

Department of Surgery Annual Report

July 1, 2008 – June 30, 2009

R.S. MCLAUGHLIN PROFESSOR AND CHAIR

Dr. R.K. Reznick

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Dr. B. Alman	Vice-Chair, Research / A.J. Latner Professor and Chair of Orthopaedic Surgery

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Dr. J.L. Semple	Women's College Hospital

UNIVERSITY DIVISION CHAIRS

Dr. M.J. Wiley	Anatomy
Dr. R.D. Weisel	Cardiac Surgery (until June 30, 2009)
Dr. C. Caldarone	Cardiac Surgery (effective July 1, 2009)
Dr. Z. Cohen	General Surgery Bernard and Ryna Langer Chair (until June 30, 2009)
Dr. A. Smith	General Surgery Bernard and Ryna Langer Chair (effective July 1, 2009)
Dr. J.T. Rutka	Leslie Dan Professor and Chair of Neurosurgery
Dr. B. Alman	A.J. Latner Professor and Chair of Orthopaedic Surgery
Dr. D.J. Anastakis	Plastic Surgery
Dr. S. Keshavjee	F.G. Pearson R.J. Ginsberg Chair in Thoracic Surgery
Dr. S. Herschorn	Martin Barkin Chair in Urological Research
Dr. T. Lindsay	Vascular Surgery



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Chair's Report

Richard K. Reznick

R.S. McLaughlin Professor and Chair



This marks the seventh time I have written this report as Chair of this Department and as in the past there is no lack of things for me to comment upon. It has been a year filled with financial challenges and yet we have managed to have another fantastic year with many research, academic and clinical achievements to celebrate. As always, I am exceptionally grateful to our faculty for being so dedicated and our Department's senior executive for their continuing wise counsel and support.

This past year we have continued an aggressive pace of recruitment with the addition of 18 new appointees to the Department. I would like to welcome the following individuals:

Margaret Akens (research SHSC), Tulin Cil (general surgery UHN-PMH), Leodante da Costa (neurosurgery SHSC), Ralph George (general surgery SMH), Anand Ghanekar (general surgery UHN-TGH and HSC), Rebecca Gladly (general surgery MSH), Clement Hamani (neurosurgical research UHN-TWH), Sharifa Himidan (general surgery HSC), Judi Laprade (anatomy), Bernard Lawless (general surgery SMH), Todd Mainprize (neurosurgery SHSC), Diane Nam (orthopaedic surgery SHSC), Catherine O'Brien (general surgery UHN-TGH), Guiseppe Papia (cardiac and vascular surgery SHSC), Ranil Sonnadara (research Surgical Skills Centre), Leonard Tse (vascular surgery UHN-TGH), Kazuhiro Yasufuku (thoracic surgery UHN-TGH), and Toni Zhong (plastic surgery UHN-TGH).

We have also had a successful year with respect to promotions. Promoted to the rank of Full Professor were Drs. Chris Caldarone, Gail Darling, Peter Dirks, Andras Kapus, Peter Kim, Ron Levine, James Mahoney, Sid Radomski, Carol Swallow and Doug Wooster. Promoted to the level of Associate Professor were Drs. Gideon Cohen, Marc De Perrot, Annie Fecteau, Ted Gerstle, Raja Rampersaud, Paul Wales and Frances Wright. Finally, elevated to the rank of Assistant Professor were Drs. Vern Campbell, Martin Roscoe and Wayne Tanner. The standards for promotion in our department and at our university are as stringent as any other institution I know and I would like to congratulate each and every one of our promotees.

This past year saw our faculty win a huge number of external and internal awards, too many to list in this column. However, I would like to make specific mention of a few. Two surgeons received two of the highest educational awards offered by our Faculty: Dr. Shaf Keshavjee (the Colin R Woolf Award for excellence in Long-Term Contributions to CME) and Dr. Chris Wallace (the Aikens Award for Excellence in Postgraduate Medical Education). Other prestigious awardees include Marvin Tile who was appointed as a Member of the Order of Canada and Robert Cartotto who won The Royal College of Physicians and Surgeons Medal in Surgery. Peter Dirks, James Rutka, Michael Taylor et al received a \$1 million dollar grant from Pediatric Brain Tumor Foundation. Geoff Fernie was inducted into the Terry Fox Hall of Fame. Andres Lozano received the March of Dimes Jonas Salk Award and was elected as Fellow to The Royal Society of Canada (now known as the Academies of Arts, Humanities and Sciences of Canada.) Charles Tator was elected to the Canadian Medical Hall of Fame and Michael Taylor was named as one of the Top 40 Under 40.

This past year, we lost two dear and respected colleagues. A mention of their passing does not do justice to the magnitude of their contributions. Suffice it to say, we will all miss and remember with respect and fondness, Michael Baida (general surgery), Philip Klotz (urology) and Leslie Farkas (plastic surgery).

This past year we have also seen the transfer of divisional leadership from Zane Cohen to Andy Smith in General Surgery and from Richard Weisel to Chris Caldarone in Cardiac Surgery. I cannot thank Zane and Richard enough for all of their contributions in their respective divisions. I would also like to congratulate the following individuals in their new leadership roles: Karen Davis, Associate Director of the Institute of Medical Science; Yaron Shargall, Associate Director, Undergraduate Education for Distributed Learning; and Michael Fehlings and Albert Yee, Inaugural Co-Directors of the University of Toronto Spine Program.

Our educational programs continue to flourish under the terrific leadership of David Latter, Ron Levine,

David Backstein, Sid Radomski, Nikki Woods and now Yaron Shargall. We have close to 200 fellows in our eight clinical divisions from over 59 countries around the world. Allan Okrainec and Georges Azzie have extended our educational outreach by teaching laparoscopy in Botswana using a telesimulation program. I think it is fair to say that when it comes to educational research we can reliably claim to be amongst the world's best.

Our research mission continues to do well and, under Ben Alman's leadership, we continue to make great gains in the quality and quantity of the enterprise. Departmental funding for research last year alone was \$33 million in external grants and contracts.

We also continue to make fundraising a top priority for the Department. This past year \$1.4 million was raised, thanks to the hard work of Nancy Collett. We are actively working towards creating new relationships with donors and creating fellowships. Neil Fleshner was named the inaugural Love Chair in Prostate Cancer Prevention Research at University Health Network and Michael Jewett became the inaugural Anna-Liisa Farquharson Chair in Kidney Cancer Research and Shaf Keshavjee received the F.G. Pearson and R.J. Ginsberg Chair in Thoracic Surgery.

Our surgical-scientist program is flourishing and I am pleased to announce that this year marks 25 years since its inception. I am very excited to announce that we are planning on celebrating the program and its successes in a gala event next year. We should all be justifiably proud of this program which trains between 35-40 surgeon scientists each year, is the engine behind a huge number of scholarly publications, and which provides us with phenomenal "home grown" talent for recruitment.

In the following paragraphs I would like to mention four new initiatives that have taken place in the last academic year. These programs have the potential to bring innovation to the department and are efforts that illustrate just what can be accomplished when our university and our teaching hospitals band together across the city to push forward change.

This year we launched the University of Toronto Collaborative Bariatric Program. There has been overwhelming evidence, accrued in the last decade, that obesity is an epidemic in North America. This chronic disease poses an enormous health care burden to our society and surgery can save lives. With only 300 cases being done in Toronto and almost 1000 patients leaving the province, a made in Ontario solution was needed. The formula for success was to put together a program that would build on the initial success at Humber River Regional Hospital, make a dent in the number of cases we need to do, not cannibalize any one hospital and take advantage of our University of Toronto collaborative spirit. And that is exactly what was done. We brought six institutions together, developed a proposal to the ministry and received a funding agreement to perform 900 cases per year in Metro Toronto. Ultimately we will focus on interdisciplinary team

care, keeping our eye on the research and training balls while delivering high quality coordinated surgical care. This initiative is a prime example of a cross departmental / cross hospital endeavour that highlights the co-participation possible in our academic enterprise between our fully affiliated and partially affiliated teaching hospitals.

Since 2002/2003 we have been planning and dreaming of developing a new approach to residency training. I am ecstatic to report that we have started such program this past July. With extraordinary dedication from Bill Kraemer, Peter Ferguson, Ben Alman and a virtual army of orthopaedic educators, we have put together a modular competency-based curriculum that has no parallel in the world. We have accepted 3 exceptional residents who will experience an orthopaedic residency program in a very different way from anyone before them. If the program is successful, they will be followed by three residents in 2010, three more the year after and so on. The program has received generous financial support from the Ministry of Health and Long Term Care. This support will enable us to truly push the limits of a new vista in residency education. The initial feedback of the program has been positive and we look forward to the potential of expanding it to other divisions.

The third new initiative relates to the establishment of a University of Toronto Spine Program. This program, which will bring together the spine surgeons from 4 hospitals, will be co-led by Michael Fehlings and Albert Yee. Its mandate is multi-factorial: to coordinate educational programs, to harmonize fellowships, to facilitate multi-institutional trials and to act as an advocacy group for spinal surgery in Toronto.

Finally, Don Berwick, from the Institute of Healthcare Improvement (IHI) recently heralded the surgical checklist project of the World Health Organization as one of the most significant advances in the last 30 years. Bryce Taylor and I had the good fortune to be involved in this project, promoting Toronto General Hospital as one of eight pilot sites around the world. Through Bryce's indefatigable efforts, he orchestrated the use of the checklist in 1000 patients, 500 without the checklist and 500 with it. The results, which we published in the New England Journal, were staggering and showed significant reductions in morbidity and mortality in the checklist group.

Despite the financial crisis, despite provincial deficits, despite endowment challenges, we have not been idle. Quite the contrary, we have been creative, on budget, successful in research and education, and have forged ahead with our plans to be one of the most innovative and successful departments on the continent. I am personally grateful to each and every member of the Department for their hard work, dedication and incredible encouragement and enthusiasm for the initiatives we are undertaking.

Research

Benjamin Alman

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



Research accomplishments by faculty clinician and non-clinician scientists carry on the departmental research endeavors and hold its strong tradition of research excellence. In addition to engaging in phenomenal research, they established new grounds to reinforce their research in education, clinical epidemiology, applied engineering, and fundamental biology.

There are over 40 non-clinician scientists in the department, each proving that their work is not only recognized internally but nationally and internationally. To name a few, Geoff Fernie was inducted into the Terry Fox Hall of Fame, Karen Davis was appointed Associated Director for the Institute of Medical Science and elected to the Johns Hopkins Society of Scholars. Glenn Regehr won the 2008 Award for Outstanding Achievement in the Evaluation of Clinical Competence by the Medical Council of Canada. Andras Kapus was promoted to Full Professor.

Despite the challenges encountered on a yearly basis to successfully receive funding for research, our productivity is growing at an astounding speed. There have been hundreds of publications from our faculty members, including many 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. Notwithstanding 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 to \$9,482,295 in funding received this past academic year. Our total research funding continues to exceed that of even many of the Universities in Canada, exceeding \$33,000,000 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 thirty 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 for 2008-09

(Wigdan Al-Sukhni, Patricia P.S. Lee, Demitre Serletis, Adrienne C. Weeks.)

The theme for this year's Gallie Day was surgical education. The day included a symposium entitled "*Competent Cutting': From Concept to Implementation of Competency Based Education and Training (CBET.)*" Symposium Chair was J. Ted Gerstle (Program Director, Division of Pediatric and Thoracic Surgery, The Hospital for Sick Children/University of Toronto.) Participants included Richard Reznick (Chair, Department of Surgery), Jason Frank (Associate Director, Specialty Standards, Policy & Development, Office of Education, RCPSC), and William Kraemer (Program Director, Division of Orthopaedic Surgery, University of Toronto.) They gave persuasive talks on the new potential role of competency based training in surgery, the perspective of the RCPSC, and development and implementation of a competency-based curriculum in orthopaedic surgery.

The Gordon Murray Lecturer, Oscar Traynor, Director of Education at the Royal College of Ireland Department of Surgical Training, gave a captivating lecture entitled, "*Surgeons are born, not made. Right.*"

There were 10 platform presentations and 50 poster presentations from trainees who were members of the Surgeon Scientist Program or non-residents training in research with our departmental faculty members. The Gallie Bateman Awards (for Surgeon Scientist Program participants), the McMurrich Awards and the Wyeth Awards (for any trainee working with a member of the faculty of surgery) were judged for both platform presentations and poster presentations. The diversity of the topics and types of trainees highlighted the diverse, yet high quality, research being conducted in our department. There was a much larger than usual attendance, and for much of the day there was a standing room only crowd.

The Gallie Bateman Award for best work by a trainee in the Surgeon Scientist Program went to **Paul Kongkham** - "A combined epigenetic and genetic genome-wide screen identifies SPINT2 as a novel tumour suppressor gene in medulloblastoma" (Supervisor: Dr. James T. Rutka), 2nd prize to **Adrian W. Laxton** - "Single neurons in the human subgenual cingulate differentiate emotion

categories" (Supervisor: Dr. Andres M. Lozano), 3rd prize to **Kristen Davidge** - "Function and health status following soft tissue reconstruction for limb preservation in extremity soft tissue sarcoma" (Supervisors: Drs. Jay S. Wunder and Aileen Davis).

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 **Carla Rosario** - "The tumor suppressor Plk4 regulates cell motility and cytokinesis via RhoA-dependent remodeling of the actin cytoskeleton" (Supervisor: Dr. Carol Swallow) and **Alvin C. Lin** - "Modulating hedgehog signaling can attenuate the severity of osteoarthritis" (Supervisor: Dr. Benjamin A. Alman). Second place was awarded to **Louisa Ho** - "Genetic events involved in the progression of enchondroma to chondrosarcoma" (Supervisors: Drs. Jay S. Wunder & Benjamin A. Alman). There was a two-way tie for third place: **Phedias Diamandis** - "Heterogeneous and equilibrating lineage primed states coordinate asynchronous gene activation in neural stem cells pools" (Supervisor: Dr. Peter B. Dirks); **András Masszi** - "Interplay between myocardin-related transcription factor and SMAD3: A critical checkpoint during epithelial-myofibroblast transition" (Supervisor: Dr. András Kapus).

The Wyeth Awards for best clinical epidemiology or education-based research poster was awarded to **Jaskarndip Chahal** - "Generalization ligamentous laxity as a predisposing factor for primary anterior shoulder dislocation" (Supervisor: Dr. Daniel B. Whelan); and **Syndie Singer** - "Ankle arthroplasty and ankle arthrodesis - A prospective gain analysis" (Supervisor: Dr. Timothy Daniels.)

Faculty research awards went to **Sevan Hopyan (Bernard Langer Surgeon Scientist Award)**, awarded to an outstanding graduate of the Surgeon Scientist Program in the Department, who shows the greatest promise for a career in academic surgery), **Robert Nam (George-Armstrong Peters Prize)**, awarded to a young investigator who has shown outstanding productivity during his initial period as an independent investigator as evidenced by research publications in peer reviewed journals, grants held, and students trained), **Glenn Regehr (Charles Tator Surgeon Scientist Mentoring Award)**, to recognize individual supervising participants in the SSP who emulate Professor Tator's qualities, namely excellence in research, commitment to SSP mentoring and dedication to promotion of Surgeon-Scientists) and **Abhijit Guha (Lister Prize)**, awarded to an investigator who has shown outstanding and continuing productivity of international stature as evidenced by research publications, grants held, students trained and other evidence of stature of the work produced).

Faculty accomplishments in the past year were beyond belief. 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: Peter Kim who holds over \$3.5 million in grants from the Ministry of Research and Innovation and \$5.4 million from the Canadian Foundation for Innovation; Geoff Fernie received over \$2.5 million, and Richard Weisel received over \$7.5 million from CIHR. Charles Tator was elected to the Canadian Medical Hall of Fame, and Michael D. Taylor was named to Canada's Top 40 under 40 list for 2009.

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. A non-clinician scientist retreat is being organized by Andras Kapus and Val Cabral for this year end.

Research will always play a leading role in our department and we have made extraordinary accomplishments in the past year. There is no doubt in the upcoming years our research activities will continue to expand, with new avenues of investigation being developed, and improvements in our research infrastructure to increase the breadth and depth of our work, ultimately improving the outcome for our patients.

Special thanks to Val Cabral for her co-ordination of all aspects of the Departmental research activities.

Postgraduate Education

David A. Latter

Vice-Chair, Education



The 2008-2009 academic year was 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. Cathy Pavlovic of Plastic Surgery, Dr. Robert Stewart and Ms. Antonella Iannaccio 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 PGY 1 CaRMS match positions. The majority of our matches were with our top-ranked applicants. The IMG program continues to grow. Visa trainees also continue to grow in numbers in our department. With Canadian medical graduates, international medical graduates and visa trainees, the department has 45 PGY 1 residents, with a total of 256 residents in training. This represents the largest training program in the country.

The Competency Based Curriculum in Orthopedic Surgery underwent final plans this past year. The Royal College sanctioned the initiation of this program set to begin in the 2009-2010 academic year. With this system, orthopedic residents will "graduate" from their training/education modules when they demonstrate proficiency in that module. Graduation will not be time-dependent, but rather proficiency dependent. Three PGY 1 orthopedic residents were selected to begin this novel training method for July 2009. Dr. Kraemer, the Program Director, and all the teaching surgeons of the Division of Orthopedics,

deserve our full support as they undertake this exciting initiative which represents a truly significant change in the methodology of how we train surgeons.

In the spring of 2008 the Department began using a POWER-based, electronic case logging system for all of our residents' OR cases. This will greatly facilitate how our Program Directors monitor what operating experiences our residents are getting. Discrepancies in operative experiences between residents, or between different rotation sites, will be readily visible and allow programs to take action to improve our surgery teaching.

The academic year 2008-2009 saw an expanded role of surgical resident teaching for our community based hospitals - Trillium Hospital (general surgery, cardiac surgery), Toronto East General Hospital (general surgery, plastic surgery), North York General Hospital (general surgery, pediatric general surgery), Humber River Regional Hospital (general surgery), Etobicoke General Hospital (general surgery, orthopedic surgery).

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 (Director), 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 Advanced Trauma Life Support course.

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. Beginning in 2009 Ron Levine does an exit survey with every graduating resident.

The new PAIRO agreement went into effect July 1, 2009. The Department of Surgery believes the effects of the new

"home by 2 hours post call" provision will significantly affect the ability of our residents to achieve competence in highly technical surgery and complex surgical problem management. Accordingly, the Department has asked for a department-wide exemption from this ill-conceived restriction on surgical resident education. In the fall of 2009, meetings between our Department, PAIRO and CAHO will take place to further discuss the impact of this educational restriction and how the Department of Surgery will manage the education of our residents.

The Surgeon Scientist Program continues to deliver world class educations in basic science research, 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 Surgeon Scholar Program continues to be successful. In this program surgical resident students can 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)s 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 Surgery has approximately 150 clinical fellows and some 30-40 research fellows at any one time. Three quarters of our clinical fellows are international in origin. The University of Toronto, Department of Surgery, clinical fellowship is highly valued. How well these surgeons are trained, and perform in their subsequent surgical positions, directly reflects on our Department. On November 4, 2008, the Department hosted the Clinical Fellow's Education Day. The event was well attended by over 40 fellows, who heard insightful talks from Drs. Allan Okrainec and Andrew Howard on subjects related to International Surgery.

In an effort to improve the social environment of our clinical fellows and their families, the Department hosts an annual BBQ in August specifically inviting spouses and children so that families can get to know each other. The event has grown each year and the feedback from fellows and their spouses has been very positive.

The Centre for Faculty Development is a resource that members of our faculty continue to use. Department members enroll in the various workshops, Stepping Stones Program, or the Education Scholars Program. In May 2009 the Centre for Faculty Development put on two outstanding workshops specifically designed for surgeons as teachers.

In other faculty development initiatives, Martin McKneally organized an excellent workshop meeting on leadership.

The Leadership Day was held at the Vaughan Estates on April 24, 2009. Approximately 20 surgeon leaders from our Department availed themselves of this opportunity. The notable speakers from the faculties of The Rotman School of Management and Harvard University included Jim Fisher, Brendan Calder, Miles Shore and Joe D'Cruz.

Continuing Medical Education continues to play a major role in our Department's activities. For the academic year 2008-2009 our Department hosted over 20 major CME events. Many of the CME programs are the major CME event for their specialties in Canada. As well, they attract surgeons from around the world. The Department will be initiating a search for a new CME Director in the fall of 2009 who we hope will bring novel scholarship initiatives to our CME activities.

The Department had many notable education award winners for the academic year 2008-2009. With the risk of missing significant achievements, I congratulate and list these winners:

- Calvin Law: 2009 Bruce Tovee Award for Postgraduate Teaching, Department of Surgery
- Yaron Shargall: 2009 Bruce Tovee Award for Undergraduate Teaching, Department of Surgery
- Melise Keys: 2009 D.R. Wilson Award for Resident Teaching of Medical Students, Department of Surgery
- Marcelo Cypel: 2009 Zane Cohen Clinical Fellowship Achievement Award, Department of Surgery
- Glenn Regehr, The Medical Council of Canada's Award for Outstanding Achievement in the Evaluation of Clinical Competence.
- Michael Cusimano: The John Provan Award for Excellence in Surgical Education
- Rod Davey: Postgraduate Individual Teaching Excellence Award, Wightman-Berris Academy
- Michael Fehlings: Allied Health Individual Teaching Excellence Award, Wightman-Berris Academy
- Ronald Kodama: Clinical Teaching Supervision Award, Peters-Boyd Academy
- Thomas Lindsay: Undergraduate Individual Teaching Excellence Award, Wightman-Berris Academy
- Sidney Radomski: Postgraduate Individual Teaching Excellence Award, Wightman-Berris Academy
- Julian Spears: Donald J. Currie Undergraduate Teaching Award, St. Michael's Hospital
- Daniel Whelan: William Horsey Postgraduate Teaching Award, St. Michael's Hospital
- Lee Errett: Jameel Ali Continuing Education Award, St. Michael's Hospital
- Yaron Shargall: Best Clinical Teaching Awards, Surgery, St. Joseph's Hospital
- Lloyd Smith: 2008 Ernie Spratt Teaching Award, Division of General Surgery, St. Joseph's Hospital
- Robert Cartotto: 2009 Arnis Freiberg Faculty Teaching Excellence Award, Division of Plastic Surgery

- Shaf Keshavjee: 2007-2008 Colin Woolf Award for Excellence in Long Term Contributions to Continuing Medical Education
- Lee Errett: 2009 Award for Excellence in Postgraduate Medical Education in the category of Development and Innovation.
- Michael Wiley: 2009 recipient of Harry Whittaker Memorial Award Excellence in Teaching
- Chris Wallace: 2009 Award for Excellence in Post-graduate Medical Education in the category of Teaching Performance/Mentorship/Advocacy
- John Bohnen Fitzgerald Academy Hall of Fame Award
- Chris Compeau Surgery, Family Medicine Resident Teaching Awards, St. Joseph's Hospital

The Banting Postgraduate office has hired Corina Salajan as a Surgical Education Assistant, to assist the Department members in their educational duties. Tess Weber, the Postgraduate Coordinator and Robert Gardin continue to deftly manage all the issues of our postgraduate office. Carmela Calorendi looks after the undergraduates.

