PW, Brindle M, Sauer CJ, Patel S, De Silva N, Chait P: Percutaneous cholangiography for the treatment of parenteral nutritionassociated cholestasis in surgical neonates: Preliminary experience. Journal of Pediatric Surgery: November 2007: 42(11): pp 1913-1918.

Wales PW, de Silva N, Langer JC, Fecteau A: Intermediate outcomes after serial transverse enteroplasty in children with short bowel syndrome. Journal of Pediatric Surgery: November 2007: 42(11): pp 1804-1810.

Zamakhshary M, Mah K, Mah D, Cameron B, Bohn D, Bass J, Scott L, Kim PC: Physiologic predictors for the need for patch closure in neonatal congenital diaphragmatic hernia. Pediatric Surgery International: June 2008: 24(6): pp 667-670.

Zlotnik SR, Langer JC, McKneally MF: Innovation in medical care: Examples from surgery. In: Bioethics for Clinicians: (Singer PA, Adrian Viens A, eds.) Cambridge University Press, Cambridge, United Kingdom: 2008: pp 194-200.

Invited Visits

Chiu PPL: American Pediatric Surgical Association, Phoenix, Arizona, May 2008. Challenges in management and outcomes of congenital and acquired single lung patients.

Chiu PPL: Pediatric Academic Societies and the Asian Society for Pediatric Research, 2008 Joint Meeting, Hawaii, USA, May 2008. The outcome of infants with congenital diaphragmatic hernia (CDH).

Chiu PPL: American Academy of Pediatrics, Section on Surgery, San Francisco, California, October 2007. Experience of moral distress among pediatric surgery trainees (Chiu P, Hilliard RI, Azzie G, Fecteau A).

Chiu PPL: Congenital Diaphragmatic Hernia - Clinical and Laboratory Research Directions, Houston, Texas, October 2007. (1) Long-term morbidity of CDH survivors - The Ontario experience, (2) Outcomes of CDH - is ECMO necessary?

Ein SH: American Academic of Pediatrics, Clinical Problem Solving Luncheon, Surgical Section Annual Meeting, San Francisco, California, October 2007. Co-Chair (Ein SH, Caty MG).

Ein SH: Canadian Association of Paediatric Surgeons, Annual Meeting, St. John's, NFLD, August 2007. Panel discussion (Moderators: Jones S, Murphy J): 40 years of CAPS - From then to now. (authored by Wiseman N, Ducharme J, Ein SH, Gillis A, and 4 residents.)

Ein SH: Seniors Association of Paediatric Surgeons, Edinburgh, Scotland, July 2007. Speaker: Pediatric surgery all over again.

Fecteau AH: American Pediatric Surgical Association (APSA), Phoenix, Arizona, May 2008. Chair and Symposium Organizer: Professionalism and the pediatric surgeon.

Gerstle JT: King Abdulaziz Medical City, Riyadh, Saudi Arabia, December 2007. Organization of pediatric oncology services at the population level.

Gerstle JT: King Abdulaziz Medical City and Oncology Center, Jeddah, Saudi Arabia, December 2007. Organization of pediatric oncology services at the population level.

Gerstle JT: King Abdulaziz University Medical College and University Hospital, Jeddah, Saudi Arabia, December 2007. MIS and pediatric oncology.

Gerstle JT: King Fahad Armed Forces Hospital, Jeddah, Saudi Arabia, December 2007. Neuroblastoma: A brief review and changes in treatment.

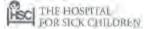
Gerstle JT: King Fahad Medical City, Riyadh, Saudi Arabia, December 2007. MIS and pediatric oncology.

Gerstle JT: Riyadh Pediatric Surgery Club, Riyadh, Saudi Arabia, December 2007. Organization of pediatric oncology services at the population level.

Gerstle JT: 4th Advanced Pediatric MIS Course, Dammam, Saudi Arabia, November 2007. MIS and pediatric oncology.

Gerstle JT: Saudi Scientific Pediatric Surgery Association, Third International Conference, Dammam, Saudi Arabia, November 2007. (1) Neuroblastoma: An update, (2) Pediatric surgery training: Present and future.

Langer JC: Society of American Gastrointestinal Endoscopic Surgeons, Symposium on Gastroesophageal Reflux, Philadelphia, Pennsylvania, April 2008. Indications and techniques for anti-reflux surgery in the pediatric population.



Langer JC: Assaf-Harofeh Medical Centre, Neonatology Rounds, Zerifin, Israel, March 2008. Controversies in the management of necrotizing enterocolitis.

Langer JC: Schneider Children's Hospital, Updates and Controversies in Pediatric Surgery, Petach Tikva, Israel, March 2008. (1) Surgical management of inflammatory bowel disease in children, (2) Treatment of Hirschsprung's disease and persistent post-operative problems, (3) Update on treatment of necrotizing enterocolitis.

Langer JC: National Hospital of Pediatrics, Pediatric Surgery Rounds, Hanoi, Vietnam, December 2007. New concepts in the management of Hirschsprung's disease.

Langer JC: Beijing Children's Hospital, Pediatric Surgery Rounds, Beijing, China, November 2007. New concepts in the management of Hirschsprung's disease, minimal access surgery in children.

Langer JC: Second Affiliated Children's Hospital of Jiaotong University, Pediatric Surgery Rounds, Xi'an, China, November 2007. New concepts in the management of Hirschsprung's disease, minimal access surgery in children.

Langer JC: Shanghai Children's Medical Center, Pediatric Surgery Rounds, Shanghai, China, November 2007. New concepts in the management of Hirschsprung's disease, minimal access surgery in children.

Langer JC: Trauma and Burn Care Symposium, Melaka, Malaysia, November 2007. (1) Conservative management of blunt abdominal trauma in children, (2) Trauma prevention in children.

Langer JC: Universiti Kebangsaan Malaysia, Inaugural Paediatric Surgical Seminar, Kuala Lumpur, Malaysia, November 2007. (1) Current pediatric laparoscopic applications, (2) The future of pediatric minimal access surgery, (3) Thoracoscopic procedures in pediatric surgery.

Langer JC: University of Hong Kong, Pediatric Surgery Rounds, Beijing, China, November 2007. New concepts in the management of Hirschsprung's disease, minimal access surgery in children.

Langer JC: International Pediatric Endosurgical Group, Buenos Aires, Argentina, September 2007. (1) Management of recurrent obstructive symptoms and incontinence after surgery for Hirschsprung disease, (2) Symposium on anorectal malformations.

Kim PCW: King Abdullah Medical Centre, Riyadh, Kingdom of Saudi Arabia, May 2008. The current state of trachael reconstruction.

Kim PCW: University of Alberta, Edmonton, AB, May 2008. Image-guided innovation and therapeutic intervention.

Kim PCW: The Children's Hospital of Eastern Ontario/Sainte-Justine Hospital/Children's Hospital of Montreal/Centre Hospitalier Universitaire Laval/Kingston General Hospital, Combined Rounds, Ottawa, ON, November 2007. State of minimally invasive pediatric surgery in Canada and the role of technology in the future.

Kim PCW: World Federation of Associations of Pediatric Surgeons, II World Congress, Buenos Aires, Argentina, September 2007. Congenital tract stenosis.

Research and Investigations

Senior Investigator's Name Appears in Italics

Can SMOFlipid, a composite parenteral nutrition lipid emulsion, prevent progression of parenteral nutrition associated liver disease in infants with short bowel syndrome? A pilot double-blind randomized controlled trial. *Wales PW*, Pencharz P, Ling S, Feldman B, Diamond IR, Clandinin MR, Van Aerde J: *SMOF Trial*. (\$162,000 2008 - 2010.)

Canadian perinatal surgery network (CAPSNET): Establishing best perinatal practices for gastrochisis and congenital diaphragmatic hernia using a Canadian dataset. *Kim P*, Skarsgard E, Bouchard S, Laberge J-M, McMillan DD, Yanchar NL, Lee SK, Von Dadelsen P: *Canadian Institutes of Health Research*. (\$214,080 2004 - 2008.)

Centre for computer-assisted intervention and innovation. Kim PCW: Ministry of Research and Innovation. (\$3,395,000 2008 - 2012.)

Development of a model of surgical short bowel syndrome utilising the neonatal piglet. *Turner J*, Wales PW, Ball R, Pencharz PP, Van Aerde J, Casey L, Nation N: *Stollery Children's Hospital Foundation Research*. (\$29,223 2007 - 2008.)

Establishment of centre for image-guided innovation and therapeutic intervention (CIGITI). *Kim P: Canadian Foundation for Innovation*. (\$25,000,000 2006 - 2010.)

Functional outcomes after pediatric liver transplantation. Ng VL, Fecteau AH: 1 R01 HD045694-01A1, National Institutes of Health (NIH). (\$125,000 2005 - 2010.)

High impact strategies toward overweight reduction in youth. *McCrindle BW*, Anderson G, Hamilton J, Parkin P, Pencharz PB, Birken CS, Dettmer EL, Langer JC, O'Connor DL, Tein I: *Canadian Institutes for Health Research*. (\$2,420,495 2008 - 2010.)

Image-guided GJ-tube vs. laparoscopic nissen fundoplication with gastrostomy in neurologically impaired children with gastroesophageal reflux: A study examining health related quality of life. *Langer JC*, *Mahant S*, Nicholas D, Connolly B, Friedman J, Wales PW, Ungar W, Pastor A: *Ontario Federation of Cerebral Palsy.* (\$29,097–2007 - 2009.)

Impact of early enteral feeding on splanchnic blood flow after surgery for critical heart disease in the newborn. *Sivarajan VB*, MacDonald CE, La Rotta GE, Caldaron CA, Herridge J, Schwartz SM, Wales PW: *Labbatt Family Heart Centre Innovation Fund.* (\$34,000 2008.)

Intestinal failure in children: A contemporary retrospective review by the pediatric intestinal failure consortium. *Squires RH*, Wales PW: *National Institutes of Health (NIH)*. (\$454,872 2008 - 2010.)

Models and mechanisms of accelerated ageing: P63 regulation of progenitor cells and cellular senescence in intestine. *Kim PCW: Canadian Institutes for Health Research.* (\$517,452 2008 - 2012.)

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

Pediatric Acute Liver Failure (PALF) registry with accompanying NAC study (A double-blinded randomized control trial of N-acetylcysteine for pediatric acute liver failure not due to acetaminophen). *Ng VL*, Fecteau AH: *National Institutes of Health (NIH) U01 KD 072146-01.* (\$54,000 2005 - 2010.)

Predictors for diagnostically accurate ultrasound in children with suspected appendicitis. *Doria A*, Schuh S, Cheng A, Langer JC, Tomlinson G: *Hospital for Sick Children Foundation Grant*. (\$128,783 2006 - 2008.)

Short bowel syndrome: Neonatal piglet models. *Turner J, Wales PW*, Pencharz PB, Ball R: *New Investigator Grants Program, the Hospital for Sick Children Foundation (HSCF), the Canadian Institutes of Health Research, the Institute of Human Development, Child and Youth Health (CIHR/IHDCYH).* (\$125,379 2008 - 2010.)

The effect of intestinal continuity on circulating levels of glucagon-like peptide - 2 (GLP-2) in children. *Wales PW*, Drucker DJ: *Dean's Fund, Faculty of Medicine, University of Toronto*. (\$9,983 2004 - 2009.)

The Fetal Alert Network: Establishment of a population-based antenatal database for pregnancies affected by anomalies. *Kim P: Ministry of Health and Long Term Care, Ontario.* (\$1,100,000 2006 - 2007.)

Honours Received

Ein SH: Simpson - Ein Lecture at The Hospital for Sick Children, Toronto, ON. June 2008.

Gerstle JT: Society for Pediatric Radiology (SPR) 2007 Walter Berdon Award. May 2008.

Gerstle JT: Walter E. Berdon Award for Best Clinical Research Paper, "Pediatric Radiology." May 2008.

Langer JC: Schwartz-Reisman Visiting Scholar, Schneider Childrens Hospital, Israel. March 2008.

Kim PCW: Advanced Health Leadership Program Scholarship to Rotman School of Business. July 2007.

Wales P: Best Clinical Paper, Canadian Association of Pediatric Surgeons, 39th Annual Meeting. August 2007.

Wales P: Best Poster Presentation, Trauma Association of Canada. April 2008.

DIVISION OF NEUROSURGERY

Dr. M. Dennis – Professor Dr. P.B. Dirks – Associate Professor Dr. J.M. Drake – Professor (Division Head) Dr. A.V. Kulkarni – Associate Professor Dr. J.T. Rutka – Professor Dr. M.D. Taylor – Assistant Professor

Publications

Al-Otibi M, Jea A, Kulkarni AV: Detection of important venous collaterals by CT venogram in multisutural synostosis: Case report and review of the literature. Journal of Neurosurgery: December 2007: 107(6 Suppl): pp 508-510.

Barnes MA, Dennis M, Huber-Okrainec J, Johnson A: A model of comprehension in spina bifida myelomeningomyelocele: Meaning, activation, integration and revision. Journal of the International Neuropsychological Society: October 2007: 13: pp 854-864.

Bercovici E, Pang E, Sharma R, Mohamed I, Imai K, Fujimoto A, Ochi A, Viljoen A, Chu B, Holowka S, Chuang S, Kemp S, Rutka JT, Snead CO, Otsubo H: Somatosensory-evoked fields on magnetoencephalography for epilepsy infants younger than 4 years with total ontravenous anesthesia. Clinical Neurophysiology: February 2008: 119: pp 1328-1334.

Dennis M, Barnes MA, Johnson A: Text comprehension in a neurodevelopmental disorder, spina bifida myelomeningocele. In: Children's Comprehension Problems in Oral and Written Language: A Cognitive Perspective: (Cain K, Oakhill J, eds.) Guildford Publications, New York, New York, 2007: pp 193-217.

Dennis M, Hasan KM, Eluvathingal TJ, Kramer LA, Ewing-Cobbs L, Fletcher JM: White matter microstructural abnormalities in children with spina bifida myelomeningocele and hydrocephalus: A diffusion tractography study of the association pathways. Journal of Magnetic Resonance Imaging: April 2008: 27(4): pp 700-709. E-published February 26, 2008.

Dennis M, Huber JF, Bradley K, Spiegler B: Long-term neuromotor speech deficits in survivors of childhood posterior fossa tumors: Effects of tumor type, radiation, age at diagnosis, and survival years. Journal of Child Neurology: July 2007: 22: pp 848-854.

Dennis M, Jewell D, Hetherington R, Brandt M, Blaser SE, Burton C, Fletcher J: Verb generation in children with spina bifida. Journal of the International Neuropsychological Society: March 2008: 14: pp 181-191.

Dennis M, Juranek J, Fletcher JM, Hasan KM, Breier JI, Cirino PT, Alvarez PP, Diaz JD, Ewing-Cobbs L, Papanicolaou AC: Neocortical reorganization in spina bifida. Neuroimage: May 2008: 40(4): pp 1516-1522. E-published February 2008.

Dennis M, Miller E, Widjaja E, Blaser S, Raybaud C: The old and the new: Supratentorial MR findings in Chiari II malformation. Child's Nervous System: May 2008: 24(5): pp 563-575.

Dennis M, Salman MS, Sharpe JA, Lillakas L, Steinbach M: The vestibulo-ocular reflex during active head motion in children and adolescents. Child's Nervous System: November 2007: 23(11): pp 1269-1274.

Dennis M, Yeates KO, Fletcher JM: Spina bifida and hydrocephalus. In: Handbook of Neuropsychology: (Morgan JE, Ricker JH, eds.) Taylor and Francis, New York, New York, 2008.

Depreitere B, Dasi N, Rutka JT, Dirks P, Drake J: Endoscopic biopsy for intraventricular tumors in children. Journal of Neurosurgery: October 2007: 106(5 Suppl): pp 340-346.

Dirks P: Bmi1 and cell of origin determinants of brain tumor phenotype. Cancer Cell: October 2007: 12: pp 3-5.

Dirks PB: Brain tumor stem cells: Bringing order to the chaos of brain cancer. Journal of Clinical Oncology: June 2008: 26: pp 2916-2924.

Dirks PB: Cancer's source in the peripheral nervous system. Nature Medicine: April 2008: 14: pp 373-375.

Drake JM: Surgical management of the tethered spinal cord -- walking the fine line. Neurosurgical Focus: December 2007: 23(2): pp 1-2.

Drake JM: The surgical management of pediatric hydrocephalus. Neurosurgery: April 2008: 62: pp 633-642.

Drake JM, Lo PA, Midha R: Chapter 7: Pediatric plexus injuries. In: Surgery of Peripheral Nerves - A Case-Based Approach: (Midha R, Zager EL, eds.) Thieme Medical Publishers, Inc., New York: 2008: pp 28-32.

Huber JF, Bradley K, Spiegler B, Dennis M: Long-term neuromotor speech deficits in survivors of childhood posterior fossa tumors: Effects of tumor type, radiation, age at diagnosis, and survival years. Journal of Child Neurology: October 2007: 22: pp 848-854.

Hyun Hwang J, Smith CA, Salhia B, Rutka JT: The role of fascin in migration and invasiveness of malignant glioma cells. Neoplasia: February 2008: 10(2): pp 149-159.

Jea A, Al-Otibi M, Rutka JT, Drake JM, Dirks PB, Kulkarni AV, Taylor MD, Humphreys RP: The history of neurosurgery at the Hospital for Sick Children in Toronto. Neurosurgery: September 2007: 61(3): pp 612-624.

Jea A, Drake JM: Chapter 13: Thoracic and lumbar spine injuries. In: The Hospital for Sick Children Manual of Pediatric Trauma (SickKids Handbook): (Wolters Kluwer - Health, ed.) Lippincott Williams and Wilkins, Philadelphia: 2008: pp 177-192.

Jea A, Taylor MD, Dirks PB, Kulkarni AV, Rutka JT, Drake JM: Incorporation of c-1 lateral mass screws in occipitocervical and atlantoaxial fusions for children 8 years of age or younger. Journal of Neurosurgery: Pediatrics: August 2007: 107(2): pp 178-183.

Jea A, Vachhrajani S, Drake JM, Kulkarni AV, Whitehead W: Accurate placement of CSF ventricular catheters with real-time ultrasound guidance in older children without patent fontanelles: Technical note. Journal of Neurosurgery: November 2007: 107: pp 406-410.

Jea A, Vachhrajani S, Widjaja E, Nilsson D, Raybaud C, Shroff M, Rutka JT: Corpus callosotomy in children and the disconnextion syndromes: A review. Child's Nervous System: June 2008: 24(6): pp 685-692.

Jiang W, Kim B, Rutka JT, Chan W: Advances and challenges of nanotechnology-based drug delivery systems. Informa UK: September 2007: pp 621-633.

Jiang W, Kim BYS, Rutka JT, Chan CW: Nanoparticle-mediated cellular response in size-dependent. Nature Nanotechnology: March 2008: 3(3): pp 145-150. E-published March 2, 2008: pp 1-6.

Juranek J, Fletcher JM, Hasan KM, Breier JI, Cirino PT, Alvarez PP, Diaz JD, Ewing-Cobbs L, Dennis M, Papanicolaou AC: Neocortical reorganization in spina bifida. Neuroimage: May 2008: 40: pp 1516-1522.

Kasuga C, Nakahara Y, Ueda S, Hawkins C, Taylor MD, Smith CA, Rutka JT: Expression of MAGE and GAGE genes in medulloblastoma and modulation of resistance to chemotherapy. Laboratory Investigation. Journal of Neurosurgery: Pediatrics: April 2008: 1(4): pp 305-313.

Kulkarni AV, Shams I: Assessment of mother and father concern in hydrocephalus. Quality of Life Research: November 2007: 16: pp 1501-1509.

Kulkarni AV, Shams I: Quality of life in pediatric hydrocephalus: Results from Hospital for Sick Children, Toronto. Journal of Neurosurgery: November 2007: 107: pp 358-364.

Lafay-Cousin L, Bartel U, Raybaud C, Kulkarni AV, Guger S, Huang A, Bouffet E: Neuroradiological findings of bleomycin extravasation in cystic craniopharyngioma. Journal of Neurosurgery: September 2007: 107: pp 318-332.

Mater A, Shroff M, Al-Farsi S, Drake J, Goldman RD: Test characteristics of neuroimaging in the emergency department evaluation of children for cerebrospinal fluid shunt malfunction. Canadian Journal of Emergency Medicine: March 2008: 10(2): pp 131-135.

Miller E, Widjaja E, Blaser S, Dennis M, Raybaud C: The old and the new: Supratentorial MR findings in Chiari II malformation. Child's Nervous System: April 2008: 24: pp 563-575.

Mohamed IS, Otsubo H, Ochi A, Elliott I, Donner E, Chuang S, Sharma R, Holowka S, Rutka JT, Snead 3rd OC: Utility of magnetoencephalography in the evaluation of recurrent seizures after epilepsy surgery. Epilepsia: November 2007: 48(11): pp 2150-2159.

Nilsson D, Rutka JT, Snead 3rd OC, Raybaud CR, Widjaja E: Preserved structural integrity of white matter adjacent to low-grade tumors. Child's Nervous System: March 2008: 24: pp 313-320.

Puget S, Rutka JT: Malignant brain tumors: Two steps forward. Clinical Neurosurgery: November 2007: 54(2): pp 4-9.

Qaddoumi I, Musharbash A, Elayyan M, Mansour A, Al-Hussaini M, Drake J, Swaidan M, Bartels U, Bouffet E: Closing the survival gap: Implementation of medulloblastoma protocols in a low-income country through a twinning program. International Journal of Cancer: March 2008: 122(6): pp 1203-1206.

Ramachandrannair R, Ochi A, Benifla M, Rutka JT, Snead 3rd OC, Otsubo H: Benign epileptiform discharges in rolandic region with mesial temporal lobe epilepsy: MEG, scalp and intracranial EEG features. Acta Neurologica Scandinavica: July 2007: 116(1): pp 59-64.

Salhia B, Hwang JH, Smith CA, Nakada M, Rutka JT, Symons M, Rutka F: Role of myosin II activity and the regulation of myosin light chain phosphoryation in astrocytomas. Cell Motility and the Cytoskeleton: January 2008: 65(1): pp 12-24.



Salman MS, Sharpe JA, Lillakas L, Steinbach M, Dennis M: The vestibulo-ocular reflex during active head motion in children and adolescents. Child's Nervous System: October 2007: 23: pp 1269-1274.

Sasaki-Adams D, Kulkarni AV, Taylor MD, Dirks PB, Rutka JT, Drake JM: Neurosurgical implications of osteogenesis imperfecta in children: Case series and review of the literature. Journal of Neurosurgery: Pediatrics: March 2008: 1: pp 229-236.

Shah N, Ray A, Bartels U, Rutka JT, Bouffet E, Drake JM, Hawkins C, Huang A: Diffuse intrinsic brainstem tumors in neonates: Report of 2 cases. Journal of Neurosurgery: Pediatrics: May 2008: 1(5): pp 382-385.

Watson P, Stinson J, Dostrovsky J, Hawkins C, Rutka JT, Forrest C: Nerve resection and re-location may relieve causalgia: A case report. Pain: November 2007: 132(1-2): pp 211-217.

Yeates KO, Fletcher JM, Dennis M: Spina bifida and hydrocephalus. In: Handbook of Neuropsychology: (Morgan JE, Ricker JH, eds.) Taylor and Francis, New York: 2008.

Invited Visits

Dennis M: National Academy of Neuropsychology, Annual Conference, Scottsdale, Arizona, November 2007. Invited Workshop Lecturer: Brain reserve capacity, cognitive reserve capacity, and age-based functional plasticity after brain injury in children.

Dennis M: Nordic Neuropsychology Society, 9th Annual Meeting, On Speaking Terms with the Brain, Gotenberg, Sweden, August 19, 2007 – August 22, 2007. Invited Lecturer: (1) Hot language and its disorders, (2) Brain reserve capacity, cognitive reserve capacity, and age-based functional plasticity after brain injury in children.

Dennis M: International Neuropsychological Society, Mid-Year Meeting, Bilbao, Spain, July 2007. Invited Workshop Lecturer: Normal and abnormal development of frontal lone structure and function.

Dirks PB: British Association for Cancer Research, Stratford-Upon-Avon, England, June 2008. Chemical genetic interrogation of cancer stem cells.

Dirks PB: Dana Farber Cancer Institute Distinguished Seminars in Oncology Series, Boston, Massachussetts, May 2008. Brain tumor stem cells: Bringing order to the chaos of brain cancer.

Dirks PB: University of California San Francisco/Helen Diller Family Comprehensive Cancer, San Francisco, California, May 2008. Stem cells and cancer symposium: Stem cell hierarchies in brain cancers from genetically engineered mice.

Dirks PB: Banbury Center Conference: How Are We Going To Cure Most Cancers?, Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, March 2008. Cancer stem cells as therapeutic targets.

Dirks PB: American Association for Cancer Research, Special Conference in Cancer Research: The Role of Cancer Stem Cells in the Initiation and Propagation of Tumorigenesis, Los Angeles, California, February 2008. Targeting CSCs in human and mouse brain tumors.

Dirks PB: Nature Chemical Biology Symposium on Chemical Neurobiology, New York, New York, February 2008. Brain tumorigenesis: Insights from the chemical biology of neural precursors.

Dirks PB: Ontario Institute for Cancer Research (OICR), Scientific Annual Meeting, Toronto, ON, February 2008. The cancer stem cell program.

Dirks PB: National Cancer Institute/National Institutes of Health, Bethesda, Maryland, January 2008. Advantages/disadvantages of assays and models for human stem cells: Human CSC in glioblastoma.

Dirks PB: American Association for Cancer Research (AACR), Sixth Annual Frontiers in Cancer Prevention Research, Philadelphia, Pennsylvania, December 2007. Brain tumor stem cells in humans and mice.

Dirks PB: British Columbia Cancer Agency, Annual Meeting, Vancouver, BC, November 2007. Brain tumor stem cells: Moving towards novel therapeutics.

Dirks PB: Harvard Stem Cell Institute, Fourth Annual Tony and Shelly Malkin Stem Cell Symposium, Cancer Stem Cells, Boston, Massachussetts, November 2007. Cancer stem cells at the root of human and mouse brain cancer.

Dirks PB: National Cancer Institute of Canada, 60th Anniversary Conference, Toronto, ON, November 2007. Brain cancer stem cells in mouse and man: Moving towards novel therapeutics.

Dirks PB: American Association for Cancer Research, Chair of the Cancer Stem Cells Session on Molecular Targets and Cancer Therapeutics - Discovery, Biology, and Clinical Applications, San Francisco, California, October 2007. Brain tumor stem cells: Chemical determinants of self renewal.

Dirks PB: Brigham and Women's Hospital, Harvard Medical School, The 2007 International Conference on Glioma Research and Therapy, Boston, Massachussetts, October 2007. The origins of gliomas.

Dirks PB: Institute for Research in Biomedicine, Barcelona, Madrid, October 2007. Identifying brain cancer stem cells in mouse and man.

Dirks PB: Library of Parliament Seminar Series, Ottawa, ON, October 2007. Recent developments in stem cell research.

Dirks PB: Nature/Centro Nacional de Investigaciones Oncologicas Carlos III, Madrid, Spain, October 2007. Brain cancer stem cells in mouse and man.

Dirks PB: American Association of Neurological Surgeons-Congress of Neurological Surgeons (ANS-CNS), Section on Tumors: Biological Diagnostics and Therapies for the 21st Century, San Diego, California, September 2007. Stem cells.

Dirks PB: Congress of Neurological Surgeons Annual Meeting, Neurosurgical Forum, Navigating Basic and Translational Science, San Diego, California, September 2007. The role of neural stem cells in brain tumors.

Dirks PB: Gordon Research Conference on Stem Cells and Cancer, Big Sky, Montana, September 2007. Identification of therapeutics targeting glioblastoma stem cells.

Dirks PB: Miller School of Medicine, University of Miami, Miami, Florida, July 2007. Brain tumor stem cells: Looking towards defining molecular and cellular targets.

Drake JM: Collaborative Pediatric Neurosurgery Research Network (CPNSRN), Meeting for Preliminary Working Group, Jacksonville, Florida, January 2008. (1) Group Leader of Working Group II: Long term protocols, (2) Gave brief presentation during group session.

Drake JM: Intracranial Endoscopy Course II, New York City, New York, November 2007. Endoscopic third ventriculostomy.

Drake JM: Preston Robb Neuroscience Lecture, Montreal, PQ, October 2007. Invited Speaker: Talk on hydrocephalus.

Kulkarni AV: Council of State Neurosurgical Societies, San Diego, California, September 2007. Clinical practice guidelines.

Rutka JT: Canadian Neurological Sciences Federation, 43rd Annual Congress, Victoria, BC, June 2008. (1) Hemispherectomy in children: Role of pathology and surgical technique in predicting patient outcome, (2) Pediatric intracranial epidermoid tumours: The Hospital of Sick Children experience, (3) The paediatric neurosurgical implications of achondroplasia.

Rutka JT: Albany Medical College, Albany, New York, May 2008. Neurosurgical management of rolandic epilepsy in children.

Rutka JT: Canadian Brain Tumour Consortium, Ninth Annual General Meeting of Members, Banff, AB, May 2008.

Rutka JT: University of Louisville, Louisville, Kentucky, May 2008. Visiting Professor. Medulloblastoma: Current treatment and future perspectives.

Rutka JT: Shreveport Medical School, Shreveport, Los Angeles, April 2008. Visiting Professor. Management of rolandic epilepsy in children: Surgical advances.

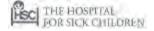
Rutka JT: American Society of Pediatric Neurosurgeons, Los Cabos, Mexico, February 2008. Symposium Moderator: (1) Epilepsy, (2) The role of fascin in the migration and invasiveness of malignant gliomas.

Rutka JT: American Association of Neurological Surgeons and Congress of Neurological Surgeons (ANS/CNS), Section on Pediatric Neurological Surgery, Annual Meeting, South Beach, Miami, November 2007. (1) Invasive recording in pediatric epilepsy, (2) Pediatric surgery update: Clinical aspects, (3) Pediatric epilepsy surgery: Case presentations.

Rutka JT: Neurosurgery Masters Course, Dubai, United Arab Emirates, November 2007. (1) Current and future management of malignant brain tumors in children, (2) Hydrocephalus and normal pressure hydrocephalus (NPH): Management strategies, (3) Intractable epilepsy in children: Diagnosis and surgical decision making.

Rutka JT: Memorial International Neuro-Oncology Forum, Nagoya, Japan, November 2007. Medulloblastoma: Current best treatment and future directions.

Rutka JT: The Sugita Memorial Workshop, Matsumoto, Japan, November 2007. Workshop in matsumoto.



Rutka JT: 12th Asia Australian Congress of Neurological Surgeons, Nagoya, Japan, November 2007. (1) Video seminar: Functional neurosurgery, (2) Glioma: Quo vadis, (3) Quality adjusted life years, (4) Difficult neurosurgery, (5) Medulloblastomas: Novel genetic approaches impacting on outcome, (6) Video session seminar: Management of low grade gliomas of the brainstem in children, (7) Luncheon seminar: The future of neurosurgical oncology: The role of a neurosurgeon.

Rutka JT: American Association of Neurological Surgeons, Board of Directors Meeting, Chicago, Illinois, October 2007.

Rutka JT: Central Nervous System (CNS), 36th Annual Meeting, Quebec, ON, October 2007. Symposium: Initial management.

Rutka JT: The Society of Neurological Surgeons, Research Update in Neuroscience for Neurosurgeons (RUNN) Course, Woodshole, Boston, October 2007. Astrocytoma invasiveness: Molecular mechanism from the leading edge.

Rutka JT: University of Rochester, Rochester, New York, October 2007. 11th Frank P. Smith Visiting Professor. Human malignant brain tumor: Past, present and future perspectives.

Rutka JT: Congress of Neurological Surgeons, San Diego, California, September 2007. (1) Innovative functional mapping technique for resecting cortical tumors in children, (2) Pediatric brain tumor update.

Rutka JT: American Association of Neurological Surgeons, Executive Committee Meeting, Washington, District of Columbia, July 2007.

Taylor MD: European Society for Pediatric Neurosurgery, Montreux, Switzerland, May 2008. What has molecular biology taught neurosurgeons about medulloblastoma?

Taylor MD: Novartis Oncology, Cambridge, Massachusetts, May 2008. Convergence of genetic events in human and murine medulloblastoma.

Taylor MD: Alberta Children's Hospital, Calgary, AB, March 2008. Has molecular biology impacted the therapy of pediatric medulloblastoma?

Taylor MD: Hamilton General Hospital, Hamilton, ON, March 2008. Molecular genetics of medulloblastoma.

Taylor MD: Pediatric Brain Tumor Foundation Annual Retreat, San Diego, California, March 2008. Murine metastatic medulloblastoma driven the sleeping beauty transposon identifies genes and pathways important for tumor initiation, maintenance, and progression.

Taylor MD: Southern Alberta Cancer Research Institute, Calgary, AB, March 2008. Multiple recurrent genetic events target histone lysine methylation in pediatric medulloblastoma.

Taylor MD: University of California at San Francisco, Department of Neurosurgery, San Francisco, California, January 2008. Multiple recurrent genetic events target histone lysine methylation in pediatric medulloblastoma.

Taylor MD: Society for Neuro-Oncology, Dallas, Texas, November 2007. (1) Genomics of medulloblastoma. Past, present and future, (2) Recent advances in the basic science of pediatric brain tumors.

Taylor MD: International Symposium on Pediatric Neuro-Oncology, Taipei, Taiwan, October 2007. (1) Radial glial cells are a candidate cell of origin for ependymoma, (2) Recurrent genetic events in human medulloblastoma converge on histone lysine methylation, neuronal differentiation, and cell adhesion molecules, a high resolution SNP array study of 212 medulloblastomas, (3) Use of transposon mediated mutagenesis to create a novel transgenic mouse model of metastatic medulloblastoma that identifies key genes and pathways important in the initiation, maintenance, and progression of medulloblastoma.

Taylor MD: Congress of Neurological Surgeons, San Diego, California, September 2007. (1) Bioinformatics in neuro-oncology, (2) Molecular biology of pediatric brain tumors.

Taylor MD: International Society for Pediatric Neurosurgery, Liverpool, England, September 2007. Translational research, and how laboratory studies are influencing treatment regimens in pediatric neuro-oncology.

Research and Investigations

Senior Investigator's Name Appears in Italics

A symmetrical self renewal in normal and cancer stem cells of the human brain. *Dirks P: Canadian Institutes of Health Research*. (\$588,180 2008 - 2013.)

Attention and traumatic brain injury. *Hutchison J*, Dennis M, Raybaud C, Shachar R, Perez-Velazquez J: *Ontario Neurotrauma Foundation*. (\$250,000 2007 - 2010.)

Cancer stem cells and cells of origin in mouse experimental brain tumors. Dirks P: National Cancer Institute of Canada. (\$423,000 2006 - 2009.)

Cellular and molecular characterization of cancer stem cells in human brain tumors. *Dirks PB: Canadian Institutes of Health Research*. (\$229,516 2004 - 2007.)

Centre for computer-assisted intervention and innovation (CCAII), project number RE-02-022. *Burns P, Babyn P, Bocking A, Cyril X, Kim P, Laberge J-M, Lymer J, Milgram P, Reznick R, Van Vaals J*, Alman B, Amaral J, Bass J, Bratu I, Chait P, Drake J, Farhat W, Fitzgerald P, Giacomantonio M, Hedden D, Hynynen K, Jones S, Langer J, Newhook P, Ryan G, Sigalet D, Skarsgard E, Yazbeck S: *Ontario Research Fund Research Excellence*. (\$3,395,000 2008 - 2012.)

Centre for the investigation of neuroplasticity in developmental disorders. *Snead C*, Dennis M, et al: *Canada Foundation for Innovation*. (\$7,364,597 2007 - 2011.)

Changes in white matter integrity and cognitive function following cranial radiation for pediatric brain tumors. *Mabbott D*, Bouffet E, Noseworthy M, Laughlin S, Kulkarni AV, Laperriere N, Sharpe M, Montour-Proulx I, Keene D, Briere M, Strother D, Witol A, Wilson B, Chafe S, McConnell D, Hukin J, Fryer C: *National Cancer Institute of Canada*. (\$708,148 2007 - 2012.)

Characterization of amplified oncogenes in pediatric ependymoma. Taylor M: Canadian Institutes of Health Research. (\$467,000 2006 - 2010.)

Children with posterior fossa brain tumours: Quality of life and predictors of outcome. *Kulkarni AV*, Bouffet E: *Brainchild Foundation*. (\$42,685 2006 - 2008.)

Functional genomic dissection of the initiation and progression of medulloblastoma. *Taylor MD: Canadian Institutes of Health Research, Institute of Human Development, Child and Youth Health, and The Sick Kids Foundation.* (\$130,000 2005 - 2007.)

High throughput screening of human brain cancer stem cells. *Dirks P*, Tyers M: *Online Community Research Network (OCRN)*. (\$100,000 2007 - 2008.)

Hydrocephalus clinical research network. *Kestle J*, Drake J, Kulkarni A, Walker M, Riva-Cambrin J, Whitehead W, Wellons J, Oakes J: *Schwab Charitable Fund (Pledged)*. (\$1,000,000 2007 - 2012.)

Hydrocephalus clinical research network. *Kestle J*, Drake J, Kulkarni A, Walker M, Riva-Cambrin J, Whitehead W, Wellons J, Oakes J: *Batterman Foundation*. (\$200,000 2008 - 2009.)

Identification of pathways regulating survival and development of cancer and cancer stem cells. *Guidos C (Project Director)*, Danska J, Dick J, Dirks P, Done S, Egan S, Green D, Hitzler H, Leong W, Mak T, Minden M, Pan J, Vallis K, Beyne J, Howe S, McCready D: *Genome Canada (Total Award for Entire Group 12 million)*. (\$861,956–2006 - 2009.)

Molecular predictors of outcome in infant medulloblastoma. Taylor MD: American Brain Tumor Association. (\$50,000 2007 - 2008.)

Multiple genetic events converge to target histone 3 lysine 9 methylation in pediatric medulloblastoma. *Taylor MD: Sontag Foundation*. (\$500,000 2007 - 2010.)

Mutation of neuronal differentiation genes in medulloblastoma. Taylor MD: National Cancer Institute of Canada. (\$600,442 2007 - 2012.)

Novel genetic approaches to medulloblastoma. Rutka J, Taylor M: Pediatric Brain Foundation of the United States. (\$330,000 2006 - 2009.)

Presurgical assessment of motor function in children. Gaetz WC, Snead OC, Rutka JT: Sick Kids Foundation. (\$150,000 2007 - 2009.)

Role of hedgehog signaling in the pathogenesis of medulloblastoma. *Rutka JT*, Taylor MD: *National Cancer Institute of Canada*. (\$450,000 2005 - 2008.)

Social outcomes in pediatric traumatic brain injury. *Dennis M (Toronto Site)*, Yeates K (Ohio Site), Taylor HG: *National Institutes of Health*. (\$1,000,000 2005 - 2010.)

Spina bifida: Cognitive and neurobiological variability (competing continuation.) *Dennis M (Toronto Site)*, Fletcher JM (Houston Site): *National Institutes of Health*. (\$1,600,000 2005 - 2010.)

The determinants of health in children with hydrocephalus. *Kulkarni AV*, Donnelly R: *Canadian Institutes of Health Research (CIHR)* and Hospital for Sick Children Foundation. (\$94,536 2005 - 2007.)

The effect of hospital admissions on children with hydrocephalus. *Kulkarni AV: RR Graham Scholarship, Department of Surgery, University of Toronto.* (\$75,000 2007 - 2010.)



The influence of postoperative systemic oxygen transport on neurologic outcomes in infants undergoing the Norwood procedure with a modified Blalock-Taussig shunt or a right ventricle-to-pulmonary artery shunt. *Van Arsdell G*, Li J, Dennis M: *Heart and Stroke Foundation*. (\$236,000 2007 - 2011.)

The role of cytoskeletal GTPases in astrocytoma migration. Rutka JT: Canadian Institutes of Health Research. (\$500,000 2004 - 2009.)

Understanding the brain tumorigenic process: Focus on cancer stem cells. Dirks P: National Cancer Institute of Canada. (\$564,000 2007 - 2011.)

Honours Received

Dennis M: Sick Kids Psychology Mentorship Award. June 2008.

- Dirks PB: Terry Fox Young Investigator Award, National Cancer Institute of Canada. February 2008.
- Taylor MD: Bernard Langer Surgeon-Scientist Award. May 2008.

Taylor MD: Sontag Foundation Distinguished Scholar Award. October 2007.

DIVISION OF ORTHOPAEDIC SURGERY

Dr. B.A. Alman – Professor (Division Head) Dr. W.G. Cole – Professor Dr. S. Hopyan – Assistant Professor Dr. A. Howard – Associate Professor Dr. U.G. Narayanan – Assistant Professor Dr. R.B. Salter – University Professor Dr. J.H. Wedge – Professor Dr. J.G. Wright – Professor Dr. R. Zeller – Associate Professor

Publications

Alman BA: Skeletal dysplasias and the growth plate. Clinical Genetics: January 2008: 73(1): pp 24-30.

Alman BA, Bueno R: Generalized systemic conditions that affect the hand. In: Principles and Practice of Pediatric Plastic Surgery (PPPPS): (Bentz M, Zuker R, Bauer B, eds.) QMP, St. Louis: 2008.

Borkhoff C, Hawker GA, Kreder HJ, Glazier RH, Mahomed NN, Wright JG: The effect of patients' sex on physicians' recommendations for total knee arthroplasty. Canadian Medical Association Journal: March 2008: 178(6): pp 681-687.

Chen Y, Whetstone HC, Lin AC, Nadesan P, Wei Q, Poon R, Alman BA: Beta-catenin signaling plays disparate role in different phases of fracture repair: Implications for therapy to improve bone healing. PLOS Medicine: July 2007: 4(7): pp e-249.

Chundamala J, Wright JG: The efficacy and risks of utilizing povidone-iodine irrigation to prevent surgical site infection: An evidence-based review. Canadian Journal of Surgery: December 2007: 50(6): pp 473-481.

Easson AM, Bezjak A, Ross S, Sam F, Wright JG: The ability of existing questionnaires to measure symptom change after paracentesis for symptomatic ascites. The Annals of Surgical Oncology: August 2007: 14(8): pp 2348-2357.

Ferri de Barros F, Howard AW: Orthopaedics. In: The Hospital for Sick Children Handbook of Pediatrics, 11th Edition: (Dipchand A et al, eds.) Saunders, Toronto: 2008.

Hamdy RC, Monpetit K, Ruck-Gibbs J, Thorstad K, Raney E, Aiona M, Platt R, Finley A, MacKenzie W, McCarthy J, Narayanan U: Safety and efficacy of botox injection in alleviating post-operative pain and improving quality of life in lower extremity limb lengthening and deformity correction. Trials: September 2007: 8(1): pp 27.

Howard A, Donaldson S, Hedden D, Stephens D, Alman B, Wright J: Improvement in quality of life following surgery for adolescent idiopathic scoliosis. Spine: November 2007: 32(24): pp 2715-2718.

Janicki J, Alman BA: Scoliosis: Review of diagnosis and treatment. Paediatrics and Child Health: November 2007: 12(9): pp 771-776.

Kolski HK, Hawkins C, Zatz M, de Paula F, Biggar D, Alman B, Vajsar J: Diagnosis of limb-girdle muscular dystrophy 2A by immunohistochemical techniques. Neuropathology: June 2008: 28(3): pp 264-268.

Krishnamurthy G, Conolly BL, Narayanan U, Babyn PS: Imaging findings in external snapping hip syndrome. Pediatric Radiology: December 2007: 37(12): pp 1272-1274.

Mercado E, Alman B, Wright JG: Does spinal fusion influence quality of life in neuromuscular scoliosis? Spine: September 2007: 32(19 Suppl): pp 120-125.

Owen JL, Stephens D, Wright JG: Reliability of hip range of motion using goniometry in pediatric femur shaft fractures. Canadian Journal of Surgery: August 2007: 50(4): pp 251-255.

Ramseier LE, Bhaskar AR, Cole WG, Howard AW: Treatment of open femur fractures in children: Comparison between external fixator and intramedullary nailing. Journal of Pediatric Orthopaedics: October 2007: 27(7): pp 748-750.

Salter RB, Thomas SR, Wedge JH: Outcome at forty-five years after open reduction and innominate osteotomy for late-presenting developmental dislocation of the hip. The Journal of Bone and Joint Surgery: November 2007: 89(11): pp 2341-2350.

Sato M, Liu M, Anraku M, Ogura T, D'Cruz G, Alman BA, Waddell TK, Kim E, Zhang L, Keshavjee S: Allograft airway fibrosis in the pulmonary milieu: A disorder of tissue remodeling. American Journal of Transplant: March 2008: 8(3): pp 517-528.



Silkstone D, Hong H, Alman BA: Beta - catenin in the race to fracture repair: In it to Wnt. Natural Clinical Practice Rheumatology: E-published June 17, 2008.

Tjandra S, Hsu C, Goh I, Gurung A, Poon R, Nadesan P, Alman BA: Interferon beta signalling positively regulates tumorigenesis in aggressive fibromatosis, potentially by modulating mesenchymal progenitors. Cancer Research: August 2007: 67(15): pp 7124-7131.

Toiviainen-Salo S, Mayranpaa MK, Durie PR, Richards N, Grynpas M, Ellis L, Ikegawa S, Cole WG, Rommens J, Marttinen E, Savilahti E, Makitie O: Shachman-Diamond syndrome is associated with low-turnover primary osteoporosis. Bone: December 2007: 41: pp 965-972.

Trippel SB, Bosse MJ, Heck DA, Wright JG: Symposium. How to participate in orthopaedic randomized clinical trials. Journal of Bone and Joint Surgery (American): August 2007: 89(8): pp 1856-1864.

Wattie N, Cobley S, MacPherson A, Howard AW, Montelpare WJ, Baker J: Injuries in Canadian youth ice hockey: The influence of relative age. Pediatrics: July 2007: 120: pp 142-148.

Wright JG, Alman B, Mercado E: Does spinal fusion influence quality of life in neuromuscular scoliosis? Spine: September 2007: 32(Supp1 9): pp S120-S125.

Wright JG, Donaldson S, Howard A, Stephens D, Alman B, Hedden D: Are surgeon's preferences for instrumentation related to patient outcomes? A randomized clinical trial of two implants for idiopathic scoliosis. Journal of Bone and Joint Surgery (American): December 2007: 89(12): pp 2684-2693.

Wright JG, Yandow S, Donaldson S, Marley L, Simple Bone Cyst Trial Group: A randomized clinical trial comparing intralesional bone marrow and steroid injections for simple bone cysts. Journal of Bone and Joint Surgery (American): April 2008: 90(4): pp 722-730.

Wu C, Alman BA: Side population cells in human cancers. Cancer Letters: May 2008.

Wu C, Wei Q, Utomo V, Nadesan P, Whetstone H, Kandel R, Wunder JS, Alman BA: Side population cells isolated from mesenchymal neoplasms have tumor initiating potential. Cancer Research: September 2007: 67(17): pp 8216-8222.

Wunder JS, Nielsen TO, Maki RG, O'Sullivan B, Alman BA: CYP3A4/5 and pharmacogenetics in patients with sarcoma - Authors' reply. Lancet Oncology: August 2007: 8(8): pp 668-669.

Wyngaarden LA, Hopyan S: Plasticity of proximal-distal cell fate in the mammalian limb bud. Developmental Biology: January 2008: 313(1): pp 225-233.

Yan T, Angelini M, Alman BA, Andrulis IL, Wunder JS: Patched-one or smoothed gene mutations are infrequent in chondrosarcoma. Clinical Orthopaedics and Related Research: June 2008.

Invited Visits

Alman BA: Canadian Orthopaedic Association and American Orthopaedic Association, Joint Annual Meetings, Quebec City, PQ, June 2008. Obesity in paediatric orthopaedic patients.

Alman BA: Infinity Pharmaceuticals, Boston, Massachusetts, June 2008. Hedgehog in cartilage tumour.

Alman BA: Desmoid Tumor Research Foundation, Gala Fundraiser, Newark, New Jersey, May 2008. Targeting the roots: A role for stem cells in desmoid tumors.

Alman BA: Los Angeles Children's Hospital, Grand Rounds, Los Angeles, California, April 2008. Is newer really better? A role for traction and the unit rod in scoliosis.

Alman BA: Los Angeles Orthopaedic Hospital, Los Angeles, California, April 2008. (1) Cutting out the roots: New treatments for sarcomas based on cancer stem cells, (2) Duchenne muscular dystrophy: Basic science makes a difference in orthopaedics, (3) Keeping track of syndromes. A classification based on genetic etiology.

Alman BA: University of California Los Angeles (UCLA), Neuroscience and Cancer Program, Los Angeles, California, April 2008. Seeding sarcomas: Tumor initiating cells in mesenchymal tumors.

Alman BA: American Association of Orthopaedic Surgeons - Paediatric Orthopaedic Association of North America (AAOS-POSNA), POSNA Speciality Day, San Francisco, California, March 2008. Top 10 basic science advances that will change clinical practice in the next 10 years.

Alman BA: American College of Medical Genetics, Annual Meeting, Phoenix, Arizona, March 2008. Congenital scoliosis and kyphosis.

Alman BA: University of California, International Conference on Neural Signaling, San Francisco, California, February 2008. Interactions between PTHrP and hedgehog signaling: Lessons from cartilage development

Alman BA: American Association of Orthopaedic Surgeons (AAOS), 4th Annual International Paediatric Orthopaedic Symposium (IPOS), Orlando, Florida, November 2007. (1) Benign bone tumors and lesions, (2) Congenital short femur: Management principles, (3) Muscular dystrophy: Management principles, (4) Simple bone cyst treatment principles.

Alman BA: King Faisal Specialist Hospital and Research Centre, Orthokids International Symposium, Riyadh, Saudi Arabia, November 2007. (1) Ankle injuries in children, (2) Bone dysplasias and the orthopaedic surgeon, (3) Osteogenesis imperfecta: Update on etiology, medical and surgical management.

Alman BA: University of Calgary, Townsend Lectureship, Calgary, AB, October 2007. (1) A classification of genetic disorders of interest to orthopaedics, (2) Newer is not always better: Traction and the unit rod in scoliosis management, (3) Scoliosis in muscular cystrophy: A case for basic science in orthopaedics.

Alman BA: University of Calgary Research Institute, Calgary, AB, October 2007. From fibroblasts to fracture healing: Beta-catenin in mesenchymal cells.

Alman BA: University of Leuven, Department of Genetics, Leuven, Belgium, October 2007. From fracture to cancer stem cells: Beta-catenin in mesenchymal cells.

Alman BA: University of Ottawa, Research Institute, Ottawa, ON, October 2007. From tumors to development: Lessons learned about hedgehog signalling from sarcomas.

Cole WG: Australian Paediatric Orthopaedic Society, Annual Scientific Meetings, Melbourne, Brisbane, October 2007. Royal AustralasianVisiting Professor: (1) Allied health professional contributions to the delivery of pediatric orthopaedic care, (2) Classification of congenital deformities, (3) Master class: Management of leg length discrepancy, (4) Moderator of mini symposium on musculoskeletal infection, (5) New developments in treatment of osteoporosis, (6) Prevention of joint destruction from arthritis – good outcomes for rheumatoid arthritis – poor outcomes for osteoarthritis.

Cole WG: Iranian Orthopaedic Association, Tehran, Iran, October 2007. Presidential Guest Speaker.

Cole WG: International Society of Prosthetics and Orthotics, Symposium, Vancouver, BC, August 2007. Congenital lower limb deficiences: Surgical and prosthetic management.

Howard A: Ahmedabad Orthopaedic Association, Ahmedabad, India, December 2007. Idiopathic scoliosis.

Howard A: Apollo Hospital, Ahmedabad, India, December 2007. (1) Paediatric femoral fractures, (2) Congenital scoliosis.

Howard A: Association of Bone and Joint Surgeons, Carl T. Brighton Workshop, Ahmedabad, India, December 2007. Global access to health research.

Howard A: College of Surgeons of East, Central and Southern Africa, Mombasa, Kenya, December 2007. (1) Ptolemy user's workshop, (2) Ptolemy's trainer workshop.

Howard A: Finnish Paediatric Surgery Society, Helsinki, Finland, November 2007. (1) International surgery, (2) Child occupant injury in motor vehicle crashes.

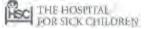
Howard A: Hospital for Children and Adolescents, University of Helsinki, Helsinki, Finland, November 2007. (1) Preventing fractures in childhood sports and leisure, (2) Upper extremity fracture management.

Narayanan UG: Paediatric Orthopaedic Society of North America, Albuquerque, New Mexico, April 2008. Impact of musculoskeletal co-morbidities on the health related quality of life of children with severe non-ambulatory cerebral palsy.

Narayanan UG: St. Justine Pediatric Orthopaedic Review Course, Montreal, PQ, March 2008. (1) Fractures of the forearm in children: Everything you need to know about Monteggia, Galeazzi and other forearm fractures of children, (2) Osteomyelitis in children, (3) Management of the ambulatory child with cerebral palsy, (4) What's new in pediatric orthopaedics?

Narayanan UG: Schneider Children's Medical Center, 4th Conference of the Assessment and Treatment of the Neuromuscular Child, Petah Tikvah, Tel Aviv, Israel, February 2008. Visiting Professor/Lecturer: (1) Management of the ambulatory child with cerebral palsy, (2) Orthopaedic management of non-ambulatory cerebral palsy, (3) The Gait analysis debate.

Narayanan UG: University of Tel Aviv, Grand Rounds, Department of Orthopaedic, Tel Aviv, Israel, February 2008. Visiting Professor/Lecturer: (1) Evidence-based medicine: A prescription for orthopaedic surgeons, (2) Injuries of the growth plate.



Narayanan UG: HARMS Spine Study Group, Beaver Creek, Colorado, January 2008. Measuring health related quality of life in children with cerebral palsy.

Narayanan UG: Harvard Combined Orthopaedic Resident Educational Program, Boston, Massachusetts, December 2007. Visiting Professor/Lecturer: (1) Evidence-based medicine: A prescription for orthopaedic surgeons?, (2) Whose life is it anyway? Measuring meaningful outcomes for children with severe disabilities.

Narayanan UG: 4th Annual International Pediatric Orthopaedic Symposium, Orlando, Florida, November 2007. (1) Lower limb deformity and limb length inequality: Essentials of pediatric orthopaedics Part I, (2) Point counterpoint debate: Single event multilevel orthopaedic surgery for ambulatory cerebral palsy, (3) Case-based panel discussion on the management of pediatric lower extremity fractures, (4) Hip instability in cerebral palsy.

Narayanan UG: Argentinian Society of NeuroOrthopaedics, the American Academy of Cerebral Palsy and Developmental Medicine, IXth International Congress, Buenos Aires, Argentina, November 2007. Invited Speaker: (1) What matters? Measuring health related quality of life in children with severe cerebral palsy, (2) Orthopaedic management of hip instability in cerebral palsy, (3) The Gait debate: Does decision making based on Gait analysis result in improved functional outcomes for children with ambulatory cerebral palsy?, (4) Evidence-based medicine: A new prescription for pediatric orthopaedic surgeons?, (5) Management of the foot and ankle in cerebral palsy.

Narayanan UG: Grandview Children's Rehabilitation Centre, Oshawa, ON, November 2007. Back to the basics: An update on the management of clubfeet.

Narayanan UG: American Academy of Cerebral Palsy and Developmental Medicine, 61st Annual Meeting, Vancouver, BC, October 2007. (1) Instructional course lecture: Measuring the quality of life of children with cerebral palsy, (2) Rates of utilization of gait analysis for decision making in ambulatory cerebral palsy in North America, (3) Does the health status of caregivers influence their perception of the health related quality of life (HRQL) of children with severe non-ambulatory cerebral palsy?

Narayanan UG: 2nd Paediatric Orthopaedic Society of North America - Association of South East Asian Nations (POSNA-ASEAN) Pediatric Orthopaedic Review Course, Singapore, August 2007. (1) Early diagnosis and management of developmental dysplasia of the hip in infants, (2) Hip dislocation in cerebral palsy, (3) Evidence-based medicine: A prescription for paediatric orthopaedicsm, (4) Workshop: Ponseti method of management of clubfeet, (5) Tarsal coalition.

Wedge JH: Royal Victoria Hospital, Surgical Rounds, Barrie, ON, June 2008. Orthopaedics for the paediatricians: The bare essentials.

Wedge JH: Great Ormond Street Hospital for Children, Department of Orthopaedic Surgery, London, England, May 2008. (1) Acetabular dysplasia in adolescents and young adults, (2) Controversies in the management of developmental dysplatia of the hip (DDH).

Wright JG: American Academy of Orthopaedic Surgeons, International Pediatric Orthopaedic Symposium, Orlando, Florida, November 2007. (1) Pescavus, (2) Orthopaedic management of spina bifida.

Zeller R: Paradigm Spine GmbH, Miami, Florida, May 2008. GSP: A novel non-fusion implant for the treatment of congenital scoliosis: A personal historical experience.

Zeller R: Paradigm Spine GmbH, Geneva, Switzerland, May 2008. GSP: A novel non-fusion implant for the treatment of congenital scoliosis: A personal historical experience.

Zeller R: European Paediatric Orthopaedic Society, Sorrento, Italy, April 2008. How to manage complex spinal deformities without vertebral resections.

Zeller R: International Symposium on Thoracolumbar Spinal Diseases, Jaipur, India, February 2008. Direct vertebral derotation (DVD): A new way to correct spinal torsion in scoliotic deformities.

Zeller R: 1st International Congress on Early Onset Scoliosis and Growing Spine (ICEOS), Madrid, Spain, November 2007. (1) Casting for EOS, (2) GSP: A novel non-fusion implant for the treatment of congenital scoliosis: A personal historical experience.

Zeller R: Fondation Garches XXes Entretiens Annuels, Paris, France, November 2007. Amyotrophie spinal infantile: Prise en charge orthopedique (Spinal muscular atrophy: Surgical treatment of spinal deformities: A personal experience of 100 cases operated.)

Zeller R: Paradigm Spine GmbH, Brussels, Belgium, October 2007. GSP: A novel non-fusion implant for the treatment of congenital scoliosis: A personal historical experience.

Zeller R: Quebec Scoliosis Society, Montreal, PQ, October 2007. (1) DVD: A new technique for spinal deformity, (2) Revision surgery for spinal deformity in adolescents.

Zeller R: Scoliosis Research Society, Edinburgh, Scotland, September 2007. Treatment of congenital scoliosis - Non-operative adjuncts.

Research and Investigations

Senior Investigator's Name Appears in Italics

A randomized controlled trial of splint versus cast in children with minimally angulated wrist fractures. *Boutis K*, Willan A, Howard A, Babyn P, Goeree R: *Hospital for Sick Children Foundation*. (\$129,775 2007 - 2009.)

American Academy for Cerebral Palsy and Developmental Medicine (AACPDM) Research Group Project: Evaluating outcomes associated with multi-disciplinary care for children with cerebral palsy using clinical practice improvement (CPI) methodology. *Damiano D*, Narayanan UG, Fehlings D (Toronto PIs); Other investigators from multiple North American and Australian sites: *American Academy of Cerebral Palsy and Developmental Medicine*. (\$29,000 2006 - 2007.)

An evaluation of the long term effectiveness of botulinum toxin in children with spastic cerebral palsy. *Fehlings D*, Narayanan UG, Rosenbaum P, Wright V, Goldsmith C: *Canadian Institutes of Health Research*. (\$425,956 2008 - 2012.)

Auto 21 project 203-ACS renewal. *Howard A*, Snowdon A, Altenhof W: *Auto 21 NCE (Networks of Centres of Excellence)*. (\$84,000 2007 - 2009.)

Barriers to use of pediatric ankle x-ray rules. Boutis K, Narayanan U: Department of Pediatrics Creative Professional Grant. (\$7,000 2007 - 2008.)

Basil O'Connor starter scholar research award grant. Hopyan S: March of Dimes. (\$150,000 2008 - 2010.)

Beta-catenin in aggressive fibromatosis: Molecular pathology and implications for therapy. *Alman BA: National Cancer Institute of Canada (NCIC)*. (\$433,326 2005 - 2008.)

Booster seat legislation in Canada: Assessing the spinal cord injury reduction. Howard A: Ontario Neurotrauma Foundation. (\$7,000 2008.)

Bracing in adolescent idiopathic scoliosis (BrAIST). *Weinstein S*, Clarke WR, Dolan L, Spratt K, Morcuende J, Wright JG: *National Institutes of Health*. (\$4,337,863 2006 - 2011.)

Bracing in adolescent idiopathic scoliosis (BrAIST). Wright JG, Clarke WR, Dolan L, Spratt K, Morcuende J, Weinstein S: Canadian Institutes of Health Research. (\$821,458 2006 - 2011.)

Canadian injury indicators team: Child and youth policy indicators project. *Brussoni MJ*, MacPherson A, Babul S, Barr RG, Desapriya EB, Groff PR, Hameed SM, Herman MS, Hewitt A, Howard A, MacArthur C, Pike I, Raina PS, Simons RK, Atathokostas L, Swaine B, Warda LJ, Yanchar NL, Young JB: *Canadian Institutes of Health Research*. (\$225,000 2008 - 2009.)

Clinical research training fellowship. *Bederman S*, Wright JG: Orthopaedic Research and Educational Foundation/American Association of Orthopaedic Surgeons (OREF/AAOS) Fellowship Award. (\$140,000 2006 - 2008.)

Concerns, needs and expectations of parents and caregivers of children with severe cerebral palsy. *Narayanan UG*, Antle BJ, Weir S, DeOliveira L: *Ontario Federation for Cerebral Palsy Research*. (\$32,035 2006 - 2008.)

Connaught new staff matching grant. Hopyan S: University of Toronto. (\$30,000 2007 - 2008.)

Dean's fund new staff grant. Hopyan S: Faculty of Medicine, University of Toronto. (\$10,000 2007 - 2012.)

Evaluation of quality of movement in ambulatory children with cerebral palsy: Validity and sensitivity to change the quality FM. *Rosenbaum P*, Wright V, Narayanan UG, Fehlings D, Kim M, Mesterman M: *The Physicians' Services Incorporated Foundation*. (\$123,000 2007 - 2009.)

From fixing to function: Exploring opportunities for the development of a functional optimization model for intervention for children with disabilities. *Cameron D*, Narayanan UG, Gibson B, Martini R, Polatajko H, Hashemi G: *Social Sciences and Humanities Research Council of Canada (SSHRC)*. (\$10,000 2007 - 2008.)

From knowledge generation to knowledge translation: A systems approach to reducing the burden of injury in Canada. *Raina R*, MacArthur C, Holowaty P, Howard AW, Morrongiello B, Shannon H, et al: *Canadian Institutes of Health Research*. (\$750,000 2003 - 2007.)

Functional outcomes following orthopaedic surgery based on gait analysis vs. observational analysis in children with cerebral palsy: A randomized controlled trial. *Narayanan UG*, Willan AR, Wedge J, Fehlings DL, Redekop S: *Zimmer Foundation*. (\$8,500 2006 - 2008.)

Functional outcomes following orthopaedic surgery based on gait analysis vs. observational analysis in children with cerebral palsy: A randomized controlled trial. *Narayanan UG*, Willan AR, Wedge J, Darcy L. Fehlings DL: *Pediatric Orthopaedic Society of North America*. (\$31,000 2006 - 2007.)

Functional outcomes following orthopaedic surgery based on gait analysis vs. observational analysis in children with cerebral palsy: A randomized controlled trial. *Narayanan UG*, Willan AR, Wedge J, Fehlings DL, Redekop S: *Bloorview Kid's Foundation and Research Institute*. (\$25,015 2006 - 2008.)

Hedgehog signaling in cartilage neoplasia and development. *Wunder JS*, Alman BA: *Canadian Institutes for Health Research*. (\$807,945 2008 - 2013.)

Identification of genes responsible for human bone disease through mouse mutagenesis. *Aubin JE*, Cole WG, Grynpas MD, Henderson JE, Stanford WL, Vogel WF: *Canadian Institutes of Health Research*. (\$1,162,705 2004 - 2009.)

Identifying the desmoid initiating cell. Alman BA: Desmoid Tumor Research Foundation. (\$270,000 2006 - 2009.)

Improving education and coping of scoliosis patients undergoing surgery and their families using e-health. *Wright JG*, Nicholas DB, Hetherington CR, Lupea D, Nyhof-Young JM: *Canadian Institutes of Health Research*. (\$240,363 2006 - 2009.)

Investigating physician bias as a possible explanation for gender disparity in the utilization of knee arthroplasty surgery. *Wright JG*, Coyte PC, Glazier RH, Hawker GA, Kreder HJ, Mahomed NN: *Canadian Institutes of Health Research*. (\$283,322 2004 - 2007.)

Modulating hedgehog and beta-catenin signalling in osteoarthritis. Alman BA: Canadian Institutes of Health Research. (\$380,000 2006 - 2009.)

Molecular mechanisms in fracture and wound healing. Alman BA: Canadian Institutes of Health Research. (\$931,675 2008 - 2013.)

Molecular pathology of cartilage neoplasia. Wunder JS, Alman BA: Canadian Institutes of Health Research. (\$560,000 2003 - 2008.)

Molecular pathology of Ehlers-Danlos syndrome and chondrodysplasias. *Cole WG: Canadian Institutes of Health Research*. (\$735,341 2005 - 2009.)

Molecular pathology of healing. Alman BA: Canadian Institutes of Health Research. (\$423,975 2005 - 2008.)

Ptolemy project for access to surgical information in Africa. *Howard A*, Isard R, Beveridge M, Ostrow B: *Canadian Network for International Surgery/Canadian International Development Agency*. (\$56,000 2007 - 2008.)

Safety and efficacy of botox injection in alleviating post-operative pain and improving quality of life in lower extremity limb lengthening and deformity correction: A multicenter, randomized, double-blinded, placebo-controlled study. *Hamdi R (PI)*, Narayanan UG (Toronto Site PI), Multiple Collaborators: *Clinical Outcomes Studies Advisory Board (COSAB) of Shriners Children's Hospitals*. (\$220,000 2007 - 2010.)

School playground surfacing: A randomized prospective comparison of injury rates on sand versus wood chip surfaces. *Howard AW*: *Canadian Institutes of Health Research*. (\$250,000 2004 - 2009.)

Start-up fund. Hopyan S: The Hospital for Sick Children, Research Institute. (\$80,000 2005 - 2008.)

Surgery in Africa and ptolemy project capacity building seed grant. Howard A, Ostrow B: Johnson and Johnson. (\$20,000 2007 - 2008.)

The national pediatric surgical wait time project. *Wright JG*, Blair G, Corsten G, Farmer JP, Fitzgerald P, Hedden D, Houle AM, Jones S, Leclerc S, Leitch KK, Mayer SK, McPherson JA, Miller GG, Ouimet A, Price D, Willis B, Wong A, Wilson K: *Health Canada*. (\$2,901,678 2007 - 2008.)

Variation in patient and physician attitudes towards spinal stenosis surgery and their influence on regional surgical rates. *Wright JG*, Bederman S: *Ontario Neurotrauma Foundation*. (\$74,988 2007 - 2009.)

Honours Received

Narayanan UG: 2008 Robert Salter Orthopaedic Chair Resident Teaching Award. April 2008.

Narayanan UG: Nominated for Gayle Arnold Award for Best Paper, presented at the 2007 Meeting of the American Academy of Cerebral Palsy and Developmental Medicine (AACPDM). December 2007.

Salter RB: Honorary Prime Mentor of Canada. 2008.

Salter RB: Named one of University of Toronto, Faculty of Medicine's 10 Most Outstanding Scientists of the Past 80 years, known as "Giants of Medical Research," with their busts displayed in the lobby of the Terrence Donnelly Centre of Cellular and Biomolecular Research and one floor of the centre named for each of the Giants. 2008.

DIVISION OF PLASTIC SURGERY

Dr. H.M. Clarke – Professor Dr. D.M. Fisher – Associate Professor Dr. C.R. Forrest – Professor (Division Head) Dr. C.Y. Pang – Professor Dr. J.H. Phillips – Associate Professor Dr. R.M. Zuker – Professor

Publications

Bauer BS, Bentz ML, Zuker RM: The evolution of pediatric plastic surgery. In: Principles and Practice of Pediatric Plastic Surgery: (Bentz ML, Bauer BS, Zuker RM, eds.) Quality Medical Publishing, Inc., St. Louis, Missouri: 2008: pp 3-8.

Borschel GH, Ho ES, Clarke HM: Congenital hand anomalies: Failure of formation. In: Principles and Practice of Pediatric Plastic Surgery: (Bentz ML, Bauer BS, Zuker RM, eds.) Quality Medical Publishing, St. Louis, Missouri: 2008: pp 1085-1126.

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Zuker RM, Upton J: Volkmann's ischemic contracture. In: Principles and Practice of Pediatric Plastic Surgery: (Bentz ML, Bauer BS, Zuker RM, eds.) Quality Medical Publishing, Inc., St. Louis, Missouri: 2008: pp 1455-1490.

Invited Visits

Clarke HM: American Association for Hand Surgery, Beverly Hills, California, January 2008. The assessment and treatment of peripheral nerve injuries in children (with Kozin S, Bassini L).

Clarke HM: American Society for Peripheral Nerve, Beverly Hills, California, January 2008. Obstetrical brachial plexus palsy (with Belzberg A, Kozin S).

Clarke HM: St. Thomas' Hospital, London Medical School, King's College, London, England, November 2007. The management of obstetrical brachial plexus palsy.

Fisher DM: London Health Sciences Centre, London, ON, June 2008. Visiting Professor: Instructor of cleft lip and palate reconstructive procedures.

Fisher DM: American Cleft Palate-Craniofacial Association, Philadelphia, Pennsylvania, April 2008. Autologous ear reconstruction - Nagata's technique.

Fisher DM: British Virgin Islands Workshop in Plastic Surgery, Tortola, British Virgin Islands, January 2008. (1) Autologous ear reconstruction: The fabrication of the Nagata 3-D framework (10 minute video), (2) Bilateral cleft lip repair - strategies for reducing secondary deformities, (3) Extension of autologous ear reconstruction - techniques for the management of the constricted ear, (4) Presurgical unilateral cleft lip anthropometrics - implications for the choice of repair technique, (5) Reconstruction of acquired partial ear defects, (6) Unilateral cleft lip repair using the anatomic subunit approximation technique (5-Minute video and 10 consecutive cases with 5-year follow-up.)

Fisher DM: Operation Smile, Phnom Penh, Cambodia, November 2007. Member of a team of volunteer plastic surgeons.

Fisher DM: American Society of Plastic Surgeons, Baltimore, Maryland, October 2007. (1) Instructional course - Introduction to two-stage total and subtotal auricular reconstruction: The fabrication of the three-dimensional costal cartilage framework (3-D frame), (2) Instructional course - Cleft nasal deformity.

Fisher DM: British Association of Plastic Reconstructive and Aesthetic Surgeons (BAPRAS), 4th International Congress on Auricular Reconstruction, Edinburgh, Scotland, October 2007. (1) Co-Chaired free paper session, (2) Extension of autologous ear reconstruction techniques for management of the constricted ear, (3) Autologous reconstruction of acquired auricular deformities.

Forrest CR: American Association of Plastic Surgeons, 87th Annual Meeting, Boston, Massachussetts, April 2008. The future of craniofacial surgery.

Forrest CR: Advanced Cranio Maxillofacial Forum (ACMF), Interdisciplinary Problem Solving in Pediatric Neurosurgery and Craniomaxillofacial Surgery, Phoeniz, Arizona, March 2008. (1) Cranioplasty with allograft in children, (2) Current management of multiple suture craniosynostosis, (3) Panelist - Management of skull defects: Can we come to any consensus?

Forrest CR: The Northwest Society of Plastic Surgeons, 46th Annual Scientific Meeting, Big Island, Hawaii, February 2008. Computer generated hard tissue replacement implants for reconstruction of complex cranial defects.

Forrest CR: Children's Hospital of Michigan, Wayne State University, Detroit, Michigan, October 2007. Visiting Professor: (1) Pediatric facial fractures, (2) Current concepts in the management of sagittal synostosis, (3) Coples pediatric case presentations.

Forrest CR: Michigan Cleft Palate Association, 24th Annual Meeting, East Lansing, Michigan, October 2007. (1) The application of alloplasts in the pediatric craniofacial skeleton, (2) Secondary cleft septorhinoplasty, (3) Panel discussion: Pediatric calvarial reconstruction.

Phillips JH: Duke University, North Carolina, May 2008. Physicians training surgery program - Operation smile.

Phillips JH: AO North America, Miami Beach, Florida, November 2007. Principles of operative treatment of craniomaxillofacial trauma and reconstruction.

Zuker RM: The Hunley Society Annual Meeting, Martha's Vineyard, MA, June 2008. (1) Bilateral index finger replantation: Indications and function, (2) Moebius Syndrome - spontaneity of function following muscle transplantation, (3) Necrotizing syndrome, (4) Severe dog bite to the upper lip - options for late reconstruction.

Zuker RM: Toolo Hospital, Helsinki, Finland, May 2008. (1) Facial paralysis symposium, (2) Functional MRI in facial reanimation, (3) Facial paralysis in children.

Zuker RM: Mini Symposium in Pediatric Plastic Surgery, Hughes Medical Centre, Anguilla, British West Indies, December 2007. (1) Neuromuscular integration following lower extremity transplantation, (2) Recent advances in unilateral facial paralysis reconstruction, (3) The role of Doppler ultrasound in the management of expanding hemangioma.

Zuker RM: The Association of Fundraising Professionals, Toronto, ON, November 2007. Presenter of the 2007 Outstanding Foundation to the Donner Canadian Foundation.

Zuker RM: American Society of Plastic Surgeons Annual Meeting, Baltimore, Maryland, October 2007. Panel Speaker: (1) Aesthetic microsurgical reconstruction - balance between form and function, (2) The complete head and neck micro course.

Zuker RM: Liquor Control Board of Ontario (LCBO), Bayview - Fundraising Group, Toronto, ON, October 2007. Cortical plasticity in muscle transplant surgery.

Research and Investigations

Senior Investigator's Name Appears in Italics

Angiogenic cytokine gene therapy for optimal augmentation of skin flap viability: Efficacy and mechanism. *Pang CY: Canadian Health Institutes of Research*. (\$488,328 2007 – 2012.)

Cooper Foundation. Zuker R: Cooper Foundation. (\$100,000 2008 - 2009.)

Educational exchange with Cleft Centre, Kolkata, India. Zuker R, Cleft Centre in Kolkata, India: Donner Foundation. (\$230,000 2007 - 2008.)

Evaluation of CFTR function ex-vivo in sweat glands of perfused skin as translational tool for future drug trials in CF. *Durie P*, Gonska T, Pang C, Bear C: *The Hospital for Sick Children, New Ideas Grant.* (\$50,000 2008 – 2009.)

Perioperative protection and postischemic salvage of skeletal muscle from ischemia/reperfusion injury. *Pang CY: Canadian Health Institutes of Research*. (\$280,032 2006 – 2009.)

The creation of a normal smile. Zuker RM, Manktelow RT: Josie Walther Fund. (\$15,000 2006 - 2009.)

Honours Received

Zuker RM: American Society of Plastic Surgeons and the Plastic Surgery Education Foundation Recognition Award. November 2007.

Zuker RM: Best Paper for "Necrotizing Syndrome," at The Hunley Society Annual Meeting in Martha's Vineyard, Massachussetts. June 2008.

Zuker RM: The Art of Listening Award, Genetic Alliance. July 2007.

DIVISION OF UROLOGY

Dr. D.J. Bagli – Associate Professor Dr. W.A. Farhat – Associate Professor Dr. A.E. Khoury – Professor (Division Head) Dr. A.J. Lorenzo – Assistant Professor Dr. J.L. Pippi Salle – Professor

Publications

Al Mandil M, Khoury AE, El Hout Y, Kogon M, Dave S, Farhat WA: Potential complications with the prescrotal approach for the palpable undescended testis? A comparison of single prescrotal incision to the traditional inguinal approach. The Journal of Urology: E-published June 13, 2008.

Braga L, Pippi Salle JL, Lorenzo AJ, Bagli DJ, Khoury AE, Farhat WA: Pediatric laparoscopic pyeloplasty in a referral centre: Lessons learned. Journal of Endourology: July 2007: 21(7): pp 738-742.

Braga LH, Lorenzo AJ, Bagli DJ, Khoury AE, Pippi Salle JL: Outcome analysis of isolated male epispadias: Single center experience with 33 cases. The Journal of Urology: March 2008: 179(3): pp 1107-1112.

Braga LH, Lorenzo AJ, Dave S, Del-Valle MA, Khoury AE, Pippi Salle JL: Long term renal function and continence status in patients with cloacal malformation. Canadian Urological Association Journal: November 2007: 1(4): pp 371-376.

Braga LH, Lorenzo AJ, Pippi Salle JL: Tubularized incised plate urethroplasty for distal hypospadias: A literature review. Indian Journal of Urology: April 2008: 24(2): pp 219-225.

Braga LH, Lorenzo AJ, Pippi Salle JL, Skeldon S, Dave S, Bagli DB, Khoury AE, Farhat WA: Failed pyeloplasty in children: Comparative analysis of retrograde endopyelotomy versus re-do pyeloplasty. The Journal of Urology: December 2007: 178(6): pp 2571-2575.

Braga LH, Pippi Salle JL, Dave S, Bagli DJ, Lorenzo AJ, Khoury AE: Outcome analysis of severe chordee correction using tunica vaginalis as a flap in boys with proximal hypospadias. The Journal of Urology: August 2007: 178(4): pp 1693-1697.

Braga LH, Pippi Salle JL, Lorenzo AJ, Skeldon S, Dave S, Farhat WA, Khoury AE, Bagli DJ: Comparative analysis of tubularized incised plate versus onlay island flap urethroplasty for penoscrotal hypospadias. The Journal of Urology: October 2007: 178(4 Pt 1): pp 1451-1456. E-published: August 16, 2007.

Buffet-Fairen A, Pippi Salle JL, Lorenzo AJ: The effect of patient position during urodynamic studies in children: Another variable to consider! Issues in Incontinence (Spring/Summer 2008): April 2008: pp 2-3.

Dave S, Farhat WA, Pace K, Navarro O, Hebert D, Khoury AE: Effect of donor pneumoperitoneum on early allograft perfusion following renal transplantation in pediatric patients: An intraoperative doppler ultrasound study. Pediatric Transplantation: August 2008: 12(5): pp 522-526.

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Dave S, Pippi Salle JL, Lorenzo AJ, Braga LH, Peralta-Del Valle MH, Bagli DJ, Farhat WA, Khoury AE: Is long term bladder deterioration inevitable following successful isolated bladder outlet procedures in children with neuropathic bladder dysfunction? The Journal of Urology: May 2008: 179(5): pp 1991-1996.

Derwin KA, Baker AR, Spragg RK, Leigh DR, Farhat WA, Iannotti JP: Regional variability, processing methods, and biophysical properties of human fascia lata extracellular matrix. Journal of Biomedical Materials Research: February 2008: 84(2): pp 500-507.

Farhat WA, Chen J, Haig J, Antoon R, Litman J, Sherman J, Derwin K, Yeger H: Porcine bladder acellular matrix (ACM): Protein expression, mechanical properties. Biomedical Materials: June 2008: 3(2): pp 25015.

Halachmi S, Farhat WA: Impact of constipation on the urinary tract system. International Journal of Adolescence Medical Health: January 2008: 20(1): pp 17-22.

Ketzer De Sousa JC, Pippi Salle JL: Cirurgia Pediatrica, Teoria e Prática (Pediatric Surgery, Theory and Practice): (Ketzer De Sousa JC, Pippi Salle JL, eds.) Editora Roca Ltda., Sao Paulo, Brazil: 2007.



Khoury AE, Dave S, Peralta-Del Valle MH, Braga LH, Lorenzo AJ, Bagli DJ: Severe bladder trabeculation obviates the need for bladder outlet procedures during augmentation cystoplasty in incontinent patients with neurogenic bladders. British Journal of Urology: January 2008: 101(2): pp 223-226.

Khoury AE, Dave S, Peralta-Del Valle MH, Braga LH, Lorenzo AJ, Bagli DJ: Predictive value of bladder trabeculation in achieving urinary continence with augmentation cystoplasty in neuropathic bladder dysfunction. British Journal of Urology: December 2007: 101: pp 223-226.

Lorenzo AJ, Chait PG, Wallis MC, Raikhlin A, Farhat WA: Minimally invasive approach for the management of urinary and fecal incontinence in selected spina bifida patients. Urology: September 2007: 70(3): pp 568-571.

Lorenzo AJ, Khoury AE: Chapter 37: Obstructive genitourinary disorders. In: Comprehensive Pediatric Nephrology: (Ederer M, ed.) Graphic World Publishing Services, St. Louis, Missouri: 2007: pp 1-29.

Lorenzo AJ, Wallis C, Cook A, Buffett-Fairen A, Bozic D, Bagli DJ, Khoury AE, Pippi Salle JL: What is the variability in urodynamic parameters with position change in children? Analysis of a prospectively enrolled cohort. The Journal of Urology: December 2007: 178: pp 2567-2570.

Lorenzo AJ: The "perfect" hypospadias repair: Are we there yet? Canadian Urological Association Journal: April 2008: 2(2): pp 115-116.

McHardy P, McDonnell C, Lorenzo AJ, Pippi Salle JL, Campbell FA: Management of priapism in a child with sickle cell anemia: Successful outcome using epidural analgesia. Canadian Journal of Anaesthesia: August 2007: 54(8): pp 642-645.

Pippi Salle JL, Braga LH, Macedo N, Rosito N, Bagli DJ: Corporal sparing dismembered clitoroplasty: An alternative technique for feminizing genitoplasty. The Journal of Urology: October 2007: 178(4 Pt 2): pp 1796-1801.

Spitzer RF, Wherrett D, Chitayat D, Colgan T, Dodge JE, Pippi Salle JL, Allen L: Maternal luteoma of pregnancy presenting with virilization of the female infant (Case Report). Journal of Obstetrics and Gynaecology Canada: October 2007: 29(10): pp 835-840.

Tavares A, Manaboriboon N, Lorenzo A, Farhat WA: Insertion of an internal-external nephroureteral stent during pediatric laparoscopic pyeloplasty: Description of the technique. Urology: June 2008: 71(6): pp 1199-1202. E-published: March 23, 2008.

Wallis MC, Lorenzo AJ, Farhat WA, Bagli DJ, Khoury AE, Pippi Salle JL: Risk assessment of incidentally detected complex renal cysts in children: Potential role for a modification of the bosniak classification. The Journal of Urology: May 2008: 180(1): pp 317-321.

Wallis MC, Yeger H, Cartwright L, Shou Z, Radisic M, Haig J, Suoub M, Farhat W: Feasibility study of a novel urinary bladder bioreactor. Tissue Engineering Part A: March 2008: 14(3): pp 339-348.

Invited Visits

Bagli DJ: American Academy of Pediatrics, Section on Urology, San Francisco, California, October 2007. Panel moderator: Preventing urinary infection in children: It's 11 pm, do you know what your antibiotics are doing?

Bagli DJ: North Eastern Section of the American Urological Association, Rochester, New York, September 2007. 2007 Slotkin Lecturer.

Farhat WA: Canadian Urological Association, Edmonton, AB, June 2008. (1) Nuances of laparoscopic surgery in pediatrics, (2) Physiological changes with laparoscopy in pediatrics.

Farhat WA: 5th Tissue Engineering Symposium, Tampere, Finland, April 2008. (1) Cell models, (2) Clinician's approach to tissue engineering and regenerative medicine.

Farhat WA: Ontario Research Commercialization Program (ORCP), Toronto, ON, December 2007. Bioreactor.

Khoury AE: 31 Congresso Barsileiro de Urologia, Salvador, Brazil, October 26, 2007 – November 1, 2007. (1) Discussion on neurogenic bladder cases, (2) Hypospadias: Use of the oral mucosa, (3) Neurogenic bladder module, (4) Tissue engineering in neurogenic bladder, (5) Vesicoureteral reflux (discussion of clinical cases).

Lorenzo AJ: Advances in Pediatric Medicine Program, Mississauga, ON, October 2007. Urinary reflux.

Lorenzo AJ: National Urology Grand Rounds, Toronto, ON, October 2007. Urethral trauma: Options for management.

Lorenzo AJ: Federation of Pediatric Surgical Associations of the South Cone of America, VII Congress, Buenos Aires, Argentina, September 2007. (1) Comparative analysis of ventral penile lengthening versus dorsal plication for severe ventral curvature: Single center experience with 100 cases, (2) Multivariable analysis of risk factors for recurrent ureteropelvic junction obstruction on 401 consecutive children.

Lorenzo AJ: 10th Brazilian Congress of Pediatric Urology, Porto Alegre, Brazil, September 2007. (1) Live surgery (video and discussion): Hypospadias repair, laparoscopic pyeloplasty, laparoscopic nephrectomy, cystoscopy, (2) Round table discussions: (a) Endoscopic treatment of VUR, (b) Enuresis, micropenis, varicocele, hormonal treatment for undescended testicle, intersex and hypospadias, (c) Voiding dysfunction and neurogenic bladder, (d) Clinical evaluation of shockwave lithotripsy, (3) True hermaphrodite/mixed gonadal disgenesis: How to choose the sex?, (4) Update: Urologic tumours.

Pippi Salle JL: Alberta Children's Hospital, Calgary, AB, February 2008. (1) Management of children with disorders of sexual development, (2) Management of hypospadias.

Pippi Salle JL: II World Congress on Hypospadias and Disorders of Sex Development, Rome, Italy, November 2007. (1) Guest Speaker, (2) Guest Surgeon: Performed surgeries and live demonstrations: (a) Redo epispadias repair, (b) Redo hypospadias repair, (c) Correction of buried penis, (d) Separation of urogenital sinus, (e) Repair of urethral duplication (with live transmission to auditorium), (3) Lectures: (a) Gender assignment, (b) Should surgery be performed on the clitoris, (c) Chordee correction: Technical alternatives, (d) Management of distal hypospadias.

Pippi Salle JL: American Academy of Pediatrics, Section on Urology, San Francisco, California, October 2007. Scientific Session Moderator: Bladder exstrophy.

Pippi Salle JL: 10th Brazilian Congress of Pediatric Urology, Porto Alegre, Brazil, September 2007. (1) Guest Speaker, (2) Guest Surgeon: Performed live demonstration: Redo epispadias repair, (3) Lectures: (a) Initial management of posterior urethral valves, (b) Management of bladder exstrophy and epispadias, (4) Panel Chairman: Controversial pediatric urological cases.

Pippi Salle JL: International Congress of Hypospadias Surgery, Prishtina, Kosovo, September 2007. (1) Guest Speaker, (2) Guest Surgeon: Performed live demonstration: Tip repair using a dorsal preputial inlay graft, (3) Lecture: Technical details to improve outcome in hypospadias repair, (4) Session moderator: Management of proximal hypospadias, (5) Video presentation: Proximal hypospadias with urethral duplication: A novel application of the snodgrass tubularized incised urethral plate urethroplasty principle.

Pippi Salle JL: World Federation of Associations of Pediatric Surgeons, 2nd World Congress, Buenos Aires, Argentina, September 2007. (1) Chaired pre-congress course: Controversies on reconstructive pediatric urology, (2) Guest Speaker, (3) As panel member on management of ambiguous genitalia, lectured: Feminizing genitoplasty: A novel technique, (b) Lectured at the pre-congress workshop on management of hypospadias, (4) Paper presentation: Comparative analysis of ventral penile lengthening versus dorsal plication for severe ventral curvature: Single experience with 100 cases, (5) Video presentation: Urethral duplication association to ano-rectal malformation: A rare anomaly solved by a simple principle (Pippi Salle JL, Ferro F, Valenciane S.)

Pippi Salle JL: Society of Colombian Urology, 1st International Congress, Cartagena, Colombia, August 2007. (1) Session Moderator: Feminizing genitoplasty, (2) Points and counterpoints: (a) Adolescent varicocele: Where does it require correction?, (b) Correction of primary proximal hypospadias, (c) Ventral curvature of penis, when it should be fixed, (3) Co-ordinator round table discussion: Pediatric urology for adult urologists.

Research and Investigations

Senior Investigator's Name Appears in Italics

Biologically enhanced fascia lata graft for soft tissue repair. Farhat W, Derwin K: (Biomedical Research and Technology Transfer Program - part of Ohio's Third Frontier Initiative), Cleveland Clinic Foundation. (\$225,000 2005 - 2008.)

Center for Computer-Assisted Intervention and Innovation (CCAII) (RE-02-022). *Kim P*, Farhat WA, Wright J: *Ontario Research Fund*. (\$3,395,000 2008 - 2012.)

Epigenetic changes in uroepitelium following e-coli infection: New keys to understanding urinary tract infection susceptibility. *Bagli DJ: Research Institute, Hospital for Sick Children.* (\$50,000 2007 - 2008.)

Patient satisfaction and predictors of outcome in hypospadias repair: A prospective assessment. *El Hout Y*, Lorenzo AJ, Pippi Salle JL, Khoury AE: *Canadian Urology Association Scholarship Fund*. (\$10,000 2007 - 2008.)

Physiologic urinary bladder simulator (PUBS): Novel urinary bladder bioreactor. *Farhat WA: BioDiscovery Toronto (BDT)*. (\$50,000 2008 - 2009.)

Quantitative MRI of angiogenesis and cellularization in tissue engineering. *Cheng HL*, Farhat WA, Stanisz GJ: *University of Toronto Dean's Fund*. (\$9,957 2007 - 2012.)

Quantitative MRI of angiogenesis and cellularization in tissue regeneration. *Cheng HL*, Farhat WA, Stanisz GJ: *Sick Kids Foundation New Investigator Awards*. (\$129,223 2008 - 2010.)



Honours Received

Farhat WA: A.W. Bruce Faculty Undergraduate Teaching Award. June 2008.

Pippi Salle JL: Best Video Presentation for "Proximal hypospadias with urethral duplication: A novel application of the snodgrass tubularized incised urethral plate urethroplasty principle (Wallis C, Lorenzo A, Pippi Salle JL) at the International Congress of Hypospadias, Prishtina, Kosovo. September 2007.

MOUNT SINAI HOSPITAL

Heads of Divisions

Dr. K. Jarvi – Urology Dr. R. McLeod – General Surgery Dr. J. Wunder – Orthopaedic Surgery

Jay Wunder

/Surgeon-in-Chief Rubinoff-Gross Chair in Orthopaedic Oncology



This has been a year of new building initiatives at Mount Sinai Hospital. Construction began on top of the hospital starting with the addition of 6 new floors which will house the Women's and Infant's Health Program. This development is particularly exciting for our Surgery Programs because once this new area has been completed, we will begin building a new surgical program within the hospital including new operating rooms and perioperative services. A large expansion of the hospital's Lunenfeld Research Institute was completed and this new space opened at 60 Murray Street directly across the street from the hospital. In addition the Toronto Center for Phenogenomics (TCP), commonly known as the "Mouse House", also opened beneath the new Lunenfeld space. The TCP is a new collaborative facility shared by Mount Sinai Hospital and 3 other University of Toronto hospital swhich will function as a research-enabling mouse facility. Both of these additions will enable further collaboration between our hospital based clinical programs and translational and basic science research. Following last year's successful expansion of the Surgical Skills Centre, the Sydney and Florence Cooper Education Centre opened this year. This new space will further support medical education programs across the hospital and will specifically foster development of inter-professional teaching initiatives for our trainees.

A major focus of the department, once again, through the efforts of the Surgery and Oncology Center of Excellence has been increasing surgical volumes and improving wait times for patients as part of the Ontario Wait Times Project and Cancer Care Ontario. These efforts focused on extremity and retroperitoneal sarcoma, colorectal cancer, breast cancer, as well as hip and knee arthroplasty. Once again we made improvements in waiting times for these procedures, and also met our overall treatment target volumes, providing leadership within our Toronto Central LHIN. As part of the provincial Surgical Efficiency Target Program (SET) and the Hip Fracture Initiative, we also made internal changes to improve accessibility for patients requiring emergency surgery, and this was especially targeted towards patients with hip fractures.

New Staff

This was a very busy year for recruitment as we welcomed the following 5 new staff to our department:

Ben Deheshi joined the Division of Orthopaedic Surgery as part of the Sarcoma Program at Mount Sinai Hospital and Princess Margaret Hospital. Ben completed his orthopaedic residency at the University of Ottawa and then a fellowship with our Sarcoma Group at Mount Sinai Hospital. Ben will be pursing research into the underlying molecular mechanisms causing sarcomas, and he will be a welcome addition to our very successful sarcoma genetics program. Ben is currently enrolled in graduate training at the Institute of Medical Science under the supervision of Drs. Jeff Wrana and Jay Wunder. Ben's graduate research focus is on TGF- β signaling in metastatic osteosarcoma, and his future goals are to integrate his basic science research experience into clinical practice in an attempt to develop optimal treatment strategies for sarcoma patients.

Oleg Safir joined the Division of Orthopaedic Surgery in the Adult Lower Extremity Reconstruction Group. Oleg completed his orthopaedic residency in Israel and then a clinical and research fellowship with Drs. Allan Gross and David Backstein at Mount Sinai Hospital. Oleg will focus his clinical practice on hip and knee arthroplasty, revision arthroplasty, as well as osteotomies and osteochondral transplantation around the knee as these are particular strengths and areas of excellence at Mount Sinai Hospital. Oleg's research interest is in surgical education and he is currently pursuing a Masters Degree at the Ontario Institute for Studies in Education (OISE) and a fellowship at the Wilson Centre for Research in Education under the supervision of Dr. Heather Carnaghan. Oleg's research will focus on methods to improve teaching of surgical skills to our trainees. His main educational research interests are dedicated to study the acquisition of technical surgical skills, curriculum development and evaluation at the undergraduate and postgraduate level as they relate to self-directed learning.

Dr. John Theodoropoulos was recruited to an academic position at the University of Toronto from a community job as an orthopaedic surgeon specializing in sports medicine. John completed his orthopaedic residency at McGill University, followed by a sports medicine fellowship at the University of Illinois, Chicago. John was successfully recruited through a joint strategy by both Mount Sinai Hospital and the New Women's College Hospital. He is the first recruit to the new downtown university sports program being developed jointly between Mount Sinai Hospital, the New Women's College Hospital, and the Hospital for Sick Children. John's first initiatives will be to improve the educational program for the orthopaedic residents and develop a fellowship program. John won a number of teaching awards during his residency leading to his strong interest in resident education. He feels that the future of sports medicine will be in developing better biologic based repair therapies. John has a specific interest in cartilage damage and will be working as part of a translational research team to develop novel surgical approaches for potential repair of focal cartilage defects in young patients. Towards this end he is currently enrolled in graduate studies through the Institute of Medical Science investigating novel tissue engineering and cartilage regeneration techniques for cartilage repair under the supervision of Dr. Rita Kandel.



Dr. Ethan Grober joined the Division of Urology in the Male Reproductive Medicine Program. Ethan is another combined recruit between the Departments of Surgery at both Mount Sinai Hospital and the New Women's College Hospital. During his urology residency at the University of Toronto, Ethan obtained a Master's Degree in Surgical Education from OISE as part of the Surgeon Scientist Program. His fellowship training was in Male Reproductive Medicine and Surgery at Baylor College of Medicine in Houston with Dr. Larry Lipshultz, a world leader in male infertility and sexual medicine. Ethan's research activities will focus on achievement of excellence in surgical education. His specific interests include the objective assessment of technical competence and operative judgement, integration and evaluation of new technologies in surgery, and the validation of surgical simulation and laboratory-based surgical skills training.

Dr.Stefan Hofer was another combined recruit to the Division of Plastic Surgery at the University Health Network together with the Department of Surgery at Mount Sinai Hospital. Stefan completed his plastic surgery residency in the Netherlands, followed by fellowship training at Erasmus Medical Center, Rotterdam, Netherlands; M.D. Anderson Cancer Center, Houston, Texas; and the University of Melbourne, Melbourne, Australia. Prior to moving to Toronto, Stefan was a Staff Plastic Surgeon in the Department of Plastic and Reconstructive Surgery, Erasmus Medical Center, Rotterdam and Head of Plastic and Reconstructive Surgical Oncology. Stefan's recruitment will primarily support our surgical oncology programs, with a focus on technical improvements of reconstructive techniques, and functional and aesthetic outcomes after reconstructive surgery. Stefan completed a PhD studying tissue perfusion and his current research is in angiogenesis and tissue engineering.

Research productivity in terms of publications, peer-reviewed funding, and invited lectureships remained at an all time high for our department. Some of the highlights include:



Division of Orthopaedic Surgery

David Backstein was promoted to Associate Professor, and continues to make major improvements in the medical school curriculum as Director of Undergraduate Education for the Department of Surgery. David also received grant funding to investigate educational opportunities for technical skills during the surgical clerkship. Oleg Safir, in only his first year on staff, received two peer-reviewed grants in support of his surgical skills educational research program. Peter Ferguson was nominated as the Oncology Subspecialty Chair of the Canadian Orthopaedic Association, Inaugural President of the Canadian Orthopaedic Oncology Society, and was awarded the Bruce Tovee Undergraduate Teaching Award from the Department of Surgery. Jay Wunder received a renewal of his CIHR grant together with Ben Alman investigating Hedgehog Signaling in Cartilage Neoplasia (\$800,000).

Division of Urology

Ethan Grober received funding from the Candian Urology Association in support of his studies on acquisition and evaluation of surgical skills. Keith Jarvi received a CUOG research award for the identification of semen biomarkers to detect prostate cancer, and is the Associate Editor of the Canadian Urology Association Journal and the Chronicle of Sexual Medicine. Alex Zlotta was funded by the Prostate Cancer Research Foundation for an international multi-centered prostate cancer study. Alex is the Associate Editor for European Urology and runs the journal's editorial office in Toronto. He also remains a Professor at the European School of Urology.

Division of General Surgery

Following the opening of the Zane Cohen Digestive Disease Research Unit, the first annual Zane Cohen Lecture was presented by Dr. Peter Angelos from the University of Chicago on the topic of "Ethical Considerations in the Adoption of New Technology." Robin McLeod was chosen as the Surgical Lead, Quality Improvement and Knowledge Transfer, Surgical Oncology Program, Cancer Care Ontario. Robin is also a Regent of the American College of Surgeons, Second Vice-President of the American Surgical Association and Treasurer of the Society for Surgery of the Alimentary Tract. Helen MacRae co-chaired the American College of Surgeons/Association of Program Directors in Surgery Technical Skills Curriculum for General Surgery. Carol Swallow continued as Chair of the RCPSC General Surgery Oncology Specialty Committee and Chair of the Research Committee of the Canadian Association of General Surgeons.

Retirement

Michael Goldberg retired after a career spanning 34 years at Mount Sinai Hospital. Michael was a vascular surgeon in the Division of General Surgery, and was well known as one of the best teachers in the Department of Surgery. We all wish him well in his retirement.

DIVISION OF GENERAL SURGERY

Dr. Z. Cohen – Professor Dr. A.M. Easson – Assistant Professor Dr. M.R. Goldberg – Associate Professor Dr. R.N. 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.B. Rosen – Professor Dr. C.J. Swallow – Associate Professor

Publications

Aarts MA, Hancock JN, Heyland D, McLeod RS, Marshall JC: Empiric antibiotic therapy for suspected ventilator-associated pneumonia: A systematic review and meta-analysis of randomized trials. Critical Care Medicine: January 2008: 36(1): pp 108-117.

Breitbach CJ, Paterson JM, Lemay CG, Falls TJ, McGuire A, Parato KA, Stojdl DF, Daneshmand M, Speth K, Kirn D, McCart JA, Atkins H, Bell JC: Targeted inflammation during oncolytic virus therapy severely compromises tumor blood flow. Molecular Therapy: September 2007: 15: pp 1686-1693.

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Chalikonda S, Kivlen MH, O'Malley ME, Dong XD, McCart JA, Gorry MC, Yin X-C, Brown CK, Zeh III HJ, Guo ZS, Bartlett DL: Oncolytic virotherapy for ovarian carcinomatosis using a replication-selective vaccinia virus armed with a yeast cytosine deaminase gene. Cancer Gene Therapy: February 2008: 15: pp 115-125.

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Coburn NG, Guller U, Baxter NN, Kiss A, Ringash J, Swallow CJ, Law CH: Adjuvant therapy for resected gastric cancer-rapid, yet incomplete adoption following results of intergroup 0116 trial. International Journal of Radiation Oncology, Biology, Physics: September 2007: 70(4): pp 1073-1080. E-published October 1, 2007.

Cummings BJ, Swallow CJ, Ajani JA: Cancer of the anal region. In: Cancer: Principles and Practice of Oncology: (De Vita Jr VT, Hellman S, Rosenberg SA, eds.) Lippincott Williams and Wilkins, Philadelphia: 2008.

Durno C, Monga N, Bapat B, Berk T, Cohen Z, Gallinger S: Does early colectomy increase Desmoid risk in familial adenomatous polyposis? Clinical Gastroenterology and Hepatology: October 2007: 5(10): pp 1190-1194.

Easson AM, Bezjak A, Ross S, Wright J: The ability of existing questionnaires to measure symptom change after paracentesis for symptomatic ascites. The Annals of Surgical Oncology: August 2007: 14(8): pp 2348-2357.

Egan TM, McLeod RS: Plus ça change. Journal of the American College of Surgeons: October 2007: 205(4): pp e5.

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Fenech DS, Takahashi T, Liu M, Spencer L, Swallow CJ, Cohen Z, MacRae HM, McLeod RS: Function and quality of life after transanal excision of rectal polyps and cancers. Diseases of the Colon and Rectum: July 2007: 50(5): pp 598-603.

Helyer L, Easson AM: Surgical approaches to malignant bowel obstruction. Journal of Supportive Oncology: March 2008: 3: pp 105-113.

Helyer LK, O'Brien C, Coburn NG, Swallow CJ: Surgeon's knowledge of quality indicators for gastric cancer surgery. Gastric Cancer: December 2007: 10(4): pp 205-214.

Kapadia MR, DaRosa DA, MacRae HM, Dunnington GL: Current assessment and future directions of surgical skills laboratories. Journal of Surgical Education: September 2007: 64(5): pp 260-265.



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Lad SV, Haider MA, Brown CJ, McLeod RS: Magnetic resonance imaging appearance of perianal carcinoma in Crohn disease. Journal of Magnetic Resonance Imaging: December 2007: 26(6): pp 1659-1662.

MacRae HM, Satterthwaite L, Reznick RK: Setting up a surgical skills centre. World Journal of Surgery: February 2008: 32(2): pp 198-195.

Martindill DMJ, Risebro CA, Smart N, Franco-Viseras MDM, Rosario CO, Swallow CJ, Dennis JW, Riley PR: The bHLH transcription factor Hand1 acts as a molecular switch to control mitotic cell cycle exit and determine cell fate. Nature Cell Biology: July 2007: 9(10): pp 1131-1141.

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McLeod RS: Evidence-based reviews in surgery to begin its seventh year. Bulletin of the American College of Surgeons: November 2007: 92(11): pp 26-27.

McLeod RS: Instilling a culture of evidence-based surgery in Canada. World Journal of Surgery: August 2007: 8: pp 1551-1555.

Moulton CA, Regehr G, Myropoulos M, MacRae HM: Slowing down when you should: A new model of expert judgment. Academic Medicine: October 2007: 82(10): pp S109-S116.

Neschadim A, McCart JA, Keating A, Medin JA: A roadmap to safe, efficient, and stable lentivirus-mediated gene therapy with hematopoietic cell transplantation. Biology of Blood and Marrow Transplantation: December 2007: 13: pp 1407-1416.

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Park J, Woodrow SI, Reznick RK, Beales J, MacRae HM: Patient care is collective responsibility: Perceptions of professional responsibility in surgery. Surgery: July 2007: 145(1): pp 111-118.

Raval MJ, Schnitzler M, O'Connor BI, Cohen Z, McLeod RS: Improved outcome due to increased experience and individualized management of leaks after ileal pouch-anal anastomosis. Annals of Surgery: November 2007: 246(5): pp 763-770.

Schiller DE, Cummings BJ, Rai S, Le LW, Last L, Davey P, Easson A, Smith AJ, Swallow CJ: Outcomes of salvage surgery for squamous cell carcinoma of the anal canal. The Annals of Surgical Oncology: October 2007: 14(10): pp 2780-2789.

Simunovic M, Goldsmith C, Thabane L, McLeod RS, Denardi F, Whelan TJ, Levine MN: The Quality Initiative in Rectal Cancer (QIRC) trial: Study protocol of a cluster randomized controlled trial in surgery. BMC Surgery: February 2008: 8: pp 4.

Stief AE, McCart JA: Oncolytic virotherapy for multiple myeloma. Expert Opinion in Biologic Therapy: April 2008: 8: pp 463-473.

Van Spall HGC, Roberts JD, Sawka AM, Swallow CJ, Mak S: A sympathetic broken heart - a unique cause of transient left ventricular apical ballooning syndrome. Lancet: July 2007: 370(9587): pp 628.

Invited Visits

Cohen Z: American Society of Colon and Rectal Surgeons, Boston, Massachusetts, June 2008. Surgical management of patients with HNPCC (hereditary non-polyposis colorectal cancer.)

Cohen Z: Caribbean College of Surgeons, Nassau, Bahamas, June 2008. Experiences in the surgical skills lab at the University of Toronto.

Cohen Z: Mexican Society of Coloproctology, Mexico City, Mexico, May 2008. (1) Management of diverticulitis, (2) Management of rectal cancer, (3) Experiences in the surgical skills lab at the University of Toronto.

Cohen Z: Mexican Society of Colon and Rectal Surgeons, Mexico City, Mexico, February 2008. Genetics of FAP (familial adenomatous polyposis).

Cohen Z: Coloproctology Society of Argentina, Buenos Aires, Argentina, September 2007. (1) Intestinal transplantation, (2) Coloanal anastamosis for rectal cancer, (3) Strictureplasty surgery, (4) Hereditary cancer.

Cohen Z: University of Sydney (Dr. Michael Solomon), Sydney, Australia, August 2007. Visiting Professor.

Cohen Z: Colorectal Society of Israel (Dr. Alex Deutch), Tel-Aviv, Israel, July 2007. Visiting Professor.

Cohen Z: Sahlgrenska Hospital, University of Sweden (Dr. Svanta Nordgren), Goteborg, Sweden, July 2007. Visiting Professor.

Cohen Z: University of Bologna (Dr. Alberto Poggioli), Bologna, Italy, July 2007. Visiting Professor.

Cohen Z: University of Denmark (Dr. Henrik Kehlet), Copenhagen, Denmark, July 2007. Visiting Professor.

Cohen Z: University of Geneva (Dr. Claudio Soravia), Geneva, Switzerland, July 2007. Visiting Professor.

Easson AM: International Grenfell Symposium, St. Anthony, NFLD, October 2007. (1) Benign breast conditions: If it is not cancer then what is it?, (2) Surgical palliation for cancer.

Easson AM: Canadian Association of General Surgeons/University of Toronto/Canadian Society of Surgical Oncology (CAGS/UofT/ CSSO) Symposium, Toronto, ON, September 2007. Applications of new technology in the management of breast disease.

MacRae HM: American Society of Colon and Rectal Surgeons (ASCRS), Annual Meeting, Boston, Massachussetts, June 2008. How will we train the next generation of colorectal surgeons?

MacRae HM: Update in General Surgery 2008, Toronto, ON, April 2008. Quality in colonoscopy.

MacRae HM: University of Ottawa, Research Day, Ottawa, ON, April 2008. Surgical skills training: What is evidence?

MacRae HM: Canadian University Software Engineering Conference (CUSEC), Montreal, PQ, November 2007. Towards sharing curriculum content: A standardized curriculum template.

MacRae HM: American College of Surgeons, 93rd Annual Clinical Congress, New Orleans, Louisiana, October 2007. Simulation based education in resident training.

MacRae HM: International Society for Quality in Health Care Inc. (ISQua), Boston, Massachussetts, October 2007. Use of simulation for education and assessment.

MacRae HM: Canadian Surgery Forum, Toronto, ON, September 2007. Teaching (and learning) operative skills in the 21st century.

MacRae HM: Second International Clinical Skills Conference, Prato, Tuscany, Italy, July 2007. How to assess technical skills, and how to develop and implement an Objective Structured Assessment of Technical Skills (OSATS) exam.

McLeod RS: 4th Annual Winter Course on Inflammatory Bowel Disease (IBD), Intestinal Failure and Nutrition at Sundance, Sundance, Utah, March 2008. X-treme surgery for Crohn's disease.

McLeod RS: Philippine College of Surgeons, 63rd Annual Clinical Congress, Manila, Philippines, December 2007. (1) Assessing outcome in rectal cancer surgery, (2) Evidence-based practice in colorectal surgery or general surgery, (3) Evidence-based reviews in general surgery, (4) Evidence-based reviews in surgery - What is it? Can we practice it?, (5) Teaching critical appraisal skills to residents and surgeons.

McLeod RS: McMaster University, General Surgery Resident Research Day, Hamilton, ON, October 2007. Translating evidence into practice.

Swallow CJ: Canadian General Surgery Review, Mississauga, ON, March 2008. Sarcoma.

Swallow CJ: Society of Surgical Oncology, Meet the Professor Breakfast, Annual Cancer Symposium, Chicago, Illinois, March 2008. Management of retroperitoneal sarcoma.

Swallow CJ: University of Saskatchewan, Department of Surgery, Faculty Research Day, Saskatoon, Saskatchewan, November 2007. Visiting Professor: To cut but not to cure - Towards an understanding of predisposition to hepatocellular carcinoma.

Swallow CJ: Update in Surgical Oncology, Toronto, ON, October 2007. Approach to large abdominal masses.

Swallow CJ: Canadian Society of Surgical Oncology/Canadian Association of Colorectal Surgeons Postgraduate Course, Canadian Association of General Surgeons Meeting, Toronto, ON, September 2007. (1) Colorectal gastrointestinal stromal tumor, (2) Discussant, instructional video session: Laparascopic partial gastrectomy.

Swallow CJ: Canadian Association of General Surgeons, Symposium/Canadian Surgical Forum, Toronto, ON, September 2007. Unexpected findings - Is it a perforated peptic ulcer or a perforated gastric cancer?

Swallow CJ: University of Alberta, Grand Rounds, Department of Surgery, Edmonton, AB, September 2007. Combined management of gastrointestinal stromal tumor.

Swallow CJ: University of Alberta, General Surgery Residents Retreat, Jasper, AB, September 2007. Visiting Professor: (1) Improving the quality of gastric cancer surgery - What then must we do?, (2) Retroperitoneal and visceral sarcomas.



Research and Investigations

Senior Investigator's Name Appears in Italics

Assessment of the relief of symptoms after the drainage of ascites: An evaluation of four questionnaires. *Easson AM*, Bezjak A, Ross S, Wright J: *Dean's Fund New Staff Award*. (\$10,000 2003 - 2009.)

Associated Medical Services fellow in end of life care. Easson AM: Associated Medical Services. (\$125,000 2004 - 2009.)

Combined oncolytic virotherapy and targeted radiotherapy for peritoneal carcinomatosis. *McCart JA*, Reilly RM, Fish EN: *Canadian Institutes of Health Research*. (\$325,000 2007 - 2010.)

Developing capacity for knowledge translation: Identifying factors that improve practice guideline implementation. *Gagliardi A*, Brouwers M, Palda V, McLeod RS, Lemieux-Charles L, Grimshaw J: *Canadian Institutes of Health Research, Institute of Health Services Research and Policy*. (\$157,763 2008 - 2010.)

Discovery of targets for the prevention of invasion and metastasis of colorectal and breast cancers and sarcoma. *Swallow CJ*, Woodgett J, Andrulis I, Wrana J, Dennis J: *The Syndey C. Cooper Program for the Prevention of Cancer Progression*. (\$1,000,000 2008 - 2011.)

Evaluation of vaccinia virus oncolysis in glioblastoma. *McCart JA*: *Grant Miller Cancer Research Grant, Faculty of Medicine, University of Toronto*. (\$19,126 2003 - 2008.)

Immuno-gene therapy for colorectal cancer. McCart JA, Medin JA: Colon Cancer Canada. (\$30,000 2007 - 2008.)

Immunogene therapy for prostate cancer: Testing outcomes in non-human primates. *Medin JA*, Trachtenberg J, McCart JA, Moloo B: *Ontario Institute of Cancer Research*. (\$560,100 2006 - 2009.)

Interdisciplinary research on the determinants and impact of colorectal cancer: Molecular genetic factors, risk modifiers and population health. *McLaughlin J (Team Grant co-Investigator)*, Gryfe R [Team Leader – Molecular epidemiological studies of patient outcome and response to treatment – \$203,706 for 3 years]: *Canadian Institutes of Health Research*. (\$3,627, 210 2006 - 2010.)

Plk4 and chromosomal instability. Swallow CN, Dennis JW: National Cancer Institute of Canada (declined). (\$467,000 2006 - 2009.)

Plk4 and chromosomal instability. Swallow CJ, Dennis JW: Canadian Institutes of Health Research. (\$447,000 2006 - 2009.)

P53 dependent synthetic lethality in colon cancer. Gryfe R: Colon Cancer Canada. (\$30,000 2007 - 2008.)

Post operative recurrence in paediatric Crohn's disease: Influence of molecular factors. *McLeod RS*, Silverberg M, Griffiths A, Walters T: *Crohn's and Colitis Foundation of Canada*. (\$300,000 2007 - 2010.)

Randomized controlled trial comparing the effectiveness of a web based journal club to a standard journal club format to teach critical appraisal skills. *McLeod RS*, MacRae H, Brasel K: *The Physicians' Services Incorporated Foundation*. (\$93,000 2008 - 2009.)

The gastrointestinal stromal tumor (GIST) experience at the University of Toronto, 1986-2006: Mutational status and prognosis. *Swallow CJ*, Bhojani F, Pollett A, Blackstein M: *Novartis Oncology*. (\$13,000 2008 - 2010.)

Honours Received

Cohen Z: Honorary Member of the Coloproctology Society of Argentina. September 2007.

Cohen Z: Naming of the Dr. Zane Cohen Lectureship in the Division of General Surgery, Mount Sinai Hospital. September 2007.

Easson AM: Best Visiting Speaker, International Grenfell Symposium. October 2007.

DIVISION OF ORTHOPAEDIC SURGERY

Dr. D. Backstein – Associate Professor Dr. R.S. Bell – Professor Dr. B.M. Deheshi – Lecturer Dr. P.C. Ferguson – Assistant Professor Dr. A.E. Gross – Professor Dr. O. Safir – Lecturer Dr. E.A. Silverstein – Assistant Professor Dr. J.S. Theodoropoulos – Lecturer Dr. J.S. Wunder – Professor (Division Head)

Publications

Backstein D: Unicompartmental knee arthritis: Patellofemoral arthroplasty. Canadian Orthopaedic Association Bulletin: June 2008: 81: pp 19-20.

Boscainos PJ, Gross AE, Kellett CF: Osteochondral allografts for articular defects of the knee. In: Topics in Tissue Engineering: (Ashammakhi N, Reis R, Chiellini F, eds.) Expertissues E-Book: Volume 4: 2008: Chapter 5.

Boscainos PJ, Kellett CF, Gross AE: Allograft transplantation for articular defects of the knee. In: Reconstructive Knee Surgery: (Jackson DW, ed.) Lippincott, Williams & Wilkins, Philadelphia: 2008: pp 461-473.

Boscainos PJ, Kellett CF, Maury AC, Backstein D, Gross AE: Management of periacetabular bone loss in revision hip arthroplasty. Clinical Orthopaedics and Related Research: December 2007: 465: pp 159-165.

Davis AM, Agnidis Z, Badley E, Davey R, Gafni A, Gollish J, Mahomed NN, Saleh KJ, Schemitsch E, Szalai JP, Waddell JP, Gross AE: Waiting for hip revision surgery: The impact on patient disability. Canadian Journal of Surgery: April 2008: 51(2): pp 92-96.

Dickson BC, Li SQ, Wunder JS, Ferguson PC, Eslami B, Werier JA, Turcotte RE, Kandel RA: Giant cell tumor of bone express p63. Modern Pathology: April 2008: 21(4): pp 369-375. E-published February 29, 2008.

Flint MN, Griffin AM, Bell RS, Wunder JS, Ferguson PC: Two stage revision of infected uncemented lower extremity tumor endoprostheses. Journal of Arthroplasty: September 2007: 22(6): pp 859-865.

Gofton W, Dubrowski A, Tabloie F, Backstein D: The effect of computer navigation on trainee learning of surgical skills. Journal of Bone and Joint Surgery (American): December 2007: 89: pp 2819-2827.

Griffin AM, Shaheen M, Bell RS, Wunder JS, Ferguson PC: Oncologic and functional outcome of scapular chondrosarcoma. The Annals of Surgical Oncology: May 2008: pp 2250-2256.

Gross AE, Kim W, Las Heras F, Backstein D, Safir O, Pritzker KP: Fresh osteochondral allografts for posttraumatic knee defects: Long-term followup. Clinical Orthopaedics and Related Research: May 2008: 466(8): pp 1863-1870.

Gross AE, Roseberg AG: Tumors in the hip: Managing real pathologies. Orthopaedics: September 2007: 30(9): pp 754-755.

Gross AE, Safir O, Backstein D: How do you handle massive bone loss at the time of revision total knee arthroplasty? In: Curbside Consultation in Knee Arthroplasty - 49 Clinical Questions: (Della Valle CJ, ed.) Slack Incorporated, Thorofare, New Jersey: 2008: pp 173-176.

Hill RP, Kaspler P, Griffin AM, O'Sullivan B, Catton C, Alasti H, Abbas A, Heydarian M, Ferguson P, Wunder JS, Bell RS: Studies of the in vivo radiosensitivity of human skin fibroblasts. Radiotherapy and Oncology: July 2007: 84(1): pp 75-83.

Hopyan S, Wunder JS, Randall L: Molecular biology in musculoskeletal neoplasia. In: Orthopaedic Knowledge Update -Musculoskeletal Tumors: (Schwartz HS, ed.) American Academy of Orthopaedic Surgeons, Rosemont, IL: 2007: pp 13-21.

Kellett CF, Boscainos PJ, Gross AE: Rings and cages. In: Hip Arthritis Surgery - Operative Techniques: (Waddell JP, ed.) Saunders Elsevier, Philadelphia, Pennsylvania: 2008: pp 274-291.

Kosashvili Y, Backstein D, Safir O, Ran Y, Loebenberg MI, Ziv YB: Hemiarthroplasty of the hip for fracture-what is the appropriate sized femoral head? Injury: September 2007: 39(2): pp 232-237.



Murray DJ, Neligan PC, Novak CB, Howley B, Wunder JS, Lipa JE: Free tissue transfer and deep vein thrombosis. Journal of Plastic and Reconstructive Aesthetic Surgery: June 2008: 61(6): 687-692. E-published January 22, 2008.

Nousiainen M, Brydges R, Backstein D, Dubrowski A: Comparison of expert instruction and computer-based video training in teaching fundamental surgical skills to medical students. Surgery: April 2008: 143(4): pp 539-544.

Safir O, Gross A, Backstein D: A classification scheme for the management of periprosthetic fractures of the knee. Seminars in Arthroplasty: March 2008: 19(1): pp 126-131.

Segui C, Kassis J, Busque L, Bestawros A, Theodoropoulos J, Alonso ML, Harvey EJ: Non-traumatic necrosis of bone (osteonecrosis) is associated with endothelial cell activation but not thrombophilia. (Oxford) Rheumatology: E-published June 4, 2008.

Woodrow S, Dubrowski A, Khokhotva M, Backstein D, Rampersaud R, Massicotte E: Training and evaluating spinal surgeons. Spine: December 2007: 32: pp 2921-2925.

Wu C, Wei Q, Utomo V, Nadesan P, Whetstone H, Kandel R, Wunder JS, Alman BA: Side population cells isolated from mesenchymal neoplasms have tumor initiating potential. Cancer Research: September 2007: 67(17): pp 8216-8222.

Wunder JS, Nielsen TO, Maki RG, O'Sullivan B, Alman BA: CYP3A4/5 and pharmacogenetics in patients with sarcoma. The Lancet Oncology: August 2007: 8(8): pp 668-669.

Yathindra Y, Gerth S, Desai S, Ferguson P, von Schroeder H: Orthopaedics. In: Toronto Notes 2008: (Colman R, Somoygi R, eds.) Toronto Notes for Medical Students Inc., Toronto: 2008: pp OR1-OR46.

Invited Visits

Backstein D: Niagara Health System Region Orthopaedic Associates Business Meeting, Niagara Falls, ON, April 2008. What is the role of anticoagulants in orthopaedic surgery - Are we doing enough?

Backstein D: Stryker Canada, Primary and Revision Total Joint Arthroplasty: Current Concepts, Niagara-on-the-Lake, ON, September 2007. (1) Extensor mechanism disruption, (2) MIS total hip replacement - Not dead, (3) The role for gender specific total knee designs.

Bell RS: Canadian College of Health Service Executives, National Healthcare Leadership Conference, Saskatoon, SK, June 2008. The politics of regionalization.

Bell RS: Peking University, Health Science Center, China-Canada Dialogue on Hospital Management and Social Work, Beijing, China, March 2008. The Canadian healthcare system and University Health Network.

Bell RS: The Fourth National Conference on Progress in Oncology, Beijing, China, March 2008. The Ontario cancer system.

Ferguson PC: Canadian Orthopaedic Association and the American Orthopaedic Association, Combined Meeting, Quebec City, PQ, June 2008. (1) Moderator, (2) Instructional Course Lectures: (a) Common oncologic mishaps: How to avoid them in general practice, (b) The botched biopsy.

Ferguson PC: Radiologic Society of North America, Chicago, Illinois, November 2007. Oncodiagnosis panel: The multidisciplinary management of soft tissue sarcoma.

Ferguson PC: Stryker Course in Revision Total Knee Arthroplasty, Toronto, ON, October 2007. Megaprostheses in salvage surgery at the knee.

Gross AE: Musculoskeletal Transplant Foundation, Fifth International Symposium, Vancouver, BC, October 2007. Long term results of fresh osteochondral allografts for posttraumatic knee defects.

Wunder J: Infinity Pharmaceuticals, Cambridge, Massachussetts, June 2008. From development to chondrosarcoma: Hedgehog signalling in chondrocytes.

Wunder J: American Academy of Orthopaedic Surgeons-Musculoskeletal Tumor Society (AAOS-MSTS) Specialty Day, San Francisco, California, March 2008. Function and quality of life: Amputation and limb salvage surgery.

Research and Investigations

Senior Investigator's Name Appears in Italics

Effect of bench model training on cognitive learning in the operating room. *Backstein D*, Syed K: *The Physicians' Services Incorporated Foundation*. (\$32,000 2008.)

Hedgehog signaling in cartilage neoplasia and development. *Wunder JS*, Alman BA: *Canadian Institutes of Health Research*. (\$807,945 2008 - 2013.)

Hedgehog signaling in cartilaginous neoplasia: Implications for treatment. *Wunder JS*, Alman BS: *Canadian Institutes of Health Research*. (\$796,660 2003 - 2008.)

Molecular medicine and surgery phase II central seminars. *Backstein D*, Woods N, Massicotte E: *McLaughlin Centre for Molecular Medicine Grant*. (\$8,876 2006 - 2007.)

Predictors of disability outcomes following revision total knee arthroplasty (renewal). *Davis A*, Garbuz D, Gignac M, Gross A, Kiss A, Mahomed N, Schemitsch E: *Canadian Institutes of Health Research*. (\$284,640 2005 - 2010.)

Repair of early joint damage - A tissue engineering approach. *Kandel R*, Grynpas M, Pilliar R, Erkorkmaz K, Gross AE, Hurtig A, Nagy M, Papini WL, Stanford E, Toyserkani E, Waldman SD, White L, Zalzal P: *Canadian Institutes of Health Research* (\$400,000 *per year.*) (\$2,400,000 2007 - 2012.)

Self-regulated scheduling of practice of a technical surgical skill. *Carnahan H*, Safir O, Dubrowski A, Backstein D: 2007 Medical Education Research Grant, *The Royal College of Physicians and Surgeons of Canada*. (\$22,680 2007 - 2008.)

Self-regulated scheduling of practice of a technical surgical skill. *Safir O, Carnahan H*, Dubrowski A, Backstein D: *The Physicians'* Services Incorporated Foundation. (\$24,000 2007 - 2008.)

The educational value of pre-training fundamental technical skills in surgical clerkship. *Backstein D*, Dubrowski A, Kurahshi A: *Education Development Fund*. (\$20,000 2007 - 2008.)

Honours Received

Ferguson PC: Bruce Tovee Undergraduate Teaching Award. May 2008.

Ferguson PC: Elected Inaugural President, Canadian Orthopaedic Oncology Society. June 2008.

DIVISION OF PLASTIC SURGERY

Dr. N.H. McKee - Professor

Publications

Wu Florence TH, Ng-Thow-Hing V, Singh K, Agur AM, McKee NH: Computational representation of the aponeuroses as NURBS surfaces in 3-D musculoskeletal models. Computer Methods and Programs in Biomedicine: October 2007: 88: pp 112-122.

DIVISION OF UROLOGY



Dr. E.D. Grober – Assistant Professor Dr. K.A. Jarvi – Professor (Division Head) Dr. K.C. Lo – Assistant Professor Dr. A.R. Zlotta – Professor

Publications

Al-Ghamdi AM, Lockwood G, Toi A, Kulkarni GS, Evans A, Finelli A, Zlotta ZR, Fleshner N: Extended pattern prostate biopsy does not minimize the volume-grade bias in prostate cancer detection. The Journal of Urology: April 2008: 179(4): pp 1332-1334.

Binsaleh S, Lo KC: Varicocelectomy: Microsurgical inguinal varicocelectomy is the treatment of choice. Canadian Urological Association Journal: September 2007: 1(3): pp 277-278.

Bollens R, Rosenblatt A, Espinoza BP, DeGroote A, Quackels T, Roumeguere T, Vanden Bossche M, Wespes E, Zlotta AR, Schulman CC: Laparoscopic partial nephrectomy with "on-demand" clamping reduces warm ischemia time. European Urology: September 2007: 52(3): pp 804-809.

Djavan B, Ravery V, Rocco B, Zlotta A, Brausi M, Margreiter M, Hammerer P, Kaisary A, Anagnostou T, Romics I, Dobronski P, DeCobelli O, Marberger M: European study of radical prostatectomy: Time trends in Europe, 1993-2005. British Journal of Urology International: July 2007: 100(Suppl 2): pp 22-25.

Fleshner N, Zlotta AR: Prostate cancer prevention: Past, present, and future. Cancer: November 2007: 110(9): pp 1889-1899.

Grober ED, Elterman D, Jewett MAS: Fellow or foe: The impact of fellowship training programs on the education of Canadian urology residents. Journal of the Canadian Urological Association: February 2008: 2(1): pp 33-37.

Grober ED, Khera M: Androgen deficiency in the aging male and testosterone replacement therapy. In: Urology and the Primary Care Practitioner: (Lipshultz LI, ed.) Mosby-Wolfe, Philadelphia, Pennsylvania: 2007.

Grober ED, Khera M, Soni SD, Espinoza MG, Lipshultz LI: Efficacy of changing testosterone gel preparations (Androgel or Testim) among suboptimally responsive hypogonadal men. International Journal of Impotence Research: March 2008: 20(2): pp 213-217.

Heshmat SM, Mullen JB, Jarvi KA, Soosaipillai A, Diamandis EP, Hamilton RJ, Lo KC: Seminal plasma lipocalin-type prostaglandin D synthase: A potential new marker for the diagnosis of obstructive azoospermia. The Journal of Urology: March 2008: 179: pp 1077-1080.

Jarvi K, Chitayat D: The genetics you never knew: A genetics primer (Male infertility: Current concepts and controversies.) In: Urologic Clinics of North America: (Hollan K, Nagler HM, eds.) W.B. Saunders Company/Elsevier Inc., Philadelphia, Pennsylvania: 2008: pp 243-256.

Jarvi K, Chityat D: The genetics you never knew: A genetics primer. Urologic Clinics of North America: August 2007: 35: pp 243-256.

Jarvi K, Grober ED, Lo KC, Patry G: Mini-incision microsurgical vasectomy reversal using no-scalpel vasectomy principles and instruments. Urology: E-published June 30, 2008.

Khera M, Grober ED, Fishman IJ: Erectile dysfunction. In: Urology and the Primary Care Practitioner: (Lipshultz LI, ed.) Mosby-Wolfe, Philadelphia, Pennsylvania: 2007.

Khera M, Grober ED, Lipshultz LI: Evaluation and management of the infertile male. In: Urology and the Primary Care Practitioner: (Lipshultz LI, ed.) Mosby-Wolfe, Philadelphia: 2007.

Lee J, Bin-Saleh S, Lo K, Jarvi K: Varicocelectomy may benefit men with a sertoli cell-only pattern on microscopic testicular sperm extraction: A case report. Urology: June 2008: 71: pp 117-118.

Lee J, Bin-Saleh S, Lo K, Jarvi K: Varicocelectomy: The diagnostic dilemma. Journal of Andrology: March 2008: 29: pp 143-146.

Lemy A, Wissing KM, Rorive S, Zlotta A, Roumegere T, Muniz Martinez MC: Late onset of bladder urothelial carcinoma after kidney transplantation for end-stage aristolochic acid nephropathy: A case series with 15-year follow-up. American Journal of Kidney Disease: March 2008: 51(3): pp 471-477.

Liu KE, Bin-Saleh S, Lo KC, Jarvi K: Propecia induced spermatogenic failure: A report of two cases. Fertility and Sterility: E-published December 11, 2007.

Scattoni V, Zlotta A, Monironi R, Schulman C, Rigatti P, Montorsi F: Extended and saturation prostatic biopsy in the diagnosis and characterisation of prostate cancer: A critical analysis of the literature. European Urology: November 2007: 52(5): pp 1309-1322.

Shahani R, Fleshner NE, Zlotta AR: Pharmacotherapy for prostate cancer: The role of hormonal treatment. Discovery Medicine: August 2007: 7(39): pp 118-124.

Shariat SF, Walz J, Roehrborn CG, Zlotta AR, Perrotte P, Suardi N, Saad F, Karakiewicz PI: External validation of a biomarker-based preoperative nomogram predicts biochemical recurrence after radical prostatectomy. Journal of Clinical Oncology: March 2008: 26(9): pp 1526-1531.

Zlotta AR: Editorial comment. The Journal of Urology: October 2007: 178(4): pp 1237.

Zlotta AR: When and how to treat superficial and muscle-invasive bladder cancer. European Urology: September 2007: 52(6): pp 1554-1557.

Invited Visits

Grober ED: Solvay Pharma, Primary Care Physicians of the Greater Toronto Area, Toronto, ON, June 2008. Testosterone replacement and prostate safety.

Grober ED: Solvay Pharma, Primary Care Physicians of the Greater Toronto Area, Toronto, ON, February 2008. Testosterone replacement and prostate safety.

Grober ED: Solvay Pharma, Primary Care Physicians of the Greater Toronto Area, Toronto, ON, November 2007. Testosterone replacement and prostate safety.

Jarvi K: In Vitro Fertilization (IVF) Canada Public Forum, Toronto, ON, May 2008. Male infertility.

Jarvi K: Canadian Fertility and Andrology Society, 53rd Annual Meeting, Halifax, NS, September 2007. (1) Fertility preservation in pre-pubertal male cancer patients-case series, (2) Improvement in sperm DNA integrity with oral anti-oxidant therapy in patients with high DNA damage, (3) Varicocelectomy for infertile couples with advanced paternal age.

Lo KC: Reproductive endocrinology fellows in training enrichment (REFINE) program, Banff, AB, May 2008. Non-surgical treatment for male infertility.

Lo KC: Canadian Cancer Society, Chinese Cancer Information Forum, Toronto, ON, April 2008. Prostate cancer - Diagnosis and treatment.

Lo KC: Chinese Cultural Center of Greater Toronto, 2007 Health Awareness Day, Toronto, ON, October 2007. Benign prostatic hypertrophy and prostate cancer.

Zlotta AR: American Urology Association, Orlando, Florida, May 2008. MSH2 mutations and bladder cancer risk: Family members of hereditary nonpolyposis colorectal cancer (HNPCC) patients with MSH2 mutations are at increased risk not only for upper urinary tract transitional cell carcinoma (TCC) but also bladder cancer.

Zlotta AR: Tel-hashomer University Hospital, Tel-Aviv, Israel, April 2008. BCG for high-grade superficial bladder cancer and CIS.

Zlotta AR: European Association of Urology, Milan, Italy, March 2008. (1) MSH2 mutations and bladder cancer risk: Family members of hereditary nonpolyposis colorectal cancer (HNPCC) patients with MSH2 mutations are at increased risk not only for upper urinary tract transitional cell carcinoma (TCC) but also bladder cancer, (2) Adjuvant or early state salvage treatment for advance PCa, (3) CIS: State of the art treatment: A case-based review.

Zlotta AR: Kantonsspital Aarau, The 5th Engadin Prostate Cancer Symposium, Zuoz, Switzerland, March 2008. Extended and saturation biopsies.

Zlotta AR: World Congress on Controversies in Urology (CURy), Barcelona, Spain, January 2008. (1) Intravesical BCG: CIS, (2) Intravesical chemotherapy: Which drug and which regimen for which patients?, (3) Is PSA a good marker?

Zlotta AR: Association of Academic European Urologists, 6th Meeting, Prague, Czech Republic, December 2007. MSH2 mutations and bladder cancer risk.

Zlotta AR: Congress of Catalunya Society, Taragona, Spain, November 2007. BPH: The role of alpha-reductase inhibitors.

Zlotta AR: Dalhousie Fear Memorial Conference, Halifax, NS, October 2007. BPH prevention: Prostate cancer and ageing-male pelvic health and ageing metabolism.

Zlotta AR: European Association of Urology, 4th Edition of the New Perspectives in Urology, Athens, Greece, September 2007. Prostate cancer prevention: New update on PCPT and REDUCE.

Zlotta AR: Societe Internationale d'Urologie, Paris, France, September 2007. Management of hormone-refractory prostate cancer: Evolving the standard of care through a multidisciplinary team approach.



Research and Investigations

Senior Investigator's Name Appears in Italics

Endoscopic assessment of bladder tumors: Accuracy of endoscopic staging and grading with fiberoptic and digital cystoscopes. *Jewett MAS*, Grober ED, Fleshner NE, Cafazzo JA, Seto E, Hersey K, Trachtenberg J, Evans A: *Gyrus - ACMI*. (\$50,000 2005 - 2007.)

Prevalence and age distribution of prostate cancer carcinoma and its precursor lesions in Caucasian, African and Asian men in autopsy specimens: A prospective comparative international study with central pathology review. *Zlotta AR*, Montorsi F, Alcaraz A, Pushkar D, Egawa S, Schulman C, Kyabu F, Fleshner N, Van der Kwast T, Finelli T, Jarvi K: *Prostate Cancer Research Foundation of Canada*. (\$29,500 2007 - 2008.)

Use of seminal fluid protein patterns as biomarkers for diseases in the male reproductive tract: Prediction of spermatogenesis in men with zoospermia. *Jarvi K*, Lo KC, Diamandis E, Mullen B: *Physician's Services Incorporated*. (\$145,500 2007 - 2009.)

Honours Received

Grober ED: 1st Prize for Best Scientific Poster, "Comparison of Strict Morphology among Fertile and Infertile Males (Grober ED, collaborator), Kimbrough Award from the Society of Government Service Urologists. July 2007.

Zlotta AR: Third Prize for the Best Abstract for Oncology at the European Association of Urology Conference in Milan, Italy. March 2008.

St. JOSEPH'S HEATH CENTRE

Heads of Divisions

Dr. T. Harmantas – General Surgery Dr. M. Roscoe – Orthopaedic Surgery Dr. L. Kasrai – Plastic Surgery Dr. C. Compeau – Thoracic Surgery Dr. U. Jain – Urology Lloyd Smith Surgeon-in-Chief



The past year has been a good one for the Department of Surgery at St. Joseph's Health Centre. Increased funding in the areas of cancer surgery, along with hip and knee replacement, has helped to significantly reduce wait times and increase patient satisfaction. We have been able to more than achieve our surgical targets for both of these areas.

In Thoracic Surgery, the hospital has made a strategic decision to become a Level I Centre, which has been accepted and supported by the University Division of Thoracic Surgery and Cancer Care Ontario. We have secured resources from the hospital to hire a third thoracic surgeon.

In Urology, Dr. Ashis Chawla has started a program in laparoscopic prostatectomy. The recruitment of Dr. Chawla has allowed us to significantly reduce our wait times for urological cancers.

The Division of General Surgery has started a community surgery fellowship, which hopefully will provide trainees with an easy transition from residency to working independently in the community.

Appointments and Promotions

Dr. George Vincent was promoted to Assistant Professor in the Division of Orthopaedic Surgery, recognizing his contribution to teaching and clinical excellence.

Dr. Umesh Jain and Dr. Tony McLean have been given appointments as Lecturer in the Division of Urology, recognizing their longstanding contributions to teaching clinical fellows.

Dr. Ronald Levine has been appointed as Director of Post-Graduate Education for the University of Toronto, Department of Surgery. This recognizes Ron's longstanding commitment to surgical education at St. Joseph's Health Centre and within the University of Toronto.

Dr. Leila Kasrai was appointed as the Division Head in Plastic Surgery at St. Joseph's, replacing Dr. Levine, who held this position for more than 10 years.



Awards

Dr. Lloyd Smith won the Family Medicine Award for Best Surgical Teacher. Dr. Smith also won the Ernie Spratt Award for Resident Teaching in the Division of General Surgery, St. Joseph's Health Centre.

Conclusion

The Department of Surgery has reaffirmed our vision to become the Best Community Teaching Hospital in Canada. Currently, we have residents and/or fellows in all our surgical sub-specialties and we continue to develop our teaching program further. Looking to the future, we plan to continue to provide excellence in teaching and clinical surgery.

DIVISION OF GENERAL SURGERY



Dr. T.A. Harmantas – Assistant Professor (Division Head) Dr. R.S. Hart – Lecturer Dr. D.R. Lindsay – Lecturer Dr. L.C. Smith – Associate Professor Dr. P.A. Sullivan – Lecturer

Invited Visits Smith LC: Johnson and Johnson, Hernia Symposium, Niagara-on-the Lake, ON, June 2008. Laparoscopic ventral hernia repair - Tips and tricks.

Honours Received Smith LC: St. Joseph's Health Centre Teaching Award. November 2007.

Smith LC: The Ernie Spratt Outstanding Surgical Teacher Award as the Best Surgical Teacher at St. Joseph's Health Centre. June 2008.

DIVISION OF ORTHOPAEDIC SURGERY

Dr. A.W. ElMaraghy – Assistant Professor Dr. M. Kliman – Lecturer Dr. M. Roscoe – Lecturer (Division Head) Dr. G. Vincent – Assistant Professor Dr. M. Wood – Lecturer

Publications

El Maraghy A, Devereaux M, Tsoi K: The biceps crease interval for diagnoses of complete distal biceps tendon ruptures. Clinical Orthopaedics and Related Research: E-published June 13, 2008.

Research and Investigations

Senior Investigator's Name Appears in Italics

Morphometric assessment of acromial interaction with the clavicular hook plate. *ElMaraghy AW*, Devereaux MD, Agur A: *Synthes Canada Ltd.* (\$30,000 2007 - 2009.)

Invited Visits

El Maraghy A: Canadian Orthopaedic Association, Quebec City, PQ, June 2008. Podium Presenter: The BCI test: A physical examination tool for diagnosis of complete distal biceps tendon ruptures.

El Maraghy A: American Academy of Orthopaedic Surgeons (AAOS), Annual Congress, San Francisco, California, March 2008. Podium Presenter: The biceps crease interval test for diagnosis of complete distal biceps tendon ruptures.

El Maraghy A: American Society for Sports Medicine (AMSSM), Annual Congress, Las Vegas, Nevada, March 2008. Podium Presentation: Surgical repair of partial pectoralis major tendon avulsion.

DIVISION OF PLASTIC SURGERY

Dr. C. Fielding – Lecturer Dr. L. Kasrai – Assistant Professor Dr. R.H. Levine – Associate Professor (Division Head) Dr. K.R. Wanzel – Assistant Professor

Invited Visits

Kasrai L: Invited Speaker, Canadian Society of Plastic Surgeons, St. John's, NFLD, June 2008. Canadian expert series: Microtia reconstruction.

Kasrai L: American Cleft Palate-Craniofacial Association, Philadelphia, Pennsylvania, April 2008. Autologous ear reconstruction - Nagata's technique.

Kasrai L: British Virgin Islands Workshop in Plastic Surgery, Tortola, British Virgin Islands, January 2008. (1) Autologous ear reconstruction: The fabrication of the Nagata 3-D framework (10 minute video), (2) Extension of autologous ear reconstruction - techniques for the management of the constricted, (3) Reconstruction of acquired partial ear defects.

Kasrai L: American Society of Plastic Surgeons, Baltimore, Maryland, October 2007. Introduction to two-stage total and subtotal auricular reconstruction - the fabrication of the three-dimensional costal cartilage framework (3-D frame.)

Kasrai L: British Association of Plastic Reconstructive and Aesthetic Surgeons (BAPTRAS), 4th International Congress on Auricular Reconstruction, Edinburgh, Scotland, October 2007. (1) Autologous reconstruction of acquired auricular deformities, (2) Co-Chair of Free Paper Session.

DIVISION OF THORACIC SURGERY

Dr. C. Compeau – Assistant Professor (Division Head) Dr. Y. Shargall – Assistant Professor Dr. E.H Spratt – Associate Professor

Publications

Shargall Y, Spratt E, Zeldin R: Hyperhidrosis: What is it and why does it occur? Thoracic Surgery Clinics, May 2008: 18(2), pp 125-132.

Invited Visits

Shargall Y: 3rd Annual Ontario Thoracic Cancer Conference, Niagara-on-the-Lake, ON, March 28, 2008 – March 30, 2008. Chair, Mediastinoscopy session.

Shargall Y: South Lake Regional Health Centre, Medical Education Retreat, Newmarket, ON, October 2007. Speaker: Medical education and the community teaching hospitals.

DIVISION OF UROLOGY

Dr. A. Chawla – Lecturer Dr. U. Jain – Lecturer (Division Head) Dr. A. Marcuzzi – Lecturer Dr. A. McLean – Lecturer



ST. MICHAEL'S HOSPITAL

Heads of Divisions

Dr. L. Errett – Cardiovascular and Thoracic Surgery Dr. A.B. Nathens – General Surgery Dr. R.L. Macdonald – Neurosurgery Dr. E. Schemitsch – Orthopaedic Surgery Dr. J. Mahoney – Plastic Surgery Dr. R.J. Honey – Urology

Dr. F.M. Ameli – Vascular Surgery

Ori Rotstein

Surgeon-in-Chief



It's been another busy year for St. Michael's Hospital and our Department of Surgery. The ancient building at 38 Shuter and accompanying annex have been completely demolished. Construction of the building is well underway for the new Li Ka Shing Knowledge Institute which will house the Keenan Research Centre as well as the Li Ka Shing International Centre in Health Care Education.

This year has been one highlighted by successes across the academic spectrum. These are too numerous to exhaustively list, but several of them are highlighted below.

Our Department had a number of individuals promoted this year. Dr. Nancy Baxter was promoted to the rank of Associate Professor. Promoted to the rank of Full Professor were Dr. Lee Errett, Dr. Michael McKee and Dr. Avery Nathens.

A number of our surgeons have taken on important leadership positions around the University. Dr. Najma Ahmed became the Program Director for the General Surgery Division. Dr. John Bohnen was appointed Vice-Dean, Clinical Affairs, Faculty of Medicine at the University of Toronto and Dr. David Latter has been appointed Vice-Chair, Education in the Department of Surgery. Outside the University, Dr. Avery Nathens has been appointed to Chair the American College of Surgeons's National Trauma Data Bank. He has also been appointed as Medical Director for Criticall in Ontario. In this role he will work with hospitals and physicians in the province to develop improved protocols for ease of access not only for patient transfers but for medical consultants.

In June, St. Michael's Hospital hosted a Physicians and Surgeons Education Achievement Day. Our Faculty has been honoured for their excellence in teaching with a number of recognition awards. Dr. Daniel Bonneau received the William Horsey Postgraduate Teaching Award; Dr. Vern Campbell was awarded the Donald J. Currie Teaching Award for Undergraduate Teaching; the Leo Mahoney Resident Teaching Award went to Dr. Michael Ko (Resident), and the McGoey Award in Orthopedic Surgery went to Dr. Bill Ristevski (Resident). The newly created Jameel Ali Award in Continuing Education in Surgery was announced at the award ceremony. This award is meant to acknowledge Dr. Jameel Ali for his outstanding contributions in continuing education as it relates to the development and propagation of the ATLS program, nationally and internationally, and will be awarded annually. Dr. John Bohnen was given special recognition for his longstanding contributions to Education here at the Institution and beyond. On a national note, Dr. Michael Cusimano has been awarded the prestigious John Provan Award for Excellence in Surgical Education. On the other hand, Dr. Richard Perrin will oversee the Arthur and Sonja Labatt Fellowship in Neurosurgery. Finally, Dr. Tim Daniels has devoted considerable efforts to Continuing Professional Development through his establishment of Educational Development Evenings for out Faculty.

The Institution has made progress in a number of clinical areas. Our program in Endovascular Surgery has been augmented by the appointment of Dr. Mark Peterson and Dr. Claudio Cina. The Da Vinci Robotics system was purchased by St. Michael's Hospital through a generous donor and is now the first of its kind in the Metro Toronto area. The robot will allow our surgeons to conduct complex procedures more accurately and in a non-invasive way, resulting in faster recoveries for our patients. Drs. Ken Pace and John Honey performed the first robotic-assisted prostate cancer surgeries in Toronto. The state-of -the-art equipment is currently being co-shared by the Division of Urology for patients undergoing such procedures as prostate surgery and kidney blockages, and the Division of Obstetrics and Gynecology for hysterectomies and pelvic surgery.



The creation of the Labatt Family Centre of Excellence in Brain Injury and Trauma Research in the Keenan Research Centre of the Li Ka Shing Knowledge Institute will support St. Michael's Hospital's surgeon scientists who are searching for novel ways to diagnose, treat and prevent traumatic injuries. In addition, a donation from the Watters family has catapulted the development of the Wathers Family Simulation Centre where Dr. Grantcharov will be able to continue his work in Surgical Simulation

As we shift into the next academic year, we look forward to further opportunities for continued growth and success in our Department.

DIVISION OF CARDIOVASCULAR AND THORACIC SURGERY

Dr. D. Bonneau – Associate Professor Dr. L.E. Errett – Professor (Division Head) Dr. D.A. Latter – Associate Professor Dr. M.D. Peterson – Assistant Professor Dr. S. Verma – Associate Professor

Publications

Kim BO, Verma S, Weisel RD, Fazel S, Jia ZQ, Mizuno T, Li RK: Preservation of heart function in diabetic rats by the combined effects of muscle cell implantation and insulin therapy. European Journal of Heart Failure: January 2008: 10(1): pp 14-21.