Undergraduate Education

David Backstein

Director



The past academic year in Surgical Undergraduate Education was one of significant curricular consolidation as well as modification, in anticipation of the enlarging medical school class size.

The 2008 LMCC examination results verified the strength of our undergraduate program as the University of Toronto moved into the top quartile across the country. The Department of Surgery continues to be an academic leader at the Faculty of Medicine as the results of the surgical component of the LMCC exceeded those of the remainder of the examination as a whole.

This was the first full year of the newly configured Department of Surgery Undergraduate Education Committee. I would like to thank all divisional representatives for their efforts in strengthening our program.

This year saw our rotation-specific educational objectives come online as part of the "My Practice Portfolio" software. Five core objectives have been developed by each of the Division's committees. Students must now verify electronically that they have achieved all of these objectives on each rotation. This program will help confirm that the educational experience achieved by all students at all site is comprehensive and at the same bring our program in compliance with the LCME ED-2 objectives.

Dr. John Murnaghan successfully ran the annual Residents as Teachers Day in both summer and winter sessions once again this year. These two days are focused on optimizing undergraduate teaching by our junior and intermediate level surgical trainees.

Dr. George Christakis was appointed clerkship coordinator at Sunnybrook Hospital. We look forward to working with Dr. Christakis and thank Dr. Robin Richards for his many years of contribution in this role.

As usual, our Surgical Education administrative staff was pivotal in running another successful academic year. Our thanks go to Michelle Dominey (SMH), Liz Doherty (UHN), Ranita Yap (Sunnybrook) and Carmela Calorendi (Banting) for their tireless efforts.

Congratulations were extended at Gallie Day this year to Dr. Yaron Shargal (Division of Thoracic Surgery) as he was awarded the E. Bruce Tovee Award for excellence in undergraduate teaching.

There are several major changes on the horizon for surgical undergraduate education. Clerkship curricular renewal is set to commence in 2011. This will mean an eight week surgical rotation *prior to the elective period* for all students. There is a "selective" period planned for the CaRMS which will be used for novel and longitudinal methods of surgical teaching. This will be both a significant opportunity and challenge for our department. We plan to take advantage of these changes to strengthen the program and further improve the quality of education we provide. Stay tuned.

Division of Anatomy

Michael J. Wiley

Chair



The past academic year began with the Division hosting the 25th Annual Meeting of the American Association of Clinical Anatomists from July 15th to 18th. In large part due to Anne Agur's organizational skills and relentless effort, the meeting was a wonderful scientific and social success. Several hundred anatomists from around the world attended and the Division was well represented by its faculty and graduate students through many platform and poster presentations. In conjunction with the annual meeting, the Association sponsors a 'Short Course.' Together with Nancy McKee from the Division of Plastic Surgery and Pat McKee from the Department of Occupational Therapy, Anne organized a very successful session on Clinical Anatomy of the Hand: Selected Surgical Procedures and Orthotic Intervention.

After 24 consecutive years as the Director for one of the most well-received courses in the pre-clerkship part of the undergraduate medical program, this was Ian Taylor's last year as the Course Director of Structure and Function. Testimony to Ian's success in developing and delivering this course are the numerous teaching awards he has garnered over the years, including the Aikens Award, the E. Mary Hollington Award, and the Harry Whittaker Memorial Teaching Award.

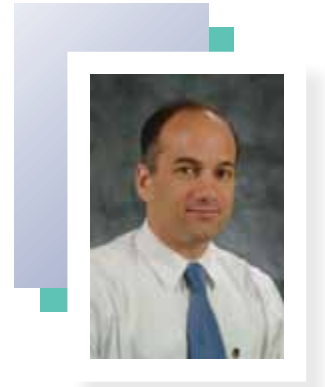
New faculty appointments in the Division this year were Drs. Reena Talwar and Judi Laprade. Dr. Talwar is an oral surgeon, cross-appointed from the Faculty of Dentistry. She is the Director of the anatomy course for dental students. Dr. Laprade has contributed to teaching anatomy and neuroanatomy on a part-time basis for several years, but has now accepted a full time appointment in the Lecturer stream. The Division also has a search currently underway to fill a tenure stream appointment at the level of Assistant Professor.

PROMOTIONS, HONOURS, AND AWARDS

Cindi Morshead was awarded tenure and promoted to Associate Professor. Cindi was also the George Armstrong Peters award winner and Lecturer for the November University Rounds, speaking on her research into the potential role of adult neural stem cells in the repair of CNS injuries. Anne Agur was elected President of American Association of Clinical Anatomists. Anne will serve as President-elect from 2009 to 2011 and President from 2011 to 2013. Ian Taylor received the E. Mary Hollington Award for teaching with distinction in the preclerkship. This is the twelfth time Ian has won this award. Mike Wiley was chosen by the first year medical class to receive the Harry Whittaker Memorial Teaching Award and Anne Agur was recognized by the Department of Physical Therapy with the Award for Excellence in Teaching and Mentoring Physical Therapy students.

Division of Cardiovascular Surgery

Christopher Caldarone
Chair



PROMOTIONS

Dr. Lee Errett was promoted to Professor of Surgery.

Dr. Robert Cusimano was promoted to Associate Professor of Surgery.

APPOINTMENTS

Dr. Christopher Caldarone was appointed Chair of the Division of Cardiovascular Surgery after Dr. Richard Weisel ended his tenure as Chair in May 2009. Dr. Weisel will continue his valuable contributions to the division through several avenues, including the newly created position of Academic Mentor to Cardiac Surgery Residents of the University of Toronto.

VISITING PROFESSORS

Over the past academic year the division has had three visiting professors: Dr. Joseph Bavaria, Vice-Chief, Division of Cardiovascular Surgery, University of Pennsylvania Health System presented his lecture "Radical and revolutionary trans-catheter aortic valve surgery: The good, bad, and ugly" at the University Rounds on May 29, 2009. Dr. Hartzell Schaff of Mayo Clinic in Rochester Minnesota and Dr. Sam Lichtenstein of St. Paul's Hospital in British Columbia lectured at the Terrence Donnelly Cardiac Surgery Residents Research Day on May 23, 2009. Dr. Tirone David gave the Bigelow lecture on October 3, 2008.

ACADEMIC ACHIEVEMENTS

Dr. Subodh Verma holds a Tier II Canada Research Chair in Atherosclerosis at the University of Toronto.

Dr. Verma was also awarded in the CIHR Proof of Principle (Phase I) program.

Dr. Tirone David received the William Glenn Award from the American Heart Association.

Dr. Lee Errett received the Jameel Ali Award in Continuing Education in Surgery.

CARDIAC SURGICAL RESIDENCY PROGRAM

Dr. Gilbert Tang was the North American recipient of the Ted Diethrich endovascular traveling fellowship and he received the Postgraduate Medical Trainee Leadership Award from University of Toronto. Dr. Mitesh Badiwala was the recipient of the Vanier Canada Graduate Scholarship for The Role of Epidermal Growth Factor-Like Domain 7 and Immunosuppressive Strategies in Attenuating Transplant Related Vascular Injury. It was ranked the 10th out of 673 applications. Dr. Khaled Algarni was accepted for Health Administration Master Program at Health Policy, Management and Evaluation (HPME). Dr. Anusha Jega received a three-year Junior Personnel Fellowship award from the Heart & Stroke Foundation of Canada (HSFC) and was appointed the Kirklin/Ashburn Fellow in the Congenital Heart Surgeons Society Datacenter at the Hospital for Sick Children.

TRAVEL

Dr Christopher Caldarone traveled to Henan Province in China with a team from the Hospital for Sick Children. The team taught surgical techniques in congenital heart disease and has established a long-term relationship with university hospitals in Xingxiang and Zhenzhou.

Dr. Glen Van Arsdell traveled to Chengdu, China in February 2009 where he led a team with Children's HeartLink at West China Hospital.

GRANTS

Dr. Caldarone holds two Heart & Stroke Foundation of Ontario grants and a LeDuc Foundation grant.

Dr. Coles holds two Heart & Stroke Foundation of Ontario grants and a Canadian Institutes of Health Research grant.

Dr. Feindel holds two Heart & Stroke Foundation of Ontario grants.

Dr. Van Arsdell holds three Heart & Stroke Foundation of Ontario grants.

Dr. Subodh Verma holds two Heart & Stroke Foundation of Ontario grants, three Canadian Institutes of Health Research grants, one grant from The Physicians' Services Incorporated Foundation, and one Ministry of Research and Innovations (Ontario) grant.

Dr. Weisel holds two Heart & Stroke Foundation of Ontario grants.

Dr. Brister holds a Canadian Institutes of Health Research grant.

Division of General Surgery

Andy Smith

Bernard and Ryna Langer Chair



This past academic year was momentous for the Division of General Surgery. Many achievements and milestones were notable, but the most important highlight of the year was marking the end of Dr. Zane Cohen's 10 years of exceptional leadership. Recruitment and academic development of faculty continued at a robust pace within the Division.

NEW FACULTY

Expansion of the Division was due to recruitment in many of our hospitals. Increasingly such recruits are the result of a formal search process. The Division continues to embrace appointment of qualified individuals in community based hospitals to help achieve our academic mission of teaching a growing and increasing range of learners. The list of new faculty this year includes:

Fulltime or Part-Time

The newcomers include seven Fulltime faculty staff, as follows: Dr. Tulin Cil (Assistant Professor/UHN-PMH and WCH), Dr. Ralph George (Associate Professor/SMH); Dr. Anand Ghanekar (Lecturer/UHN-TGH), Dr. Rebecca Gladdy (Assistant Professor/MSH), Dr. Bernard Lawless (Assistant Professor/SMH), Dr. Catherine O'Brien (Assistant Professor/UHN-TGH/MSH/PMH), Ranil Sonnadara (PhD/Assistant Professor/Research Scientist-MSH Surgical Skills Centre); two Part-time Assistant Professors, namely: Dr. Mary-Anne Aarts at TEGH and Dr. Sharifa Himidan to The Hospital for Sick Children and North York General Hospital.

Adjunct Faculty

The Division also welcomed two new Adjunct faculty members: Dr. Saul Mandelbaum (Lecturer/SGH) and Dr. Jason Pennington (Lecturer/TWH).

PROMOTIONS

Continuous high level academic achievement in the Division is evident in the output of papers and grants documented in this report and acknowledged through awards. The highest honour bestowed by the Department and

Faculty is promotion and members of the General Surgery Division who were promoted in the past academic year were: Dr. Allan Okrainec (UHN-TWH) to Assistant Professor; Drs. Annie Fecteau (HSC), Theodore Gerstle (HSC), Frances Wright (SHSC) and Paul Wales (HSC) to Associate Professor; Drs. Peter Kim (HSC) and Carol Swallow (MSH) to Full Professors.

GENERAL SURGERY TRAINING PROGRAMS

The General Surgery residency is the largest of the 4 accredited training programs in General Surgery. The program has benefitted significantly from the energetic leadership of Najma Ahmed. Najma and the General Surgery faculty have helped guide another excellent group of residents to success at the Royal College and entry into diverse careers in surgery. The 2009 graduates from General Surgery included: Anna Bendzsak, Jonathan Cardella, Anand Govindarajan, Khumar Huseynova, Zane Jackson, Pavi Kundhal, Alex Mihailovic, Lynn Mikula, Fahima Osman, Zaid Yasser and George Zogopoulos.

The other accredited programs are General Surgical Oncology (Carol Swallow), Pediatric General Surgery (Ted Gerstle) and Colorectal Surgery (Marcus Burnstein).

At the end of the 2008-2009 year, we welcomed the new Resident class. University of Toronto was able to attract 12 of our highest ranked students from across the country. It is noteworthy that not all of the programs across Canada were as fortunate and the team, led by Dr. Ahmed, responsible for recruiting individuals to our program, deserve a great deal of credit. It is a testament to the excellence and breadth of our program and the superb individuals within it that we are able to attract such high quality students to the program. The following are new Residents in the General Surgery Program beginning July 2009: Nathalie Adabachie, Reena Baweja, Wiley Chung, Daffolyn (Rachel) Fels Elliot, Arash Kashfi, Ahmed Kayssi, Karineh Kazazian, Kenneth Leung, Aaron Lo, Grace Ma, Emily Partridge, Jossie Swett Cosentino, David Wang, Sydney Wong, Roman Zassoko and Nathan Zilbert.

REFLECTIONS ON THE PAST DECADE

It is appropriate, at this time, to reflect on the accomplishments of the Division over the last 10 years. Dr. Zane Cohen provided outstanding leadership for the Division and the list of achievements for the Division is, in large part, due to his guidance and support of our diverse and exceptional faculty. Many achievements during the last 10 years bear mention but a few notable highlights are mentioned below.

- 1) The establishment of the Bernard and Ryna Langer Chair in General Surgery. This happened in 2004 during Zane Cohen's first term as Chairman and has had significant impact. This endowed Chair has been used to help the Division with recruiting and retention and has provided bridge funding for research, to fund visiting professorships, to provide support to the Program Director's office and other vital academic activities. In addition, it has been a fitting tribute to the tremendous contributions to the Division and the Department by Dr. Bernard Langer. It is noteworthy that a significant portion of this Chair was derived from monies contributed by the Faculty in our Division of General Surgery.
- 2) The extraordinary growth and continued excellence of the Update Course in General Surgery. The 3-day course has grown in size as well as profile to the point where it is now the largest General Surgery meeting in Canada. The Update attracted nearly 500 registrants from across the province, country and beyond. It is an excellent way to highlight the faculty at the University and is an important educational event for a wide range of surgeons. In 2010 the Update will celebrate its 50th anniversary.
- 3) The Surgical Skills Centre. Drs. Cohen and Helen MacRae have led the development of the Skills Centre such that it is now one of the finest surgical skills centres in the world. In 2006, the centre was doubled in size and today more than 2,500 students pass through the centre each year.

In addition to these very tangible successes during Dr. Cohen's term, it is also worth mentioning that there has been significant attention paid to residency issues and progress has been made in the quality of our training programs. In 2003-2004 the General Surgery Residency Program faced challenges of attrition and decreased Resident morale. Issues such as this are of constant concern, but the state of the union is much better presently. We have succeeded in establishing a much stronger sense of camaraderie and unity amongst our residents. The development of guidelines for rotations, designation of base hospitals and the introduction of social events to improve morale are components of the improvements of recent years. One of the major themes in the development of the changes in the program has been strong reliance, championed by Zane, on a "bottom-up" approach to solving problems. Residents have played a key role in the change process.

Finally, an improved sense of unity exists across our large Division and its many contributing hospital divisions. It is arguably greater now than it has ever been. Increasingly, there are efforts to develop and nurture programs that represent University-wide initiatives. One example is the multidisciplinary and multi-institutional obesity program spanning six University of Toronto hospitals. Organization of this effort relied on the input of many of our MIS specialists and Dr. Richard Reznick played a key role in helping organize this complex initiative. The second example is the Best Practices in General Surgery (BPiGS) initiative led by Dr. Robin McLeod. This initiative continues to be a catalyst for quality improvement across our hospitals and also provides important academic initiatives in understanding quality improvement and knowledge translation. The years to come will feature further examples of our combined efforts as a U of T faculty or "team."

Division of Neurosurgery

James T. Rutka

Leslie Dan Professor and Chair



RESIDENT ACHIEVEMENTS

Fellows of the Royal College of Surgeons of Canada

The following neurosurgery residents completed the program and passed their Royal College Examinations in May, 2009: Dr. Charles Matouk, Dr. Ann Parr and Dr. Sarah Woodrow.

Resident Research Awards (International/National)

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

David Cadotte was awarded a 2009-10 Congress of Neurological Surgeons/Synthes Spine Fellowship. He was also awarded a two-year fellowship from the Ontario Neurotrauma Foundation in Spinal Cord Injury Research.

Douglas Cook was the recipient of the 2nd Annual Literary Award.

Greg Hawryluk was awarded a 2008-2009 Resident/Fellow research grant from the Cervical Spine Research Society. He also received the First Place Award in basic science, Eastern Canada category at the Canadian Surgical Forum, Halifax, Nova Scotia on September 13, 2008; the Chisholm Memorial Fellowship and the Edward Christie Stevens Fellowship. Aside from these, he was appointed to the Brain Trauma Foundation's "Algorithm for the Management of Post-Traumatic Intracranial Hypertension" Committee.

Kathryn Howe received the Sopman Humanitarian award.

Betty Kim received the Chisholm Memorial Fellowship, the Neveren (Miriam) Memorial Prize, the Timposters Fellowship, and the Joseph M. West Family Memorial Prize from the University of Toronto; successfully defended her PhD in the Institute of Biomaterials and Biomedical Engineering; received the Brain Star Award from the Canadian Institutes of Health Research/Institute of Neuroscience, Mental Health and Addiction, February, 2009; awarded also the 2009 Canadian Research Award for Specialty Residents from The Royal College of Physicians and Surgeons of Canada (RCPSC)/Canadian Society for Clinical Investigation (CSCI) and the Professional Association of Interns and Residents of Ontario (PAIRO).

Ann Parr was awarded the Cahill Fellowship, a fellowship sponsored by Synthes Spine, which is awarded annually by the American Association of Neurological Surgeons/Congress of Neurological Surgeons (AANS/CNS) Section of Disorders of the Spine and Peripheral Nerves to one U.S. or Canadian trained neurosurgical resident.

Demitre Serletis received the Edward Christie Stevens Fellowship and the Joseph M. West Family Memorial Prize from the University of Toronto, and a research fellowship from the American Academy of Neurological Surgeons/Neurosurgery Research and Education Foundation.

Shobhan Vachhrajani has been appointed the 2009-2010 National Neurosurgery Resident Representative to the Canadian Neurological Sciences Federation (CNSF) and the Canadian Neurosurgical Society (CNSS).

Adrienne Weeks received a National Cancer Institute of Canada (NCIC) Terry Fox Foundation Post MD Research Fellowship Award.

Resident Research Awards (University of Toronto)

Ratan Bhardwaj won 2nd place in both the Horsey Prize and the Morley Prize.

David Cadotte received the Warren Ho Memorial Scholarship.

D.J. Cook was the first placer in the Morley Prize and received the first prize award as a Graduate Student, Toronto Western Research Institute Award.

Kathryn Howe received the Sopman Humanitarian award.

Paul Kongkham won first prize in the Gallie-Bateman Award for best resident research paper and presentation at Gallie Day.

Adrian Laxton received the second prize Gallie-Bateman Award and also received the 3rd place award for oral competition as a Graduate Student, Toronto Western Research Institute Award

Nir Lipsman took the first place in the Horsey Prize.

Demitre Serletis came in 2nd place in the Poster Competition as a Graduate Student, Toronto Western Research Institute Award.

Victor Yang received the AR Hudson Annual Resident Teaching Award.

FACULTY ACHIEVEMENTS

Honours and Awards

Peter Dirks was promoted to full Professor in the Division of Neurosurgery, Department of Surgery and has also been awarded a Canadian Cancer Research Society Grant.

Karen Davis has been appointed Associate Director, Institute of Medical Science effective January 1, 2009.

Michael Fehlings has been appointed Director of the University of Toronto Neurosciences Program; appointed to the Editorial Board of the American Journal of Neuroprotection and Neuroregeneration; appointed as the inaugural co-Director of the newly formed University of Toronto Spine Program; and re-appointed as Chairman of the Editorial Board of the Journal of Neurosurgery Spine. He was the celebrated researcher at the 2008 AANS Annual Meeting in Chicago. He was also awarded two-years of funding from the Ministry of Health and Long-Term care; awarded two grants from the Spinal Cord Injury Solutions Network/Rick Hansen Foundation; received an award from the Cervical Spine Research Society; received a one-year grant from the Rick Hansen Man-in-Motion Foundation; awarded a 3-year operating grant from CHIR; selected for the 2009 Olivecrona Award in Stockholm, Sweden; and selected to receive the "Outcomes Award" from the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves.

Howard Ginsberg received an Ontario Research Commercialization Program grant from the Ministry of Research and Innovation.

Ab Guha received one-year of bridge funding from CIHR.

Clement Hamani received a Young Investigator Award/grant from the National Alliance for Research on Schizophrenia and Depression (NARSAD)

Andres Lozano is the recipient of the 2008 Jonas Stalk Award; has been designated as a key opinion leader in the area of "Deep Brain Stimulation;" ranked first when compared to all the other authors using the same keyword; and received a grant from the Dystonia Medical Research Foundation.

Loch Macdonald and Douglas J. Cook received a 2-year grant from the Brain Aneurysm Research Foundation; and has been appointed to the Editorial Board of the Journal of Neurosurgery

James Rutka was awarded a grant from Brain Tumour Foundation of Canada; was the Honored Guest of the Congress of Neurological Surgeons Annual Meeting, New Orleans 2009; was chosen as November's Researcher of the Month by the Ontario site of the Canadian Cancer Society; was appointed as Director at Large for the Canadian Cancer Society effective August 2009; received an Institute Grant with Michael Taylor and Peter Dirks from the Pediatric Brain Tumor Foundation of the United States; and was elected to the position of President-Elect, for the American Association of Neurological Surgeons.

Julian Spears is this year's recipient of the Donald J. Currie Undergraduate Teaching Award.

Charles Tator and Michael Fehlings successfully renewed their Christopher and Dana Reeve Foundation grant for an additional year. Dr. Tator was also inducted into the Canadian Medical Hall of Fame on April 27, 2009 in Montreal.

Michael Taylor has been elected to the Advisory Board (Neuro-oncology) of the journal, *Child's Nervous System*; received a \$1 million research grant from the Pediatric Brain Tumor Foundation; named one of Canada's Top 40 under 40; and has been appointed as an Associate Investigator at The Center for Applied Genomics at Sick Kids.