Kpodonu J, Peterson MD, Lucas LA, Rodriguez-Lopez JA, Diethrich EB: An extra anatomic, close chest approach to manage an aortic arch aneurysm in an 88 year old woman. The Annals of Thoracic Surgery: September 2007: 83(3): pp 1045-1047.

Mazer CD, Leong-Poi H, Mahoney J, Latter D, Strauss BH, Teitel JM: Vascular injury and thrombotic potential: A note of caution about recombinant factor V11a. Seminars in Cardiothoracic and Vascular Anesthesia: December 2007: 1(4): pp 261-264.

Verma S, Mamdani MM, Al-Omran M, Melo M, Rouleau J: Angiotensin receptor blockers vs. angiotensin converting enzyme inhibitors and acute coronary syndrome outcomes in elderly patients: A population-based cohort study (UMPIRE study results). Journal of the American Society of Hypertension: August 2007: 1: pp 286-294.

Wang CH, Cherng WJ, Yang NI, Hsu CM, Yeh CH, Lan YJ, Wang JS, Verma S: Cyclosporin increases ischemia-induced endothelial progenitor cell mobilization through manipulation of the CD26 system. American Journal of Physiology - Regulatory, Integrative and Comparative Physiology: December 2007: 294(3): pp R811-R818.

Invited Visits

Bonneau D: Sorin Group USA, Denver, Colorado, November 2007. Aortic disease.

Bonneau D: Sorin Group, Vancouver, British Columbia, July 2007. Aortic surgery.

Errett LE: Servier Canada Inc., Toronto, ON, April 2008. Canadian regional expert (Concept) meeting.

Errett LE: The 10th South China International Congress of Cardiology, Guanzhong, China, April 2008. (1) Congenital bicuspic aortic valves, (2) The use of stent grafting in the aorta.

Errett LE: The Chinese Medical Association and Guangdong Provincial Cardiovascular Institute, Guangzhou, China, April 2008. Dealing with small aortic root common in small Chinese population.

Errett LE: Egyptian Society of Cardio-Thoracic Surgery, 15th Annual Conference, Ain Shams University, Cairo, Egypt, March 2008. (1) Sternal plates fixation for sternal wound reconstruction: Initial experience, (2) Can adding a sternal plate to primary closure prevent sternal dehiscence?

Errett LE: 7th International Congress on Coronary Artery Disease from Prevention to Intervention, Venice, Italy, October 2007. Is off-pump coronary artery bypass grafting worth it?

Errett LE: Canadian Cardiovascular Congress 2007, Quebec City, PQ, October 2007. Is off-pump coronary artery bypass grafting worth it?

Errett LE: Sohag University of the National Heart Institute, 14th Scientific Annual Meeting of Cardio-Thoracic Surgery, Alexandria, Egypt, July 2007. Sternal plates fixation for sternal wound reconstruction: Initial experience.

Peterson MD: Greater Toronto Area Community Cardiovascular Specialists Organization, Bridging the Gap, Toronto, ON, January 2008. Presentation - Endovascular surgery: The evolving role of the cardiac surgeon.

Peterson MD: Scarborough Centenary, Cardiology Rounds, Toronto, ON, October 2007. Endovascular Surgery for Cardiac Surgeons.

Verma S: European Society of Hypertension, Berlin, Germany, June 2008. Do we need new strategies for organ protection?

Verma S: Cardiology-Oncology Interface Meeting, Toronto, ON, May 2008. Exploring novel targets of cardioprotection with chemotherapy.

Verma S: Hôpital Tivoli, La Louviere, Belgium, April 2008. From current to future RAS blockade.

Verma S: National Taiwan University Hospital, Taipei Veterans General Hospital, E-DA Hospital, Pingtung Christian Hospital, Chang Gung Memorial Hospital, Kuang Tien General Hospital, Taichung Veterans General Hospital, Taipei, Taiwan/Ping Tung, Taiwan/Taichung, Taiwan, April 2008. Atherosclerosis: The unique interaction between inflammation and dyslipidemia.

Verma S: (1) Universitair Ziekenhuis Brussel, (2) Universitair Ziekenhuis Antwerpen, (3) Universitair Ziekenhuis Gent, (a) Laarbeeklaan, Brussels, (b) Antwerp, (c) Ghent - Belgium, April 2008. From current to future RAS blockade.

Verma S: (1) Vergaderzaal Cradiologie, Onze-Lieve-Vrouw (OLV) Ziekenhuis, (2) 3eme etage, Hôpital St. Luc, Universite Catholique de Louvain, (3) Katholicke Universiteit Leuven, (3) Universite de Liege, (a) Aalst, (b) Louvain-la-Neuve, (c) Leuven, (d) Liege - Belgium, April 2008. From current to future RAS blockade.

Verma S: Canadian Cardiovascular Society, Quebec City, PQ, October 2007. (1) Session I - Annual Advances in Cardiology, Translational Featured Presentation: Endothelial function: The elixir of life, (2) Session II - Thiazolidinediones and Cardiovascular Risk: Where Do We Stand Today: Applying scientific evidence into clinical practice: Case session, (3) Session III - Milestones in Cardiovascular Evidence: New Approaches and Evolving Insights: Cardiovascular continuum - A triumphant story of a RAAS inhibition, (4) Session IV - Current Issues in Cardiology: Pharmacotherapy in eldery patients: Unique challenges RAS inhibition in elderly patients – Insights from Canadian population-based studies, (5) Balancing life and work – Putting down the blackberry.

Research and Investigations

Senior Investigator's Name Appears in Italics

ACE2: Novel target for endothelial function and atherosclerosis. *Verma V*, Stewart DJ, Peninger J, Oudit G: *Heart and Stroke Foundation*. (\$320,000 2007 - 2011.)

Rodent cardiovascular and physiological investigations. Verma S: Canada Foundation for Innovation and Ontario Research Fund for Research Infrastructure Funding. (\$259,000 2007 - 2009.)

Sternal closure: Stability using the sternal fixation system. *Fawzy H*, Errett L, Verma S, Bonneau D, Latter D, Peterson M: *Arbeitsgemeinschaft f'uer Osteosynthesefragen (AO) Foundation Research Grant.* (\$54,555 2007 - 2008.)

Targeting RasGP3 in endothelial progenitor cells. Verma S, Stanford W: Heart and Stroke Foundation. (\$159,000 2006 - 2008.)

Telomerase regulation by C-reactive protein. Verma S: Canadian Institutes of Health Research. (\$330,000 2005 - 2008.)

Traineeship in atherosclerosis program. Verma S: Canadian Research-Based Pharmaceutical (Rx and D) Companies. (\$1,200,000 2006 - 2010.)

Honours Received

Bonneau D: Postgraduate Teaching Award, St. Michael's Hospital. June 2008.

Verma S: Canada Research Chair in Atherosclerosis. August 2007.

ST. MICHAEL's HOSPITAL

DIVISION OF GENERAL SURGERY

Dr. N.A. Ahmed – Assistant Professor Dr. J. Ali – Professor Dr. N. Baxter – Associate Professor Dr. J.M.A. Bohnen – Professor Dr. M.J. Burnstein – Associate Professor Dr. T. Grantcharov – Assistant Professor Dr. A. Kapus – Associate Professor Dr. J. Koo – Associate Professor Dr. W. Kuebler – Associate Professor Dr. J.C. Marshall – Professor Dr. J.C. Marshall – Professor Dr. A.B. Nathens – Professor (Division Head) Dr. O.D. Rotstein – Professor Dr. K. Szaszi – Assistant Professor

Publications

Aarts MAW, Brun-Buisson C, Cook DJ, Kumar A, Opal S, Rocker G, Smith T, Vincent JL, Marshall JC: Antibiotic management of suspected nosocomial ICU-acquired infection: Does prolonged empiric therapy improve outcome? Intensive Care Medicine: August 2007: 33: pp 1369-1378.

Aarts MAW, Hancock JN, Heyland D, McLeod R, Marshall JC: Empiric antibiotic therapy for suspected ventilator-associated pneumonia: A systematic review and meta-analysis of randomized trials. Critical Care Medicine: January 2008: 36: pp 108-117.

Al Ahmadi K, Ahmed N: Outcomes after pancreatic trauma. Canadian Journal of Surgery: April 2008: 51: pp 118-124.

Ali J: Chapter 11- Initial assessment and management commentary. In: Trauma - 6th Edition: (Feliciano D, Mattox K, Moore E, eds.) McGraw Hill, Chicago: 2008: pp 181-184.

Ali J: Fraser Gurd Lecture: The advanced trauma life support program-historical perspectives and future directions. Journal of Trauma: May 2008: 64(5): pp 1149-1158.

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Invited Visits

Ahmed NA: Association for Surgical Education, Toronto, ON, April 2008. Meeting the educational needs of off-service residents rotating on a surgical service.

Ahmed NA: Trauma Association of Canada, Annual Scientific Meeting, Whistler, BC, April 2008. (1) A real-time inter-professional performance improvement activity implemented through a nursing fellowship, (2) An ethnographic study of an injury prevention program, (3) Implementation and acceptability of an alcohol screening and brief intervention program, (4) Plenary session: Challenging cases, (5) Utility of VTE as a marker of quality, (6) What the health professionals of tomorrow should learn about injury control: A decision delphi.

Ahmed NA: Academic Surgical Congress, Huntington Beach, California, February 2008. A decision-delphi to evaluate injury control curricula in Canadian health professional schools: Opinions of trauma experts.

Ali J: Emergency Resident Journal Club, Trinidad, June 2008. Speaker: Hypotension in the Trauma.

Ali J: External Examiner, University of the West Indies, Trinidad and Barbados, June 2008.



Ali J: International Emergency and Catastrophe Management (IECM), Conference and Exhibition, Dubai, April 2008. (1) Hypotension in trauma, (2) Keynote Speaker: Trauma systems.

Ali J: McMaster University, Hamilton, ON, March 2008. Educator for Advanced Trauma Life Support (ATLS) Instructor Course.

Ali J: Trauma Association of Canada, Annual Scientific Meeting, Whistler, BC, March 2008.

Ali J: American College of Surgeons, Meeting of Advanced Trauma Life Support (ATLS) Educators and Authors, Chicago, IL, February 2008. Advanced trauma life support, instructor update process - 8th edition.

Ali J: Advanced Trauma Care for Nurses (ATCN), Phoenix, AZ, February 2008. Advanced trauma course for nurses program.

Ali J: College of Physicians and Surgeons of Costa Rica, San Jose, Costa Rica, February 2008. (1) Advanced trauma life support outreach program, (2) Prehospital trauma life support outreach program.

Ali J: St. Georges' University, Grenada, January 2008. (1) Advanced trauma life support program, (2) Prehospital trauma life support program, (3) Trauma evaluation and management.

Ali J: University of Calgary, Calgary, AB, January 2008. Instructor course: Advanced trauma life support (ATLS).

Baxter N: American Society of Colon and Rectal Surgeons, Current Status of Quality Initiatives in the United States, Boston, Massachussetts, June 2008. Moderator and Presenter: Quality symposium: Ensuring quality of care for colorectal surgery patients: Redesigning the system.

Baxter N: Congreso Internacional de Cirugia Endoscopia, Puerto Vallarta, Mexico, May 2008. (1) Colorectal surgery, medial or lateral approaches, pros and cons, (2) Creation of centres of excellence for rectal cancer, (3) Current status of colon surgery, (4) Laparoscopic surgery for colon cancer - Are the results better?

Baxter N: MD Medical Education Conferences, Update on the Management of Gastrointestinal Malignancies, San Diego, California, November 2007. New developments in colorectal surgery.

Baxter N: American College of Surgeons, Annual Meeting, New Orleans, Louisiana, October 2007. Stage II colon cancer: A 12 node minimum is <u>not</u> the right metric.

Baxter N: International Colorectal Cancer Congress, Fort Lauderdale, Florida, October 2007. Surgical advances in rectal cancer.

Baxter N: Imedex, Perspectives in Colorectal Cancer, Miami, Florida, September 2007. Advances in colorectal surgery.

Burnstein MJ: Crohn's and Colitis Foundation, Toronto, ON, April 2008. Surgery for IBD.

Burnstein MJ: The Western Pennsylvania Hospital, Pittsburgh, Pennsylvania, March 2008. Visiting Professor: Contemporary management of rectal cancer.

Burnstein MJ: Schering-Plough, Continuing Medical Education, Barrie, ON, November 2007. Surgical management of perianal Crohn's disease.

Grantcharov T: 16th Congress of the European Association of Endoscopic Surgery, Stockholm, Sweden, June 2008. (1) How to start an advanced minimally invasive surgery practice? Pre-OR training, (2) Laparoscopic repair of giant paraesophageal hernias, anti-reflux procedure - do we need it and which technique?

Grantcharov T: XXXVI Congress of the Nordic Federation of Societies of Obstetrics and Gynaecology, Reykjavik, Iceland, June 2008. Evidence-based training curriculum in minimally invasive surgery.

Grantcharov T: Aarhus University, Hospital Grand Rounds, Department of Surgery, Aarhus, Denmark, February 2008. (1) How to organize a comprehensive curriculum in minimally invasive surgery, (2) Planning a career in surgery, (3) Minimally invasive therapy for gastric cancer. Live surgery and current state of evidence.

Grantcharov T: Human Patient Simulation Network (HPSN08) Conference, Tampa, Florida, February 2008. Curriculum design and implementation for residency training.

Grantcharov T: Aarhus University Hospital, Department of Surgery, Grand Rounds, Aarhus, Denmark, February 2008. Planning a career in surgery.

Grantcharov T: Covidien Healthcare, National Meeting, Toronto, ON, December 2007. NOTES - Current status and future prospectives.

Grantcharov T: XVII Congress of the Latin American Surgical Association, Federacion Latino Americana de Cirugia (FELAC), Santiago, Chile, November 2007. (1) Evidence-based tools for laparoscopic training and assessment, (2) Technical skills assessment in laparoscopic surgery.

Grantcharov T: International Club of Young Laparoscopic Surgeons (ICYLS), 5th International Meeting, Santiago, Chile, November 2007. New training curriculum in minimally invasive surgery.

Grantcharov T: The Royal College of Surgeons of England, Symposium, London, England, September 2007. Laparoscopic training in the operating theatre.

Kapus A: Hungarian Society of Physiology, Annual Meeting, Debrecen, Hungary, June 2008. Epithelial-myosfibroblast transitionplenary lecture at the cell physiology section.

Kapus A: American Society of Nephrology, 2007 Meeting, San Francisco, California, October 2007. Cell contact injury activates myocardin-related transcription factor: Key role in epithelial-myofibroblast transition.

Kapus A: Cell Volume in Health and Disease Conference, Salzburg, Austria, September 2007. The cytoskeleton, the mitochondrion and their relationship in osmotic stress.

Marshall JC: Canadian Critical Care Trials Group Research Education Day, Quebec City, PQ, June 2008. Building an academic career.

Marshall JC: International Federation of Shock Societies, 6th International Congress, Koln, Germany, June 2008. The challenge of description: Is it sepsis, is it shock?

Marshall JC: University of the Witwatersrand and the Association of Surgeons of South Africa, 21st Biennial Symposium, Johannesburg, South Africa, June 2008. Janie and Michael Miller Visiting Professor: (1) Recognizing sepsis in the sick patient, (2) Futile care: When is enough, enough?, (3) Overwhelming systemic inflammation.

Marshall JC: 7th International Sepsis Forum Colloquium on the Systems Biology of Acute Illness, Chapel Hill, North Carolina, May 2008. Limitations of entry criteria in current sepsis trials.

Marshall JC: Surgical Infection Society, 28th Annual Meeting, Hilton Head, South Carolina, May 2008. Introduction of President Dr. Stephen Lowry.

Marshall JC: 18th European Society of Clinical Microbiology and Infectious Diseases Symposium, Barcelona, Spain, April 2008. Sepsis: The role of viable organisms and microbial products.

Marshall JC: International Critical Care Conference, Dubai, UAE, April 2008. (1) Sepsis: Rethinking the approach to clinical research, (2) PIRO and the staging of sepsis, (3) Damage control in trauma, (4) Principles of source control, (5) A primer on the cell biology of critical illness, (6) Apoptosis as a mechanism of disease in the critically ill, (7) The multiple organ dysfunction syndrome, (8) An approach to nosocomial infection in the critically ill, (9) Controversies in sepsis management in the ICU.

Marshall JC: 28th International Symposium of Intensive Care and Emergency Medicine, Brussels, Belgium, March 2008. (1) Regulation of inflammation: The role of apoptosis, (2) Late-acting mediators of sepsis, (3) The sepsis trial of the future, (4) What is a biomarker, and what is its purpose?, (5) Early antibiotic therapy: Insights from the AATICC (Appropriate Antimicrobial Therapy in Clinical Care) trial.

Marshall JC: Roundtable Conference on Improving Clinical Trials in the Critically Ill, Brussels, Belgium, March 2008. Clinical trials consortia: Construction, maintenance and future.

Marshall JC: Society of Critical Care Medicine, 37th Critical Care Congress, Honolulu, Hawaii, February 2008. (1) Preventing or reversing MODS: The role of guideline implementation, (2) Multiple organ failure: The role of apoptosis.

Marshall JC: 16th Winter Symposium on Intensive Care Medicine, Steamboat Springs, Colorado, January 2008. (1) Quantifying sepsis at the bedside, (2) New therapeutic interventions in sepsis: What is the future?, (3) What is sepsis after all?

Marshall JC: Association of Organ Procurement, Medical Directors' Symposium, Park City, Utah, January 2008. The Canadian Critical Care Trials Group: 12 lessons learned.

Marshall JC: 17th Atlantic Respirology and Critical Care Meeting, Dartmouth, NS, November 2007. (1) Sepsis: Clinical trials and conceptual tribulations, (2) Surgical critical care: Contributions and challenges.

Marshall JC: American College of Surgeons, 93rd Annual Clinical Congress, New Orleans, LA, October 2007. (1) Integrating evidence and inference in surgical decision-making, (2) The use of corticosteroids in surgical sepsis.



Marshall JC: Australian and New Zealand Intensive Care Society, Annual Scientific Meeting, Rotorua, New Zealand, October 2007. (1) The Canadian Critical Care Trials Group: An update., (2) Cardiovascular system: New therapies, (3) My ICU in 2017, (4) Monitoring cellular dysfunction, (5) Measuring organ dysfunction, (6) How many Canadians does it take to change a light bulb?

Marshall JC: Critical Care Canada Forum, Toronto, ON, October 2007. (1) A critique of the sepsis-related organ failure assessment (SOFA) score, (2) From biology to physiology to epidemiology, (3) Neutrophil survival in sepsis, (4) When does research become knowledge?

Marshall JC: Japanese Association for Acute Medicine, 35th Annual Meeting, Osaka, Japan, October 2007. Sepsis: Evolving concepts, emerging therapies.

Marshall JC: Osaka University Medical School, Osaka, Japan, October 2007. Visiting Professor: Host-microbial interactions in critical illness.

Marshall JC: 47th International Congress on Antimicrobial Agents and Chemotherapy, Chicago, Illinois, September 2007. Antibiotics for acute pancreatitis?

Marshall JC: German Sepsis Society, 3rd International Congress, Weimar, Germany, September 2007. (1) Theragnostics: A clinical perspective, (2) How can theragnostics meet an unmet clinical need?, (3) What is the clinical utility of measuring endotoxin?, (4) How I manage the patient with sepsis, (5) Describing the ideal sepsis marker.

Marshall JC: Sepsis 2007, an International Conference of the International Sepsis Forum, Paris, France, September 2007. (1) Principles of source control, (2) Endotoxin translocation in the critically ill, (3) Improving sepsis clinical research: Better patient selection.

Nathens AB: Clinical Data Management Users' Conference, Breckenridge, Colorado, June 2008. National trauma databank update.

Nathens AB: Trauma Association of Canada, Annual Scientific Meeting, Whistler, BC, April 2008. Level 1 and 2: size matters.

Nathens AB: Surgical Site Infections (SSI) National Teleconference, Safer Healthcare NOW!, Toronto, ON, January 2008. Presentation - SSI prophylaxis: Perspective from the University of Toronto teaching hospitals.

Nathens AB: ThinkFirst Foundation of Canada, Summit on Head Protection, Toronto, ON, November 2007. Estimating the burden of injury of TBI (traumatic brain injury).

Rotstein OD: Educational Rounds, The "East End" General Surgeons, Toronto, ON, February 2008. A case based discussion on the management of intra-abdominal infections.

Rotstein OD: Bayer Inc., National Business Meeting, Vancouver, BC, January 2008. Chronic intra-abdominal infections.

Rotstein OD: American College of Surgeons, Moderator - Clinical Congress/Scientific Program/General Session, New Orleans, Louisiana, October 2007. Writing a grant and getting it right: What the pros say.

Rotstein OD: Ankara Surgeons Meeting, Istanbul Surgeons Meeting and Ankara Satellite Symposium, Infectious Disease Congress, Ankara, Turkey, October 2007. A new treatment approach for intraabdominal infections: Moxifloxacin.

Rotstein OD: Bayer Anti-Infectives Division, Round Table Discussion, Toronto, ON, September 2007. What Bugs?

Rotstein OD: Canadian Association of General Surgeons, Canadian Surgery Forum, Toronto, ON, September 2007. Academic general surgery.

Rotstein OD: York Central Hospital, Department of Surgery Rounds, Thornhill, ON, September 2007. Update in the management of infections in surgery with a focus on complicated intra-abdominal infections.

Szaszi K: Matrix Research Group, Canadian Institutes of Research, Toronto. ON, March 2008. TNF-alpha-induced Rho signaling and junction regulation in kidney tubular cells.

Research and Investigations

Senior Investigator's Name Appears in Italics

An epidemiologic study of lymph node evaluation in colorectal cancer patients. *Viring BA*, Baxter NN, Rothenberger DA, Jessurun J: *National Cancer Institute, National Institutes of Health (US).* (\$408,561 2006 - 2008.)

Application for a calibrated densitometer and microcentrifuge for studies on epithelial cell physiology and pathology. *Szaszi K*, Kapus A: *National Sciences and Engineering Research Council.* (\$32,000 2008 - 2009.)

Assessing the uptake and effectiveness of laparoscopic surgery for colorectal cancer in Ontario. *Simunovic M*, Baxter N, Urbach D, Caddeau M: *Canadian Institutes of Health Research*. (\$400,000 2008 - 2012.)

Canada Research Chair in trauma systems development. Nathens AB: Canadian Government. (\$500,000 2006 - 2011.)

CCURE: Critical care from cell to society. *Slutsky AS*, Cook D, Martin P, Baker A, Stewart D, Sibbald W, Marshall J, Downey G, Hawryluk L, Marsden P: *Canadian Foundation for Innovation*. (\$4,600,000 2002 - 2007.)

CIHR emerging team: Colorectal cancer screening. *Rabeneck L*, Dobrow M, Paszat L, Ritvo P, Stukel T, Baxter N: *Canadian Institutes of Health Research*. (\$1,735,300 2008 - 2013.)

CIHR team grant for clinical research network: The Canadian Critical Care Trials Group (Declined). *Marshall JC*, Cook D: *Canadian Institutes of Health Research*. (\$10,000 2007 - 2008.)

Clinical research network for the treatment of acute lung injury (ALI) and acute respiratory distress syndrome (ARDS) (2.5% effort.) *Nathens AB: National Institutes of Health.* (\$1,707,932 2006 - 2012.)

Clinical trials incubator unit, Specialized Centers of Clinically Oriented Research (SCCOR) program in acute lung injury (20% effort). *Nathens AB: National Institutes of Health.* (\$1,707,032 2003 - 2008.)

Crash Injury Research and Engineering Network (CIREN) (10% Effort.) Nathens AB: National Highway Traffic Safety Administration. (\$2,546,924 2005 - 2010.)

Does chemotherapy cause dementia in older breast cancer survivors? *Baxter NN*, Virnig BA, Phillips KA: *The Lance Armstrong Foundation*. (\$110,000 2004 - 2007.)

Does virtual surgery translate to better surgery: The impact of high fidelity virtual reality simulation on intraoperative performance. *Grantcharov T: Canadian Surgical Research Grant, The Canadian Association of General Surgeons.* (\$10,000 2007 – 2008.)

Effectiveness of colonoscopy for the prevention of colorectal cancer and mortality from colorectal cancer: A population-based case control study. *Baxter NN*, Urbach DR, Saskin R, Goldwasser M, Pazat L, Rabenek L: *Canadian Institutes of Health Research*. (\$85,185 2006 - 2008.)

Expression, localization and function of epithelial ion transporters under physiological and pathological conditions. *Kapus A: National Sciences and Engineering Research Council.* (\$160,000 2005 - 2009.)

Frederick Banting and Charles Best Canada Graduate Scholarship - Doctoral Award. *Hill A*, Nathens AB, Fowler RA: *Canadian Institutes of Health Research*. (\$105,000 2008 - 2011.)

Mechanisms of macrophage priming for LPS signaling by oxidative stress. *Rotstein OD: Canadian Institutes of Health Research*. (\$110,162 2005 - 2010.)

Myocardin-related transcription factor: A central regulator of epithelial-myofibroblast transition. *Kapus A: Canadian Institutes of Health Research*. (\$617,500 2008 - 2013.)

New or missed cancers after colonoscopy. *Rabeneck L*, Paszat L, Baxter NN, Hsieh E: *American College of Gastroenterology*. (\$147,400 2007 - 2009.)

Novel mechanisms of prolonged neutrophil survival in human sepsis: A bedside-to-bench approach. *Marshall JC: Canadian Institutes of Health Research*. (\$543,565 2003 - 2008.)

Patterns of cancer care in the disabled. Baxter NN, Virnig BA: The American Society of Clinical Oncology. (\$170,100 2004 - 2008.)

Prognostic scoring for patients with severe disease due to influenza. *Christian MD*, Muller M, McGeer A, Marshall J: *Canadian Institutes of Health Research, Catalyst Grant: Pandemic Preparedness Competition.* (\$99,455 2008 - 2009.)

PROphylaxis of thromboEmbolism in Critical Care Trial (PROTECT). *Cook DJ*, Marshall JC: *Canadian Institutes for Health Research*. (\$4,800,000 2005 - 2009.)

Protocol TFP008 a Phase 3, multicenter, randomized, placebo-controlled, double-blind, three-arm study to evaluate the safety and efficacy of tifacogin (recombinant tissue factor pathway inhibitor) administration in subjects with severe community-acquired pneumonia. *Marshall JC: Novartis Pharmaceuticals Corporation*. (\$55,000 2005 - 2008.)

PTHOST Study. Koo J: Hamilton Health Sciences Research Centre. (\$6,650 2006 - 2007.)

Regulation of epithelial paracellular permeability by apical transport processes. *Szaszi K: National Sciences and Engineering Research Council.* (\$180,000 2006 - 2011.)

Regulation of intercellular contacts in kidney tubular epithelium. Szaszi K: Kidney Research Scientist Core Education and National Training (KRESCENT) Program, New Investigator Award, Kidney Foundation of Canada. (\$180,000 2007 - 2010.)

Regulation of intercellular contacts in kidney tubular epithelium. Szaszi K: Kidney Research Scientist Core Education and National Training (KRESCENT) Program, Infrastructure Support, Kidney Foundation of Canada. (\$25,000 2007.)

Survival using glucose algorithm regulation (SUGAR). *Chittock DR*, Marshall JC: *Canadian Institutes for Health Research*. (\$40,000 2006 - 2009.)

Team Talk II: A multi-institutional evaluation of a checklist intervention to structure communication and promote patient safety in the operating room. *Lingard L*, Regehr D, Baker R, Bohnen J, Reznick R, Orser B, Doran D, Rotstein L: *Canadian Institutes of Health Research*. (\$312,000 2004 - 2008.)

The effects of stress on clinical performance in simulated trauma scenarios. *Nathens AB: The Physicians' Services Incorporated Foundation*. (\$24,000 2007 - 2008.)

The role of the cell contact-cytoskeleton-nucleus axis in epithelial-mesenchymal transition of kidney tubular cells. *Kapus A*, Szaszi K: *Kidney Foundation of Canada*. (\$100,000 2007 - 2009.)

The young adult survivors of cancer study. *Baxter NN*, Urbach D, Del Giudice L, Rabeneck L, Paszat L: *Canadian Institutes of Health Research*. (\$355,255 2008 - 2011.)

Training curriculum in minimally invasive surgery. Grantcharov T: Covidien Canada. (\$25,000 2008 - 2009.)

Treatment and survivorship in young adults with cancer. *Baxter NN*, Urbach D, Rabeneck L: *Ontario Ministry of Research and Innovation Early Researcher Award*. (\$190,000 2007 - 2012.)

Honours Received

Ahmed NA: Best paper (interprofessional) for "A real-time performance improvement activity implemented through a nursing fellowship," at the Annual Scientific Meeting of the Trauma Association of Canada. April 2008.

Ali J: Jameel Ali Award in Continuing Education in Surgery. June 2008.

Bohnen JMA: Arbor Award for Outstanding Volunteer Service to the University of Toronto. September 2007.

Bohnen JMA: Best Doctors "Doctors of Excellence" Network Member, by peer review of practising physicians. February 2008.

Bohnen JMA: Fitzgerald Academy Hall of Fame, St. Michael's Hospital. June 2008.

Grantcharov T: Honorary Fellow in Surgery, Imperial College, London, England. September 2007.

Grantcharov T: Professional Association of Interns and Residents of Ontario (PAIRO) Trust Travel Award for Clinical Educators. May 2008.

DIVISION OF NEUROSURGERY

Dr. M.D. Cusimano – Professor Dr. H.J. Ginsberg – Assistant Professor Dr. R.L. Macdonald – Professor (Division Head) Dr. P.J. Muller – Professor Dr. R.G. Perrin – Associate Professor Dr. T. Schweizer – Assistant Professor Dr. J.S. Spears – Assistant Professor Dr. W.S. Tucker – Associate Professor

Publications

Cusimano M, Bartal C, Freedman J, Bowman K: Coagulopathic patients with intracranial hemorrhage: Defining the role of recombinant factor VIIa. Journal of Trauma: October 2007: 63(4): pp 725-732.

Cusimano MD, Cantelmi D, Schweizer TA: Role of the cerebellum in the neurocognitive sequelae of treatment of tumors of the posterior fossa: An update. The Lancet Oncology: June 2008: 9: pp 569-576.

Cusimano MD, Kwok J, Spadafora K: Effectiveness of multifaceted fall-prevention programs for the elderly in residential care: A systematic review. Injury Prevention: May 2008: 14: pp 113-122.

Cusimano MD, Mohammed S: Research in normal pressure hydrocephalus. Current-Spina Bifida and Hydrocephalus Association of Ontario-Spring 2008: pp 14-15.

Cusimano MD, Morrongiello B, Orr E, Barton B, Chipman M, Tyberg J, Kulkarni A, Khanlou N, Masi R, Bekele T: Schoolage children's safety attitudes, cognitions, knowledge and injury experiences: How do these relate to their safety practices? Injury Prevention: June 2008: 14: pp 176-179.

Cusimano MD, Ray JG, Moineddin R, Bell CM, Thiruchelvam D, Creatore MI, Gozdyra P, Redelmeier DA: Alcohol sales and risk of serious assault. PLOS (Public Library of Sciences) Medicine: May 2008: 5: pp 1-7.

Cusimano MD, Salehi F, Kovacs K, Bell CD, Rotonto F, Scheithauer B: Nestin: Immunohistochemical expression in adenohypophyseal vessels during the development and progression of pituitary infarction. Journal of Neurosurgery: January 2008: 108(1): pp 118-123.

Cusimano MD, Schweizer TA, Levine B, Rewilak D, O'Connor C, Turner G, Alexander MP, Manly T, Roberston I, Stuss DT: Rehabilitation of executive functioning after focal damage to the cerebellum. Neurorehabilitation and Neural Repair: February 2008: 22(1): pp 72-77.

Cusimano MD, van Furth W, Smyth HS, Horvath E, Kovacs K, Salehi F: Salivary gland-like tumor of the sella. Canadian Journal of Neurological Sciences: November 2007: 34(4): pp 478-482.

Macdonald RL, Aabu-Abed S, Munoz DG: Anaplastic ganglioglioma (WHO Grade IV). Canadian Journal of Neurological Science: November 2007: 34(4): pp 504.

Macdonald RL, Rosen D, Huo D, Goldenberg FG, Novakovic RL, Frank JI, Rosengart AJ: Intraventricular hemorrhage from ruptured aneurysm: Clinical characteristics, complications and outcomes in a large, prospective, multicenter study population. Journal of Neurosurgery: August 2007: 107: pp 261-265.

Macdonald RL, Rosengart AJ, Huo D, Novakovic RL, Frank JI, Goldenberg FD: Prophylactic anti-epileptic drug use in patients with subarachnoid hemorrhage is associated with in-hospital complications and worse outcome. Journal of Neurosurgery: August 2007: 107: pp 253-260.

Macdonald RL, Rosengart AJ, Schultheiss KE, Tolentino J: Prognostic factors for outcome in patients with aneurysmal subarachnoid hemorrhage. Stroke: August 2007: 38: pp 2315-2321.

Macdonald RL, Spears J, Boulton M: Treatment decision in the acute management of aneurysmal subarrachnoid hemorrhage. Contemporary Neurosurgery: December 2007: 29: pp 1-7.



Invited Visits

Cusimano MD: Chordoma Foundation, Bethesda, Maryland, April 2008. Chordoma presentation.

Cusimano MD: 2007 Canadian Injury Prevention and Safety Promotion Conference, Toronto, ON, November 2007. (1) Body checking injuries among minor hockey players: Effects of lowering legal age limit for body contact, (2) Clues to preventing aggressive-related injuries in sport: A qualitative study of Canadian adolescent ice-hockey players, (3) Local determinants for alcohol-related traumatic brain injury in three Ontario urban centres, (4) The spatial association between the location of injury and land uses.

Cusimano MD: International Conference on Urban Health, Baltimore, Maryland, October 2007. The spatial association between the location of injury and land uses (presented by Marshall S.)

Cusimano MD: Canadian Public Health Association, Ottawa, ON, September 2007. (1) Development of the BACKIE questionnaire: A measure of children's behaviour, attitudes, cognitions, knowledge and injury experiences for unintentional injury, (2) School-age children's safety attitudes, cognitions, knowledge and injury experiences, (3) The intersection of intentional and unintentional injury in urban Canada: A geomatics study---collaborator, (4) Translating bicycle helmet knowledge and skills to kindergarten children: The PEI Thinkfirst--Hard Heads Program, (5) Web mapping of injury and its socio-demographic determinants--map types and their potential uses—collaborator.

Cusimano MD: Schloffer Conference and the International Society of Pituitary Surgeons (ISPS) Meeting 2007, Vienna, Austria, September 2007. Immunohistochemical expression of PTTG in pituitary adenomas.

Macdonald RL: American Association of Neurological Surgeons, 76th Annual Meeting, Chicago, Illinois, April 2008. (1) Moderator: Cerebral neuromonitoring, (2) Invited Speaker - (a) Management of cerebral vasospasm, (b) Does country or continent of treatment affect outcome after aneurismal subarachnoid hemorrhage?

Macdonald RL: 2nd International Cerebral Hemorrhage Conference, Shanghai, China, November 2007. (1) Moderator - Plenary Session, (2) Invited Speaker: Cerebral vasospasm after subarachnoid hemorrhage: Need for further study.

Macdonald RL: Canadian Association of Neuropathologists, 47th Annual Meeting, Niagara Falls, ON, September 2007. Case presentation: Anaplastic ganglioglioma (WHO Grade IV.)

Macdonald RL: Congress of Neurological Surgeons, 57th Annual Meeting, San Diego, California, September 2007. (1) Invited Speaker: Management of unruptured intracranial aneurysms: Understanding and developing treatment options, (2) Moderator: Cerebral ischemic disease: Current management strategies.

Macdonald RL: European Congress of Neurosurgery, Glasgow, Scotland, September 2007. Invited Speaker: Randomized trial of clazosentan, an endothelin A receptor antagonist, for prevention of vasospasm after aneurysmal subarachnoid hemorrhage.

Perrin RG: Neurosurgical Society of America, Whistler, British Columbia, June 2008. Canadian, eh?

Perrin RG: Temple Spine Symposium, Philadelphia, Pennsylvania, May 2008. Management of symptomatic spinal metastases.

Perrin RG: 1st Eastern Meditteranean Congress on Minimally Invasive Neurosurgery, Amman, Jordan, January 2008. (1) Cerebral aneurysm - clipping vs. coiling, (2) Carotid stenosis: Endarterectomy vs. stenting, (3) Remarks on World Federation of Neurosurgery.

Perrin RG: 7th International Congress on Minimally Invasive Neurosurgery, Suzhou, China, November 2007. (1) Clips vs. coils in the management of cerebral aneurysms, (2) WFNS (World Federation of Neurological Societies) uniting neurosurgeons worldwide, (3) Endovascular therapy - surgery vs. stenting for carotid occlusive disease.

Perrin RG: World Federation of Neurosurgical Societies, Nagoya, Japan, November 2007. Chair of Surgery for Spinal Lesions Sessions.

Perrin RG: Congress of Neurological Surgeons, Annual Meeting/Luncheon Seminar, San Diego, California, September 2007. (1) WFNS (World Federation of Neurosurgical Societies) Report - Navigating change: Charting a new course, (2) Metastatic spinal disease: The role of surgery and radiation therapy.

Spears JS: University of West Indies, Caribbean Neurosciences Symposium, Montego Bay, Jamaica, January 2008. (1) Modern neurovascular practice, (2) Clinical teaching rounds.

Spears JS: Ottawa Hospital, Neurosurgery Teaching Rounds, Ottawa, ON, October 2007. International, prospective study of radiographic and clinical events in the management of aneurysms.

Tucker WS: Canadian Neurological Sciences, Medical Legal Symposium, Federation, Toronto, ON, June 2008. Presenter.

Research and Investigations

Senior Investigator's Name Appears in Italics

3-D computer simulator of spinal fusion surgery. Ginsberg H, Whyne C: Stryker Canada. (\$15,000 2006 - 2008.)

A driving simulator study of brain tumor patients with focal cerebellar lesions. *Cusimano MD*, Schweizer T: *Brain Tumor Foundation of Canada*. (\$25,000 2008 - 2009.)

Bicyclists' injuries and the cycling environment (BICE). *Teschke K*, Cusimano M (Toronto lead investigator), Chipman M, Friedman S: *Canadian Institutes of Health Research*. (\$250,000 2007 - 2008.)

Bicyclists' injuries and the cycling environment (BICE). *Teschke K*, Cusimano M (Toronto lead investigator, Chipman M, Friedman S: *Heart and Stroke Foundation*. (\$329,000 2007 - 2008.)

Bicyclists' injuries and the cycling environment (The BICE study). *Teschke K*, Babul S, Chipman M, Cripton P, Cusimano MD, Harris A, Mulpuri K, Reynolds C, Wentwork B, Becker J, Brubacher J, Fenton B, Friedman S, Hay D, Hunte G, Stary P, Tomlinson D: *Health Care and Epidemiology, University of British Columbia*. (\$250,000 2007 - 2010.)

Calcium channels in cerebral vasospasm. Macdonald L: The Physicians' Services Incorporated Foundation. (\$158,000 2007 - 2009.)

Cannabis and traffic collisions: A case crossover study of patients presenting to tertiary care centres in Toronto and Halifax. *Asbridge M*, Chisholm D, Cusimano MD, Magee K, Mann R, Rehm J, Tallon J: *Canadian Institutes of Health Research*. (\$218,122 2007 - 2010.)

Cognitive disorders following focal cerebellar lesions. *Alexander M*, Cusimano MD, Schweizer T, Stuss D: *National Institutes of Health*. (\$931,820 2006 - 2010.)

Compromised driving ability in trauma and neurosurgery patients: A driving simulator study of patients with focal cerebellar lesions. *Cantelmi D*, Cusimano MD, Schweizer TA: *Trauma/Neurosurgery Program, Internal Multi-Disciplinary Small Grant Program, St. Michael's Hospital.* (\$1,500 2007 - 2008.)

Currently investigating novel strategies for intra-operative navigation during spinal instrumentation surgery. *Ginsberg H*, Cobbold R: *National Sciences and Engineering Research Council (NSERC) of Canada - \$15,000 and DePuy Spine - \$30,000 (Johnson and Johnson)*. (\$45,000 2006 - 2008.)

Development of a Novel Computer Program to evaluate patients with emergencies in the fluid, electrolyte and acid-base area. *Halperin ML*, Kamel KS, Mazer D, Ginsberg HJ, Bohn D, Davids MR: *Keenan Award*. (\$25,000 2006 - 2007.)

Hippocampal radiosurgery exposure and memory. Menard C, Cusimano MD: Brain Tumor Foundation. (\$22,950 2007 - 2008.)

International prospective multi-centre study of clinical and radiographic events in the management of medium and large cerebral aneurysms. *Spears J*, Wallace C, Macdonald L, Montanera W, Marotta T: *Microvention/Terumo, Heart and Stroke Foundation*. (\$80,000 2007 - 2009.)

Pedicle Screw Insertion Simulator Study. *Ginsberg H*, Whyne C, Massicotte E, Martin A: *Trauma and Neurosurgery Multi-Disciplinary Small Grant Program, St. Michael's Hospital.* (\$2,000 2008 - 2009.)

Photodynamic therapy: Basic and clinical science studies and prospective clinical trials in the use of photodynamic therapy (PDT) for the treatment of malignant brain tumors. *Muller P*, Hetzel F, Chopp M, Hitchcock, Patterson M, Singh G, Wilson B: *National Institutes of Health.* (\$7,067,876 2004 - 2009.)

Secondary neurological injury after subarachnoid hemorrhage in dogs: Role of thromboembolism, microcirculatory spasm and delayed neuronal apoptosis. (Summer Student Award to Mohammed Sebri, Faculty Supervisor). *Macdonald RL: St. Michael's Hospital.* (\$4,000 2007.)

Spinous process less invasive extendable (SPLINE) fusion - A less invasive extendable device for posterior spinal fusion. *Ginsberg H*, Whyne C (Director of Biomechanics Lab, Sunnybrook Hospital), Singh D: *Ministry of Research and Innovation*. (\$10,000 2007 - 2008.)

The fractionation and localization of attentional and language processing in the cerebellum. *Stuss DT*, Alexander MP, Schweizer TA, Cusimano M: *Canadian Institutes of Health Research*. (\$270,444 2006 - 2010.)

Youth Science and Technology Outreach Program (YSTOP). *Slutsky AS*, Kohn M, Cusimano MD, O'Campo P, Yardy G, O'Neil J, Dunn J, Dias M, Falk M, Kidd M, Omeara P, Gobin S, Vernon S, Barker S, Evans T, Naik V: *Ministry of Research and Innovation*. (\$89,575 2007 - 2010.)



Honours Received

Cusimano MD: Alan R. Hudson Teaching Award. May 2008.

Cusimano MD: Provan Teaching Award--Undergraduate Teaching. December 2007.

Spears JS: Heart and Stroke Foundation Phase 1 Clinician - Scientist Award (3 Years - \$192,000) Renewed.

Tucker WS: Arbor Award for 2007. July 2007.

DIVISION OF ORTHOPAEDIC SURGERY

Dr. H. Ahn – Lecturer Dr. E.R. Bogoch – Professor Dr. T.R. Daniels – Associate Professor Dr. M.D. McKee – Professor Dr. E.H. Schemitsch – Professor (Division Head) Dr. J.P. Waddell – Professor Dr. D.B. Whelan – Assistant Professor

Publications

Altamimi SA, McKee MD, Canadian Orthopaedic Trauma Society: Nonoperative treatment compared with plate fixation of displaced midshaft clavicle fractures. Journal of Bone and Joint Surgery (American): March 2008: 90A(2Suppl): pp 1-9.

Bhandari M, Busse JW, Hanson BP, Leece P, Ayeni OR, Schemitsch EH: Psychological distress and quality of life after orthopaedic trauma: An observational study. Canadian Journal of Surgery: February 2008: 51(1): pp 15-22.

Bogoch ER: Canadian orthopaedic surgeons and post-fracture osteoporosis care: Moving from persuasion toward facilitation. Canadian Journal of Surgery: January 2008: 51(1): pp 6-7.

Bogoch ER, Benjamin GE, Judd MGP: Insufficient flexion of the metacarpophalangeal joint of the little finger following Swanson silicone arthroplasty for rheumatoid arthritis. Journal of Hand Surgery: March 2008: 3: pp 24-29.

Bogoch ER, Sale JEM, Beaton DE: Web commentary on "Improving evaluation and treatment for osteoporosis following fractures of the distal radius: A prospective randomized intervention." Journal of Bone and Joint Surgery (American): E-published May 2008.

Bogoch ER, Snowden E: A sample of Canadian orthopaedic surgeons' expressed willingness to participate in osteoporosis management for fragility fracture patients. Canadian Journal of Surgery: January 2008: 51(1): pp 8-14.

Braybrooke J, Ahn H, Gallant A, Ford M, Bronstein Y, Finkelstein J, Yee A: The impact of surgical wait time on patient-based outcomes in posterior lumbar spinal surgery. European Spine Journal: November 2007: 16: pp 1832-1839.

Daniels TR, Hollinger JO: Joint fusion in the foot and ankle. In: Tissue Engineering: Applications in Oral and Mazillofacial Surgery and Periodontics: (Lynch S, Marx R, Nevins M, Wisner-Lynch L, eds.) Quintessence Publishing Company, Hanover Park, Illinois: 2008: pp 267-275.

Daniels TR, Ferri M, Scharfenberger AV, Goplen G, Pearce D: Weightbearing CT scan of severe flexible pes planus deformities. Foot & Ankle International: February 2008: 29: pp 199-204.

Davis AM, Agnidis Z, Badley E, Davey JR, Gafni A, Gollish J, Mahomed NN, Saleh KJ, Schemitsch EH, Szalai JP, Waddell JP, Gross AE: Waiting for hip revision surgery: The impact on patient disability. Canadian Journal of Surgery: April 2008: 51(2): pp 92-96.

Davis ET, Lingard EA, Schemitsch EH, Waddell JP: Effects of socioeconomic status on patients' outcome after total knee arthroplasty. International Journal for Quality in Health Care: January 2008: 20(1): pp 40-46.

DiPasquale DJ, Bhandari M, Tov A, Schemitsch EH: The effect of high and low pressure pulsatile lavage on soft tissue and cortical blood flow: A canine segmental humerus fracture model. Archives of Orthopaedic and Trauma Surgery: December 2007: 127(10): pp 884. E-published August 18, 2007.

Droll K, Perna P, Potter J, Harniman E, Schemitsch EH, McKee MD: Outcomes following plate fixation of fractures of both bones of the forearm in adults. Journal of Bone and Joint Surgery (American): December 2007: 89(12): pp 2619-2624.

Droll K, Prasad V, Coirau A, Gray BG, McKee MD: The use of post-operative bone scintigraphy to predict graft retention. Canadian Journal Surgery: August 2007: 50(4): pp 261-266.

Duckworth AD, Kulijdian A, Ring D, McKee MD: Residual subluxation of the elbow after dislocation or fracture-dislocation: Treatment with active elbow exercises and avoidance of varus stress. Journal of Shoulder and Elbow Surgery: March 2008: 17(2): pp 276-281.

Duckworth AD, Ring D, Kulijdan A, McKee MD: Unstable elbow dislocations. Journal of Shoulder and Elbow Surgery: March 2008: 17(2): pp 281-286.



Glazebrook M, Younger A, Foote CJ, Penner M, Wing K, Lau J, Leighton R, Dunbar R, Daniels TR: Comparison of health related quality of life between patients with end stage ankle and hip arthritis. Journal of Bone and Joint Surgery (American): March 2008: 90(3): pp 499-505.

Hurley R, McKee MD: Keinboch's disease: An unusual cause of wrist pain in a thirteen year old girl. Canadian Journal of Surgery: February 2008: 51(1): pp E13-E14.

Jolles B, Bogoch ER: Quality of life after TKA for patients with juvenile rheumatoid arthritis. Clinical Orthopaedics and Related Research: January 2008: 466: pp 167-178.

Kakar S, Tornetta III P, Schemitsch EH, Swiontkowski MF, Koval K, Hanson BP, Jonsson A, Bhandari M, International Hip Fracture Research Collaborative: Technical considerations in the operative management of femoral neck fractures in elderly patients: A multinational survey. Journal of Trauma: September 2007: 63(3): pp 641-646.

Kirkley A, Griffin S, Whelan DB: The development and validation of a quality of life-measurement tool for patients with meniscal pathology: The Western Ontario meniscal evaluation tool (WOMET). Clinical Journal of Sport Medicine: September 2007: 17: pp 349-356.

Lever JP, Aksenov SA, Zdero R, Ahn H, McKee MD, Schemitsch EH: Biomechanical analysis of plate osteosynthesis systems for proximal humerus fractures. Journal of Orthopaedic Trauma: January 2008: 22(1): pp 23-29.

McKay PJ, Resendes S, Schemitsch EH, Bhandari M: What is involved in a regulatory trial investigating a new medical device? Journal of Long Term Effects of Medical Implants: December 2007: 17(2): pp 165-171.

McKee MD, Yoo DJ, Zdero R, Dupere M, Wild L, Schemitsch EH, Mahoney J: Combined single-stage osseous and soft tissue reconstruction of the tibia with the Ilizarov method and tissue transfer. Journal of Orthopaedic Trauma: March 2008: 22(3): pp 183-189.

Mundri R, Chaundhry H, Sharma R, Schemitsch EH, Bhandari M: What is the quality of the orthopaedic literature? Journal of the Long Term Effects of Medical Implants: December 2007: 17(2): pp 103-109.

Olsen M, Davis ET, Gallie PA, Waddell JP, Schemitsch EH: The reliability of radiographic assessment of femoral neck-shaft and implant angulation in hip resurfacing arthroplasty. Journal of Arthroplasty: E-published April 8, 2008.

Peskun C, McKee MD, Kreder H, Stephen D, McConnell A, Schemitsch EH: Functional outcome of ipsilateral intertrochanteric and femoral shaft fractures. Journal of Orthopaedic Trauma: February 2008: 22(2): pp 102-106.

Petrisor B, Jeray K, Schemitsch EH, Hanson B, Sprague S, Sanders D, Bhandari M: Fluid lavage in patients with open fracture wounds (FLOW). An international survey of 984 surgeons. BMC (BioMed Central) Musculoskeletal Disorders: January 2008: 23(9): pp 7.

Potter JM, Jones C, Wild LM, Schemitsch EH, McKee MD: Does delay matter? The restoration of objectively measured shoulder strength and patient-oriented outcome after immediate fixation versus delayed reconstruction of displaced midshaft fractures of the clavicle. Journal of Shoulder and Elbow Surgery: July 2007: 16(5): pp 514-518.

Sander B, Elliot-Gibson V, Beaton DE, Bogoch ER, Maetzel A: A coordinator program in post-fracture osteoporosis management improves outcomes and save costs. Journal of Bone and Joint Surgery (American): June 2008: 90: pp 1197-1205.

Schemitsch EH: The Canadian Orthopaedic Association (COA) web site: A real benefit for members. Canadian Orthopaedic Association Bulletin: July 2007: 76: pp 7.

Schemitsch EH: The Canadian Orthopaedic Trauma Society: A jewel of Canadian orthopaedics. Canadian Orthopaedic Association Bulletin: July 2007: 77: pp 9.

Simmen BR, Bogoch ER, Goldhahn J: Surgery insight: Orthopaedic treatment options in rheumatoid arthritis. Nature Clinical Practice Rheumatology: May 2008: 4(5): pp 266-273.

Sprint Investigators, Bhandari M, Guyatt G, Tornetta 3rd P, Schemitsch EH, Swiontkowski M, Sanders D, Walter SD: Study to prospectively evaluate reamed intramedullary nails in patients with tibial fractures (S.P.R.I.N.T): Study rationale and design. Musculoskeletal Disorder: June 2008: 239(9): pp 91.

Talbot M, Zdero R, Garneau D, Cole PA, Schemitsch EH: Fixation of long bone segmental defects: A biomechanical study. Injury: January 2008: 39(2): pp 181-186.

Talbot M, Zdero R, Schemitsch EH: Cyclic loading of periprosthetic fracture fixation constructs. Journal of Trauma: May 2008: 64(5): pp 1308-1312.

Tamir E, McLaren AM, Gadgil A, Daniels TR: Outpatient percutaneous flexor tenotomies for management of diabetic claw toe deformities with ulcers: A preliminary report. Canadian Journal of Surgery: February 2008: 51(1): pp 41.

Van Houwelingen AP, Schemitsch EH: Infection associated with cortical allograft strut fixation of a periprosthetic femoral shaft fracture: A case report and review of the literature. Journal of Trauma: June 2008: 64(6): pp 1630-1634.

White AP, Vaccaro AR, Hall JA, Whang PG, Friel BA, McKee MD: Clinical applications of BMP-7/OP-1 in fractures, nonunions and spinal fusions. International Orthopaedics: September 2007: 31: pp 735-741.

Zahari A, Bhandari M, Varma A, Rennie WR, Kreder H, Stephen DJG, McKee MD, Waddell JP, Schemitsch EH: Residents quality of life during an orthopaedic trauma rotation: A multicentre prospective observational study. Canadian Journal of Surgery: June 2008: 51(3): pp 190-196.

Zdero R, Walker R, Waddell JP, Schemitsch EH: Biomechanical evaluation of periprosthetic femoral fracture fixation. Journal of Bone and Joint Surgery (American): May 2008: 90(5): pp 1068-1077.

Invited Visits

Ahn H: Canadian Spine Society, Kamloops, BC, March 2008. Chair.

Ahn H: AO Spine, Edmonton, AB, July 2007. AO spine course: Degenerative spinal disorders and surgical techniques.

Bogoch ER: University of Minnesota Medical School, Second Annual Geriatric Summit, St. Paul, Minnesota, September 2007. Osteoporosis in the geriatric trauma patient.

Daniels TR: Canadian Orthopaedic Association-American Orthopaedic Association (COA-AOA), 2008 Combined Meeting, Quebec City, PQ, June 2008. (1) Moderator: Hindfoot arthritis (ICL #4), (2) Presenter: Treatment of ankle arthritis with ipsilateral deformity and periarticular arthritis, (3) ICL #15, evidence-based treatment: Fractures of the lesser metatarsals, (4) Tips and tricks 4: I want to learn! Hallux valgus surgical treatment algorithm.

Daniels TR: American Orthopaedic, Foot and Ankle Society (AOFAS) Specialty Day, San Francisco, California, March 2008. Total ankle arthroplasty: Debate on the merits of total ankle arthroplasty as a treatment for end-stage ankle arthritis (TAA vs. fusion.)

Daniels TR: University of Manitoba, Pan Am Clinic, Winnipeg, MB, February 2008. Ankle arthritis.

Daniels TR: Workplace Safety and Insurance Board (WSIB) Conference, University Health Network, Toronto, ON, February 2008. Foot and ankle pathology.

Daniels TR: Integra/Kantonsspital, Liestal, Switzerland, November 2007. (1) Advanced training course on Hintegra total ankle replacement: How do I do it? Preoperative planning, (2) My results: Associated pathologies/surgeries, (3) My complications: What have I learnt?, (4) Revision arthroplasty: Techniques, (5) My worst case: How did I salvage it?/what have I learnt?, (6) Case discussion, summary and conclusion.

Daniels TR: Kantonsspital, Orthopaedic Department (Switzerland)/Integra Life Sciences, Lyon, France, November 2007. (1) Guest Speaker - Liestal course: Total ankle arthroplasty: Hintegra Experience.

Daniels TR: Dewar Orthopaedic Society, Deer Lake, Newfoundland and Labrador, September 2007. Hallux valgus surgery: Plenty of opinions/plenty of techniques.

Daniels TR: American Orthopaedic Foot and Ankle Society (AOFAS), Toronto, ON, July 2007. (1) Cavovarus foot and ankle deformities, (2) Feasibility of ankle joint replacement in the presence of moderate to severe coronal plane deformities of the ankle (varus/valgus), (3) patients with end-stage ankle and hip arthritis have similar poor health-related quality of life, (4) Reconstructive options for ankle OA: The Canadian experience - Total ankle replacement using STAR implant.

McKee MD: Research Triangle Park Orthopaedic Society, Raleigh, North Carolina, May 2008. Clavicle fractures: Fact and fallacy.

McKee MD: Toronto Rheumatology Study Group, Toronto, ON, May 2008. Shoulder problems: How your local Orthopaedist can help.

McKee MD: Orthopaedic Trauma Association (OTA) Special Day, Annual Meeting, March 2008. Presented the Highlight Paper: A randomized clinical trial of a bioabsorbable antibiotic-impregnated bone substitute.

McKee MD: Amercan Shoulder and Elbow Surgeons, 2008 Open Meeting, San Francisco, California, February 2008. Distal clavicle fractures.

McKee MD: Orthopaedic Trauma: Concepts to Controversies, Snowmass, Colorado, February 2008. (1) What's new in fractures of the clavicle, (2) Rational approach to fracture-dislocations of the elbow, (3) Upper extremity cases.

McKee MD: Stryker Canada, Contemporary and Future Concepts of Orthopaedics, Whistler, British Columbia, February 2008. (1) Co-Chairman, (2) Elbow fracture-dislocations, (3) Clavicle fractures, (4) Calcium Sulphate, (5) Panel discussion on difficult cases, (6) How to get and stay out of trouble.

McKee MD: Extremity War Injury III, Washington, DC, January 2008. The role of primary arthrodesis in massive peri-articular bone loss.

McKee MD: 5th Annual Current Solutions in Orthopaedic Trauma, Orlando, Florida, December 2007. (1) Nonunion of the clavicle, (2) Four-part fractures of the proximal humerus, (3) Nonunion and malunion of the upper extremity.

McKee MD: Orthopaedic Trauma Association, Basic Science Focus Forum, Boston, Massachussetts, October 2007. (1) Proximal humeral fractures in the older patient: Have we solved the fixation problem?, (2) The role of BMPs in nonunions: Should they be standard of care?

McKee MD: Zimmer Canada Ltd, Toronto, ON, October 2007. Course Co-Director: Peri-operative nurses course.

McKee MD: International Trauma Symposium, Aventura, Florida, September 2007. (1) Rehabilitation strategies that work, (2) Clinical algorithm for elbow fracture-dislocation, (3) Upper extremity case presentations.

McKee MD: Principles and Practice of Clinical Research, Mississauga, ON, September 2007. How to minimize bias in a non-randomized trial.

Schemitsch EH: Canadian and American Orthopaedic Associations, Combined Meeting, Quebec City, PQ, June 2008. (1) Symposium moderator: Evidence-based approach to bringing new orthopaedic devices to market, (2) Tips and tricks: Navigation for hip resurfacing.

Schemitsch EH: Current Solutions in Joint Surgery BHR Master Series, London, ON, June 2008. (1) Moderator, (2) Panel discussion, (3) Avoiding the risk for femoral neck fracture in SRA.

Schemitsch EH: Osteosynthesis and Trauma Care Leadership Forum, Nice, France, June 2008. (1) Course Chair, (2) Moderator, (3) Panel discussion, (4) Supracondylar elbow fractures current concepts, (5) Clavicle fractures: What's new.

Schemitsch EH: 2nd Annual Canadian Navigation User's Meeting, Montreal, PQ, May 2008. RCTs (randomized controlled trials) and surgical navigation.

Schemitsch EH: 3rd Annual San Francisco Trauma Course, San Francisco, California, May 2008. (1) Supracondylar humerus fractures: Fix or replace?, (2) What is the evidence: Allografting techniques, (3) Lab demonstrator.

Schemitsch EH: 7th Symposium on Joint Preserving and Minimally Invasive Surgery of the Hip, Montreal, PQ, May 2008. (1) Navigation for hip resurfacing: All the time!, (2) Moderator.

Schemitsch EH: International Trauma Symposium, Barcelona, Spain, April 2008. Moderator: Clinical algorithm and future investigations in hip fractures.

Schemitsch EH: Queens University, Department of Surgery and Division of Orthopaedics, Kingston, ON, April 2008. (1) Royal College Guest Lecturer - Current concepts in the treatment of open tibia fractures: From bench to bedside. (2) Visiting Professor: (a) BMPs (bone morphogenetic proteins) in trauma, (b) Clavicle fractures.

Schemitsch EH: American Academy of Orthopaedic Surgeons, San Francisco, California, March 2008. Instructional Course Lecturer: (1) Treatment of humeral shaft fractures, (2) Treatment of elbow-fracture dislocations.

Schemitsch EH: Orthopaedic Research Society, Symposium on Assessment of Fracture Healing in Clinical Trials, San Francisco, California, March 2008. Moderator.

Schemitsch EH: Contemporary and Future Concepts of Orthopaedics, Whistler, BC, February 2008. Course Chair and Moderator: (1) BMPs (bone morphogenetic proteins) and their use in my practice, (2) Supracondylar elbow fractures: Tips and tricks, (3) IM nailing - How entry portal and blocking screws help, (4) Panel discussion.

Schemitsch EH: Hip Surgery in the Young Adult IV, Banff, AB, January 2008. (1) Biomechanics of hip resurfacing, (2) Femoral neck fracture, (3) Case presentations, (4) Lab demonstrations.

Schemitsch EH: 1st US Annual Hip Resurfacing Course, Baltimore, Maryland, November 2007. (1) Computer assisted surgery in resurfacing, (2) Navigation: Complications and pitfalls in resurfacing.

Schemitsch EH: Locking Plates: Technical Pearls and Optimizing Outcomes, Toronto, ON, November 2007. Course Chairman/ Moderator: (1) Evidence-based outcome of locked plating, (4) Proximal tibia fractures: I use nailing.

Schemitsch EH: Principles of Clinical Research Summit, New York, New York, November 2007. Course designer.

Schemitsch EH: Annual Advances in Arthritis, Arthroplasty and Trauma Course, Arlington, Virginia, October 2007. (1) Elbow fractures in the adult, (2) Case presentations, (3) Pearls and pitfalls in sub-trochanteric and femur fracture fixation, (4) Intertrochanteric fractures: Nail vs. replacement.

Schemitsch EH: Orthopaedic Trauma Association (OTA), Basic Science Focus Forum, Annual Meeting, Boston, Massachusetts, October 2007. (1) Session/symposium moderator: (a) Evidence based approach to bringing new orthopaedic devices to market, (b) BMPs (bone morphogenetic proteins): Clinical evidence and future solutions, (c) Commonly asked questions in orthopaedic research, (2) Lecture: (a) The pivotal clinical trial, (b) How to get funding for clinical research, (c) What can I do to decrease bias.

Schemitsch EH: Surgical Advances in Revision Total Knee Arthroplasty, Toronto, ON, October 2007. (1) Unstable patellofemoral joint, (2) Dealing with bone loss-metal augments, (3) Wound problems.

Schemitsch EH: An Integrated Approach to Fracture Treatment, Nice, France, September 2007. (1) Course Co-Chairman, (2) State of the art management of high energy fractures, (3) Displaced femoral neck fracture: The case for replacement.

Schemitsch EH: International Trauma Symposium, Miami, Florida, September 2007. (1) EBM (evidence-based medicine) behind femoral neck fractures, (2) Where and when should I use BMPs.

Schemitsch EH: Principles of Clinical Research, Mahwah, New Jersey, September 2007. (1) Moderator, (2) How to prepare a study protocol, (3) Randomization: Envelopes, telephone or internet, (4) Breakout session leader: Writing a successful research proposal, (5) What are the types of non-randomized studies, (6) Breakout session: Statistics primer: The basics of analysis.

Schemitsch EH: Principles of Clinical Research, Mississauga, ON, September 2007. (1) Course Co-Chairman, (2) Moderator, (3) Breakout session leader: Writing a successful research proposal, (4) What are the responsibilities of site investigators.

Schemitsch EH: First Workshop Evidence Based Health Care for the Surgical Specialites, Arezzo, Italy, July 2007. State of the art treatment of the open tibia fracture.

Waddell JP: University of Iowa, Department of Orthopaedics and Rehabiliation, Senior Resident Day, Iowa City, Iowa, June 2008. (1) Current management of open fractures, (2) Options in reconstructive hip surgery.

Waddell JP: Canadian Orthopaedic Association and the American Orthopaedic Association, Combined Meeting, Quebec City, PQ, June 2008. Symposium 2, Orthopaedic Education Speaker: Practice environment: How attractive is our job?

Waddell JP: 8th European Congress of Trauma and Emergency Surgery, Polytrauma in Combination with Thorax Trauma III, Budapest, Hungary, May 2008. Chair.

Waddell JP: European Federation of National Associations of Orthopaedics and Traumatology, Art of Session, Humerus Fractures, Nice, France, May 2008. (1) Proximal humerus - Conservative treatment, (2) Open fractures.

Waddell JP: International Course in Orthopaedics, Quito, Ecuador, April 2008. (1) Hip fracture strategies, (2) Humerus fractures, (3) Difficult primary total hip replacement, (4) Hip osteotomy in the adult, (5) Osteotomies about the knee, (6) Choosing a total knee replacement in 2008, (7) Curriculum for undergraduate MSK, (8) Structured residency training, (9) Pelvic fractures.

Waddell JP: Executive Training for Research Application Program, Becoming a Leader for the Use of Research-Based Evidence in Healthcare Organizations, Ste-Adele, PQ, February 2008. (1) Competency 1: Leadership and effective communication of the evidence in wait time reduction, (2) Competency 1 and 2: Small group work intervention projections.

Waddell JP: 7th Central European Orthopaedic Congress, Bratislava, Slovak Republic, January 2008. (1) Chairman: Art of Session - Distal tibia and tibial plafond fractures, (2) Introduction - The role of ARTOF, (3) Operative treatment of tibial plafond fractures - ORIF - Open, (4) Complications of tibial plafond fractures - Soft tissue.

Waddell JP: Hip Surgery in the Young Adult IV, Banff, AB, January 2008. (1) Moderator: Total hip arthroplasty: Alternative bearings, (2) Speaker: (a) The case for ceramic, (b) Principles of revision total hip arthroplasty.

Waddell JP: Apollo Hospitals, Orthopaedic Postgraduate Symposium, Ahmedabad, India, December 2007. Fracture neck femur.

Waddell JP: Association of Bone and Joint Surgeons (ABJS), Carl T. Brighton Annual Workshop on Musculoskeletal Trauma in Low and Middle Income Countries, Ahmedabad, India, December 2007. (1) Association for the rational treatment of fractures, (2) Moderator, 6th Global Forum on Road Traffic: Update on road traffic crashes, (3) Participant break out session: Essential surgery for lower extremity fractures, (4) Participant: Break out session: Working with other stakeholders: Government, administration, public health officials.

Waddell JP: Arthritis Society, Arthritis Public Forum, Toronto, ON, November 2007. Total hip and knee replacement for arthritis.

Waddell JP: Egyptian Orthopaedic Association, Cairo, Egypt, November 2007. (1) Planning and management of complex total hip arthroplasty, (2) Planning and management of revision total hip arthroplasty.

Waddell JP: Societe International de Chirurgie Orthopedique de Traumatologie (SICOT), 4th and 5th Global Forum on Road Traffic Trauma, Internet 2 Video Conference, Toronto, ON, November 2007. Moderator.

Waddell JP: University Hospital, Cairo, Egypt, November 2007. Postgraduate training in orthopaedic surgery.

Waddell JP: Australian Orthopaedic Association, Gold Coast, Australia, October 2007. Bone and joint decade - Keeping up the momentum beyond the decade.

Waddell JP: University of Virginia, Charlottesville, Virginia, October 2007. Visiting Professor: (1) Avoiding complications in total hip replacement, (2) Choices in hip surgery, (3) Revision total hip replacement, (4) Case presentations: The difficult primary total hip replacement.

Waddell JP: Homer-Stryker International Advisory Board, Bath, United Kingdom, September 2007. Global education strategy - Bone and Joint Canada musculoskeletal health for Canadians.

Waddell JP: Societe Internationale de Chirurgie Orthopedique et de Traumalogie (SICOT), 3rd Global Forum on Road Traffic Trauma, Internet 2 Video Conference, Toronto, ON, September 2007. Moderator.

Waddell JP: Societe Internationale de Chirurgie Orthopedique et de Traumatologie (SICOT), Marrakech, Morocco, September 2007. Management of Open Fractures.

Waddell JP: Societe Internationale de Chirurgie Orthopedique et de Traumatologie (SICOT), Marrakech, Morocco, August 2007. Displaced femoral neck fractures in adults.

Waddell JP: 3rd Mid-East Computer Assisted Orthopaedic Surgery (CAOS) Symposium held in conjunction with the Societe Internationale de Chirurgie Orthopedique et de Traumatologie (SICOT) meeting, Marrakech, Morocco, August 2007. Templating for total hip arthroplasty.

Waddell JP: American Board of Orthopaedic Surgeons, Chicago, Illinois, July 2007. Examiner.

Whelan DB: Ecuador Society of Orthopedics and Trauma and Pichincha Medical College, Quito, Ecuador, January 2008. (1) Knee dislocation or multiligament knee injury, (2) Anterior cruciate ligament diagnosis and repair, (3) Shoulder instability.

Research and Investigations

Senior Investigator's Name Appears in Italics

A prospective randomized controlled pilot clinical study to evaluate the safety and efficacy of GEM OS2 injectable B-TCP/Collagen Matrix Plus rhPDGF-BB. *Ahn H*, Montanera W: *Biomimmetics*. (\$140,000 2007 - 2008.)

A prospective randomized trial investigating the effect of a novel reamer irrigator aspirator on the incidence of fat embolism and respiratory function during intramedullary nailing of femoral shaft fractures. *Schemitsch EH*, McKee MD: *Orthopaedic Trauma Association*. (\$49,000 2006 - 2008.)

A prospective randomized trial of non-operative versus operative treatment of acute acromio-clavicular joint dislocation. *McKee M: Orthopaedic Trauma Association.* (\$50,000 2007 - 2008.)

A prospective RCT investigating the effect of a novel reamer aspirator on the incidence of fat embolism during IM (intramedullary) nailing of femoral shaft fractures. *McKee MD*, Schemitsch EH, Bhandari M, Davis E: *Orthopaedic Trauma Association*. (\$65,000 2005 - 2007.)

A randomized trial comparing a novel reamer irrigator aspirator to standard reaming for treatment of femoral shaft fractures. *Schemitsch EH*, McKee MD: *Orthopaedic Trauma Association*. (\$65,000 2006 - 2008.)

A randomized trial of cannulated screws vs. sliding hip screws for femoral neck fractures. *Bhandari M*, Schemitsch EH: *Canadian Institutes of Health Research*. (\$160,267 2008 - 2010.)

A randomized trial of fluid lavage in open wounds. *Bhandari M*, Petrisor B, Schemitsch EH, Flow Investigators (co-Principal Investigator and Steering Committee): *Osteosynthesis and Trauma Care Foundation*. (\$50,000 2008 - 2010.)

A randomized trial of fluid lavage in open wounds. FLOW (Schemitsch EH: co-Investigator, Steering Committee Member): Canadian Orthopaedic Association. (\$10,000 2005 - 2007.)

A randomized trial of fluid lavage in open wounds. FLOW Investigators (Schemitsch EH: co-Investigator, Steering Committee Member): McMaster University - Department of Surgery. (\$12,630 2008 - 2010.)

A randomized trial of fluid lavage in the treatment of open wounds. *Bhandari M*, Petrisor B, Schemitsch EH: Association Internationale pour l'Osteosynthese Dynamique. (\$35,000 2006 - 2007.)

A randomized trial of fluid lavage in the treatment of open wounds. *Bhandari M*, Petrisor B, Schemitsch EH, *Flow Investigators (co-Principal Investigator and Steering Committee): Orthopaedic Trauma Association.* (\$48,000 2006 - 2008.)

A randomized trial of fluid lavage in the treatment of open wounds (FLOW). Pilot Study. *Bhandari M*, FLOW/Petrisor B, Schemitsch EH: *The Physicians' Services Incorporated Foundation*. (\$100,000 2005 - 2007.)

A randomized trial of non-operative versus operative treatment of acromioclavicular joint injuries. *McKee MD*, Schemitsch EH: *Orthopaedic Trauma Association*. (\$40,000 2007 - 2009.)

A randomized trial of non-operative versus operative treatment of acromioclavicular injuries. *McKee MD*, Schemitsch EH, Canadian Orthopaedic Trauma Society: *Osteosynthesis and Trauma Care Foundation*. (\$50,000 2007 - 2009.)

A randomized trial of total hip arthroplasty versus hemi arthroplasty for femoral neck fractures. *Bhandari M*, Schemitsch EH, Health Investigators (co-Investigator and Steering Committee): *Canadian Institutes of Health Research*. (\$139,423, 2008 - 2010.)

A randomized controlled trial of operative versus non-operative treatment of acute acromioclavicular dislocations. *McKee MD*, Canadian Orthopaedic Trauma Society: *Association Internationale pour l'Osteosynthese Dynamique*. (\$50,000 2008 - 2009.)

Assessment of a computerized navigation system in a cadaveric lower extremity model. Schemitsch EH: Stryker. (\$20,000 2006 - 2007.)

AWAIT Study: Adolescent idiopathic scoliosis, are we waiting too long? Wright JG, Ahn H: Restracomp. (\$70,000 2005 - 2007.)

Biomechanical and finite element analysis of the Birmingham hip resurfacing. Schemitsch EH: Smith and Nephew. (\$50,000 2006 - 2007.)

Bridging the gap between identified need and adherence to osteoporosis care after a fragility fracture. *Sale J*, Beaton DE, Bogoch ER, Gignac MAM, Hawker G, Meadows: *Canadian Institutes of Health Research*. (\$88,193 2008 - 2009.)

Canadian orthopaedic foot and ankle society (COFAS) multicentred randomized case controlled trial on clinical and radiographic outcome of total ankle arthroplasty vs. ankle arthrodesis. *Daniels TD*, Younger A, Glazebrook M: *Canadian Orthopaedic Research Legacy Award*. (\$19,160 2007 - 2008.)

Cell-based gene therapy to accelerate fracture healing. *Schemitsch EH*, Li R, Stewart D, Von Schroeder H: *Association Internationale pour l'Osteosynthese Dynamique Canada*. (\$10,000 2007 - 2008.)

Cell-based gene therapy to accelerate fracture healing. *Schemitsch EH*, Li R, Stewart D, Von Schroeder H: *Osteosynthesis and Trauma Care Foundation*. (\$50,000 2007 - 2009.)

Cell-based gene therapy to accelerate fracture healing (EPC-VEGF eNOS). *Schemitsch EH*, Li R, Stewart D, Von Schroeder H: *Association Internationale pour l'Osteosynthese Dynamique*. (\$50,000 2006 - 2008.)

Cell-based VEGF gene transfer to promote fracture healing. *Schemitsch EH*, Li R, Von Schroeder H, Stewart D: *The Physicians'* Services Incorporated Foundation. (\$86,000 2005 - 2007.)

Data collection and analysis from the Ontario Osteoporosis Strategy Post-fracture Osteoporosis Coordinator Program in Ontario fracture clinics. *Bogoch ER*, Beaton DE: *Ministry of Health and Long-Term Care, Province of Ontario.* (\$325,000 2008 - 2009.)

Data collection for monitoring of provincial post fracture osteoporosis screening. *Beaton DE*, Bogoch ER: *Ministry of Health and Long-Term Care, Province of Ontario.* (\$228,315 2007 - 2008.)

Development of a fellowship in surgical navigation. Schemitsch EH: Stryker. (\$50,000 2006 - 2008.)

Exploring racial/ethnic differences in communication between patients and orthopaedic surgeons. *Hudak P*, Hawker G, Levinson W, Schemitsch EH: *Social Sciences and Humanities Research Council of Canada*. (\$88,077 2006 - 2008.)

GEMOS-1 randomized clinical trial. Daniels TR: BioMimetic Therapeutics Inc. (\$100,000 2007 - 2008.)

Osteoporosis care for fragility fracture patients. Bogoch ER: Martin Family Foundation. (\$100,000 2007.)

Osteoporosis exemplary fracture care program. Bogoch ER: Procter and Gamble Pharmaceuticals. (\$200,000 2008 - 2009.)

Outcome management: The importance of time. *Davis A*, Badley E, Beaton D, Cote P, Flannery J, Gignac M, Hogg-Johnson S, Mahomed N, Schemitsch EH, Streiner D: *Canadian Institutes of Health Research*. (\$624,224 2005 - 2009.)

Predictors of disability following revision knee arthroplasty. *Davis A*, Garbuz D, Gignac M, Kiss A, Mahomed N, Gross A, Schemitsch EH: *Canadian Institutes of Health Research*. (\$284,640 2005 - 2010.)

Prospective comparison of ankle fusion versus ankle arthroplasty. *Daniels TR*, Lau JTC, Glazebrook M, Younger A: *American Orthopaedic Foot and Ankle Society*. (\$11,500 2007 - 2008.)

Randomized clinical trial of ankle fusion versus ankle arthroplasty. *Daniels TR*, Younger A, Glazebrook M: *American Orthopaedic Foot and Ankle Society Research Grant.* (\$10,000 2007 - 2008.)

Refining the coordinator model of post fracture osteoporosis care. Bogoch ER: Procter and Gamble Pharmaceuticals. (\$50,000 2007.)

Regional osteoporosis coordinator knowledge exchange trial (ROCKET). *Jaglal S*, Beaton DE, Bogoch ER, Cadarette S, Donescu S, Hawker G, Kloseck M, Majumdar S, Meadows L, Papaioannou A, Thorpe K, Zwarenstein M, Siaschini P, Ramirez O, Jiwa F: *Ontario Ministry of Health and Long Term Care Osteoporosis Strategy, Toronto Rehabilitation Institute.* (\$320,983 2007 - 2008.)

Secondary prevention of osteoporosis following fragility fracture. Bogoch ER: Procter and Gamble Pharmaceuticals. (\$50,000 2006 - 2007.)

The effect of VEGF and eNOS genes in bone repair. *Schemitsch EH*, Li R, Stewart D, Von Schroeder H: Zimmer/University of Toronto. (\$7,500 2006 - 2007.)

To brace or not to brace in stable thoracolumbar burst fractures: A pilot prospective randomized controlled trial. *Wai E*, Ahn H: *Physicians' Services Incorporated*. (\$25,000 2007 - 2008.)

Toronto pilot study: Rick Hansen spinal cord injury registry. *Verrier M*, Ahn H, Fehlings M, Finkelstein J: *Ontario Neurotrauma Foundation, Rick Hansen Group.* (\$300,000 2005 - 2008.)

Trial to re-evaluate ultrasound in the treatment of tibial fractures. *Guyatt G*, Bhandari M, Busse J, Schemitsch EH, Sanders D: *TRUST Investigators (co-Investigator and Steering Committee): Canadian Institutes of Health Research/Smith & Nephew.* (\$2,025,469 2007 - 2010.)

Use of a novel scaffold to accelerate fracture healing. *Kuzyk P*, Schemitsch EH, Davies J: *Association Internationale pour l'Osteosynthese Dynamique Canada*. (\$5,000 2007 - 2008.)

Use of a novel scaffold to accelerate fracture healing. *Kuzyk P*, Schemitsch EH, Davis J: *Osteosynthesis and Trauma Care Foundation*. (\$10,000 2007 - 2009.)

Honours Received

Daniels TR: The Roger Mann Award (and US\$4000) for Best Clinical Paper at the American Orthopaedic Foot and Ankle Society (AOFAS) Summer Meeting in Toronto, ON. Comparison of ankle arthritis to hip/knee arthritis. July 2007.

McKee MD: Best Poster, Shoulder and Elbow Section of the 2008 Annual Meeting of the American Academy of Orthopaedic Surgerons (AAOS). The effect of a clavicle shaft fracture on general health status: Results of a randomized clinical trial. March 2008.

McKee MD: The Edwin G. Bovill Award for Best Paper, "S.P.R.I.N.T. Study," at the Orthopaedic Trauma Association Annual Meeting. March 2008.

Schemitsch EH: Jacques Duparc Poster Award for "Gamma nails revisited: Gamma nails versus compression hip screws in the management of intertrochanteric fractures of the hip: A meta-analysis EFORT 2007." July 2007.

Schemitsch EH: Neer Award for Best Paper, American Shoulder and Elbow Surgeons Open Meeting (McKee, Schemitsch and the Canadian Orthopaedic Trauma Society.) July 2007.

Whelan DB: First Place for Sport Medicine Poster - A "Meniscus Specific" HRQOL Index: The Western Ontario Meniscal Evaluation Tool (WOMET), at the American Association of Orthopaedic Surgeons, San Francisco. March 2008.

DIVISION OF PLASTIC SURGERY

Dr. J.L. Mahoney – Associate Professor (Division Head) Dr. M.A. Musgrave – Assistant Professor

Publications

Elahi MM, Brar MS, Ahmed N, Howley DB, Nishtar S, Mahoney JL: Cervical spine injury in association with craniomaxillofacial fractures. Plastic and Reconstructive Surgery: January 2008: 121(1): pp 201-208.

Mahoney J, The Expert Working Group et al: Vacuum assisted closure: Recommendations for use – A consensus document. Principles of Best Practice - A World Union of Wound Healing Societies' Initiative: (World Union of Wound Healing Societies, ed.) Medical Education Partnership (MEP) Ltd., London: 2008: pp 1-10.

Mazer CD, Leong-Poi H, Mahoney JL, Latter D, Strauss BH, Teitel JM: Vascular injury and thrombotic potential: A note of caution about recombinant factor VIIa. Cardiothoracic and Vascular Anesthesia: December 2007: 11(4): pp 261-264.

McKee MD, Yoo DJ, Zdero R, Dupere M, Wild L, Schemitsch EH, Mahoney JL: Combined single-stage osseous and soft tissue reconstruction of the tibia with the Illizarov method and tissue transfer. Journal of Orthopaedic Trauma: March 2008: 22(3): pp 183-189.

Invited Visits

Mahoney JL: Baylor College of Medicine, Sternal Wound Management: New Surgical Strategies, Houston, Texas, June 2008. (1) Basic principles of wound care and osteosynthesis, (2) Stabilization and reconstruction of the thorax.

Mahoney JL: World Union of Wound Healing, Toronto, ON, June 2008. (1) Surgical reconstruction of non-healing pressure ulcers, (2) Moderator: Wound complications of vascular surgery.

Mahoney JL: The University of Texas Southwestern Medical Center, Dallas, Texas, April 2008. (1) Initial management of sternal wounds, (2) Post-operative issues.

Mahoney JL: Egyptian Society Cardio-Thoracic Surgery, 15th Annual Conference, Cairo-Egypt, March 2008. Sternal plates fixation for sternal wounds reconstruction initial experience.

Mahoney JL: Laval Unversity, Deep Sternal Wound Infection Symposium, Laval, PQ, August 2007. (1) History of sternal plating and current concepts, (2) The approach of the plastic surgeon, muscle flaps.

Research and Investigations

Senior Investigator's Name Appears in Italics

Are chest compressions safe for the patient with sternal plates? Investigation using human cadaveric model. *Mahoney JL*, McKay D: *AO Foundation*. (\$5,000 2006 - 2009.)

Negative pressure wound therapy (NPWT) for the treatment of chronic pressure wounds. *Mahoney JL*, Goeree R, Teague L: *Programs for Assessment of Technology in Health (PATH) Research Institute*. (\$250,000 2008 - 2009.)

Sternal closure stability using the sternal fixation system. Mahoney JL: AO Research Fund. (\$35,000 2007 - 2008.)

DIVISION OF UROLOGY



Dr. R.J.D. Honey – Associate Professor (Division Head) Dr. K.T. Pace – Assistant Professor Dr. R.J. Stewart – Assistant Professor

Publications

Pace KT: Is there a better way to work-up kidney stones? Canadian Urological Association Journal: April 2008: 2(2): pp 123.

Pace KT: Kidney donation surgery: The benefits of laparoscopic donor nephrectomy. Transplant Digest: May 2008: 4: pp 8-10.

Perks AE, Schuler TD, Pace KT, Honey RJ: Prospective determination of ureteral orifice location - a guide for fluoroscopic stent insertion. Journal of Endourology: June 2008: 22(6): pp 1203-1208.

Invited Visits

Honey RJD: American Urological Association, Annual Meeting, Ureteroscopic Working Instruments and Complications, Orlando, Florida, May 2008. Course Director: Hands-on course on percutaneous nephrostomy.

Pace KT: Canadian Urological Association, Annual Meeting, Edmonton, AB, June 2008. (1) Practical tips for laparoscopic suturing, (2) Moderator of Scientific Poster Session: Minimally-invasive surgery and renal transplantation.

Pace KT: American Urological Association, Orlando, Florida, May 2008. Introduction to flexible ureteroscopy: Indications, preparation, anesthesia and access.

Pace KT: Canadian Transplant Fellows Symposium, Toronto, ON, October 2007. Laparoscopic donor nephrectomy: Pro.

Pace KT: Prevention of Renal Disease: An International Conference, Toronto, ON, September 2007. Prevention of obstructive uropathy.

Research and Investigations

Senior Investigator's Name Appears in Italics

A randomized, double-blinded placebo-controlled trial of alfuzosin (Xatral) in the management of distal ureteral calculi. *Pace KT*, Honey RJ, Chisholm D, Laroche B: *Investigator-initiated multi-centered randomized clinical trial, funded by Sanofi-Aventis*. (\$100,000 2007 - 2009.)

DIVISION OF VASCULAR SURGERY

Dr. F.M. Ameli – Associate Professor (Division Head) Dr. C. Cina – Professor Dr. V.M. Campbell – Lecturer Dr. A.G. Lossing – Associate Professor Dr. W. Tanner – Lecturer

Invited Visits

Ameli FM: The Association of International Vascular Surgeons, 26th Annual Meeting, Charmonix, France, March 2008. Session Chairman.

Ameli FM: Rock Mountain Traumatologic Society, Snowmass, Colorado, January 2008. The medico-legal implications for the vascular surgeons of the delayed effects of blunt abdominal trauma.

Ameli FM: Canadian Society for Vascular Surgery, Montreal, PQ, September 2007. The medico-legal implications for the vascular surgeons of the delayed effects of blunt abdominal trauma.

Honours Received Campbell VM: Donald J. Currie Undergraduate Teaching Award. June 2008.

SUNNYBROOK HEALTH SCIENCES CENTRE

Heads of Divisions

Dr. S. Fremes – Cardiac and Vascular Surgery Dr. A. Smith – General Surgery Dr. M. Schwartz – Neurosurgery Dr. H. Kreder – Orthopaedic Surgery Dr. P. Binhammer – Plastic Surgery Dr. L. Klotz – Urology **Robin Richards**

Surgeon-in-Chief



Sunnybrook underwent a strategic refocusing exercise during the year confirming the role of trauma, cancer and cardiovascular interventional care as being central Institutional foci with strong surgical components. The large and long-awaited M Wing and Emergency Department expansions were underway throughout the year. These sizeable projects will open new chapters in Sunnybrook's history.

New Staff

Markku Nousiainen was appointed as a Surgeon-Investigator in the Division of Orthopaedic Surgery to develop a practice in total joint replacement and musculoskeletal trauma and perform educational research. Andrew Dueck was appointed as a Surgeon-Investigator in the Division of Cardiac and Vascular Surgery to perform both open and percutaneous vascular surgical procedures and vascular imaging research. Doug McKay was appointed as a Clinical Associate in the Division of Neurosurgery to augment provision of neurosurgical clinical care.

Appointments and Promotions

Peter Chu was promoted to Associate Professor in recognition of his sustained excellence in teaching in General Surgery. Calvin Law was promoted to Associate Professor for his scholarship in research in the surgical treatment of gastrointestinal malignancy. Robert Nam was promoted to Associate Professor for his research in the areas of prostate cancer, biomarkers and genetics. Albert Yee was promoted to Associate Professor in recognition of his research into the mechanisms of spinal disease processes. Terry Axelrod was promoted to Full Professor for his sustained excellence in teaching orthopaedic traumatology at the local, national and international levels.

Sender Herschorn continued in his role as the inaugural holder of the Martin Barkin Chair in Urological Research and Chair of the University Division of Urology. Andy Smith continued as the inaugural leader of knowledge translation in the Centre for Health Services Research of the Sunnybrook Research Institute, established to identify opportunities for improvement and innovation at the interface between care and research. Laurence Klotz, Editor-in-Chief of the Canadian Urological Association Journal, was installed as President of the Canadian Urology Association. Lesley Carr was elected President of the Medical-Dental-Midwifery Staff Association.

Educational Activity and Awards

Ron Kodama received a Peters-Boyd Clinical Teaching/Supervision Award. Ron also received the Tovee Award for Postgraduate Education at Gallie Day and the Division of Urology A.W. Bruce Undergraduate Teaching Award. John Murnaghan received the University of Toronto Surgical Skills Centre Distinguished Education Award for exemplary, innovative contributions to teaching and learning in the Surgical Skills Centre. Manuel Gomez and colleagues received the Best Trauma Coordinator of Canada Presentation Award at the annual scientific meeting of the Trauma Association of Canada for their presentation, "Effectiveness of the PARTY Program in Changing Youth Driving Related Attitudes." Rob Nam received the Division of Urology Postgraduate Teaching and Lecture Awards.

Andy Smith helped to organize and also participated in the 48th Annual Update in General Surgery. Fred Brenneman, Natalie Coburn, Darlene Fenech, Claire Holloway, May Lynn Quan, Sandro Rizoli, Andy Smith, Homer Tien and Frances Wright also participated in this annual course. Oleh Antonyshyn, assisted by Jeff Fialkov, together with colleagues from the Department of Otolaryngology and Head and Neck Surgery organized a second successful craniofacial surgery symposium with live surgical demonstrations. Albert Yee and Cari Whyne organized and participated in a successful symposium on emerging spinal technologies. Mike Ford also participated in this symposium together with four guest faculty from other institutions. Jeff Gollish, together with colleagues from the Division of Orthopaedic Surgery and the Department of Anaesthesia at the Holland Orthopaedic and Arthritic Centre, organized a symposium directed towards Optimizing Function Following Total Hip and Knee Replacement. Robin Richards co-directed and participated in the 24th Annual Upper Extremity Update together with Terry Axelrod, Richard Holtby and Stewart Wright.

Research Activity and Awards

Robert Nam received an early researcher award from the Ministry of Research and Innovation. Joel Fish received the Charles H. Tator Surgeon-Scientist Mentoring Award at Gallie Day for excellence in research, commitment to mentoring and dedication to promotion of Surgeon-Scientists. Karen Cross, supervised by Joel Fish, received the Wyeth Award in Clinical Epidemiology/Education for their study "Redefining the gold standard and establishing a grading system for tissue injury" at Gallie Day. Vanessa Wong, with co-authors Manuel Gomez and Rob Cartotto, won an award for their presentation regarding the objective estimation of survival in burn patients at the annual meeting of the American Burn Association. Albert Yee, Cari Whyne, and Joel Finkelstein received Canadian Institutes of Health Research (CHIR) funding. Anna Gagliardi received a CIHR Operating Grant and a five-year CIHR New Investigator Award in Knowledge Translation. Sandro Rizoli received a CIHR New Investigator Award. Vasundara Venkateswaran was appointed a member of the CIHR Nutrition, Food and Health grants committee.

Natalie Coburn received a substantive three-year National Cancer Institute of Canada (NCIC) grant to develop and measure quality indicators to improve gastric cancer survival.

May Lynn Quan received funding for three years from the Canadian Breast Cancer Foundation for her study of young women with breast cancer. Cari Whyne received three years funding from the Ontario Institute for Cancer Research for her study on the impact of photodynamic therapy on the biomechanical stability of the metastatic spine. Veronica Wadey received funding from the ACMS Academic Trust for her study of interactive on-line training on knowledge and skills acquisition in patients with inflammatory arthritis. Sandro Rizoli received The Physicians' Services Incorporated (PSI) Foundation funding for a study of occult pneumothoraces in mechanically ventilated patients. Robin Richards and co-investigator, Chris Robertson, received funding from the PSI Foundation for a study of the influence of BMP-2 on graft incorporation.

Other Awards and Activities

Joe Schatzker was appointed as a Member of the Order of Canada for his contributions to orthopaedic surgery, particularly for introducing surgical procedures for the internal fixation of fractures to North America. Robert Nam was named the recipient of the 2008 Medal in Surgery from the Royal College of Physicians and Surgeons of Canada for his work on gene fusion and prostatic cancer. Robert delivered a presentation regarding prostate cancer genetics in a symposium on the role for surgeons in oncology research at Gallie Day. Sandro Rizoli was appointed as the de Sousa Chair in Trauma Research for a five-year term.

Andy Smith was unanimously selected as the James IV Travelling Fellow for 2009, having been reappointed for a second term as Head of the Division of General Surgery after external review by Dr. Don Buie of the University of Calgary. Daryl Kucey was installed as President of the Canadian Society for Vascular Surgery. Hans Kreder received a Presidential Medal and Jeff Gollish received the Laurin Award at the Annual General Meeting of the Canadian Orthopaedic Association. Ron Kodama was appointed President of the Canadian Academy of Urologic Surgeons.

Dr. Steve Fremes' appointment as Head of the Division of Cardiac and Vascular Surgery was extended following an internal review. Steve was elected to the American Surgical Association. Joel Fish was appointed Chief Medical Officer at St. John's Rehabilitation Hospital. Robert Cartotto was appointed acting Medical Director of the Ross Tilley Burn Centre. Andy Smith and Laurie Klotz received the Tile Award for outstanding service to the Department. Michael Ordon, Steve Lopushinsky, Mansour Alvi and Robert Hamilton received Harrison Awards for clerkship teaching. Several fundraising events were held in support of the establishment of the Dr. Bernard Goldman Chair in Cardiovascular Surgery. Dr. Goldman gave the W.G. Bigelow Lecture at the Canadian Cardiovascular Society.



Retirements and Sabbaticals

Joel Fish completed his sabbatical in New Zealand where he had been asked to establish a national burn care system. Joel completed his term as Medical Director of the Ross Tilley Burn Centre, remaining at Sunnybrook as a burn surgeon. Fred Brenneman completed a two-year term as President of the Trauma Association of Canada.

Conclusion

As the year concluded efforts were underway to appoint new staff in cardiac and vascular surgery, neurosurgery, orthopaedic surgery and neurosurgery. The institution welcomed Dr. Barry McLellan as President and Chief Executive Officer in September and Dr. Keith Rose as Chief Medical Officer in April. The department looked forward to working with the institution in implementing the strategic refocusing exercise, recognizing the need to continually focus its activity in the context of limited provincial surgical capacity. The department remains thankful for both present and future opportunities and the substantive role it has been asked to play within our institution and by our university department, our faculty, the Toronto Central Local Health Integrated Network, our surrounding Local Health Integrated Networks and the Province.

DIVISION OF CARDIAC AND VASCULAR SURGERY

Dr. G.T. Christakis – Professor Dr. G. Cohen – Assistant Professor Dr. A. Dueck – Assistant Professor Dr. S.E. Fremes – Professor (Division Head) Dr. B.S. Goldman – Professor Dr. D.S. Kucey – Assistant Professor Dr. R. Maggissano – Associate Professor

Publications

Desai ND, Fremes SE: Radial artery conduit for coronary revascularization: As good as an internal thoracic artery? Current Opinion in Cardiology: November 2007: 22(6): pp 534-540.

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Rouleau JL, Warnica WJ, Baillot R, Block PJ, Chocron S, Fremes SE, Johnstone D, Myers MG, Calciu CD, Dalle-Ave S, Martineau P, Mormont C, van Gilst WH, for the IMAGINE Investigators: Effects of angiotensin-converting enzyme inhibition in low-risk patients early after coronary artery bypass surgery. Circulation: January 2008: 117(1): pp 24-31.

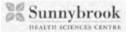
Invited Visits

Cohen G: American Association for Thoracic Surgery, San Diego, California, May 2008. Are stentless valves hemodynamically superior to stented valves? Long-term follow-up of a randomized trial.

Cohen G: Arrythmia Service Rounds, Toronto, ON, March 2008. Anatomy of the pericardium.

Cohen G: City Wide Rounds, Toronto, ON, February 2008. Modified maze operations.

Fremes SE: Dalhousie University, Annual Department of Surgery Research Day, Cardiac Surgery, Halifax, NS, April 2008. Improving the outcomes of cardiac surgery.



Fremes SE: American Association for Thoracic Surgery, San Diego, California, November 2007. Equivalent patencies of the radial artery, right internal thoracic artery and saphenous vein beyond 5 years: Surprising results from the Radial Artery Patency and Clinical Outcomes Trial.

Goldman BS: Toronto Rehab, 3rd Annual Cardiac Rehabilitation Symposium, Toronto, ON, May 2008. Whatever happened to coronary bypass surgery?

Goldman BS: Five Chiefs Family Medicine Clinic Day, Markham, ON, April 2008. Whatever happened to the coronary bypass.

Goldman BS: Southlake Regional Health Sciences Centre, Newmarket, ON, April 2008. Whatever happened to the coronary bypass.

Goldman BS: 7th International Congress on Coronary Artery Disease, From Prevention to Intervention, Venice, Italy, October 2007. Changing role of surgical coronary revascularization.

Goldman BS: Edith Wolfson Medical Center, 2nd Angela and Sami Shamoon Seminar on Congenital and Adult Cardiac Surgery, Holon, Israel, October 2007. To stent or not to stent - State of the art of stentless prosthesis.

Goldman BS: Dalhousie University, Halifax, NS, September 2007. Implantation of cardiac rhythm devices.

Goldman BS: University of Western Ontario, Annual Research Day, London, ON, September 2007. Current issues and controversies in coronary revascularization.

Kucey DS: KMH Medical, MDMS Symposium, Collingwood, ON, June 2008. Occlusive vascular disease.

Kucey DS: MEDCAN, Toronto, ON, June 2008. Screening for asymptomatic carotid disease.

Kucey DS: University of Manitoba, Spring Vascular Meeting, Winnipeg, MB, April 2008. Extra-anatomic bypass.

Kucey DS: Canadian Society for Vascular Surgery, Toronto, ON, March 2008. AAA screening round table discussion.

Research and Investigations

Senior Investigator's Name Appears in Italics

A randomized, double blind, placebo-controlled, multi-center study to evaluate the cardioprotective effects of MC-1 in patients undergoing high-risk coronary artery bypass graft (CABG) surgery (MEND-CABG). *Fremes SE* with multi-center investigators: *Medicure International Inc.* (\$160,000 2006 - 2007.)

CABG off or on pump revascularization study (CORONARY). *Lamy A*, Yusuf S, Taggart D, Murkin J, Fremes SE: *Canadian Institutes of Health Research*. (\$6,580,411 2007 - 2014.)

Cardiovascular complications of diabetes. *Moody A*, Burns P, Tobe S, Silverberg J, Leung D, Maggisano R: *Canadian Institutes of Health Research/Heart and Stroke Foundation of Canada* (\$288,081 2007 – 2009.)

Continuing education strategies in the implementation of clinical practice guidelines: Addressing a care gap. *Wooster DL*, Dueck AD, Wooster E, Moneley D: *Office of Continuing Education, University of Toronto* (\$5,000 2008 – 2009.)

FREEDOM Trial - Future revascularization evaluation in patients with diabetes mellitus: Optimal management of multivessel disease. *Fuster V*, Fremes SE, the FREEDOM Study Investigators: *National Heart, Lung and Blood Institute*. (\$162,000 2006 - 2011.)

Outcomes assessment of endovascular repair of aortic aneurysms versus open surgery. *Kucey DS*, Maggisano R: *Sunnybrook Foundation*. (\$1,500,000 2005 – 2008.)

Unraveling the black box of adverse events in cardiac surgery. *Fremes SE*, Tu JV, Anderson GM, Novick RJ, Guru V, Rubens FD, Mazer D, Adhikari NKJ, Scales DC, Fowler RA: *Heart and Stroke Foundation of Ontario*. (\$260,950 2006 - 2009.)

Honours Received

Goldman BS: Friends of the Meir Medical Centre, Israel, Tribute Dinner, The Intensive Care Unit - Where Science and Technology Meet Humanity. May 2008.

Kucey DS: President, Canadian Society for Vascular Surgery. September 2007.

DIVISION OF GENERAL SURGERY

Dr. F.D. Brenneman – Associate Professor Dr. P.T.Y. Chu – Associate Professor Dr. N.S. Coburn – Assistant Professor Dr. D.S. Fenech – Assistant Professor Dr. A.R. Gagliardi – Assistant Professor Dr. S.S. Hanna – Associate Professor Dr. C.M.B. Holloway – Associate Professor Dr. C.H.L. Law – Associate Professor Dr. M.L. Quan – Assistant Professor Dr. S. Rizoli – Associate Professor Dr. S. Rizoli – Associate Professor Dr. T.M. Ross – Associate Professor Dr. A.J. Smith – Associate Professor Dr. H.C. Tien – Assistant Professor Dr. L. Tremblay – Assistant Professor Dr. F.C. Wright – Assistant Professor

Publications

Cardella J, Coburn NG, Gagliardi A, Maier BA, Greco E, Last L, Smith AJ, Law C, Wright F: Compliance, attitudes and barriers to post-operative colorectal cancer follow-up. Journal of Evaluation in Clinical Practice: June 2008: 14(3): pp 407-415. E-published: March 24, 2008.

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Coburn NG, Guller U, Baxter NN, Kiss A, Ringash J, Swallow CJ, Law CHL: Adjuvant therapy for resected gastric cancer-rapid, yet incomplete adoption following the results of the Intergroup 0116 Trial. International Journal of Radiation Oncology, Biology, Physics: March 2008: 70(4): pp 1073-1080.

Gagliardi AR, Lemieux-Charles L, Brown AD, Sullivan T, Goel V: Barriers to patient involvement in health care planning and evaluation: An exploratory study. Patient Education and Counseling: February 2008: 70: pp 234-241.

Gagliardi AR, Lemieux-Charles L, Brown A, Sullivan T, Goel V: Stakeholder preferences for cancer care performance indicators. International Journal for Health Care Quality Assurance: February 2008: 21: pp 175-189.

Gagliardi AR, Wright FC, Anderson MA, Davis D: The role of collegial interaction in continuing professional development. Journal of Continuing Education in the Health Professions: Fall 2007: 27(4): pp 214-218.

Gagliardi AR, Wright FC, Grunfeld E, Davis D: Colorectal cancer care knowledge mapping: Identifying priorities for knowledge translation research. Cancer Causes and Control: E-published February 13, 2008.

Gagliardi AR, Wright F, Khalifa M, Smith AJ: Multiple factors influence compliance with colorectal cancer staging recommendations: An exploratory study. BMC (BioMed Central) Health Services Research: February 2008: 8: pp 34.

Gagliardi AR, Wright FC, Khalifa M, Smith AJ: Exploratory study of factors influencing quality improvement in colorectal cancer lymph node staging. BioMed Central (BMC) Health Services Research: February 2008: 8: pp 34.

Gagliardi AR, Wright FC, Lemieux-Charles L, Davis D: Fostering knowledge exchange between researchers and decision-makers: Exploring the effectiveness of a mixed-methods approach. Health Policy: April 2008: 18(1): pp 53-63.

Gallinger S, Govindarajan A, Fraser N, Cranford V, Wirtzfeld D, Law CH, Smith AJ, Gagliardi AR: Predictors of multivisceral resection in patients with locally advanced colorectal cancer. The Annals of Surgical Oncology: E-published May 13, 2008.

Govindarajan A, Naimark D, Coburn NG, Smith AJ, Law CHL: Use of colonic stents in emergent malignant left colonic obstruction: A Markov chain Monte Carlo decision analysis. Diseases of the Colon and Rectum: November 2007: 50(1): pp 1811-1824. E-published September 27, 2007.

Govindarajan A, Tan JCC, Baxter NN, Coburn NG, Law CHL: Variations in surgical treatment and outcomes of patients with pancreatic cancer: A population-based study. The Annals of Surgical Oncology: January 2008: 15(1): pp 175-185.

Helyer LK, O'Brien C, Coburn NG, Swallow CJ: Surgeon's knowledge of quality indicators for gastric cancer surgery. Gastric Cancer: December 2007: 10(4): pp 205-214.

Holloway CMB, Saskin R, Brackstone M, Paszat L: Variation in the use of percutaneous biopsy for diagnosis of breast abnormalities in Ontario. The Annals of Surgical Oncology: October 2007: 14: pp 2932-2939.

Kepron C, Kapilla V, Hanna S, Khalifa M: Periampullary carcinoid of the ampulla of Vater presenting as an intraductal papillary mucinous tumour of the pancreas: A sheep in wolf's clothing. Canadian Journal of Surgery: June 2008: 51: pp E67-E68.

Kluger Y, Riou B, Rossaint R, Rizoli SB, Boffard KD, Choong PIT, Warren B, Tillinger M: Safety of rFVIIa in hemodynamically unstable polytrauma patients with traumatic brain injury: Post-hoc analysis of 30 patients from a prospective, randomized, placebo-controlled, double-blind clinical trial. Critical Care: August 2007: 11(4): pp R85.

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Nascimento B, Scarpelini S, Rizoli S: Coagulopathy in trauma. Medicina: November 2007: 404(4): pp 509-517.

Netto F, Hamilton P, Kodama R, Scarpelini S, Ortega SJ, Chu P, Rizoli SB, Tremblay LN, Brenneman FD, Tien HC: Retrograde urethrocystography impairs the CT diagnosis of pelvic arterial hemorrhage in the presence of a lower urological tract injury. Journal of the American College of Surgeons: February 2008: 206(2): pp 322-327.

Netto FS, Pannell D, Tien HC: Hollowpoint ammunition and handguns: The potential for large temporary cavities. Injury Extra: January 2008: 39: pp 50-52.

Netto F, Shulman H, Rizoli SB, Tremblay LN, Brenneman FD, Tien HC: Are needle decompressions for tension pneumothoraces being performed appropriately for appropriate indications? American Journal of Emergency Medicine: June 2008: 26: pp 597-602.

Nofech-Mozes S, Holloway C, Hanna W: The role of Cytokeratin (CK) 5/6 as an adjunct to diagnosis in breast core needle biopsies. International Journal of Surgical Pathology: E-published May 21, 2008.

Ortega SJ, Netto FS, Hamilton P, Chu P, Tien HC: CT scanning for diagnosing blunt ureteral and ureteropelvic junction injuries. BMC (BioMed Central) Urology: February 2008: 8: pp 3.

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Rowsell CH, Hanna SS, Hsieh E, Law C, Khalifa M: Improved lymph node retrieval in whipple specimens as a result of implementation of a new unicinate margin protocol. HPB Surgery: September 2007: 9(5): pp 388-391.

Sawyer J, Wright FC, Moura SL, Maier BA, Fitch MI: Introducing a patient focused care map in colorectal surgery: A qualitative pilot study of patients and surgical oncology nurses' experiences. Canadian Oncology Nursing Journal: August 2007: 18(1): pp 25-33.

Scarpelini S, Rhind SG, Tien H, Spencer Netto FAC, Leung KK, Rizoli S: Effects of hypertonic saline on the development of acute lung injury following traumatic shock. Journal of Organ Dysfunction: February 2008: pp 1-7.

Schiller D, Rai S, Cummings, Davey P, Easson A, Last L, Le LW, Smith AJ, Swallow CJ: Outcomes for salvage surgery for squamous cell carcinoma of the anal canal. The Annals of Surgical Oncology: October 2007: 14(10): pp 2780-2789.

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Stuart TL, Mulvey M, Simor AE, Tien HC, Battad A, Taylor G, Ofner M, Gravel D: Multi-drug resistant acinetobacter baumannii infections in casualties returning from Afghanistan: Canadian approach to a public health threat. Canadian Journal of Infection Control: November 2007: 22(3): pp 152-154.

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Tien HC, Gough M, Farrell R, Macdonald J: Successful use of recombinant activated coagulation factor VII in a patient with massive hemoptysis from a penetrating thoracic injury: A case report. The Annals of Thoracic Surgery: October 2007: 84: pp 1373-1374.

Tremblay LN, Slutsky AS: Ventilator-induced lung injury: From bench to bedside. In: 12th Critical Care Refresher: (Rehm CG, Fuhrman TM, eds.) Society of Critical Care Medicine, Mount Prospect, Illinois: 2008: pp 85-93.

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Wright FC, Gorey KM, Luginaah IN, Schwartz KL, Fung KY, Balagurusamy M, Bartfay E, Anucha U, Parsons RR: Increased racial group breast cancer care and survival differentials in America: Historical evidence consistent with a health care hypothesis, 1975-2001. Breast Cancer Research and Treatment: March 2008.

Wright FC, McWhirter E, Yogendran G, Dranitsaris, Clemons M: Baseline radiologic staging in primary breast cancer: Impact of education interventions on adherence to published guidelines. Journal of Evaluation in Clinical Practice: August 2007: 13(4): pp 647-650.

Zakrison T, Nascimento BA, Tremblay LN, Kiss A, Rizoli SB: Perioperative vasopressors are associated with an increased risk of gastrointestinal anastomotic leak. World Journal of Surgery: August 2007: 31(8): pp 1627-1634.

Invited Visits

Brenneman FD: Department of National Defence, CF Base Borden, Barrie, ON, June 2008. Seminar teaching to Canadian Forces physician assistants: Thoracic and abdominal trauma.

Brenneman FD: Department of National Defence, CF Base Borden, Barrie, ON, April 2008. Seminar teaching to Canadian Forces physician assistants: (1) The acute abdomen, (2) Anorectal disorders.

Brenneman FD: Johnson and Johnson, Professional Education Seminar, Quebec City, PQ, April 2008. (1) Laparoscopic ventral hernia repair - Tips and techniques, (2) UHS for inguinal hernia repair.

Brenneman FD: Trauma Association of Canada, Annual Scientific Meeting, Whistler, BC, April 2008. (1) AIS 2005 yields lower injury severity scores in trauma patients, (2) Dosage of factor VIIa (rFVIIa) and mortality in bleeding trauma patients, (3) Factor VIIA (rFVIIa) and thromboembolic complications in bleeding trauma patients, (4) Glycemic control in severe trauma patients - How many become hyper or hypoglycemic, (5) High frequency oscillatory ventilation of trauma patients with acute respiratory distress syndrome who fail conventional mechanical ventilation, (6) Holiday weekend motor vehicle related trauma, 6) President's address - TAC: Strengths and future directions.

Brenneman FD: Royal College of Physicians and Surgeons of Canada, Annual Meeting, Surgical Society, Kamloops, BC, March 2008. Speaker: (1) Clinical updates in trauma, (2) FAST - Where are we today.

Brenneman FD: Johnson and Johnson, Professional Education Seminar, Saint John, NB, November 2007. Advances in laparoscopic ventral hernia repair.

Brenneman FD: Portuguese Society of Surgery/University of Minho, Trauma Conference, Braga, Portugal, November 2007. Keynote Speaker: (1) Management of abdominal trauma, (2) FAST trauma ultrasound course.

Brenneman FD: Saint John Regional Health Centre, Saint John, NB, November 2007. OR teaching - Advanced laparoscopic ventral hernia repair techniques - Dr. Brian Johnston.

Brenneman FD: Greater Niagara Falls Hospital, Niagara Falls, ON, October 2007. OR teaching - Advanced inguinal hernia repair techniques - Dr. Rajagopaul.

Brenneman FD: Johnson and Johnson, Professional Education Seminar, Thunder Bay, ON, October 2007. Advances in laparoscopic ventral hernia repair.

Brenneman FD: Thunder Bay Regional Health Centre, Thunder Bay, ON, October 2007. OR teaching - Advanced laparoscopic ventral hernia repair techniques - Dr. Chris Decker.

Brenneman FD: Canadian Association of General Surgeons/Trauma Association of Canada (CAGS/TAC) Symposiuum, Canadian Surgery Forum 2007, Toronto, ON, September 2007. Clinical updates in trauma and critical care.

Brenneman FD: International Association of Trauma and Surgical Critical Care (IATSIC), Trauma Association of Canada (TAC) Symposium, International Surgery Week (ISW 2007), Montreal, PQ, August 2007. Moderator: Health resource teams and major incident response.

Brenneman FD: McGill University, Health Centre, Montreal, PQ, August 2007. Course Instructor: Definitive surgical trauma care (DSTC).

Brenneman FD: Johnson and Johnson, Professional Education Seminar, Alliston, ON, July 2007. Advances in laparoscopic ventral hernia repair.

Brenneman FD: Stevenson Memorial Hospital, Alliston, ON, July 2007. OR teaching - Advanced laparoscopic ventral hernia repair techniques.

Coburn NG: Update in General Surgery 2008, Toronto Convention Centre, Toronto, ON, April 2008. Modern management of gastric cancer.

Coburn NG: 3rd Annual Surgical Oncology Education Day, Odette Cancer Centre, Toronto, ON, February 2008. Caring for patients with gastric cancer.

Coburn NG: Cancer Care Ontario/Canadian Association of General Surgeons, Toronto, ON, July 2007. Defining quality in gastric cancer surgery.

Fenech DS: Colon Cancer Association of Canada, Patient Support Group, Toronto, ON, May 2008. Surgical management of colon and rectal cancer.

Fenech DS: Canadian Surgery Forum, Toronto ON, September 2007. Anastomotic stricture.

Gagliardi AR: Ottawa Health Research Institute, Ottawa, ON, October 2007. Developing capacity for knowledge translation: Identifying and evaluating factors that improve the effectiveness of practice guideline implementation.

Hanna SS: Kiwanis Club of North Toronto, Toronto, ON, February 2008. Sunnybrook to China and China to Sunnybrook: A journey of discovery.

Hanna SS: Nanjing First Hospital Cancer Symposium, Nanjing, China, November 2007. (1) Advances in the treatment of pancreatic cancer, (2) Surgical management of cholangiocarcinoma, (3) Surgical management of gallbladder cancer.

Hanna SS: Nanjing First Hospital, Nanjing, Jiangsu Province, China, October 2007. Visiting Professor.

Holloway CMB: Nanjing First Hospital, Nanjing, Jiangsu, China, November 2007. (1) Advances in minimally invasive techniques of breast surgery, (2) Locally advanced breast cancer: A multidisciplinary approach.

Law CHL: Lakeridge Health Association, Oshawa, ON, June 2008. Gastrointestinal stromal tumour: A multidisciplinary case based discussion.

Law CHL: Markham Stoufville Hospital, Division of General Surgery, Markham, ON, June 2008. An update from the Society of Surgical Oncology annual meeting: New frontiers in liver metastases, neuroendocrine tumour and initial results of adjuvant therapy for GIST.

Law CHL: Credit Valley Hospital, Mississauga, ON, May 2008. Surgical management of carcinoid tumour of the gastrointestinal tract.

Law CHL: New York State Society of Pathologists, Syracuse, New York, May 2008. Schleifstein lecture: Lymph node analysis in colorectal cancer - Perspectives from a surgeon and a clinical researcher.

Law CHL: Multidisciplinary Oncology Meeting, Saskatoon, Saskatchewan, March 2008. GIST – A multidisciplinary update.

Law CHL: Regional Oncology Rounds, Regina, SK, March 2008. GIST: A multidisciplinary update.

Law CHL: Train the Trainer: Best Practice in the Management of Colorectal Cancer Patients, Toronto, ON, February 2008. Current management of colorectal metastases to the liver.

Law CHL: Novartis Oncology, Annual Meeting, Lake Louise, BC, January 2008. A physician's approach to the multidisciplinary care for gastrointestinal stromal tumours.

Law CHL: Kingston Regional Cancer Centre, Oncology Grand Rounds, Queen's University, Kingston, ON, December 2007. Neoadjuvant treatment for metastatic colorectal cancer to the liver. Why? When? Where?

Law CHL: British Columbia Cancer Agency, Annual Meeting, Vancouver, BC, November 2007. The GIST of what's new in gastrointestal stromal tumour management: A multidisciplinary approach.

Law CHL: Nanjing First Hospital, Nanjing Medical University, Nanjing Cancer Symposium, Nanjing, China, November 2007. (1) Adequate lymphadenectomy in gastric cancer, (2) Cystic and mucinous disorders of the peritoneum, (3) Surgical management of gastrointestinal stromal tumours.

Law CHL: University of Calgary, Surgical Rounds, Calgary, AB, November 2007. The GIST of what's new in gastrointestinal stromal tumours: A multidisciplinary approach.

Law CHL: Vancouver General Hospital, Surgery Grand Rounds, Vancouver, BC, November 2007. Surgical management of gastrointestinal stromal tumours: A current approach.

Law CHL: Grand River Regional Hospital, Oncology Grand Rounds, Kitchener, ON, October 2007. Carcinoid tumours of the gastrointestinal tract.

Law CHL: Canadian Association of General Surgery (CAGS), Annual Meeting, Toronto, ON, September 2007. (1) Current management of colorectal cancer metastasis, (2) Lymphadenectomy in gastric cancer.

Law CHL: Train the Trainer: Best Practice in the Management of Colorectal Cancer, Toronto, ON, September 2007. Current management of colorectal cancer metastases to the liver.

Law CHL: Toronto Community Oncology Rounds, Toronto, ON, July 2007. The GIST of what's new: A multidisciplinary discussion.

Quan ML: Canadian General Surgery Review, Toronto, ON, March 2008. Breast cancer.

Quan ML: Canadian Association of General Surgeons/Canadian Society of Surgical Oncology, Toronto, ON, September 2007. New technology in the treatment of breast cancer.

Smith AJ: American Society of Colon and Rectal Surgeons, Boston, Massachussetts, June 2008. Improving the quality of care through the use of population data - a comparison of four countries: How we do it in Canada?

Smith AJ: Northwest Ontario Surgeons Conference, Sioux Lookout, ON, June 2008. Colorectal cancer standards in Ontario: What's new and why it matters.

Smith AJ: Sanofi-Aventis, Montreal, PQ, May 2008. Modern management of rectal cancer.

Smith AJ: Sanofi-Aventis, National Sales Meeting, Niagara-on-the-Lake, ON, April 2008. Keynote Speaker.

Smith AJ: Society of Surgical Oncology, Meet the Professor, Chicago, Ilinois, March 2008. Locally recurrent rectal cancer.

Smith AJ: Roche, National Sales Meeting, Toronto, ON, February 2008. Keynote Speaker.

Smith AJ: University of Calgary, Calgary, AB, January 2008. Dr. Roy Preshaw Academic Lecturer/Visiting Professor: (1) Lecture: A team approach to battling colorectal cancer, (2) Judge at Resident/Fellow Research Day.

Smith AJ: Erie St. Clair Local Health Integrated Network, Windsor, ON, December 2007. The new CCO colorectal cancer guideline on margins and lymph node assessment.



Smith AJ: American College of Surgeons, Clinical Congress, New Orleans, LA, October 2007. Rectal cancer update: Current strategies to optimize results.

Smith AJ: Canadian Association of General Surgeons, Toronto, ON, September 2007. Coordinator and Panelist of a postgraduate course in colorectal cancer.

Smith AJ: Ontario Association of Pathologists, Niagara-on-the-Lake, ON, September 2007. The new CCO colorectal cancer guideline on margins and lymph node assessment.

Smith AJ: Colombian Surgical Association, Annual Meeting, Cartagena, Colombia, August 2007. (1) Knowledge translation strategies in surgical oncology, (2) Locally advanced colorectal cancer, (3) Locally recurrent colorectal cancer.

Tien HC: Trauma Association of Canada, Whistler, BC, April 2008. Advanced trauma life support - Rest in peace?

Tien HC: Canadian Surgery Forum, Toronto, ON, September 2007. Expanded scope of practice - The Canadian military experience in Kandahar.

Tien HC: International Association for Trauma Surgery and Intensive Care/Trauma Association of Canada (IATSIC/TAC), Main Session, International Surgical Week (ISW), Montreal, PQ, August 2007. Military role in disasters.

Tremblay L: Trauma Association of Canada, Whistler, BC, April 2008. Moderator for trauma rapid fire session.

Tremblay L: American College of Surgeons, Annual Conference, New Orleans, Los Angeles, October 2007. Fasciotomy: Defining high risk patients and making a diagnosis.

Tremblay L: Canadian Association of General Surgeons, Annual Meeting, Halifax, NS, September 2007. What's new in the ICU?

Wright F: Canadian Society of Surgical Oncology, Toronto, ON, May 2008. Multidisciplinary cancer conferences: Exploring obstacles and facilitators to their establishment and function.

Wright F: Queen's University, Department of General Surgery, Kingston, ON, May 2008. Surgical issues in locally advanced breast cancer.

Wright F: Provincial Leadership Council for Cancer Care Ontario, Toronto, ON, May 2008. Update on multidisciplinary cancer conferences.

Wright F: Ontario Medical Association, Tariff Committee, Toronto, ON, April 2008. Multidisciplinary cancer conferences - should they be billable?

Wright F: Canadian Association of General Surgeons (CAGS), Toronto, ON, September 2007. Applications of new technology in the management of breast disease (Imaging).

Wright F: Cancer Care Ontario, Multidisciplinary Cancer Conferences, Toronto, ON, September 2007. (1) Considerations for the hepatobiliary community of practice, (2) Considerations for the thoracics community of practice.

Research and Investigations

Senior Investigator's Name Appears in Italics

A phase I/II study of neoadjuvant docetaxel with concurrent radiation therapy for locally advanced breast cancer (LABC) (CHEMORADS Study). *Holloway C, Spayne J*, Pritchard K, Trudeau M, Clemons M, Pignol JP, Rakovitch E: *Sanofi-Aventis*. (\$400,000 2006 - 2009.)

A phase I/II trial of III in-DTOA-trastuzumab fab injection for radioimmunoguided surgery in women with HER2/neu-positive breast cancer. *Holloway C*, Reilly R, Caldwell C, Ehrlich L, Kahn H, Wright F, Quan ML, Pritchard K: *Ontario Cancer Research Network*. (\$312,068 2007 - 2009.)

Cancer follow-up care in Ontario: Patterns of practice. *Grunfeld E*, Hodgson D, Elit L, Walker H, Sussman J, Del Guidice L, Rakovitch E, Imrie K, Paszat L, Krzyzanowska M, Law CHL, Coburn NG, Kwon J: *Cancer Care Ontario Research Network*. (\$148,692 2006 - 2008.)

Career Scientist Award for - Surgical oncology outcomes: Determining quality indicators, practice patterns and outcomes of cancer surgery in Ontario. *Law CHL: Ministry of Health and Long Term Care of Ontario.* (\$301,875 2004 - 2009.)

Clinical research consortium to improve resuscitation outcomes. *Slutsky A*, Tremblay L: *Consortium Grant, National Institutes of Health*. (\$2,454,201 2004 - 2009.)

Colonoscopy Collaborative Network. *Rabeneck L*, Gandhi M, Feinberg S, Smith D, Smith A, Bertnick P: *Cancer Care Ontario*. (\$150,000 2007 - 2008.)

Developing capacity for knowledge translation: Identifying factors that improve practice guideline implementation. *Gagliardi A*, Brouwers MC, Palda V, McLeod R, Lemieux-Charles L, Grimshaw J: *Canadian Institutes of Health Research*. (\$135,676 2008 - 2010.)

Does clinical breast examination, mammography or magnetic resonance imaging most accurately correlate with pathological response after neo-adjuvant therapy in women with locally advanced breast cancer? *Wright FC*, Clemons M, Verma S, Trudeau M, Fitzgerald B, Jong R, Causer P, Pignol JP, Zubovits J, Holloway C: *Canadian Breast Cancer Foundation*. (\$113,096 2004 - 2008.)

Does directed self-audit of urologists stimulate reflection and improved lymph node retrieval in patients with bladder cancer? A mixed methods study. *Finelli A*, Gagliardi A, Kulkarni G, Fleshner N: *Research and Development Grant, Continuing Medical Education, University of Toronto.* (\$5,000 2008 - 2009.)

Ductal carcinoma in situ: A population-based analysis. *Rakovitch E*, Paszat L, Hanna W, Done S, Kahn H, Mai V, Goodwin P, Vallis K, Wong J, Holloway C, Gravel D, SenGupta S, Elavathil L, Tuck A, Escott N, Bonin M: *Canadian Breast Cancer Research Alliance*. (\$939,737 2004 - 2007.)

Evaluating the quality of sentinel lymph node biopsy in Ontario. *Quan ML*, Gagliardi A, Wright F, Urbach D, McCready D: *Canadian Breast Cancer Foundation*. (\$329,745 2007 - 2009.)

Exploring the cancer-related information needs of general surgeons. *Gagliardi A*, Smith AJ, Wright FC: *Grant Miller Cancer Research Grant.* (\$20,000 2006 - 2011.)

Exploring the cognitive processes influencing intraoperative decisions during colorectal cancer surgery. *Gagliardi A*, Govindarajan A, Wirtzfeld D, Gallinger S, Law CHL, Smith AJ: *National Colorectal Cancer Campaign*. (\$5,080 2006 - 2008.)

Factors influencing lymph node staging practice in colorectal cancer. Gagliardi A, Wright F, Smith A: Dean's Fund. (\$9,797 2006 - 2009.)

Hospital acquired infections: Making surgery less dangerous. *McMurray K*, Smith AJ, Redelmeir D, Zwarenstein M, Etchells E, Taggar R, Boehm L, McKay ML: *Canadian Institutes of Health Research*. (\$3,000 2007 - 2009.)

How does collegial interaction address the oncology information needs of community-based general surgeons? *Gagliardi A*, Wright FC, Smith AJS: *Grant Miller Cancer Research Grant*. (\$20,000 2006 - 2009.)

Identifying opportunities for improving prevention of infections following colorectal cancer surgery. *McLeod R*, Fenech D, Eskicioglu C, Nathens A: *Colon Cancer Canada*. (\$29,500 2007 - 2008.)

Improving gastric cancer survival: Development and measurement of quality indicators using the RAND/UCLA appropriateness method and population-based data analysis. *Coburn NG*, Gagliardi A, Law CHL, Helyer LK, Swallow CJ, McLeod R, Pazzat L, Rabeneck L: *National Cancer Institute of Canada*. (\$552,466 2008 - 2011.)

Lobular carcinoma in situ: A population-based analysis. *Rakovitch E*, Paszat L, Hanna W, Pignol JP, Kahn H, Quan ML, Wong J, Ackerman I: *National Cancer Institute of Canada/Canadian Breast Cancer Research Alliance*. (\$585,545 2006 - 2009.)

Mentoring for continuous professional development of surgical skills: Qualitative study to establish performance measures. *Gagliardi A*, Wright F: *Research and Development Grant*. (\$3,937–2007 - 2008.)

Mild traumatic brain injury from blast exposure. Tien H, Baker A, Shek P, Chung B: Canadian Forces Health Services. (\$120,000 2007 - 2009.)

Multidisciplinary consensus on performance measures for sentinel lymph node biopsy. *Quan ML*, Gagliardi A, Wright F, Urbach D: *Canadian Breast Cancer Research Alliance*. (\$19,813 2007 - 2008.)

Ontario cancer surgery survey. Gagliardi A, Wright F, Davis D, McLeod R, Urbach D: Cancer Care Ontario. (\$35,000 2007 - 2008.)

Patterns of care for breast cancer surgery in Ontario. Quan ML, Hodgson N: Cancer Care Ontario. (\$34,119 2007 - 2008.)

Population-based assessment of lymphadenectomy during radical cystectomy for bladder cancer in Ontario. *Sharir S*, Law CHL: *Dean's Fund*. (\$10,000 2006 - 2011.)

Predictors of local recurrence in ductal carcinoma in situ: A population-based outcomes analysis. *Rakovitch E*, Paszat L, Hanna W, Pignol J, Kahn H, Wong J, Dunn S, Goodwin P, Holloway C, Tuck A, Elavathil L, Gravel D, Sengupta S, Escott N, Bonin M, Quan ML, Zhang L: *Canadian Breast Cancer Research Alliance*. (\$1,464,000 2006 - 2011.)

Priorities for knowledge translation research in colorectal cancer. *Gagliardi A*, Wright FC, Smith AJS: *Canadian Institutes of Health Research*. (\$15,000 2006 - 2007.)

Priorities for knowledge translation research in colorectal cancer. *Gagliardi A*, Wright FC, Smith AJS: *National Cancer Institute of Canada*. (\$15,000 2006 - 2007.)

Quality of breast cancer sentinel lymph node biopsy practice in Ontario. *Quan ML, Gagliardi A*, Wright F, McCready D, Urbach D: *Canadian Breast Cancer Foundation*. (\$350,000 2007 - 2009.)

Quality of gastric cancer care in Ontario: A population-based cohort study. Coburn NG, Rabeneck L: Dean's Fund. (\$10,000 2007 - 2008.)

Risk of advanced proximal neoplasia of the colon in asymptomatic adults. *Rabeneck L*, Paszat LF, Bondy SJ, Law CHL, Hsieh E, Stukel T, Marshall D, McLaughlin JR, Kim Y-IJ: *Canadian Institutes of Health Research*. (\$952,659–2005 - 2009.)

Social, prognostic and therapeutic factors associated with breast cancer survival in Canada and the United States: Health care access and effectiveness in diverse urban and rural contexts. *Gorey KM*, McCready D, Holowaty E, Luginaah I, Fung K, Hamm C, Wright W, Wright FC: *Canadian Institutes of Health Research/Canadian Breast Cancer Research Alliance*. (\$353,000 2004 - 2009.)

Social, prognostic and therapeutic factors associated with colon cancer survival in Canada and the United States: Health care access and effectivness in diverse urban and rural places: 1995 to 2010. *Gorey KM*, Herbert C, Wright FC, Hamm C, Kanjeekal S, Holowaty E, Fung K, Bartfay E: *National Cancer Institute of Canada/Canadian Cancer Society*. (\$293,050–2008.)

Surgical care of gastric cancer patients in Ontario: A population-based study. *Coburn NG*, Law CHL, Swallow CJ, Rabeneck L: *Connaught Foundation*. (\$23,000 2007 - 2008.)

Surveillance magnetic resonance imaging and ultrasound for women at high risk for hereditary breast cancer. *Warner E*, Wright FC, Causer P, DeBoer G, Jong R, Messner S, Narod S, Plewes D, Wong J, Yannfe M: *Ontario Cancer Research Network*. (\$288,000 2005 - 2009.)

The impact of positron emission tomography (PET) imaging prior to liver resection for colorectal adenocarcinoma metastases: Prospective, multicenter randomized clinical trial (PETCAM). *Gallinger S, Moulton CA*, Levine M, Tandan VR, Wall W, Fairfull Smith R, Jalink D, Roberts R, Grieg P, Hanna SS, Marcaccio M, Law CHL [site PI for Sunnybrook and Women's College Health Sciences Centre]: *Ontario Clinical Oncology Group*. (\$968,842 2005 - 2008.)

The implications of a sister's breast cancer diagnosis. *Metcalfe K*, Quan ML, Narod S: *Canadian Breast Cancer Foundation*. (\$262,749 2007 - 2009.)

The role of thromboelastography in minimizing blood transfusions in trauma patients. *Tien H*, Rizoli S: *Department of National Defence*. (\$185,000 2006 - 2007.)

The role of thromboelastography in trauma. *Rizoli S*, Tien H, Tremblay L, Reis M: *Defence Research and Development Canada*. (\$244,388 2006 - 2008.)

Understanding how patients value the competing risks, benefits and long term outcomes for the treatment of rectal cancer. *Kennedy E*, McLeod R, Llewellyn-Thomas H, Smith AJ, Swallow C, Ko YJ, Fenech D: *National Cancer Institute of Canada*. (\$189,476 2007 - 2009.)

Honours Received

Gagliardi AR: Named an Exceptional Reviewer for 2006-07 by Medical Care, which includes the top 5% of all peer reviewers for 2007 who are chosen on the basis of quality, timeliness and number of reviews performed. June 2008.

Smith AJ: James IV Association Travelling Fellowship (Canada) for 2009. May 2008.

Smith AJ: Marvin Tile Distinguished Service Award, Department of Surgery, Sunnybrook Health Sciences Centre. December 2007.

Tremblay L: Invitation to be a College of Physicians and Surgeons of Ontario (CPSO) Peer Assessor. June 2008.

DIVISION OF NEUROSURGERY

Dr. M. Fazl – Associate Professor Dr. D.A. Houlden – Assistant Professor Dr. F. Pirouzmand – Assistant Professor Dr. M.L. Schwartz – Professor (Division Head)

Publications

Andrade-Souza YM, Ramani M, Beachey DJ, Scora D, Tsao MN, terBrugge K, Schwartz ML: Liquid embolisation material reduces the delivered radiation dose: A physical experiment. Acta Neurochirurgica: February 2008: 150: pp 161-164.

Davey P, Schwartz ML, Scora D, Gardner S, O'Brien PF: Fractionated (split dose) radiosurgery in patients with recurrent brain metastases: Implications for survival. British Journal of Neurosurgery: October 2007: 21: pp 491-495.

Fazl M, Houlden DA, Kretschmer T, Tiel RL: Dorsal root entry zone lesioning for intractable deafferentation pain. In: Surgery of Peripheral Nerves. A Case-Based Approach: (Midha R, Zagar, eds.) Thieme Medical Publishers, New York: 2008.

Fujiwara E, Schwartz ML, Gao F, Black SE, Levine B: Ventral frontal cortex functions and quantified MRI in traumatic brain injury. Neuropsychologia: January 2008: 46: pp 461-474.

Houlden DA, Fazl M, Kretschmer T, Tiel RL: Dorsal root entry zone lesioning for intractable deafferentation pain. In: Surgery of Peripheral Nerves. A Case Based-Approach. (Midha R, Zagar EL, eds.) Thieme Medical Publishers, New York, 2008.

Levine B, Kovacevic N, Nica EI, Cheung G, Gao F, Schwartz ML, Black SE: The Toronto traumatic brain injury study: Injury severity and quantified MRI. Neurology: March 2008: 70: pp 771-778.

Pirouzmand F, Muhajarine N: Definition of topographic organization of skull profile in normal population and its implications on the role of sutures in skull morphology. Journal of Craniofacial Surgery: January 2008: 1: pp 27-36.

Invited Visits

Houlden DA: Charles E. Henry Society, Geneva, New York, USA, April 2008. Instructional course: Cranial nerve monitoring.

Houlden DA: Kendall-Witts Contract Research, Beijing and Shanghai, China, February 2008. Impressions of China.

Houlden DA: American Peripheral Nerve Society, Beverly Hills, California, January 2008. Instructional course: Intraoperative monitoring.

Honours Received

Houlden DA: Sunnybrook Health Sciences Centre Team Award, Surgical Neuromonitoring Department, Trauma. September 2007.



DIVISION OF ORTHOPAEDIC SURGERY

Dr. T.S. Axelrod – Professor Dr. H.U. Cameron – Associate Professor Dr. J.C. Cameron – Assistant Professor Dr. G.R. Fernie – Professor Dr. J.A. Finkelstein – Associate Professor Dr. M.H. Ford – Assistant Professor Dr. J.D. Gollish – Assistant Professor Dr. H. Hall - Professor Dr. R.M. Holtby - Assistant Professor Dr. H.J. Kreder - Professor (Division Head) Dr. B. Maki - Professor Dr. B.W. Malcolm – Assistant Professor Dr. P.H. Marks – Associate Professor Dr. J.J. Murnaghan – Associate Professor Dr. M. Nousiainen – Assistant Professor Dr. R.R. Richards – Professor Dr. J. Schatzker – Professor Dr. D.G.S. Stephen – Associate Professor Dr. M. Tile – Professor Dr. V.M.R. Wadey - Assistant Professor Dr. I. Weller – Assistant Professor Dr. C. Whyne – Associate Professor Dr. C.S. Wright - Assistant Professor Dr. A.J.M. Yee – Associate Professor

Publications

Ahn H, Mousavi P, Chin L, Roth S, Finkelstein J, Vitken A, Whyne C: The effect of pre-vertebroplasty tumour ablation using laser induced thermo-therapy on biomechanical stability and cement fill in the metastatic spine. European Spine Journal: August 2007: 16(8): pp 1171-1178.

Atesok K, Finkelstein J, Khoury A, Peyser A, Weil Y, LIebergall M, Mosheiff R: The use of intraoperative three-dimensional imaging (ISO-C-3D) in fixation of intra articular fractures. Injury: September 2007: 38: pp 1163-1169.

Borkhoff CM, Hawker GA, Kreder HJ, Glazier RH, Mahomed NN, Wright JG: The effect of patient's gender on physician's recommendations for total knee arthroplasty. Canadian Medical Association Journal: March 2008: 178(6): pp 681-687.

Braybrooke J, Ahn H, Gallant A, Ford M, Bronstein Y, Finkelstein J, Yee A: The impact of surgical wait time on patient-based outcomes in posterior lumbar spinal surgery. European Spine Journal: November 2007: 16(11): pp 1832-1839. E-published August 14, 2007.

Cameron HU: Cemented femoral fixation: Thin mantels, the French paradox. Seminars in Arthroplasty: March 2008: 19: pp 144-147.

Fernie GR, Dutta T, Holliday PJ: Design of novel sling interface systems for patient lifting. Technology and Aging: (Mihailidis A, Boger J, Kautz H, Normie L, eds.) IOS Press, Amsterdam: 2008: pp 77-84.

Flynn CJ, Yip D, Ko Y-J, Yee AJ, Cardoso M, Bell C, Aviv R, Chow E: Clinical benefit of reirradiation: A case report. Journal of Palliative Medicine: January 2008: 11(1): pp 112-116.

Gollish JD, Kennedy DM, Stratford PW, Riddle DL, Hanna SE: Assessing recovery and establishing prognosis following total knee arthroplasty. Physical Therapy: January 2008.

Hall H: Discectomy for back pain. Patient Care: October 2007: 18(10): pp 23.

Hall H: Epidural cortisone injections. Patient Care: October 2007: 18(10): pp 22-23.

Hardisty M, Gordon L, Agarwal P, Skrinskas T, Whyne C: Quantitative characterization of metastatic disease in the spine: Part 1 - Semi-automated segmentation of the metastatic spine using atlas-based deformable registration and the level set method. Medical Physics: August 2007: 34: pp 3127-3134.

Khoury A, Kreder H, Skrinskas M, Hardisty M, Tile M, Whyne CM: Lateral compression fracture of the pelvis represents a heterogeneous group of complex 3D patterns of displacement. Injury: E-published February 14, 2008.

Khoury A, Siewerdsen JH, Whyne CM, Daly MJ, Kreder HJ, Moseley DJ, Jaffray DA: Intraoperative cone beam CT for imageguided tibial plateau fracture reduction. Computer Aided Surgery: July 2007: 12(4): pp 195-207.

Kreder HJ: Moderate weight loss improves functional disability but does not reduce pain in obese patients with knee osteoarthritis (author of commentary). ACP (American College of Physicians) Journal Club/Annals of Internal Medicine: September 2007: 147(2): pp 43.

Maki BE, Cheng KC, Mansfield A, Scovil CY, Perry SD, Peters AL, McKay S, Lee T, Marquis A, Corbeil C, Fernie GR, Liu B, McIroy WE: Preventing falls in older adults: New interventions to promote more effective change-in-support balance reactions. Journal of Electromyography and Kinesiology: January 2008: 18: pp 243-254.

Maki BE, Mansfield A, Peters AL, Liu BA: Efficacy of perturbation-based balance training. Proceedings: Advances in Neurohabilitation: Toronto: 2007.

Maki BE, McIlroy WE: Cognitive demands and cortical control of human balance-recovery reactions. Journal of Neural Transmission: August 2007: 114: pp 1279-1296.

Maki BE, Perry SD, Scovil CY, Peters AL, McKay SM, Lee TA, Corbeil C, Fernie GR, McIlroy WE: Interventions to promote more effective balance-recovery reactions in industrial settings: New perspectives on footwear and handrails. Industrial Health: January 2008: 46: pp 40-50.

Nousiainen MT: Treatment options for the unstable total knee arthroplasty - Condylar constrained. Canadian Orthopaedic Association Bulletin: January 2008: 79: pp 17-18.

Nousiainen MT, Brydges R, Backstein D, Dubrowski A: Comparison of expert instruction and computer-based video training in teaching fundamental surgical skills to medical students. Surgery: April 2008: 143(4): pp 539-544.

Perry SD, Radtke A, McIlroy WE, Fernie GR, Maki BE: Efficacy and effectiveness of a balance-enhancing insole. Journal of Gerontology. Series A, Biological Sciences and Medical Sciences: June 2008: 63(6): pp 595-602.

Razjmou H, Yee A, Holtby R, Vidmar M, Ford M, Finkelstein: Relationship between preoperative patient characteristics and expectations in candidates for total knee arthroplasty. Journal of Bone and Joint Surgery (British): September 2007.

Scovil CY, Corbeil P, Lee TA, McKay SM, Peters AL, Maki BE: A handrail cueing system to prevent falls. In: Technology and Aging: (Mihailidis A, Boger J, Kautz H, Normie L, eds.) IOS Press, Amsterdam: 2008: pp 181-188.

Scovil CY, Corbeil P, Lee TA, McKay SM, Peters AL, Maki BE: Development of a novel handrail cueing system to prevent falls in older adults. Gerontechnology: October 2007: 6: pp 224-229.

Sigal IA, Hardisty MR, Whyne CM: Mesh-morphing algorithms for specimen specific finite element modeling. Journal of Biomechanics: April 2008: 41: pp 1381-1389.

Von Bertoldi A, Boger J, Hoey J, Poupart P, Fernie GR, Boutilier C, Mihailidis A: Autonomous guidance through handwashing using a partially observable Markov decision process. Technology and Aging: (Mihailidis A, Boger J, Kautz H, Normie L, eds.) IOS Press, Amsterdam: 2008: pp 43-50.

Wadey V, Halpern J, Younger A, Dev P, Olshen R, Walker D: Canadian orthopaedic surgery core curriculum - Foot and ankle reconstruction. Foot and Ankle International: July 2007: 28(7): pp 831-837.

Wadey VMR, Ladd A, Dev P, Walker D: What orthopaedic surgery residents need to know about the hand and wrist. BMC (BioMed Central) Medical Education: October 2007: 7: 33.

Wai E, Rodriguez S, Dagenais S, Hall H: Evidence-informed management of chronic low back pain with physical activity, smoking cessation and weight loss. The Spine Journal: January 2008: 8: pp 195-202.

Weil YA, Nousiainen MT, Helfe DL: Removal of an iliosacral screw entrapping the L5 nerve root after failed posterior pelvic ring fixation: A case report. Journal of Orthopaedic Trauma: July 2007: 21(6): pp 414-417.

Whyne CM, Wu F, Skrinskas T, Gordon L, Hardisty M, Basran P: Quantitative characterization of metastatic disease in the spine: Part 2 histogram based analyses. Medical Physics: August 2007: 34: pp 3279-3285.

Yee A, Adjei N, Do J, Ford M, Finkelstein J: Do patient expectations of spinal surgery relate to functional outcome? Clinical Orthopaedics and Related Research: May 2008: 466(5): pp 1154-1161. E-published March 18, 2008.

Yee AJ: Odontoid fractures: Anterior odontoid screw fixation. Canadian Orthopaedic Association Bulletin: May 2008: 81: pp 15-17.

Yee AJM, Akens M, Yang BL, Finkelstein JA, Zheng PS, Deng Z, Hardisty M, Yang BB: The effect of versican G3 domain on local breast cancer invasiveness and bony metastasis. Breast Cancer Research: July 2007: 9(4): pp R47.

Zettel JL, Scovil CY, McIlroy WE, Maki BE: Gaze behavior governing balance recovery in an unfamiliar and complex environment. Neuroscience Letters: August 2007: 422: pp 207-212.

Invited Visits

Axelrod TS: AO North America Education, Phoenix, Arizona, April 2008. (1) Course Director: AO hand and wrist fracture management course, (2) Chairman, panel discussion: Scaphoid non-unions, (3) AO hand and wrist fracture management course: The history of AO and the current state of fracture management.

Axelrod TS: 24th Upper Extremity Update 2008, Continuing Education and Professional Development, Toronto, ON, April 2008. The treatment of metacarpal phalangeal disease in rheumatoid arthritis.

Axelrod TS: American Academy of Orthopaedic Surgeons, American Society for Surgery of the Hand (ASSH) Specialty Day, Annual Meeting/Symposia, San Francisco, California, March 2008. (1) Presentation: Collagen vascular disorders of the upper extremity: A hand surgeon's perspective, (2) The myth of Colles fracture. Do they all do well?

Axelrod TS: AO Foundation Education, AO Hand and Wrist Course, Davos, Switzerland, December 2007. (1) Panel discussions: (a) Distal radius fractures (Chairman), (b) Scaphoid Fractures (Chairman), (c) Phalangeal fractures, (2) Lectures: (a) Review of principles of internal fixation (Day 1), (b) Scaphoid non-unions, (3) Moderator of case-based 10 discussion small group sessions.

Axelrod TS: University of Minnessota, Minneapolis Trauma Symposia 2007, Hennipin County Medical Center, Minneapolis, Minnesota, October 2007. (1) Internal fixation of proximal humerus fractures, (2) The Robert Merkow Memorial Lecture: The evolution of internal fixation in distal radius fractures.

Axelrod TS: American Society for Surgery of the Hand, Annual Meeting, Seattle, Washington, September 2007. Instructional course lecture IC04: Metacarpal phalangeal arthroplasty in rheumatoid arthritis: The treatment of wrist and hand deformities in rheumatoid arthritis.

Cameron HU: Current Concepts, Las Vegas, Nevada, May 2008. (1) Hip revision in the presence of distal bone loss, (2) Isolated liner exchange.

Cameron HU: Current Concepts, Florida, December 2007. (1) Modularity in hip revision surgery, (2) Patellar replacement.

Cameron HU: Joint Replacement Update, Niagara-on-the-Lake, September 2007. (1) Modularity in total hip replacement, (2) Patellar resurfacing in total knee replacement.

Cameron JC: Canadian Orthopaedic Association, Quebec City, PQ, June 2008. Paper presentations: (1) Rotational osteotomy of the proximal tibia for mal-tracking/dislocation of the patella, (2) External tibial torsion as a cause of lateral compartment osteoarthritis of the knee.

Cameron JC: European Society of Sports Traumatology Knee Surgery and Arthroscopy (ESSKA), Porto, Portugal, May 2008. Poster exhibits: (1) External tibial torsion as a cause of lateral compartment osteoarthritis of the knee, (2) Puddu Open Wedge HTO for OA of the knee, (3) Rotational osteotomy of the proximal tibia for mal-tracking/dislocation of the patella.

Cameron JC: Workplace Safety Insurance Board, Toronto, ON, March 2008. Care of common knee injuries.

Cameron JC: Rocky Mountain Traumatological Society, Colorado, USA, January 2008. Rotational osteotomy of the proximately tibia for patella dislocation.

Finkelstein JA: Canadian Orthopaedic Association, Quebec City, PQ, June 2008. Instructional Course Lecture: Management of the spine in the multiple trauma patient - Unique aspects of fixation in combined lumbar-pelvic trauma.

Finkelstein JA: Stryker Spine Continuing Medical Education Course, Las Vegas, Nevada, May 2008. Techniques in interbody fusion.