Chris Wallace is the recipient of a 2009 Award for Excellence in Postgraduate Medical Education in the category of Teaching Performance Mentorship/Advocacy.

U. OF T. NEUROSURGERY LECTURESHIPS

Professor Manfred Westphal, Hamburg, Germany. Botterell Lectureship

Dr. Jerry Silver, Case Western Reserve University, Cleveland, Ohio. Charles H. Tator-Barbara Turnbull Lectureship

Dr. Juha Hernesniemi, Helsinki, Finland. Keith Lectureship

Dr. Paul Steinbok, B.C. Children's Hospital, Vancouver, BC. Hendrick Lectureship

Dr. Ralph Dacey, Washington University in St. Louis. Annual Marshall Lecturer

Dr. Jeffrey Wang, UCLA. U of T SpineFest Visiting Professor

Dr. Eka Wahjoepramono and Dr. Julius July, Indonesia, Visiting International Speakers.

City-Wide Rounds

Dr. Jean-Pierre Farmer, McGill University, Montreal, Quebec, The Hospital for Sick Children.

Dr. Paul McCormick, Columbia University, Toronto Western Hospital.

Dr. Jeffrey Bruce, Columbia University, Sunnybrook Health Sciences Centre.

Dr. Steven Giannotta, University of Southern California, St. Michael's Hospital.

COURSES OFFERED AT THE SURGICAL SKILLS CENTRE

Lougheed Microvascular Course. Dr. Art Day, September 30-October 3, 2008

Lougheed Microvascular Course. Dr Ian Fleetwood, Dalhousie University March 30-April 3, 2009

Surgical Epilepsy Course, May 9, 2009. Dr. Taufik Valiante Course Leader.

Spine Course, June 15-17, 2009. Dr. Eric Massicotte Course Leader.

PUBLICATIONS BY NEUROSURGERY FACULTY AND RESIDENTS: 210

VISITING PROFESSORSHIPS BY U OF T FACULTY: 129

NEW FACULTY APPOINTMENT

Leo da Costa, Sunnybrook Health Sciences Centre

Todd Mainprize, Sunnybrook Health Sciences Centre

Division of Orthopaedic Surgery

Ben Alman

A.J. Latner Professor and Chair



The 2008-2009 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 the past three years, and these individuals are already working to improve our clinical, educational, and academic output. We welcomed two new recruits 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 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 of 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. Raja Rampersaud was promoted to Associate Professor while Martin Roscoe was promoted to Assistant Professor.

Nizar Mahomed has been appointed as Division Head in Orthopedic Surgery at UHN, effective February 1, 2009. Nizar is well known to everyone within our division and at UHN, having been the Program Medical Director in Musculoskeletal Health and Arthritis for several years. We wish Nizar continued success in his new role as a Division Head. At the same time, our sincere thanks to Rod Davey who has served as the Orthopedic Division Head for the last twelve years. During that time, the division has grown tremendously and has become a most sought-after rotation in orthopedic training. Rod was instrumental in recruiting several young academics to the division which is now one of the finest in the UofT family. Rod will continue as the Medical Director of the TWH operating rooms and Associate Surgeon-in-Chief at the TWH site.

Sevan Hopyan 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 CIHR funding, our divisional members are continuing to seek alternative funding sources. We had a record number of divisional awards on Gallie Day this year. Jas Chahal (supervised by Danny Whelan) received first place in the Wyeth competition for Best Non-Bench Research. Syndie Singer (supervised by Tim Daniels) received second place for The Wyeth Award. Two graduate students working in labs, headed by our divisional faculty, received McMurrich awards (for bench research undertaken by trainees not in the Surgeon-Scientist Program); Alvin Lin received first place (supervised by Ben Alman) and Louisa Ho received second place (supervised by Jay Wunder and Ben Alman). Although she is in plastic surgery, Kristen Davidge who received third place in the Gallie Bateman competition (for trainees in the Surgeon Scientist Program) has Aileen Davis and Jay Wunder as co-authors. Sevan Hopyan, our co-chair of our research committee, received the Langer Award for most promise for a starting faculty member who is a graduate of our Surgeon Scientist Program. In addition to the various awards we received, Bill Kraemer spoke at the symposium on competency based education. This was the largest attendance ever for a Gallie Day symposium, and Bill did a fabulous job speaking about designing and implementing a competency based residency program.

Our Graduation Day Visiting Professor was Robert Bell, the CEO of UHN-Toronto General Hospital. He gave a fascinating glimpse into the history of sarcoma treatment ("If Terry Fox Presented Today - 25 Years of Progress in MSK Oncology") as his Salter lecture. Graduating residents presented their research work during the main Graduation Day activities.

The Lawson Award for Best Academic Resident, as adjudicated by a committee, went to Daniel Penello; and the Meisami Award for Most Compassionate

Resident, as selected by the faculty, went to Bill Ristevski. The R.I. Harris Award for the Best Presentation at Graduation Day went to Aaron Nauth. The James Waddell Award for the Best PGY 4 Resident was awarded to Christopher Peskun. David Stephen received the Divisional Award for Best Teacher as selected by the residents.

John Semple (WCH Toronto), Michael Goldberg (Seattle Children's Hospital, Rang Professorship), Aileen Davis (Toronto), Bruce A. Levy (Mayo Clinic Rochester, MN), Peter Waters (Children's Hospital Boston, Salter Visiting Professorship), Shekhar Kumta (Department of Orthopaedics and Traumatology, Musculoskeletal Oncology, The Chinese University of Hong Kong), Thomas Byrd (Nashville Sports Medicine and Orthopaedic Center), some of whom were Toronto visitors, gave university-wide grand rounds.

There were a large number of awards that our faculty received this past year. There are too many to mention here, but they are listed elsewhere in this annual report. Marvin Tile received a special award by being named to the Order of Canada. We now have four divisional members who have received this honor, more than any other orthopaedic division in the country. The competency-based curriculum was approved by the The Royal College of Physicians and Surgeons of Canada as an alternate stream in the orthopaedic residency training program and the pilot project with three residents commences on July 1, 2009. Peter Ferguson was appointed an Associate Program Director and will be working to oversee this stream of our program. We are not aware of any other residency training program that has trialed an entirely competency-based curriculum. We look forward to reporting the results and anticipate supporting the assertion that it is the quality of time and not the quantity that matters in residency training. In order to better integrate clinical care, education and research in subspecialties, we started two new programs this year. Albert Yee (Sunnybrook) has been appointed (along with Michael Fehlings, Neurosurgery - TWH) as co-Director of the U of T Spine Program. On June 19th of this year we held the inaugural Spine Professorship Day with Jeffery Wang from UCLA as an invited speaker. This program will not only integrate the spine care, education and research across orthopaedics but also between orthopaedics, neurosurgery and other disciplines treating the spine.

Tim Daniels (SMH) is the inaugural head of our new Foot and Ankle Program. The program arose following an external review of foot and ankle care, education, and research, undertaken earlier this year. The new program will work to develop a Toronto-wide foot and ankle education program (including a city-wide fellowship program), coordinate care between foot and ankle specialists in the Greater Toronto Area, and encourage new research in foot and ankle.

Toronto was very well represented at the Annual COA Conference 2009 in Whistler, BC: Robin Richards gave the R.I. Harris Lecture. Ben Alman gave the J. Edouard Samson Award Lecture. Jas Chahal won the J.A. Nutter Award at this year's CORA meeting for the Best Paper presented, *Generalized Ligamentous Laxity as a Predisposing Factor*

for Primary Anterior Shoulder Dislocation (supervised by Danny Whelan). Emil Schemitsch was selected as the second President-elect of the Canadian Orthopaedic Association.

The University of Toronto's Division of Orthopaedic Surgery is continuing in its long history of excellence in clinical care, teaching, and research. The division has been 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 in the development of novel improved educational approaches to clinical training.

Division of Plastic Surgery

Dimitri Anastakis

Chair



The Division of Plastic Surgery has enjoyed continued growth and further development during the past academic year. We are the largest academic Division of Plastic and Reconstructive Surgery in North America and have become the first choice for the world's leading plastic surgery researchers, educators, clinicians and students. Our faculty, alumni and trainees continue to make significant contributions to and lead in the areas of plastic surgery research, education and clinical practice.

RECRUITMENT

Derek Ford was appointed to the Department as Lecturer. Dr. Ford's clinical interests include general plastic and reconstructive surgery and aesthetic surgery. Dr. Ford has a strong interest in teaching and will make significant contributions to our aesthetic training program.

Toni Zhong was recruited to Toronto General Hospital as a Surgeon-Investigator. Her clinical interests include complex reconstruction post-oncologic ablation and the treatment of difficult cutaneous malignancies. Dr. Zhong is currently pursuing her Masters of Science in Clinical Epidemiology at the Harvard School of Public Health.

PROMOTIONS TO FULL PROFESSOR

Ronald Levine

James Mahoney

FACULTY AND RESIDENT GRANTS

Dimitri Anastakis: The Physicians' Services Incorporated Foundation

Oleh Antonyshyn, Jeffrey Fialkov: 3M Pharmaceuticals

Oleh Antonyshyn: Outcomes Grant Funding; Educational Foundation of the Canadian Society of Plastic Surgeons

Paul Binhammer: Canadian Society of Plastic Surgery

Mitchell Brown, Toni Zhong: ASPS/PSEF National Endowment Fund

Linda Dvali and Brent Graham: Physicians' Services Incorporated

Jeffrey Fialkov: Stryker Corporation

Joel Fish: Electrical Injury Research Foundation (3x)

Christopher Forrest and Tatiana Cypel: Komedoplast/PSEF

Stefan Hofer: Nuts Ohra Foundation; Vanderes Foundation; Dutch Cancer Foundation

James Mahoney: AO Foundation; AO Research Fund; Programs for Assessment of Technology in Health (PATH) Research Institute

Christine Novak, Dimitri Anastakis: American Association for Hand Surgery

Ryan Neinstein, James Mahoney, Melinda Musgrave: Physicians' Services Incorporated Foundation; Canadian Society of Plastic Surgeons

Cho Pang: Canadian Institutes of Health Research

Cho Pang, Christopher Forrest: Canadian Institutes of Health Research

Cho Pang, Christopher Forrest, Peter Neligan: Canadian Institutes of Health Research

Cho Pang, Christopher Forrest, Stefan Hofer, Toni Zhong: Canadian Institutes of Health Research

Cho Pang, Peter Duric, Tanja Gonska, Christine Bear: HSC Research Institute Seed Grant

John Semple: Ontario Research Development Challenge Fund (ORDCF); Canadian Breast Cancer Foundation

Herb von Schroeder: Workers Safety and Insurance Board

Toni Zhong, Stefan Hofer, Mitchell Brown, John Semple, Brett Beber: Plastic Surgery Educational Foundation

Ronald Zuker: Donner Foundation; Cooper Foundation

Ronald Zuker, Ralph Manktelow: Josie Walther Fund

FACULTY HONOURS/AWARDS/ APPOINTED POSITIONS

Dimitri Anastakis: Appointed Secretary, Association for Surgical Education; appointed Clinical Lead, WTIS for Plastic and Reconstructive Surgery, MHLTC

Paul Binhammer: Distinguished Education Award for Outstanding Contributions to Surgical Skills Education, Surgical Skills Centre, MSH

Robert Cartotto: Arnis Freiberg Faculty Teaching Excellence Award 2009

Howard Clarke: President-elect, American Society for Peripheral Nerve

Joel Fish: Appointed Chief Medical Officer, St. John's Rehabilitation Hospital

David Fisher: Best Chapter (Bilateral Cleft Lip) in Plastic Surgery: Indications and Practice. 2008

Derek Ford: Appointed Director, Residents Aesthetic Training Program; appointed Coordinator of the Aesthetic Plastic Surgery Fellowship

Christopher Forrest: ASMS Traveling Scholar

Arnis Freiberg: Canadian Society of Plastic Surgeons Time Achievement Award

Ronald Levine: Appointed Director of Postgraduate Surgical Education, Department of Surgery

James Mahoney: William K. Lindsay Faculty Research Mentor Award 2009

Melinda Musgrave: Appointed Undergraduate Plastic Surgery Education Coordinator

John Semple: Best Poster Award at the Canadian Breast Cancer Research Alliance Meeting; Zeiss Award for Best 'Podium Presentation' at the Canadian Society of Plastic Surgery

John Semple, GW Moore: Publication in New England Journal of Medicine "Ozone Exposure and Mortality."

RESIDENTS HONOURS/AWARDS/ POSITIONS HELD

Karen Cross: John Edward DeToro Award, Division of Plastic Surgery

Kristen Davidge: 3rd Prize for the Gallie-Bateman Award Poster Presentations and Best Basic Science Award, Division of Plastic Surgery

Siba Haykal: Mentor Medical Systems Canada Graduate Scholarship in Plastic Surgery

Mary-Helen Mahoney: Best Clinical Paper Award, Division of Plastic Surgery

Karen Wong: Best Clinical Paper (Woodhouse Award), CSPA

VISITING PROFESSORS

2009 Hoyle Campbell Visiting Professor

This year's Hoyle Campbell Visiting Professor was Dr. Donald LaLonde from Dalhousie University. Dr. Lalonde is well known and respected by the Canadian Plastic Surgery community for his collaborative leadership style, innovation, and drive for excellence.

Don has served many important leadership roles in Plastic Surgery. As Chair of the Plastic Surgery Specialty Committee of The Royal College of Physicians and Surgeons of Canada since 2004, he has helped reshape the education of Canadian Plastic Surgeons.

7th Annual R.T. Manktelow Hand and Microsurgery Lectureship

This year's Ralph T. Manktelow Hand Surgery Day was held on October 17, 2008. This year's visiting professor was Dr. Peter Gropper, Clinical Professor of Orthopaedic Surgery at University of British Columbia.

6th Annual Lindsay-Thomson Symposium in Paediatric Plastic Surgery

The 6th Annual Lindsay-Thomson Symposium in Paediatric Plastic Surgery was held on September 25, 2008. Dr. Gordon Wilkes, University of Alberta, Edmonton gave the INCO-Vale Lecture in Pediatric Craniofacial Surgery.

CONTINUING MEDICAL EDUCATION

The 39th Annual University of Toronto Symposium on Aesthetic Plastic Surgery held from April 17-18, 2009 took place at The Sutton Place Hotel. Visiting Professors included Dr. Grady Core of Birmingham, Alabama as the University of Toronto Visiting Professor; Dr. Mark Jewell of Eugene, Oregon as the University of Toronto Aesthetic Visiting Professor, and Dr. Renato Saltz of Salt Lake City, Utah as the W.R.N. Lindsay Visiting Professor.

The 9th Annual Toronto Breast Surgery Symposium, held on April 16, 2009, welcomed Visiting Professors Dr. Dennis C. Hammond of Grand Rapids, Michigan and Dr. Richard J. Warren of Vancouver, British Columbia.

ROYAL COLLEGE FELLOWSHIPS

Daniel Martin successfully passed his RCPSC fellowship examination.

The Division of Plastic Surgery at the University of Toronto remains a powerhouse of accomplishment in research, education and clinical service. I wish to thank our faculty for their hard work and on-going cooperation and collaboration during the past academic year.

Division of Thoracic Surgery

Shaf Keshavjee

F.C. Pearson/R.J. Ginsberg Chair



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, performing over a hundred lung transplants 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 Surgery team 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. This year marks the initiation of the Thoracic Interventional Program at UHN, under the leadership of Dr. Kazu Yasufuku. This program includes an animal operating suite for research, development and testing of new technologies, as well as a teaching center to train surgeons in these new technologies. Also part of this program is the construction of a state of the art Thoracic Interventional Suite at UHN for early diagnosis, staging and treatment of patients with lung and esophageal cancer. This includes modalities such as endobronchial ultrasound (EBUS), endoesophageal ultrasound (EUS), photodynamic therapy, brachytherapy autofluorescence and narrow band imaging as well as endoscopic surgery.

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, Thoracic Surgery

Residency Program Director and Dr. Andrew Pierre, Thoracic Surgery Fellowship Director. The *FG Pearson Award for Best Resident/Fellow Teacher* was awarded to Dr. Najib Safieddine. 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 5th Annual Pearson Day was a tremendous success – highlighting the breadth of clinical and basic science research activity in the division. The Pearson Day Visiting Professor was Dr. Claude Dechamps, Chief of Surgery, Mayo Clinic, Rochester, Minnesota. The award for *Best Basic Science Paper* was awarded to Dr. Jonathan Yeung for his project entitled “Ex-vivo delivery of IL-10 for repair of donor lungs” (Supervisor, S. Keshavjee). The award for *Best Clinical Research Paper* was awarded to Dr. Christian Finley for his project entitled “Treatment choices and outcomes of patients with manometrically diagnosed achalasia” (Supervisor, G. Darling). This year, Dr. Keshavjee was awarded the Colin R. Woolf Award for Long Term Contributions to Continuing Education, recognizing his contributions and longstanding leadership of the Annual Toronto Thoracic Surgery Refresher Course.

The Latner Thoracic Research Laboratories continue to be very successful with grant capture and publications. The principal investigator, namely: 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 CIHR 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 R & D 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 co-principal 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 Hospital, St. Joseph's Health Centre and the Toronto East General Hospital. Dr. Kazuhiro Yasufuku has been appointed to the position of Assistant Professor in the Division of Thoracic Surgery, UHN. Dr. John Dickie, recently recruited to Toronto East General Hospital, has been appointed to the position of Lecturer in the Division of Thoracic Surgery.

Dr. Maurice Blitz, recently recruited to St. Joseph's Health Centre, has also been appointed as Lecturer in the Division of Thoracic Surgery.

Promotion: Dr. Gail Darling was promoted to the position of Full Professor and Dr. Marc de Perrot was promoted to the position of Associate Professor in the Division of Thoracic Surgery at UHN.

ADDITIONAL INFORMATION

The Visiting Professors to the Division of Thoracic Surgery for 2008-09 academic year were as follows:

September 19, 2008

Dr. Thomas Rice, Head, Section of General Thoracic Surgery

Department of Thoracic and Cardiovascular Surgery, Cleveland Clinic, Cleveland, Ohio

October 10, 2008

Dr. John Mayo, Director Advanced Cardiac Imaging, Department of Medical Imaging and Professor of Radiology & Cardiology, Vancouver General Hospital, University of British Columbia

June 5, 2009

Dr. Claude Deschamps, Division of General Thoracic Surgery, Mayo Clinic, Rochester, Minnesota

LATNER THORACIC SURGERY VISITING PROFESSOR 2008-2009:

October 21-22, 2008

Dr. David Wilkes

Dr. Calvin H. English, Professor of Medicine, Division of Pulmonary and Critical Care Medicine, Indiana University School of Medicine, Indianapolis, Indiana, USA

April 1, 2009

Dr. Bartley Griffith, Professor of Surgery, University of Maryland, School of Medicine, Baltimore, Maryland, USA

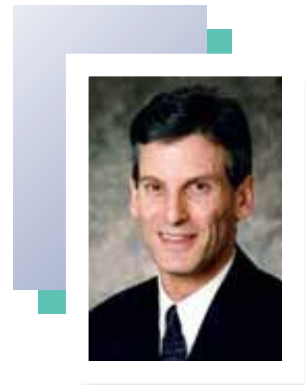
April 14 - 16, 2009

Dr. Daniel Weiss, Associate Professor of Medicine, Pulmonary and Critical Care, University of Vermont College of Medicine, Burlington, Vermont, USA.

Division of Urology

Sender Herschorn

Martin Barker Chair in Urological Research



ACADEMIC PROMOTION

Dr. Sidney Radomski was promoted to Professor.

SICKKIDS

Dr. Joao Pippi-Salle continued as the Site Chief of Urology at Sick Kids. He was an invited speaker, surgeon and Visiting Professor at many locations around the world. These included Qatar, Bosnia, the United Kingdom, Brazil, Egypt, the United States and Canada.

He chaired the very successful Annual Sick Kids Pediatric Urology Symposium.

Dr. Darius Bagli continued his basic research in bladder diseases with projects funded by the Research Institute at Sick Kids (*Determinants of carcinogenesis in bladder augmentation in a novel animal model*) and CIHR (*Novel therapeutic approaches for obstructive bladder disease*) as well as previous projects. He also lectured in the United States and Brazil.

He continued as Deputy Chief of Surgery at Sick Kids and staff coordinator of Urology Resident Research.

Dr. Walid Farhat continued his work in tissue engineering with funded projects. He participated in new projects funded by the Ontario Research Fund and Canadian Foundation for Innovation (Disruptive technologies in pediatric and fetal intervention.)

He organized and directed the Third Annual North American Pediatric Fellows Laparoscopy Course.

He was an invited speaker in Edmonton and Kuwait.

Dr. Armando Lorenzo continued his work in Clinical Epidemiology and minimally invasive pediatric surgery. He was an invited speaker in Chile and the U.S. He won the Michael A.S. Jewett Award for Excellence in Postgraduate Teaching in the Division of Urology.

MSH

Dr. Ethan Grober 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. He is also working on a video-atlas of male reproductive and sexual medicine (funded by Eli Lilly.)

He was an invited speaker in Calgary.

Dr. Keith Jarvi, site chief at MSH, continued the Male Infertility Program and as Director of 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 was an invited speaker in Montreal and Calgary.

He continued work on his funded projects in Infertility. A new project has been funded by the Canadian Uro-Oncology Group (*Identification of prostate cancer biomarkers in semen.*)

Dr. Kirk Lo continued his basic research in infertility with a project entitled "Semen proteomics - discovery of prostate cancer biomarkers" funded by a private donor. He was Program Chair of the section on Circumcision and HIV/HPV infection at the American Society of Andrology Meeting in Philadelphia.

He won the A.W. Bruce award for Postgraduate Teaching in the Division of Urology.

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

He was invited speaker and/or Visiting Professor to Turkey, Switzerland, Portugal, Sweden, Brazil, Russia, Spain, Israel, places in Canada and the U.S.

He was funded by the Ontario Institute for Cancer Research for a project entitled "A proteomic and genetic biomarker panel for improving PSA performance," by CIHR for *Clinical significance of calcium ion transport in prostate cancer*. He continued work on other projects.