Finkelstein JA: AO Spine, Advanced Concepts in the Management of Spinal Disorders, Niagara-on-the-Lake, ON, August 2007. Metastatic spine disease - decision making in management.

Ford MH: A Patient, Family and Healthcare Professionals Seminar - Myeloma Today and Tomorrow: Progress and Challenges, London, ON, September 2007. Surgical management myeloma lesions of the spine.

Ford MH: The Dewar Orthopaedic Society, Corner Brook, NFLD, September 2007. Management of high energy burst fractures with kyphoplasty and prodense (preliminary biomechanical results.)

- Hall H: Stryker Spine, Boca Grande, Florida, June 2008. What works if you don't operate?
- Hall H: Stryker Spine, Las Vegas, Nevada, May 2008. Patient selection.
- Hall H: Alberta Workers' Compensation Board, Edmonton, AB, April 2008. Return to work: It's everybody's business.
- Hall H: CBI Health, Edmonton, AB, April 2008. Effective care of the spine.
- Hall H: CBI Health, Red Deer, AB, April 2008. Rehabilitation of the industrial athlete.
- Hall H: University of Alberta, Department of Physiotherapy, Edmonton, AB, April 2008. Assessment of the lumbar spine.
- Hall H: Janssen-Ortho, Port Dover, ON, March 2008. Managing back pain in family practice.
- Hall H: CBI Health, London, ON, February 2008. Neck pain and whiplash.
- Hall H: Janssen-Ortho, Brantford, ON, February 2008. Managing lower back pain in family practice.
- Hall H: Woodstock General Hospital, Grand Rounds, Woodstock, ON, February 2008. Managing lower back pain in family practice.
- Hall H: CBI Health, Burlington, ON, November 2007. A simple approach to back pain in family practice.
- Hall H: CBI Health, Kitchener, ON, November 2007. Neck pain in family practice.
- Hall H: Bluewater Emergency Care Conference, Sarnia, ON, October 2007. Dealing with back pain in the ER.
- Hall H: CBI Health, Whitby, ON, October 2007. A simple approach to back pain.
- Hall H: CBI Health, Woodbridge, ON, October 2007. Managing back pain in family practice.
- Hall H: Canadian Orthopaedic Nurses Association, Toronto, ON, October 2007. Back pain: What every nurse should know.
- Hall H: Garrett Wellness Centre, Vancouver, BC, October 2007. Understanding back pain.
- Hall H: University of British Columbia, Vancouver, BC, October 2007. The top ten things you should know about back pain.
- Hall H: CBI Health, Cambridge, ON, September 2007. A simple approach to back pain.
- Hall H: Dr. Fabian Curry Annual Memorial Clinic Day, Huntsville, ON, September 2007. Understanding back pain.
- Hall H: Stryker Spine, Controversies in Cervical Spine Surgery, Baltimore, MD, September 2007. When do you operate cervical spine?

Kreder HJ: Canadian Orthopaedic Association and the American Orthopaedic Association, Combined Meeting Quebec, PQ, June 2008. (1) Symposium No. 3: Orthopaedics in 2020: Predictors of musculoskeletal need. How many patients and who is going to look after them?, (2) How I fix a comminuted distal femur fracture: Video tips and tricks.

Kreder HJ: Laval University - Division of Orthopaedic Surgery and the Quebec Orthopaedic Association Meeting, Quebec, PQ, April 2008. Visiting Professor: (1) How not to fix fractures: Staying out of trouble.

Kreder HJ: Quebec Orthopaedic Association, Quebec, PQ, April 2008. (1) Fracture fixation in osteoporotic patients: Avoiding disappointment, (2) Pelvic and acetabular fracture management: What every orthopedic surgeon should know.

Kreder HJ: Emerging trends and controversies in hip and knee arthroplasty, Whistler, BC, February 2008. Speaker/Moderator/ Discussor: (1) Controversies in hip and knee replacement surgery, (2) Bilateral total knee replacement surgery: Keeping it safe, (3) Controversies regarding the interface for total joint replacement surgery, (4) Management of periprosthetic acetabular fractures, (5) Management of periprosthetic fractures about the knee, (6) Total joint reconstruction for pelvic metastases.



Kreder HJ: United States Bone and Joint Decade, Toronto, ON, October 2007. Starting your research career: Time management and contract negotiation.

Kreder HJ: Association Internationale pour l'Osteosynthese Dynamique Canada, Mississauga, ON, September 2007. (1) Principles and practice of clinical research: How to design, analyze and participate in orthopaedic research, (2) Designing a non-randomized study: What are the types? From case series to prospective cohorts.

Kreder HJ: Scottish Orthopaedic Research Trust Into Trauma, Edinburgh, Scotland, August 2007. (1) Edinburgh International Instructional Trauma Course: (a) Intra-articular distal radius fractures, (b) Surgery of acetabular fractures, (2) Edinburgh International Trauma Symposium: (a) Trauma update: Femoral fracture symposium, (b) Update on surgery of the femur: Nailing table or not for diaphyseal fractures, (c) Does delay to surgery affect outcome? Hip fractures: The North American view, (d) Fracture outcomes: Are classification systems predictive?

Maki BE: Canadian Institutes of Health Research Institute on Aging, National Forum on Mobility in Aging, Ottawa, ON, September 2007. Invited Participant: Mobilizing researchers and stakeholders.

Maki BE: International Society for Postural and Gait Research, XVIIIth Conference, Burlington, Vermont, July 2007. Presentation: Cognitive/cortical control of balance-recovery reactions.

Murnaghan JJ: Ontario Association Amputee Care, Toronto, ON, April 2008. Keynote Speaker: Some technical aspects of lower limb amputation surgery.

Nousiainen M: AO North America, Fourteenth Toronto Pelvic and Acetabular Fracture Management Course, Toronto, ON, May 2008. Computer assisted surgery in pelvic and acetabular surgery.

Richards RR: Ontario Medical Association, Toronto, ON, May 2008. Assessment and treatment of common shoulder disorders.

Richards RR: 16th Herbert Stark Visiting Professor, University of California, Los Angeles, California, January 2008. (1) Top ten tips for upper extremity trauma surgery, (2) Open shoulder reconstruction, (3) Reconstruction for irreparable brachial plexus injury, (4) Assessment of the patient with a work related upper extremity disorder.

Richards RR: Workplace Safety and Insurance Board, Care of Common Injuries Excellence Series: Shoulder Conditions, Toronto, ON, December 2007. (1) Instability and labral tears, (2) Adhesive capsulitis, (3) Acute tendon ruptures.

Richards RR: 8th Annual Advances in Arthritis Arthroplasty and Trauma Course, Arlington, Virginia, September 2007. (1) Both bone forearm fracture fixation: Pearls and pitfalls, (2) Distal radius fracture fixation: Pearls and pitfalls, (3) Case presentation and panel discussion: Advances in treatment of upper extermity fracture care, (4) Surgical demonstrations and case presentations, (5) Update on total elbow arthroplasty.

Stephen DGS: AO Pelvic and Acetabular Fracture Management Course - Chair, Toronto, ON, May 2008. (1) Acute management of high energy pelvic trauma, (2) Acetabulum, (3) Practical exercise VI: Anatomy of the pelvis/acetabulum cadaveric dissection - anterior approaches, (5) Practical exercise V: Anatomy of the pelvis/acetabulum cadaveric dissection - Posterior approaches.

Stephen DGS: 8th Biannual Canadian Foot and Ankle Symposium, April 2008. Course Coordinator and Moderator: Management of ankle fracture malunion.

Stephen DGS: AO Advance Course in Operative Fracture Management, Brisbane, Australia, April 2008. (1) Current concepts in intramedullary nailing, (2) Minimally invasive plating techniques and indications, (3) Calcaneal fractures - indications for surgery and techniques, (3) Case presentation, (4) Practical exercise - Calcaneal plating, (5) Femoral shaft fractures - current trends.

Stephen DGS: AO Advanced Symposium: Solutions for Fracture Fixation Problems, San Francisco, California, April 2008. (1) Complex ankle fracture, (2) Ankle arthrodesis for salvage of trauma sequelae, (3) Femur and knee.

Stephen DGS: American Academy of Orthopaedic Surgeons, San Francisco, California, March 2008. Instructional course lecture: Operative management of calcaneous fractures.

Stephen DGS: AO Principles Course in Operative Fracture Management, Brisbane, Australia, March 2008. (1) AO classification, (2) Principles of articular fractures, (3) Practical exercise: Femoral nailing, (4) Ankle fractures - preop and postop.

Stephen DGS: AO Principles of Fracture Management, Hollywood, California, March 2008. Patient and the injury.

Stephen DGS: 2008 Orthopaedic Think Tank, Aspen, Colorado, February 2008. (1) Co-Chair, (2) Proximal femur: Using the hook plate.

Stephen DGS: AO Basic Principles and Techniques of Operative Fracture Management Course for Residents, Jacksonville, Florida, January 2008. (1) Overview of AO Foundation, (2) Intracapsular hip fracture, (3) Practical exercise VIII: Fractures of the hip - dynamic screw/cannulated screws, (3) Module 6: Specific fractures - articular, (4) Module 7: Special fracture problems.

Stephen DGS: AO Specialty Course - Pelvic, Davos, Switzerland, December 2007. (1) Panel discussion: You are on call, (2) Moderator: Acetabulum-decision making and approaches, (3) Discussion group - radiographic analysis acetabulum.

Stephen DGS: 2007 Synthes Trauma Fall Annual Meeting, Phoenix, AZ, October 2007. Invited Faculty: (1) Subtrochanteric femoral fractures, (2) Upper extremity firesides.

Stephen DGS: AO Basic Principles and Techniques of Operative Fracture Management, Salt Lake City, Utah, October 2007. Invited Lecturer.

Stephen DGS: Orthopaedic Trauma Association, 2007 Comprehensive Fracture Course for Residents, Boston, Massachusetts, October 2007. (1) Femoral neck fractures: Young and old, (2) Hands on skills lab: (a) Proximal femoral nailing, (b) Calcaneous fractures.

Stephen DGS: AO Minimally Invasive Osteosynthesis Course, Minneapolis, Minnestoa, September 2007. Invited Faculty: Panel discussion on pelvis and acetabulum.

Stephen DGS: 9th Annual Chicago Trauma Symposium, Chicago, Illinois, August 2007. Invited Faculty: (1) Lab: Advanced techniques for intertrochanteric fractures, (2) Lectures: (a) Resuscitation in pelvic ring disruptions, (b) Acute management of pelvic fractures.

Stephen DGS: 2nd AO Intramedullary Nailing Expert Symposium, Innsbruck, Austria, July 2007. Case presentation and discussion.

Wadey VMR: MEDEC Committee, Quebec City, PQ, June 2008. Update on MSKHealth.ca website.

Wadey VMR: Stanford University, Founder's Day, Department of Orthopaedic Surgery, Stanford, Connecticut, June 2008. Speaker: How necessary are intraoperative AFB and Fungal Cultures?

Wadey VMR: American Association of Orthopaedic Surgeons (AAOS) Meeting, March 2008. Canadian core curriculum for orthopaedic surgery: Tumor reconstruction.

Wadey VMR: Orthopaedic Research Society and American Association of Orthopaedics Surgeon, Combined Meeting, March 2008. (1) Are routine intraoperative AFB and fungal cultures necessary?

Wadey VMR: Orthopaedic Research Society and the American Association of Orthopaedic Surgeons, Combined Meeting, Honolulu, Hawaii, October 2007. (1) Functional outcomes observed in patients with total knee arthroplasty (TKA) discharged four days after surgery (a pilot study), (2) Protocols for patients presenting with joint infections (completed - implementation in process at Stanford University and now working with Dr. Andrew Simor to establish protocols for implementation at Sunnybrook and Holland Centre sites), (3) Functional ability of patients discharged 4 days after primary total knee arthroplasty: A pilot study.

Wadey VMR: International Society of Physiotherapists, August 2007. Presenter: So...you think you need a total joint?

Wadey VMR: International Federation of Societies for Surgery of the Hand, International Symposium for Hand Surgery, Hagamat, Japan, April 2007. A congenital hand website for families: What caregivers want to know.

Wadey VMR: The British Society for Surgery of the Hand, 7th World Symposium on Congenital Malformations of the Hand and Upper Limb, Sydney, Australia, March 2007. A congential hand website for families: What caregivers want to know.

Whyne C: Bonus Symposium, MaRS, Toronto, ON, March 2008. Image-based quantification and minimally invasive local treatments for spinal metastases.

Whyne C: Canadian Student Conference on Biomedical Computing, Toronto, ON, March 2008. Medical imaging and computer aided interventions: Musculoskeletal applications.

Yee AJM: Canadian Orthopaedic Association (63rd Annual)/American Orthopaedic Association (121st Annual), Combined Meeting, Quebec City, PQ, June 2008. J.A. Nutter Award Presentation: A novel composite elastin and hyaluronan scaffold for nucleus pulposus tissue engineering.

Yee AJM: McMaster University, Grand Surgical Rounds, Department of Surgery, Hamilton, ON, July 2007. Osteobiologics in orthopaedic surgery: A conceptual update.



Research and Investigations

Senior Investigator's Name Appears in Italics

A biomechanical assessment of floor and overhead lifts using one or two caregivers for patient transfers. *Fernie GR: Workplace Safety and Insurance Board.* (\$61,088 2007 - 2009.)

A biomechanical assessment of kyphoplasty and IBC in a human cadaveric burst fracture model. *Whyne C*, Ford M, Yee A, Finkelstein J: *Kyphon Inc*. (\$24,000 2006 - 2008.)

A biomechanical assessment of kyphoplasty and IBC in a human cadaveric burst fracture model. *Whyne C*, Ford M, Yee A, Finkelstein J: *Wright Medical*. (\$24,000 2006 - 2008.)

A novel delivery system for BMP 2 to enhance ACL graft integration. *Richards R*, Yee A, Roberston C: *The Physicians' Services Incorporated Foundation*. (\$80,000 2008.)

A prospective randomized trial comparing open reduction and internal fixation, non-spanning external fixation, and closed reduction with percutaneous fixation in displaced distal radius fractures with joint congruity. *Berry G, Kreder HJ*, Canadian Orthopaedic Trauma Society: *Orthopaedic Trauma Association*. (\$210,806 2008 - 2009.)

A prospective study of biomechanically based guidelines in metastatic burst fracture risk prediction. *Whyne C*, Yee A, Finkelstein J, Kreder H, Chow E, Barnes A, Weller I, Clemons M, Trudeau M: *Canadian Breast Cancer Research Alliance*. (\$335,406 2003 - 2007.)

A randomized, comparative multicenter clinical trial evaluating BST-CarGel and microfracture in repair of focal articular cartilage lesions on the femoral condyle. *Marks P*, Restreop A, Matthew Shive M: *BioSyntech Canada Incorporated*. (\$240,000 2005 - 2008.)

Academic trust fund application for a research workshop for MSK on-line curriculum – Module No.1. *Wadey V*, Cividino A, McDonald-Blumer H, Wessel J, McIlroy J, Dauphinee D: *Academic Clinicians' Management Services*. (\$5,000 2007.)

Advanced hand hygiene system to reduce hospital-acquired infections. *Fernie GR*, McGeer AJ, Mihailidis A, McGilton K: *The Health Technology Exchange Matching grant*. (\$40,000 2007 - 2008.)

Advanced hand hygiene system to reduce hospital-acquired infections. *Fernie GR*, McGeer AJ, Mihailidis A, McGilton K: *Andrew J*. *Hart Enterprises Limited - Industry Partner for Canadian Institutes of Health Research Award*. (\$30,000 2007 - 2008.)

Advanced hand hygiene system to reduce hospital-acquired infections. *Fernie GR*, McGeer AJ, Mihailidis A, McGilton K: *Canadian Institutes of Health Research*. (\$40,000 2007 - 2008.)

Assessing the home environment (the "At Home" study): Validating a self-report questionnaire. *Kennedy DM*, *Colleen K*, Dickson P, Woodhouse LJ, Ritcey S, Rivington-Law B, Stratford PW, Gollish JD: *Sunnybrook Health Sciences Centre*. (\$8,522 2006 – 2009.)

Biomechanical implications of metastatic disease in the spine: Evaluation of stability and tumor burden in a pre-clinical model - funding extension. *Whyne C*, Yee AJ, Finkelstein J: *Canadian Institutes of Health Research*. (\$40,096 2007 - 2008.)

Biomechanical implications of metastatic disease in the spine: Evaluation of stability and tumor burden in a pre-clinical model. *Whyne C*, Yee AJ, Finkelstein F: *Canadian Institutes of Health Research*. (\$239,460, 2004 - 2007.)

Bone stability and tumor burden in the metastatic spine: Implications of variable disease patterns. *Whyne CM*, Yee AJ, Finkelstein JA, Probyn L: *Canadian Institutes of Health Research*. (\$379,862 2008 - 2012.)

Bone stability and tumour burden in the metastatic spine: Implications of variable disease patterns. *Whyne C*, Finkelstein J, Yee A: *Canadian Institutes of Health Research*. (\$94,966 2008 - 2012.)

Bone stability and tumor burden in mixed osteolytic/osteoblastic spinal metastases (funding declined). *Whyne CM*, Yee A, Finkelstein JA: *Canadian Breast Cancer Foundation*. (\$402,930 2008 - 2011.)

Centre for research in image-guided therapeutics. *Hynynen K*, Multiple collaborators, including Whyne CM: *Research Hospital Fund Large Scale Institutional Endeavours, Canada Foundation for Innovation*. (\$14,337,919 2008 - 2011.)

Clinical trial of novel technology to improve hand hygiene (year 1). Fernie GR: Health Research Grants, Ministry of Health and Long-Term Care. (\$177,165 2008 - 2009.)

Cloud nine. Fernie GR: Ontario Research Commercialization Program. (\$50,000 2008 - 2009.)

Control of balance reactions in the complex environments of daily life: Effects of age-related changes in visual processing and the development of novel approaches for fall prevention. *Maki BE*, McIlroy WE, Fernie GR, Pratt JW: *Canadian Institutes of Health Research*. (\$886,113 2004 - 2009.)

Development and testing of a perturbation-based balance training program to improve balance reactions and prevent falls in older adults. *Maki BE*, Mansfield A: *Ontario Neurotrauma Foundation*. (\$7,000 2007.)

Development of a Canadian-led international bone metastases module to accompany the European Organization for Research and Treatment of Cancer QofL Group core questionnaire (EORTC QLQ-C30) for future clinical trials in patients with bone metastases. *Chow E*, Bezjak A, Brundage M, Clemons M, Jackson Wu J, Yee AJM, Bottomley A, Peter H, Velikova G: *National Cancer Institute of Canada*. (\$271,483 2005 - 2008.)

Does exposure to an interactive on-line training program translate into better knowledge and skill acquisition in patients with inflammatory arthritis. *Wadey V*, Cividino A, McDonald-Blumer H, Wessel J, McIlroy J, Dauphinee D: *The Physicians' Services Incorporated Foundation*. (\$170,000 2007 - 2009.)

Does optimal control of chronic and acute pain predict improved function after total hip arthroplasty? *McCartney C*, Kreder HJ, Katz J, Carmichael N, Clarke H, Kennedy D: *The Physicians' Services Incorporated Foundation*. (\$104,000 2008.)

Evaluation of pGLcNAc-derived materials as activator of intervertebral disc tissue repair. *Yee AJ*, Seth A, Whyne CM: *Marine Polymers Technologies*. (\$217,560 2007 - 2009.)

Exploring the determinants of case selection and clinical severity scoring by the Advanced Practice Physiotherapist in the new model of care for knee replacement. *Denis S*, Robarts S, Kennedy DM, Winter Dicola J, Clarke S, Stratford P, Woodhouse L, Gollish JD: 6th Annual Practice-Based Research Awards for Health Disciplines – *Sunnybrook Health Sciences Centre*. (\$10,000 2007 – 2008.)

Functional outcome in cardiovascular patients undergoing surgical hip fracture repair (FOCUS). *Carson J*, Kreder H: Multicentre Trial Involving USA and Canadian Sites: *National Institutes of Health, National Heart and Lung Institute.* (\$8,000,000 2003 - 2008.)

Hand hygiene compliance audit tool. Fernie GR, McGeer A, Muller M: Mississauga Halton Infection Control Network (Ministry of Health and Long Term Care-Regional Infection Control Networks). (\$43,142 2008 - 2009.)

Health care technology and place - research training program. *Coyte PC*, McKeever P, Fernie GR, et al: *Canadian Institutes of Health Research*. (\$1,980,000 2002 - 2007.)

Intelligent Design for Adaptation, Participation and Technology (IDAPT): Innovative rehabilitation for people in challenging environments. *Fernie GR*, Colangelo A, Cott C, Davis A, De Nil L, Maki BE, McIlroy WE, Naglie G, Naumann S, Patla A: *Canadian Foundation for Innovation*. (\$18,398,069 2004 - 2009.)

Intelligent multiple user mounted hand hygiene dispenser. *Fernie GR: Ontario Research Commercialization Program-Technology Transfer Toronto*. (\$50,000 2008 - 2009.)

Laboratories and workspaces for scientists and graduate students engaged in the iDAPT research program at Toronto Rehabilitation Institute (tentatively approved pending final administrative approval). *Fernie GR*, Boutilier C, Bradley D, Colangelo A, Cott C, Davis A, Maki BE, McIlroy WE, McKeever P, Naglie G: *Canadian Foundation for Innovation*. (\$17,631,726 2004 - 2008.)

Metastatic breast cancer genome anatomy. *Seth A*, Aubin J, Kahn K (co-Applicants), Lyons-Weiler J, Yee AJ, Narod S: *Canadian Breast Cancer Research Alliance, Special Competition in New Approaches to Metastatic Disease in Breast Cancer Research.* (\$750,000 2005 - 2010.)

Modeling thin bone structures of the human skeleton. Whyne C: Natural Sciences and Engineering Research Council. (\$165,000 2006 - 2011.)

New Emerging Team - Balance and mobility in elderly. *Maki BE*, Fernie GR, Liu B, McIlroy WE, Popovic M, Fisher R: *Canadian Institutes of Health Research*. (\$1,085,000 2002 - 2007.)

Patient transfer and lifting device. Fernie GR: Ontario Research Commercialization Program. (\$50,000 2007.)

Portable sleep apnea diagnostic device for home use. *Bradley TD*, Alshaer H, Fernie GR: *Ontario Research Commercialization Program -Technology Transfer Toronto (Ministry of Research and Innovation)*. (\$10,000 2008.)

Recombinant elastin-like peptide based materials for use in osteochondral defects; evaluation in a rabbit knee model. *Yee AJ*, Woodhouse K, Moss I: *Elastin Specialties Incorporated*. (\$29,633 2007 - 2008.)

Recombinant elastin-like polypeptide based materials for use in artificial spinal discs. *Woodhouse K*, Whyne C, Yee A: *Emerging Materials Network Collaborative Grant, Ontario Centres of Excellence*. (\$211,400 2006 - 2008.)

Recombinant elastin-like polypeptide based materials for use in spinal disc repair. (\$51,400 Elastin Specialties Funding, \$50,000 over 2 years). *Woodhouse K*, Yee AJ, Whyne CM, Ontario Research Development Challenge Fund (ORDCF) through EMK matched by Elastin Specialities through ARTEC: *Advanced Regenerative Tissue Engineering Centre, Emerging Materials Knowledge Project (Ontario Centre for Excellence Project, with ORDCF funding.)* (\$101,400 2006 - 2008.)

Rehabilitation Engineering Research Center on Universal Design and the Built Environment at Buffalo [Joint initiative between Toronto Rehab and the State University of New York (SUNY) at Buffalo.] *Steinfeld E*, Fernie G: *National Institute on Disability and Rehabilitation Research*. (\$5,538,000 2005 - 2009.)

Retrospect comparison of two anesthetic techniques (regional or general anesthesia) in the same patient for hip and knee arthroplasty. *McCartney C*, Gollish JD, Kummer C, Robinson S, Katz J, Mawani A: *Holland Centre Hip and Knee Arthroplasty Research Fund*. (\$5,000 2007.)

Risk factors and indicators that predict the progression of osteoarthritis after knee injury. *Marks PH*, Hurtig M, White L, Weller I: *Canadian Institutes of Health Research*. (\$300,000 2004 - 2009.)

Safe activities following elective total hip replacement (SafeT). *Weller IM*, Corey PN, Gignac MA, Gollish JD, Hawker GA, Kennedy DM, Kreder HJ, MacDonald SJ: *Canadian Institutes of Health Research*. (\$930,000 2007 - 2012.)

Safe activity participation following elective total hip replacement. *Weller I*, Kreder HJ, Gollish JD, Kennedy DM: *Orthopaedic and Arthritic Institute MSK Research Program*. (\$15,000 2005 – 2007.)

Spinous process less invasive extendable fusion: A less invasive extendable device for posterior spinal fusion. *Ginsberg H, Whyne CM*, Singh D: *Ministry of Research and Innovation*. (\$10,000 2008.)

The short and long term effects of perioperative gabapentin use on functional, rehabiliation and pain outcomes following total knee arthroplasty: A randomized, double-blind, placebo-controlled trial. *Clarke H*, Gollish JD, Gilron I, Katz J, Kennedy DM, Stratford P, Robinson S, Kay J: *Canadian Anesthesiology Society – Smiths Medical Canada Ltd. Canadian Research Award in Pain Research and/or Regional Anesthesia.* (\$10,000 2007.)

The determinants of safe mobility in the elderly who use assistive mobility devices. *Fernie GR*, Zabjek K, McIlroy WE, Gage W, Maki BE, Naglie G, Hill S, Black S, Mihailidis A: *Canadian Institutes for Health Research*. (\$47,615 2007 - 2008.)

The impact of photodynamic therapy on the biomechanical stability of the metastatic spine: Characterization independent and combined treatment effects with bisphosphonates and radiation therapy. *Whyne CM*, Yee A, Wilson, B, Burch S, Bisland S: *Ontario Institute for Cancer Research*. (\$530,361 2008 - 2011.)

Two versus one caregiver substudy. Fernie GR: Institute for Work and Health (OPLES). (\$25,000 2007 - 2008.)

Use of video games to improve processing of visual information needed for balance control: Development and pilot testing of a new approach to falls prevention. *Maki BE*, McKay S: *Ontario Neurotrauma Foundation*. (\$12,000 2008.)

Visual processing and postural reactions: Development and pilot testing of a visual training program to improve balance control and prevent falls in older adults. *Maki BE*, McKay S: *Ontario Neurotrauma Foundation*. (\$10,000 2007.)

Honours Received

Axelrod TS: Robert L. Merkow Memorial Lecturer, Minneapolis Trauma Symposia. October 2007.

Murnaghan JJ: Outstanding Contributions to Surgical Skills Education. May 2008.

Whyne C: Best Poster Award - SpineFest (Akens MK, Hardisty M, Wilson BC, Burch S, Whyne CM, Bisland S, Yee AJM). April 2008.

Whyne C: First Prize, Clinical Science Poster, University of Toronto Bone and Mineral Group Research Day (Akens MK, Hardisty M, Wilson BC, Burch S, Whyne CM, Bisland S, Yee AJM). April 2008.

Whyne C: Gallie-Bateman Award, 2nd Place - University of Toronto, Department of Surgery (Moss I, Gordon L, Woodhouse K, Whyne CM, Yee A). May 2008.

Yee AJM: Best Clinical Poster Award for "Assessment of the Therapeutic Window of Photodynamic Therapy Treatment (PDT) of Breast Cancer Metastasis in the Spine." [Akens MA (trainee presentation), Hardisty M, Whyne C, Wilson BC, Yee AJ], Annual Bone and Mineral Research Day, University of Toronto, April 2008.

Yee AJM: Clinical Poster Award for "Assessment of the Therapeutic Window of Photodynamic Therapy Treatment (PDT) of Breast Cancer Metastasis in the Spine." [Akens MA (trainee presentation), Hardisty M, Whyne C, Wilson BC, Yee AJ], SpineFEST Symposium, CPED course, University of Toronto, April 2008.

Yee AJM: Sunnybrook Research Institute Merit Pool Award: Albert Yee (\$10,000) - for academic achievements 2006/07. June 2008.

DIVISION OF PLASTIC SURGERY

Dr. O. Antonyshyn – Associate Professor Dr. P. Binhammer – Assistant Professor (Division Head) Dr. R.C. Cartotto – Associate Professor Dr. J.A. Fialkov – Assistant Professor Dr. J.S. Fish – Associate Professor Dr. M. Gomez – Assistant Professor Dr. S. Shahrokhi – Lecturer

Publications

Cartotto RC: The endothelium's diverse roles following burn injury. In: Endothelial Biomedicine: (Aird WC, ed.) Cambridge University Press, New York: 2007: pp 1506-1512.

Cartotto R, Mayich M, Nickerson D, Gomez M: SCORTEN accurately predicts mortality among toxic epidermal necrolysis patients treated in a burn center. Journal of Burn Care and Research: January 2008: 29: pp 141-146.

Fish J, Cartotto R, Gomez M, Knighton J, Smith K: Improved survival following thermal injury in adult patients treated at a regional burn centre. Journal of Burn Care and Rehabilitation: January 2008: 29: pp 130-137.

Fish J, Davidge K: Older adults and burns. Geriatrics and Aging: June 2008: 11: pp 270-275.

Gomez M, Cartotto R, Knighton J, Smith K, Fish JS: Improved survival following thermal injury in adult patients treated at a regional burn center. Journal of Burn Care and Research: January-February 2008: 29(1): pp 130-137.

Grover R, Murray D, Fialkov JA: Distraction osteogenesis of radiation-induced orbito-zygomatic hypoplasia. Journal of Craniofacial Surgery: May 2008: 18(3): pp 678-683.

Kwan P, Gomez M, Cartotto R: Safe and successful restriction of transfusion in burn patients. 2007 Year Book of Surgery: (Copeland, ed.) Elsevier, St. Louis, Missouri: 2007: pp 51-52.

VAC Expert Panel (Fish J): VAC consensus guidelines. American College of Physicians (ACP) Journal Club/Annals of Internal Medicine: June 2008.

Invited Visits

Antonyshyn O: American Society of Neuroradiology (ASNR), 46th Annual Meeting, Neuroradiology Education and Research (NER) Foundation Symposium, New Orleans, LA, June 2008. (1) Keynote Lecture: Craniofacial trauma and post-traumatic deformities: What the surgeon needs to know and why?, (2) Roundtable discussion: Emergency neuroradiology services.

Antonyshyn O: AO Principles of Operative Treatment of Craniomaxillofacial Trauma and Reconstruction, Seattle, Washington, March 2008. (1) Lab exercise: Cranial fixation and cranioplasty, (2) Management of enopthalmos and zygoma malposition, (3) Panel discussion: Treatment of complex mandible fractures and management of complications, (4) Management of post-traumatic malocclusion.

Antonyshyn O: AO Principles of Operative Treatment of Craniomaxillofacial Trauma and Reconstruction, Hollywood, Florida, November 2007. (1) Naso-orbito-ethmoid fractures, (2) Panel: Midface fractures, (3) Surgical approaches to craniomaxillofacial fractures.

Antonyshyn O: About Face Conference "Inspiration 2007," Toronto, ON, October 2007. Shared decision making.

Cartotto RC: Canadian Burn Survivors Conference, Toronto, ON, June 2008. An overview of burn care: Applying what we know.

Cartotto RC: University of Calgary, Calgary, AB, May 2008. Visitor/Trauma and Critical Care Speaker: (1) Pawn to G4: The chess match of caring for a major burn patient, (2) Current concepts and controversies in the acute management of a major burn injury.

Cartotto RC: American Burn Association, Annual Meeting, Chicago, Illinois, April 2008. (1) Multicentre trials group: IVIG in TEN: Current status of proposal, (2) Sunrise symposium: Ventilator management, (3) Education Symposium of the Canadian Special Interest Group: Topical antimicrobials.

Cartotto RC: Shriners Hospital for Children, Inhalation Injury Consensus Conference, Coeur d'Alene, Idaho, November 2007. High frequency oscillatory ventilation after inhalation injury.



Cartotto RC: Ontario Paramedic Association, Niagara Falls, ON, September 2007. Acute care and stabilization of the burn patient.

Fialkov JA: AO North America, Principles of Operative Treatment of Craniomaxillofacial Trauma and Reconstruction, Toronto, ON, March 2008. Practical Exercise V: Accurate reduction of a ZMC complex fracture.

Fish JS: World Union of Wound Healing, Toronto, ON, June 2008. Burn treatment.

Fish JS: Ontario Electrical League, Huntsville, ON, May 2008. Electrical injury program.

Fish JS: Power Workers Union, Toronto, ON, March 2008. Update on electrical injury program.

Fish JS: Law Society of Upper Canada, Toronto, ON, October 2007. Burns and their consequences.

Fish JS: Sudbury Trauma Society, Sudbury, ON, October 2007. Update on burn trauma for emergency room physicians.

Research and Investigations

Senior Investigator's Name Appears in Italics

Advanced research in tissue engineering. Semple J, Fish J, Midha R, Fialkov J, Woodhouse: Multidisciplinary Group Working Grant, Ontario Research and Development Corporation Foundation. (\$12,000,000 2003 - 2008.)

Defining pyschological recovery following electrical injury and the longitudinal outcomes. *Fish J*, Atkins J: *Electrical Injury Research Foundation*. (\$60,000 2007 - 2010.)

Fatigue following electrical injury. Klein C, Fish J, Chen R: Electrical Injury Research Foundation. (\$40,000 2007 - 2009.)

Prospective study of imiquimod in the treatment of patients with positive margins following surgical excision of basal cell carcinoma and squamous cell carcinoma. *Barnes EA*, Assaad D, Antonyshyn O, Barnes EA, Fialkov J, Choo R, Breen D: *3M Pharmaceuticals*. (\$150,000 2006 - 2009.)

Retrospective review of pain management during electrical injury. Fish J, Li A: Electrical Injury Research Foundation. (\$7,000 2007 - 2008.)

Honours Received

Antonyshyn O: A. Freiberg Plastic Surgery Resident Teaching Award. March 2008.

Antonyshyn O: Advanced Craniomaxillofacial Forum (Stryker CMF) Educational Grant, \$190,000 in support of the Craniofacial Symposium, University of Toronto CME Program. November 2007.

Antonyshyn O: Nominee, Colin Woolf Award for Excellence in Course Coordination for developing the First Annual Craniofacial Symposium, by the Office of Continuing Education and Professional Development (CEPD), Faculty of Medicine, University of Toronto. January 2008.

Cartotto RC: 1st Prize for Best Abstract "Objective estimation of survival in burn patients re-visited" [Wong VH, Gomez M, Cartotto R (SRI)], presented by the Canadian Special Interest Group of the American Burn Association at the American Burn Association Meeting in Chicago, Illinois. April 2008.

Fish JS: Dr. Charles Tator Surgeon Scientist Mentoring Award, Department of Surgery, University of Toronto. May 2008.

Gomez M: Best Trauma Coordinators of Canada Presentation Award (Co-Author). April 2008.

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 – Associate Professor Dr. V. Venkateswaran – Assistant Professor

Publications

Bruchovsky N, Klotz L, Crook J, Phillips N, Abersbach J, Goldenberg SL: Quality of life, morbidity, and mortality results of a prospective phase II study of intermittent androgen suppression for men with evidence of prostate-specific antigen relapse after radiation therapy for locally advanced prostate cancer. Clinical Genitourinary Cancer: May 2008: 6(1): pp 46-52.

Carr LK, Steele D, Steele S, Wagner D, Pruchnic R, Jankowski R, Erickson J, Huard J, Chancellor MB: 1-year follow-up of autologuous muscle-derived stem cell injection pilot study to treat stress urinary incontinence. International Urogynecology Journal and Pelvic Floor Dysfunction: June 2008: 19(6): pp 881-883. E-published January 19, 2008.

Chi KN, Chin JL, Winquist E, Klotz L, Saad F, Gleave ME: Multicenter phase II study of combined neoadjuvant docetaxel and hormone therapy before radical prostatectomy for patients with high risk localized prostate cancer. The Journal of Urology: E-published June 12, 2008.

Choo R, Danjoux C, Morton G, Szumacher E, Sugar L, Gardner S, Kim M, Choo CM, Klotz L: How much does Gleason grade of follow-up biopsy differ from that of initial biopsy in untreated, Gleason score 4-7, clinically localized prostate cancer? The Prostate: November 2007: 67(15): pp 1614-1620. E-published September 6, 2007.

Dall'Era MA, Cooperberg MR, Chan JM, Davies BJ, Albertsen PC, Klotz LH, Warlick CA, Holmberg L, Bailey Jr DE, Wallace ME, Kantoff PW, Carroll PR: Active surveillance for early-stage prostate cancer: Review of the current literature. Cancer: April 2008: 112(8): pp 1650-1659.

Furuta A, Carr LK, Yoshimura N, Chancellor MB: Advances in the understanding of stress urinary incontinence and the promise of stem-cell therapy. Reviews in Urology: July 2007: 9(3): pp 106-112.

Herschorn S: The use of biological and synthetic materials in vaginal surgery for prolapse. Current Opinion in Urology: November 2007: 17: pp 408-414.

Herschorn S: Urodynamic evaluations for patients with prolapse: In: Female Urology, 3rd Edition. (Raz S, Rodriguez L, eds.) Elsevier, Philadelphia: 2008.

Herschorn S, Abrams P, Artibani W, Coyne K, Hampel C, Hunskaar S, Irwin DE, Kelleher C, Kopp Z, Milsom I, Reilly K: Understanding the elements of overactive bladder: Questions raised by the EPIC (European Prospective Investigation of Cancer) study. British Journal of Urology: March 2008: 101: pp 1381-1387.

Herschorn S, Artibani W, Coyne KS, Henry D, Irwin DE, Kopp ZS, Matza LS, Milsom I, Thompson C: Examining lower urinary tract symptom constellations using cluster analysis: British Journal of Urology International: May 2008: 101: pp 1267-1273.

Herschorn S, Bump RC, Kreder KJ, Moore K, Steers WD, Strohbehn K, Yalcin I, Duloxetine OAB (Overactive Bladder) Study Group: Duloxetine compared with placebo for treating women with symptoms of overactive bladder. British Journal of Urology: August 2007: 100: pp 337-345.

Herschorn S, Corcos J, Gajewski J, Schulz J: A population-based study of urinary symptoms and incontinence: The Canadian Urinary Bladder Survey. British Journal of Urology: January 2008: 101: pp 52-58.

Klotz L: Active surveillance for favorable risk prostate cancer. Current Urology Reports: September 2007: 8(5): pp 341-344.

Klotz L: Active surveillance for favorable risk prostate cancer: Who, how, and why? Nature Clinical Practice Oncology: December 2007: 4(12): pp 692-698.

Klotz L: Active surveillance for favorable risk prostate cancer: Rationale, risks, and results. Urologic Oncology: November 2007: 25(6): pp 505-509.

Klotz L: Active surveillance for favorable risk prostate cancer: What are the results and how safe is it? Seminars in Radiation Oncology: January 2008: 18(1): pp 2-6.

Klotz L: Editorial: Cumulative association of five genetic variants with prostate cancer. European Urology: June 2008: 53(6): pp 1298-1299.

Klotz L: High intensity focused ultrasound. A new option for low risk prostate cancer. Our Voice: July 2007: 3(2): pp 10-12.

Klotz L: Low risk prostate cancer can and should often be managed with active surveillance and selective delayed intervention. Nature Clinical Practice Urology: January 2008: 5(1): pp 2-3. E-published November 27, 2007.

Klotz L: Managing prostate cancer by active surveillance. Patient Care: October 2007: pp 40-49.

Klotz L: Maximal androgen blockade for advanced prostate cancer. Best Practice and Research Clinical Endocrinology and Metabolism: April 2008: 22(2): pp 331-340.

Klotz L: Nomogram for predicting survival in men with clinically localized prostate cancer who do not undergo definitive therapy. Nature Clinical Practice Urology: E-published May 27, 2008.

Klotz L: Point: Active surveillance for favorable risk prostate cancer. Journal of the National Comprehensive Cancer Network: July 2007: 5(7): pp 693-698.

Matthew AG, Currie KL, Irvine J, Ritvo P, Santa Mina D, Nam R, Trachtenberg J: Serial personal digital assistant data capture of health related quality of life: A randomized controlled trial in a prostate cancer clinic. Health and Quality of Life Outcomes: July 2007: 5: pp 38.

Nam RK, Sugar L, Yang W, Srivastava S, Klotz LH, Yang LY, Stanimirovic A, Encioiu E, Neill M, Loblaw DA, Trachtenberg J, Narod SA, Seth A: Expression of the TMPRSS2:ERG fusion gene predicts cancer recurrence after surgery for localised prostate cancer. British Journal of Cancer: December 2007: 97(12): pp 1690-1695. E-published October 30, 2007.

Nam RK, Toi A, Klotz LH, Trachtenberg J, Jewett MA, Appu S, Loblaw DA, Sugar L, Narod SA, Kattan MW: Assessing individual risk for prostate cancer. Journal of Clinical Oncology: August 2007: 25(24): pp 3582-3588.

Nam RK, Zhang WW, Loblaw DA, Klotz LH, Trachtenberg J, Jewett MA, Stanimirovic A, Davies TO, Toi A, Venkateswaran V, Sugar L, Siminovitch KA, Narod SA: A genome-wide association screen identifies regions on chromosomes 1q25 and 7p21 as risk loci for sporadic prostate cancer. Prostate Cancer and Prostatic Diseases: E-published September 18, 2007.

Narod SA, Neuhausen S, Vichodez G, Armel S, Lynch HT, Ghadirian P, Cummings S, Olopade O, Stoppa-Lyonnet D, Couch F, Wagner T, Warner E, Foulkes WD, Saal H, Weitzel J, Tulman A, Poll A, Nam R, Sun P: Rapid progression of prostate cancer in men with a BRCA2 mutation. British Journal of Cancer: E-published June 24, 2008.

Palmer J, Venkateswaran V, Fleshner NE, Klotz LH, Cox ME: The impact of diet and micronutrient supplements on the expression of neuroendocrine markers in murine lady transgenic prostate. Prostate: March 2008: 68(4): pp 345-353. E-published January 10, 2008.

Supiot S, Shubbar S, Fleshner N, Warde P, Hersey K, Wallace K, Cole H, Sweet J, Tsihlias J, Jewett MA, Klotz L, Bristow RG: A phase I trial of pre-operative radiotherapy for prostate cancer: Clinical and translational studies. Radiotherapy and Oncology: E-published April 16, 2008.

Van Poppel H, Da Posso W, Albrecht W, Klotz L, Sylvester R for EORTC, NCIC, SWOG ECOG: A prospective randomized EORTC intergroup phase 3 study comparing the complications of elective nephron sparing surgery and radical nephrectomy for low stage renal cell carcinoma. European Urology: July 2007: 51: pp 1606-1615.

Venkateswaran V, Haddad AQ, Fleshner NE, Fan R, Sugar LM, Nam R, Klotz LH, Pollak M: Association of diet-induced hyperinsulinemia with accelerated growth of prostate cancer (LNCaP) xenografts. Journal of the National Cancer Institute: December 2007: 99(23): pp 1793-1800. E-published November 27, 2007.

Invited Visits

Herschorn S: Canadian Urological Association, Edmonton, AB, June 2008. (1) Education Forum 3: Incontinence and Voiding Dysfunction: Changing and Emerging Technologies in Pelvic Health. (a) Recurrent SUI (stress urinary incontinence) and AUS (artificial urinary sphincter), (b) Workup and traditional surgery for pelvic organ prolapse; (2) Education Forum 4: Pediatric Urology: Complications of Augmented Bladders. Follow-up in Adulthood: When and What to Watch For.

Herschorn S: American Urological Association, Session on Urodynamics/Incontinence/Female Urology: Female Urology 1, Orlando, Florida, May 2008. Moderator.

Herchorn S: 8th Annual Basic Science Course in Urology for Urology Residents, Toronto, ON, February 2008. Basic voiding dysfunction and urodynamics: What you need to know.

Herschorn S: Asian Network of Excellence in Urological Science, Kunming, China, February 2008. (1) Prevalence and impact of male OAB/LUTS (overactive bladder/lower urinary tract symptoms): Global and Asian perspectives, (2) Assessment of OAB in the male patient with LUTS: Expert opinion, (3) Defining the safety, efficacy and tolerability of tolterodine in men with LUTS, (4) Redefining the treatment of OAB/LUTS in men: The role of combination therapy (TIMES); (a) Workshop 1 - Male OAB: New concepts, improved understanding, better management, (b) Workshop 2 – Communicating the male OAB/LUTS message.

Herschorn S: General Hospital Kuala Lumpur, Department of Gynecology, Kuala Lumpur, Malaysia, February, 2008. Review of OAB.

Herschorn S: Ipoh General Hospital, Department of Family Practice, Ipoh, Malaysia, February 2008. The x's and y's of OAB.

Herschorn S: Malaysian Urological Society, Kuala Lumpur, Malaysia, February 2008. The x's and y's of OAB: How gender differences affect the presentation, diagnosis and management of LUTS.

Herschorn S: Queen's University, Department of Urology, Kingston, ON, February 2008. Visiting Professor: (1) New developments in the treatment of male overactive bladder, (2) Advances in slings for female stress incontinence, (3) Surgical demonstration and teaching of new sling for male stress incontinence.

Herschorn S: Society for Female Urology and Urodynamics, Miami, Florida, February 2008. Neurourology workshop: Catheterization.

Herschorn S: Fesoterodine Global Experts Forum, Pfizer, Barcelona, Spain, January 2008. (1) Case discussions of overactive bladder, (2) Moderator of presentation workshop.

Herschorn S: Second Changsha Hospital of the Central South University Medical School, Urology Seminar, Changsha, Hunan, China, November 2007. (1) Advances in surgery for female stress incontinence, (2) Management of vesicovaginal fistulas.

Herschorn S: International Continence Society, Rotterdam, Netherlands, August 2007. Point-Counter Point Debate: Treatment of first choice for postradical prostatectomy incontinence is the artificial urinary phincter. Affirmative side.

Klotz LH: 8th Biennial Prostate Cancer Forum, Toronto, ON, June 2008. Scientific Host and Meeting Chairman: Micronutrients and prostate cancer prevention in a transgenic mouse model.

Klotz LH: American Urological Association (AUA), Endocrine Forum, Orlando, Florida, May 2008. (1) Instructional course: Management of advanced prostate cancer, (2) Surveillance: Who is the ideal candidate?

Klotz LH: Los Angeles Urological Society, Los Angeles, California, May 2008. PSA kinetics and androgen deprivation for prostate cancer.

Klotz LH: Orange County Urological Society, Orange County, California, May 2008. PSA Kinetics in prostate cancer.

Klotz LH: University of Manitoba, Division of Urology, Winnipeg, MB, May 2008. Visiting Professor: Active surveillance for favorable risk prostate cancer.

Klotz LH: Philippine Society of Urology and Philippine Society of Urologic Oncology, Manila, Philippines, April 2008. Controversies in prostate cancer management.

Klotz LH: European Multidisciplinary Uro Oncology Congress, Barcelona, Spain, February 2008. Guest Speaker: Androgen deprivation therapy for prostate cancer: Current Controversies.

Klotz LH: Brazilian Urology Association, Salvador, Brazil, November 2007. Invited Speaker.

Klotz LH: British Association of Urologic Surgeons Uro Oncology Section, Bristol, England, November 2007. Invited Speaker.



Klotz LH: Duke University, "Duke Tuesday," Raleigh, North Carolina, November 2007. Visiting Professor and Guest Speaker.

Klotz LH: European Genito Urinary Oncology Conference, Barcelona, Spain, November 2007. Invited Speaker.

Klotz LH: Massachusetts Association of Practicing Urologists, Boston, Massachussetts, November 2007. Guest Speaker.

Klotz LH: Massachussetts General Hospital, Radiation Oncology Department, Harvard University, Boston, Massachussetts, November 2007. Visiting Professor.

Klotz LH: Baylor College of Medicine, Annual Update, Santa Fe, New Mexico, October 2007. Invited Speaker.

Klotz LH: Canadian Urology Research Consortium-Canadian Urological Oncology Group (CURC-CUOG), Research Retreat, Vancouver, BC, October 2007. Chairman.

Klotz LH: Dalhousie University, Halifax, NS, September 2007. Visiting Professor.

Klotz LH: Department of Defense, Prostate Cancer Research Initiative (IMPACT), Atlanta, Georgia, September 2007. Invited Speaker.

Klotz LH: European Oncology Association, Barcelona, Spain, September 2007. Invited Speaker.

Klotz LH: Society Internationale de Urology (SIU), Paris, France, September 2007. Ethical issues in urology.

Klotz LH: World Uro Oncology Federation, 3rd International Uro-Oncology Conference, Paris, France, September 2007. Chairman.

Klotz LH: Memorial University, Division of Urology, St. Johns, NFLD, July 2007. Visiting Professor.

Kodama RT: Dalhousie University, Resident Research Day, Department of Urology, Halifax, NS, April 2008. Visiting Professor: Pelvic fracture urethral distraction injuries - Lessons learned.

Kodama RT: QUEST, Kingston, ON, February 2008. (1) Reconstructive urology and trauma, (2) Examiner.

Nam RK: Prostate Cancer Research Foundation, United Kingdom and Canada, June 2008. Prostate cancer genetics.

Venkateswaran V: Canadian Prostate Cancer Research Initiative and the Canadian Prostate Cancer Network, Canadian Prostate Cancer Conference, Toronto, ON, September 2007. Micronutrient combination and time of administration influences development of prostate cancer.

Research and Investigations

Senior Investigator's Name Appears in Italics

12-week, randomized, double-blind, double-dummy, placebo-controlled, parallel-group, multicenter trial to evaluate the efficacy and safety of fesoterodine in comparison to tolterodine ER in patients with overactive bladder. *Herschorn S*, Carr LK: *Pfizer*. (\$60,000 2007 - 2008.)

A multicenter, double-blind, randomized, placebo-controlled, parallel-group study of the safety and efficacy of a single treatment with two dose levels of botox (Botulinum Toxin Type A) purified neurotoxin complex followed by a treatment with botox in patients with urinary incontinence due to neurogenic detrusor overactivity. *Herschorn S, Carr LK: Allergan.* (\$50,000 2008.)

A placebo-controlled randomized, 12-week, dose-ranging, double-blind study versus placebo using tolterodine as a study calibrator, to evaluate efficacy and safety of SSR240600C in women with overactive bladder including urge urinary incontinence. *Herschorn S*, Carr LK: *Sanofi.* (\$50,000 2008.)

A randomized, double-blind, parallel group, active controlled, multi-center long-term study to assess the safety and efficacy of the beta-3 agonist YM178 (50 mg qd and 100 mg qd) in subjects with symptoms of overactive bladder (The 178 CL-049 Study.) *Herschorn S: Astellas Pharma.* (\$30,000 2008.)

A randomized multicentre clinical trial to evaluate the efficacy of cellcept for the treatment of interstitial cystitis. *Nickel C*, Carr LK: *National Institutes of Health.* (\$30,000 2007 - 2008.)

CORAL study - Fosamax versus placebo in patients initiating therapy with LHRH analogues. Investigator initiated multicentre trial, initiated by L Klotz, with funds provided to CURC by Abbott Laboratories Canada. Funds include per patient reimbursement (\$500,000) and project management costs (\$300,000). *Klotz L: Canadian Urology Research Consortium*. (\$800,000 2005 - 2008.)

Cross-canada assessment of a new nomogram prediction tool for prostate cancer screening. *Nam RK (PI)*, Narod S, Klotz L, Trachtenberg J, Jewett M, Izawa J, Chin J, Bell D, Aprikian A, So A, Toi A: *National Cancer Institute of Canada*. (\$462,084 2006 - 2009.)

CURC/CUOG Casodex dose intensification study (CHICS). Investigator-initiated study by L Klotz. Funds provided to CURC by Astra Zeneca Canada. Funds include per patient reimbursement (\$450,000) and project management costs (\$450,000). *Klotz L: Canadian Urology Research Consortium.* (\$900,000 2005 - 2007.)

Dietary factors influencing IGF signaling in prostate cancer. *Pollak M*, Venkateswaran V, Gleave M, Ong C: *National Cancer Institute of Canada*. (\$345,548 2007 - 2010.)

Dutesteride versus placebo in patients initiating intermittent androgen deprivation. Investigator-initiated multicentre trial, initiated by L Klotz, with funds provided to CURC by Glaxo Smith Kline US. Funds include per patient reimbursement (\$500,000) and project management costs (\$300,000). *Klotz L: Canadian Urology Research Consortium.* (\$800,000 2006 - 2009.)

Effect of a low-carbohydrate diet on prostate cancer in vivo: Alterations in biochemical mechanisms involving the insulin and IGF axis. *Vasundara V*, Klotz L: *Prostate Cancer Research Foundation of Canada*. (\$110,130 2006 - 2008.)

Effect of a low-carbohydrate diet on prostate cancer in vivo: Alterations in biochemical mechanisms involving the insulin and IGF axis. *Venkateswaran V*, Klotz L, Fleshner N, Sugar L, Pollak M: *Prostate Cancer Research Foundation of Canada*. (\$110,138 2006 - 2008.)

Efficacy of a combined surgical and pharmacological therapy to treat mixed urinary incontinence. *Carr LK*, Herschorn S: *National Institutes of Health*. (\$7,200 2008.)

Impact of combination antioxidants on MRI markers of cell proliferation and hypoxia among men on active surveillance with early stage prostate cancer. *Fleshner NE*, Haider M, Venkateswaran V: *Prostate Cancer Research Foundation of Canada*. (\$60,000 2007 - 2008.)

Impact of combination antioxidants on MRI markers of cell proliferation and hypoxia among men on active surveillance with early stage prostate cancer. *Fleshner NE*, Haider M, Venkateswaran V: *Abbott Grant Competition, Canadian Urological Association*. (\$25,000 2007 - 2008.)

Individual risk assessment for prostate cancer using risk factors, tumour markers and new biomarkers. *Nam RK*, Narod S: *Canadian Institutes of Health Research*. (\$708,000 2006 - 2009.)

Integrated development of epigenetic and expression-based biomarkers of prostate cancer progression. *Bapat B*, Fleshner N, van der Kwast T, Briollais L, Ozcelik H, Pinthus J, Venkateswaran V: *Canadian Prostate Cancer Research Initiative and Ontario Institute for Cancer Research*. (\$749,561 2007 - 2010.)

Micronutrients and prostate cancer: Prevention to treatment. *Vasundara V*, Klotz L: *Canadian Institutes of Health Research*. (\$247,413 2006 - 2008.)

Micronutrients and prostate cancer: Prevention to treatment. *Venkateswaran V*, Klotz L, Fleshner N, Sugar K Teahan S: *Canadian Institutes of Health Research*. (\$247,413 2006 - 2009.)

Muscle cell mediated therapy for stress urinary incontinence: A phase 2 trial. Carr LK: Cook Myosite. (\$100,000 2005 - 2008.)

NIRS ED proof of concept study protocol. Radomski S, Herschorn S, Barkin J: Urodynamix Technologies Ltd. (\$10,800 2007 - 2008.)

Ontario Cancer Biomarker Network. Eleftherios D, Klotz L: Ontario Cancer Research Network. (\$6,000,000 2005 - 2008.)

Prospective randomized double-blind trial of intravesical injection of botulinum toxin type A versus saline for neurogenic detrusor overactivity and urinary incontinence related to spina cord injury or multiple sclerosis. *Herschorn S*, Bard R, Baverstock R, Bailly G, Carlson K, Carr L, Corcos J, Ethans K, Gajewsi J, Radomski S, Valiquette L: *Allergan*. (\$295,000 2005-2007.)

SELECT (selenium and vitamin E cancer prevention) trial - Vitamin E and selenium for prevention of prostate cancer: A randomized trial. *Coltman C*, many co-Investigators with the South Western Oncology Group, including Klotz LH: *National Institutes of Health*. (\$170,000 1999 - 2009.)

A randomized double-blind study to assess the safety and efficacy of solifenacin succinate (vesicare) in comparison to oxybutynin for overactive bladder patients. *Herschorn S: Astellas Canada.* (\$15,000 2007 – 2008.)



Honours Received

Herschorn S: 5-Star Rating for Presentations at the Annual Meeting of the Canadian Urological Association in Edmonton, AB: (1) The use of botulinum toxin A in patients with neurogenic detrusor overactivity: Preliminary results from a Canadian multicentre randomized trial, (2) Add-on tolterodine extended release improves overactive bladder symptoms in men receiving alpha-blocker therapy. 2008.

Herschorn S: Vice-Chair, Canadian Male Sexual Health Council. 2008.

- Herschorn S: Vice-President, Canadian Urological Association. 2008.
- Klotz LH: Naming the Conference Room of the Prostate Cancer Research Foundation of Canada "Dr. Laurence Klotz Room." June 2008.
- Klotz LH: President, Canadian Urological Association. June 2008.
- Klotz LH: Tile Award for Meritorious Service to Sunnybrook. June 2008.
- Kodama RT: A.W. Bruce Undergraduate Teaching Award, Division of Urology. June 2008.
- Kodama RT: Bruce Tovee Postgraduate Resident Teaching Award. May 2008.
- Kodama RT: Peters-Boyd Clinical Teaching/Supervision Award. May 2008.
- Kodama RT: Postgraduate Resident Teaching Award Clinical, Division of Urology. June 2008.
- Nam RK: Faculty Postgraduate Teaching Award, Surgical, Division of Urology, University of Toronto. June 2008.
- Nam RK: Postgraduate Lecture Award, Division of Urology, University of Toronto. June 2008.
- Nam RK: Royal College of Physicians and Surgeons of Canada, Medal Award in Surgery. February 2008.

TORONTO EAST GENERAL HOSPITAL

Heads of Divisions

Dr. R. Zeldin – General Surgery Dr. G. Maistrelli – Orthopaedic Surgery Dr. L. Tate – Plastic Surgery Dr. R. Singal – Urology Laura Tate Surgeon-in-Chief



The Department of Surgery has been involved in Safer Health Care Now and Wait Time Strategies initiatives. Computerized Provider Order Entry across the organization has involved surgical input for clinical order sets designed by Division, then integrated with multidisciplinary teams. Peter Weiler has been our clinical lead in this impressive endeavor planned for November 2008. HSMR reviews were presented at the Medical Quality Assurance Committee to understand our processes. Our Ambulatory Care Unit underwent a change in management with separate Medical and Surgical budgets. An external review by Dr. Robert Bear [Calgary Regional Health Center] was undertaken for the Surgical Clinics with recommendations for development of an Ambulatory Care Council with governance and a Physician Lead Laura Tate.

The Surgical Department of the Toronto East General Hospital has 20 active surgeons including 4 urologists, 6 orthopedic surgeons, 5 general surgeons including 3 thoracic surgeons and 3 plastic surgeons.

Critical Care

The Division of Critical Care has grown to include Dr. Mary Anne Aarts, our second surgeon-intensivist, along with Division Head, Dr. Carmine Simone. The Division has implemented a number of initiatives this past year. Most notably, there has been an increased teaching commitment to the Department of Surgery and to the Adult Critical Care Training Program. We now have regular Critical Care Fellows and PGY2 General Surgery Residents rotating through our ICU.

We have a Multidisciplinary Patient Simulator Program employed in resident and fellow teaching and soon we will have 'in house' ACLS training. TEGH has a fully operational Critical Care Rapid Response Team and a new Sepsis Alert Initiative, which is being developed in parallel with our Electronic Patient Record.



General Surgery

Minimally Invasive Surgery has continued to be our focus in General Surgery with increasing laparoscopic procedures in hernia repair, bowel resection, cholecystectomy and solid organ surgery. Bob Mackenzie has successfully set up our integrated Time to Treat Breast Referral Clinic, which includes participation from Jamie Cyriac, Tom Gilas and Brett Beber [Plastic Surgery.] TEGH has the 2nd lowest Wait Times for Breast Cancer. Jamie Cyriac continues his role in ASCM teaching. Jamie Cyriac and Paul Bernick had outstanding TES scores this year. Sentinel node biopsy is now available at TEGH with Tom Gilas as our surgical resource.



Orthopedics

Paul Wong was promoted to Assistant Professor this year. Gianni Mastrelli has stepped down as Division Head and Medical Director and is on Modified Active Staff. Peter Weiler is our new Division Head and Medical Director Orthopedics. Bill Kraemer continues as PostGraduate Program Director, Orthopedics. TEGH has the lowest Wait Time statistics for hip replacements in the province and 3rd in the province, 1st in the LHIN for knee replacements. Physician Assistants have been integrated into our Orthopedic Division with continued development of their roles. Advanced Practice Physiotherapists have been trained and are working with a multidisciplinary team.

Plastic Surgery

Marc Dupere is no longer on active staff. There is a recruitment process going on for a new Head for the Division. Dimitri Anastakis conducted an external review this year with a focus on TEGH's teaching potential, University/community needs and hospital resources. Atul Kesarwani has reduced his clinic and OR time to concentrate on his private clinic opening this year. Brett Beber continues to focus his strengths on breast reconstruction and is on Courtesy Staff at Women's College Hospital where he participates in Breast Clinic. This year a two-month rotation for PGY 5 residents began for the first time in 24 years. The Division is developing a closer tie with the University and is planning to structure for regular resident assignments in the coming years.

Thoracic Surgery

TEGH has become a Level 1 Thoracic Center. Simon Yu has joined our staff from North York General [NYG] to continue in thoracic cancer surgery here while still maintaining his general surgery practice at NYG. TEGH is covering the thoracic surgery needs of Sunnybrook and North York.

Urology

Dr. Singal is working closely with the Foundation to bring robotic capabilities to TEGH. Postgraduate residents have started rotating through TEGH this year. An annual Fellowship is registered with the University.

DIVISION OF GENERAL SURGERY

Dr. P.E. Bernick – Assistant Professor Dr. J. Cyriac – Lecturer Dr. T. Gilas – Assistant Professor Dr. R.L. Mackenzie – Assistant Professor Dr. C. Simone – Lecturer Dr. R. Zeldin – Assistant Professor (Division Head)

Publications

Simone C, Dahele M, Ung Y, Meharchand J, Shulman H, Zeldin R, Behzadi A, Cheng S, Weigensberg C, Sivjee K: Integrating regional and community lung cancer services to improve patient care. Current Oncology: December 2007: 14(6): pp 234-237.

Simone C, Dev SP, Nascimento Jr B, Chien V: Chest tube insertion. New England Journal of Medicine: February 2008: 358: pp 749-750. Videos in Clinical Medicine. October 2007: 357: e15 (article and video on-line.)

Simone C, Kargel M, Lee M: The intensivist-led model of care in a Canadian community hospital ICU. Chest: October 2007: 132(Suppl 4): pp 444-445.

Simone C, Kargel M, Lee M: The introduction of a critical care rapid response team in a Canadian community hospital. Chest: October 2007: 132(Suppl 4): pp 445.

Zeldin RA, Lo D, Skrastins R, Fraser IM, Newman H, Monavvari A, Ung YC, Joseph H, Downton T, Maxwell L, Meharchand J: Time to treat: A system redesign focusing on decreasing the time from suspicion of lung cancer to diagnosis. Journal of Thoracic Oncology: November 2007: 2(11): pp 1001-1006.

Zeldin RA, Shargall Y, Spratt E: Hyperhidrosis: What is it and why does it occur? Thoracic Surgery Clinic: May 2008: 18(2): pp 125-132.

Invited Visits

Bernick PE: Canadian Society of Colon and Rectal Surgeons-Canadian Society for Surgical Oncology (CSCRS-CSSO), Canadian Surgical Forum Toronto 2007, Toronto, ON, September 2007. Postgraduate Course in Colorectal Cancer: The malignant polyp.

Simone C: Lung Cancer Canada and Columbus Centre, Toronto, ON, May 2007. Conoscere il cancro del polmone (per vincerlo): Understanding lung cancer (diagnosis, treatment, survivorship.)

Simone C: Ontario Hospital Association, Exploring a New Era in Critical Care Design, Delivery and Evaluation (Ontario's Critical Care Strategy – Year One Results), Toronto, ON, April 2007. Leadership and physician engagement in the ICU.

Simone C: Fourth Annual Toronto Radiation Medicine Conference, King City, ON, April 2007. Collaborating to strengthen thoracic oncology services. (with Dr. M. Dahele)

Simone C: Partnership for After School Education (PASE) Leadership Day, April 2007. Interprofessional patient care success stories: ICU.

Zeldin R: Third Annual Ontario Thoracic Oncology Conference, Regionalization of Thoracic Surgical Oncology in Ontario, Niagaraon-the-Lake, March 2008. Moderator.



DIVISION OF ORTHOPAEDIC SURGERY

Dr. M. Catre – Lecturer Dr. W. Kraemer – Assistant Professor Dr. G. Maistrelli – Associate Professor Dr. F. Mastrogiacomo – Lecturer Dr. P. Weiler – Assistant Professor Dr. P. Wong – Assistant Professor

Publications

Catre M, Kumar A, Weiler P, Butt S: Supracondylar nailing of periprosthetic fractures above total knee arthroplasties. Journal of Orthopaedics and Traumatology: December 2007: 8(4): pp 177-184. E-published December 14, 2007.

Maistrelli G, Kumar A, Chambers I, Wong P: Management of periprosthetic fracture above total knee arthroplasty using intramedullary fibular allograft and plate fixation. Arthroplasty: June 2008: 23(4): pp 554-558.

Invited Visits

Maistrelli G: American Academy of Orthopaedic Surgeons (AAOS), 7th Annual Advanced Hands-On Knee Reconstruction Course, Chicago, Illinois, May 2008. (1) Lecture: Advancements in knee arthroplasty kinematics, (2) Demo cadaver lab: MIS total knee arthroplasty.

Maistrelli G: University of Pisa, Italy, April 2008. Visiting Professor, Ospedale Versilia: (1) Lecture: Kinematics in new generation knee arthroplasty, (2) Live demonstration of total knee surgery: Lateral approach for valgus knee deformity.

Maistrelli G: 5th Annual Symposium on Soft Tissue Sparing Knee Arthroplasty, Portnovo, Italy, February 2008. Lecture: Surgical alternatives for the younger patient with arthritis of the knee.

Maistrelli G: ALOTO (Latium Hospitals Association of Orthopaedics and Traumatology), 44th Annual Congress, Rome, Italy, December 2007. (1) Lecture: Failure mechanisms in total knee arthroplasty, (2) Lecture/workshop: MIS unicompartmental knee arthroplasty, (3) Session moderator: Painful hip prostheses: Diagnosis and management.

Maistrelli G: University of Milan, Italy, October 2007. Visiting Professor: (1) Lecture: Total knee arthroplasty: Past, present and future, (2) Live total knee surgery demonstration.

Maistrelli G: Surgical Advances in Revision Total Knee Arthroplasty, Continuing Medical Education Course Symposium, Toronto, ON, October 2007. Presenter: (1) Osteolysis, (b) Two-stage revision for infected total knee, (3) Revision of unicompartmental arthroplasty.

Maistrelli G: La Societa Ortopedica Regione Emilia-Romagna, Knee Surgery Symposium, Monticelli Termi, Parma, Italy, July 2007. Invited Lecturer: Dealing with bone loss in knee revision arthroplasty.

Honours Received

Maistrelli G: Appointed to the Advisory Board of the Journal of Orthopaedics and Traumatology. January 2008.

DIVISION OF PLASTIC SURGERY

Dr. B. Beber – Lecturer Dr. L. Tate – Assistant Professor (Division Head)

DIVISION OF UROLOGY

Dr. R. MacMillan – Assistant Professor Dr. R. Singal – Lecturer (Division Head) Dr. P. Vlaovic – Lecturer

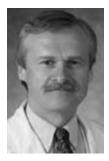
UNIVERSITY HEALTH NETWORK

Heads of Divisions

Dr. T.E. David – Cardiac Surgery Dr. L. Rotstein – General Surgery Dr. C. Wallace – Neurosurgery Dr. R. Davey – Orthopaedic Surgery Dr. S. Hofer – Plastic Surgery Dr. S. Keshavjee – Thoracic surgery Dr. N. Fleshner – Urology Dr. B. Rubin – Vascular Surgery

Bryce Taylor

Surgeon-in-Chief/ James Wallace McCutcheon Chair in Surgery



Surgical Programs and Critical Care continue to be a dominant program in the administrative structure at the University Health Network, contributing to all other programs in the organization. Budgeted surgical volumes were for the most part realized, and all divisions and departments strived to meet wait times targets mandated by the Ministry of Health. The initial stages of the "GATES" strategic planning process were completed, and a planning document was published and distributed. "Growing Academically, Technologically, Efficiently and Safely" captured the major future initiatives in the department.

UHN Surgery was one of two North American centres to participate in the World Health Organization Checklist Project as part of the World Alliance for Patient Safety, and was a prominent player in the formal kick-off celebration on June 25th in Washington, DC. UHN Surgery also played a major role in the CSSC (Clinical Specialty Supply Chain) initiative in collaboration with the Ministry of Health.

Exciting new clinical and research initiatives involved the GTx (Guided Therapeutics) Program and the I³ Program (Innovation, Intervention, Imaging) both of which benefited from input from surgery, imaging and basic science. The design of the MPOR (multipurpose operating room) was completed in preparation for construction of a multidisciplinary minimally invasive operating room to carry out advanced cardiac and vascular procedures.

Stefan Hofer was recruited as Head of Plastic Surgery and became holder of the Wharton Chair in Plastic and Reconstructive Surgery. Rajiv Gandhi and Christian Veillette joined the Orthopedic Service, Rajiv in the field of arthroplasty surgery and Christian in upper limb surgery with a special interest in medical informatics. Carol-Anne Moulton and Sean Cleary were appointed to the HPB Program in General Surgery at the Toronto General site. Carol-Anne has an academic interest in education while Sean's focus is in genetics and epidemiology.





Major university posts continue to be held by Shaf Keshavjee as Chair of Thoracic Surgery and Thomas Lindsay as Chair of Vascular Surgery. Richard Weisel completed his second five-year term as Chair of Cardiac Surgery and will go on as the Director of the Toronto General Research Institute. Wayne Johnston was elected President of the Society of Vascular Surgery, and Sid Radomski was appointed as Special Advisor to the Chair on Education. Michael Fehlings was appointed as co-director (along with Albert Yee) of the University of Toronto's Department of Surgery Spine Program, and Charles Tator completed five years as Director of Alumni Advancement.

In July 2007 Joan Lipa was promoted to Associate Professor; Barry Rubin, Thomas Lindsay, Michael Tymianski and Neil Fleshner to Full Professor. For July 2008, R.J. Cusimano was promoted to Associate Professor.

The members of the department continue to have prodigious output in grant capture, manuscripts published and papers presented. The most recent figures boasted a total of \$38 million in research funding, 342 publications, and 303 invited lectures. These metrics compared favourably to the Mayo Clinic.



Surgical Services now has members who hold no fewer than 28 endowed chairs. The most recent chairs to be awarded are the Wyeth/ CIHR Clinical Research Chair in Surgical Oncology (Michael Jewett), the Wyeth/CIHR Clinical Research Chair in Transplantation (Shaf Keshavjee), the Crashley Chair in Gynecologic Oncology (Joan Murphy), the Love Chair in Prostate Cancer Prevention (Neil Fleshner) and the Kevin and Sandra Sullivan Chair in Surgical Oncology (Jonathan Irish). The Belinda Stronach Chair in Breast Reconstruction was announced, and it is anticipated that funding will be complete in the coming months prior to a formal search for the inaugural chairholder.



A large number of teaching awards were won by UHN surgeons, including Wightman-Berris Awards to Rod Davey, Thomas Lindsay, Michael Fehlings and Sid Radomski, the Ross Fleming Award to Andrew Pierre, and the highly coveted University of Toronto Aiken's Award to Chris Wallace. Doug Wooster won the Colin Woolf Award for Long-term Contributions in Continuing Education, and also received the David Fear Fellowship for further study in the field of education. Other major awards were the Order of Spain for meritorious civil service given to Andres Lozano, and the University Health Network Global Impact Award won by alumnus Bernie Langer. The UHN Department of Surgery looks forward to further exciting developments in recruitment in our various specialties and to work on a number of innovative quality initiatives.

DIVISION OF CARDIAC SURGERY

Dr. S.J. Brister – Associate Professor Dr. R.J. Cusimano – Associate Professor Dr. T.E. David – University Professor (Division Head) Dr. C.M. Feindel – Professor Dr. R.K. Li – Professor Dr. A.C. Ralph-Edwards – Lecturer Dr. V. Rao – Associate Professor Dr. H.E. Scully – Professor Dr. R.D. Weisel – Professor Dr. T.M. Yau – Associate Professor

Publications

Akins CW, Miller DC, Turina MI, Kouchoukos NT, Blackstone EH, Grunkemeier GL, Takkenberg JJ, David TE, Butchart EG, Adams DH, Shahian DM, Hagl S, Mayer JE, Lytle BW: Guidelines for reporting mortality and morbidity after cardiac valve interventions. European Journal of Cardiothoracic Surgery: April 2008: 33(4): pp 523-528.

Akins CW, Miller DC, Turina MI, Kouchoukos NT, Blackstone EH, Grunkemeier GL, Takkenberg JJ, David TE, Butchart EG, Adams DH, Shahian DM, Hagl S, Mayer JE, Lytle BW, Councils of The American Association for Thoracic Surgery, The Society of Thoracic Surgeons, the European Association for Cardio-Thoracic Surgery, Ad Hoc Liaison Committee for Standardizing Definitions of Prosthetic Heart Valve Morbidity: Guidelines for reporting mortality and morbidity after cardiac valve interventions. Journal of Thoracic and Cardiovascular Surgery: April 2008: 135(4): pp 732-738.

Akins CW, Miller DC, Turina MI, Kouchoukos NT, Blackstone EH, Grunkemeier GL, Takkenberg JJ, David TE, Butchart EG, Adams DH, Shahian DM, Hagl S, Mayer JE, Lytle BW, Society of Thoracic Surgeons, American Association of Thoracic Surgeons, European Association for Cardio Thoracic Surgery: Guidelines for reporting mortality and morbidity after cardiac valve interventions. The Annals of Thoracic Surgery: April 2008: 85(4): pp 1490-1495.

Badiwala M, Rao V, Ross HJ: An unusual and fatal complication of mechanical circulatory support with a continuous flow assist device. New England Journal of Medicine: December 2007: 357: pp 936-937.

Borger MA, Prasongsukarn K, Armstrong S, Feindel CM, David TE: Stentless aortic valve reoperations: A surgical challenge. The Annals of Thoracic Surgery: September 2007: 84(3): pp 737-743.

Bouchentouf M, Benabdallah BF, Bigey P, Yau TM, Scherman D, Tremblay JP: Vascular endothelial growth factor reduced hypoxia-induced death of human myoblasts and improved their engraftment in mouse muscles. Gene Therapy: March 2008: 15(6): pp 404-414. E-published December 13, 2007.

Brister SJ: Warfarin cessation prior to cardiopulmonary bypass; lessons learned from a randomized controlled trial of oral Vitamin K (Invited Commentary). The Annals of Thoracic Surgery: July 2007: 84: pp 108-109.

Butany J, Dixit V, Leong SW, Daniel LB, Mezody M, David TE: Inflammatory myofibroblastic tumor with valvular involvement: A case report and review of the literature. Cardiovascular Pathology: November 2007: 16(6): pp 359-364.

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Cimini M, Fazel S, Zhuo S, Xaymardan M, Fujii H, Weisel RD, Li R-K: c-Kit dysfunction impairs myocardial healing after infarction. Circulation: September 2007: 116: pp 177-182.

Collins MJ, Butany J, Borger MA, Strauss BH, David TE: Implications of a congenitally abnormal valve: A study of 1025 consecutively excised aortic valves. Journal of Clinical Pathology: April 2008: 61(4): pp 530-536.

Cusimano RJ: Surgical management of cardiac tumors. Seminars in Diagnostic Pathology: February 2008: 25(1): pp 76-81.

David TE: Mitral valve repair. The Annals of Thoracic Surgery: September 2007: 84(3): pp 1066-1068.



David TE: Outcomes of mitral valve repair for mitral regurgitation due to degenerative disease. Seminars in Thoracic and Cardiovascular Surgery: August 2007: 19(2): pp 116-120.

David TE, Feindel CM, Bos J, Ivanov J, Armstrong S: Aortic valve replacement with Toronto SPV bioprosthesis: Optimal patient survival but suboptimal valve durability. Journal of Thoracic and Cardiovascular Surgery: January 2008: 135(1): pp 19-24.

Degousee N, Fazel S, Angoulvant D, Stefanski E, Pawelzik S-C, Korotkova M, Arab S, Liu T, Lindsay TF, Sun Z, Butany J, Li R-K, Audoly L, Schmidt R, Angioni C, Geisslinger G, Jakobsson P-J, Rubin BB: Microsomal prostaglandin E2 synthase-1 deletion leads to adverse left ventricular remodeling after myocardial infarction. Circulation: April 2008: 117(13): pp 1701-1710.

Delgado D, Ross HJ, Rao V: The dilemma of a left ventricular assist device explanation: A decision analysis. Canadian Journal of Cardiology: October 2007: 23: pp 657-661.

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Fazel SS, Ihlberg L, David TE: Mitral valve reconstruction in the failing heart. Scandinavian Journal of Surgery: August 2007: 96(2): pp 111-120.

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Ivanov J, Borger MA, Tu JV, Rao V, David TE: Mid-term outcomes of off-pump versus on-pump coronary artery bypass graft surgery. Canadian Journal of Cardiology: April 2008: 24(4): pp 279-284.

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Kim BO, Verma S, Weisel RD, Fazel S, Jia Z-Q, Mizuno T, Li R-K: Preservation of heart function in diabetic rats by the combined effects of muscle cell implantation and insulin therapy. European Journal of Heart Failure: January 2008: 10(1): pp 14-21.

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Sun Z, Wu J, Fujii H, Wu J, Li SH, Porozov S, Belleli A, Fulga V, Porta Y, Li R-K: Human angiogenic cell precursors restore function in the infarcted rat heart: A comparison of cell delivery routes. European Journal of Heart Failure: June 2008: 10(6): pp 525-553. E-published May 19, 2008.

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Xie X, Cao F, Sheikh AY, Li Z, Connolly AJ, Pei X, Li R-K, Robbins RC, Wu JC: Genetic modification of embryonic stem cells with VEGF enhances cell survival and improves cardiac function. Cloning and Stem Cells: December 2007: 9(4): pp 549-563.

Invited Visits

Brister SJ: Universita degli Studi di Bari, Dipartimento Emergenza Trapianti di Organo (D.E.T.O.), Sezione di Cardiochirugia, Facolta di Medicina e Chirurgia, Bari, Italy, June 2008. La rivascolarizzazione miocardica. Confronto tra trattamento percutaneo e trattamento chirurgico.

Brister SJ: Canadian Cardiovascular Congress, Workshop, Quebec City, PQ, October 2007. Aspirin resistance - Fact or fiction!

Brister SJ: Xian Xiang Medical College, Xian, Xiang, Henan Province, People's Republic of China, August 2007. Race, culture and cardiovascular disease.

Brister SJ: Zong Shan Hospital, Xiamen University, Henan Province, People's Republic of China, August 2007. Race, culture and cardiovascular disease.

Cusimano RJ: Utretch University, Amsterdam, Netherlands, June 2008. European OSATS (Objective Structured Assessment of Technical Skills) examiner.

Cusimano RJ: Wuxi People's Hospital, Wuxi City, Jiangsu, China, March 2008. (1) Demonstrator - pacemaker and off pump cardiac surgery, (2) Teacher/Lecturer: Heart transplantation, techniques and tricks.

Cusimano RJ: Heart and Stroke Foundation, Public Education Forum, Courtice, ON, February 2008. Valve replacements and repair, who needs it and why?

Cusimano RJ: Canadian Cardiovascular Congress, Canadian Cardiovascular Society Poster Session, Quebec City, PQ, October 2007. Moderator.

David TE: American Society of Echocardiography, 19th Annual Scientific Sessions, Toronto, ON, June 2008. (1) Mitral valve repair for degenerative mitral regurgitation, (2) Surgery for failed mitral bioprosthesis, (3) Surgery for acute aortic dissections, (4) Essentials on tricuspid valve leaflets, chordal and annular anatomy, (5) Carcinoid of the tricuspid valve, (6) Surgery for hypertrophic obstructive cardiomyopathy.

David TE: Congenital Heart Surgery Group, 18th International Symposium on Congenital Heart in Adults, Toronto, ON, June 2008. Guest Speaker: Surgical treatment of aortic root aneurysm in patients with Marfan syndrome.

David TE: American Association for Thoracic Surgery, Aortic Symposium 2008, New York City, New York, May 2008. Guest Speaker: Aortic valve reimplantation.

David TE: American Association for Thoracic Surgery, 88th Annual Meeting, San Diego, California, May 2008. Guest Speaker on Clinical Research: Developing the academic surgeon.

David TE: Washington University of St. Louis, St. Louis, MO, May 2008. The Thomas Ferguson Visiting Professor: Creativity in surgery.

David TE: Brazilian Society of Cardiovascular Surgery, 35th Annual Congress, Sao Paulo, Brazil, April 2008. (1) Guest Speaker: Surgery of the aorta, (2) Live teleconference: The David procedure.

David TE: Sutter Pacific Heart Centers, Hospital Sponsored, San Francisco, California, April 2008. The McClelland Visiting Professorship in Cardiovascular Medicine: (1) Is aortic valve endocarditis a surgical disease?, (2) Which mitral valve pathology is the most difficult to repair?, (3) Is aortic valve repair ready for "prime time," (4) The changing face of the patient with valvular heart disease: How the new demographics and technology affect patient management, (5) Current controversies in the spectrum of mitral regurgitation (Bonow RO, David TE.)

David TE: Asian Society for Cardiovascular and Thoracic Surgery, Annual Meeting, Singapore, March 2008. Postgraduate Course: (1) Aortic valve sparing operations, (2) Choices of prosthetic heart valves.

David TE: Hayama Heart Seminar, Hayama, Japan, March 2008. Honoured Guest Speaker: (1) Mitral valve repair, (2) Aortic valve sparing operations: The David procedure.

David TE: University of Erlangen, Germany, December 2007. Visiting Professor: (1) Surgical demonstration, (2) Lecture: Clinical outcomes of aortic valve repair.

David TE: University of Freiburg, Freiburg, Germany, December 2007. Visiting Professor: Principles of aortic valve repair and clinical outcomes.

David TE: University of Leipzig, Heart Center, Live Teleconference on the Latest Techniques in Cardiac Surgery, Leipzig, Germany, December 2007. Surgical demonstration: Implantation of trifecta pericardial aortic valve and maze procedure for atrial fibrillation.

David TE: McMaster University, Cardiology Grand Rounds, Hamilton, ON, November 2007. Visiting Professor: An update on surgery for heart valve disease.

David TE: Vanderbilt University, Vanderbilt Valve Symposium, 21st Century Techniques for Complex Valve Surgery, Nashville, Tennessee, October 2007. Guest Speaker: Valve sparing root replacement.

David TE: American Association for Thoracic Surgery, Chicago, Illinois, September 2007. (1) Program Director of a postgraduate course on valvular heart disease: Advanced surgical and interventional therapies, (2) Speaker: Clinical outcomes of mitral valve repair for degenerative mitral insufficiency.

David TE: Scandinavian Association for Thoracic Surgery, Annual Meeting, Helsinki, Finland, August 2007. Guest Speaker: Aortic valve sparing operations.

David TE: University of Goteborg, Sweden, August 2007. Visiting Professor: Lecture and surgical demonstration: Aortic valve repair.

David TE: University of Virginia Health System, A Half Century of Progress in Cardiovascular Surgery, Charlottesville, Virginia, August 2007. Keynote Speaker: Aortic valve reconstruction.

David TE: University of Zurich, Zurich, Switzerland, August 2007. Visiting Professor: (1) Surgical demonstration - (a) mitral valve repair, (b) aortic valve repair (two cases); (2) Lecture: Choices of valve for aortic valve replacement.

Feindel CM: American Association for Thoracic Surgery, 88th Annual Meeting, San Diego, California, May 2008. (1) Moderator: Simultaneous Scientific Session - Adult cardiac surgery: Effects of mild hypothermia and rewarming on renal injury following coronary artery bypass surgery, (2) Session Chair: Prosthesis-patient mismatch is irrelevant for patients greater than 70 years of age undergoing bioprosthetic aortic valve replacement.

Feindel CM: American Association for Thoracic Surgery, Valvular Heart Disease 2007, Advanced Surgical and Interventional Therapies, Chicago, Illinois, September 2007. Surgery to treat endocarditis of the mitral valve.

Li R-K: 2nd Annual Oriental Congress of Cardiology, Shanghai, China, May 2008 – June 1, 2008. Gene therapy in heart failure.

Li R-K: University of Alberta, Cardiovascular Research Group, Department of Pediatrics, Edmonton, AB, April 2008. Cell transplantation to restore cardiac function: Bench to bedside and back to bench.

Li R-K: Queen's University, Department of Anatomy and Cell Biology, Anne Croy's Reproductions Seminar, Kingston, ON, February 2008. Cell therapy for cardiac regeneration and function restoration.

Li R-K: American Heart Association, Scientific Sessions 2007, Orlando, Florida, November 2007. Invited Speaker: Cardioprotective c-kit+ cells are from the bone marrow and regulate the myocardial balance of angiogenic cytokines.

Li R-K: International Congress of Cardiovascular Science, Scientific Forum XVII, Belo Horizonte, Brazil, November 2007. Invited Speaker: Cell transplantation to restoration of heart function after myocardial infarction: Past, present and future.

Li R-K: Institute of Cardiovascular Sciences Awards 2007, St. Boniface General Hospital Research Centre, Winnipeg, MB, November 2007. Invited Speaker: Cell transplantation to restore cardiac function after myocardial infarction: Bench to bedside.

Li R-K: UC Davis Medical Center, Focus Workshop on Biophotonics in Regenerative Medicine, Sacramento, California, November 2007. Invited Speaker: Cardiac regeneration by cell transplantation: Bench to bedside.

Li R-K: Canadian Cardiovascular Congress 2007, Chair, Quebec City, PQ, October 2007. Signal transduction and vascular remodeling.



Rao V: Albert Einstein Medical Center, Success with Heart Failure Symposium, Perspective from the Big Apple, Montefiore-Einstein Heart Center, New York, New York, June 2008. When is LV dysfunction a contraindication to MV repair or replacement?

Rao V: Toronto Adult Congenital Heart Network, Adult Congenital Heart Symposium, Toronto, ON, June 2008. Ventricular assist devices as a bridge to transplant.

Rao V: Toronto Adult Congential Heart Network, 3rd Annual Canadian Congenital Cardiac Patient Conference, Toronto, ON, May 2008. The failing heart: Road to transplant?

Rao V: McGill University, Division of Cardiovascular Surgery, Transplantation and Mechanical Circulatory Support, 2nd Canadian Residents and Fellows Summit for Heart Failure, Montreal, QC, April 2008. (1) Devices and patient management in a hub and spoke network; second and third generation devices.

Rao V: Washington Medical Center, Division of Cardiothoracic Surgery, Grand Rounds, Washington, District of Columbia, April 2008. The operating room as a laboratory.

Rao V: Canadian Cardiac Transplant Network, Education Symposium, Calgary, AB, February 2008. Which device? Which patient?

Rao V: Society for Thoracic Surgeons, ABIOMED Circulatory Support Symposium (STS Satellite Symposium), Ft. Lauderdale, Florida, January 2008. Levacor: The next generation VAD for chronic heart failure.

Rao V: American Heart Association, 80th Annual Scientific Sessions, Orlando, Florida, November 2007. Severe ischemic cardiomyopathy: What can I do?

Rao V: Toronto Anaesthesiology Associates, 7th Annual Transesophageal Echocardiography (TEE) Symposium, Toronto ON, November 2007. High risk surgical revascularization.

Scully HE: McGill University, Health Innovation Forum Physician Round Table, Montreal, QC, November 2007. Panelist and participant.

Scully HE: Royal College of Physicians and Surgeons of Canada, National Physician Compensation and Human Resource Conference, Ottawa, ON, September 2007. (1) Contemporary issues in physician compensation, (2) Co-Chair, National Physician Human Resource Task Forces.

Scully HE: Royal College of Physicians and Surgeons of Canada, Winnipeg, MB, September 2007. An overview of physician human resources in Canada.

Weisel RD: American College of Cardiology, Heart Failure Summit, Toronto, ON, June 2008. Stem cell transplantation: Current status and future prospects.

Weisel RD: American Society of Echocardiography, Toronto, ON, June 2008. Advances in heart failure: Stem cells and myocardial repair.

Weisel RD: Symposium on Adult Congenital Heart Disease, Toronto, ON, June 2008. Tissue engineering: Creating a new heart.

Weisel RD: Missouri Baptist Medical Center, St. Louis, Missouri, March 2008. Myocardial protection strategies.

Weisel RD: Society for Thoracic Surgical Education, St. Helena, California, March 2008. Tissue engineering for cardiac restoration.

Weisel RD: Society of Thoracic Surgeons, Fort Lauderdale, FL, January 2008. Cardiac engineering and stem cells.

Weisel RD: Association of Thoracic and Cardiovascular Surgeons of Asia, Bali, Indonesia, November 2007. (1) Cardiac regeneration by stem cell therapy, (2) Cardiac restoration by tissue engineering, (3) Cell therapy.

Weisel RD: Heart Failure Management Symposium, Riyadh, Saudi Arabia, November 2007. (1) Cardiac regeneration by stem cell therapy, (2) Cardiac restoraton by tissue engineering contracts.

Weisel RD: Canadian Cardiovascular Society, Trainee Day, Quebec City, PQ, October 2007. The future of cardiac surgery.

Weisel RD: Northeast Cardiothoracic Surgical Society, East Madison, New Hampshire, October 2007. Cardiac regeneration: The future of heart surgery.

Yau TM: Canadian Cardiovascular Congress, Scientific Sessions, Quebec City, PQ, October 2007. (1) Chair and Moderator: Surgical poster session I, (2) Co-Chaired: Oral abstract session - Stem cells.

Research and Investigations

Senior Investigator's Name Appears in Italics

A randomized, double-blind, placebo-controlled, multi-center study to evaluate the cardioprotective effects of MC-1 in patients undergoing high-risk coronary artery bypass graft (CABG) surgery. *Yau TM: MEND-CABG II.* (\$200,000 2006 - 2007.)

An angiogenic progenitor cell niche in the uterus: Potential implications for cell therapy. *Li R-K: Canadian Institutes of Health Research*. (\$681,120, 2008 – 2013.)

Autologous tissue-engineered grafts for congenital heart surgery. Li R-K: Canadian Institutes of Health Research. (\$647,655 2003 - 2008.)

Cardiac allograft vasculopathy: Determining optimal immunosuppression and vascular protection strategies. *Rao V*, Badiwala M: *The Physician's Services Incorporated Foundation*. (\$20,000 2007 - 2008.)

Cardiac regeneration by cell transplantation. Weisel RD, Fazel S: Heart and Stroke Foundation. (\$70,717 2007 - 2008.)

Cardiac regeneration: Improving the response to injury. Weisel RD, Fazel S: Heart and Stroke Foundation. (\$73,602 2007 - 2008.)

Development of a new, portable biomedical device for in vivo measurement of regional heart tissue elasticity. Zu JW, Li R-K: Natural Sciences and Engineering Research Council of Canada. (\$393,700 2004 – 2007.)

Erythropoietin and hypertonic saline for cardiac transplant. Feindel CM, Rao V: Heart and Stroke Foundation of Ontario. (\$276,248 2006 - 2009.)

Functionality of resistant starch and bioactive peptides in preventing chronic diseases and promoting gut functions in studies with the pig model. *Fan MZ*, Liu Q, Mine Y, Yada R, Bakovic M, Li R-K, Hellerstein M: *Ontario Ministry of Agriculture and Food, University of Guelph Food Research Program.* (\$600,000 2004 – 2008.)

Inflammation, infection, trauma and repair cluster – Canada Research Chair in Cardiac Regeneration. *Li R-K: Canadian Institutes of Health Research*. (\$1,400,000 2006 – 2014.)

Matrix modulation is required to restore cardiac function after cell therapy. *Li RK: Heart and Stroke Foundation of Ontario*. (\$185,740 2007 – 2009.)

Mechanisms of transplant related vascular injury. Rao V: Heart and Stroke Foundation of Canada. (\$64,260 2007 - 2008.)

Peptide modified photocrosslinkable chitosan for cell therapy in myocardial infarction. *Radisic M*, Li R-K: *Heart and Stroke Foundation of Ontario*. (\$152,922 2007 – 2010.)

Polyarginine treated vein grafts (PATENT.) Brister SJ, Ralph-Edwards RE, Yau T: Lumen Therapeutics, LLC. (\$700,000 2005 - 2008.)

Predictors of massive blood loss in cardiac surgery: Value of intraoperative coagulation testing. *Karkouti K*, Yau TM: *Canadian Institutes of Health Research*. (\$82,652 2006 - 2008.)

Restoration of cardiac function: Cellular regeneration and matrix reconstruction. *Li R-K: Heart and Stroke Foundation of Ontario*. (\$439,750 2006 - 2011.)

STICH (Surgical Therapy for Ischemic Congestive Heart Failure) Trial. *Rao V*, Australia, Brazil, Europe, India, New Zealand/Southeast Asia, North America, Southern South America, Duke University, et al: *National Institutes of Health*. (\$40,000 2007 - 2008.)

STICH (Surgical Therapy for Ischemic Congestive Heart Failure) Trial, awarded world wide. *Rao V*, Yau T, Brister SJ, Cusimano RJ: *National Institutes of Health*. (\$7,500,000 2002 - 2008.)

The cardiac regeneration project: Quantitative cell tracking and response for cardiac regenerative approaches (CARE Project.) *Li RK*, *Weisel R*, Jaffray D, Neverova I, Sefton M, Wilson B: *Canadian Institutes of Health Research*. (\$2,287,690 2006 – 2012.)

The interplay of recruited stem cells and the matrix after myocardial infarction: Shifting the balance toward repair. *Li RK*, Fazel S: *Canadian Institutes of Health Research*. (\$738,073 2004 – 2009.)

The Regenerative Medicine (REMEDI) Project. *Weisel RD*, Jaffray D, Keating A, Keller G, Kotra L, Liu P, Li R-K, Sefton M, Wright G: *Canada Foundation for Innovation and Ontario Research Fund*. (\$14,400,000 2006 - 2010.)

Transplant vasculopathy: The role of endothelium. Rao V: Canadian Institutes of Health Research. (\$50,000 2007 - 2008.)



Honours Received

Brister SJ: Honorary Doctorate Degree, Xinxiang Medical College, Xinxiang City, Henan Province, People's Republic of China. August 2007.

Cusimano RJ: Ordine al Merito Award. October 2007.

David TE: Distinguished Alumnus Award. October 2007.

Li R-K: Vincenzo Panagia Distinguished Award. November 2007.

DIVISION OF GENERAL SURGERY

Dr. M.S. Cattral - Professor Dr. S.P. Cleary - Assistant Professor Dr. J.M. Escallon - Associate Professor Dr. S. Gallinger – Professor Dr. R.M. Gorczynski - Professor Dr. D. Grant - Professor Dr. P.D. Greig – Professor Dr. E.D. Kennedy - Assistant Professor Dr. W.L. Leong – Assistant Professor Dr. D.R. McCready - Professor Dr. I. McGilvray - Assistant Professor Dr. C. Moulton – Assistant Professor Dr. A. Okrainec – Lecturer Dr. T.P. Penner – Lecturer Dr. M. Reedijk – Assistant Professor Dr. R.K. Reznick - Professor Dr. L.E. Rotstein – Professor (Division Head) Dr. B.R. Taylor - Professor Dr. D.R. Urbach - Associate Professor Dr. A.C. Wei – Assistant Professor

Publications

Al-Sukhni WR, Gallinger S, Pratzer A, Wei A, Ho CS, Kortan P, Taylor BR, Grant D, McGilvray I, Cattral M, Langer B, Greig P: Recurrent pyogenic cholangitis with hepatolithiasis - The role of surgical therapy in North America. Journal of Gastrointestinal Surgery: March 2008: 12(3): pp 496-503.

Bajdik CD, Sung S, Spinelli JJ, Huntsman D, Gallinger S, Horsman D, Gallagher RP: Predicting the performance of a genetic testing service for cancer susceptibility. Genetic Testing: December 2007: 11(4): pp 381-386.

Beiner ME, Zhang WW, Zhang S, Gallinger S, Sun P, Narod SA: Mutations of the MYH gene do not substantially contribute to the risk of breast cancer. Breast Cancer Research and Treatment: E-published May 4, 2008.

Belghiti J, Carr B, Greig PD, Lencioni R, Poon R: Treatment before liver transplantation. The Annals of Surgical Oncology: May 2008: 15(4): pp 993-1000.

Berry M, Hellstrom M, Gothlin J, Reznick RK, Lonn L: Endovascular training with animals versus virtual reality systems: An economic analysis. Journal of Vascular Interventional Radiology: September 2007: 19: pp 233-238.

Boardman LA, Morlan BW, Rabe KG, Petersen GM, Lindor NM, Nigon SK, Goldberg J, Gallinger S: Colorectal cancer risks in relatives of young-onset cases: Is risk the same across all first-degree relatives? Clinical Gastroenterology Hepatology: October 2007: 5(10): pp 1195-1198.

Boileau J-F, Easson A, Escallon JM, Leong WL, Reedijk M, Youngson BJ, McCready DR: Sentinel nodes in breast cancers: Relevance of axillary level II nodes and optimal number of nodes that need to be removed. The Annals of Surgical Oncology: June 2008: 15(6): pp 1710-1716. E-published March 7, 2008.

Boudakov I, Liu J, Fan N, Gulay P, Way K, Gorczynski R: Mice lacking CD200R1 show absence of suppression of LPS induced TNF alpha and MLC responses by CD200. Transplantation: May 2008: 84: pp 251-257.

Campbell PT, Cotterchio M, Dicks E, Parfrey P, Gallinger S, McLaughlin JR: Excess body weight and colorectal cancer risk in Canada: Associations in subgroups of clinically defined familial risk of cancer. Cancer Epidemiology Biomarkers and Prevention: September 2007: 16(9): pp 1735-1744.

Campbell PT, Newcomb P, Gallinger S, Cotterchio M, McLaughlin JR: Exogenous hormones and colorectal cancer risk in Canada: Associations stratified by clinically defined familial risk of cancer. Cancer Causes Control: September 2007: 18(7): pp 723-733.



Clark DA, Gorczynski RM, Blajchman MA: Transfusion-related immunomodulation due to peripheral blood dendritic cells expressing the CD200 tolerance signaling molecule and alloantigen. Transfusion: May 2008: 48(5): pp 814-821.

Clark DA, Wong K, Banwatt D, Chen Z, Liu J, Lee L, Gorczynski RM, Blajchman MA: CD200-dependent and nonCD200-dependent pathways of NK cell suppression by human IVIG. Journal of Assisted Reproduction and Genetics: May 2008: 25 (2-3): pp 67-72.

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Diao J, Winter E, Chen W, Xu F, Cattral MS: Antigen transmission by replicating antigen-bearing dendritic cells. Journal of Immunology: September 2007: 179: pp 2713.

Eppel A, Cotterchio M, Gallinger S: Allergies are associated with reduced pancreas cancer risk: A population-based case-control study in Ontario, Canada. International Journal of Cancer: November 2007: 121(10): pp 2241-2245.

Escallon J: El equilibrio en cirugia (Balance in Surgery). Revista Colombiana de Cirugia: June 2008: 23: pp 60-69.

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Invited Visits

Cattral MS: Universities of Chicago, Arizona and Illinois, 4th International Conference on Living Donor Abdominal Organ Transplantation: State of the Art, Sorrento, Italy, June 2008. Advanced biliary reconstruction in living-donor liver transplantation.

Cattral MS: American Hepato-Pancreato-Biliary Association, Annual Meeting, Ft. Lauderdale, Florida, March 2008. Chair of Competitive Video Session.

Cattral MS: Canadian Society of Transplantation, Annual Meeting, Mount Tremblant, PQ, February 2008. Living donor liver transplantation.

Cleary SP: Canadian Institutes of Health Research Team - Institute for Cancer Research and Treatment (CHIR-IRCC), Annual General Meeting, St, John's, NFLD, June 2008. C-CFR population-based MYH study.

Escallon J: Latin American Federation of Surgical Societies, Annual Meeting, Santiago de Chile, Chile, November 2007. Selection of antibiotic in surgical infection: Guidelines for the implementation of new technology in surgery.

Escallon J: Colombian Association of General Surgery, Annual Meeting and Symposium on Surgical Infection, Masters of Colombian Surgery, Cartagena, Colombia, August 2007. Lecture: Balance in surgery.

Escallon J: International Surgical Society and International Association for Surgical Metabolism and Nutritional Support, International Surgical Week, Montreal, PQ, August 2007. Metabolic complications of morbid obesity surgery.

Gallinger S: 4th International Society of Chemotherapy (ISC), International Conference on Cancer Therapeutics and the 7th Princess Margaret Hospital Conference: New Developments in Cancer Management, Joint Meeting, Toronto, ON, November 2007. Resection of liver mets.

Gallinger S: The Gairdner Foundation, Advances and Opportunities in Cancer Prevention: A Cancer Prevention Forum, Toronto, ON, October 2007. Genome-wide association studies in colorectal cancer.

Gallinger S: 8th Annual Perspectives in Colorectal Cancer, Miami, Florida, September 2007. Genome-wide association studies in colorectal cancer.

Gallinger S: Manitoba Institute of Cell Biology, Cancer Care Manitoba, Winnipeg, MB, September 2007. Genome -wide association studies in colorectal cancer.

Gorczynski RM: Akdeniz University, 3rd Annual Conference on Aging, Antalya, Turkey, November 2007. (1) Alterations in regulatory T cell number/function in the mucosal immune system is important in regulating immune changes with age, (2) Regulation of immunity during aging. A role for altered TLR signaling?

Gorczynski RM: Clinique La Prairie (CLP) Institute, Montreux, Switzerland, November 2007. Induction of Treg during aging is controlled by altered expression of TLRS and activation of CD200Rs.

Gorczynski RM: International Congress of Nephrology, Antalya, Turkey, November 2007. CD200 as an important regulator of immunity and inflammation.

Grant D: National Taiwan University Hospital, Hepatitis Research Center, Taipei, Taiwan, December 2007. Surgical treatment of hepatocellular cancer.

Grant D: International Intestine Transplant Society/University of California Los Angeles, Santa Monica, California, September 2007. Update of the International Intestinal Transplant Registry.

Greig PD: American Hepato-Pancreato-Biliary Assocation (AHPBA), Ft. Lauderdale, Florida, March 2008. Laparoscopic living donor hepatectomy.

Greig PD: International Hepato-Pancreato-Biliary Association (IHPBA), Mumbai, India, February 2008. (1) Liver transection techniques, (2) Living donor liver transplantation.

McCready DR: Canadian Association of General Surgeons, Canadian Surgical Forum, Toronto, ON, September 2007. (1) Applications of new technology in the management of breast disease, (2) Postgraduate course: Role of lymph node dissection in melanoma.

Moulton C: Conjoint Annual Scientific Congress (CASC), Hong Kong, May 2008. (1) Surgical education surgical simulation: You can learn a lot from a dummy, (2) Plenary session: Credentialling the surgeon for new technologies: An optional or essential process, (3) Keynote lecture: Slowing down when you should: An approach to surgical judgment, (4) Research in surgical education, (5) Surgical trainee's experience in Hong Kong, (6) The myth of self assessment.

Moulton C: Royal Australasian College of Surgeons, Younger Fellows Forum, Aberdeen, Hong Kong, May 2008. Credentialling of surgeons.

Moulton C: University of Ottawa, Staff Surgical Rounds, Ottawa, ON, April 2008. Slowing down when you should: A new model of expert judgment.

Moulton C: Dalhousie University, Department of Surgery, Annual Research Day, Halifax, NS, March 2008. Invited Discussant and Rounds: Slowing down when you should: A new model of expert judgment.

Okrainec A: Thunder Bay Regional Health Sciences Centre, Thunder Bay, ON, May 2008. Mentoring in laparoscopic surgery: Ingredients for success.

Okrainec A: Society of American Gastrointestinal and Endoscopic Surgeons - Go Global and International Surgery Liason Group, Philadelphia, Pennsylvania, April 2008. (1) Fundamentals of laparoscopic surgery hands-on-skills course, (2) The introduction of FLS in Southern Africa: Where we've been and where we're going.

Okrainec A: Canadian Association of General Surgeons-Canadian Society of Colon and Rectal Surgeons (CAGS-CSCRS), Canadian Surgical Forum, Toronto, ON, September 2007. Minimally Invasive Surgery Postgraduate Course: (1) Laparoscopic appendectomy: Tips and tricks, (2) Endomechanical devices in minimally invasive surgery

Reedijk M: The Royal College of Physicians and Surgeons of Canada, Canadian Surgical Forum, Toronto, ON, September 2007. Advances in the treatment of breast cancer.

Reznick RK: Danish Surgical Society, 100th Anniversary, Copenhagen, Denmark, June 2008. Keynote Speaker: How do we learn to operate?

Reznick RK: Methodist Hospital/Cornell University, Department of Surgery Grand Rounds, Houston, Texas, May 2008. A new model of training - Can we afford to wait?

Reznick RK: Royal Australasian College of Surgeons, International Conference on Surgical Education and Training, Melbourne, Australia, March 2008. (1) Skills and attributes of tomorrow's surgeons: What are we looking for?, (2) What is the role of simulation?

Reznick RK: Society of Teaching Scholars, Medical College of Wisconsin, Milwaukee, Wisconsin, January 2008. Elsa B. Cohen Visiting Professor: Old ways won't work: Musings on a new model for surgical education.

Reznick RK: Memorial Sloan Kettering Cancer Center, New York, New York, December 2007. Do focused specialists need generalist training?

Reznick RK: Albert Einstein College of Medicine, Department of Obstetrics and Gynecology, Women's Health Fall Symposium 'Autumn in New York, New York, New York, November 2007. Turning it upside down.

Reznick RK: Cervical Spine Research Society, Annual Meeting, San Francisco, California, November 2007. Presidential Address: 80, 70, 60, 50 - Fine tuning our educational model or radical change?

Reznick RK: American College of Surgeons, Annual Clinical Congress, New Orleans, Louisiana, October 2007. (1) Surgical education: James IV 50th anniversary symposium, (2) Decision making in a surgical practice, (3) I need to speak to you: Informing patients or family members about error in care, (4) Patient safety through simulation.

Reznick RK: University of Pittsburg, Grand Rounds, Pittsburgh, Pennsylvania, October 2007. 80, 70, 60, 50 - Fine tuning our educational model (or radical change?)

Reznick RK: Imperial College London, London, United Kingdom, September 2007. Surgical education.

Reznick RK: Royal College of Surgeons of England, London, United Kingdom, September 2007. Team communications: Playing well in the surgical sandbox.

Reznick RK: International Surgical Group, Annual Meeting, London, United Kingdom, August 2007. Surgical education now and in the future.

Reznick RK: International Surgical Week, Annual Meeting, Montreal, PQ, August 2007. (1) Co-Chair of Session: Surgical professionalism in the 21st century, (2) Moderator of Session: Fulminant colitis.

Rotstein LE: First University of Zhengzhou, Zhengzhou, China, November 2007. Invited Speaker: Advances in the management of differentiated thyroid cancer.

Rotstein LE: Sinchuan University, Chengdu, China, November 2007. Invited Speaker: (1) Advances in the management of differentiated thyroid cancer, (2) Minimally invasive parathyroidectomy, (3) Evolution not revolution.

Rotstein LE: Xinxian Medical College First Affiliated Hospital, Weihui, China, November 2007. Invited Speaker: Management of thyroid cancer.

Rotstein LE: Columbian Association of Surgeons, Annual Meeting, Cartagena, Columbia, August 2007. Invited Speaker: (1) Cutaneous melanoma of the head and neck - Challenges in management, (2) Differentiated thyroid cancer 2007 - What's new?, (3) Primary hyparathyroidism - Advances in understanding and treatment.

Taylor BR: Association for Surgical Education, Faculty Development Workshop, Toronto, ON, April 2008. Leading the change for surgery in medical education: Strategies for getting what you need and defending what you have – the rules of the game.

Taylor BR: Ontario Hospital Association and the Ministry of Health and Long-term Care, Conference on Linking the Implications of Surgical Efficiency Target (SET) Program and Wait Time Information, Toronto, ON, January 2008. Beyond SPAI, what's new in perioperative care?

Taylor BR: Ontario Hospital Association, Operating Room Supply Chain Conference, Toronto, ON, October 2007. Clinical specialty supply chain solution. What's in it for me?

Taylor BR: Canadian Association of General Surgeons, Poster Session, Canadian Surgical Forum, Toronto, ON, September 2007. Judge.

Urbach DR: Konferans dili Türkçe ve İngilizcedir, Current Concepts and Controversies in Colorectal Cancer Symposium, Ankara, Turkey, March 2008. (1) Medical evidence and laparoscopic colorectal cancer surgery, (2) Technical shortcomings of laparoscopic colorectal cancer surgery.

Urbach DR: Canadian Institute of Underwriters, 30th Annual Education Seminar, Toronto, ON, January 2008. Gastric ulcers, Barrett's esophagus and their cancer risk.

Wei AC: Credit Valley Oncology Group, Toronto, ON, May 2008. Colorectal liver metastases: Evolving management.

Research and Investigations

Senior Investigator's Name Appears in Italics

A prospective, randomized, controlled trial of radioguided seed localization versus standard needle localization of nonpalpable breast cancers. *Lovrics P*, Reedijk M, Chen V, Cornacchi S, Franic S, Garnett A, Goldsmith CH, Hodgson H, McCready D: *Canadian Breast Cancer Foundation*. (\$223,577 2005 - 2007.)

A randomized comparison of laparoscopic myotomy and pneumatic dilatation for achalasia. *Urbach DR*, Darling G, Kortan P, Diamant N, Tomlinson G, Laporte A, Deitel W: *Canadian Institutes of Health Research*. (\$445,410, 2005 - 2010.)

Altered immune function with aging. Gorczynski RM, Terzioglu E: Turkish Science Foundation. (\$300,000 2006 - 2008.)

Assessing the uptake and effectiveness of laparoscopic surgery for colorectal cancer in Ontario. *Simunovic M*, Urbach DR, Baxter N, Sutradhar R, Cadeddu M, Charles C, Guyatt G, Straus S, Thabane L: *Canadian Institutes of Health Research*. (\$503,248 2008 - 2011.)

Breast cancer clinical research program. Vallis K, McCready DR: University Health Network. (\$800,000 2005 - 2009.)



Breast cancer gene profiling. *Leong WL*, Kulkarni S, Done S, Boerner S, Vallis K, McCready DR, Woodgett JR, Leighl N: *Genome Canada Research Matching Fund*. (\$400,000 2005 - 2009.)

Breast cancer gene profiling. *Leong WL*, Kulkarni S, Done S, Boerner S, Vallis K, McCready DR, Woodgett JR, Leighl N: *Breast Cancer Clinical Research Program, Princess Margaret Hospital.* (\$400,000 2005 - 2009.)

CD200:CD200R regulation of bone growth and development in space-flight. *Gorczynski R*: Microgravity and Bone Cells. *A Canadian Space Agency-Canadian Institutes of Health Research (CSA-CIHR), joint initiative.* (\$116,666 2006 - 2008.)

Cancer Risk Evaluation (CaRE) program. Zanke B, Gallinger S, Hudson T, Kustra R: National Cancer Institute of Canada, Program Project. (\$300,000 2007 - 2010.)

Characterization of germline DNA copy number variation in familial pancreas cancer. *Gallinger S*, Bondy M, Lynch H, Petersen G, Schwartz A, Syngal S, Zogopoulos G: *The Lustgarten Foundation for Pancreatic Cancer Research (USA)*. (\$100,000 2006 - 2007.)

CIHR team in interdisciplinary research on colorectal cancer. *McLaughlin L*, Gallinger S, and 25 others: *Canadian Institutes of Health Research*. (\$3,627,210 2006 - 2011.)

Clinical accountability and value-based purchasing: Linking funding to quality of care. *Dobrow M*, Urbach DR, Ritvo P, Lemieux-Charles L, Wodchis W: *Canadian Institutes of Health Research*. (\$165,348, 2006 - 2009.)

Clinical and biologic effects of metformin in early stage breast cancer. *Goodwin P*, Clemons M, Bordeleau L, Leong WL, O'Malley F, Stambolic V, Khoka R, Rottapel R, Woodgett J, Ennis M, Escallon J: *Susan G. Komen, The Cure Grants*. (\$147,590 2008 - 2011.)

Clinical research in breast cancer. McCready DR: Princess Margaret Hospital Foundation. (\$150,000 2007.)

Combined surgical resection of intra-and-extra hepatic metastases from colorectal cancer: A phase II trial. *Wei A*, Gallinger S, Moore M: *Intra-Structure Program of the Ontario Institute for Cancer Research*. (\$20,000 2007 - 2008.)

Combined surgical resection of intra-and-extra hepatic metastases from colorectal cancer: Effect on patient outcomes and correlation with stem cell markers. *Wei AC*, Gallinger S, Dick J: *Connaught New Staff Matching Grant*. (\$15,000 2008 - 2010.)

Developing a predictive micro-RNA profile for breast cancer. *Liu FF*, Fyles A, McCready DR, Miller N: *Weekend Walkers Breast Cancer Innovation Fund*. (\$72,250 2006 - 2008.)

Developing and validating a predictive micro-RNA signature of node-negative breast cancer area of focus. *Liu F-F*, Hui A, Wie S, Fyles A, McCready DR, Pintilie M, Miller N, Whelan T: *Canadian Breast Cancer Foundation*. (\$393,105 2008 - 2011.)

Development and validation of a virtual reality haptic needle insertion simulator. *Okrainec A*, Apkarian J, Gilbert P: *Health Technology Exchange*. (\$81,177 2008 - 2009.)

Development of a surgical oncology atlas. Urbach DR: Cancer Care Ontario. (\$189,276 2006 - 2007.)

Discontinuity of chronic medications in seniors surviving ICU (intensive care unit) admission: Enhancing medication safety. *Bell C*, Urbach DR, Bajcar J, Bierman A, Zwarenstein M, Scales D: *Canadian Institutes of Health Research*. (\$345,861 2006 - 2008.)

Does virtual surgery translate to better surgery: The impact of high fidelity virtual reality simulation on intraoperative performance. *Okrainec A*, Grantcharov T, Reznick R: *Canadian Association of General Surgeons*. (\$10,000 2007 - 2008.)

Evaluating the quality of sentinel lymph node biopsy practice in Ontario. *Quan ML*, Wright FC, McCready DR, Gagliardi A, Urbach D: *Canadian Breast Cancer Foundation*. (\$329,745 2007 - 2009.)

Evaluating the quality of sentinel lymph node biopsy practice in Ontario. *Quan ML*, Gagliardi AR, Wright FC, McCready DR, Urbach DR: *Canadian Breast Cancer Foundation*. (\$284,745 2007 - 2009.)

Fellowship in surgical oncology. McCready DR: Alfred Hertz Endowment. (\$1,000,000 2007.)

fgl2/FGL2 and xenograft transplantation. Levy G, Gorczynski R, Grant D: Stroke Foundation of Canada. (\$265,800 2007 - 2011.)

Gene expression profiles of prophylactic mastectomy specimens in women at hereditary high risk of breast cancer. *Borderleau L*, Andrulis I, Glendon G, Leong WL, Lipa L, McCready DR, Mulligan AM, O'Malley F, Youngson B: *Canadian Breast Cancer Foundation*. (\$147,590 2007 - 2009.)

Genomics and proteomic identification of biomarkers linked to human breast cancer developments; progression and outcome. *Dirks P*, Vallis K, McCready DR, Leong W: *Genome Canada*. (\$789,297 2006 - 2010.)

Identification of molecular alterations leading to malignancy in ductoscopically procured pure mammary epithelial cell populations. *Done S*, Adams C, Leong W, MacGregor P, Boerner S, Pintilie M, Miller N, Youngson B, McCready DR: *Ontario Cancer Research Network*. (\$543,015 2004 - 2007.)

Integrated assessment of technical and communication skills: Integrated procedural performance instrument (IPPI). *Moulton C*, McDonald C, MacRae H, Kneebone R, Tabak D, LeBlanc V: *American College of Surgeons Foundation*. (\$25,000 2007 - 2008.)

Isolation of breast cancer stem cells and identification of pathways regulating their survival and development. *Mak T*, Done S, McCready DR, Leong WL: *Campbell Family Institute for Breast Cancer Research*. (\$108,300 2006 - 2010.)

Life sciences research in space simulation using a bed rest model. *Hughson R*, Shoemaker K, Hart D, Rush J, Gorczynski R: *Joint initiative of Canadian Space Agency-Canadian Institutes of Health Research*. (\$200,000 2007 - 2009.)

Mechanism(s) for immunoregulation induced in aging by interactions of LPS and hemoglobin. *Gorczynski R: CLP Research.* (\$300,000 2005 - 2009.)

Ontario Clinical Oncology Group, Ministry of Health and Long Term Care. *Gallinger S*, Moulton CA: *PET CAM - (\$1200/case)*. (\$180,000 2005 - 2010.)

Ontario hepatic, pancreatic and biliary (HPB) tract clinical database project. *Wei AC*, Gallinger S, Davies W, Fairfull-Smith R, Hanna S, Marcaccio M, Wall B, Jalink D, Barnett H, Langer B, McLeod R: *Cancer Care Ontario*. (\$35,000 2007 - 2008.)

Pancreatic cancer linkage consortium. Petersen GM, Gallinger S, and 27 others: National Institutes of Health. (\$7,000,000 2002 - 2008.)

Patient specific virtual reality systems for surgical oncology. *DiRaddo R*, Clarke D, Dube S, Fried G, Sutherland G, Okrainec A, Quyumi K, Reznick R, Rolando D, West M: *National Research Council Genomics and Health Initiative*. (\$4,800,000 2008 - 2011.)

Proteimics and protein biomarkers of breast cancers. *Done S*, Leong WL, Kulkarni S, Boerner S, Vallis K, McCready DR, Woodgett JR, Leighl N: *Breast Cancer Clinical Research Program, Princess Margaret Hospital*. (\$400,000 2005 - 2009.)

Proteimics and protein biomarkers of breast cancers. *Done S*, Leong WL, Kulkarni S, Boerner S, Vallis K, McCready DR, Woodgett JR, Leighl N: *Genome Canada Research Matching Fund*. (\$400,000 2005 - 2009.)

Randomized clinical trials for breast cancer. McCready DR: National Surgical Adjuvant Breast and Bowel Project. (\$120,000 2007.)

Role of CD200:CD200R in regulation of cardiac rejection and atherosclerosis. *Gorczynsk RM: Heart and Stroke Association*. (\$100,000 2007 - 2010.)

Role of fg12 in transplantation and cardiac development. Grant D, Levy G: Heart and Stroke Foundation of Canada. (\$227,750 2005 - 2008.)

Role of immediate dendritic cell precursors in immunity and tolerance. *Cattral MS: Canadian Institutes of Health Research/Astellas*. (\$850,000 2005 - 2010.)

Slowing down when you should: A new model of expert surgical judgment. *Moulton C*, Regehr G, MacRae H: *The Physicians'* Services Incorporated Foundation. (\$41,000 2007 - 2009.)

Social, prognostic, and therapeutic factors associated with breast cancer survival in Canada and the US: Health care access and effectiveness in diverse urban and rural areas, 1985-2010. *Gorey KM*, McCready DR, Holowaty E: *Canadian Institutes of Health Research*. (\$374,000 2004 - 2009.)

Team Talk II: A multi-institutional evaluation of a checklist intervention to structure communication and promote patient safety in the operating room. *Lingard L*, Bohnen J, Regehr G, Baker R, Orser B, Doran D, Reznick RK, Rotstein LE, Tan J: *Canadian Institutes of Health Research*. (\$311,734 2004 - 2009.)

The assessment of risk for colorectal tumors in Canada (ARCTIC) genome project. *Zanke B*, Hudson T, Gallinger S, Cotterchio M, Lemmens T: *Genome Canada*. (\$9,600,000 2004 - 2007.)

The association of cigarette smoking and genetic polymorphisms in carcinogen metabolizing enzymes with pancreatic cancer risk. *Cleary SP*: Grant Miller Research Grant: *University of Toronto*. (\$20,000 2008.)



The chemotherapeutic potential of notch signaling inhibitors in breast cancer. *Reedijk M*, Connolly E: *Weekend Walkers Breast Cancer Innovation Fund*. (\$72,250 2007.)

The effectiveness of telesimulation for teaching the fundamentals of laparoscopic surgery in Africa. Okrainec A, Azzie G: Society of American Gastrointestinal and Endoscopic Surgeons. (\$25,753 2008 - 2009.)

The MYH gene and colorectal cancer risk. *Gallinger S*, Cotterchio M, Bristow R, Manno M, Bishop T: *National Cancer Institute of Canada (NCIC)*. (\$423,000 2005 - 2008.)

The young adult survivors of cancer study. *Baxter N*, Urbach DR, Sutradhar R, Simunovic M, Paszat L, Rabeneck L, Singh S: *Canadian Institutes of Health Research*. (\$577,989 2008 - 2011.)

Therapeutic notch inhibition in breast cancer; toward identifying a predictive test and a mode of action. *Reedijk M: Canadian Breast Cancer Foundation*. (\$198,836 2008 - 2010.)

Thymoglobulin versus basiliximab induction therapy in living donor liver transplant. *Greig PD*, Ghanekar A: *Genzyme Corporation*. (\$50,000 2007 - 2009.)

Transillumination breast spectroscopy (TIBS) and breast cancer risk assessment. *Lilge L*, Leong WL, Kulkarni AS, Knight J, Liu FF, McCready DR, Done S: *National Cancer Institute of Canada*. (\$352,481 2006 - 2009.)

Transillumination breast spectroscopy (TIBS) and breast cancer risk assessment. *Lothar L*, Knight J, McCready DR, Liu F-F: *Canadian Breast Cancer Research Alliance*. (\$352,481 2006 - 2009.)

Validation of an integrated assessment of technical and communication skills: Integrated procedural performance instrument (IPPI). *Moulton C*, McDonald C, MacRae H, Kneebone R, Tabak D, LeBlanc V: *Medical Council of Canada*. (\$62,000 2006 - 2008.)

Honours Received

Okrainec A: Frank Mills Award for Excellence in Teaching by a General Surgery Faculty Member. July 2007.

Reznick RK: Honorary Professorship, Imperial College London. September 2007.

DIVISION OF NEUROSURGERY

Dr. M. Bernstein – Professor Dr. K.D. Davis - Professor Dr. J.H. Eubanks – Associate Professor Dr. M.G. Fehlings - Professor Dr. F. Gentili – Professor Dr. A. Guha – Professor Dr. M. Hodaie – Assistant Professor Dr. A.R. Hudson - Professor Dr. W.D. Hutchison - Associate Professor Dr. K.M. Johnston – Assistant Professor Dr. S. Karimi-Abdolrezaee – Assistant Professor Dr. A.M. Lozano - Professor Dr. E.M. Massicotte - Assistant Professor Dr. J.A. Saint-Cyr – Professor Dr. C. Tator - Professor Dr. M. Tymianski – Professor Dr. T. Valiante – Assistant Professor Dr. A.A. Velumian – Assistant Professor Dr. M.C. Wallace - Professor (Division Head)

Publications

Ackery A, Hagel BE, Provvidenza C, Tator CH: An international review of head and spinal cord injuries in alpine skiing and snowboarding. Injury Prevention: December 2007: 13(6): pp 368-375.

Al-Nedawi K, Meehan B, Micaleff J, Lhotak V, May L, Guha A, Rak J: Intercellular transfer of microvesicles containing oncogenic EGFRvIII. Cells and Materials: May 2008: 10(5): pp 619-624.

Alafifi T, Kern R, Fehlings M: Clinical and MRI predictors of outcome after surgical intervention for cervical spondylotic myelopathy. Journal of Neuroimaging: October 2007: 17(4): pp 315-322.

Allendes FE, Lozano AM, Hutchison WD: Attenuation of long-term depression in human striatum after anterior capsulotomy. Stereotactic and Functional Neurosurgery: May 2008: 86(4): pp 224-230.

Austin JW, Fehlings MG: Molecular mechanisms of Fas mediated cell death in oligodendrocytes. Journal of Neurotrauma: May 2008: 25(5): pp 411-426.

Balasubramanian A, Shannon P, Hodaie M, Laperriere N, Michaels H, Guha A: Glioblastoma multiforme after radiosurgery for acoustic neuroma: Case report and review of the literature. Neurooncology: October 2007: 4: pp 447-453.

Baptiste DC, Fehlings MG: Emerging drugs for spinal cord injury. Expert Opinion on Emerging Drugs: March 2008: 13(1): pp 63-80.

Chen JK, Johnston KM, Ptito A: Recovery from mild head injury in sports: Evidence from serial functional MRI studies in male athletes. Clinical Journal of Sport Medicine: January 2008: 18: pp 241-247.

Chen JK, Johnston KM, Collie A, McCrory P, Ptito A: A validation of the post concussion symptom scale in the assessment of complex concussion using cognitive testing and functional MRI. Journal of Neurology, Neurosurgery, and Psychiatry: November 2007: 78: pp 1231-1238.

Chen JK, Johnston KM, Petrides M, Ptito A: Neural substrates of symptoms of depression following concussion in male athletes with persisting post concussion symptoms. Archives of General Psychiatry: January 2008: 65: pp 81-89.

Chu GKT, Fehlings MG: The p75 neurotrophin receptor is essential for neuronal cell survival and improvement of functional recovery after spinal cord injury. Neuroscience: September 2007: 148(3): pp 668-682.

da Costa LB, ter Brugge K, Farb R, Wallace MC: Surgical disconnection of cortical venous reflux as a treatment for Borden type II dural arteriovenous fistulae. Acta Neurochirurgica: October 2007: 149: pp 1103-1108.

Davis KD: New Techniques for Examining the Brain: (Chudler E, ed.) Chelsea House Publishers, New York: 2007: pp 1-120.



Davis KD, Pope G, Chen J, Kwan CL, Crawley AP, Diamant NE: Cortical thinning in irritable bowel syndrome: Implications for homeostatic, attention and pain processing. Neurology: January 2008: 70: pp 153-154.

Davis KD, Seeman MV, Chapman J, Rotstein O: A graduate student oath. Science: June 2008: 320: pp 1587-1588.

Dehdashti AR, Ganna A, Karabatsou K, Gentili F: Purely endoscopic endonasal approach for pituitary adenomas: Early surgical results in 164 patients and comparison to previous microsurgical series. Neurosurgery: May 2008: 62: pp 1006-1015.

Dehdashti AR, Gentili F: Current state of the art in the diagnosis and treatment of Cushing's disease: Early experience with the purely endoscopic endonasal technique. Neurosurgical Focus: September 2007: 23(3): pp E9.

Dvorak M, Fisher CG, Aarabi B, Harris MB, Hurbert RJ, Rampersaud YR, Vaccaro A, Harrop JS, Nockels RP, Madrazo IN, Schwartz D, Kwon BK, Zhao Y, Fehlings MG: Clinical outcomes of 90 isolated unilateral facet fractures, subluxations, and dislocations treated surgically and nonoperatively. Spine: December 2007: 32(26): pp 3007-3013.

Dvorak MF, Fisher CG, Fehlings MG, Rampersaud YR, Oner FC, Aarabi B, Vaccaro AR: The surgical approach to subaxial cervical spine injuries: An evidence-based algorithm based on the SLIC classification system. Spine: November 2007: 32(23): pp 2620-2629.

Eftekharpour E, Karimi-Abdolrezaee S, Fehlings MG: Current status of experimental cell replacement approaches for spinal cord injury. Neurosurgical Focus: March 2008: 24(3-4): pp E19.

Ehsani S, Hodaie M, Liebsch NJ, Gentili F, Kiehl TR: Anaplastic glioma after high-dose proton-photon radiation treatment for low-grade skull base chondrosarcoma. Journal of Neuro-Oncology: June 2008: 88(22): pp 231-236. E-published March 15, 2008.

Ehsani S, Kiehl TR, Bernstein A, Gentili F, Asa SL, Croul SE: Creation of a retrospective searchable neuropathologic database from print archives at Toronto's University Health Network. Laboratory Investigation: January 2008: 88(1): pp 89-93.

Fehlings MG: Reducing medical errors: An essential aspect of neurosurgical practice [Editorial.] Journal of Neurosurgery: Spine: November 2007: 7(5): pp 465-466.

Fehlings MG: Repair of the chronically injured human spinal cord [Editorial.] Journal of Neurosurgery: Spine: March 2008: 8(3): pp 205-206.

Fehlings MG, Furlan JC: Effect of age on spinal cord injury. Journal of Neurosurgery: Spine: September 2007: 7(3): pp 275-276.

Furlan JC, Bracken MB, Fehlings MG: Is age a key determinant of mortality and neurological outcome after acute traumatic spinal cord injury? Neurobiology of Aging: E-published June 10, 2008.

Furlan JC, Fehlings MG: Role of screening tests for deep venous thrombosis in asymptomatic adults with acute spinal cord injury: An evidence-based analysis. Spine: August 2007: 32(17): pp 1908-1916.

Furlan JC, Fehlings MG, Massicotte EM, Aarabi B, Vaccaro AR, Bono CM, Madrazo I, Villanueva C, Grauer JN, Mikulis D: A quantitative and reproducible method to assess cord compression and canal stenosis after cervical spine trauma: A study of interrater and intra-rater reliability. Spine: September 2007: 32(19): pp 2083-2091.

Furlan JC, Perrin RG, Govinder PV, Petrenko Y, Massicotte EM, Rampersaud YR, Lewis S, Fehlings MG: Use of osteogenic protein-1 in patients at high risk for spinal pseudarthrosis: A prospective cohort study assessing safety, health-related quality of life, and radiographic fusion. Journal of Neurosurgery: Spine: November 2007: 7(5): pp 486-495.

Furlan JC, Urbach DR, Fehlings MG: Optimal treatment for severe neurogenic bowel dysfunction after spinal cord injury: A decision analysis. British Journal of Surgery: September 2007: 94(9): pp 1139-1150.

Gajadhar A, Munoz D, Guha A: Chapter 16: Molecular biology of astrocytomas: A review. In: Progress in Clinical Neurosciences, Vol 22: (Rajshekhar V, Bhattacharyya K, eds.) Byword Books, Delhi: 2007: pp 171-184.

Golan JD, Marcoux J, Golan E, Schapiro R, Johnston KM, Maleki M, Khetarpal S, Jacques L: Traumatic brain injury in intoxicated patients. The Journal of Trauma, Injury, Infection and Critical Care: August 2007: 63: pp 365-369.

Gurd JW, Rawof S, Zhen HJ, Dykstra C, Bissoon N, Teves L, Wallace MC, Rostas JA: Ischemia and status epilepticus results in enhanced phosphorylation of calcium and calmodulin stimulated protein kinase II on threonine 253. Brain Research: E-published April 26, 2008.

Guridi J, Obeso JA, Rodriguez-Oroz MC, Lozano AM, Manrique M: L-Dopa induced dyskinesia and stereotactic surgery for Parkinson's disease. Neurosurgery: February 2008: 62(2): pp 311-325.

Hajioff D, Raut VV, Walsh RM, Bath AP, Bance ML, Guha A, Tator CH, Rutka JA: Conservative management of vestibular schwannomas: Third review of a 10-year prospective study. Clinical Otolaryngology: June 2008: 33(3): pp 255-259.

Hamani C, Hodaie M, Chiang J, Del Campo M, Andrade DM, Sherman D, Mirski M, Mello LE, Lozano AM: Deep brain stimulation of the anterior nucleus of the thalamus: Effects of electrical stimulation on pilocarpine-induced seizures and status epilepticus. Epilepsy Research: February 2008: 78(2-3): pp 117-123.

Hamani C, Lozano AM, Moro E, Zadikoff C, Poon YY: Location of active contracts in patients with primary dystonia treated with globus pallidus deep brain stimulation. Neurosurgery: March 2008: 62(Supp1 1): pp 217-223.

Hamani C, McAndrews MP, Zumsteg D, Wennberg R, Lozano AM: Memory enhancement induced by hypothalamic/fornix deep brain stimulation. Annals of Neurology: January 2008: 63(1): pp 119-123.

Hutchison WD, Lim AS, Lozano AM, Moro E, Hamani C, Dostrovsky JO, Lang AE, Wennberg RA, Murray BJ: Characterization of REM-sleep associated ponto-geniculo-occipital waves in the human pons. Sleep: July 2007: 30(7): pp 823-237.

Hutchison WD, Toda H, Hamani C, Fawcett AP, Lozano AM: The regulation of adult rodent hippocampal neurogenesis by deep brain stimulation. Journal of Neurosurgery: January 2008: 108: pp 132-138.

Hutchison WD, Weinberger M, Hamani C, Moro E, Lozano AM, Dostrovsky JO: Pedunculopontine nucleus microelectrode recordings in movement disorder patients. Experimental Brain Research: March 2008: 188(2): pp 165-174.

Jacobs WB, Fehlings MG: Ankylosing spondylitis and spinal cord injury: Origin, incidence, management, and avoidance. Neurosurgical Focus: January 2008: 24(1): pp E12.

Jeannon JP, Goldstein DP, Bachar G, Gentili F, Irish JC: Forestier disease causing dysphagia. Journal of Otolaryngology, Head and Neck Surgery: February 2008: 37(1): pp E11-E14.

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Invited Visits

Davis KD: University of Minnesota, Neurology Grand Rounds, Minneapolis, MN, May 2008. The brain in acute and chronic pain.

Davis KD: Society for Neuroscience, Symposium on the Brain in Chronic Pain, San Diego, California, November 2007. The brain in visceral chronic pain.

Davis KD: Dalhousie University, Continuing Education on Current Perspectives on the Management of Chronic Pain, Halifax, NS, October 2007. Cortical mechanisms of chronic pain.

Davis KD: Organization for Computational Neuroscience, 16th Annual International Meeting, Toronto, ON, July 2007. What can brain imaging add to neuronal and network representations of pain and attention?

Fehlings MG: American Spine Injury Association/Spine Trauma Study Group Meeting, San Diego, California, June 2008. (1) Co-Chair and presentation: STSG update and vision for the future, (2) STASCIS (Surgical Treatment of Acute Spinal Cord Injury Study) update and plans for radiographic analysis, (3) Member and participant in ASIA's Industry Advisory Council meeting, (4) Co-Chair: Spine Symposium: Spinal trauma: Evidence-based spine trauma treatment techniques, (5) Session 2 Spinal Cord Injury: Case on cervical dislocation and incomplete SCI.



Fehlings MG: AOSpine North America, Coronado, San Diego, California, June 2008. (1) Setting the standard in research: Summary of activities and challenges for SCICOM (Scientific Committee), (2) Wrap up/Summit evaluation/Take away message.

Fehlings MG: Canadian Neurological Sciences Federation, Victoria, BC, June 2008. (1) Chair of Select Plenary Presentation, (2) Talk - The STASCIS (Surgical Treatment of Acute Spinal Cord Injury Study): Initial one-year results of a prospective, multicenter trial to evaluate the role and timing of decompression in patients with cervical spinal cord injury, (3) Spine Course: Transplant strategies - neural stem cell transplantation and bioengineered strategies for repair and regeneration of the injured spinal cord.

Fehlings MG: European Multicenter Study on Human Spinal Cord Injury, Institute Guttmann, Barcelona, Spain, June 2008. Presentation on the Spinal Cord Injury Translational Research Network in Canada.

Fehlings MG: The Multidisciplinary Team in Locomotor Rehabilitation, Montreal, PQ, June 2008. (1) Co-organizer of meeting on Spinal Cord Function, Repair and Rehabilitation After Injury, (2) Repair and regeneration of the acutely injured spinal cord: Opportunities for clinical translation of basic discoveries.

Fehlings MG: Advancing Surgeons' Clinical Expertise and New Design, Washington, District of Columbia, May 2008. An update on translational research in spinal cord injury - Are we any closer to the cure?

Fehlings MG: Canadian Association for Neuroscience, Montreal, PQ, May 2008. (1) Chair - Therapeutic approaches for spinal cord injury: From neuroprotection to neural repair, (2) Lecture - Translational opportunities in SCI with an update on current clinical trials.

Fehlings MG: Christopher and Dana Reeve Foundation, Spinal Cord Symposium, Atlanta, Georgia, May 2008. Keynote address - A special overview of spinal cord injury: Including a unique perspective on potentially viable therapies either in clinical trials or on their way to trials.

Fehlings MG: University of Virginia, Charlottesville, Virginia, May 2008. Visiting Professor: Repair and regeneration of the injured spinal cord: Clinical translation of basic science discoveries.

Fehlings MG: AO North America, Baltimore, MD, April 2008. STASCIS and its importance in contemporary cervical spinal cord injury management participants cases.

Fehlings MG: AOSpine North America, 6th Annual Fellows Forum, Calgary, AB, April 2008. (1) Chairman, (2) Moderator of Keynote Lecture - Management of TB of the spine: Historical perspective and the future, (3) Moderator: Clinical research, (4) Moderator of Keynote Lecture - AOSpine North America: How it can work for you?, (5) Lecture - The treatment of cervical spondylotic myelopathy: A prospective study.

Fehlings MG: Canadian Spine Society, Sun Peaks, BC, March 2008. Lumbar spinal stenosis: Role of minimally invasive approaches.

Fehlings MG: American Association of Neurological Surgeons/Congress of Neurological Surgeons, Section on Disorders of the Spine and Peripheral Nerves, Orlando, Florida, February 2008. Complex cervical revision (kyphosis, failed major reconstruction).

Fehlings MG: National Football League Teams Physician Society, Indianapolis, Indiana, February 2008. Current and emerging neuroprotective and regenerative strategies for spinal cord injury.

Fehlings MG: ONE Spine, Cancun, Mexico, February 2008. (1) Optimal treatment in immediate posterior reduction and instrumentation, (2) The optimal management involving immediate decompression and reconstruction, (3) Best treatment options - Minimally invasive TLIF preferred over open TLIF.

Fehlings MG: University of California, Management of the Neurotrauma Patient Residents Program, San Francisco, California, February 2008. (1) Role and timing of decompression for acute SCI: STASCIS trial update, (2) New horizons in SCI (spinal cord injury).

Fehlings MG: Vail Spinal Summt, Vail, Colorado, February 2008. (1) Cervical adjacent segment and multilevel disease: Treatment options, (2) Cervical spinal cord injuries: Methods and timing, (3) Spinal cord regeneration.

Fehlings MG: Spine Trauma Study Group, Denver, Colorado, January 2008. What is the optimal timing of surgical intervention in the setting of acute SCI?

Fehlings MG: Word Forum for Spine Research, AOSpine, Kyoto, Japan, January 2008. Novel insights into the pathophysiology of cervical spondylotic myelopathy.

Fehlings MG: AO Spine North America, Davos, Switzerland, December 2007. Invited Faculty: (1) Trauma and Tumor Course: Where are we in research on SCI (spinal cord injury)?, (2) Cervical Spine Course: General principles on cervical trauma, polytrauma patients management - role of the spine surgeon, (3) Trauma and Tumor Course: Technical aspects for resection in the occipitocervical and cervical spine, (4) The voices of the masters, where are we in research on spinal cord injury?, (5) Thoracolumbar Spine Course: Treatment options, (6) The voices of the masters, current research on spinal cord injury. **Fehlings MG**: US Department of Veteran Affairs, 12th International Symposium on Neural Regeneration, Pacific Grove, California, December 2007. Keynote Lecture: Repair and regeneration of the injured spinal cord: Opportunities for clinical translation of basic research discoveries.

Fehlings MG: Society for Neuroscience, Symposium, San Diego, California, November 2007. Spinal cord injury: Time to move?

Fehlings MG: Spinal Cord Injury Association of Kentucky, Louisville, Kentucky, November 2007. Repair and regeneration of the injured spinal cord: Opportunity for the clinical translation of basic discoveries.

Fehlings MG: AO Spine Asia Pacific and AO Spine North America, Hong Kong, October 2007. (1) Faculty, (2) How I manage cervical myelopathy.

Fehlings MG: Christopher Reeve Foundation, International Spinal Research Trust, Internationales Forschungsintitut fuer Paraplegiologie, Joint Meeting, Zurich, Switzerland, September 2007. Repair of the human spinal cord: Clinical perspectives and insights based on recent clinical trials.

Fehlings MG: Congress of Neurological Surgeons, San Diego, California, September 2007. (1) Special course II - Future advances: Stem cell therapy, regeneration, and robotics, (2) Spine trauma and spinal cord injury: Advances in medical and surgical management.

Fehlings MG: International Brain Research Organization, Satellite Meeting on Function of Myelinated Axons and Glial-Axonal Signaling in the CNS: Basic Aspects and Clinical Implications, Melbourne, Australia, July 2007. (1) Chair, (2) Speaker: Glial-axonal interactions and axonal function in mature CNS white matter: Implications to spinal cord injury and repair.

Fehlings MG: University of Melbourne, Department of Surgery, Melbourne, Australia, July 2007. Repair and regeneration of the injured spinal cord with a focus on neural stem cell based remyelination strategies.

Fehlings MG: World Spine IV, World Spine Society, Istanbul, Turkey, July 2007. (1) Faculty and scientific abstract reviewer, (2) Moderator: Spinal cord injury: From molecule to man, (3) Moderator: Diagnostics, imaging and spinal cord injury.

Gentili F: Rome International Skull Base and Cerebrovascular Workshop, Session III Chordomas, Rome, Italy, June 2008. Invited Guest Speaker: (1) Open vs. expanded approaches to the skull base: Indications and limitations, (2) Management of asymptomatic aneurysm - International Study of Unruptured Intracranial Aneurysms past, present and future, (3) Moderator: Session on management of chordomas.

Gentili F: IV World Congress for Endoscopic Surgery of the Brain on Skull Base and Spine, Sao Paolo, Brazil, May 2008. (1) Panel Moderator: How to manage CSF leaks and orbital lesions, (2) Speaker: New expanded approaches to the skull base: Indications, limitations and complications.

Gentili F: University of Trier, Guest, 6th Hands-on Workshop: Endoscopic Transnasal Approaches to the Skull Base, Trier, Germany, May 2008. (1) Faculty cadaver dissection, (2) Moderator of a live surgery, (3) Presentation: Extended endoscopic approaches to the skull base.

Gentili F: American Association of Neurological Surgeons, Annual Meeting, Breakfast Seminar on Open vs. Endoscopic Approaches to the Skull Base, Chicago, Illinois, April 2008. Guest.

Gentili F: University of Brussels, 2008 William S. Keith Professorship in Neurosurgery, Professor Jacques Brotchi, President of the World Federation of Neurosurgical Societies, Brussels, Belgium, March 2008. Course Organizer and Chair.

Gentili F: All Institute of Medical Sciences and Skull Base Surgery Society of India, New Delhi, India, December 2007. Live satellite transmission of endoscopic pituitary surgery.

Gentili F: Interdisciplinary Problem-Solving in Skull Base Surgery, Advanced Cranio-Maxillofacial Forum, Continuing Medical Education Activity, Washington, DC, November 2007. (1) Co-Chair - Course: Overview of skull base surgery: Neurosurgery perspective, (2) Case presentations. Expert Panel Member.

Gentili F: Impromed Medical Education Division, Overview of Skull Base Surgery, Washington, District of Columbia, November 2007. (1) Co-Chair: Interdisciplinary problem-solving in skull base surgery: The team approach, (2) Case presentations, (3) Expert Panel Member.

Gentili F: Japan Neurosurgical Society, 66th Annual Meeting, Tokyo, Japan, October 2007. Guest Lecturer: Verification of long-term outcome in the treatment of pituitary adenomas.

Gentili F: Skull Base Society of India, 9th Annual Meeting, October 2007. Moderator, Approaches to Skull Base. (1) Lecture: Endoscopic skull base surgery for lesions of the anterior skull base: Indications and limitations, (2) International live surgery telecast on endoscopic pituitary surgery.



Gentili F: World Federation of Neurosurgical Societies, Microsurgery and Endoscopy Skull Base Cadaver Workshop, New Delhi, India, October 2007. Endoscopic skull base techniques.

Gentili F: Congress of Neurological Surgeons, Luncheon Seminar at the Annual Meeting, San Diego, California, September 2007. Presentation: Anterior skull base approaches - what, when and how.

Gentili F: University of Vienna, Schloffer Conference and International Society of Pituitary Surgeons, Vienna, Austria, September 2007. Invited Lecturer: (1) Expanded endoscopic techniques for pituitary and other sellar and suprasellar lesions, (2) Extended approaches, complications.

Gentili F: University of Minnesota, Endoscopic Complications Study Group, Minneapolis, Minnesota, August 2007. Panel Speaker: Complications and outcomes in endoscopic skill base surgery.

Guha A: Canadian Neurooncology Meeting, Banff, AB, May 2008. Gliomas: Lessons from the mouse.

Guha A: Mount Sinai School of Medicine, Department of Oncological Sciences, Grands Rounds, New York, New York, May 2008. Transgenic glioma models as gene discovery tools.

Guha A: The Cancer Genome Atlas, GBM (Glioblastoma Multiforme) Workshop, Washington, District of Columbia, March 2008.

Guha A: 6th Conference on Evidenced Based Management of Cancers, Tata Memorial Centre, Mumbai, India, February 2008. (1) Molecular analysis of brain tumors: Current and future, (2) Management of ependymomas.

Guha A: King Faisal Specialist Hospital and Research, Hope for the Future, Brain Gliomas Workshop, Riyadh, Saudi Arabia, February 2008. (1) Molecular biology of gliomas: From bench to bedside, (2) Management of malignant gliomas, (3) Management of peripheral nerve tumors.

Guha A: American Society of Pediatric Nephrology, Beverly Hills, California, January 2008. Management of MPNST (malignant peripheral nerve sheath tumor.)

Guha A: Society of Neurooncology, 18th Breakfast Seminar, Dallas, Texas, November 2007. Genetically engineered mouse glioma models.

Guha A: National Cancer Institute, Heterogeneity in Metabolism of Human Gliomas, Dallas, Texas, November 2007. Mouse models in human cancer consortium.

Guha A: Society of Neurooncology, Dallas, Texas, November 2007. (1) Molecular, cellular and pathological properties of genetically modified Synthetic Astrocytes differentiated from Embryonic Stem (ES) cells In-Vitro, (2) Results from PRECISE: A randomized Phase 3 study in patients with first recurrent GBM comparing Cintrdkin Besdudotox administered via Convection-Enhanced Delivery (CED) with Gliadel wafers, (3) GATA4 expression in the normal CNS and its frequent loss in human gliomas, (4) Expression and functional significance of Inhibitors of Apoptosis Proteins (IAPs) in Human Gliomas, (5) The Warburg effect and tumor cell survival in human GBM 6: Role of neuropilin1-semaphorin3A mediated activation of plexinA1 in regulating.

Guha A: Dartmouth University, 3rd Annual Fall Conference on Neurooncology and Supportive Care, Providence, Rhode Island, October 2007. (1) Molecular biology of gliomas: Bench to bedside.