SUNNYBROOK

Dr. Lesley Carr continued her work as an investigator 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 an invited speaker and a lecturer in North America, France, Sweden, Korea, Taiwan and Turkey. He also directed the 16th annual U of T Urology Update. He chaired the 4th International Consultation on Urinary Incontinence Section on Male Surgery for Incontinence in Paris.

He became President-elect of the Canadian Urological Association.

Dr. Laurence Klotz, site chief at Sunnybrook, continued his research in uro-oncology. He carries on as Chair of the CURC and the World Uro Oncology Federation (WUOF).

His many peer-reviewed research projects continues as well as his initiated new work in prostate cancer which receives funding from NCIC, Ontario Cancer Research Network, CURC, CPRF, CIHR. He was a guest speaker and a visiting professor in North America, Switzerland, Japan, Mexico, Israel and Chile.

He served a one-year term as President of the Canadian Urological Association.

Dr. Ron Kodama organized the 6th Annual Resident Basic Science Course in February. He also directed the annual Urology Fair 2009. He won a Special Recognition Postgraduate Teaching Award for excellence in residency teaching. He was a Visiting Professor at the Eastern Virginia Division of Urology in Norfolk, Virginia.

Dr. Robert Nam continued his work on his peer-reviewed projects and also received new grants. His funding is currently from NCIC and CIHR.

He was a visiting professor and/or speaker in Florida and at UWO in London, Ontario.

He received the George Armstrong Peters Research Award from the Department of Surgery and the Faculty Postgraduate Teaching Award-Surgical from the Division of Urology.

Dr. Vasundara Venkateswaran continued her basic research in prostate cancer projects funded by CIHR, CPRF, and NCIC. She was an invited speaker to the 4th PacRim Breast and Prostate Cancer Meeting in Whistler, British Columbia.

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, CPRF, CUA/CUOG, Department of Defense, and NIH.

He was invited speaker at meetings in the United States and abroad. He was on the Scientific Committee of the 2nd World Congress on Controversies in Urology in Lisbon, Portugal.

He became the first holder of the Love Chair in Prostate Cancer Prevention at the Princess Margaret Hospital.

Dr. Michael Jewett continued his clinical and research work in many peer-reviewed funded projects in uro-oncology, including one under the CUA/CUOG Bayer Kidney Cancer Fellowship award for renal cell carcinoma. His other projects are funded by CIHR, ORCP 'BioDiscover' Stage I Business and Development, and the Ontario Institute for Cancer Research.

He remains the Wyeth/CIHR Clinical Research Chair in Oncology.

He was an invited speaker and/or Visiting Professor in Canada, the United States, Brazil, The Netherlands and Germany. He won the Best of Posters Award and the Best Paper Award at the EAU Meeting in Stockholm. He became Chair, Canadian Kidney Cancer Forum and Chair of the Steering Committee of the Kidney Cancer Research Network of Canada. He was awarded Honorary Membership in the American Urological Association for lifetime contributions in nerve-sparing lymphadenectomy for testis cancer and management of small renal cell carcinomas.

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, Health Technology Exchange, NCI/SWOG, and industry. He was an invited speaker and a Visiting Professor in North America and elsewhere.

He co-chaired the 16th Annual Issues and Controversies in Prostate Care in Cancun, Mexico.

Dr. Tony Finelli continued his funded research projects in renal cancer and in men with negative biopsies for prostate cancer. He was an invited speaker in Canada, U.S., Colombia and Portugal.

Dr. Andrew Matthew, clinical psychologist, passed his 3-year review and continued his work in outcomes after prostate cancer therapy. His projects are funded by the PMH Foundation and CIHR.

UHN - TWH

Dr. Magdy Hassouna continued his basic and clinical work in neurourology and neuromodulation. He received funding from the Ontario Neurotrauma Foundation and industry.

He won the AW Bruce Faculty Undergraduate Teaching award in Urology.

Dr. Sidney Radomski, continued his role as the Urology Co-Ordinator in the Surgical Skills Lab and Director of the weekly Postgraduate Urology Resident Seminars. He continued his work in peer-review and industry funded grants in incontinence, overactive bladder and erectile dysfunction.

He continued as the assessor of educational performance for the Department of Surgery.

He was appointed Full Professor.

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 of a hands-on course at the American Urological Association (AUA) meeting in Chicago, Illinois. He was guest speaker in Shanghai, China.

Dr. Kenneth Pace continued his work in clinical epidemiology, stone disease, and minimally invasive surgery. He continued as the Fellowship Coordinator for the Division of Urology. He was guest speaker at meetings in the U.S. and Shanghai, China.

He won the Urology Residents Clinical Teaching Award.

Dr. Robert Stewart continued as the principal urologist in the kidney transplantation program. He continued as Urology Residency Program Director and Director of Undergraduate Surgery Education at SMH.

ACADEMIC EVENTS & AWARDS

The **Annual Charles J. Robson Research Day** was held on April 2nd. The Visiting Professor was Dr. Yves Fradet, Professor of Urology at Laval University in Quebec City

There were over 25 presentations. Resident Clinical winner was **Paul Toren**; Resident Basic/Translational was won by **Robert Hamilton**; Honourable Mention went to **Natalie Venier**; Fellow Clinical winner was **Nathan Lawrentchuk**; Fellow Basis/Translational winners were **Robert Abouassaly** and **Bas van Rijn**.

The **Patrick Harty Award for Excellence in Patient Care** was awarded to **Dr. Robert Hamilton**.

The PGY-5s, namely **Drs. Ryan Groll, Jason Lee, Rohan Shahani** and **Bryce Weber**, passed their Royal College Examinations.

VISITING PROFESSORS

Guests this year were Gopal Badlani, MD (Wake Forest University), Chris Chapple, MD (University of Sheffield), James Eastham, MD (Memorial Sloan-Kettering), Marston Linehan, MD (National Institutes of Health), Allen Morey, MD (UT Southwestern Dallas), John Mulhall, MD (Memorial Sloan-Kettering), Hassan Razvi, MD, FRCSC (University of Western Ontario),

Robert Reiter, MD (UCLA), Fred Saad, MD, FRCSC (l'Université de Montréal), Arthur Smith, MD (Long Island Jewish Medical Center.)

Division of Vascular Surgery

Thomas Lindsay

Chair



INTRODUCTION

The division has had an active academic year in all areas. Dr. Leonard Tse was recruited to UHN in October, 2008 and is pursuing a Masters degree at the Institute of Biomaterials and Biomedical Engineering with Dean Cristina Amon as his supervisor. Dr. Giuseppe Papia, a graduate of our program in 2008, returned from a fellowship at the Cleveland Clinic to join the Division of Cardiac and Vascular Surgery and the Critical Care Medicine program at Sunnybrook Health Science Center as an Assistant Professor in April 2009.

Three members of the Division were promoted this year, Dr. Wooster to Professor and Drs. Campbell and Tanner to Assistant Professor.

ADMINISTRATION

Dr. Johnston continues as R. Fraser Elliott Chair in Vascular Surgery and is the co-editor of the 7th edition of Rutherford's Vascular Surgery. He is the Chair of the Society of Vascular Surgery (SVS) Document Oversight Committee and a member of the SVS executive committee. Dr. Daryl Kucey completed his term as the President of the Canadian Society for Vascular Surgery at the October 2008 meeting in Saskatoon. Dr. Lindsay completed his term as a member of the Vascular Surgery Examination Board at The Royal College of Physicians and Surgeons. He was appointed to the SVS Document Oversight Committee. Dr. Rubin continues as the Chairman and CEO of the MSH /UHN Academic Medical Organization and the UHN/MSH Health Practitioners Funding Group. In addition, Dr. Rubin continues to represent all AHSC AFP Governance Chairs in Ontario on the Academic Medicine Steering Committee. Dr. Tanner continues as the Head of the Section of Vascular Surgery at the OMA and was elected to the OMA Board of Directors to head and represent the Surgical Assembly of the OMA. Dr. Andrew Dueck has been appointed to the executive of the Schulich Heart Center, the Hybrid Operating Room Committee and has begun a successful interventional peripheral occlusive disease program at Sunnybrook. He and Dr. Maggisano have been instrumental in Sunnybrook's achieving Ministry of Health funding for the EVAR program. Dr. Dueck is the Vascular Surgery representative on the tariff committee at the Ontario Medical Association. Dr. Rubin

continues his Society for Vascular Surgery commitment as a member of the Research and Education Committee and Chair of the Audit Committee. Dr. Lindsay remains a member of the Editorial Board of the Annals of Vascular Surgery and a key reviewer for the Journal of Vascular Surgery. Dr. Maggisano has been awarded the Marvin Tile award for sustained and long term contribution to the Department Surgery and Sunnybrook Hospital. Dr. Maggisano has been instrumental in achieving funding for the EVAR program at Sunnybrook initially through private donations and now from the Ontario Ministry of Health.

EDUCATION

Dr. Oreopoulos has successfully completed his first year of the Educational Scholars program and continues as the coordinator of the Vascular Surgical resident seminar series.

RESEARCH

Dr. Rubin holds three independent basic science operating grants from CIHR. In addition, he was named Chair of the Grant Review Panel for the Foundation for Accelerated Vascular Research, San Francisco. Dr. Lindsay's PSI grant to study complement activation in ruptured abdominal aortic aneurysm in both humans and animals continues. Dr. Cinà was awarded the Cook Award from the CSVS in September 2008. Dr. Tse was awarded a University of Toronto Fellowship, Institute of Biomedical Engineering, the Barbara and Frank Milligan Graduate Fellowship and an NSERC CGS-M Award to continue his graduate studies. Dr. Wooster is the recipient of a two Royal College of Physicians and Surgeons of Canada awards one for CanMEDs and one for faculty development.

AWARDS

Dr. Johnston was awarded the Lifetime Achievement Award of the Society for Vascular Surgery at the June 2009 meeting in Denver. The Lifetime Achievement Award is the highest honor that the Society for Vascular Surgery bestows on one of its members. Selection for this honor recognizes an individual's outstanding and sustained contributions both to the profession and to the Society for Vascular Surgery.

Dr. Johnston is the 10th recipient and the first Canadian over the past 21 years. Previous awardees include, Michael E. DeBakey. Dr. Cinà was inducted *Knight Grand Cross* of the The Nights Hospitallers of the Sovereign Order of Saint John of Jerusalem (Knights of Malta). The Ecumenical Order. Dr. Heather Cox, a first year vascular trainee, won second place in the CONCOURS PAUL-CARTIER resident competition at the May 2009 meeting of The Entretiens Vasculaires XXVII meeting in Montreal, Quebec for a paper titled Approaches to Inadvertent Branch Coverage During EVAR: Case Report and Review.

EXTERNAL VISITS AND VISITORS

Dr. Ameli was an invited guest at the 9th Annual Conference on Vascular Surgery of China in Tainan, Shandong Province of the People's Republic of China in September 2008. He was a Visiting Professor at the Qianfoshan Hospital, part of the Clinical School of Shandong University. Dr. Lindsay was an invited speaker at the XVIII Waterford Surgical Meeting and the Manitoba Chapter of the American College of Surgeons meeting.

Drs. Johnston, Lindsay and Wooster presented at the Winnipeg Vascular Surgery course in April 2009. Dr. Wooster was an invited guest at the University of Rochester Vascular Course in May 2009 and was a visiting professor at University of Southern California in April. Dr. Cinà was an endovascular surgery preceptor in Palermo, Messina and during the PIVOTAL Course at the University of Catania in Italy in May 2009. Dr. Johnston was a guest lecturer at the Cleveland Clinic in June 2009.

Surgical Alumni Association

Martin Barkin

President



STEERING COMMITTEE MEMBERS

Dr. Dimitri Anastakis
Dr. Andrew Bruce
Dr. Zane Cohen
Dr. Bernard Goldman
Dr. Tirone David
Dr. Griff Pearson

Dr. Hamilton Hall
Dr. Wayne Johnston
Dr. Bernard Langer
Dr. Jacob Langer
Dr. Richard Reznick
Dr. Joseph Schatzker

Dr. Charles Tator
Dr. James Waddell
Dr. John Wedge

STAFF SUPPORT

Nancy Collett and Mike Den Haan

Dr. Martin Barkin (6T0) assumed the role of President of the Steering Committee of the Surgical Alumni Association in 2008, succeeding Dr. Charles Tator. New steering committee members were appointed from across the Department and four major activities were undertaken to serve the aims of the association: to help build the Department of Surgery's capacity for excellence in research, education and clinical practice through advancement activities. The association is a means to help build and maintain relationships with alumni in order to maintain and strengthen their relationship with the University. It also serves a fundraising role, raising funds for the Surgeon Scientist Program as an example.

Activity one entailed updating and strengthening the Department's database of those who can be considered alumni of the program which includes trainees, past residents, fellows as well as faculty. This meant collaboration with the Faculty of Medicine to plan improved data integration with the University.

Activity two was an exercise in establishing a strong case for inclusion in, and support of, the association in order to build and maintain ongoing ties to the Department.

Activity three was the planning for a major event to coincide with Gallie Day in May 2010 to celebrate the great accomplishments of the Department and specifically to honour the 25th anniversary of the Surgeon Scientist Program at the University of Toronto. Coinciding with this goal of re-engaging alumni for this upcoming celebration is the opportunity to establish increased endowment funding for our Surgeon Scientist Program to help ensure its long term success.

Activity four was to step up the role of the association in financially supporting the Department's activities. This is particularly relevant as we continue to have access to graduate student endowment matching funds (GSEF) which serve to virtually triple donations to the Surgeon Scientist Program. Activities included a mail solicitation and an education evening in soliciting philanthropy specifically geared to surgeons and given by Mr. George Fierheller. Alumni across all of the surgical Divisions play a crucial role in continuing to help us build on our proud tradition of excellence in the Department. All are invited and encouraged to return in May 2010 to celebrate the Department's great history and promise for the future.

Surgical Oncology

Andy Smith

Head, University of Toronto Surgical Oncology Umbrella Committee



Success and productivity continue to characterize the activity of surgical oncologists at the University of Toronto. Notable achievements are evident in all aspects of the academic mandate including education, research and implementation of changes in health care.

Fellowship communities are a cornerstone of the surgical oncology community at UofT. Particularly notable this year is that Dr. Carol Swallow is coming to the end of more than a decade of leadership of the General Surgical Oncology Fellowship. During her tenure as Program Director, we have witnessed considerable changes in the Fellowship that have been paralleled by significant gains in the General Surgical Oncology community in general. Over the last decade there has been increasingly close and collegial collaboration between the departments of surgical oncology at Sunnybrook and at Mount Sinai Hospital/UHN/PMH in training fellows. Dr. Swallow successfully led the transitioning of the surgical oncology training program from a Royal College "accreditation without certification" program to a certification specialty program. This development catalyzed similar changes in other programs across the country. In addition, the Toronto program has been recognized by, and included as one of, the Society of Surgical Oncology (USA) training programs and provides one of the highest volumes of cases for Fellows of any programs in the SSO. The program continues to attract and train high quality international trainees who either have or will return to their home countries to improve the quality of cancer care and act as testimonials to the caliber of the surgical oncology training they received in our program. Recent trainees from Singapore, Ireland, Jamaica and Switzerland are but a few that are examples. The diversity of our fellows is wide and overall their activity has increased the quantity and quality of our research in the surgical oncology communication in general. Ultimately, Carol's leadership of the Fellowship Program has helped establish a legacy of clinical excellence, critical thinking and progress in surgical oncology education.

In the research domain, the output of our faculty is extensive and broad in nature. Perusal of Divisional publication lists in this report reflects this and it is particularly noteworthy that an increasing amount of the work in surgical

oncology is not only multidisciplinary in nature, but multi-institutional as well. It is very common to see research effort that comes not from a single academic health science centre but rather multiple units and this reflects a University of Toronto accomplishment rather than simply that of one of our component institutions. Much of the work is notable but particular attention is deserved for Dr. Robert Nam's urologic oncologic work. Dr. Nam won The Royal College medal for his paper entitled "*Expression of the TMPRSS2: ERG fusion gene predicts cancer recurrence after surgery for localized prostate cancer.*" In this work, Nam and colleagues showed for the first time that a hybrid gene was an independent predictor for prostate cancer progression amongst patients who had surgery. This will have important clinical implications in how we treat patients with prostate cancer.

Our surgical oncologists continue to lead on the provincial scene and in guiding cancer care in our LHINS. Examples of UofT leadership include the implementation of Thoracic surgery standards and quality improvement, initiatives in mediastinal staging (Dr. Gail Darling) and HPB standards and their implementation that has been led by Dr. Steven Gallinger. Drs. May Lynn Quan, Dr. Ralph George and Dave McCready have played crucial roles in improving sentinel lymph node biopsy guidelines and care throughout Ontario. Dr. Neil Fleshner and colleagues have engaged and begun leading the Prostate Cancer Working Group to improve oncologic outcomes in prostate cancer surgery. Dr. Frances Wright continues to lead with research efforts around understanding tumour boards and their consistent implementation across Ontario. Dr. Robin McLeod and colleagues continue to push colorectal cancer quality improvement in innovative and effective ways.

Finally, the Hanna Family Chair in Surgical Oncology Research has reached its goal of \$3 million dollars in funding and the holder of the Chair will be named in the 2009-2010 academic year.

Overall, there is much to be proud of when one reflects on the ongoing activity of our surgical oncologists at the University of Toronto.

Continuing Education and Professional Development

David A. Latter

Interim Director



On June 18, 2009, the Office of Continuing Education and Professional Development of the Faculty of Medicine launched a new website <http://www.cepd.utoronto.ca/> that will be hosting the BeBo (Better Education for Better Outcomes) Bulletin, a monthly newsletter filled with interesting educational tips. The site also provides Course Directors access to innovative educational techniques and research to accelerate knowledge transfer.

Continuing Medical Education continues to play a major role in our Department's activities. For the academic year 2008-2009 our Department hosted over 20 major CME events. Many of the CME programs are the major CME event for their specialties in Canada. As well, they attract surgeons from around the world. The Department will be initiating a search for a new CME Director in the fall of 2009 who we hope will bring novel scholarship initiatives to our CME activities.

In the next couple of pages is a Table of CME Events during the academic period 2008-09.

CME EVENTS 2008-09

DESCRIPTION	START DATE	END DATE	LOCATION	DEPT	DIRECTOR	CREDITS
Pediatric Urology Laparoscopy Course	August 15, 2008	August 16, 2008	Surgical Skills Facility - Mount Sinai Hospital	Surgery	Walid Farhat	RCPSC (13.0) AMA (13.0)
The Inaugural Canadian Intraoperative Neurophysiological Monitoring Symposium	October 3, 2008	October 4, 2008	Delta Chelsea Hotel	Surgery	David Houlden	RCPSC (9.0)
Craniofacial Symposium	October 9, 2008	October 11, 2008	Intercontinental Toronto Yorkville	Surgery	Oleh M. Antonyshyn, Christopher R. Forrest	RCPSC (22.0) AMA(22.0)
Colorectal Guidelines Listserv	October 14, 2008	February 20, 2009	Web-Based	Surgery	Robin McLeod	RCPSC(11.5)
Advanced Reconstructive Urologic Laparoscopy Course	October 24, 2008	October 24, 2008	UofT Surgical Skills Centre, Mount Sinai	Surgery	Kenneth Pace	Cancelled
Urology Update 2008	October 25, 2008	October 26, 2008	Fairmont Royal York Hotel	Surgery	Sender Herschom	RCPSC (14.0) AMA(14.0)
Update in Surgical Oncology 2007	October 31, 2008	October 31, 2008	Metro Toronto Convention Centre, North Building	Surgery	Andrew J. Smith	RCPSC (6.0) AMA(6.0)
EBUS - Endobronchial Ultrasound Training Course	November 7, 2008	November 7, 2008	Toronto Medical Discovery Tower, MaRS	Surgery	Shaf Keshavjee	RCPSC (7.0) AMA(7.0)
Heart Care St. Michael's and Toronto General CV Surgery Day	January 31, 2009	January 31, 2009	La Gala Banquet Centre	Surgery	Vivek Rao	RCPSC (3.5) CFPC (3.5)
Cancer Care Ontario's Surgical Oncology Program Prostate Cancer List Serve	March 23, 2009	June 19, 2009	Web-Based	Surgery	Robin McLeod	RCPSC (11.0)
Vascular Education Day	March 27, 2009	March 27, 2009	University of Toronto - 89 Chestnut	Surgery	Douglas Wooster	AMA (7.5)

CME EVENTS 2008-09

DESCRIPTION	START DATE	END DATE	LOCATION	DEPT	DIRECTOR	CREDITS
Division of Orthopaedic Surgery UofT Graduation Day	April 1, 2009	April 1, 2009	The Great Ballroom, UofT Conference Centre	Surgery	William Kraemer	RCPSC (5.0)
25th Annual Upper Extremity Update 2009	April 3, 2009	April 3, 2009	University of Toronto Conference Centre	Surgery	Robin Richards	RCPSC (6.0) AMA (6.0)
Update in General Surgery 2009 - 50th Annual Course for Practising Surgeons	April 16, 2009	April 18, 2009	Westin Harbour Castle	Surgery	Zane Cohen	RCPSC (16.0) AMA (16.0)
9th Annual Breast Surgery Symposium	April 16, 2009	April 16, 2009	Sutton Place Hotel	Surgery	Mitchell Brown	RCPSC (7.0) AMA (7.0)
39th Annual Symposium on Aesthetic Plastic Surgery	April 17, 2009	April 18, 2009	Sutton Place Hotel	Surgery	Walter Peters	RCPSC (13.0) AMA (13.0)
Surgical Leadership Day	April 24, 2009	April 24, 2009	Sunnybrook Vaughan Estate	Surgery	Martin McKneally	RCPSC (5.0)
Department of Surgery Gallie Day	May 8, 2009	May 8, 2009	MaRS Auditorium	Surgery	Richard Reznick	RCPSC (5.5)
International Surgery Bethune Round Table	May 22, 2009	May 24, 2009	Bahen Centre, 40 St. George St.	Surgery	Andrew W. Howard	RCPSC (13.0)
Vascular Imaging Toronto 2009	May 30, 2009	May 30, 2009	89 Chestnut Convention Centre	Surgery	Douglas Wooster	RCPSC (6.5) AMA (6.5)
EBUS Hands-On, Live Animal Course	June 11, 2009	June 11, 2009	Toronto Medical Discovery Tower, MaRS	Surgery	Shaf Keshavjee	RCPSC (7.0) AMA (7.0)
Thoracic Refresher Course	June 12, 2009	June 13, 2009	Sutton Place Hotel	Surgery	Shaf Keshavjee	RCPSC 14.5) AMA (14.5)

The Hospital for Sick Children

James Wright

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



HEADS OF DIVISION

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

The Department of Surgery was reviewed in my fifth year by Drs. Richard Azizkhan, from Cincinnati Children's Hospital, and Baxter Willis, from Children's Hospital of Eastern Ontario. The review was highly positive and placed SickKids among the best children's hospitals in the world.