Guha A: 2007 International Workshop on Glioma Research and Therapy, Boston, Massachussetts, October 2007. Molecular heterogeneity in GBMs.

Guha A: European Genes and Cancer Meeting, London. England, October 2007. (1) Molecular, cellular and pathological properties of genetically modified synthetic astrocytes differentiated from embryonic stem (ES) cells in-vitro, (2) Inhibitors of apoptosis in glioblastomas, (3) Mass spectrometry-based cancer marker discovery and verification.

Guha A: Children Tumor Foundation (sponsored by National Cancer Institute), Quebec City, PQ, October 2007. Neurological diseases of childhood: Summary of proceedings.

Guha A: The Kline Festschrift Symposium on Nerve MPNST, New Orleans, October 2007. Biological diagnostics and therapeutics of MPNST.

Guha A: Congress of Neurological Surgeons, Utah, September 2007. (1) GATA-6 is an astrocytoma tumor suppressor gene identified by gene trapping of genetically engineered mouse glioma astrocytes, (2) Genetic alterations in the initiation and progression of NF1 deficient Schwann Cells in Peripheral Nerve Sheath Tumors (PNST), (3) Characterization of GATA4 in the human and mouse CNS and its role as a candidate tumor suppressor in gliomas, (4) Differential role of Neuropilin1 in regulating angiogenesis vs. invasion in the center vs. periphery of human glioblastoma multiforme (GBM), (5) FDG-PET/CT in the differentiation of benign from malignant peripheral nerve sheath tumors in patients with neurofibromatosis 1.

Guha A: Schering Plough Canada Inc., Canadian Neurooncology Update, Barcelona, Spain, September 2007. Canadian virtual tumor bank and Warburg effect and GBMs.

Hodaie M: American Society for Stereotactic and Functional Neurosurgery, Vancouver, BC, June 2008. Radiosurgery for the treatment of movement disorders.

Hodaie M: Leksell Gamma Knife Society, Quebec City, PQ, May 2008. Dosimetric comparison between single iso-center and dual iso-center techniques for gamma knife radiosurgery in trigeminal neuralgia.

Hodaie M: McMaster University, Hamilton, ON, May 2008. Gamma knife radiosurgery: The experience at the Toronto Western Hospital.

Hodaie M: The American Association of Neurological Surgeons, Chicago, Illinois, April 2008. Breakfast Seminar No. 219, The future of global neurosurgery: The use of online learning modules in international neurosurgery.

Hodaie M: Canadian Radiosurgery Society, Mont-Tremblant, PQ, February 2008. Introduction to functional radiosurgery.

Hutchison W: Medtronic, Banff, AB, May 2008. Focus on innovative theory and techniques for activa DBS procedures.

Hutchison W: Abteilung Neurologie, UniKlinik Aachen, Rheinwestfalen Technical Universitat, Aachen, Germany, December 2007. Basal ganglia oscillations, synaptic plasticity and movement disorders.

Hutchison W: Universitaets Klinik, Henrich Heine Universitaet, (Host, Alfons Schnitzler), Dusseldorf, Germany, December 2007. Basal ganglia, synaptic plasticity, oscillations and movement disorders.

Hutchison W: University of Waterloo, Division of Neural Engineering, Kitchener, Waterloo, December 2007. Basal ganglia, oscillations and synaptic plasticity in movement disorders.

Hutchison W: Christian-Albrechts-Universitat, DBS case with Jens Volkmann, Neurology Clinic, Kiel, Germany, September 2007. Operating Room visit.

Hutchison W: University of California, Dana Foundation, Los Angeles, USA, July 2007. Dual microelectrode recordings of evoked potentials in subgenual cingulate cortex.

Johnston K: ThinkFirst Foundation of Canada, Winnipeg, MB, January 2008. The concussion road show.

Johnston K: Hockey Canada, Dr. Tom Pashby Sport Safety Fund, ThinkFirst Foundation of Canada, Ottawa, ON, November 2007. The concussion road show.

Johnston K: Toronto Rehabilitation Institute, Toronto, ON, November 2007. The concussion road show.

Lozano AM: Bellaria Hospital, Department of Surgery, Neuromodulation Conference, Como, Italy, June 2008. Invited Speaker: New trends in neurostimulation: Where does the pipeline go?

Lozano AM: Movement Disorder Society, 12th International Congress of Parkinson's Disease and Movement Disorders, Chicago, Illinois, June 2008. Session Chair: Deep brain stimulation surgery meets neurosurgery.

Lozano AM: ABCUR, Mar del Plata, Argentina, May 2008. Guest Speaker: (1) Thalamic anterior ventral nucleus stimulation for the control of epilepsy, (2) Considerations about the surgical treatment of movement disorders. (3) Neuromodulation of area 25 in chronic depression.

Lozano AM: Columbia University, Department of Neurosurgery, Grand Rounds, New York, New York, May 2008. (1) Advances in functional neurosurgery, (2) Deep brain stimulation to drive transactions in dysfunctional motor and limbic circuits.

Lozano AM: Columbia University, Movement Disorder Center, New York, New York, May 2008. Surgery for gait dysfunction in Parkinson's disease.

Lozano AM: Johnson and Johnson, Scientific Advisory Meeting, Newark, New Jersey, May 2008. Applications of neurotechnologies.

Lozano AM: The Rockefeller University, Paul Greengard Laboratory of Molecular and Cellular Neuroscience, New York, New York, May 2008. Stimulating the neural substrates of depression in mice and man.

Lozano AM: University of Kiel, Neuroscience Symposium, Kiel, Germany, April 2008. Speaker: Should we use neurosurgery to modulate mood and cognition?

Lozano AM: American Association for Neurological Surgeons, Annual Meeting, Breakfast Seminar, Surgery for Psychiatric Disorders, Chicago, Illinois, April 2008. Special Lecture: Adjusting the dials on the circuits of the brain.



Lozano AM: University of Auckland, Auckland, New Zealand, March 2008. Visiting Professor: Surgery for Parkinson's disease.

Lozano AM: Queen's University, Centre for Neuroscience Studies Seminar Series and Maitland Baldwin Memorial Lecture, Kingston, ON, February 2008. Speaker: (1) Adjusting the activity of brain circuits to improve neurological function. (2) Treating depression with deep brain stimulation.

Lozano AM: University of Florida, McKnight Brain Institute, Department of Neurological Surgery, Gainsville, Florida, February 2008. Visiting Professor: (1) Adjusting the activity of brain circuits to improve neurological function, (2) Treating depression with deep brain stimulation.

Lozano AM: Mount Sinai Hospital, Neurology Grand Rounds, New York, New York, January 2008. Traveling through the brain adjusting the activity of various circuits.

Lozano AM: Boehringer Ingelheim, International Advisory Board Meeting, Miami, Florida, December 2007. Novel targets for deep brain stimulation: Can gait and balance be improved ?

Lozano AM: World Federation of Neurology, XVIIth WFN World Congress on Parkinson's Disease, Amsterdam, The Netherlands, December 2007. (1) Co-Chairman, Session on Neurosurgical Interventions (DBS, cell transplantation and gene therapy), (2) Surgical strategies in parkinsonism.

Lozano AM: American Academy of Neurological Surgery Meeting, Las Vegas, Nevada, November 2007. Deep brain stimulation increases adult hippocampal neurogenesis.

Lozano AM: Institute of Electrical and Electronic Engineers (IEEE) Biomedical Circuits and Systems Conference, Montreal, PQ, November 2007. Fine tuning the circuits of the brain to improve function.

Lozano AM: Vanderbilt University Children's Hospital, Cully Cobb Lecture, Nashville, Tennessee, October 2007. DBS in psychiatric disease.

Lozano AM: Parkinson's Disease Foundation, 50th Anniversary, Frontiers of Science and Clinical Advances in Quality of Life in Parkinson's Disease, New York, New York, October 2007. Basal ganglia - Physiology and DBS.

Lozano AM: 16th Symposium on the Treatment of Parkinson's Disease, Tokyo, Japan, September 2007. Invited Speaker: What can we learn from DBS and pathophysiology of gait disorders.

Massicotte EM: Spine Week 2008, Geneva, Switzerland, May 2008. Surgical management of neurofibromatosis type-1: Case series.

Massicotte EM: AOSpine North America, Sun Valley, Idaho, February 2008. Excellence in spine: Advanced concepts in the management of spinal disorders.

Massicotte EM: Annual Caribbean Neurosciences Symposium, Montego Bay, Jamaica, January 2008. Cervical spondylosis management, surgical management of NF-1.

Massicotte EM: AOSpine International, Davos, Switzerland, December 2007. Advance course on cervical spine, degenerative and deformity, thoracolumbar trauma and tumor.

Massicotte EM: AOSpine North America, Las Vegas, Nevada, November 2007. Principles and treatment of spinal disorders for resident and fellows.

Massicotte EM: Congress of Neurological Surgeons, San Diego, California, September 2007. Adult and pediatric spinal trauma surgery.

Massicotte EM: Neuro-Trauma Symposium, Synthes, Bethesda, Maryland, August 2007. Spinal cord research update: Neurotrauma and critical care management.

Tator C: Canadian Neurological Sciences Federation, Victoria, BC, June 2008. Penfield Lecture – Sports related brain and spinal cord injuries in Canada.

Tator C: Spinal Cord Function, Repair and Rehabilitation After Injury, Montreal, PQ, June 2008. Historical perspective on therapeutic studies of spinal cord injury in Canada.

Tator C: Spine Week 2008 Congress, Geneva, Switzerland, May 2008. Key Lecture: The evidence for early decompression after spinal cord trauma.

Tymianski M: Stroke Conference, New Orleans, Louisiana, February 2008. (1) Brainstem arteriovenous malformations: Natural history, multimodality management and long-term follow up, (2) Multimodality care of occipital lobe AVMS: Neurological outcomes of a prospective series of 134 patients, (3) Posterior fossa arteriovenous malformations-angioarchitectural factors affecting outcome.

Velumian AA: International Brain Research Organization, Function of Myelinated Axons and Glial-Axonal Signaling in the CNS: Basic Aspects and Clinical Implications, 2007 Satellite Symposium S4, Melbourne, Australia, July 2007. Cytoplasmic diffusional networks within the living CNS myelin.

Wallace MC: American Association of Neurological Surgeons, Discussant, 2008 Meeting, Chicago, Illinois, April 2008. Surgical management of brainstem cavernous malformations.

Wallace MC: American Neurosurgery Update in the State of Kuwait, Kuwait, December 2007. (1) Aneurysm decision making, (2) Cavernous malformation, (3) Cerebral arteriovenous malformation, (4) Fellowship training versus residency training in cerebrovascular surgery.

Research and Investigations

Senior Investigator's Name Appears in Italics

Abnormal involuntary movements (AIMs) and synaptic plasticity in human basal ganglia. *Hutchison WD*, Eliasmith C, Dostrovsky JO, Lozano AM, Hodaie M: *Michael J. Fox Foundation for Parkinson's Research*. (\$534,110 2006 - 2009.)

An fMRI study of the neural and clinical implications of pediatric sports-related concussion. *Keightley M*, Ptito A, Johnston K, Lobaugh N: *Canadian Institutes of Health Research*. (\$335,910 2008 - 2011.)

An investigation of the clinical implications of sports-related concussion in children and youth. *Keightley M*, Comper P, Johnston KM, Ptito A, Tremblay L, Taha T, Thomas S, Schneiderman-Walder J, Wiseman-Hakes C, Corey P: *Ontario Neurotrauma Foundation*. (\$245,110 2007 - 2010.)

An investigation of the clinical implications of sports-related concussion in children and youth. *Keightley M*, Ptito A, Johnston KM, Lobaugh N: *Ontario Neurotrauma Foundation*. (\$66,000 2008.)

AOSpine North America fellowship program, 2-year merit award. *Fehlings MG*, Massicotte EM, Rampersaud YR, Lewis S: *AOSpine North America*. (\$150,000 2007 - 2009.)

Attenuated NMDA receptor development in MeCP2-deficient mice: Relevance to Rett syndrome. *Eubanks JH*, Zhang L, Brotchie JM: *Canadian Institutes of Health Research*. (\$610,225 2006 - 2011.)

Canada Research Chair in Neuroscience Tier 1. Lozano AM: Canadian Institutes for Health Research. (\$1,400,000 2005 - 2012.)

Cell signalling in mucosal inflammation and pain - a CIHR strategic training initiative. *Ellen R*, Sessle B, Overall C, McCulloch C, Roberts C, Locker D, Cvitkovich D, Maksym G, Guyatt G, Downey G, Lawrence H, Tenenbaum H, Lee JM, Santerre JP, Sodek J, Davis KD, Glogauer M, Salter M, Manolson MF, Jones NL, Sherman P, Ellen R, Kandel R, Casper R, Labow R: *Canadian Institutes of Health Research*. (\$1,245,906 2002 - 2008.)

Childhood Tumor Foundation: Validation of rapamycin as an effective therapy for human NF1-associated MPNST. *Guha A: Malignant Peripheral Nerve Sheath Tumor.* (\$26,443 2007.)

Cognitive neurophysiology corsortium: Study of cognition through neuronal recordings in humans. *Howard M*, Fried L, Lozano A: *Dana Foundation*. (\$550,000 2007 - 2008.)

Evaluation of effective stimulation parameters for seizure control in rats with thalamic deep brain stimulation using a pilocarpine seizure model. *Hodaie M*, Lozano A: *Medtronic Neurological*. (\$62,894 2005 - 2007.)

Evaluation of effective stimulation parameters for seizure control in rats with thalamic deep brain stimulators, using a pilocarpine seizure model. *Hodaie M*, Lozano A: *Dean's Fund New Staff Grant*. (\$9,800 2005 - 2010.)

Examination of the key imaging and clinical determinants of outcome after traumatic spinal cord injury (R003-07). *Fehlings MG: Rick Hansen Man in Motion Foundation.* (\$132,796 2007 - 2008.)

Examination of the therapeutic potential of an engineered transcription factor promoting activation of vascular endothelial growth factor in spinal cord injury. *Fehlings MG: Sangamo BioSciences, Incorporated.* (\$178,109 2006 - 2007.)

Expression profile of NF1 deficient Schwann cells. Guha A: US Army, Department of Defense Concept Award. (\$71,925 2007 - 2008.)

Functional analysis of GATA6 in human gliomas: A novel tumor suppressor gene identified from genetically engineered murine (GEM) glioma model by gene-trapping (characterization of the role and mechanism of GATA6, a novel tumor suppressor gene we identify.) *Guha A: National Cancer Institute of Canada.* (\$135,000 2006 - 2009.)

Functional magnetic resonance imagine and cognitive functions following mild traumatic brain injury. *Ptito A*, Johnston K: *Canadian Institutes of Health Research*. (\$559,000 2006 - 2011.)

GATA4 and GATA6 as prognostic indicators of glioblastoma multiforme patients. Guha A: Radiation Therapy Oncology. (\$15,000 2008 - 2009.)

Gender differences in child development: Vulnerability to chronic pain. *McGrath PA*, Davis KD, Katz J, Brown SC, Geist R: *Canadian Institutes of Health Research*. (\$1,478,735 2003 - 2008.)

High-performance cone-beam CT guidance of head and neck surgery. *Siewerdsen JH*, Brock KK, Easty A, Gentili F, Irish JC, Jaffray DA, Kucharczyk W, Witterick I: *National Institutes of Health*. (US\$750,000 2007 - 2011.)

Human studies of pain perception. Davis KD, Tenenbaum HC, Diamant NE: Canadian Institutes of Health Research. (\$726,452 2007 - 2012.)

Investigation and treatment of traumatic axonal dysfunction after spinal cord injury (MOP-82782). *Fehlings MG: Canadian Institutes of Health Research*. (\$634,713 2007 - 2012.)

Investigation of molecular signaling and susceptibility to apoptosis in canine intervertebral disc notochordal cells. *Erwin WM*, Fehlings MG, Inman RD: *AOSpine North America*. (\$32,010 2007 - 2008.)

Methyl DNA-binding factor complexes and neurodegeneration. Eubanks JH: Heart and Stroke Foundation. (\$255,036 2006 - 2009.)

Microenvironment induced molecular heterogeneity in glioblastoma multiforme (GBM). *Guha A: Canadian Institutes of Health Research*. (\$125,000 2007 - 2012.)

Molecular mechanisms of neuronal injury. Tymianski M, Twelve Investigators Across Canada: Canadian Stroke Networks. (\$91,000 2006 - 2008.)

Neural stem progenitor cells for remyelination and recovery in MS. Tator CH: Multiple Sclerosis Society of Canada. (\$93,702 2008 – 2010.)

Neurophysiological studies of human subthalamic nucleus. *Dostrovsky JO*, Hutchison WD, Lozano AM: *Canadian Institutes of Health Research*. (\$475,265 2004 - 2009.)

Neuroprotection of the injured spinal cord through inhibition of FAS-mediated apoptosis. *Fehlings MG: The Physicians' Services Incorporated Foundation.* (\$134,500 2006 - 2008.)

Neuroprotection: Preventing cell death and neuronal damage from stroke. Tymianski M: Canadian Stroke Networks. (\$71,430 2006 - 2008.)

New emerging team in spinal cord injury research. Fehlings MG: Krembil Foundation. (\$1,500,000 2006 - 2011.)

North American Clinical Trials Network for the treatment of spinal cord injury (CTN3-2007 F/T and CTN4-2008 F/T). *Fehlings MG*, Tator CH: *Christopher Reeve Foundation*. (\$331,735 2007 - 2008.)

Ontario Spinal Cord Injury Research Network - Acute care infrastructure support. *Fehlings MG: Ontario Neurotrauma Foundation*. (\$400,000 2007 - 2009.)

Pain research from molecules to community - Collaborative national training program. *Salter MW*, Bushnell MC, Choiniere M, Coderre T, Collet J-P, Davis KD, De Koninck Y, Dostrovsky JO, Henry JL, Lavigne G, Mogil JS, Ribeiro-Da Silva A, Seguela P, Sessle BJ, Stevens B, Wilson-Pauwels L: *Canadian Institutes of Health Research*. (\$1,681,200 2002 - 2008.)

Pathological oscillations in basal ganglia and synaptic plasticity. *Hutchison W*, Lozano AM, Hodaie M, Dostrovsky J: *Parkinson Society Canada*. (\$42,000 2006 - 2008.)

Pathophysiology of Parkinson's disease. Chen R, Hutchison WD, Lozano AM: Canadian Institutes of Health Research. (\$625,000 2004 - 2009.)

Phase III, international study of unruptured intracranial aneurysms (ISUIA). *Wiebers D*, Gentili F, Wallace C, Tymianski M, Willinsky R: *National Institute of Neurological Disorders and Stroke*. (\$25,000 2004 - 2008.)

Protein expression profile of NF1 deficient Schwann cells (using mass spec based proteomics on LCM isolated schwann cells from varying types of peripheral nerve tumors in NF1 patients). *Guha A: US Army, Department of Defense Concept Award.* (\$68,000 2007 - 2008.)

Protein nitration in traumatic and ischemic brain damage. Tymianski M: Canadian Institutes of Health Research. (\$668,710 2006 - 2011.)

Protein nitration in traumatic brain injury. *Tymianski M*, Lau A: *Canadian Institutes of Health Research/Institutes of Neurosciences, Mental Health and Addiction*. (\$61,500 2006 - 2008.)

Regenerative approach to intervertebral disc research. Fehlings MG: Synthes Spine Company. (\$210,000 2008 - 2009.)

Regenerative medicine strategies for spinal cord injury repair: Integration of stem cell biology, nanotechnology, bioengineering approaches and neurosurgical application. *Fehlings MG*, Morshead C, Shoichet M, Stanisz G, Tator CH, van der Kooy D: *Canadian Institutes of Health Research*. (\$1,500,000 2004 - 2009.)

Regional variation in inhibitors of apoptosis (IAPs) in GBMs and their role in apoptosis and therapeutic resistance. *Guha A: National Brain Tumor Foundation*. (\$52,886 2007 - 2008.)

Regional variations in IAPs in GBMs (laser capture microdissection of center and periphery of human GBM samples and quantification of IAPs. *Guha A: National Brain Tumor Foundation*. (\$50,000 2007 - 2008.)

Regulation and function of kallikreins in spinal cord injury and repair. *Scarisbrick IA*, Blaber M, Fehlings MG: *National Institutes of Health*. (\$339,711 2008 - 2009.)

Regulation of antiretroviral drug transport and betabolism in the brain. *Bendayan R*, Valiante T: *Canadian Institutes of Health Research*. (\$234,198 2005 - 2008.)

Role of angiopoietins and Tie2 receptor in astrocytoma angiogenesis and malignant growth (expression and functional role of angiopoietins and their receptors in astrocytoma angiogenesis and growth.) *Guha A: National Cancer Institute of Canada.* (\$140,000 2004 - 2007.)

Role of IAPs in GBMs (using transgenic glioma models to explore the role of IAPs in GBMs.) *Guha A: Brain Tumor Society (BTS) of North America.* (US\$75,000 2007 - 2009.)

Role of TRP channels in anoxic neuronal damage. Tymianski M: Canadian Institutes of Health Research. (\$363,759 2004 - 2007.)

Role of TRPM channels in ischemic brain damage. *Tymianski M: Canadian Institutes of Health Research, Five-Year MOP-89720.* (\$180,000 2008 – 2013.)

SCI-TRN acute care and treatment practice network grant. Fehlings MG: Rick Hansen Foundation. (\$621,511 2007 - 2008.)

Spinal cord repair. *Fehlings MG*, Morshead C, Shoichet M, Tator C, van der Kooy D: *McLaughlin Centre for Molecular Medicine*. (\$115,000 2007 - 2008.)

Surgical versus conservative treatment of metastatic epidural spinal cord compression (MESCC). Quality of life and cost-effectiveness outcomes. *Fehlings MG: AOSpine North America.* (\$304,020 2007 - 2011.)

Targeting postsynaptic density proteins in the treatment of CNS injury. Tymianski M: National Institutes of Health. (\$1,610,000 2004 - 2009.)

The bilateral motor representation of the dominant subthalamic nucleus in Parkinson's disease. *Moro E*, Strafella AP, Chen R, Dostrovsky JO, Lozano AM, Hodaie M, Lang AE: *Michael J. Fox Foundation for Parkinson's Research*. (\$863,325 2006 - 2009.)

The Delphi Trial I (RCT)2: International randomized clinical trials of rheumatoid craniocervical treatment intervention prognostic (cost-) effectiveness trial comparing 'early' surgery with prolonged conservative treatment. *Peul WC*, Wolfs JFC, Fehlings MG, Wang JC, Dvorak M, Hilbrand AS: *Cervical Spine Research Society*. (\$50,000 2008.)

The ischemic axon: Cross-talk with myelin in K+ channel terms. *Fehlings MG*, Velumian AA: *Heart and Stroke Foundation of Canada*. (\$158,178 2006 - 2008.)

The living myelin sheath: Functional organization and role in dynamic modulation of axonal function in CNS. *Velumian AA*, Fehlings MG: *Natural Sciences and Engineering Research Council of Canada*. (\$125,000 2008 - 2013.)

The oscillation model of the basal ganglia. *Chen R*, Moro E, Lang A, Lozano AM: *Michael J. Fox Foundation for Parkinson's disease*. (\$548,427 2006 - 2009.)

The Regenerative Medicine Project (REMEDI). *Weisel R*, Fehlings MG, Jaffray J, Keating A, Keller G, Kotra L, Li R, Liu P, Sefton M, Wright G: *Canada Foundation for Innovation*. (\$7,200,000 2007 - 2011.)

The role of somatosensory activity on cortical plasticity and functional motor outcomes following upper extremity peripheral nerve lesions. *Davis KD*, Anastakis D: *The Physicians' Services Incorporated Foundation*. (\$142,500 2007 - 2009.)

The role of TRP channels in the cellular mechanism of stroke and aging. *Tymianski M*, MacDonald JF: *Canadian Institutes of Health Research*. (\$750,000 2004 - 2009.)

Tissue factor in tumor progression, angiogenesis. Guha A, Rak J: Grant No. 018173, National Cancer Institute of Canada. (\$117,000 2007 - 2010.)

Towards the correction of rett phenotype by exogenous gene delivery. *Eubanks JH*, Burnham WM, Snead OC: *Canadian Institutes of Health Research*. (\$585,685 2004 - 2009.)

Transforming neuropathic pain research in Canada. *Salter MW*, Davis KD, De Koninck Y, Mogil J, Zhuo M, Kapur S: *Brain Repair Program, Neuroscience Canada*. (\$1,750,000 2004 - 2008.)

Translating the promise of cellular-based strategies for repair of spinal cord injury: Impact of combined therapy with neural precursor cells, growth factor delivery and inhibition of glial scar formation. *Karimi S*, Fehlings MG: *AOSpine North America*. (\$30,000 2008 - 2009.)

Translating the promise of cellular-based strategies for repair of spinal cord injury: Impact of combined therapy with neural precursor cells, inhibition of glial scar formation and exercise induced plasticity. *Karimi S*, Fehlings MG: *AO Spine North America*. (\$32,010 2007 - 2008.)

Transplantation of neural stem cells and tissue engineering approaches to repair chronic, severe spinal cord injury. *Fehlings MG*, Hawryluk G: *Craig H. Neilsen Foundation*. (\$132,000 2007 - 2008.)

Transplantation of spinal cord derived adult neural stem progenitor cells for axonal regeneration and myelination of the injured spinal cord. *Tator CH: International Institute for Research in Paraplegia [IRP]*. (\$105,000 2007-2009.)

Treatment of stroke with peptide and small molecule inhibitors of NMDA receptor-PSD95 interaction. *Tymianski M: Canadian Stroke Networks.* (\$329,000 2006 - 2008.)

Validation of rapamycin as an effective therapy for human NF1-associated MPNST (examining the in-vivo effects of blocking mTOR pathway in human MPNST explant models). *Guha A: Childhood Tumor Foundation, USA.* (\$25,000 2007.)

VEGF zinc finger transcription factor gene therapy for the treatment of stroke and examination of the therapeutic potential of an engineered transcription factor to promote activation of VEGF after traumatic spinal cord injury: Assessment of effectiveness when administered in a clinically relevant post-traumatic time window \$326,200. *Fehlings MG*, Koeberle PD (on study No. 1 only): *Sangamo BioSciences, Incorporated.* (\$593,600 2007 - 2009.)

Honours Received

Fehlings MG: Award for Individual Teaching Excellence, 2007-08, The Wightman-Berris Academy, University of Toronto. May 2008.

Fehlings MG: 2nd Best Poster at the 2008 Annual Meeting of the American Spinal Injury Association (ASIA) to Dr. Furlan (Fehlings MG, co-author). June 2008.

Fehlings MG: 2nd Place, the Clinical Research Award from the Cervical Spine Society for "The impact of age at the timing of injury on the mortality and neurological outcome after acute traumatic spinal cord injury: Examination of the NASCIS database. November 2007.

Fehlings MG: 1st place (with Dr. W.R. Yu), the Basic Science Research Award from the Cervical Spine Research Society for Development of a novel strategy, based on inhibition of Fas signaling, to reduce cell death and promote functional recovery in a mouse model of cervical spondylotic myelopathy. November 2007.

Fehlings MG: 1st Place Research Award at the 15th Interurban Spinal Cord Injury Conference for an abstract "Mortality and neurological outcome in the geriatric population following spinal cord injury: A retrospective cohort study of 485 patients." October 2007.

Lozano AM: Designated a "highly cited" scientific author by Thompson Scientific Essential Science Indicators 2007 (Lozano ranks 5th worldwide among 23,117 authors across the field of Parkinson's disease for a 10-year period ending December 2006). July 2007.

Lozano AM: Meacham Society Lecture, Vanderbilt University. July 2007.

Lozano AM: Order of Spain for contributions to Parkinson's disease and depression research, Spanish Embassy, Ottawa. November 2007.

Tator C: Arbor Award for Outstanding Voluntary Service to the University of Toronto. 2007.

Tator C: ThinkFirst Charles Tator Annual Lecture on Brain and Spinal Cord Injury Prevention. 2007.

Tator C: Penfield Lecturer. 2008.

Valiante T: Epilepsy Toronto HOPE (Helping Out People With Epilepsy) Award for making an outstanding contribution to the epilepsy community. May 2008.

Wallace MC: Aikins Award for Undergraduate Teaching, Department of Surgery, University of Toronto. May 2008.

DIVISION OF ORTHOPAEDIC SURGERY

Dr. J.R. Davey – Associate Professor (Division Head) Dr. W.M. Erwin – Assistant Professor Dr. R. Gandhi – Lecturer Dr. B.A. Graham – Assistant Professor Dr. J. Lau – Assistant Professor Dr. S.J. Lewis – Assistant Professor Dr. N.N. Mahomed – Associate Professor Dr. K.W. Marshall – Assistant Professor Dr. D.J. Ogilvie-Harris – Associate Professor Dr. Y.R. Rampersaud – Assistant Professor Dr. K.A. Syed – Lecturer Dr. C.J.H. Veillette – Assistant Professor Dr. H.P. von Schroeder – Associate Professor

Publications

Borkhoff CM, Hawker GA, Kreder HJ, Glazier RH, Mahomed NN, Wright JG: The effect of patients' sex on physicians' recommendations for total knee arthroplasty. Canadian Medical Association Journal: March 2008: 178(6): pp 681-687.

Cibere J, Esdaile J, Chalmers A, Bellamy N, Greidanus N, Mahomed N, Shojania K, Kopec J: Reliability of the hip examination in osteoarthritis: Effect of standardization. Arthritis and Rheumatism: March 2008: 59(3): pp 373-381.

Davey JR: Direct lateral approach to the hip: In operative techniques. In: Hip Arthritis Surgery: (Waddell, ed.) Saunders Elsevier, Philadelphia: 2008: pp 93-112.

Davis AM, Agnidis Z, Badley E, Davey JR, Gafni A, Gollish J, Mahomed NN, Saleh KJ, Schemitsch EH, Szalai JP, Waddell JP, Gross AE: Waiting for hip revision surgery: The impact on patient disability. Canadian Journal of Surgery: April 2008: 51(2): pp 92-96.

de Perrot M, Rampersaud R: Anterior transclavicular approach to malignant tumors of the thoracic inlet: Importance of the scapilothoracic articulation. Journal of Thoracic and Cardiovascular Surgery: September 2007: 134(3): pp 801-803.

Dvorak M, Fisher CG, Aarab B, Harris MB, Hurlbert RJ, Rampersaud YR, Vaccaro AR, Harrop J, Nockels R, Madrazo IN, Schwartz D, Kwon B, Zhao Y, Fehlings MG: Clinical outcomes of ninety isolated unilateral facet fractures, subluxations and dislocations treated surgically and nonoperatively. Spine: December 2007: 32(26): pp 3007-3013.

Dvorak MF, Fisher CG, Fehlings MG, Rampersaud YR, Oner FC, Aarabi B, Vaccaro AR: The surgical approach to subaxial cervical spine injuries: An evidence based algorithm based on the SLIC classification system. Spine: November 2007: 32(23): pp 2620-2629.

Furlan JC, Perrin RG, Preneshlin V, Govinder V, Petrenko Y, Massicotte E, Rampersaud YR, Lewis S, Fehlings M: Use of osteogenic protein-1 in patients at high risk for spinal pseudoarthrosis: A prospective cohort study assessing safety, health-related quality of life and radiographic fusion. Journal of Neurosurgery: Spine: November 2007: 7(5): pp 486-495.

Gandhi R, Alomran A, Mahomed NN: Bilateral non-union of high tibial osteotomies treated by total knee arthroplasty: A case report. The Knee: May 2008: 15(3): pp 242-245.

Gandhi R, Mahomed N: DVT prophylaxis in total joint arthroplasty: Low molecular weight heparin. Canadian Orthopaedic Association (COA) Bulletin: October 2007: 78: pp 30-31.

Gandhi R, Mahomed N: Knee bracing: Unicompartmental knee arthritis. Canadian Orthopaedic Association (COA) Bulletin: June 2008: 81: pp 28-29.

Gandhi R, Razak F, Davey JR, Mahomed NN: Ethnicity and patient's perception of risk in joint replacement surgery. Journal of Rheumatology: March 2008: 35(8): pp 1-4.

Glazebrook M, Daniels T, Younger A, Foote CJ, Penner M, Wing K, Lau J, Leighton R, Dunbar M: Comparison of health-related quality of life between patients with end-stage ankle and hip arthrosis. Journal of Bone and Joint Surgery (American): March 2008: 90(3): pp 449-505.

Graham B, Brauer CA: The surgical treament of cubital tunnel syndrome: A decision analysis. Journal of Hand Surgery (British): December 2007: 32: pp 654-662.



Graham B, Mullaney PJ, Becker E, Ghararian D, Riddell RH, Salonen DC: Benign hidradenoma: Magnetic resonance and ultrasound features of two cases. Skeletal Radiology: December 2007: pp 1185-1190.

Han M, Liew CT, Zhang HW, Chao S, Zheng R, Yip KT, Song ZY, Li HM, Geng XP, Zhu LX, Lin JJ, Marshall KW, Liew CC: Novel blood-based five-gene panel biomarker set for the detection of colorectal cancer. Clinical Cancer Research: March 2008: pp 1-10.

Joseph AV, Al Jahwari AS, Rampersaud YR: Mediastinal migration of distal occipito-thoracic instrumentation. European Spine Journal: E-published November 14, 2007.

Joseph V, Rampersaud YR: Heterotopic bone formation with the use of rhBMP2 in posterior minimal access interbody fusion. Spine: December 2007: 32(25): pp 2885-2890.

Lau J, Stamatis ED, Myerson M, Schon L: Implantable direct current bone stimulators in high-risk and revision foot and ankle surgery: A retrospective analysis with outcome assessment. American Journal of Orthopedics: July 2007: 36(7): pp 354-357.

Marshman LA, Friesem R, Rampersaud YR, Le Huec JC, Krishna M, Reddy GR: Significantly improved lumbar arthroplasty placement using image guidance. Spine: August 2007: 32(18): pp 2027-3200.

Marshman LA, Trewhella M, Friesem T, Rampersaud YR, Le Huec JC, Krishna M: The accuracy and validity of "routine" x-rays in estimating lumbar disc arthroplasty placement. Spine: November 2007: 32(23): pp E661-E666.

Nassr A, Lee JY, Dvorak MF, Harrop JS, Dailey AT, Shaffrey CI, Arnold PM, Brodke DS, Rampersaud YR, Grauer JN, Winegar C, Vaccaro AR: Variations in surgical treatment of cervical facet dislocations. Spine: April 2008: 33(7): pp E188-E193.

Qu G, von Schroeder HP: Trabecular microstructure at the human scaphoid nonunion. Journal of Hand Surgery: May 2008: 33(5): pp 650-655.

Rampersaud YR, Ravi B, Lewis SJ, Stas V, Barron R, Davey R, Mahomed N: Assessment of health-related quality of life following surgical treatment of focal symptomatic spinal stenosis compared to osteoarthritis of the hip or knee. The Spine Journal: March 2008: 8: pp 296-304.

Ratliff J, Anand N, Vaccaro AR, Lim MR, Lee JY, Arnold P, Harop JS, Rampersaud YR, Bono CM, Spine Trauma Study Group: Regional variability in use of a novel assessment of thoracolumbar spine fractures: United States versus international surgeons. World Journal of Emergency Surgery: September 2007: 2: pp 24. E-published September 7, 2007.

Ravi B, Rampersaud YR: Clinical magnification error in lateral spinal digital radiographs. Spine: May 2008: 33: pp E311-E316.

Veillette CJH, McKee MD: Acute fracture-dislocations about the elbow. In: Solutions for Complex Upper Extremity Trauma: (Dines DM, Lorich DG, Helfet DL, eds.) Thieme, New York: 2008: Chapter 14, pp 141-150.

Veillette CJH, McKee MD: Growth factors-BMPs, DBMs, and buffy coat products: Are there any proven difference amongst them? Injury: March 2008: 38: pp 38-48.

Veillette CJH, McKee MD: Open reduction and internal fixation for fractures about the elbow in the elderly. In: Solutions for Complex Upper Extremity Trauma: (Dines DM, Lorich DG, Helfet DL, eds.) Thieme, New York: 2008: Chapter 12, pp 117-128.

Veillette CJH, Steinmann SP: Olecranon fractures. Orthopaedic Clinics of North America: April 2008: 39(2): pp 229-236.

Woodrow SI, Dubrowski A, Khokhotva M, Backstein D, Rampersaud YR, Massicotte EM: Training and evaluating spinal surgeons. Spine: December 2007: 32(25): pp 2921-2925.

Yee G, Lau J: Current concepts review: Hallux rigidus. Foot and Ankle International: June 2008: 29(6): pp 637-646.

Zaarour C, Engelhardt T, Strantzas S, Pehora C, Lewis S, Crawford MW: Effect of low-dose katemine on voltage requirement for transcranial electrical motor evoked potentials in children. Journal of Bone and Joint Surgery: October 2007: 32: pp E627.

Invited Visits

Davey JR: Emerging Trends and Controversies in Hip and Knee Arthroplasty, Whistler, BC, February 2008. (1) Femoral offset in primary and revision THA, (2) Instability in THA, (3) Long term results of HA in primary THA, (4) Revision total knee-approach options, (5) Stability-optimizing range of movement in primary TKA, (6) Total knee arthroplasty post high tibial osteotomy.

Davey JR: Contemporary and Future Concepts of Orthopaedics, Whistler, BC, February 2008. (1) Modular tibias - who needs them?, (2) NSAIDS for pain post TKA and THA, (3) Osteolysis - bench to clinical practice.

Davey JR: Guatemalan Orthopaedic Association, Guatemala City, Guatemala, November 2007. Soft tissue balancing in total hip arthroplasty.

Davey JR: Surgical Advances in Revision Total Knee, Toronto, ON, October 2007. Backside wear in total knee arthroplasty: Treating infected knee with two-stage articulating spacer.

Gandhi R: Stryker Advances in Revision Knee Replacement Surgery 2007, Toronto, ON, October 2007. (1) Blood loss in revision knee replacement surgery, (2) DVT prophylaxis in total joint arthroplasty.

Lau J: Dewar Orthopaedic Society, Saskatoon, SK, June 2008. Bony morphology in ankle arthritis.

Lau J: Workplace Safety and Insurance Board, Toronto, ON, June 2008. Chronic pain after ankle sprains: Evaluation and management.

Lau J: Detroit Academy of Orthopedic Surgeons, Troy, Michigan, January 2008. Ankle arthritis: Fusion vs. replacement?

Lau J: Dewar Orthopaedic Society, Corner Brook, NF, September 2007. Hallux rigidus: Fusion or replacement?

Lewis SJ: Orthopaedic Federation of Equador, Quito, Equador, April 2008. Update in orthopaedic surgery.

Lewis SJ: Stryker Spine, Scottsdale, Arizona, March 2008. Spinal deformity update.

Lewis SJ: DePuy Spine, East Coast Peer to Peer Meeting, Miami, Florida, February 2008. Vertebral column resection for severe deformity.

Lewis SJ: Medtronic, St. Louis, Missouri, November 2007. Invited Speaker: Advance deformity spine course.

Mahomed NN: University of British Columbia, Annual Resident Orthopaedic Research Day 2008 and Continuing Medical Education, Vancouver, BC, April 2008. K.S. Morton Guest Lecturer: The hip: A lifespan approach.

Mahomed NN: Ontario Hospital Association, Health Achieve Conference 2007 on Fractured Hip Rapid Assessment and Treatment, Toronto, ON, November 2007. (1) The clinical trial of a new "integrated model of care for patients with fractured hips - ensuring sustainability, (2) Helping older persons go home following a hip fracture: A new integrated model of care.

Mahomed NN: Canadian Surgical Forum, North American Osteoarthritis Workshop, Chicago, Illinois, September 2007. Antibiotic bone cement and the incidence of deep infection following total knee arthroplasty.

Rampersaud YR: American Orthopaedic Association and Canadian Orthopaedic Association, Combined Meeting, Quebec City, QC, June 2008. Management of thoracic-lumbar in polytrauma patient, ICL.

Rampersaud YR: Lumbar Spine Study Group Meeting, Washington, DC, June 2008. (1) Minimally invasive surgery (MIS) vs. open surgery, (2) Spinal adverse event severity system (SAVES) study.

Rampersaud YR: Medtronic National Sales Meeting, Tampa, Florida, May 2008. Talk on MAST Techniques, Indications, Products: MIS (Minimally Invasive Surgery) - Trauma Management.

Rampersaud YR: Canadian Spine Society, Eighth Annual Meeting, Sun Peaks Resort, BC, March 2008. Symposium - Minimally Invasive Spine Surgery in Canada.

Rampersaud YR: Non Fusion Technology and Dynamic Stabilization Meeting, Tampa, Florida, February 2008. Indications for disc replacement and interspinous spacers.

Rampersaud YR: Spine Trauma Study Group, Denver, Colorado, January 2008. (1) Spinal adverse event severity system (SAVES), (2) Systematic review of management for C2 hangman's fractures.

Rampersaud YR: Leaders in Spine Series: Evidence Based Approaches to Common Spine Problems, Chicago, Illinois, December 2007. Cervical trauma - classification.

Rampersaud YR: Direction for Leadership - Political and Clinical, Ontario Orthopaedics 2007, Toronto, ON, November 2007. (1) Kyphoplasty update, (2) MIS (minimally invasive spine) surgery: A new frontier.

Rampersaud YR: University of Alberta, Department of Radiology and Diagnostic Imaging, Expert Panel Meeting, Toronto, ON, September 2007. The appropriateness of MRI study.

Veillette CJH: American Bone and Joint Surgery Meetings, Jackson Hole, Wyoming, June 2008. Orthopaedic informatics exposed - Interactive instructional course lectures: (1) Keeping up-to-date - Using RSS readers, (2) Crowd intelligence, (3) Web 2.0, (4) Finding orthopaedic knowledge online, (5) Advanced search engine strategies.

Veillette CJH: American Academy of Orthopaedic Surgeons, San Francisco, California, March 2008. (1) Finding orthopaedic knowledge online, (2) Inbox zero, (3) Search engine optimization and marketing for office websites.



Research and Investigations

Senior Investigator's Name Appears in Italics

A care model for patients with cognitive impairment in rehabilitation following hip fracture. *McGilton KS*, Davis AM, Cott CA, Jaglal SB, Mahomed NN, Flannery JF, Naglie G, Rochon E: *Canadian Institutes of Health Research*. (\$146,005 2008 - 2009.)

Alternative role of physiotherapists in impoving access to total joint replacement. *Badley E*, Mahomed N, Davis A, Mackay C: *Canadian Institutes of Health and Research*. (\$98,250 2007 - 2008.)

An epidemiological investigation of the risk of lumbar disc herniation and cauda equina syndrome following chiropractic care. *Cote P*, Cassidy D, Boyle E, Rampersaud Y: *Canadian Chiropractic Association*. (\$400,000 2008 - 2010.)

Apoptosis and molecular signaling in intervertebral disc notochordal cells cultured under hypoxic conditions. *Erwin WM*, Fehlings MG: *AOSpine North America*. (\$30,000 2008 - 2009.)

Centre of research expertise in improved disability outcomes (CREIDO). *Cassidy JD*, Cote P, Carette S, Mahomed N, Hamer H, von Schroeder H, Inman R, Gignac M, Evans M, Bombardier C, Ammendolia C, Franche RL, Cole D, Reardon R, Guzman J, Flannery J, Davis A, Anderson J, Loisel P, Wells R: *Workplace Safety and Insurance Board*. (\$400,000 2007 - 2012.)

Determinants and consequences of pain and fatigue in osteoarthritis (OA), using a biopsychosocial approach. *Hawker G*, Badley E, Gignac M, Davis A, Romans S, Gordan A, Murray B, Benazon N, Grigoriadis S, Mahomed N, Sale J, Juurlink D, Gagliese L, Steele L, Henry J: *Canadian Institutes of Health Research*. (\$1,495,170 2004 - 2009.)

Efficacy of intraoperative topical application of tranexamic acid in reducing perioperative bleeding in total knee arthroplasty. *Wong J*, Chung F, Mahomed N, Davey R, Syed K: *The Physicians' Services Incorporated Foundation*. (\$116,500 2007 - 2009.)

Gait symmetry and knee arthroplasty: Before and after surgery, and implications for rehabilitation. *Mahomed N*, Gage W, McIlroy W, Flannery J, McGlynn M, Davis A: *Canadian Orthopaedic Foundation*. (\$9,995–2006 - 2007.)

Investigation of DRS-induced recovery of IL-1-induced degeneration of IVD NP cells. Erwin WM: Skoll Foundation. (\$53,000 2007 - 2008.)

Investigation of molecular signaling and susceptibility to apoptosis in canine intervertebral disc notochordal cells. *Erwin WM*, Fehlings MG: *AOSpine North America*. (\$30,000 2007 - 2008.)

Measuring and understanding gender equity in access to care. *Brown AD*, Mahomed N: *Canadian Institutes of Health Research*. (\$103,254 2006 - 2009.)

Minimally invasive surgical management of neurogenic claudication - Diam pilot study. *Rampersaud R: Medtronic - Sofamor Danek*. (\$54,867 2007 - 2008.)

Outcome measurement: The importance of time. *Davis A*, Badley E, Beaton D, Cote P, Flannery J, Gignac M, Hogg-Johnson S, Mahomed N, Schemitsch E, Streiner D: *Canadian Institutes of Health Research*. (\$162,398 2005 - 2009.)

Patients with CI: Outcomes following inpatient rehabilitation for hip fracture. *McGilton K*, Davis A, Mahomed N, Wodchis W, Jaglal S, Naglie G, Flannery J: *Canadian Institutes of Health Research*. (\$75,000 2007 - 2009.)

Post-operative epidural analgesia after minimally invasive decompression and fusion: Double-blinded RCT. *Rampersaud Y*, Brull R, Choi S, Tumber P, Chan V: *The Physicians' Services Incorporated Foundation*. (\$19,500–2008 - 2009.)

Predictors of disability following revision knee arthoplasty. *Davis A*, Garbuz D, Gignac M, Kiss A, Mahomed N, Gross A, Schemitsch E: *Canadian Institutes of Health Research*. (\$74,132 2005 - 2010.)

Regenerative medicine applications to the IVD. Erwin WM, Fehlings MG, Robert Inman: Synthes Corporation. (\$210,000 2008 - 2010.)

Surgical treatment of focal spinal stenosis compared to hip and knee replacement. Rampersaud R: Canadian Spine Society. (\$60,000 2007 - 2009.)

Tooling up for early OA: Measuring what matters. *Esdaile J*, Fortin P, Hawker G, Wright J, Abrahamowicz M, Backman C, Badii M, Bombardier C, Bourne R, Chesworth B, Cibere J, Davis A, Greidanus N, Koehn C, Leffondre K, Mahomed N, Marra C, Sale J, Sebalt R: *NET (New Emerging Team.)* (\$1,495,170 2004 - 2009.)

Total joint network II: An integrated model of care for hip fractures. *Mahomed N*, Flannery J, Brien H, McGlasson R, Davis A: *Ministry of Health and Long Term Care*. (\$373,000 2006 - 2008.)

Variation in patient and physician attitudes towards lumbar spinal stenosis surgery and their influence on regional surgical rates. *Bederman S*, Mahomed N, McIsaac W, Coyte P, Kreder H, Wright J: *Ontario Neurotrauma Foundation and the Ministry of Health and Long-Term Care*. (\$74,988 2007 - 2009.)

Honours Received

Davey JR: Individual Teaching Award, Medical Education, University Health Network. May 2008.

Davey JR: The Spine Journal Outstanding Paper Award in Surgical Science from the North American Spine Society for "Assessment of health related quality of life following surgical treatment of focal symptomatic spinal stenosis compared to osteoarthritis of the hip or knee." October 2007.

Gandhi R: Canadian Arthritis Network Junior Investigator Travel Grant. September 2007.

Gandhi R: Royal College of Physicians and Surgeons of Canada Traineeship Grant. July 2007.

Lau J: Roger A. Mann Research Award, American Orthopaedic Foot and Ankle Society. 2007.

Lau J: American Orthopedic Association Membership. 2008.

Lewis SJ: 2007 North American Spine Society Outstanding Paper Award for "Surgical science assessment of health-related quality of life following surgical treatment of focal symptomatic spinal stenosis compared to osteoarthritis of the hip or knee." October 2007.

Lewis SJ: Deborah Scarlett Award for Outstanding Paper, Canadian Spine Society. March 2008.

Mahomed NN: The Spine Journal Outstanding Paper Award in Surgical Science from the North American Spine Society 2007 for "Assessment of health related quality of life following surgical treatment of focal symptomatic spinal stenosis compared to osteoarthritis of the hip or knee."

Rampersaud YR: 2007 Arbor Award for Outstanding Volunteer Service at the University of Toronto. September 2007.

Rampersaud YR: Best Paper Award, Canadian Spine Society. May 2008.

Rampersaud YR: The Spine Journal Outstanding Paper Award in Surgical Science from the North American Spine Society for "Assessment of health-related quality of life following surgical treatment of focal symptomatic spinal stenosis compared to osteoarthritis of the hip or knee." October 2007.

University Health Network

DIVISION OF PLASTIC SURGERY

Dr. D.J. Anastakis – Associate Professor Dr. T.A. Bell – Lecturer Dr. P. Bray – Assistant Professor Dr. L.T. Dvali – Assistant Professor Dr. B. Graham – Assistant Professor Dr. S.O.P. Hofer – Associate Professor (Division Head) Dr. J.A. Lipa – Associate Professor Dr. R.T. Manktelow – Professor Dr. H.P. Von Schroeder – Associate Professor

Publications

Anastakis DJ, Manktelow RT: Free functioning muscle transfers for upper extremity reconstruction of plexus palsy. In: Surgery of Peripheral Nerves: A Case-Based Approach: (Midha R, Zager E, eds.) Thieme Publishers, New York: 2008: pp 37-42.

Bederman SS, Anastakis DJ: Giant arteriovenous fistula of the upper extremity following a distal radius fracture: A rare complication following a common problem. Journal of Trauma: August 2007: 63: pp E30-E33.

Bingener J, Boyd T, Van Sickle K, Jung I, Saha A, Winston J, Lopez P, Ojede H, Schwesinger W, Anastakis DJ: Randomized double-blinded trial investigating the impact of a curriculum focused on error recognition on laparoscopic suturing training. American Journal of Surgery: December 2007: 195: pp 179-182.

Bingener J, Boyd T, Van Sickle K, Jung I, Saha A, Winston J, Lopez P, Ojede H, Schwesinger W, Anastakis DJ: Randomized double-blinded trial investigating the impact of a curriculum focused on error recognition on laparoscopic suturing training. Teaching and Learning in Medicine: February 2008: 20(1): pp 92-97.

Brenner MJ, Dvali LT, Hunter DA, Myckatyn TM, Mackinnon SE: Efficiency of motor neuron regeneration through end-to-side repairs is a function of donor nerve axotomy. Plastic and Reconstructive Surgery: July 2007: 120: pp 215-223.

Dunn A, Salonen D, Anastakis DJ: MR imaging findings of anterior interosseous nerve lesions. Skeletal Radiology: December 2007: 36(12): pp 1155-1162.

Hofer SOP: A pedicled anterolateral thigh flap for abdominal reconstruction after previous degloving injury of the donor site: A case report. Scandinavian Journal of Plastic and Reconstructive Hand Surgery: July 2007: 41: pp 203-206.

Hofer SOP, Damen THC, Mureau MAM, Rakhorst HA, Roche NA: A critical review of perioperative complications in 175 deep inferior epigastric perforator flap breast reconstructions. Annals of Plastic Surgery: August 2007: 59: pp 137-142.

Jensen AR, Wright AS, Lance AR, O'Brien KC, Pratt CD, Anastakis DJ, Pellegrini CA, Horvath KD: The emotional intelligence of surgical residents: A descriptive study. American Journal of Surgery: January 2008: 195(1): pp 5-10.

Jensen AR, Wright AS, McIntyre LK, Levy AE, Foy HM, Anastakis DJ, Horvath KD: Laboratory-based instruction of skin closure and bowel anastomosis for surgical residents. Teaching and Learning in Medicine: February 2008: 20(1): pp 92-97.

Liapakis IE, Anagnostoulis S, Karayannakis A, Korkolis DP, Labropoulos M, Anastakis DJ, Simopoulos C: Exogenously administered leptin increases early incisional wound angiogenesis in an experimental animal model. In Vivo, International Journal of Experimental and Clinical Pathophysiology and Drug Research: September 2007: 21(5): pp 797-801.

Moolenburg SE, Mureau MAM, Hofer SOP: Facial attractiveness and abnormality of nasal reconstruction patients and controls assessed by laypersons. Journal of Plastic, Reconstructive and Aesthetic Surgery: June 2008: 61: pp 676-680.

Mureau MAM, Hofer SOP: Perforator-to-perforator musculocutaneous anterolateral thigh flap for reconstruction of a lumbosacral defect using the lumber artery perforator as recipient vessel. Journal of Reconstructive Microsurgery: May 2008: 24: pp 295-299.

Mureau MAM, Moolenburgh SE, Levendag PC, Hofer SOP: Aesthetic and functional outcome following nasal reconstruction. Plastic Reconstructive Surgery: October 2007: 120: pp 1217-1227.

Posch NAS, Mureau MAM, Dumans AG, Hofer SOP: Functional and aesthetic outcome and survival after double free flap reconstruction in advanced head and neck cancer patients. Plastic Reconstructive Surgery: July 2007: 120: pp 124-129.

Rayatt SS, Mureau MAM, Hofer SOP: Osteoradionecrosis of the mandible: Etiology, prevention, diagnosis, and treatment. Indian Journal of Plastic Surgery: December 2007: 40: pp S65-S71.

van der Lei B, Krabbe-Timmerman IS, Cromheecke M, Hofer SOP: Bipolar coagulation-assisted orbital (BICO) septo-blepharoplasty: A retrospective analysis of a new fat-saving upper eyelid blepharoplasty technique. Annals of Plastic Surgery: September 2007: 59: pp 263-267.

van der Lei B, van Nieuwenhoven CA, de Visscher JG, Hofer SOP: Closure of osteoseptocutaneous fibula free flap donor sites with local full thickness skin grafts. Journal of Oral and Maxillofacial Surgery: June 2008: 66: pp 1294-1298.

Invited Visits

Anastakis DJ: Association for Surgical Education, 2008 Surgical Education Week, Toronto, ON, April 2008. Empowerment moderator for ASE panel.

Anastakis DJ: King Faisal Specialist Hospital, Riyadh, Kingdom of Saudi Arabia, December 2007. Visiting Professor/Lecturer: (1) Chronic neurogenic pain following peripheral nerve injury, (2) Cortical plasticity following upper extremity reconstruction.

Hofer SOP: PSEF (Plastic Surgery Education Foundation) Aesthetic Facial Reconstruction in Adults and Children Symposium, Tucson, Arizona, February 2008. (1) How I integrated nasal reconstruction in my practice: What works for me, (2) Radiation and reconstruction, (3) Tailor-made flaps for reconstructive challenges, (4) The facial artery perforator flap for reconstruction of perioral defects.

Hofer SOP: First Annual QMP Reconstructive Surgery Symposium, St. Louis, Missouri, September 2007. (1) Breast reconstruction with the transverse myocutaneous gracilis flap, (2) Indications for microsurgical reconstruction in the face, (3) Tailor-made flaps for reconstructive challenges.

Research and Investigations

Senior Investigator's Name Appears in Italics

Biomedical and psychosocial factors associated with pain and disability after peripheral nerve injury. *Novak C*, Katz J, Anastakis DJ: *American Association for Hand Surgery*. (\$5,000 2008.)

Development of an injury severity score for hand trauma. Dvali LT, Graham B: Physicians' Services Incorportated. (\$33,000 2007 - 2009.)

Development of autologous tissue engineered vascularized adipose tissue for restoration of contour defects and breast reconstruction. *Hofer SOP*, van Osch G: *Nuts Ohra Foundation*. (\$260,000 2006 - 2009.)

Mental imagery proficiency as a predictive marker of surgical skill in medical students. *Okhowat A*, Brydges R, Anastakis DJ, Reznick RK, Dubrowski A: *Undergraduate Medical Education, University of Toronto.* (\$7,500 2007 - 2008.)

Post mastectomy breast reconstruction: A comparative analysis of the psychological implications of DIEP flap and implant procedures. *Hofer SOP*, Tibben A: *Dutch Cancer Foundation*. (\$600,000 2007 - 2011.)

The role of somatosensory activity on cortical plasticity and functional motor outcomes following upper extremity peripheral nerve lesions. *Anastakis DJ*, Davis KD: *The Physicians' Services Incorporated Foundation*. (\$142,500 2007 - 2009.)

Vascularization of tissue engineered mucosa. Hofer SOP, Kanaar R, Eggermont A: Vanderes Foundation. (\$200,000 2006 - 2008.)

Honours Received

Anastakis DJ: 2008 CAME (Canadian Association for Medical Education) Certificate of Merit Award. March 2008.

DIVISION OF THORACIC SURGERY



Dr. G.E. Darling - Associate Professor Dr. M. de Perrot - Assistant Professor Dr. S. Keshavjee – Professor (Division Head) Dr. M. Liu – Professor Dr. M.F. McKneally - Professor Dr. A.F. Pierre - Assistant Professor Dr. T.K. Waddell - Associate Professor

Publications

Anraku M, Cunningham KS, Yun Z, Tsao MS, Zhang L, Keshavjee S, Johnston MR, De Perrot M: Impact of tumor-infiltrating T cells on survival in patients with malignant pleural mesothelioma. Journal of Thoracic and Cardiovascular Surgery: April 2008: 135(4): pp 823-829.

Benamore RE, Weisbrod GL, Hwang DM, Bailey DJ, Pierre AF, Lazar NM, Maimon N: Reversed halo sign in lymphomatoid granulomatosis. British Journal of Radiology: August 2007: 80(956): pp 162-166.

Cameron MJ, Ran L, Xu L, Danesh A, Bermejo-Martin JF, Cameron CM, Muller MP, Gold WL, Richardson SE, Poutanen SM, Willey BM, De Vries ME, Fang Y, Seneviratne C, Bosinger SE, Persad D, Wilkinson P, Greller LD, Somogyi R, Humar A, Keshavjee S, Louie M, Loeb MB, Brunton J, McGeer AJ, The Canadian SARS Research Network, Kelvin DJ: Interferonmediated immunopathological events are associated with atypical innate and adaptive immune responses in patients with sever acute respiratory syndrome. Journal of Virology: August 2007: pp 8692-8706.

Christie J, Keshavjee S, Orens J, Arcasoy S, de Perrot M, Barr M, Van Raemdonck D, International Society for Heart and Lung Transplantation (ISHLT) Working Group on PGD (Primary Graft Dysfunction): Potential refinements of the International Society for Heart and Lung Transplantation primary graft dysfunction grading system. Journal of Heart and Lung Transplantation: January 2008: 27(1): pp 138.

Coonar A, Darling GE: Pulmonary involvement in inflammatory bowel disease. The Annals of Thoracic Surgery: November 2007: 85(5): pp 1748-1750.

de Perrot M: Benign fibrous tumor of the pleura. In: Textbook of Pleural Diseases: (Light RW, Lee YCG, eds.) Hodder Arnold, London: 2008: pp 483-489.

de Perrot M, Fadel E, Dartevelle P: Carinal resection. In: Pearson's Thoracic and Esophageal Surgery, 3rd Edition: (Patterson GA, Cooper JD, Deslauriers J, Lerut AEM, Luketich JD, Rice TW, eds.) Churchill Livingstone Elsevier, Philadelphia: 2008: pp 383-392.

de Perrot M, Fadel E, McRae K, Tan KT, Slinger P, Paul N, Mak S, Granton JT: Evaluation of persistent pulmonary hypertension after acute pulmonary emboli. Chest: September 2007: 132: pp 780-785.

de Perrot M, McRae K, Anraku M, Karkouti K, Waddell TK, Pierre AF, Darling G, Keshavjee S, Johnston MR: Risk factors for major complications after extrapleural pneumonectomy for malignant pleural mesothelioma. The Annals of Thoracic Surgery: April 2008: 85(4): pp 1206-1210.

de Perrot M, Rampersaud R: Anterior transclavicular approach to malignant tumors of the thoracic inlet: Importance of the scapulothoracic articulation. Journal of Thoracic and Cardiovascular Surgery: September 2007: 134: pp 801-803.

dos Santos C, Liu M: Chapter 5: Gene expression profiling by microarray. In: Bioinformatics: A Practical Approach: (Ye S, Chapman & Hall, CRC Mathematical and Computational Biology Series, eds.) Taylor and Frances Group, Boca Raton, London, New York: 2007: pp 131-188.

dos Santos CC, Okutani D, Hu P, Han B, Crimi E, He X, Keshavjee S, Greenwood C, Slutsky AS, Zhang H, Liu M: Differential gene profiling in acute lung injury identifies injury-specific gene expression. Critical Care Medicine: March 2008: 36(3): pp 855-865.

Duchesnau P, Gallagher E, Walcheck B, Waddell TK: Up-regulation of leukocyte CXCR4 expression by sulfatide: An L-selectindependent pathway on CD4+ T cells. European Journal of Immunology: October 2007: 37(10): pp 2949-2960.

Fischer S, Darling G, Pierre AF, Sun A, Leighl N, Waddell TK, Keshavjee S, de Perrot M: Induction chemoradiation therapy followed by surgical resection for non-small cell lung cancer (NSCLC) invading the thoracic inlet. European Journal of Cardiothoracic Surgery: June 2008: 33(6): pp 1129-1134.

Hadjiliadis D, Steele MP, Chaparro C, Singer LG, Waddell TK, Hutcheon MA, Davis RD, Tullis DE, Palmer SM, Keshavjee S: Survival of lung transplant patients with cystic fibrosis harboring panresistant bacteria other than Burkholderia cepacia, compared with patients harboring sensitive bacteria. Journal of Heart and Lung Transplantation: August 2007: 26(8): pp 834-838.

HarnishJL, Darling G, Diamant NE, Kortan P, Tomlinson G, Deitel W, Laporte A, Urbach D: Patient-centered measures for achalasia. Surgery Endoscopy: November 2007: 22(5): pp 1290-1293.

He X, Han B, Mura M, Li L, Cypel M, Soderman A, Picha K, Yang J, Liu M: Anti-human tissue factor antibody ameliorated intestinal ischemia reperfusion-induced acute lung injury in human tissue factor knock-in mice. PLoS ONE: January 2008: 3(1): pp e1527.

He X, Han B, Mura M, Xia S, Wang S, Mat T, Liu M, Liu Z: Agiotensin-converting enzyme inhibitor captopril prevents oleic acid-induced acute lung injury. Shock: July 2007: 1: pp 106-111.

Jaragh M, Alsaad K, Darling G, Ghazarian D: Primary oesophageal spindle cell melanoma. Pathology: October 2007: 39(5): pp 524-526.

Johnston MR, de Perrot M: Metastatic cancer to the lung. In: Cancer: Principles and Practice of Oncology, 8th edition: (DeVita VT, Lawrence TS, Rosenberg SA, eds.) Lippincott Williams and Wilkins, Philadelphia: 2008: pp 2476-2492.

Juvet SC, Hwang D, Waddell TK, Downey GP: Rare lung disease II: Pulmonary alveolar proteinosis. Canadian Respirology Journal: June 2008: 15: pp 203-210.

Kawut SM, Lederer DJ, Keshavjee S, Wilt JS, Daly T, D'Ovidio F, Sonett JR, Arcasoy SM, Barr ML: Outcomes after lung retransplantation in the modern era. American Journal of Respiratory and Critical Care Medicine: January 2008: 177(1): pp 114-120.

Lara-Guerra H, Waddell TK: Perioperative care. In: Pearson's Textbook of Thoracic Surgery, 3rd Edition: (Patterson GA et al, ed.) Churchill Livingstone Elsevier, Philadelphia: 2007: pp 136-144.

Lau SK, Boutros PC, Pintilie M, Blackhall FH, Zhu CQ, Strumpf D, Johnston MR, Darling G, Keshavjee S, Waddell T, Liu N, Lau D, Penn LZ, Shepherd FA, Jurisica I, Der SD, Tsao MS: Three-gene prognostic classifier for early-stage non small-cell lung cancer. Journal of Clinical Oncology: December 2007: 25(35): pp 5562-5569.

Maziak D, Darling G, Inculet R, Gulenchyn K, Driedger A, Ung YC, Evans I, Levine M: A randomized controlled trial (RCT) of 18 F-fluorodeoxyglucose (FDG) positron emission tomography (PET) versus conventional imaging (CI) in staging potentially resectable non-small cell lung cancer (NSCLC). Journal of Clinical Oncology (Meeting Abstracts): May 2008: 26(15S): pp 7502.

McKneally MF, Singer PA: Teaching bioethics to medical students and postgraduate trainees in the clinical setting. In: The Cambridge Textbook of Bioethics: (Singer PA, Viens AM, eds.) Cambridge University Press, Cambridge: 2008: pp 538.

Mura M, Andrade CF, Han B, Seth R, Zhang Y, Bai XH, Waddell TK, Hwang D, Keshavjee S, Liu M: Intestinal ischemiareperfusion-induced acute lung injury and oncotic cell death in multiple organs. Shock: August 2007: 28(2): pp 227-238.

Pisters K, Darling G: The IASLC lung cancer staging project: The nodal zone. Journal of Thoracic Oncology: July 2007: 2(7): pp 583-584.

Pisters K, Evans W, Azzoli C, Kris M, Smith C, Desch C, Somerfield M, Brouwers M, Darling G, Ellis P: Cancer Care Ontario and American Society of Clinical Oncology adjuvant chemotherapy and adjuvant radiation therapy for stages I-IIIA resectable non-small cell lung cancer guideline. Journal of Clinical Oncology: November 2007: 25(35): pp 5506-5518.

Rao J, Sayeed RA, Tomaszek S, Fischer S, Keshavjee S, Darling GE: Prognostic factors in resected satellite-nodule T4 non-small cell lung cancer. The Annals of Thoracic Surgery: September 2007: 84(3): pp 934-938.

Roberts HC, Patsios D, Paul NS, McGregor M, Weisbrod G, Chung T, Herman S, Boerner S, Waddell T, Keshavjee S, Darling G, Pereira A, Kale A, Bayanati H, Sitartchouk I, Tsao M, Shepherd FA: Lung cancer screening with low-dose computed tomography: Canadian experience. Canadian Association of Radiologists Journal: October 2007: 58(4): pp 225-235.

Sage E, Mercier O, Van den Eyden F, de Perrot M, Barlier-Mur AM, Dartevelle P, Eddahibi S, Herve P, Fadel E: Endothelial cell apoptosis in chronically obstructed and reperfused pulmonary artery. Respiratory Research: February 2008: 9: pp 19.

Sato M, Liu M, Anraku M, Ogura T, D'Cruz G, Alman BA, Waddell TK, Kim E, Zhang L, Keshavjee S: Allograft airway fibrosis in the pulmonary milieu: A disorder of tissue remodeling. American Journal of Transplantation: March 2008: 8(3): pp 517-528.

Sayeed R, Darling G: Surface anatomy and surface landmarks for thoracic surgery. Thoracic Surgery Clinic: November 2007: 17: pp 449-461.

Sayeed RA, Waddell TK: Lung volume reduction surgery. In: Core Topics in Cardiothoracic Critical Care: (Klein A, Vuylsteke A, Nashef S, eds.) Cambridge University Press, United Kingdom: 2008: Chapter 52, pp 390-394.



Syeda F, Liu HY, Tullis E, Liu M, Slutsky AS, Zhang H: Src-dependent and independent mechanisms of HNP-induced IL-8 production in human lung epithelial cells and monocytes. Journal of Cell Physiology: March 2008: 214(3): pp 820-827.

Uy KL, Darling G, Xu W, Yi QL, de Perrot M, Pierre AF, Waddell TK, Johnston MR, Bezjak A, Shepherd FA, Keshavjee S: Improved results of induction chemoradiation before surgical intervention for selected patients with stage IIIA-N2 non-small cell lung cancer. Journal of Thoracic and Cardiovascular Surgery: July 2007: 134(1): pp 188-193.

Uy K, Waddell TK: Role of mediastinoscopy in management of T1 lung cancer. In: Evidence-Based Medicine in Thoracic Surgery: (Ferguson M, ed.) Springer, London, 2007: Chapter 29, pp 68-74.

Wang D, Zhuang L, Gao B, Shi CX, Cheung J, Liu M, Jin T, Wen XY: The blimp-1 gene regulatory region directs EGFP expression in multiple hematopoietic lineages and testis in mice. Transgenic Research: September 2007: 17(2): pp 193-203.

Wigle D, Waddell TK: Investigation and management of massive hemoptysis. In: Pearson's Textbook of Thoracic Surgery: (Patterson GA et al, eds.) Elsevier, Philadelphia: 2007: Chapter 38, pp 444-454.

Wong AP, Dutly AE, Sacher A, Lee H, Hwang D, Liu M: Direct intratracheal delivery of bone marrow cells enhance engraftment in an acutely injured airway epithelium. American Journal of Physiology - Lung Cellular and Molecular Physiology: September 2007: 293(3): pp L740-L752.

Xiang YY, Wang S, Liu M, Hirota J, Li J, Ju W, Fan Y, Kelly MM, Ye B, Orser B, O'Bryne P, Inman MD, Yang X, Lu WY: An essential role for a novel airway epithelial GABAergic system in mucus overproduction in allergic asthma. Nature Medicine: July 2007: 13(7): pp 862-867.

Xiao H, Cai GP, Liu MY: Fe (2+)-catalyzed non-enzymatic glycosylation alters collagen conformation during AGE-collagen formation in vitro. Archives of Biochemistry and Biophysics: September 2007: 468(2): pp 183-192.

Xiao H, Cai P, Liu M: Hydroxyl radical induced structural changes of collagen. Spectroscopy - An International Journal: July 2007: 21(2): pp 91-103.

Zlotnik Shaul R, Langer JC, McKneally MF: Innovation in medicine: Examples from surgery. In: The Cambridge Textbook of Bioethics: (Singer PA, Viens AM, eds.) Cambridge University Press, Cambridge: 2008: pp 538.

Invited Visits

de Perrot M: Sudbury and District Medical Society, Unified Grand Rounds, Sudbury, ON, June 2008. Surgical and non-surgical advances in the treament of chronic thrombo-emboic pulmonary hypertension and associated pulmonary arterial hypertension.

de Perrot M: 4th International Meeting, Lung Transplantation and Cystic Fibrosis, Paris, France, May 2008. Lung preservation. The Toronto experience.

de Perrot M: University of Manitoba, Health Sciences Centre, Respirology Rounds, Winnipeg, MB, March 2008. Surgical and nonsurgical advances in the treament of chronic thrombo-emboic pulmonary hypertension and associated PAH.

de Perrot M: The Moncton Hospital, Pulmonary Hypertension Rounds, Teleconference, Moncton, NB, February 2008. Surgical and non-surgical advances in the treatment of chronic thrombo-emboic pulmonary hypertension and associated PAH.

de Perrot M: Dalhousie University, Pulmonary Hypertension Rounds, Halifax, NS, January 2008. Surgical and non-surgical advances in the treatment of chronic thrombo-emboic pulmonary hypertension and associated PAH.

Keshavjee S: American Transplant Congress 2008, Toronto, ON, May 2008. Molecular markers of lung injury.

Keshavjee S: Harvard Medical School, Boston, Massachussetts, May 2008. Postgraduate Course in Thoracic Surgery: (1) Sleeve resection for lung cancer, (2) Carinal resection for lung cancer, (3) Management of N2 non small cell lung cancer, (4) Management of end stage lung disease, (5) Accelerated treatment of postpneumonectomy empyema, (6) Omentum in the management of complicated thoracic problems, (7) Management of thymoma.

Keshavjee S: International Society of Heart and Lung Transplantation, Boston, Massachussetts, April 2008. (1) Ex-vivo lung perfusion for repair and regeneration of donor lungs, (2) Extended normothermic ex-vivo lung assessment.

Keshavjee S: Canadian Society of Transplantation, Mont Tremblant, PQ, February 2008. Enhancing the precision of extended donor selection and utilization.

Keshavjee S: European Society for Heart and Lung Transplantation, Wengen, Switzerland, January 2008. (1) Werner Zuber Memorial Lecture: Molecular diagnostics in thoracic transplantation, (2) Debate: Current problems in organ donation mandates selecting only low risk recipients with best estimated outcomes.

Keshavjee S: British Thoracic Society, London, United Kingdom, December 2007. Novel approaches to increase the donor lung supply.

Keshavjee S: National Cancer Institute of Canada, Clinical Trials Group Meeting, Toronto, ON, November 2007. Limited lung resection for early stage lung cancer.

Keshavjee S: European Society of Transplantation, Prague, Czech Republic, October 2007. Molecular concepts in the monitoring of thoracic transplant recipients.

Keshavjee S: Lung Transplantation for Cystic Fibrosis Symposium, Orford, PQ, September 2007. Artifical lung as a bridge to transplant.

Liu M: Nanjing University, Nanjing Drum Tower Hospital, Nanjing, Jiangsu, China, March 2008. Happy Birthday ARDS, Sunrise Symposium, International Society of Heart and Lung Transplantation Annual Meeting.

McKneally MF: Harvard Medical International, University of Lausanne, Lausanne, Switzerland, May 2008. (1) Principles of innovation, (2) Ethical issues in innovation.

McKneally MF: University of Chicago, MacLean Center for Clinical Medical Ethics, Chicago, Illinois, November 2007. Ethics of surgical innovation and its regulation.

Waddell TK: Canadian Respiratory Conference, Montreal, PQ, June 2008. Update on lung transplantation.