SickKids continues to lead the Canadian Paediatric Surgical Wait Time project. Stage II of the project, funded by Health Canada, is measuring wait times for children's surgery in all clinical areas at 16 paediatric academic health science centres and now 7 community partners. The project has also developed surgical indications for orchidopexy under sponsorship of the Canadian Urologic Society and the Canadian Association of Paediatric Surgeons. The project is also performing a capacity analysis and sharing learning on efficiency initiatives for children's hospitals across Canada.

Targeted funding from the Ministry of Health and Long Term Care continues to make a substantial impact on wait time for surgery. While waits are still not ideal, the number of children waiting has dropped from over 3,000 to just under 2,000.

With the assistance of the SickKids Foundation we have raised over \$7.5 million allowing us to open two state of the art operating rooms as well as retrofitting an existing OR to facilitate minimally invasive surgery.

NEW STAFF

No new staff came to SickKids in 2008. However, searches for Plastic Surgery, Orthopaedic Surgery and Urology are complete and new recruits will be arriving in 2009.

DEPARTURES

Dr. William Cole, former Head, Division of Orthopaedic Surgery left SickKids after a highly successful clinical, teaching, and research career to become Surgeon in Chief at Stollery Children's Hospital in Edmonton, Alberta.

Dr. Leslie Farkas, Associate Professor, Division of Plastic Surgery passed away in October 2008 after a career in craniofacial anthropometry that spanned 40 years. Dr. Farkas joined the Division of Plastic Surgery in 1968 as a researcher and became an internationally respected figure in the field of craniofacial measurements, leaving a body of work including 244 papers and 4 textbooks.

APPOINTMENTS AND PROMOTIONS

Dr. Darius Bagli, Division of Urology, was promoted to Senior Associate Scientist in the Research Institute. Dr. Christopher Caldarone, Division of Cardiovascular Surgery, was promoted to Professor and appointed Chair of the Division of Cardiovascular Surgery, University of Toronto. Dr. Peter Dirks, Division of Neurosurgery, was promoted to Professor. Drs. Annie Fecteau, Ted Gerstle, Paul Wales Division of General and Thoracic Surgery, were promoted to Associate Professor. Dr. Sevan Hopyan, Division of Orthopaedic Surgery, was reclassified to Scientist in the Program of Developmental and Stem Cell Biology, Research Institute. Dr. Peter Kim, Division of General and Thoracic Surgery, was promoted to Professor. Dr. Abhaya Kulkarni, Division of Neurosurgery, was promoted to Associate Professor, University of Toronto and Scientist, Research Institute.

DIVISION OF CARDIAC SURGERY

Dr. Van Arsdell led a multidisciplinary team to Chengdu, China for operative, anesthesia, ICU, and nursing education. Dr. Caldarone was appointed Chair of the Division of Cardiovascular Surgery, University of Toronto. Dr. Caldarone became a member of the American Association for Thoracic Surgery and Dr. Al-Radi became a member of the Society of Thoracic Surgeons. Each of the three senior Division members continues to hold Heart and Stroke Grants; 6 funded grants in total. Dr. Coles holds a CIHR grant. Members of the Division published 24 papers.

DIVISION OF GENERAL AND THORACIC SURGERY

Dr. Jack Langer was elected Chair of the Nominating Committee of the American Pediatric Surgical Association. Dr. Langer also participated in the establishment of a newly funded complex obesity program, which will include bariatric surgery for adolescents. Drs. Georges Azzie and Ted Gerstle established a pediatric simulator for teaching laparoscopic skills in neonatal patients, which is being validated at several major pediatric surgical meetings. Drs. Georges Azzie, Ted Gerstle, and Doruk Ozgediz (pediatric general surgery fellow) are all involved in significant initiatives in Africa developing training programs and surgical expertise. Drs. Ted Gerstle, Annie Fecteau, and David Grant, in collaboration with members of the Division of Oncology, hosted a highly successful international symposium on the role of transplantation in the management of children with liver tumours. Dr. Peter Kim will receive \$2.2 million in support of the establishment of the Centre for Image-Guided Innovation and Therapeutic Intervention (CIGITI) (www.cigiti.com) at SickKids. Dr. Kim's team is developing

three new innovative technologies with paediatric and fetal applications: minimally-invasive endoscopic manipulators, a natural orifice anastomotic device and magnetic resonance-guided high-intensity focused ultrasound. This new award builds on the team's ongoing and groundbreaking work at the Center for Computer-Assisted Innovation and Intervention (CCAII) at SickKids on smart medical tools, imaging and simulation development.



DIVISION OF NEUROSURGERY

Dr. Peter Dirks received the Terry Fox Young Investigator Award, National Cancer Institute of Canada. Dr. Michael Taylor was named one of Canada's Top 40 under 40 in Neurosurgery, appointed as an Associate Investigator at The Center for Applied Genomics at SickKids and received the Bernard Langer Surgeon-Scientist Award in the Department of Surgery, University of Toronto. Members of the Division published 70 papers, presented 57 invited lectures and currently hold 25 funded and non-funded grants.

DIVISION OF ORTHOPAEDIC SURGERY

Members of the Division of Orthopaedic Surgery continue to be acknowledged for their achievements during this academic year. Dr. Ben Alman received the 2008 J. Edouard Samson Award given by the Canadian Orthopaedic Foundation. This award recognizes the best orthopaedic research over a five-year period at a Canadian Centre. Dr. Sevan Hopyan was the recipient of the 2009 Angela S.M. Kuo Young Investigator Memorial Award presented by the Pediatric Orthopaedic Society of North America to an outstanding young researcher to help promote a long-term research career.

The Division of Orthopaedic Surgery hosted three academic sessions over the past year. Dr. Peter Waters, from Boston Children's Hospital, was the 2008 Robert B. Salter Visiting Professorship Lecturer. Dr. Michael Goldberg, from Shriners Hospital Seattle, was the 2009 Mercer Rang Visiting Professorship Lecturer. His visit was scheduled back-to-back with the Salter Society Meeting. The Division was selected as one of the premier hosts of the Scoliosis Research Society's Traveling Fellowship; a first for a Canadian institution, due in part to their strong scoliosis program and highly regarded surgeons.

The Bone Health Centre, spearheaded by Orthopaedics, will be the source for genetic sample collection used to discover underlying hereditary and genetic markers for commonly seen orthopaedic problems. We are also actively recruiting patients for the Ontario iPS facility for further basic science research into the mechanisms of disease. Members of the Division of Orthopaedic Surgery published 46 peer-reviewed publications and 11 grants were funded during this academic year.

DIVISION OF PLASTIC SURGERY

Dr. Hugh G. Thomson (Professor Emeritus) received the Lifetime Achievement Award from the Canadian Society of Plastic Surgery. This is the highest award the society can bestow on any member. Dr. Christopher Forrest completed the Advanced Health Care Leadership Program at the Rotman School of Business. Dr. Forrest received grant funding from the Canadian Institutes of Health Research (CIHR) with Drs. Cho Pang and Stefan Hofer (UHN) and from the Physicians' Services Incorporated (PSI). Dr. Howard Clarke was appointed President of the American Society of Peripheral Nerve and became a member of the Sunderland Society that recognizes international expertise in peripheral nerve. Dr. Ronald Zuker was appointed President of the International Plastic, Reconstructive and Aesthetic Society Planning Committee for the bi-annual meeting in Vancouver, 2011. Members of the Division published 12 papers and presented 14 invited lectures.

DIVISION OF UROLOGY

Dr. Darius Bagli successfully completed two grants, "Novel Therapeutic Strategies for Obstructive Bladder Disease" from CIHR and "Identification of Novel Therapies for Obstructive Bladder Disease" from the Kidney Foundation. Dr. Walid Farhat was awarded the A.W. Bruce Faculty Undergraduate Teaching Award 2008 from the University of Toronto. Dr. Armando Lorenzo completed his Master's Degree in Clinical Epidemiology at the University of Toronto and received the Michael Jewett Teaching Award from the Division of Urology.

EDUCATION

The Department Surgery continues to have an active education program training 54 fellows and 83 residents originating from 30 countries worldwide.

RESEARCH:

Of 34 surgeons, 16 have funded research programs. The Department is engaged in a wide variety of clinical and basic research supervising many research fellows, 20 Masters and 17 PhD students.

Division of Cardiac Surgery

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

PUBLICATIONS

Alsoufi B, Al-Radi OO, Gruenwald C, Lean L, Williams WG, McCrindle BW, Caldarone CA, Van Arsdell GS: Extracorporeal life support following cardiac surgery in children: Analysis of risk factors and survival in a single institution. *European Journal of Cardiothoracic Surgery*: June 2009: 35(6): pp 1004-1011. E-published ahead of print: April 7, 2009

Asoh K, Hickey E, Dorostkar PC, Chaturvedi R, Van Arsdell G, Humpl T, Benson LN: Outcomes of emergent cardiac catheterization following pediatric cardiac surgery. *Catheterization and Cardiovascular Interventions*: June 2009: 73(7): pp 933-940.

Caldarone BJ, King SL, Picciotto MR: Sex differences in anxiety-like behavior and locomotor activity following chronic nicotine exposure in mice. *Neuroscience Letters*: July 2008: 439(2): pp 187-191.

Caldarone CA: Apoptosis-related mitochondrial dysfunction in the neonate after cardiologic arrest. *Korean Circulation Journal*: October 2008: 38(10): pp 104-111.

Caldarone CA, Al-Radi O: The limits of confidence: At what price a baby's life? *Pediatric Cardiology*: July 2008: 29(4): pp 704-705.

Grosse-Wortmann L, Yun TJ, Al-Radi O, Kim S, Nii M, Lee KJ, Redington A, Yoo SJ, Van Arsdell G: Borderline hypoplasia of the left ventricle in neonates: Insights for decision-making from functional assessment with magnetic resonance imaging. *Journal of Thoracic and Cardiovascular Surgery*: December 2008: 136(6): pp 1429-1436. E-published ahead of print: September 6, 2008.

Gruenwald CE, McCrindle BW, Crawford-Lean L, Holtby H, Parshuram C, Massicotte P, Van Arsdell G: Reconstituted fresh whole blood improves clinical outcomes compared with stored component blood therapy for neonates undergoing cardiopulmonary bypass for cardiac surgery: A randomized controlled trial. *Journal of Thoracic and Cardiovascular Surgery*: December 2008: 136(6): pp 1442-1449.

Herrera P, Caldarone CA, Forte V, Holtby H, Cox P, Chiu P, Kim PC: Topsy-turvy heart with associated congenital tracheobronchial stenosis and airway compression requiring surgical reconstruction. *The Annals of Thoracic Surgery*: July 2008: 86(1): pp 282-283.

Hickey EJ, Jung G, Manlhiot C, Sakopoulos AG, Caldarone CA, Coles JG, Van Arsdell GS, McCrindle BW: Infective endocarditis in children: Native valve preservation is frequently possible despite advanced clinical disease. *European Journal of Cardiothoracic Surgery*: January 2009: 35(1): pp 130-135. E-published ahead of print: September 30, 2008.

Hickey EJ, Jung G, Williams WG, Manlhiot C, Van Arsdell GS, Caldarone CA, Coles J, McCrindle BW: Congenital supra-ventricular aortic stenosis: Defining surgical and nonsurgical outcomes. *The Annals of Thoracic Surgery*: December 2008: 86(6): pp 1919-1927.

Hickey EJ, McCrindle BW, Caldarone CA, Williams WG, Blackstone EH: Making sense of congenital cardiac disease with a research database: The Congenital Heart Surgeons' Society Data Center. *Cardiology in the Young*: December 2008: 2: pp 152-162.

Honjo O, Benson LN, Mewhort HE, Predescu D, Holtby H, Van Arsdell GS, Caldarone CA: Clinical outcomes, program evolution, and pulmonary artery growth in single ventricle palliation using hybrid and Norwood palliative strategies. *The Annals of Thoracic Surgery*: June 2009: 87: pp 1885-1892.

Honjo O, Merklinger SL, Poe JB, Guerguerian AM, Alghamdi AA, Takatani S, Van Arsdell GS: Mechanical cavopulmonary assist maintains pulmonary and cerebral blood flow in a piglet model of bidirectional cavopulmonary shunt with high pulmonary vascular resistance. *Journal of Thoracic and Cardiovascular Surgery*: February 2009: 137(2): pp 355-361. E-published ahead of print: December 27, 2008.

Karamlou T, Bernasconi A, Jaeggi E, Alhabshan F, Williams WG, Van Arsdell GS, Coles JG, Caldarone CA: Factors associated with arch reintervention and growth of the aortic arch after coarctation repair in neonates weighing less than 2.5 kg. *Journal of Thoracic and Cardiovascular Surgery*: May 2009: 137(5): pp 1163-1167. E-published ahead of print: March 17, 2009.

Kim S, Al-Radi O, Friedberg MK, Caldarone CA, Coles JG, Oechslin E, Williams WG, Van Arsdell GS: Superior vena cava to pulmonary artery anastomosis as an adjunct to biventricular repair: 38-year follow-up. *The Annals of Thoracic Surgery*: May 2009: 87(5): pp 1475-1482: discussion 1482-1483.

Li J, Zhang G, Holtby H, Bissonnette B, Wang G, Redington AN, Van Arsdell GS: Carbon dioxide—a complex gas in a complex circulation: Its effects on systemic hemodynamics and oxygen transport, cerebral, and splanchnic circulation in neonates after the Norwood procedure. *Journal of Thoracic and Cardiovascular Surgery*: November 2008: 136(5): pp 1207-1214.

Li J, Zhang G, Holtby H, Cai S, Walsh M, Caldarone CA, Van Arsdell GS: Significant correlation of comprehensive Aristotle score with total cardiac output during the early postoperative period after the Norwood procedure. *Journal of Thoracic and Cardiovascular Surgery*: July 2008: 136(1): pp 123-128.

Riazi AM, Takeuchi JK, Hornberger LK, Zaidi SH, Amini F, Coles JG, Bruneau BG, Van Arsdell GS: NKX2-5 regulates the expression of beta-catenin and GATA4 in ventricular myocytes. *PLoS ONE*: May 2009: 4(5): pp e-5698.

Tan M, Armstrong D, Birken C, Bitnun A, Caldarone CA, Cox P, Kahr W, Macgregor D, Askalan R: Bacterial endocarditis in a child presenting with acute arterial ischemic stroke: Should thrombolytic therapy be absolutely contraindicated? *Developmental Medicine and Child Neurology*: February 2009: 51(2): pp 151-154.

Teixeira LS, Shivananda SP, Stephens D, Van Arsdell GS, McNamara PJ: Postoperative cardiorespiratory instability following ligation of the preterm ductus arteriosus is related to early need for intervention. *Journal of Perinatology*: December 2008: 28(12): pp 803-810. E-published ahead of print: July 10, 2008.

Van Arsdell GS: Can we modify late functional outcome in Ebstein anomaly by altering surgical strategy? *Journal of the American College of Cardiology*: September 2008: 52(6): pp 467-469.

Wang L, Oka N, Tropak M, Callahan J, Lee J, Wilson G, Redington A, Caldarone CA: Remote ischemic preconditioning elaborates a transferable blood-borne effector that protects mitochondrial structure and function and preserves myocardial performance after neonatal cardioplegic arrest. *Journal of Thoracic and Cardiovascular Surgery*: August 2008: 136(2): pp 335-342.

Wermelt JZ, Honjo O, Kilic A, Van Arsdell GS, Gruenwald C, Humpl T: Use of a pulsatile ventricular assist device (Berlin Heart EXCOR) and an interventional lung assist device (Novalung) in an animal model. *ASAIO (American Society for Artificial Internal Organs) Journal*: September 2008: 54(5): pp 498-503.

Wittnich C: Editorial. *Journal of Marine Animals and Their Ecology*: May 2009: 2: pp 1.

Wittnich C, Askin N, Belanger MP: *Marine Mammal Anatomy & Physiology - Laboratory Notes*, 1st Edition: (Belanger MP, ed.) OERS Publishing, Toronto: 2009: pp 93.

Wittnich C, Askin N, Belanger MP: *Marine Mammal Ecology & Conservation - Laboratory Notes*, 1st Edition: (Belanger MP, ed.) OERS Publishing, Toronto: 2009: pp 61.

Wittnich C, Tan L, Askin N, Belanger MP: *Marine Mammal Anatomy & Physiology Lectures*, 1st edition: (Belanger MP, ed.) OERS Publishing, Toronto: 2009: pp 102.

Wittnich C, Tan L, Askin N, Belanger MP: *Marine Mammal Ecology & Conservation Lectures*, 1st Edition: (Belanger MP, ed.) OERS Publishing, Toronto: 2009: pp 77.

Wong D, Golding F, Hess L, Caldarone CA, Van Arsdell GS, Manlhiot C, McCrindle BW, Miner SE, Nield LE: Intraoperative coronary artery pulse Doppler patterns in patients with complete transposition of the great arteries undergoing the arterial switch operation. *American Heart Journal*: September 2008: 156(3): pp 466-472. E-published ahead of print: July 24, 2008.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Caldarone C: Society of Thoracic Surgeons, 45th Annual Meeting, San Francisco, California, January 2009. Invited Commentary: Retrograde aortic arch in the hybrid approach to HLHS.

Caldarone C: American College of Cardiology, Orlando, Florida, March 2009. Presenter: Hybrid approach to stage I palliation.

Caldarone C: American Association of Thoracic Surgery, Boston, Massachusetts, May 2009. (1) Postgraduate course: Multi-institutional studies: Lessons learned from the CHSS studies, (2) Invited discussant: Mechanical mitral valve prostheses in children don't deserve their ill repute.

Caldarone C: Korean Society of Circulation, 52nd Annual Scientific Meeting, Seoul, Korea, October 2008. (1) Mitral/aortic valve repair/replacement in infants and children, (2) Postoperative neonatal myocardial apoptosis.

Caldarone C: Arkansas Children's Hospital, University of Arkansas for Medical Sciences - College of Medicine, Little Rock, Arkansas, February 2009. (1) Preconditioning, mitochondria and apoptosis, (2) Hybrid strategies in single ventricle palliation.

Caldarone C: American Heart Association, New Orleans, Louisiana, November 2008. Stunningly apoptotic preconditioning: Convergence of the pediatric cardiac surgical patients.

Van Arsdell GS: West China Hospital, Children's Heart Link, Mission in Chengdu, February 2009.

Van Arsdell GS: Medical University of South Carolina, Charleston Symposium on Congenital Heart Disease, Charleston, South Carolina, November 2008. Repairing double outlet right ventricle.

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 & Stroke Foundation.* (\$235,000 2006 - 2009.)

Apoptosis-related mitochondrial dysfunction in the neonate after cardioplegic arrest. *Caldarone CA: Heart & 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 - 2009.)

Defective stem cell signaling in tetralogy of fallot (TF). *Coles JG: Heart & Stroke Foundation of Ontario.* (\$156,600 2008 - 2010.)

Development and validation of a Pediatric Risk Evaluative Clinical Index in the Surgical Environment (PRECISE) to predict adverse clinical outcomes after pediatric cardiac surgery. *Caldarone CA: Heart & Stroke Foundation, Junior Personnel Award for Anusha Jegatheeswaran.* (\$150,000 2008 - 2011.)

Gender and sex hormones in the heart. *Wittnich C: Heart & Stroke Foundation of Ontario.* (\$270,000 2004 - 2009.)

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. *McCordle, BW, Caldarone CA: The Children's Heart Foundation.* (\$86,308 2007 - 2009.)

Oxygen stress in the newborn heart. *Wittnich C: Heart & Stroke Foundation of Ontario.* (\$320,000 2002 - 2008.)

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

Selective generation of cardiac progenitor cells and cardiomyocytes from mouse embryonic stem cells. *Van Arsdell GS, Riazi A: Heart & Stroke Foundation.* (\$140,000 2008 - 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 GS, Li J, Laughlin S, Christian AM: Heart & Stroke Foundation of Ontario.* (\$119,000 2007 - 2009.)

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

HONOURS RECEIVED

Wittnich C: Excellence in Course Design for PSL378 H, Department of Physiology. December 2008.

Division of General Surgery

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

PUBLICATIONS

Azzie G, Bendiak G: Chapter 18: General surgery. In: *The Hospital for Sick Children Handbook of Pediatrics*, 11th Edition: (Dipchand A, Friedman J, Gupta S, Bismilla Z, Lam C, eds.) Saunders Elsevier, Toronto: 2009:pp 348-362.

Azzie G, Bickler S, Farmer D, Beasley S: Partnerships for developing pediatric surgical care in low-income countries. *Journal of Pediatric Surgery*: December 2008: 43(12): pp 2273-2274.

Browne M, Sher D, Grant D, Deluca E, Alonso E, Whittington PF, Superina RA: Survival after liver transplantation for hepatoblastoma: A 2-center experience. *Journal of Pediatric Surgery*: November 2008: 43(11): pp 1973-1981.

Chen LE, Zamakhshary M, Foglia RP, Coplen DE, Langer JC: Impact of wait time on outcome for inguinal hernia repair in infants. *Pediatric Surgery International*: March 2009: 25(3): pp 223-227. E-published ahead of print: December 16, 2008.

Cheng W, Yeung C-K, Zhang J, Moro A, Ho R, Ng Y-K, Hui C-C, Kim PC: Sonic hedgehog mediator Gli2 regulates bladder mesenchymal patterning. *The Journal of Urology*: October 2008: 180(4): pp 1543-1550. E-published ahead of print: August 16, 2008.

Chiu P, Hedrick HL: Postnatal management and long-term outcome for survivors with congenital diaphragmatic hernia. *Prenatal Diagnosis*: July 2008: 28(7): pp 592-603.

Chiu PPL, Langer JC: Mediastinal and thoracic masses, pneumothorax and pneumomediastinum. In: *Pediatric Surgical Diseases. A Radiological Surgical Case Study Approach*: (Esposito C, Esposito G, eds.) Springer-Verlag, Heidelberg, Germany: 2008: pp 57-64.

Dasgupta R, Langer JC: Complications of colon surgery. In: *Complications of Pediatric Surgery*: (Coty N, Glick PL, eds.) Informa Healthcare, New York: 2009: pp 285-298.

Davies DA, Pearl RH, Ein SH, Langer JC, Wales PW: Management of blunt splenic injury in children: Evolution of the non-operative approach. *Journal of Pediatric Surgery*: May 2009: 44(5): pp 1005-1008.

Diamond IR, Wales PW: Advantages of the distal sigmoid colostomy in the management of infants with short bowel syndrome. *Journal of Pediatric Surgery*: August 2008: 43(8): pp 1464-1467.

Draper H, Chitayat D, Ein SH, Langer JC: Long-term functional results following resection of neonatal sacrococcygeal teratoma. *Pediatric Surgery International*: March 2009: 25(3): pp 243-246. E-published ahead of print: February 3, 2009.

DuBay DA, Holtzman S, Adcock L, Abbey S, Greenwood S, Macleod C, Kashfi A, Jacob M, Renner EL, Grant DR, Levy GA, Therapondos G: Adult right-lobe living liver donors: Quality of life, attitudes and predictors of donor outcomes. *American Journal of Transplantation*: May 2009: 9(5): pp 1169-1178.

Dutta S, Milhailovic A, Benson L, Kantor PF, Fitzgerald PG, Walton JM, Langer JC, Cameron BH: Thoracoscopic ligation versus coil occlusion for patent ductus arteriosus: A matched cohort study of outcomes and cost. *Surgical Endoscopy*: July 2008: 22(7): pp 1643-4168.

Ein SH, Nasr A, Wales PW, Gerstle T: The very large recurrent postoperative scrotal hydrocele after pediatric inguinal hernia repair: A rare problem. *American College of Physicians (ACP) Journal Club/Annals of Internal Medicine*: May 2009: 25(1): pp 239-241.

Hall NJ, Pacilli M, Eaton S, Reblock K, Gaines B, Pastor A, Langer JC, Koivusalo AI, Pakarinen MP, Stroedter L, Beyerlein S, Haddad M, Clarke S, Ford H, Pierro A: Recovery after open versus laparoscopic pyloromyotomy for pyloric stenosis: A double-blind multicentre randomised controlled trial. *Lancet*: January 2009: 373(9661): pp 390-398. E-published January 18, 2009.

Herrera P, Caldarone CA, Forte V, Holtby H, Cox P, Chiu P, Kim PCW, Airway Reconstruction Team: Topsy turvey heart with associated congenital tracheobronchial stenosis and airway compression requiring surgical reconstruction. *The Annals of Thoracic Surgery*: July 2008: 86(1): pp 282-283.

Keijzer R, Chiu PP, Ratjen F, Langer JC: Pulmonary function after early vs late lobectomy during childhood: A preliminary study. *Journal of Pediatric Surgery*: May 2009: 44(5): pp 893-895.

Kelly Jr RE, Cash TF, Shamberger RC, Mitchell RK, Mellins RB, 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, Columbani PM, Bagley T, Quinn A, Moskowitz AB: Surgical repair of pectus excavatum markedly improves body image and perceived ability for physical activity: Multicenter study. *Pediatrics*: December 2008: 122(6): pp 1218-1222.

Langer JC: Surgical aspects of inflammatory bowel disease in children. In: *Pediatric Gastrointestinal Disease: Pathophysiology, Diagnosis, Management*, 5th edition: (Walker et al, eds.) BC Decker, Lewiston: 2008: pp 569-574.

Langer M, Chiu PP, Kim PC: Congenital and acquired single-lung patients: Long-term follow-up reveals high mortality risk. *Journal of Pediatric Surgery*: January 2009: 44(1): pp 100-105.

Ling SC, Pfeiffer A, Avitzur Y, Fecteau A, Grant D, Ng VL: Long-term follow-up of portal hypertension after liver transplantation in children. *Pediatric Transplantation*: March 2009: 13(2): pp 206-209. E-published ahead of print: June 18, 2008.

Liu H, Shalev I, Manuel J, He W, Leung E, Crookshank J, Liu MF, Diao J, Cattral M, Clark DA, Isenman DE, Gorczyński RM, Grant DR, Zhang L, Phillips MJ, Cybulsky MI, Levy GA: The FGL2-FcγRIIB pathway: A novel mechanism leading to immunosuppression. *European Journal of Immunology*: November 2008: 38(11): pp 3114-3126.

Lopushinsky S, Fecteau AH: Pectus deformities: A review of open surgery in the modern era. *Seminars in Pediatric Surgery*: August 2008: 17(3): pp 201-208.

Mah VK, Zamakhshary M, Mah DY, Cameron B, Bass J, Bohn D, Scott L, Himidan S, Walker M, Kim PC: Absolute versus relative improvements in congenital diaphragmatic hernia survival: What happened to "hidden mortality." *Journal of Pediatric Surgery*: May 2009: 44(5): pp 877-882.

Morinis J, Dutta S, Blanchette V, Butchart S, Langer JC: Laparoscopic partial vs total splenectomy for children with hereditary spherocytosis. *Journal of Pediatric Surgery*: September 2008: 43(9): pp 1649-1652.

Ng VL, Fecteau A, Shepherd R: Outcomes of 5-year survivors of pediatric liver transplantation: Report on 461 children from a North American multicenter registry. *Pediatrics*: December 2008: 122(6): pp e1128-1135. E-published December 1, 2008.

Nicholas DB, Swan SR, Gerstle JT, Allan T, Griffiths AM: Struggles, strengths and strategies: An ethnographic study exploring the experiences of adolescents living with an ostomy. *Health and Quality of Life Outcomes*: October 2008: 6: pp 114.

Panossian A, Diamond I, Fecteau A, Grant D, Zuker R: Hepatic artery microvascular anastomosis in pediatric living donor liver transplantation: A review of 35 consecutive cases by a single microvascular surgeon. *Journal of Reconstructive Microsurgery*: E-published ahead of print: May 19, 2009.

Pastor A, Osman F, Teitelbaum DH, Caty M, Langer JC: Development of a standardized definition for Hirschsprung-associated enterocolitis: A Delphi analysis. *Journal of Pediatric Surgery*: January 2009: 44(1): pp 251-256.

Pastor A, Phillips JD, Fenton SJ, Meyers RL, Lamm A, Raval MV, Lehman E, Karp TB, Wales PW, Langer JC: Routine use of a silastic spring-loaded silo for infants with gastroschisis: A multicentre randomized controlled trial. *Journal of Pediatric Surgery*: October 2008: 43(10): pp 1807-1812.

Scheida N, Krishnamurthy G, Chait PG, Wales PW, Amaral JG: Ectopic drainage of the common bile duct into the lesser curvature of the gastric antrum in a patient with pyloric atresia, annular pancreas and congenital short bowel syndrome. *Pediatric Radiology*: September 2008: 39(1): pp 66-69.

Selzner N, Girgrah N, Lilly L, Guindi M, Selzner M, Therapondos G, Adeyi O, McGilvray I, Cattral M, Greig PD, Grant D, Levy G, Renner EL: The difference in the fibrosis progression of recurrent hepatitis C after liver donor liver transplantation versus deceased donor liver transplantation is attributable to the difference in donor age. *Liver Transplantation*: December 2008: 14(12): pp 1778-1786.

Shalev I, Wong KM, Foerster K, Zhu Y, Chan C, Maknoja A, Zhang J, Ma XZ, Yang XC, Gao JF, Liu H, Selzner N, Clark DA, Adeyi O, Phillips MJ, Gorczyński RR, Grant D, McGilvray I, Levy G: The novel CD4+CD25+ regulatory T cell effector molecule fibrinogen-like protein 2 contributes to the outcome of murine fulminant viral hepatitis. *Hepatology*: February 2009: 49(2): pp 387-397.

Struijs MC, Diamond IR, Pencharz PB, Chang KTE, Viero S, Langer JC, Wales PW: Absence of the interstitial cells of Cajal in a child with chronic pseudoobstruction. *Journal of Pediatric Surgery*: December 2008: 43(12): pp E25-E29.

Toso C, Trotter J, Wei A, Bigam DL, Shah S, Lancaster J, Grant DR, Greig PD, Shapiro AM, Kneteman NM: Total tumor volume predicts risk of recurrence following liver transplantation in patients with hepatocellular carcinoma. *Liver Transplantation*: August 2008: 14(8): pp 1107-1115. E-published ahead of print: July 30, 2008.

Zamakhshary M, Ein A, Ein SH, Wales PW: Predictors of metachronous inguinal hernias in children. *Pediatric Surgery International*: January 2009: 25(1): pp 69-71. E-published ahead of print: November 7, 2008.

Zamakhshary M, Guan J, To T, Langer JC: Risk of incarceration of inguinal hernia among infants and young children awaiting elective surgery. *Canadian Medical Association Journal*: November 2008: 179(1): pp 1001-1005.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Chiu P: York Region Conservatory of Music, Fundraiser for the SickKid's Foundation, Toronto, ON, June 2009. A brief history of the Hospital for Sick Children.

Chiu P: CHERUBS (The Association of Congenital Diaphragmatic Hernia Research, Awareness and Support) International Congress, Raleigh, North Carolina, July 2008. Congenital diaphragmatic hernia repairs: The old, the new and the future.

Chiu P: Canadian Association of Paediatric Surgeons, Annual Meeting, Toronto, ON, August 2008. Pulmonary function following early versus late lobectomy during childhood: A preliminary study.

Ein SH: British Association of Paediatric Surgeons, 5th Annual Meeting, Salamanca, Spain, July 2008. Paper given: The best 10 clinical papers over the last 50 years from the Division of General Surgery, Hospital for Sick Children, Toronto, Ontario.

Ein SH: Canadian Association of Paediatric Surgeons, 40th Annual Meeting, Toronto, ON, August 2008. Scientific session moderator.

Ein SH: American Academy of Pediatrics, Annual Meeting, Section on Surgery, Boston, Massachusetts, October 2008. Co-moderator of luncheon and clinical problem solving session.

Gerstle JT: Canadian Association of General Surgeons, Symposium on International Surgery, Global Health - A Role for Canadian Surgeons, Halifax, NS, September 2008. Debate 1: Short-term surgical projects provide food value for investment.

Gerstle JT: Black Lion Hospital/Addis Ababa University, Addis Ababa, Ethiopia, November 2008. (1) Minimal access surgery in children: An overview, (2) Pediatric cancer and minimal access surgery.

Gerstle JT: Canadian Paediatric Society, Annual Meeting, Ottawa, ON, June 2009. Omental infarction in children.

Grant D: Israel Transplant Society, Tel Aviv, Israel, January 2009. Liver donor liver transplantation.

Grant D: British Gastroenterology Society, Glasgow, Scotland, March 2009. Intestine transplantation update.

Grant D: Canadian Transplantation Society, Banff, AB, March 2009. Liver donor liver transplantation.

Kim PCW: King Abdullah Medical City, Visiting Professors Program, Riyadh, Kingdom of Saudi Arabia, November 2008. Fetal Alert Network: Conception to transition.

Langer JC: Erasmus University, Pediatric Surgery, Grand Rounds, Rotterdam, The Netherlands, January 2009. (1) Abdominal wall defects, (2) Management of obstructive symptoms after surgery for Hirschsprung's disease and the use of botulinum toxin.

Langer JC: Radboud University, Department of Surgery, Pediatric Colorectal Workshop 2009, Nimegen, The Netherlands, January 2009. (1) Management of obstructive symptoms after surgery for Hirschsprung's disease, (2) Transanal pullthrough for Hirschsprung's disease.

Langer JC: Medical University of Graz, International Pediatric Surgery Week, Graz, Austria, March 2009. Should all children be operated on by a pediatric surgeon?

Langer JC: American Academy of Pediatrics/American College of Chest Physicians, Celebration of Pediatric Pulmonology 2009, Scottsdale, Arizona, April 2009. (1) Pneumothorax, blebs and cysts: When to intervene, (2) Surgical complications for the pulmonologist, (3) Video-assisted thoracoscopic surgery (VATS), tubes and drains.

Langer JC: Canadian Medical Network, Port of Spain, Trinidad, October 2008. The use of telehealth to enhance international surgical activities.

Langer JC: Crohn's and Colitis Foundation of Canada, Toronto, ON, November 2008. The role of the surgeon in the management of IBD: Living well with inflammatory bowel disease.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

Centre for Computer-Assisted Intervention and Innovation (CCAII). *Kim PCW: Ministry of Research and Innovation.* (\$10,200,000 2008 - 2012.)

Effect of nitrous oxide exposure during surgery on the homocysteine concentrations of children. *O'Connor DL, Luginbuehl I, Wales PW, Pichardo D: Mead Johnson/Heinz/Weston Endowment for Nutrition/Metabolism Research.* (\$12,043 2009 - 2010.)

fgl2/FGL2 and xenograft transplantation. *Grant DR, Levy G, Backx P, Adamson L, Lobe CG: Ontario Heart and Stroke Foundation.* (\$264,000 2008 - 2011.)

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

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 (Principal Investigators); 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 N-acetylcysteine (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: The Hospital for Sick Children Foundation Grant.* (\$128,783 2006 - 2008.)

Research hospital fund: Centre for image-guided innovation and therapeutic intervention (CIGITI). *Kim P (Section Leader), Wright J, Rossant J, Babyn P, Lymer J: Canadian Foundation for Innovation. Total Awarded \$227,000,000.* (\$12,500,000 2008 - 2012.)

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

Simulation based on novel, innovative surgical and computational models: Minimally invasive repair of fetal anomalies. *Windrim R, Kim P: Network of Excellence in Simulation for Clinical Teaching and Learning.* (\$40,000 2008.)

SMOF trial: 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: Fresenius Kabi.* (\$162,000 2008 - 2010.)

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

The Fetal Alert Network: A population-based antenatal database for pregnancies affected by anomalies. *Kim P: Ministry of Health and Long Term Care.* (\$900,000 2007 - 2008.)

Division of Neurosurgery

Dr. M Dennis	Professor
Dr. P.B. Dirks	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-Habib A, Rutka JT: Pediatric meningiomas. In: *Meningiomas, Diagnosis, Treatment, and Outcome*: (Lee JH, ed.) Springer, London: 2008: pp 543-553.

Benifla M, Rutka JT, Otsubo H, Lamberti-Pasculi M, Elliott I, Sell E, Ramachandran R, Ochi A, Weiss SK, Snead 3rd OC, Donner EJ: Long-term seizure and social outcomes following temporal lobe surgery for intractable epilepsy during childhood. *Epilepsy Research*: December 2008: 82(2): pp 133-138.

Chamoun RB, Relyea KM, Johnson KK, Whitehead WE, Curry DJ, Luerssen TG, Drake JM, Jea A: Use of axial and subaxial translaminar screw fixation in the management of upper cervical spinal instability in a series of 7 children. *Neurosurgery*: April 2009: 64(4): pp 1-6.

Cook DJ, Rutka JT: Craniopharyngioma: Neurosurgical management. In: *Comprehensive Management of Skull Base Tumors*: (Hanna EY, DeMonte F, eds.) Informa Healthcare, New York: 2009: pp 573-581.

Dennis M, Agostino A, Roncadin C, Levin H: Theory of mind depends on domain-general executive functions of working memory and cognitive inhibition in children with traumatic brain injury. *Journal of Clinical and Experimental Neuropsychology*: February 2009: 16: pp 1-13.

Dennis M, Berch DB, Mazzocco MM: Mathematical learning disabilities in special populations: Phenotypic variation and cross-disorder comparisons. *Developmental Disabilities Research Reviews*: February 2009: 15(1): pp 80-89. E-published: February 11, 2009.

Dennis M, Francis DJ, Cirino PT, Schachar R, Barnes MA, Fletcher JM: Why IQ is not a covariate in cognitive studies of neurodevelopmental disorders. *Journal of the International Neuropsychological Society*: May 2009: 15(3): pp 331-343.

Dennis M, Sinopoli KJ, Fletcher JM, Schachar R: Puppets, robots, critics, and actors within a taxonomy of attention for developmental disorders. *Journal of the International Neuropsychological Society*: September 2008: 14(5): pp 673-690.

Diamandis P, Sacher A, Tyers M, Dirks P: New drugs for brain tumors? Insights from chemical probing of neural stem cells. *Medical Hypotheses*: June 2009: 72: pp 683-687.

Drake JM, Kulkarni AV, Kestle J: Endoscopic third ventriculostomy versus ventriculoperitoneal shunt in pediatric patients - a decision analysis (CNS-08-0206.R1). *Child's Nervous System*: April 2009: 25(4): pp 467-472.

Fletcher JM, Ostermaier KK, Cirino PT, Dennis M: Neurobehavioral outcomes in spina bifida: Processes versus outcomes. *Journal of Pediatric Rehabilitation Medicine*: February 2009: 1(4): pp 311-324.

Gaetz W, Cheyne D, Rutka JT, Drake JM, Benifla M, Strantzas S, Widjaja E, Holowka S, Tovar-Spinozza Z, Otsubo H, Pang E: Presurgical localization of primary motor cortex in pediatric patients with brain lesions by the use of spatially filtered magnetoencephalography. *Neurosurgery*: March 2009: 64(3Suppl): pp 177-185.

Hannay HJ, Dennis M, Kramer L, Blaser S, Fletcher JM: Partial agenesis of the corpus callosum in spina bifida meningomyelocele and potential compensatory mechanisms. *Journal of Clinical and Experimental Neuropsychology*: February 2009: 31(2): pp 180-194.

Hannay HJ, Walker A, Dennis M, Kramer L, Blaser S, Fletcher JM: Auditory interhemispheric transfer in relation to patterns of partial agenesis and hypoplasia of the corpus callosum in spina bifida meningomyelocele. *Journal of the International Neuropsychological Society*: September 2008: 14(5): pp 771-781

Hazrati L, Kleinschmidt-DeMasters B, Handler M, Smith M, Ochi A, Otsubo H, Rutka JT, Go C, Weiss S, Hawkins C: Astrocytic inclusions in epilepsy: Expanding the spectrum of filaminopathies. *Journal of Neuropathology*: July 2008: 67(7): pp 669-676.

Hasan KM, Sankar A, Halphen C, Ewing-Cobbs L, Kramer LA, Dennis M, Fletcher JM: Quantitative diffuse tensor imaging and intellectual outcomes in spina bifida: Laboratory investigation. *Journal of Neurosurgery: Pediatrics*: July 2008: 2(1): pp 75-82.

Hopyan-Misakyan T, Gordon KA, Dennis M, Papsin BC: Recognition of affective speech prosody and facial affect in deaf children with unilateral right cochlear implants. *Child Neuropsychology*: March 2009: 15(2): pp 136-146.

- Jea A, Vachhrajani S, Johnson K, Rutka JT:** Corpus callosotomy in children with intractable epilepsy using frameless stereotactic neuronavigation: 12 year experience at the Hospital for Sick Children in Toronto. *Neurosurgical Focus*: September 2008: 25(3): pp E7.
- Jhas S, Henriques L, Hawkins C, Bouffet E, Rutka JT:** An intracranial leiomyosarcoma in a child with neurofibromatosis type 1. *The Canadian Journal of Neurological Sciences*: February 2009: 36(4): pp 491-495.
- Kadis DS, Kerr EN, Rutka JT, Snead C, Weiss SK, Smith M:** Pathology type does not predict language lateralization in children with medically intractable epilepsy. *Epilepsia*: February 2009: 50(6): pp 1498-1504.
- Kim BY, Jiang W, Oreopoulos J, Yip CM, Rutka JT, Chan WC:** Biodegradable quantum dot nanocomposites enable live cell labeling and imaging of cytoplasmic targets. *Nano Letters*: November 2008: 8(11): pp 3887-3892.
- Kim CF, Dirks PB:** Cancer and Stem Cell Biology: How tightly intertwined? *Cell Stem Cell*: August 2008: 3(2): pp 147-150.
- King JA, Halliday W, Drake JM:** High-grade primary diffuse leptomeningeal gliomatosis in a child with neurofibromatosis type 1. *Journal of Neurosurgery: Pediatrics*: December 2008: 2(6): pp 402-415.
- Kongkham PN, Northcott P, Ra YS, Nakahara Y, Mainprize TG, Croul SE, Smith CA, Taylor MD, Rutka JT:** An epigenetic genome-wide screen identifies SPINT2 as a novel tumor suppressor gene in pediatric medulloblastoma. *Cancer Research*: December 2008: 68(23): pp 9945-9953.
- Kulkarni AV, Cochrane DD, McNeely PD, Shams I:** Comparing the child's and parent's perception of health outcome in paediatric hydrocephalus. *Developmental Medicine and Child Neurology*: August 2008: 50(8): pp 587-592.
- Kulkarni AV, Cochrane DD, McNeely PD, Shams I:** Medical, social, and economic determinants of quality of life in Canadian children with hydrocephalus. *Journal of Pediatrics*: November 2008: 153(5): pp 689-695.
- Lo BW, Kulkarni AV, Rutka JT, Jea A, Drake JM, Lamberti-Pasculli M, Dirks PB, Thabane L:** Clinical predictors of developmental outcome in patients with cephaloceles. *Journal of Neurosurgery: Pediatrics*: October 2008: 2(4): pp 254-257.
- Nejat F, El Khashab M, Rutka JT:** Initial management of childhood brain tumors: Neurosurgical considerations. *Journal of Child Neurology*: October 2008: 23(10): pp 1136-1148.
- Northcott PA, Fernandez A, Hagan JP, Ellison DW, Grajkowska W, Gillespie Y, Grundy R, Van Meter T, Rutka JT, Croce CM, Kenney AM, Taylor MD:** The miR-17/92 polycistron is amplified and up-regulated in sonic hedgehog-driven medulloblastomas and induced by N-myc in sonic hedgehog-treated cerebellar neural precursors. *Cancer Research*: April 2009: 69(8): pp 3249-3255. E-published: April 7, 2009.
- Northcott PA, Nakahara Y, Wu X, Feuk L, Ellison D, Croul S, Mack S, Kongkham P, Peacock J, Dubuc A, Ra YS, Zilberberg K, McLeod J, Scherer SW, Rao J, Eberhart CG, Grajkowska W, Gillespie Y, Lach B, Grundy R, Pollack IF, Hamilton RL, Van Meter T, Carlotti CG, Boop F, Bigner D, Gilbertson RJ, Rutka JT, Taylor MD:** Multiple recurrent genetic events converge on control of histone lysine methylation in medulloblastoma. *Nature Genetics*: April 2009: 41(4): pp 465-472. E-published ahead of print: March 8, 2009.
- Nunez OM, Seol HJ, Rutka JT:** The role of surgery in the management of intracranial gliomas: Current concepts. *Indian Journal of Cancer*: April 2009: 46(2): pp 120-126.
- Ornstein TJ, Levin HS, Chen S, Hanten G, Ewing-Cobbs L, Dennis M, Barnes M, Max J, Chapman S, Logan GD, Schachar RJ:** Performance monitoring in children following traumatic brain injury. *Journal of Child Psychology and Psychiatry*: April 2009: 50(4): pp 506-513.
- Pollard S, Yoshikawa K, Clarke I, Danovi D, Stricker S, Russell R, Bayani J, Head R, Lee M, Bernstein M, Squire JA, Smith A, Dirks P:** Glioma stem cell lines expanded in adherent culture have tumour specific phenotypes and are suitable for chemical and genetic screens. *Cell Stem Cell*: June 2009: 4(6): pp 568-580.
- Roncadin C, Dennis M, Greenberg ML, Spiegler BJ:** Adverse medical events associated with childhood cerebellar astrocytomas and medulloblastomas: Natural history and relation to very long-term neurobehavioral outcome. *Child's Nervous System*: September 2008: 24(9): 995-1002. E-published ahead of print: June 25, 2008.
- Rutka JT:** Endonasal resection of craniopharyngiomas. *Journal of Neurosurgery*: July 2008: 109(1): pp 1-5.
- Rutka JT:** Letters to the Editor: Health plans in place. *Toronto Sun*: March 2009: pp 19.
- Rutka JT, Kongkham P, Northcott P, Carlotti C, Guduk M, Osawa H, Moreno O, Seol HJ, Restrepo A, Weeks A, Nagai S, Smith C:** The evolution and application of techniques in molecular biology to human brain tumors: A 25 year perspective. *Journal Neuro-Oncology*: May 2009: 92(3): pp 261-273. E-published ahead of print: April 9, 2009.
- Salhia B, Tran NL, Chan A, Wolf A, Nakada M, Rutka F, Ennis M, McDonough WS, Berens ME, Symons M, Rutka JT:** The guanine nucleotide exchange factors trio, Ect2, and Vav3 mediate the invasive behavior of glioblastoma. *American Journal of Pathology*: December 2008: 173(6): pp 1828-1838.
- Steinbok P, Gan P, Connollu M, Carmant L, Sinclair D, Rutka JT, Griebel R, Aronyk K, Hader W, Vebtureyra E, Atkinson J:** Epilepsy surgery in the first 3 years of life: A Canadian survey. *Epilepsia*: January 2009: 50(6): pp 1442-1449.
- Stone S, Rutka JT:** Utility of neuronavigation and neuromonitoring in epilepsy surgery. *Neurosurgery Focus*: September 2008: 25(3): pp E17.