Waddell TK: American Thoracic Society, Toronto, ON, May 2008. B96-stem cells in the lung: Recruitment, engraftment, and function. Epithelial progenitor cells in the bone marrow.

Waddell TK: Transatlantic Airway Conference, Lucerne, Switzerland, January 2008. Discussion: Stem/progenitor cells and lung repair.

Waddell TK: Canadian Cystic Fibrosis Foundation, Orford, PQ, September 2007. The future of lung transplantation.

Research and Investigations

Senior Investigator's Name Appears in Italics

A multi-center, randomized, double-blind, placebo-controlled, phase 3 study of single-agent Tarceva(erlotinib) following complete tumor resection with or without adjuvant chemotherapy in patients with stage IB-IIIA non-small cell lung carcinoma who have EGFT-positive tumor (RADIANT). *Keshavjee S*, Darling G, Waddell T, de Perrot M, Pierre A, Johnston M: *OSI Pharmaceutical*. (\$20,000 2007 - 2008.)

A randomized comparison of laparoscopic myotomy and pneumatic dilatation for achalasia. *Urbach D*, Diamant N, Kortan P, Darling G, Tomlinson G, Laporte A, Deitel W: *Canadian Institutes of Health Research*. (\$445,410 2005 - 2010.)

Adjuvant sutent following chemotherapy, radiation and surgery for esophageal cancer, a phase II trial (ASSET). *Knox J*, Wong R, Darling G, Waddell T, Keshavjee S, Johnston M, Pierre A, de Perrot M: *University Health Network*. (\$235,000 2007 - 2008.)

Airway remodelling in bronchiolitis obliterans after lung transplantation: The role of matrix metalloproteinases. *Keshavjee S: Canadian Fibrosis Foundation*. (\$270,000 2006 - 2009.)

Cell replacement therapy for cystic fibrosis. Waddell TK: Canadian Cystic Fibrosis Foundation. (\$189,716 2007 - 2010.)

CF transplant center grant. Keshavjee S, Singer L: Canadian Cystic Fibrosis Foundation. (\$60,241 2008.)

Development of a novel therapeutic strategy with Pemetrexed and regulatory T cell depletion for malignant pleural mesothelioma: A translational research project. *de Perrot M: Mesothelioma Applied Research Foundation*. (\$100,000 2008 - 2009.)

Ex-vivo gene repair of injured donor lungs for transplantation. *Keshavjee S: Wyeth Pharmaceuticals/Canadian Institutes of Health Research, Rx and D Clinical Research Chairs: Transplantation.* (\$1,100,000 2008 - 2013.)

GABAergic regulations of airway epithelium in asthma. *Lu WY*, Inman M, Liu MY: *Canadian Institutes of Health Research*. (\$675,414 2007 - 2012.)

Gene therapeutic strategies for transplant related lung injury. Keshavjee S: Canadian Institutes of Health Research. (\$654,290 2003 - 2008.)



High risk seed grant - regenerative medicine: The role of marrow stromal cells in prevention of chronic lung allograft rejection. *Waddell TK: Canadian Institutes of Health Research.* (\$150,000 2005 - 2007.)

Repair of damaged lungs for transplantation using an ex-vivo gene therapeutic strategy. *Keshavjee S: Center for Gene Therapy of Cystic Fibrosis and Other Genetic Diseases, University of Iowa/National Institutes of Health Pilot Grant.* (\$34,560 2006 - 2008.)

Signal cross-talk in acute lung injury. Liu MY: Canadian Institutes of Health Research. (\$659,750 2003 - 2008.)

The effect and mechanisms of a novel adoptive immunotherapy for lung cancer using ex vivo expanded human DNT cells. *Zhang L*, de Perrot M, Tsao M, Johnston M: *National Cancer Society (National Cancer Institute of Canada)*. (\$705,000 2006 - 2011.)

The role of galectin-3 in xenograft rejection. Waddell TK: Heart and Stroke Foundation of Ontario. (\$275,934 2007 - 2010.)

Ventilator-induced acute lung injury: From mechanotransduction to molecular therapies. *Liu MY*, Chen P, Han B: *Canadian Institutes of Health Research*. (\$789,240 2006 - 2011.)

Honours Received

Keshavjee S: Andrew Lazarovits Lecturer, Canadian Society of Transplantation. February 2008.

Keshavjee S: Lister Prize in Surgery, Department of Surgery, University of Toronto. April 2008.

Pierre AF: Gail E. Darling Award for Excellence in Undergraduate Teaching 2007-08, Division of Thoracic Surgery, University of Toronto. June 2008.

Pierre AF: Robert J. Ginsberg Award for Excellence in Postgraduate Teaching 2007-08, Division of Thoracic Surgery, University of Toronto. June 2008.

Pierre AF: Ross Fleming Surgical Educator Award 2007-08, Department of Surgery/Surgical Services, University Health Network. June 2008.

DIVISION OF UROLOGY

Dr. A. Finelli – Assistant Professor Dr. N.E. Fleshner – Professor (Division Head) Dr. M.M. Hassouna – Associate Professor Dr. M.A.S. Jewett – Professor Dr. A.G. Matthew – Assistant Professor Dr. S.B. Radomski – Associate Professor Dr. M. Robinette – Associate Professor Dr. J. Trachtenberg – Professor

Publications

Al-Ghamdi AM, Lockwood G, Toi A, Kulkarni GS, Evans A, Finelli A, Zlotta AR, Fleshner N: Extended pattern prostate biopsy does not minimize the volume-grade bias in prostate cancer detection. The Journal of Urology: April 2008: 179(4): pp 1332-1334.

Alibhai SM, Leach M, Tomlinson GA, Krahn MD, Fleshner N, Naglie G: Is there an optimal comorbidity index for prostate cancer? Cancer: March 2008: 112(5): pp 1043-1050.

Bogaards A, Sterenborg HJCM, Trachtenberg J, Wilson BC, Lilge L: In vivo quantification of fluorescent molecular markers in real-time by ratio imaging for diagnostic screening and image-guided surgery. Lasers in Surgery and Medicine: August 2007: 39(7): pp 605-613. E-published September 14, 2007.

Chatterjee S, Radomski S, Matsumoto E: Durability of endourological skills: Two-year follow-up study. Journal of Endourology: August 2007: 21(8): pp 843-846.

Chung DE, Chung J, Platzker T, Radomski SB: Discordance of community and hospital ultrasound reports for urological abnormalities. Canadian Urological Association Journal: September 2007: 1: pp 251-254.

Chung PW, Bristow RG, Milosevic MF, Yi QL, Jewett MA, Warde PR, Catton CN, McLean M, Moore M, Tannock IF, Gospodarowicz MK: Long-term outcome of radiation-based conservation therapy for invasive bladder cancer. Urologic Oncology: July 2007: 25: pp 303-309.

Crook J, Fleshner N, Roberts C, Pond G: Long-term urinary sequelae following (125) iodine prostate brachytherapy. The Journal of Urology: September 2007: 179(1): pp 141-145.

Eggener SC, Scardino PT, Carroll PR, Zelefsky MJ, Sartor O, Hricak H, Wheeler M, Fine SW, Trachtenberg J, Rubin MA, Ohori M, Kuroiwa K, Rossignol M, Abenhaim L: Focal therapy for localized prostate cancer: A critical appraisal of rationale and modalities. The Journal of Urology: December 2007: 178(6): pp 2260-2267.

Finelli A: Laparoscopic retroperitoneal lymph node dissection for nonseminomatous germ cell tumors: Long-term oncologic outcomes. Current Opinion in Urology: March 2008: 18(2): pp 180-184.

Fleshner N, Zlotta AR: Prostate cancer prevention: Past, present and future. Cancer: November 2007: 110(9): pp 1889-1899.

Gervais ML, Henry PC, Saravanan A, Burry N, Gallie BL, Jewett MAS, Hill RP, Evans AJ, Ohh M: Nuclear E-cadherin and VHL immunoreactivity are prognostic indicators of clear-cell renal cell carcinoma. Laboratory Investigation: December 2007: 87: pp 1252-1264.

Groenendijk PM, Lycklama-Nyeholt AAB, Heesakkers JPFA, van Kerrebroeck PEV, Hassouna MM, Gajewski JB, Cappellano F, Siegel SW, Fall M, Dijkema HE, Jonas U, van den Hombergh U: Urodynamic evaluation for sacral neuromodulation for urge urinary incontinence. British Journal of Urology International: February 2008: 101(3): pp 325-329.

Groll R, Warde P, Jewett MAS: A comprehensive systematic review of testicular germ cell tumor surveillance. Critical Reviews in Oncology/Hematology: Incorporating Geriatric Oncology: December 2007: 64: pp 182-197.

Haider MA, Chung P, Sweet J, Toi A, Jhaveri K, Menard C, Warde P, Trachentenberg J, Lockwood G, Milosevic M: Dynamic contrast-enhanced magnetic resonance imaging for localization of recurrent prostate cancer after external beam radiotherapy. International Journal of Radiation Oncology, Biology, Physics: September 2007: 70(2): pp 425-430.



Haider MA, Davidson SRH, Kale AV, Weersink RA, Evans AJ, Toi A, Gertner MR, Bogaards A, Wilson BC, Chin JL, Elhilali M, Trachtenberg J: Prostate gland: MR imaging appearance after vascular targeted photodynamic therapy with palladiumbacteriopheophorbide. Radiology: July 2007: 244(1): pp 196-204. E-published May 16, 2007.

Haider MA, vander Kwast TH, Tanguay J, Evans AJ, Hashmi A-T, Lakewood G, Trachtenberg J: Combined T2-weighted and diffusion-weighted MRI for localization of prostate cancer. American Journal of Roentgenology: August 2007: 189(2): pp 323-328.

Jewett MAS, Knox JJ, Kollmansberger C, Basiuk J: Commentary on management of kidney cancer: Canadian kidney cancer forum consensus statement. Canadian Urological Association Journal: June 2008: 2(3): pp 175-182.

Krege S, Beyer J, Souchon R, Albers P, Albrecht W, Algaba F, Bamberg M, Bodrogi I, Bokemeyer C, Cavallin-Stahl E, Classen J, Clemm C, Cohn-Cedermark G, Culine S, Daugaard G, De Mulder PHM, De Santis M, de Wit M, de Wit R, Derigs HG, Dieckmann KP, Dieing A, Droz JP, Fenner M, Fizazi K, Flechon A, Fossa SD, Garcia del Muro X, Gauler T, Geczi L, Gerl A, Germa-Lluch JL, Gillessen S, Hartmann JT, Hartmann M, Heidenreich A, Hoeltl W, Horwich A, Huddart R, Jewett M, Joffe J, Jones WG, Kisbenedek L, Klepp O, Kliesch S, Koehrmann KU, Kollmannsberg C, Kuczyk M, Laguna OP, Galvis OL, Loy V, Mason MD, Mead GM, Mueller R, Nichols C, Nicolai N, Oliver T, Ondrus D, Oosterhof GON, Ares LP, Pizzocaro G, Pont J, Pottek T, Powles T, Rick O, Rosti G, Salvioni R, Scheiderbauer J, Schmelz H-U, Schmidberg H, Schmoll H-J, Schrader M, Sedlmayer F, Skakkebaek NE, Sohaib A, Tjulandin S, Warde P, Weinknecht S, Weissbach L, Wittekind C, Winter E, Wood L, von der Maase H: European consensus conference on diagnosis and treatment of germ cell cancer: A report of the second meeting of the European Germ Cell Cancer Consensus Group (EGCCCG): European Journal of Urology: March 2008: 53(3): pp 478-496. Part I, E-published March 31, 2008.

Kulkarni GS, Finelli A, Fleshner NE, Jewett MAS, Lopushinsky SR, Alibhai SMH: Optimal management of high-risk T1G3 bladder cancer: A decision analysis. PLoS (Public Library Science Medicine): September 2007: 4(9): pp e284.

Kulkarni GS, Finelli A, Lockwood G, Saravanan A, Evans A, Jewett MAS, Trachtenberg J, Robinette M, Fleshner NE: Effect of healthcare provider characteristics on nodal yield at radical cystectomy. Urology: E-published May 2, 2008.

Matthew AG, Currie KL, Irvine J, Ritvo P, Santa Mina D, Jamnicky L, Nam R, Trachtenberg J: Serial personal digital assistant data capture of health-related quality of life: A randomized controlled trial in a prostate cancer clinic. Health Quality Life Outcomes: September 2007: 5: pp 38. E-published July 6, 2007.

Neill MG, Toi A, Lockwood G, Evans A, Tammsalu L, Fleshner N: Systemic lateral prostate biopsy - are the benefits worth the costs? The Journal of Urology: April 2008: 179(4): pp 1321-1326.

Neill MG, Wei AC, Jewett MAS: Consolidative renal cell carcinoma metastatectomy for partial response after multitargeted tyrosine kinase inhibitor therapy. Urology: July 2007: 70: pp 178: e9-e11.

Nieder AM, Soloway MS, Jewett MA: Letter to the Editor: Can restaging transurethral resection of T1 bladder cancer select patients for immediate cystectomy? The Journal of Urology: July 2007: 177: pp 75-79.

Palmer J, Venkateswaran V, Fleshner N, Klotz LH, Cox ME: The impact of diet and micronutrient supplements on the expression of neuroendocrine markers in murine Lady transgenic prostate. Prostate: March 2008: 68(4): pp 345-353.

Ponsky L, Cherullo E, Moinzadeh A, Desai M, Kaouk J, Haber GP, Chen D, Ng C, Fuchs G, Singh D, Finelli A, Frank I, Matin S: The hem-o-lok clip is safe for laparoscopic nephrectomy: A multi-institutional review. Urology: April 2008: 71(4): pp 593-596.

Shahani R, Fleshner N, Zlotta AR: Pharmacotherapy for prostate cancer: The role of hormonal treatment. Discovery Medicine: August 2007: 7(39): pp 118-124.

Sotelo R, Mirandolino M, Trujillo G, Garcia A, de Andrade R, Carmona O, Sanchez L, Rodriguez E, Finelli A: Laparoscopic repair of rectourethral fistulas after prostate surgery. Urology: September 2007: 70(3): pp 515-518.

Srinivasan S, Radomski SB, Chung J, Singer S, Slomovic AR: Intraoperative floppy-iris syndrome during cataract surgery in men using alpha-blockers for benign prostatic hypertrophy. Journal of Cataract and Refractive Surgery: October 2007: 33: pp 1826-1827.

Stewart J, Fleshner N, Cole H, Toi A, Sweet J: Prognostic significance of alpha-methylacyl-coA racemase among men with high grade prostatic intraepithelial neoplasia in prostate biopsies. The Journal of Urology: May 2008: 179(5): pp 1751-1755.

Stewart J, Fleshner, Cole H, Sweet J: Comparison of annexin II, p63 and (alpha)-methylacyl-coA racemase immunoreactivity in prostatic tissue: A tissue microarray study. Journal of Clinical Pathology: July 2007: 60(7): pp 773-780.

Trachtenberg J, Bogaards A, Weersink R, Haider M, Evans A, McCluskey S, Scherz A, Gertner M, Yue C, Appu S, Aprikian A, Savard J, Wilson BC, Elhilali M: Vascular targeted photodynamic therapy with palladium-bacteriopheophorbide photosensitizer for recurrent prostate cancer following definitive radiation therapy: Assessment of safety and treatment response. The Journal of Urology: November 2007: 178(5): pp 1974-1979.

Trachtenberg J, Fleshner NE, Matthew AG, Currie KL, Santa Mina D, Lancaster C, Ritvo P, Irvine J, Casselman B: Challenging Prostate Cancer: Nutrition, Exercise and You. Informco, Toronto, 2008: pp 1-98.

Trachtenberg J, Weersink R, Davidson S, Haider MA, Bogaards A, Gertner MR, Evans A, Scherz A, Savard A, Chin JL, Wilson BC, Elhilali M: Vascular-targeted photodynamic therapy (padoporfin, WST09) for recurrent prostate cancer after failure of external beam radiotherapy: A study of escalating light doses. British Journal of Urology: May 2008: 102(5): pp 556-562. E-published May 20, 2008.

van Kerrebroeck PEV, van Voskuilen AC, Bemelmans B, Lycklama-Nycholt AAB, Siegel S, Jonas U, Fowler CJ, Fall M, Gajewski JB, Hassouna MM, Capellano F, Elhilali MM, Milam DF, Das AK, Dijkema H, van den Hombergh U: Five-year results of sacral neuromodulation therapy for urinary voiding dysfunction: Outcomes of a prospective, worldwide clinical study. The Journal of Urology: November 2007: 178: pp 2029-2034.

Venkateswaran V, Haddad AQ, Fleshner N, Fan R, Sugar LM, Nam R, Klotz LH, Pollak M: Association of diet-induced hyperinsulinemia with accelerated growth of prostate cancer (LNCaP) xenografts. Journal of the National Cancer Institute: December 2007: 99(23): pp 1793-1800.

Volpe A, Kachura JR, Geddie WR, Evans AJ, Gharajeh A, Saravanan A, Jewett MAS: Techniques, safety and accuracy of sampling of renal tumors by fine needle aspiration and core biopsy. The Journal of Urology: August 2007: 178: pp 379-386.

Invited Visits

Finelli A: Kidney Cancer Canada, Toronto, ON, March 2008. Imaging tests for staging and surveillance of RCC.

Finelli A: Canadian Kidney Cancer Forum, Mt. Tremblant, PQ, January 2008. (1) Chair: Management of localized kidney cancer, (2) The role of biopsy in the management of small renal masses.

Finelli A: La Floresta Institute, Caracas, Venezuela, October 2007. (1) Advanced laparoscopic surgery for urologic malignancies, (2) Live laparoscopic nephrectomy.

Fleshner NE: Prostate Cancer Research Foundation, Toronto, ON, June 2008. Anterior prostate tumors: How to avoid missing them.

Fleshner NE: European Association of Urology, Milan, Italy, March 2008. (1) State of the art: New diagnostic techniques, (2) Identifying and managing candidates for prostate cancer risk reduction therapy.

Fleshner NE: University of Kansas Medical Centre, Kansas, Missouri, March 2008. (1) Starting an academic career, (2) The role of diet in the prevention of prostate cancer.

Hassouna MM: University of Laval, Quebec, PQ, March 2008. Visiting Professor: Advances in pelvic neuromodulation for voiding dysfunction.

Hassouna MM: Canadian Paraplegic Society/Canadian National Institute for the Blind, Conference "Sex, Wheels and Relationships II," Toronto, ON, February 2008. Sexuality in male patients with spinal cord injury.

Hassouna MM: Society of Female Urology and Urodynamics, Miami, Florida, February 2008. Round table discussion on techniques of neuromodulation.

Hassouna MM: International Neuromodulation Society (INS), 8th World Congress, Acapulco, Mexico, December 2007. (1) Chair of Session: Neuromodulation in visceral pain, (2) Pelvic neuromodulation in voiding dysfunction: What we have learned in the last 20 years, (3) Urological disorders and pelvic neuromodulation.

Jewett MAS: Laval University, Division of Urology, Quebec City, PQ, June 2008. Visiting Professor: Management of testis cancer stage by stage.



Jewett MAS: European Society of Medical Oncology, Testicular Cancer Symposium, Munich, Germany, May 2008. (1) Is there still a need for primary surgical staging and treatment in clinical stage I non-seminoma?, (2) Primary chemotherapy in stage II a/b non-seminoma.

Jewett MAS: Us Too!, Brampton, ON, April 2008. What does the future hold for prostate cancer treatment?

Jewett MAS: European Urology Association, Annual Meeting, Milan, Italy, March 2008. Annual Societe Internationale d'Urologie (SIU) Lecture, Plenary Session: (1) Detection and mapping regional lymph nodes in GU cancer, (2) Debate: Retroperitoneal lymphadenectomy can be performed selectively.

Jewett MAS: American Society of Clinical Oncology/American Society of Therapeutic Radiology and Oncology/Society of Urologic Oncology (ASCO/ASTRO/SUO), 2008 Genitourinary Cancer Symposium, San Francisco, California, February 2008. Optimal management of stage I renal cell cancer: Active surveillance.

Jewett MAS: University of Berne, Department of Urology, Berne, Switzerland, February 2008. Visiting Professor: The role of needle biopsy in the management of small renal masses.

Jewett MAS: Canadian Kidney Cancer Forum, Mt. Tremblant, PQ, January 2008. Localized kidney cancer: Demographics/natural history of small renal masses.

Jewett MAS: McLaughlin Durham Regional Cancer Centre, 8th Annual Oncology Conference, GU Cancer: Managing the Stream of Information, Oshawa, ON, November 2007. New advances in kidney cancer.

Jewett MAS: Society of Urologic Oncology, Annual Meeting, Bethesda, Maryland, November 2007. Nephroureterectomy should be done laparoscopically: No.

Jewett MAS: 6th International Kidney Cancer Symposium, Chicago, Illinois, October 2007. What is the optimal management for a 4cm renal mass: Active surveillance.

Jewett MAS: 25th World Congress of Endourology and Shockwave Lithotripsy (SWL), Cancun, Mexico, October 2007. Invited Faculty: (1) Debate: One year later, update on radical cystectomy, (2) Incidental renal masses: Watchful waiting, in whom?

Jewett MAS: 31st Brazilian Urology Congress, Salvador, Brazil, October 2007. Visiting Professor.

Jewett MAS: Brazilian Urological Association, Annual Congress, Salvador, Brazil, October 2007. Biopsy of the prostate.

Jewett MAS: Blue Ribbon Prostate Cancer Patient Forum, St. Catharines, ON, September 2007. What does the future hold for prostate cancer treatment?

Jewett MAS: University of Iowa, Department of Urology, Urology Postgraduate Conference, Iowa City, Iowa, September 2007. David A. Culp Lecture: (1) Comment: Is there a role for brachytherapy for cancer of the penis?, (2) Management of small renal masses in 2007, (3) Meet the professors: Case presentations.

Jewett MAS: World Urologic Oncology Federation, 3rd Conference, Paris, France, September 2007. (1) New technologies in the management of small renal masses, (2) Small renal masses should be biopsied: Yes.

Jewett MAS: Bladder Think Tank 2/Bladder Cancer Think Tank 2, Brewster, Massachusetts, August 2007. (1) Blue sky: Where can imaging in bladder cancer take us?, (2) Enhancing cystoscopy: White light vs. narrow band imaging, (3) Targeted intravesical therapy in bladder cancer.

Matthew AG: Canadian Prostate Cancer Research Initiative, Niagara-on-the-Lake, ON, June 2008. Honest broker: Patient decisionmaking for prostate cancer treatment.

Matthew AG: Canadian Prostate Cancer Network, Newmarket, ON, May 2008. Coping with the emotional side-effects of prostate cancer diagnosis and treatment.

Matthew AG: Simcoe County Palliative Care Program, Orillia, ON, May 2008. Sexuality and cancer.

Matthew AG: Canadian Association of Palliative Oncology, Halifax, Nova Scotia, May 2008. Sexual dysfunction in couples after prostate cancer surgery.

Matthew AG: Dalhousie University, Halifax, NS, May 2008. Prostate cancer survivorship: Adapting to sexual dysfunction after androgen deprivation therapy.

Matthew AG: American Psychology Association, Washington, District of Columbia, March 2008. Provincial Advocacy Co-Ordinator.

Matthew AG: York University, Toronto, ON, March 2008. Sexuality and oncology: An essential part of clinical care.

Matthew AG: Ontario Psychology Association, Toronto, ON, February 2008. Outcome informed professional practice: How to demonstrate your effectiveness.

Matthew AG: York University, Toronto, ON, November/December 2007. Health psychology: Sexuality after cancer.

Trachtenberg J: National Cancer Institute of Canada, Toronto, ON, November 2007. Health related quality of life of men with prostate cancer.

Trachtenberg J: University of British Columbia, Vancouver, BC, November 2007. (1) Focal therapy for prostate cancer: A new paradigm of therapy, (2) The prostate cancer prevention trial: Clinical applications.

Trachtenberg J: University of Graz, Graz, Austria, November 2007. Image-guided focal therapy of low risk prostate cancer.

Trachtenberg J: Weill Cornell Medical School, New York, New York, October 2007. Image-guided focal therapy for prostate cancer.

Research and Investigations

Senior Investigator's Name Appears in Italics

A phase 2, randomized, double-blind, parallel group, placebo-controlled, multi-centered study to evaluate the urodynamics and safety of YM178 in male subjects with lower urinary tract symptoms (LUTS) and bladder outlet obstruction(BOO). *Radomski SB: Astellas Pharma US, Incorporated.* (\$38,500 2007 - 2008.)

A phase II, single arm, prospective study of neoadjuvant sutent for patients with renal cell carcinoma. *Finelli A*, Knox A, Evans A, Fleshner N, Haider M, Jewett M: *Pfizer*. (\$384,175 2007 - 2010.)

A phase III, randomized, double blind, placebo-controlled trial of PROSCAR in men with initial negative prostate biopsies. *Finelli A*, Fleshner N, Jewett M, Toi A, Trachtenberg J, Zlotta A: *Merck Frosst Company*. (\$194,506–2007 - 2009.)

A randomized double-blind study of combination vitamin E, selenium and lycopene versus placebo in men undergoing radical prostatectomy for prostate cancer. *Fleshner N*, Evans A, Venkateswaran V, Klotz L: *Prostate Cancer Research Foundation*. (\$60,000 2008.)

A randomized double-blind study to assess the safety and efficacy of slifenacin (vesicare) in comparison to oxybutynin for overactive bladder patients. *Radomski SB: Astellas Pharma Canada Incorporated.* (\$26,000 2006 - 2008.)

A randomized, prospective parallel group study to investigate the frequency of urinary tract infections comparing hydrophilic-coated catheters with uncoated catheters for intermittent catheterization. *Hassouna M: Coloplast, Incorporated.* (\$45,000 2006 - 2007.)

Advanced articulating patient support system for image-guided therapeutics. *Fernie G, Jewett MAS*, Menard C, Finelli A, Kucharchyk W: *BioDiscover Stage I Business and Development Project, Ontario Research Commercialization Program.* (\$130,000 2007 - 2008.)

Analysis of VHL gene mutation in sporadic renal cell carcinoma. *Jewett MAS*, Gallie BL, Ohh M, Evans A: *Canadian Urologic Association/Canadian Urologic Oncology Group/Bayer Kidney Cancer Fellowship Award*. (\$40,000 2007.)

Assessment of the clinical utiligy of PTEN genomic deletion analyses and related downstream biomarkers in prostate cancer. *Evans A*, Fleshner N, Lockwood G, Squire J, Sweet J: *Ontario Institute for Cancer Research*. (\$221,323 2008 - 2011.)

Assisting stem cell transplant patients in the first year of post-transplant recovery. *Ritvo PG*, Keating A, Nevill T, Shaw B, Irvine MJ, Matthew AG, Tomlinson S, Brown L: *National Cancer Institute of Canada*. (\$84,600 2004 - 2007.)

Comparison between 2 of M3 receptors antagonists on detrusor overactive bladder in spinal cord injured patients. *Hassouna M: Ontario Neurotrauma Foundation.* (\$10,000 2007.)

Cross-Canada assessment of a new nomogram prediction tool for prostate cancer screening. *Nam RK*, Narod S, Klotz L, Trachtenberg J, Jewett M, Izawa J, Chin J, Bell D, Aprikian A, So A, Toi A: *National Cancer Institute of Canada*. (\$462,084 2006 - 2009.)



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.)

Dietary heterocyclic amines, polymorphisms in metabolism genes and risk of prostate cancer. *Birkett N*, Fleshner N, Malone S, Morash C: *Department of Defense (DOD) (Congressionally Directed Medical Research Programs-CDMRP).* (\$250,000 2004 - 2008.)

Does directed self-audit of urologists stimulate reflection and improved lymph node retrieval in patients with bladder cancer? *Finelli* A, Gagliardi AR, Kulkarni GS, Fleshner NE: *Continuing Education and Professional Development, Faculty of Medicine, University of Toronto.* (\$5,000 2008 - 2009.)

Effect of a low carbohydrate diet on prostate cancer in vivo: Alternations in biochemical mechanisms involving the insulin and IGF axis. *Venkateswaran V*, Pollak M, Fleshner N, Klotz L, Sugar L: *Prostate Cancer Research Foundation of Canada*. (\$110,138 2006 - 2008.)

Effect of RANK ligand inhibition on metastatic prostate cancer. Trachtenberg J: Amgen. (\$90,000 2008 - 2009.)

Effect of WST 11 on localized prostate cancer - A phase 1 trial. Trachtenberg J: Steba Biopharma. (\$180,000 2008 - 2009.)

Effects of botulinium-A toxin versus sacral neuromodulation on voiding dysfunction in rats following spinal cord injury: Role of C-afferent fibers in the mechanism of action in both treatment modalities. *Hassouna M: Medtronic Incorporated.* (\$20,000 2006 - 2008.)

Epigenomics-based strategies for prediction of prognosis and therapeutic outcome of prostate cancer. *Bapat B*, van der Kwast T, Fleshner N, Briollais L: *Canadian Institutes for Health Research*. (\$142,936 2006 - 2009.)

Facilitating informed treatment decision-making through a professional/peer-led decision-aid group educational program (PLEDGE): A feasibility study in a prostate cancer clinical setting. *Matthew M*, O'Neil S, Squire J, Ritvo P, Cole D, Yue C, Trachtenberg J: *Princess Margaret Hospital Foundation*. (\$31,000 2007 - 2010.)

Focal therapy of prostate cancer. *Trachtenberg J*, Wilson B, Haider M, Weersink R, Goldenberg A: *Princess Margaret Hospital Foundation*. (\$500,000 2006 - 2009.)

Identification and characterization of genetic alterations at the stromal-epithelial interface in prostate cancer. *Fleshner N*, Brown T, Done S, Jurisica I, Lockwood G, Sweet J: *Ontario Institute for Cancer Research*. (\$566,993 2007 - 2010.)

Impact of combination antioxidants on MRI markers of cell proliferation and hypoxia among men on active surveillance with early stage prostate cancer. *Fleshner N*, Haider M, Venkateswaran V: *Canadian Urological Association/Canadian Urologic Oncology Group/Abbott Prostate Cancer Research Grant*. (\$25,000 2007 - 2008.)

Impact of combination antioxidants on MRI markers of cell proliferation and hypoxia among men on active surveillance with early state prostate cancer. *Fleshner N*, Haider M, Venkateswaran V: *Prostate Cancer Research Foundation of Canada*. (\$60,000 2007 - 2008.)

In bore robotic assisted image-guided focal ablation of prostate cancer. *Trachtenberg J*, Haider M, Goldenberg A, Kucharczyk W: *Princess Margaret Hospital Foundation*. (\$160,000 2006 - 2007.)

Mentoring and strength in impoverished young males. *Ritvo P*, James C, Katz J, Baker J, Ardern C, Flicker S, Matthew A, Brown P, Capelli M: *Canadian Institutes of Health Research*. (\$98,860 2008 - 2009.)

Micronutrients and prostate cancer: Prevention to treatment. *Venkateswaran V*, Fleshner N, Klotz L, Sugar L, Teahan S: *Canadian Institutes of Health Research*. (\$315,176 2006 - 2009.)

MRI-guided and tumor-targeted HDR brachytherapy for recurrent prostate cancer. *Menard C*, Fleshner N: *National Institutes of Health*. (\$274,240 2008 - 2010.)

Multicenter randomized study on the efficacy and safety of M3 receptors antagonists on the urinary bladders in spinal cord injured patients. *Hassouna M*, Razvi H, Wilson J, Winter L, McGillivray C: *Ontario Neurotrauma Foundation*. (\$401,204 2007 - 2009.)

NIR imaging and photodynamic therapy of prostate cancer using aptamer-directed lipoprotein nanoplatform. *Zheng G*, Wilson B, Trachtenberg J: *Canadian Institutes of Health Research*. (\$365,000 2007 - 2010.)

NIRS ED (Near-Infrared Spectroscopy Erectile Dysfunction) proof of concept study protocol. *Radomski S*, Barkin J, Herschorn S: *Urodynamix Technologies Limited*. (\$10,800 2007 - 2008.)

Novel urine markers of bladder cancer: A proteomic approach. *van der Kwast T*, Fleshner N, Evans A, Lockwood G: *Ontario Institute for Cancer Research*. (\$436,805 2008 - 2011.)

Photodynamic therapy - Basic science studies. Zheng H, Hetzel FW, Chen Q, Trachtenberg J, Wilson BC: National Institutes of Health. (\$6,077,500 2004 - 2009.)

Photodynamic therapy beacon triggered by prostate cancer-specific mRNA. *Zheng G*, Wilson B, Trachtenberg J: *National Cancer Institute of Canada*. (\$500,000 2007 - 2011.)

Population-based estimates and quality of life in prostate cancer survivors. *Krahn M*, Trachtenberg J: *Canadian Institutes of Health Research*. (\$520,474 2006 - 2009.)

Preoperative administration of sorafenib in patients with metastatic renal cell carcinoma undergoing cytoreductive nephrectomy. *Finelli A*, Knox J, Evans A, Fleshner N, Jewett M, Kim TK: *Bayer Incorporated*. (\$207,155 2007 - 2009.)

Prevalence and age distribution of prostate carcinoma and its precursor lesions in African, Asian and Caucasian men in autopsy specimens: A prospective comparative international study with central pathology review. *Zlotta A*, Finelli A, Fleshner N, Jarvi K, van der Kwast T: *Prostate Cancer Research Foundation of Canada*. (\$59,000 2007 - 2008.)

Program project grant: Photodynamic therapy-basic science studies. Project 3-prostate preclinical. *Hetzel FWl*, Chen Q, Wilson BC, Trachtenberg J: *National Institutes of Health (United States)*. (\$1,000,000 2002 - 2009.)

Prospective randomized double-blind trial of intravesical injection of botulinum toxin A versus saline for neurogenic detrusor overactivity and urinary incontinence related to spinal cord injury or multiple sclerosis. *Herschorn S*, Radomski SB: *Allergan Canada*. (\$39,000 2006 - 2007.)

Prostate cancer survivorship: Adaptation following radical prostatectomy. *Matthew AG*, Currie K, Jamnick L, Ritvo P, Trachtenberg J: *Princess Margaret Hospital Foundation*. (\$31,000 2007 - 2008.)

Randomized study to investigate the efficacy and safety of treatment with dutasteride and tamsulosin once daily for four years on the improvement of symptoms and outcome of benign prostatic hyperplasia. *Hassouna MM*, Radomski S: *Glaxo-Smith-Kline Pharmaceutical*. (\$15,000 2004 - 2008.)

Randomized trial of the effects of cholecalciferol on prostate cancer associated lesions and on cholecalciferol metabolites in prostate tissue. *Veith R*, van der Kwast T, Fleshner N, Klotz L: *Canadian Institutes of Health Research*. (\$262,730 2006 - 2008.)

Reduction in progression among men on watchful waiting using dutasteride. *Fleshner N*, REDEEM Study Group: *Glaxo Smith Kline*. (\$8,000,000 2006 - 2011.)

Sexual dysfunction and adaptation in couples affected by prostate cancer surgery: Steps towards a biopsychosocial model of treatment. *Matthew A*, Ritvo P, Irvine J, Trachtenberg J, Jewett M, Fleshner N, Radomski S, Tsihlias J, Shaw B, Katz J, Weitzman E: *Canadian Institutes of Health Research*. (\$120,000 2005 - 2008.)

Telomere erosion as an early marker of prostate cancer. *Squire J*, Fleshner N, MacGregor P, Trachtenberg J, Evans A, Minkin S, Srigley J: *National Cancer Institute of Canada*. (\$383,482 2004 - 2007.)

The Selenium and Vitamin E Cancer Prevention (SELECT) Trial. *Trachtenberg J*, Jewett M, Tshilias J: *National Cancer Institute*. (\$250,000 2000 - 2009.)

Translational companion study to PRP.1. *Fleshner N*, Evans A, Gleave M, Nelson C, Minkin S, Nam R, Pollak M, Saad F, Shepherd L, Squire J, Sweet J: *Ontario Cancer Research Network*. (\$641,038 2005 - 2008.)

Two-year follow-up study of the health effects of androgen deprivation therapy in men with non-metastatic prostate cancer. *Alibhai S*, Canning DS, Fleshner N, Krahn M, Naglie G, Tannock I, Tomlinson G: *Canadian Institutes for Health Research*. (\$339,000 2007 - 2010.)

Wyeth/Canadian Institutes of Health Research Clinical Research Chair in Oncology. Jewett M: Canadian Institutes of Health Research. (\$1,100,000 2008 - 2013.)



Honours Received

Jewett MAS: Best of Posters Award, American Urological Association Annual Meeting. May 2008.

Jewett MAS: Best of Posters Award, Canadian Urological Association Annual Meeting. June 2008.

Jewett MAS: Best Poster of Session: "Active surveillance of small renal masses: A prospective multi-centre Canadian trial," at the Annual Meeting of the European Association Urology. March 2008.

Jewett MAS: Wyeth/Canadian Institutes of Health Research Clinical Research Chair in Oncology. February 2008.

Matthew AG: National Cancer Institute of Canada Poster Award, First Place in Psychosocial Section. November 2007.

Radomski SB: The Wightman-Berris Academy Award for Individual Teaching Excellence 2007-2008. May 2008.

DIVISION OF VASCULAR SURGERY

Dr. K.W. Johnston – Professor Dr. T.F. Lindsay – Professor Dr. G.D. Oreopoulos – Assistant Professor Dr. B.B. Rubin – Professor (Division Head) Dr. D.L. Wooster – Associate Professor

Publications

Dill-Macky MJ, Wilson SR, Kachura J, Lindsay TF: Detecting endoleaks in aortic endografts using contrast-enhanced sonography. American Journal of Radiology: July 2007: 188(3): pp 262-268.

Dueck A, Wooster DL, Wooster E: Fishing for BASS: Surveying primary care practitioners in the barrier to aortic screening study. Journal of Vascular Ultrasound: December 2007: 31(4), pp 189-192.

Kirton A, Tan M, Mikulis D, Fisher J, Han J, deVeber G, Rubin BB: Recurrent reversible coma in an adolescent. Lancet Neurology: January 2008: 7(1): pp 110-112.

Moneley DS, Dueck A, Johnston KW: Carotid artery stenting: To be or not to be? Surgeon: February 2008: 6: pp 14-18.

Oreopoulos GD: Aortic dissection in the elderly. Geriatrics and Aging: October 2007: 10: pp 631-636.

Santone DJ, Lindsay TF, Shahani R, Rubin BB: Mast cell stabilization improves cardiac contractile function following hemorrhagic shock and resuscitation. American Journal of Physiology: June 2008: 294: pp H1-H10.

Soor GS, Vukin I, Leong SW, Oreopoulos GD: Peripheral vascular disease: Who gets it and why? A histomorphological analysis of 261 arterial segments from 58 cases. Pathology: June 2008: 40: pp 385-391.

Warriner RK, Johnston KW, Cobbold RSC: Viscoelastic model of arterial wall motion in pulsatile flow: Implications for Doppler ultrasound clutter assessment. Physiological Measurement: January 2008: 29: pp 157-179.

Wooster DL: A structured audit tool of vascular ultrasound interpretation reports: A quality initiative. Journal of Vascular Ultrasound: December 2007: 31(4): pp 207-210.

Yu ACH, Johnston KW, Cobbold RSC: Frequency-based signal processing for ultrasound color flow imaging. Biomedical Acoustics: August 2007: 35: pp 11-23.

Invited Visits

Lindsay TF: Winnipeg Vascular Symposium, Winnipeg, MB, April 2008. Is there a role for stem cells in peripheral arterial disease.

Lindsay TF: Saudi Society for Vascular Surgery, 2nd Scientific Meeting in conjunction with the 7th International Symposium onVascular Surgery Update, Riyadh, Saudi Arabia, January 2008. (1) New trends in vascular surgery, (2) Current standards for training in vascular surgery in Canada.

Lindsay TF: Annual Ontario Stroke Day, Toronto, ON, September 2007. Carotid endarterectomy for asymptomatic stenosis: Do it.

Rubin BB: Eicosanoid Research Foundation, 10th International Eicosanoids Conference, Montreal, PQ, September 2007. (1) Microsomal prostaglandin E2 synthase-1 deletion leads to adverse left ventricular remodeling after myocardial infarction.

Wooster DL: College of Physicians and Surgeons of Ontario, Toronto, ON, May 2008. A proposal for ultrasound interpretation report audit: QA and stimulus for CPD.

Wooster DL: Rochester Vascular Meeting, Rochester, NY, May 2008. (1) Advances in the noninvasive vascular lab, (2) Duplex surveillance in vascular management.

Wooster DL: Vascular Imaging Toronto, Toronto, ON, April 2008. (1) Carotid duplex standards and practice, (2) Carotid duplex studies after intervention, (3) Issues in venous duplex ultrasound, (4) Quality assurance and credentialling in ultrasound practice, (5) Screening and surveillance strategies, (6) Venous ultrasound interpretation audit.

Wooster DL: AVID, New York, New York, November 2007. (1) Barriers to AAA screening: Lessons learned from a survey of primary care practitioners [co-authors: Dueck AD, Wooster EM], (2) Structured report audit system for quality assurance and improvement of your vascular lab reports.



Research and Investigations

Senior Investigator's Name Appears in Italics

Complement activation following ruptured abdomina aortic aneurysm: Combining human observation with animal experimentation to establish a framework for human therapy. *Lindsay TF: The Physicians' Services Incorporated Foundation*. (\$161,000 2007 - 2009.)

Continuing education strategies in the implementation of clinical practice guidelines: Addressing a care gap. *Wooster D*, Dueck A, Wooster E: *Office of Continuing Education, Faculty of Medicine, University of Toronto*. (\$5,000 2007 - 2008.)

Fundamental ultrasound studies. Johnston KW, Cobbold RSC: Canadian Institutes of Health Research. (\$320,880 2003 - 2008.)

Role of microsomal prostaglandin E2 synthase in ventricular remodeling after myocardial infarction. *Rubin BB: Canadian Institutes of Health Research*. (\$384,000 2007 - 2011.)

Study on AAA guidelines implementation. Wooster D: Continuing Education Research and Development Grant. (\$10,000 2007-2009.)

Vascular education inventory and web portal. *Wooster D*, Wooder E: *Canadian Society for Vascular Surgery, John L. Provan Award*. (\$5,000 2007 - 2008.)

Honours Received

Lindsay TF: Individual Teaching Award, Wightman Berris Academy. May 2008.

Wooster DL: Colin Wolff Award (for Long Term Contributions in Continuing Education/PD), University of Toronto. October 2007.

Wooster DL: David Fear Fellowship, University of Toronto. October 2007.

Wooster DL: Provan Award, Canadian Society for Vascular Surgery. September 2007.

THE NEW WOMEN'S COLLEGE HOSPITAL

Dr. M.H. Brown – Associate Professor Dr. E.D. Grober – Assistant Professor Dr. G.Y. Hiraki – Assistant Professor Dr. L. Lickley – Professor Dr. J. Theodoropoulos – Lecturer Dr. J.L. Semple – Professor John L. Semple Surgeon-in-Chief



The New Women's College Hospital continues to evolve as an academic ambulatory surgical centre that is fully integrated with the hospital's ambulatory programs and services and is a designated facility for ambulatory surgery in the Toronto Central LHIN. Women's College will develop as a fully academic affiliated site for inter-professional research and education in ambulatory surgery focused on minimally invasive and specialized ambulatory procedures in subspecialty areas of Urology, Orthopedics, Plastic Surgery and General Surgery.

New Staff

Dr. John Theodoropolous in Orthopedic Surgery joined us in November of 2007 in partnership with Mount Sinai Hospital. John brings several years of clinical experience in the community as well as being the designate physician for several professional sports teams. Dr. Theodoropolous will be a key surgeon in the Orthopaedic Sports Medicine Program here at Women's College.

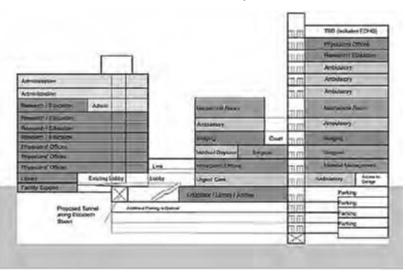
Dr. Brett Beber, a Plastic Surgeon, with a primary appointment at Toronto East General Hospital was recruited as an "affiliate" surgeon (part-time) to assist in reducing the wait times of breast reconstruction at Women's College Hospital. Dr. Beber will carry out a clinic and participate in the OR in immediate breast reconstruction at Women's College Hospital.

Women's College will continue to actively recruit in surgical areas that are central to key programs.

Appointments and Activities

Dr. Mitch Brown and Dr. John Semple co-chaired the 8th Annual Toronto Breast Surgery Symposium held this past April. Dr. Semple stepped down as Research Director of the Division of Plastic Surgery after eleven years of service. Dr. Brown has taken on the important position of Program Director of the Division of Plastic Surgery. Dr. Brown was an invited lecturer for the Korean Society of Plastic and Reconstructive

Surgery in Seocho-Ku, Seoul, Korea in May of 2008. Women's College Hospital has one of two sites (the other being UHN) to be designated under the new Allergan Breast Cancer Reconstruction Fellowship. In January 2008 our first international fellow, Dr. Meredith Simcock (from New Zealand), became the inaugural clinical fellow at Women's College Hospital. This has become a very popular international fellowship with upcoming fellows from Switzerland and Israel. Dr. Brown as a supervisor in research, along with a final year U of T plastic surgery resident (Dr. Laura Snell), has recently won two awards for their research. Research on "Breast Implant Capsules and Sub Clinical Infections," won best clinical paper at the University of Toronto, Division of Plastic Surgery, Resident Research Day as well as best poster at the recent Canadian Society of Plastic Surgery Annual Meeting in St. John's, Newfoundland.



Dr. Semple won a research award at the Canadian Breast Cancer Alliance, Canadian Breast Cancer Foundation Conference in Vancouver, BC in April 2008 for best poster entitled "Quantification of Lymphatic Function Following Lymph Node Excision: The Development of a Lymphedema Model in Sheep," which he co-supervised with Dr. Miles Johnston of the Sunnybrook Research Centre and Dr. Dalia Tobbia (a surgical research fellow). His work, "Microsurgical Auto Transplantation of Lymph Nodes and the Prevention of Experimental Lymphedema" also won the Zeiss Award for Best Podium presentation during the recent meeting of GAM (Group of Advancement of Microsurgery) at the Canadian Society of Plastic Surgeons' Annual Meeting in St. John's, Newfoundland.

A new Surgical Clinical area is currently under construction within the Women's College Hospital, which will provide office/administrative and clinical space for the core surgical activities and programs. This construction should be completed by Fall 2009. The New Women's College continues to build surgical partnerships and integrate with existing services in other hospitals and health organizations across the LHIN.

DIVISION OF GENERAL SURGERY

Dr. G.Y. Hiraki – Assistant Professor Dr. L. Lickley – Professor

Publications

Axelrod DE, Miller NA, Lickley HL, Qian J, Christens-Barry WA, Yuan Y, Fu Y, Chapman JA: Effect of quantitative nuclear image features of recurrence of ductal carcinoma in situ (DCIS) of the breast. Cancer Informatics: June 2008: 6: pp 99-109.

Chapman J-AW, Miller NA, Lickley HLA, Qian J, Christens-Barry WA, Fu Y, Yuan Y, Axelrod DE: Ductal carcinoma in situ of the breast (DCIS) with heterogeneity of nuclear grade: prognostic effects of quantitative nuclear assessment. BMC Cancer: July 2007: 7: pp 174.

Dent R, Trudeau M, Pritchard KI, Hanna WM, Kahn HJ, Sawka CA, Lickley HLA, Rawlinson E, Sun P, Narod SA: Triple negative breast cancer: clinical features and patterns of recurrence. Clinical Cancer Res: August 2007: 13(15): pp 4429-4434.

Nofech-Mozes S, Spayne J, Rakovitch E, Kahn HJ, Seth A, Pignol J-P, Lickley L, Paszat L, Hanna W: Biological markers predictive of invasive recurrence in DCIS. CMO: January 2008: (In-Press).

Warner E, Carroll J, Chart P, Doan BD, Goel V, Heisey RE, Lickley HLA, Meschino WS, Taylor KM (deceased): Hereditary Breast Cancer Information Aid. (Sponsored by Canadian Cancer Society 2001, Updated 2007, eds.) 2007.

Research and Investigations

Senior Investigator's Name Appears in Italics

Breast cancer prevention study (excel-exemestane versus placebo). *Lickley HLA*, Down N, Carvalhana I, Mandel M: *Cancer Institute of Canada – Clinical Trials Group*. (\$192,000 2006 – 2008.)

Clinical trials support. Lickley HLA: Bennett Family Foundation. (\$400,000 2006 - 2008.)

DIVISION OF ORTHOPAEDIC SURGERY

Dr. J. Theodoropoulos - Lecturer

Publications

Segui C, Kassis J, Busque L, Bestawros A, Theodoropoulos J, Alonso ML, Harvey EJ: Non-traumatic necrosis of bone (osteonecrosis) is associated with endothelial cell activation but not thrombophilia. (Oxford) Rheumatology: E-published June 4, 2008.

DIVISION OF PLASTIC SURGERY

Dr. M.H. Brown – Associate Professor Dr. J.L. Semple – Associate Professor

Publications

Brown MH: Breast Surgery: Consider all options for reconstructive, therapeutic and aesthetic procedures. Parkhurst Exchange: July 2007: 15: pp 74-79.

Semple JL: Breast feeding and silicone implants. Plastic and Reconstructive Surgery: December 2007: 120(7 Suppl 1): pp 123S-128S.

Semple JL, Flynn L, Prestwich GD, Woodhouse KA: Adipose tissue engineering in vivo with adipose-derived stem cells on naturally-derived scaffolds. Journal of Biomedical Materials Research. Part A: E-published May 8, 2008.

Semple JL, Flynn L, Prestwich GD, Woodhouse KA: Adipose tissue engineering with naturally-derived scaffolds and adiposederived stem cells. Biomaterials: September 2007: 28(6): pp 3834-3842.

Semple JL, Flynn LE, Prestwich GD, Woodhouse KA: Proliferation and differentiation of adipose-derived stem cells on naturallyderived scaffolds. Biomaterials: April 2008: 29(2): pp 1862-1871. E-published February 1, 2008.

Invited Visits

Brown MH: Allergan Asia, Taipei, Taiwan, May 2008. Current concepts in the use of silicone gel breast implants.

Brown MH: Korean Society of Plastic and Reconstructive Surgeons, Seocho-ku, Seoul, Korea, May 2008. (1) Invited Lecturer: Implants in aesthetic and reconstructive breast surgery, (2) Textured versus smooth silicone gel breast implants, (3) An approach to facial injections in a plastic surgical practice.

Brown MH: Face 2008, Las Vegas, Nevada, January 2008. Advanced breast implant surgery for the experienced plastic surgeon.

Semple JL: Canadian Society of Plastic Surgeons, 62nd Annual Meeting, St. John's, NFLD, June 2008. Microsurgical autotransplantation of lymph nodes and the prevention of experimental lymphedema.

Semple JL: Hereditary Breast + Ovarian Cancer Foundation, 2nd International Symposium on Hereditary Breast and Ovarian Cancer, Montreal, PQ, October 2007. (1) Preventive breast surgical options for BRCA 1/2 mutation carriers, (2) Workshop: Breast reconstruction: What can we offer?

Research and Investigations

Senior Investigator's Name Appears in Italics

Advanced Regenerative Tissue Engineering Centre (ARTEC) program based at Sunnybrook Health Sciences Centre, in partnership with University of Toronto, APOTEC Research Incorporated, Rimon Therapeutics, Elastin Specialties and matRegen, for multiple projects. *Semple JL*, Woodhouse K, Sefton M, Shoichet M, Dumont D, Midha R, Fish J: *Ontario Research Development Challenge Fund*. (\$12,568,500 2003 - 2008.)

Investigation of lymph node transplantation as therapy for breast cancer related lymphedema. *Johnston M*, Dumont M, Shoichet M, Semple JL: *Canadian Breast Cancer Foundation*. (\$440,996 2007 - 2010.)

Honours Received

Brown MH: W.K. Lindsay Research Award, Division of Plastic Surgery. April 2008.

DIVISION OF UROLOGY

Publications

Grober ED, Elterman D, Jewett MAS: Fellow or foe: The impact of fellowship training programs on the education of Canadian urology residents. Journal of the Canadian Urological Association: February 2008: 2(1): pp 33-37.

Grober ED, Khera M: Androgen deficiency in the aging male and testosterone replacement therapy. In: Urology and the Primary Care Practitioner: (Lipshultz LI, ed.) Mosby-Wolfe, Philadelphia: 2007.

Grober ED, Khera M, Soni SD, Espinoza MG, Lipshultz LI: Efficacy of changing testosterone gel preparations (Androgel or Testim) among suboptimally responsive hypogonadal men. International Journal of Impotence Research: March 2008: 20(2): pp 213-217.

Khera M, Grober ED, Fishman IJ: Erectile dysfunction. In: Urology and the Primary Care Practitioner: (Lipshultz LI, ed.) Mosby-Wolfe, Philadelphia: 2007.

Khera M, Grober ED, Lipshultz LI: Evaluation and management of the infertile male. In: Urology and the Primary Care Practitioner: (Lipshultz LI, ed.) Mosby-Wolfe, Philadelphia: 2007.

Invited Visits

Grober ED: Primary Care Physicians of the Greater Toronto Area, Solvay Pharma, Toronto, ON, June 2008, February 2008, November 2007. Testosterone replacement and prostate safety.

Research and Investigations

Senior Investigator's Name Appears in Italics

Endoscopic assessment of bladder tumors: Accuracy of endoscopic staging and grading with fiberoptic and digital cystoscopes. *Jewett MAS*, Grober ED, Fleshner NE, Cafazzo JA, Seto E, Hersey K, Trachtenberg J, Evans A: *Gyrus - ACMI*. (\$50,000 2005 - 2007.)

Honours Received

Grober ED: 1st Prize for Best Scientific Poster, "Comparison of Strict Morphology among Fertile and Infertile Males (Grober ED, collaborator), Kimbrough Award from the Society of Government Service Urologists, July 2007.

The New Women's College Hospital

DIVISION OF ANATOMY

Dr. A. Agur – Professor Dr. B. Ballyk – Lecturer Dr. S. Karimi-Abdolrezaee – Assistant Professor Dr. P. Koeberle – Assistant Professor Dr. C.M. Morshead – Assistant Professor Dr. J.A. Saint-Cyr – Professor Dr. P.A. Stewart – Professor Dr. I.M. Taylor – Professor Dr. M. J. Wiley – Professor (Division Head) Michael J. Wiley

Chair



Publications

Agur A, Dalley A: Grant's Atlas of Anatomy, 12th Edition: (Agur A, Dalley A, eds.) Lippincott, Williams and Wilkins, Baltimore, 2008.

Eftekharpour E, Karimi-Abdolrezaee S, Fehlings M: Current status of experimental cell replacement approaches to spinal cord injury. Neurosurgical Focus: March 2008: 23(3-4): p E19.

Eftekharpour E, Karimi-Abdolrezaee S, Cheng V, Want J, El-Beheiry H, Morshead C, Fehlings M: Myelination of congenitally dysmyelinated spinal cord axons by adult neural precursor cell results in formation of nodes of Ranvier and improved axonal conduction. Journal of Neuroscience: March 2008: 27(13): 3416-3428.

Kim S, Boynton E, Ravichandiran K, Fung L, Bleakney R, Agur A: Three-dimensional study of the musculotendinous architecture of supraspinatus and its functional correlations. Clinical Anatomy: August 2007: 20(6): pp 648-655.

Koeberle P, Bahr M: The upregulation of GLAST-1 is an indirect anti-apoptotic mechanism of GDNF and neurturin in the adult CNS. Cell Death and Differentiation: March 2008: 15(3): pp 471-483.

Ross M, Brewer K, Wright V, Agur A: Closed neural tube defects: Neurologic, orthopaedic and gait outcomes. Paediatric Physical Therapy: Winter 2007: 19(4): pp 288-295.

Wall L, Wiley M, Neilson B, Jenkinson J, Tait G, Bägli D: Developing a web-based clinical counselling tool about intersex conditions. Journal of Biocommunication: January 2008: 34(1): pp E12-E17.

Wu F, Ng-Thow-Hing V, Singh K, Agur A, McKee N: Computational representation of the aponeuroses as NURBS surfaces in 3D musculoskeletal models. Computer Methods and Programs in Biomedicine: November 2007: 88(2): pp 112-122.

Zahir T, Nomura H, XiaoDong G, Kim H, Tator C, Morshead C, Shoichet M: Bioengineering brain-derived stem/progenitor cellcoated tubes for spinal cord injury repair. Cell Transplantation: March 2008: 17: pp 245-254.

Research and Investigations

Senior Investigator's Name Appears in Italics

Approaches to self-repair: Characterizing the endogenous responses of neural stem cells following brain injury. *Morshead C: Premier's Research Excellence Award.* (\$100,000 2004 – 2009.)

Building a 3-D retina. Shoichet M, Morshead C, MacDonald J, Boyd S: National Sciences and Engineering Research Council/ Canadian Institutes of Health Research/Collaborative Health Research Projects Program. (\$595,000 2008 – 2011.)

Development of an in situ 3D computer model to investigate movement/stability characteristics of lumbar back muscles. *Agur A: Dean's Fund, University of Toronto.* (\$10,000 2004 – 2009.)

Engineering healing for spinal cord injury repair. *Shoichet M*, Morshead C, Tator C: *Natural Sciences and Engineering Research Council of Canada*. (\$650,000 2004 – 2007.)

Full thickness tears of the supraspinatus tendon: A clinical ultrasonographic study. *Agur A*, Boynton E: *Canadian Orthopaedic Foundation*. (\$10,000 2006 – 2007.)

Functional partitioning of the lumbar multifidus: An analysis of muscle architecture, nerve and fiber type distribution using a novel 3D in situ approach. *Agur A: AO/ASIF (Arbeits-gemeinschaft für Osteosynthese/Association for the Study of Internal Fixation) Foundation, Switzerland.* (\$68,000 2004 – 2007.) In vivo monitoring of neural recovery following stem cell therapies to treat stroke. *Stanisz G*, Morshead C, Lobough N: *Canadian Institutes of Health Research*. (\$450,000 2007 – 2010.)

Long term imaging and cell tracking for stem cell lineage analysis. *Morshead C*, Jervis E: *Stem Cell Network – Network of Centres of Excellence*. (380,000 2005 – 2008.)

Mechanisms of neuronal degeneration after traumatic CNS injury or stroke: *Koeberle P: Canadian Foundation for Innovation/ Ontario Research Fund.* (\$249,000 2007 – 2008.)

Regenerative medicine strategies for spinal cord injury repair: Integration of stem cell biology, nanotechnology, bioengineering approaches and neurosurgical application. *Fehlings MG*, Morshead C, van der Kooy D, Tator C: *Canadian Institutes of Health Research*. (\$1,500,000 2004 – 2007.)

Regulating adult neural stem cells using in vivo and in vitro manipulation. *Morshead C: Canadian Institutes of Health Research*. (\$330,000 2005 – 2008.)

Stem cells to treat stroke. Morshead C, Kolb B, Weiss S, Miller F, Corbett D: Canadian Institutes of Health Research. (\$595,000 2005 - 2008.)

The development of drug and cell delivery systems for use in stem cell based therapies to treat stroke. *Morshead C*, Shoichet M, Corbett D: *Heart and Stroke Foundation*. (\$405,000 2008 – 2011.)

The role of extracellular matrix in adult CNS neurodegeneration. Koeberle P: Connaught New Staff Grant. (\$10,000 2007 - 2008.)

The role of extracellular matrix interactions in adult CNS neuroprotection. Koeberle P: Dean's Fund, University of Toronto. (\$10,000 2007 - 2010.)

The role of extracellular matrix interactions in adult CNS neuroprotection. *Koeberle P: Connaught New Staff Matching Grant*. (\$30,000 2007 – 2009.)

The role of matrix metalloproteinases in adult CNS neuroprotection. *Koeberle P*, Fehlings M: *Canadian Institutes of Health Research*. (\$257,217 2008 – 2011.)

The role of RGMa in retinal cell degeneration. Koeberle P, Monnier P: Glaucoma Research Society of Canada. (\$10,000 2006 - 2007.)

Towards defining a pedagogical framework for the development of interactive learning tools. *Stewart P*, Tymianski M, Jenkinson J, Cameron T, Bally B: *McLaughlin Centre for Molecular Medicine*. (\$10,090 2007 – 2008.)

VEGH zinc finger transcription factor therapy for stroke. Koeberle P, Fehlings M: Sangamo Pharmaceuticals. (\$190,000 2008 - 2010.)

Honours Received

Morshead C: George Armstrong-Peters Prize. May 2008.

Stewart P: Award for Excellence in Undergraduate Basic Science Teaching. May 2008.

Taylor I: Harry Whittaker Memorial Award. Faculty of Medicine. May 2008.

Wiley M: W.T. Aikins Award for Innovative Use of Instructional Technology. May 2008.

RESEARCH IN EDUCATION

Dr. H. Carnahan – Professor Dr. A. Dubrowski – Assistant Professor Dr. G. Regehr – Professor

Dr. N. Woods - Assistant Professor

Publications

Brummer V, Carnahan H, Okrainec A, Dubrowski A: Trocar insertion: The neglected task of VR simulation. Studies in Health Technology and Informatics: January 2008: 132: pp 50-52.

Carnahan H: Methods for teaching and learning motor skills. In: The ACS/APDS (American College of Surgeons/Association of Program Directors in Surgery) National Surgical Skills Curriculum: A Guidebook for Program Directors: (DaRosa DA, Dunnington GL, MacRae H, eds.) 2007: pp 1-13.

Carnahan H, Gonzalez D, Kowalski K, Dubrowski A: Magnification of the visual field and touch perception when exploring surfaces with the index finger and surgical snaps. Human Factors: July 2007: 49: pp 679-687.

Carnahan H, Harvey A, Dubrowski A: Strategies related to effective design in surgical simulation. Proceedings of Cybernetics of Information Technology and Systems and Applications: Orlando: 2007: pp 242-246.

Carnahan H, Hung C, Dubrowski A, Gonzalez D: Surface exploration using instruments: The perception of friction. Studies in Health Technology and Informatics: July 2007: 125: pp 191-193.

Carnahan H, Kurahashi A, Leming K, Dubrowski A: Effects of expertise, practice and contextual interference on adaptations to visuo-motor misalignment. Studies in Health Technology and Informatics: August 2007: 132: pp 225-229.

Carnahan H, Leming JK, Dorman K, Brydges R, Dubrowski A: Tensiometry as a measure of improvement in knot quality in undergraduate medical students. Advances in Health Sciences Education: August 2007: 12: pp 331-344.

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Regehr G, Baker GR, Kennedy TJT, Kitchen L, Lingard L: Clinical oversight: Conceptualizing the relationship between supervision and safety. Journal of General Internal Medicine: August 2007: 22(8): pp 1080-1085.

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Regehr G, MacRae H, Moulton C, Mylopoulos M: Slowing down when you should: A new model of expert judgment. Academic Medicine: October 2007: 82(10 Suppl): pp S109-S116.

Regehr G, Mylopoulos M: Constructions of expertise in cognitive research: Prospects and limitations for medical education. Medical Education: December 2007: 41(12): pp 1159-1165

Invited Visits

Carnahan H: Department of Psychology, York University, Toronto, ON, November 2007. Enabling health professions education: The role of simulation.

Carnahan H: Third Annual Everyday Technology for the Alzheimer Care Symposium, Chicago, Illinois, October 2007. The application of a tactile way-finding belt to facilitate navigation.

Regehr G: British Columbia Health Regulatory Organization Quality Assurance Committee, Vancouver, BC, June 2008. Invited Address: Self-assessment, self-direction and self-regulation: Deconstructing the myth of the adult learner.

Regehr G: International Continuing Medical Education (CME) Congress, Vancouver, BC, May 2008. Plenary Address: Self-assessment, self-direction and self-regulation: Deconstructing the myth of the adult learner.

Regehr G: Association of Faculties of Medicine of Canada, Annual Meeting, Montreal, PQ, April 2008. Plenary Symposium Speaker: Quantifying competence: The challenge of authentic clinical evaluation.

Regehr G: Columbia University, The Annual Thomas O. Morris Symposium, New York, New York, April 2008. Named Lectureship: Self-assessment, self-direction and other myths: Implications for the self-regulating professional.

Regehr G: American Educational Research Association, Division 1 Annual Meeting, New York, New York, March 2008. Plenary Address: It's NOT rocket science: Rethinking our metaphors for professions education research.

Regehr G: Queen's University, Faculty of Medicine Evaluation Retreat, Kingston, ON, March 2008. Keynote Address: Representing competence without scales: Toward a model of authentic clinical evaluation.

Regehr G: Accreditation Council for Graduate Medical Education, Dallas, Texas, February 2008. Invited Address: Self-assessment, self-direction and other myths: Implications for the self-regulating professional.

Regehr G: University of British Columbia, Department of Medical Education, Education Rounds, Vancouver, BC, Feburary 2008. Kids these days: Promoting and exploiting adult learning in medical students.

Regehr G: University of Pittsburg, Faculty of Medicine, Pittsburgh, Pennsylvania, February 2008. (1) Grand Rounds: Self-assessment, self-direction and other myths: Implications for the self-regulating professonal, (2) Education Rounds: It's NOT rocket sicence: Rethinking the research agenda in health professions education.

Regehr G: Vanderbilt University, Department of Medical Education, Education Rounds, Nashville, Tennessee, January 2008. It's NOT rocket science: Rethinking the research agenda in health professions education.

Regehr G: McMaster University Health Sciences Program for Education Research and Development, Education Rounds, Hamilton, ON, December 2007. It's NOT rocket science: Rethinking the research agenda in health professions education.

Regehr G: Canadian National Continuing Competence Conference, Toronto, ON, November 2007. Plenary Address: Self-assessment, self-direction and other myths: Implications for the self-regulating professional.

Regehr G: Medical Council of Canada, Annual General Meeting, Ottawa, ON, October 2007. Plenary Address: Representing competence without scales: Toward a model of authentic clinical evaluation.

Regehr G: Acredited Council for Graduate Medical Education/American Board of Medical Specialties (ACGME/ABMS) Physician Competency Conference, Chicago, Illinois, September 2007. Plenary Address: Representing competence without scales: Toward a model of authentic clinical evaluation.

Regehr G: Peninsula University Medical School, Medical Education Rounds, Plymouth, United Kingdom, June 2007. Invited Address: Measuring the social in health professional education: Epistemological and rhetorical issues.

Research and Investigations

Senior Investigator's Name Appears in Italics

Application of a way-finding belt to facilitate navigation. Carnahan H, Zelek J: Alzheimer's Association. (\$165,000 2007 - 2009.)

Arthroscopy equipment. Safir O, Carnahan H, Dubrowski A: Liventek Canada Incorporated. (\$100,000 2007 - 2008.)

Documenting and disseminating the daily educational innovations of clerks: A pilot project in surgery. *Woods N*, Mylopoulos M, Regehr G: *University of Toronto, Faculty of Medicine, Educational Development Fund.* (\$20,000 2007 – 2009.)

Evaluating social work students' practice competence: Integrating performance assessment and reflective practice dialogues. *Bogo M*, Regehr G, Regehr C: *Social Sciences and Humanities Research Council of Canada*. (\$95,000 2007 - 2010.)

Evaluation of a flexible sigmoidoscopy course for Ontario registered nurses. *Carnahan H, Walsh C*, Cooper M, Gayman K: *Cancer Care Ontario*. (\$15,500 2007 - 2008.)

Identifying and classifying error in laparoscopic skills acquisition: Can simulators help? *Okrainec A*, Greco E, Regehr G: *The Royal College of Physicians and Surgeons of Canada*. (\$24,930 2008 - 2009.)

Matching trainees to standardized student profiles: Investigation of a scale-free approach to evaluating clinical performance. *Ginsburg S*, McIlroy J, Eva K, Hatala R, Imrie K, Regehr G: *Medical Council of Canada*. (\$150,000 2006 - 2009.)

Model and curriculum development for training rehabilitation specialists using simulation. *Carnahan H*, McKee P: *Faculty of Medicine Educational Development Fund*. (\$20,000 2007 - 2008.)

Motion analysis system to quantify manual skills. *Carnahan H: National Sciences and Engineering Research Council of Canada*. (\$76,000 2007 - 2008.)

Paediatric consultants education research grants. Ling S, Walsh C, Carnahan H: Hospital for Sick Children. (\$4,968 2007 - 2008.)

Piloting of behavioural marking system to determine performance of obstetrical teams using high fidelity simulation. *Morgan P*, Tregunno D, Pettini R, Regehr G, Milne K, Zwarenstein M, Tarshis H: *Canadian Medical Protective Association*. (\$49,740 2007.)

Role of manual dexterity in hearing aid ergonomics. Pichora-Fuller K, Carnahan H, Singh G: Unitron. (\$3,600 2007 - 2008.)

Self-regulated scheduling of practice of a technical surgical skill. *Safir O, Carnahan H*, Dubrowski A, Backstein D: *Physicians'* Services Incorporated. (\$25,300 2007 - 2008.)

Self-regulated scheduling of practice of suturing. *Safir O, Carnahan H*, Dubrowski A, Backstein D: *The Royal College of Physicians and Surgeons*. (\$22,680 2007 - 2008.)

Slowing down when you should: A new model of surgical judgment. *Moulton C-A*, Regehr G, MacRae HM: *The Physicians' Services Incorporated Foundation*. (\$41,000 2007 – 2009.)

Team Talk II: A multi-institutional evaluation of a checklist intervention to structure communication and promote patient safety in the operating room. *Lingard L*, Regehr G, Baker GR, Bohnen JM, Doran DM, Orser BA, Reznick RK, Rotstein L: *Canadian Institutes of Health Research*. (\$311,735 2004 - 2009.)

The integration of social science perspectives in health research: Does interdisciplinarity transform knowledge production? *Albert M*, Laberge S, Lingard L, Hodges B, Regehr G: *Canadian Institutes of Health Research*. (\$194,939 2005 - 2008.)

The role of manual dexterity in hearing aid ergonomics: Part II. Pichora-Fuller K, Carnahan H, Singh G: Unitron. (\$4,200 2007 - 2008.)

The role of skilled tongue pressure format. Steeles CM, Bressman T, Carnahan H: Canadian Institutes of Health Research. (\$81,636 2007 - 2008.)

The role of tongue pressure generations kill in the oral phase of swallowing. *Steeles CA*, Bressman T, Carnahan H: *Canadian Institutes of Health Research*. (\$244,316 2007 - 2010.)

Touch perception and the control of movement. Carnahan H: National Sciences and Engineering Research Council. (\$173,725 2007 - 2012.)

Understanding residents' daily innovative practices. *Mylopoulos M*, Ginsburg S, Regehr G: *The Royal College of Physicians and Surgeons of Canada*. (\$16,440 2007 – 2008.)

CROSS APPOINTMENTS

Dr. A.J. Baker (Anaesthesia) Dr. B. Bapat (Laboratory Medicine and Pathobiology) Dr. P. Birek (Dentistry) Dr. A. Campbell (Medicine) Dr. J. Carson (Family and Community Medicine) Dr. W.A. Cassar-Demajo (Anaesthesia) Dr. A. Daar (Public Health Sciences) Dr. A. Damyanovich (Medical Imaging) Dr. J.E. Davies (Dentistry) Dr. W.A. Demajo (Anaesthesia) Dr. A.D. DePetrillo (Obstetric and Gynaecology) Dr. E. Diamandis (Laboratory Medicine and Pathobiology) Dr. R.J. Eby (Medicine) Dr. V.L. Fornasier (Laboratory Medicine and Pathobiology) Dr. A. Fox (Medical Imaging) Dr. J. Freeman (Otolaryngology) Dr. R. Gilbert (Otolaryngology) Dr. M. Greenberg (Pediatrics) Dr. M.D. Grynpass (Laboratory Medicine and Pathobiology) Dr. P.J. Gullane (Otolaryngology) Dr. B. Harvey (Public Health Sciences) Dr. J. Irish (Otolaryngology) Dr. J. Irvine (Psychiatry) Dr. G. Jackowski (Laboratory Medicine and Pathobiology) Dr. M.G. Johnston (Laboratory Medicine and Pathobiology) Dr. R. Kandel (Laboratory Medicine and Pathobiology) Dr. W. Kucharczyk (Medical Imaging) Dr. M. Lee (Anatomy) Dr. G.A. Levy (Medicine) Dr. C. Lumsden (Medicine) Dr. A. McDonald (Medicine) Dr. J. McGlade (Medical Biophysics) Dr. D.A.G. Mickle (Laboratory Medicine and Pathobiology) Dr. M. Milner (Rehabilitation Sciences) Dr. W. Montanera (Medical Imaging) Dr. J. Mullen (Laboratory Medicine and Pathobiology) Dr. S. Narod (Public Health Sciences) Dr. M. Ojha (Rehabilitation Sciences) Dr. K.P.H. Pritzker (Laboratory Medicine and Pathobiology) Dr. P. Ritvo (Public Health Sciences) Dr. A. Romaschin (Laboratory Medicine and Pathobiology) Dr. J. Rutka (Otolaryngology) Dr. A. Slutsky (Medicine) Dr. D. Stewart (Psychiatry) Dr. K.G. terBrugge (Medical Imaging) Dr. T. van der Kwast (Laboratory Medicine and Pathobiology) Dr. Q. Wan (Physiology) Dr. I. Weller (Public Health Sciences) Dr. L. White (Medical Imaging) Dr. R. Willinsky (Medical Imaging) Dr. L. Wilson-Pauwels (BioMedical Communications) Dr. I. Witterick (Otolaryngology)