Tovar-Spinoza Z, Ochi A, Rutka JT, Go C, Otsubo H: The role of magnetoencephalography in epilepsy surgery. *Neurosurgical Focus*: September 2008: 25(3): pp E16. E-published ahead of print: August 29, 2008

Vachhrajani S, Fawaz C, Mathieu D, Menard C, Cusimano MD, Gentili F, Hodaie M, Kenny B, Kulkarni AV, Laperriere N, Schwartz M, Bernstein MD: Complications of gamma knife surgery: An early report from two Canadian centres. *Journal of Neurosurgery*: December 2008: 109(Suppl): pp 2-7.

Vachhrajani S, Jea A, Rutka JA, Blaser S, Cusimano M, Rutka JT: Meningioma with dural venous sinus invasion and jugular vein extension. *Journal of Neurosurgery Pediatrics*: December 2008: 2(2): pp 391-396.

Ward RJ, Lee L, Graham K, Satkundendran T, Clarke ID, Austin R, Ling E, Harper L, Niewhaus E, Hui CC, Dirks PB: Multipotent CD15+ cancer stem cells in patched1-deficient mouse medulloblastoma. *Cancer Research*: June 2009: 69: pp 4682-4690.

Widjaja E, Otsubo H, Raybaud C, Ochi A, Cham D, Rutka JT, Snead CO, Halliday W, Sakuta R, Galicia E, Shelef I, Chuang SH: Characteristics of MEG and MRI between Taylor's focal cortical dysplasia (type II) and other cortical dysplasia: Surgical outcome after complete resection of MEG spike source and MR lesion in pediatric cortical dysplasia. *Epilepsy Research*: December 2008: 82(2): pp 147-155.

Yamazaki M, Chan D, Tovar-Spinoza Z, Go C, Imai K, Ochi A, Chu B, Rutka JT, Drake JM, Widjaja E, Matsuura M, Snead III OC, Otsubo H: Interictal epileptogenic fast oscillations on neonatal and infantile EEGs in hemimegalencephaly. *Epilepsy Research*: February 2009: 83(2): pp 198-206.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Dennis M: 37th Annual Meeting, Lifespan Neuropsychology: Transdisciplinary Issues and Horizons, Atlanta, GA, February 2009. Herbert H. Birch Memorial Lecture: (1) The goldilocks dilemma in neurodevelopmental disorders: A functional grain that is not too small, not too big, but just right, (2) Frontal lobe: Typical and atypical development.

Dennis M: University of California San Diego, School of Medicine, Nelson Butters West Coast Neuropsychology Conference, Advances in the Neuropsychological Assessment and Treatment of School-Aged Children with Cognitive Deficits, 19th Annual Meeting, San Diego, California, April 2009. (1) Attention disorders that are not ADHD: A new taxonomy, (2) Social language and social cognition after childhood traumatic brain injury.

Dirks PB: Burnham Institute, SoCal Stem Cell Consortium and Cancer Seminar Series, San Diego, California, January 2009. Cancer stem cells: The view from the brain.

Dirks PB: Centro Nacional de Investigaciones Oncológicas (CNIO), Cancer Conference on Stem Cells and Cancer, Madrid, Spain, February 2009. Characterizing cancer stem cells in brain tumors from human and mouse.

Dirks PB: Second Annual Wyeth Frontiers in Human Disease Symposium, Stem Cells in Human Disease, New York, New York, March 2009. Defining the hierarchy of mouse and human brain tumors.

Dirks PB: University of Wisconsin, Department of Neurological Surgery, Annual Stem Cell Symposium, Madison, Wisconsin, April 2009. (1) Brain tumor stem cells: A surgeon's perspective, (2) Characterizing cancer stem cells in human and mouse brain tumours.

Dirks PB: World Federation of Neuro-Oncology, 3rd Quadrennial Meeting, Yokohama, Japan, May 2009. Brain tumor stem cells: New insights and challenges in human and mouse models.

Dirks PB: World Federation of Stereotactic and Functional Neurosurgery, Quadrennial Meeting, Toronto, ON, May 2009. Brain tumors and neural stem cells.

Dirks PB: Fred Hutchison Cancer Research Center, Translational Gastrointestinal Cancer Symposium, Seattle, Washington, October 2008. Stem cells in liver cancer.

Dirks PB: International Society of Pediatric Oncology, Berlin, Germany, October 2008. State of the art in pediatric oncology: Stem cells and brain tumors.

Dirks PB: National Cancer Institute-Deutsches Krebsforschungszentrum (NCI-DKFZ), 2nd International Symposium on Stem Cells and Cancer, Heidelberg, Germany, October 2008. Tracking the cancer stem cell in human and mouse brain tumors.

Dirks PB: Pediatric Oncology Group, Annual Meeting, Toronto, ON, November 2008. Brain cancer stem cells: The evolving story.

Dirks PB: University of Michigan, Cellular and Molecular Biology (CMB) Fall Short Course, Ann Arbor, Michigan, November 2008. Beyond the hype of cancer stem cells.

Dirks PB: Institute of Molecular Pathology - Institute of Molecular Biotechnology GmbH (IMP-IMBA-BI) Meeting on Stem Cells, Vienna, Austria, December 2008. The heterogeneity of brain tumor stem cells.

Dirks PB: Max Delbrück Center for Molecular Medicine, Berlin, Germany, December 2008. Tracking the cancer stem cells in human and mouse brain tumors.

Drake JM: University of British Columbia, Department of Neurosurgery, Neuroscience Day, Vancouver, British Columbia, March 2009. (A) Visiting Professor: (1) CSF diversion with shunts in pediatric hydrocephalus - Why have we failed?, (2) CSF shunt infection - La Bete Noire, (B) P.D. Moyes Lecturer: Endoscopic third ventriculostomy for pediatric hydrocephalus - The latest technology, but is it better?

Drake JM: University of Utah, School of Medicine, Department of Neurosurgery Grand Rounds, Salt Lake City, Utah, March 2009. Marion L. Walker Visiting Professor: Optimizing cerebrospinal fluid (CSF) diversion strategies in pediatric patients.

Drake JM: Harvard University, Department of Neurosurgery Grand Rounds, Boston, Massachusetts, April 2009. Visiting Professor: Optimizing CSF diversion strategies in pediatric patients.

Drake JM: American Association of Neurological Surgeons (AANS), Annual Meeting, Current and Future Treatments for Hydrocephalus, San Diego, California, May 2009. Panelist/Discussant in a scientific session on pediatrics: (1) Ventriculopleural shunts in children: A single institution's 30-year experience, (2) Morphologic intracranial pressure waveform analysis in the setting of ventricular enlargement.

Drake JM: International Federation of Neuroendoscopy, 5th Congress, Athens, Greece, May 2009. Session 2: Hydrocephalus - Debate (Con Side): Endoscopic third ventriculostomy in the management of hydrocephalus in the first year of life.

Drake JM: Hydrocephalus Research Network (HCRN), Investigator Site Meeting, Birmingham, Alabama, September 2008. Participant.

Drake JM: Texas Children's Hospital, Pediatric Neurosurgery Research Group (PNSRG) Meeting, Houston, Texas, September 2008. Participant.

Drake JM: Congreso Latinoamericano de Neurocirugia (CLAN), 33rd Meeting, Bogota, Colombia, October 2008. Speaker: Optimizing cerebrospinal fluid (CSF) diversion for pediatric patients.

Drake JM: International Society of Pediatric Neurosurgery (ISPN), Intraoperative Monitoring in Pediatric Neurosurgery Symposium, Cape Town, South Africa, October 2008. (1) Speaker: Intraoperative monitoring for complex spine in pediatric patients, (2) Course.

Drake JM: Cornell Weil Medical School, Division of Neurosurgery, Course and Workshop on Intracranial Endoscopy, New York, New York, November 2008. Invited Faculty: Course on endoscopic third ventriculostomy

Drake JM: American Association of Neurological Surgeons/ Congress of Neurological Surgeons (AANS/CNS), Pediatric Section Meeting, Spokane, Washington, December 2008. Attendee.

Drake JM: University of Manitoba, Division of Neurosurgery, Tenth Annual Norman Hill Lecture, Winnipeg, MB, December 2008. Invited Speaker: Down on the farm - Lessons learned.

Kulkarni A: American Association of Neurological Surgeons (AANS), Trauma Section, North American Senior Resident Course on Neurotrauma and Critical Care, Toronto, ON, March 2009. Guidelines for pediatric head injury management.

Kulkarni A: American Association of Neurological Surgeons, San Diego, California, May 2009. (1) Patient assessment and outcomes in neurosurgery. (2) Technical advances in hydrocephalus treatment

Kulkarni A: Congress of Neurological Surgeons, Orlando, Florida, September 2008. Evidence-based neurosurgery.

Rutka JT: American Society for Peripheral Nerve (ASPN), Annual Meeting, Kohala Island, Hawaii, January 2009. Neurosurgical implications of achondroplasia.

Rutka JT: Israel Neurosurgical Society Meeting, Dead Sea, Israel, March 2009. (1) Hemispherectomy in children: Role of pathology and surgical technique in predicting patient outcome, (2) Pediatric neurosurgical oncology: Lessons learned.

Rutka JT: Society of Neurological Surgeons, Salt Lake City, Utah, May 2009. (1) Incorporating translational research into clinical care, (2) Neurosurgical resident education: The Canadian landscape.

Rutka JT: Japanese Society for Pediatric Neurosurgery, 37th Annual Meeting, Osaka, Japan, June 2009. (1) Pediatric neurosurgical oncology: Lessons learned, (2) Neurosurgical management of rolandic epilepsy in children, (3) Recent advances in the diagnosis and management of the child with a brain tumor, (4) Role of pediatric neurosurgeons in multidisciplinary therapy for central nervous system (CNS) tumours.

Rutka JT: Mount Sinai School of Medicine, New York, New York, June 2009. Medulloblastoma: Current treatment and future directions.

Rutka JT: Acibadem University School of Medicine, Istanbul, Turkey, July 2008. (1) How to build a brain tumor centre, (2) Pediatric neurosurgery oncology - lesson learned.

Rutka JT: American Academy of Neurological Surgeons Meeting, Sedona, Arizona, September 2008. Kruppel-like factor 4 (KLF4) as a novel tumor suppressor gene in medulloblastoma.

Rutka JT: Brazilian Neurosurgical Congress, XXVII Meeting, Iguassu Falls, Brazil, September 2008. (1) Medulloblastoma: Present and future perspectives, (2) Neurosurgical management of brainstem tumors in children, (3) Temporal lobectomy in children: Management issues and outcomes, (4) The role of magnetoencephalography in pediatric epilepsy surgery, (5) Pediatric epilepsy surgery: The Hospital for Sick Children experience, (6) Clinical trials are authoritative.

Rutka JT: Congress of Neurological Surgeons, Annual Meeting, Orlando, Florida, September 2008. Practical course (PC32): Pediatric brain tumor update.

Rutka JT: International Society for Pediatric Neurosurgery (ISPN), Cape Town, South Africa, October 2008. (1) An epigenetic wide screen identifies SPINT2 as a tumor suppressor gene in medulloblastoma, (2) Combination of MEG and DRT1 tactography detect novel white matter tract formation in the afflicted hemispheres of pediatric patients with intractable epilepsy, (3) Resection of symptomatic peri-rolandic lesions in children.

Rutka JT: Marine Biological Laboratory, multi-sponsored Research Update in Neuroscience for Neurosurgeons (RUNN) Course, Woods Hole, Boston, October 2008. Medulloblastoma: From a difficult past to a promising future.

Rutka JT: Dartmouth University Medical Center, Lebanon, New Hampshire, November 2008. Novel genetic and epigenetic targets for childhood medulloblastoma.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

Asymmetrical 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-Velasquez J: Ontario Neurotrauma Foundation.* (\$250,000 2007 - 2010.)

Cancer stem cell initiative. *Taylor MD: Ontario Institute of Cancer Research.* (\$263,290 2008 - 2012.)

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

Centre for Computer-Assisted Intervention and Innovation (CCAI), 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.* (\$7,354,597 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 MD, Witol A, Wilson B, Chafe S, McConnell D, Hukin, Fryer JC: 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.)

Characterization of nanoparticle delivery across the blood brain barrier. *Rutka JT: Brain Tumour Foundation of Canada.* (\$2,450,000 2009.)

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.)

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.)

Quality of life in children with hydrocephalus. *Kulkarni AV: SickKids Research Institute.* (\$55,000 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. *Dennis M* (Toronto Site), Fletcher J (PI-Houston Site): *National Institutes of Health*. (\$1,600,000 2005 - 2010.)

The effect of hospital admissions on children with hydrocephalus. *Kulkarni AV*: *University of Toronto, Department of Surgery, RR Graham Scholarship*. (\$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 & Stroke Foundation*. (\$236,000 2007 - 2011.)

The influence of postoperative systemic oxygen transport on neurologic outcomes in infants undergoing single ventricle palliation with Norwood and Hybrid management strategies. *Caldarone C, Dennis M*: *Heart & Stroke Foundation*. (\$120,000 2007 - 2011.)

The role of aberrant hepacyte growth factor (HGF)/cMET signaling in medulloblastoma. *Rutka J, Taylor M*: *National Cancer Institute of Canada*. (\$378,000 2008 - 2011.)

The role of aberrant HGF/cMET signaling in medulloblastoma. *Rutka JT*: *Canadian Cancer Society*. (\$378,000 2008 - 2011.)

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

The role of isochromosome 17q in medulloblastoma. *Rutka JT, Dirks P, Taylor MD, Tabori U*: *Pediatric Brain Tumor Foundation*. (\$1,198,800 2008 - 2011.)

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

White matter brain injury in children with hydrocephalus. *Kulkarni AV, Mabbot D, Widjaja E, Donnelly R*: *The Physicians' Services Incorporated Foundation*. (\$98,000 2008 - 2010.)

HONOURS RECEIVED

Taylor MD: Canada's Top 40 Under 40 - 2008 Recipient. May 2009.

Division of Orthopaedic Surgery

Dr. B.A. Alman	Professor (Division Head)
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, Wunder JS: Parathyroid hormone-related protein regulates glioma-associated oncogene transcriptional activation: Lessons learned from bone development and cartilage neoplasia. *Annals of the New York Academy of Sciences*: November 2008: 1144: pp 36-41. E-published: November 21, 2008.

Borkhoff CM, Hawker GA, Kreder HJ, Glazier RH, Mahomed NN, Wright JG: Patients' gender affected physicians' clinical decisions when presented with standardized patients but not for matching paper patients. *Journal of Clinical Epidemiology*: May 2009: 62(5): pp 527-541.

Castillo H, Samson-Fang L, Wiart L, Vogtle L, Darrah J, Michaels M, Hickman R, McLaughlin J, Logan J, Msall M, Hoon A, Walker W, Narayanan U: Effects of bisphosphonates in children with osteogenesis imperfecta: An AACPD systematic review. *Developmental Medicine and Child Neurology*: January 2009: 51(1): pp 17-29.

Chen Y, Alman BA: Wnt pathway, an essential role in bone regeneration. *Journal of Cellular Biochemistry*: February 2009: 106(3): pp 353-362.

Chundamala J, Wright JG, Kemp SM: An evidence-based review of parental presence during anesthesia induction and parent/child anxiety. *Canadian Journal of Anaesthesia*: January 2009: 56(1): pp 57-70.

Diamond IR, Murray C, Bosse MJ, Heckman JD, Mirza SK, Peabody TD, Saleh KJ, Swiontkowski MF, Wright JG: The American Orthopaedic Association clinical trials curriculum. *Journal of Bone and Joint Surgery (American)*: April 2009: 91(4): pp 1007-1011.

Gevorgyan A, Sukhu B, Alman BA, Bristow RG, Pang CY, Forrest CR: Radiation effects and radioprotection in MC3T3-E1 mouse calvarial osteoblastic cells. *Plastic Reconstructive Surgery*: October 2008: 122(4): pp 1025-1035.

Giampietro PF, Dunwoodie SL, Kusumi K, Pourquie O, Tassy O, Offiah AC, Cornier AS, Alman BA, Blank RD, Raggio CL, Glurich L, Turnpenny PD: Progress in the understanding of the genetic etiology of vertebral segmentation disorders in humans. *Annals of the New York Academy of Sciences*: January 2009: 1151: pp 38-67.

Gurung A, Uddin F, Hill RP, Ferguson P, Hill R, Alman BA: Beta-catenin is a mediator of the response of the fibroblasts to irradiation. *American Journal of Pathology*: January 2009: 174(1): pp 248-255.

Howard A: Chapter 24: Can we prevent children's fractures? In: *Evidence-Based Orthopaedics: The Best Answers to Clinical Questions: Expert Consult: Online and Print*: Elsevier Saunders, Toronto, ON: 2008: pp 177-180.

Howard A: Chapter 27: How should we treat elbow fractures in children? In: *Evidence-Based Orthopaedics: The Best Answers to Clinical Questions: Expert Consult: Online and Print*: Elsevier Saunders, Toronto, ON: 2008: pp 188-194.

Howard A: Implementation of child biomechanical neck behaviour into the hybrid III crash test dummy. *SAE International Journal of Passenger Cars - Mechanical Systems*: April 2009: 1(1): pp 835-845.

Howard A, Galpin R, Noonan K, Goebel J, Wainwright W, Kocher M: Section III: Pediatric topics. In: *Evidence-Based Orthopaedics: The Best Answers to Clinical Questions: Expert Consult: Online and Print*: (Howard A, ed.) Elsevier Saunders, Toronto, ON: 2008: pp 188-194.

Howard AW, Mikrogianakis A: Pediatric Orthopaedics. In: *The Hospital for Sick Children Manual of Pediatric Trauma*: (Mikrogianakis A, Valani R, Cheng A, eds.) Lippincott Williams and Wilkins, Toronto, ON: 2008.

Janicki JA, Narayanan UG, Harvey B, Roy A, Ramseier LE, Wright JG: Treatment of neuromuscular and syndrome-associated (nonidiopathic) clubfeet using the Ponseti method. *Journal of Pediatric Orthopaedics*: June 2009: 29(4): pp 393-397.

Janicki JA, Narayanan UG, Harvey B, Roy A, Weir S, Wright JG: Comparison of surgeon and physiotherapist-directed Ponseti treatment of idiopathic clubfoot. *Journal of Bone and Joint Surgery (American)*: May 2009: 91(5): pp 1101-1108.

Jellicoe P, Hopyan S: Can chronic recurrence multifocal osteomyelitis predispose to lymphoma of bone? A case report. *Journal of Pediatric Orthopaedics*: November 2008: 17(6): pp 329-332.

- Jhaveri SN, Zeller R, Miller S, Lewis SJ:** The effect of intra-operative skeletal (skull femoral) traction on apical vertebral rotation. *European Spine Journal*: March 2009: 18(3): pp 357. E-published ahead of print: December 24, 2008.
- Kapoor T, Altenhof W, Howard W, Rasico J, Zhu F:** Methods to mitigate injury to toddlers in near-side impact crashes. *Accidental Analysis and Prevention*: September 2008: 40(6): pp 1880-1892.
- Kapoor T, Altenhof W, Tot M, Zhang W, Howard AW, Rasico J, Zhu F, Mizuno K:** Load limiting behavior in CRS tether anchors as a method to mitigate head and neck injuries sustained by children in frontal crash. *Traffic Injury Prevention*: July 2008: 9(3): pp 243-255.
- Khetani N, Donaldson S, Wright JG:** What do patients and parents know about surgery for adolescent idiopathic scoliosis? A knowledge questionnaire. *Spine*: September 2008: 33(20): pp E754-E758.
- Khoshbin A, Wright JG:** O.R. huddles and time-outs eliminate adverse events. In: *Patient Safety: Leading Practice in Ontario-Improvements, Ideas and Innovations 2008*: Ontario Hospital Association, Toronto: 2008: pp 38.
- Lee PP, Mihailovic M, Rothman L, Mutto M, Nakitto M, Howard AW:** Pedestrian injuries in school-attending children: A comparison of injury surveillance techniques in a low-income setting. *Injury Prevention*: April 2009: 15(2): pp 100-104.
- Macculloch R, Donaldson S, Nicholas D, Nyhof-Young J, Hetherington R, Lupea D, Wright JG:** Towards an understanding of the information and support needs of surgical adolescent idiopathic scoliosis patients: A qualitative analysis. *Scoliosis*: May 2009: 4: pp 12.
- Mahomed NN, Davis AM, Hawker G, Badley E, Davey JR, Syed KA, Coyte PC, Gandhi R, Wright JG:** Inpatient compared with home-based rehabilitation following primary unilateral total hip or knee replacement: A randomized control trial. *Journal of Bone and Joint Surgery (American)*: August 2008: 90(8): pp 1673-1680.
- Morrongiello B, Howard A, Rothman L, Sandomierski M:** Once bitten twice shy? Medically-attended injuries can sensitize parents to children's risk of injury on playgrounds. *Injury Prevention*: February 2009: 15: pp 50-54.
- Nakitto MT, Mutto M, Howard A, Lett HR:** Pedestrian traffic injuries among school children in Kawempe, Uganda. *African Health Sciences*: September 2008: 8(3): pp 156-159.
- Narayanan UG:** Chapter 34: Interventions for ambulatory children with cerebral palsy. In: *Evidence Based Orthopaedics*: (Wright JG, ed.) Elsevier, Philadelphia, Pennsylvania: 2008: pp 247-257.
- Noor A, Winpassinger C, Vitcu I, Rafiq MA, Ayub M, Alman B, Vincent JB:** Oligodontia with short stature is caused by mutation in the gene encoding latent TGF-beta binding protein LTBP3. *American Journal of Human Genetics*: April 2009: 84(4): pp 519-523.
- Noordin S, Wright JG, Howard AW:** Global access to literature on trauma. *Clinical Orthopaedics and Related Research*: October 2008: 466(10): pp 2418-2421.
- Noordin S, Wright JG, Howard AW:** Global relevance of literature on trauma. *Clinical Orthopaedics and Related Research*: October 2008: 466(10): pp 2422-2427. E-published ahead of print: August 7, 2008.
- Parkin P, Howard AW:** Advances in the prevention of children's injuries: An examination of four common outdoor activities. *Current Opinion in Pediatrics*: December 2008: 20(6): pp 719-723.
- Poon R, Amini Nik S, Ahn J, Slade L, Alman BA:** Beta-catenin and transforming growth factor Beta have distinct roles regulating fibroblast cell motility and the induction of collagen lattice contraction. *BMC Cell Biology*: May 2009: 10(1): pp 38. E-published: May 11, 2009.
- Poon R, Li CF, Alman BA:** Beta-catenin mediates soft tissue contracture in clubfoot. *Clinical Orthopaedics and Related Research*: May 2009: 467(5): pp 1180-1185. E-published ahead of print: January 24, 2009.
- Santaguida PL, Hawker GA, Hudak PL, Glazier R, Mahomed NN, Kreder HJ, Coyte PC, Wright JG:** Patient characteristics affecting the prognosis of total hip and knee joint arthroplasty: A systematic review. *Canadian Journal of Surgery*: December 2008: 51(6): pp 428-436.
- Warsh J, MacPherson A, Howard AW:** A systematic review of the association between body checking and injury in youth ice hockey. *Clinical Journal of Sports Medicine*: March 2009: 19(2): pp 134-144.
- Wedge J, Thomas S, Salter R:** Outcome at forty-five years after open reduction and innominate osteotomy for late-presenting developmental dislocation of the hip. *Journal of Bone and Joint Surgery (American)*: October 2008: 90(Suppl2): pp 238-253.
- Wright JG:** *Evidence-Based Orthopaedics. The Best Answers to Clinical Questions*, 1st Edition: (Wright JG, ed.) Saunders Elsevier, Philadelphia, Pennsylvania: 2009.
- Wright JG, Smith PL, Owen JL, Fehlings D:** Assessing functional outcomes of children with muscular dystrophy and scoliosis: The Muscular Dystrophy Spine Questionnaire. *Journal of Pediatric Orthopaedics*: December 2008: 28(8): pp 840-845.
- Wright JG, Young NL:** Outcomes assessment in children with fractures. In: *Skeletal Trauma in Children*, 4th Edition, Volume 4: (Green & Swiontkowski, ed.) W.B. Saunders, Philadelphia, Pennsylvania: 2008.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Alman BA: Memorial Sloan Kettering Cancer Centre, Department of Surgery, Research Lecture Series, New York, New York, USA, February 2009. (1) From fibromatosis to fractures, beta-catenin in mesenchymal cells, (2) Targeting the roots: Stem cells in sarcomas.

Alman BA: Tufts Medical Center, Tibby Day Resident and Fellow Graduation Ceremony, Department of Orthopaedics, Boston, MA, USA, June 2009. (1) Asking the right questions or why basic science does matter in orthopaedics, (2) How much training do we need? A competency-based orthopaedic curriculum.

Alman BA: Gordon Research Conferences/Musculoskeletal Biology and Bioengineering Conference, New Hampshire, Massachusetts, USA, July 2008. What pathology teaches about development: Hedgehog signaling in chondrocytes.

Alman BA: American Academy of Orthopaedic Surgeons/Orthopaedic Research Society (AAOS/ORS), Molecular Biology and Therapeutics in Musculoskeletal Oncology, Salt Lake City, Utah, USA, September 2008. Genetic alterations resulting in chondrosarcoma.

Alman BA: University of Manitoba, Residents Day, Winnipeg, Manitoba, October 2008. (1) Cutting the roots: How knowledge about stem cells may cure sarcomas, (2) Is bigger really better? The obesity epidemic and pediatric orthopaedics.

Alman BA: International Pediatric Orthopaedic Symposium, Orlando, Florida, USA, December 2008. (1) Osteogenesis imperfecta: Medical and surgical management, (2) Use of bisphosphonates in pediatric orthopaedics, (3) Current concepts in musculoskeletal oncology, (4) Osteochondroma/MHE, (5) Overview of skeletal dysplasias and syndromes.

Alman BA: Israeli Orthopaedic Association, Jerusalem, Israel, December 2008. Ten basic science advances that will change the way we practice orthopaedics in the next decade.

Alman BA: University of Tel Aviv, Department of Orthopaedics, Tel Aviv, Israel, December 2008. (1) Basic science advances that will change orthopaedic management, (2) Osteogenesis imperfecta.

Howard A: Canadian Broadcasting Corporation (CBC), Toronto, ON, March 2009. Bodychecking, a leading cause of injury in youth hockey: Study.

Howard A: Fan 590 (Radio Station), Toronto, ON, March 2009. A systematic review of the association between body checking and injury in youth ice hockey.

Howard A: The Sports Network (TSN), Toronto, ON, March 2009. Study: Bodychecking in youth hockey leading cause of injury.

Howard A: The Star, Toronto, ON, March 2009. Study links checking to fractures in youth hockey.

Howard A: American Academy of Orthopaedic Surgeons/Orthopaedic Research Society (AAOS/ORS), 2009 Clinical Trials in Orthopaedics (CTO) Research Symposium, Albuquerque, New Mexico, May 2009. Pediatrics overview.

Howard A: The Star, Toronto, ON, June 2009. 7 stages of healthy bones: Skeletal changes through the years require constant adjustments in diet, exercise and behaviour to fight off bone disease. Here's a look at how to keep bones healthy through the different stages of life.

Howard A: Global TV, Toronto, ON, October 2008. Botox story.

Narayanan UG: American Academy of Cerebral Palsy and Developmental Medicine, 62nd Annual Meeting, Atlanta, Georgia, September 2008. (1) Assessing the wellbeing of children with cerebral palsy: A comparison of the CPCHILD questionnaire and other quality of life measures, (2) Instructional course lecture on measuring the quality of life of children with cerebral palsy.

Narayanan UG: University of Alberta, Faculties of Physical Education and Recreation/Education/Nursing and the Alberta Heritage Foundation for Medical Research, 14th International Interdisciplinary Conference on Qualitative Health Research, Banff, AB, October 2008. Concerns, needs and expectations of parents and caregivers of children with severe cerebral palsy: What do health care providers need to know.

Narayanan UG: University of Alberta, Qualitative Institute, Ontario Association of Children's Rehabilitation Services, Annual Conference, Waterloo, ON, October 2008. The hip in cerebral palsy.

Narayanan UG: Grandview Children's Rehabilitation Centre, Oshawa, ON, November 2008. The assessment and management of the hip in children with cerebral palsy.

Narayanan UG: American Academy of Orthopaedic Surgeons (AAOS), 5th Annual International Pediatric Orthopaedic Symposium, Orlando, Florida, December 2008. (1) Lower limb deformity and limb length inequality: Essentials of pediatric orthopaedics - Part I, (2) Neuromuscular disorders: Essentials of pediatric orthopaedics - Part II, (3) Deformity correction in metabolic bone disease.

Narayanan UG: Bombay Orthopaedic Society, Western Indian Regional Orthopaedic Conference, Mumbai, India, December 2008. Keynote Address: Evidence-based medicine: A prescription for orthopaedic surgeons.

Wedge JH: International Paediatric Orthopaedic Think Tank, Charleston, South Carolina, October 2008. (1) Acetabular version and coverage following innominate osteotomy, (2) Comparison of innominate osteotomy and varus derotation osteotomy of the femur in the treatment of dislocation of the hip after walking age.

Wright JG: American Academy of Orthopaedic Surgeons, Symposium on Deformities of the Child's Foot: Evaluation and Principles-Based Management, Las Vegas, Nevada, February 2009. Instructional course lecture: Pes cavus.

Wright JG: Spina Bifida Association, First World Congress of Spina Bifida Research and Care, Orlando, Florida, March 2009. What we know about evidence-based medicine (EBM) today for individuals with musculoskeletal problems in myelomeningocele.

Wright JG: Stryker International, The Stryker International Knee Symposium, Patients, Prostheses and Practitioners, Prague, Czech Republic, March 2009. Unmet needs and disparity in healthcare. Great Expectations.

Wright JG: American Academy of Orthopaedic Surgeons/Orthopaedic Research Society (AAOS/ORS), Clinical Trials in Orthopaedics Research Symposium 2009, Albuquerque, New Mexico, May 2009. (1) Keynote Address: Setting the stage, (2) Moderator: (a) Cultural and practical barriers/issues, (b) Clinical practice/policy implications: Looking forward.

Wright JG: Institute of Child Health/Great Ormond Street Hospital (GOSH)/University College Hospital (UCH), London, England, United Kingdom, September 2008. (1) Otto Wolff Lecture: Orthopaedic surgery - going from practice-based evidence to evidence-based practice,

(2) Department of Orthopaedic Surgery Lecture at GOSH: A clinical epidemiologist in a hospital administrative role; implementing an agenda for quality, efficiency and safety, (3) Combined Orthopaedic Rounds of UCH and GOSH: Are we performing too few or too many orthopaedic procedures?

Wright JG: International Pediatric Orthopaedic Think Tank, Charleston, North Carolina, October 2008. Failed Ponseti: Not the same old posterior medial release (PMR).

Wright JG: International Congress on Early Onset Scoliosis and Growing Spine (ICEOS), 2nd International Congress, Montreal, PQ, November 2008. How we best measure broadly defined issues of outcomes with expandable rods: Did I help this child?

Zeller R: SpineVision/Cedars-Sinai Hospital, Beverly Hills, California, September 2008. Direct vertebral derotation (DVD) for spinal deformities in children and adolescents.

Zeller R: 2nd International Congress on Early Onset Scoliosis & Growing Spine (ICEOS), Montreal, PQ, November 2008. Non-fusion solutions for the continuum of care in paediatric scoliosis.

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.)

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.)

Assessment of spinal stability in children with pediatric spinal deformities. *Zabjek K, Andrysek J, Redekop S, Zeller R, Popovic M, Narayanan U: Bloorview Research Institute, Seed Grant.* (\$24,724 2008 - 2009.)

Auto21 Project A203-ACS. *Howard AW, Snowdon A, Altenhof W: Auto21 NCE.* (\$42,000 2005 - 2009.)

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

Beta-catenin in aggressive fibromatosis. *Alman BA: National Cancer Institute of Canada (NCIC)-Canadian Cancer Society (CCS) Research Grant.* (\$681,140 2008 - 2013.)

Booster seat legislation and injury rates by province among 4 to 9 Year olds in Canada. *Howard A, MacPherson A, Rothman L, Lee P: Ontario Neurotrauma Foundation, Summer Student Grant.* (\$7,000 2008 - 2009.)

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. *Brussoni M, MacPherson A, Babul S, Barr RG, Desapriya EBR, Groff PR, Hameed SM, Herman MS, Hewitt A, Howard AW, MacArthur C, Pike I, Raina PS, Simons RK, Stathokostas L, Swaine BR, Warda LJ, Yanchar NL, Young JB: Canadian Institutes of Health Research.* (\$107,292 2008 - 2010.)

Canadian pediatric surgical wait times project-stage II. *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.* (\$9,800,000 2008 - 2010.)

Cancer stem cell: Musculoskeletal tumour project leader and clinical outcomes project leader. *Alman BA, Dick J (OICR - Cancer Stem Cell Program Head): Ontario Institute for Cancer Research.* (\$759,000 2008 - 2012.)

Collaborative community-based complex care coordination. *Cohen E, Narayanan UG: SickKids Foundation, Norman Saunders Complex Care Grant.* (\$47,451 2008 - 2010.)

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

Development of a computer adaptive test - patient-reported outcome measure for children with physical disabilities. *Tucker C (Philadelphia, PA); Gorton G (Springfield, MA); Narayanan UG (Toronto, ON), Bagley A (Sacramento, CA); Bjornson K (Seattle, WA); Stout J and Novacheck T (St. Paul, MN): American Academy of Cerebral Palsy and Developmental Medicine, Research Grant.* (\$22,325 2008 - 2009.)

Evaluation of quality of movement in ambulatory children with cerebral palsy: Validity and sensitivity to change of the quality FM. *Rosenbaum P, Wright V, Narayanan UG, Fehlings D, Kim M, Mesterman R: 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.)

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, Fehlings DL, Redekop S: Bloorview Kid's Foundation and Research Institute.* (\$25,015 2006 - 2008.)

Globus pallidus deep brain stimulation in children with dystonia. *Soman T, Moro E, Lozano AM, Hodaie M, Westmacott RM, Gorman D, Narayanan UG: The Hospital for Sick Children Foundation, New Investigator Grant.* (\$118,617 2008 - 2010.)

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

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

Implementation of low risk ankle rules. *Boutis K, Narayanan UG, Grootendorst P, Goeree R, Schuh S, Johnson D, Plint A, Butler N, Sayal A: The Physicians' Services Incorporated Foundation.* (\$161,000 2008 - 2010.)

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.)

Mammalian limb development. *Hopyan S: University of Toronto, Faculty of Medicine, Dean's Fund New Staff Grant.* (\$10,000 2007 - 2012.)

Mammalian limb development. *Hopyan S: March of Dimes, Basil O'Connor Starter Scholar Research Award Grant.* (\$150,000 2008 - 2010.)

Modulating hedgehog and beta-catenin signalling in osteoarthritis. *Alman BA: Canadian Institutes of Health Research (CIHR), Operating Grant.* (\$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 for Health Research (CIHR).* (\$560,000 2003 - 2008.)

Oriented cell division as a driving force for cell movement into the nascent limb bud. *Hopyan S: Pediatric Orthopaedic Society of North America, Angela Kuo Awards.* (\$29,614 2009 - 2010.)

Projeto hospitalar infantil Canada-Brasil-Pariquera-Acu. *Ferri-de-Barros F, Howard A: Petroleo Brasileiro (PETROBRAS).* (\$33,333 2008.)

Provincial data regarding booster seat legislation, use, and injuries. *Howard A, Snowdon A: Auto21 Knowledge Translation Grant.* (\$12,500 2009 - 2010.)

Ptolemy, surgery in Africa, Bethune round table. *Howard A: Canadian Network for International Surgery/Canadian International Development Agency (CNIS/CIDA).* (\$80,000 2008 - 2009.)

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 G (Toronto Site PI) and multiple collaborators: Clinical Outcomes Studies Advisory Board (COSAB) of Shriners Hospitals for Children.* (\$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, New Investigator Award.* (\$250,000 2004 - 2009.)

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

Alman BA: J. Edouard Sampson Award (\$15,000), presented by the Canadian Orthopaedic Foundation. February 2009.

Division of Plastic Surgery

Dr. H.M. Clarke	Professor
Dr. D.M. Fisher	Assistant 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

Cypel TKS, Zuker RM: Juvenile xanthogranuloma: Case report and review of the literature. *Canadian Journal of Plastic Surgery*: October 2008: 16(3): pp 175-177.

Fisher DM: Bilateral cleft lip (under Sections 3 and 4, Chapter 39 - Basic Principles of Craniomaxillofacial Surgery and Craniofacial Surgery). In: *Plastic Surgery: Indications and Practice*: (Guyuron B, Eriksson E, Persing J, Chung K, Disa J, Gosain A, Kinney B and Rubin JP, eds.) Elsevier, London, United Kingdom: 2008: pp 493-504.

Fisher DM, Tse R, Marcus JR: Objective measurements for grading the primary unilateral cleft lip nasal deformity. *Plastic Reconstructive Surgery*: September 2008: 122(3): pp 874-880.

Forrest CR: Craniofacial injury. In: *The Hospital for Sick Children, Manual of Pediatric Trauma*: (Mikrogianakis A, Valani R, Cheng A, eds.) Lippincott, Williams & Wilkins, Toronto: 2008: pp 83 -106.

Gevorgyan A, Sukhu B, Alman BA, Bristow RG, Pang CY, Forrest CR: Radiation effects and radioprotection in MC3T3-E1 mouse calvarial osteoblastic cells. *Plastic and Reconstructive Surgery*: October 2008: 122(4): pp 1025-1035.

Lin JC, Schwentker-Colizza A, Curtis CG, Clarke HM: Final results of grafting versus neurolysis in obstetrical brachial plexus palsy. *Plastic and Reconstructive Surgery*: March 2009: 123(3): pp 939-948.

McAllister SE, Ashrafpour H, Choon N, Huang N, Moses MA, Neligan PC, Forrest CR, Lipa JE, Pang CY: Postconditioning for salvage of ischemic skeletal muscle from reperfusion injury: Efficacy and mechanism. *American Journal of Physiology - Regulatory, Integrative and Comparative Physiology*: August 2008: 295(2): pp R681-R689.

McAllister SE, Moses MA, Jindal K, Ashrafpour H, Cahoon NJ, Huang N, Neligan PC, Forrest CR, Lipa JE, Pang CY: Na⁺/H⁺ exchange inhibitor cariporide attenuates skeletal muscle infarction when administered before ischemia or reperfusion. *Journal of Applied Physiology*: January 2009: 106(1): pp 20-28. E-published ahead of print: November 20, 2008.

Mrad MA, Chan K, Cypel TKS, Zuker RM: Juvenile xanthogranuloma of the ear: A case report. *The Canadian Journal of Plastic Surgery*: January 2009: 16(4): pp 229-231.

Panossian A, Diamond I, Fecteau A, Grant D, Zuker R: Hepatic artery microvascular anastomosis in pediatric living donor liver transplantation: A review of 35 consecutive cases by a single microvascular surgeon. *Journal of Reconstructive Microsurgery*: E-published May 19, 2009.

Stewart TL, Fisher DM, Olson JL: Modified von Langenbeck cleft palate repair using an anterior triangular flap: Decreased incidence of anterior oronasal fistulas. *The Cleft Palate-Craniofacial Journal*: May 2009: 46(3): pp 299-304.

Vallino LD, Zuker R, Napoli JA: A study of speech, language, hearing, and dentition in children with cleft lip only. *Cleft Palate Craniofacial Journal*: September 2008: 45(5): pp 485-494.

Zuker RM, Manktelow RT: Facial reanimation. In: *Head and Neck Reconstruction*: (Butler CD, Evans GRD, eds.) Saunders Elsevier, Toronto: 2009: pp 221-234.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Clarke HM: American Association for Hand Surgery, Wailea, Hawaii, January 2009. Paediatric peripheral nerve problems: Diagnosis and management (with Bishop A, Kozin S).

Clarke HM: American Society for Peripheral Nerve, Wailea, Hawaii, January 2009. Brachial plexus surgery: What works and does not work (with Bishop A, Spinner R).

Clarke HM: American Society for Reconstructive Microsurgery, Wailea, Hawaii, January 2009. Brachial plexus challenges and solutions (with Doi K, Spinner R).

Clarke HM: Canadian Society of Plastic Surgeons, Kelowna, BC, June 2009. Meet the professor: Getting a grip on paediatric hand surgery.

Fisher DM: Operation Smile, Santa Cruz, Bolivia, South America, February 2009. (1) Guest Speaker, (2) Surgery demonstration.

Fisher DM: American Cleft Palate-Craniofacial Association, Scottsdale, Arizona, USA, April 2009. Invited Speaker: Anatomical subunit approximation technique for unilateral cleft lip repair (90 minute instructional course).

Fisher DM: Canadian Society of Plastic Surgeons, Canadian Expert Series, Kelowna, BC, June 2009. Invited Speaker: Repair of the unilateral cleft lip.

Fisher DM: The Atlantic Society of Plastic Surgeons, Halifax, NS, October 2008. (1) Unilateral cleft lip repair: Anatomic subunit repair, (2) Bilateral cleft lip repair: Strategies for avoiding secondary deformities.

Fisher DM: The Caribbean Aesthetic Surgery Workshop (CASW), Tobago, West Indies, October 2008. Unilateral cleft lip repair by anatomic subunit approximation: 10 consecutive cases with 5-year follow-up.

Fisher DM: Operation Smile, Bolpur, India, November 2008. Volunteer plastic surgeon assigned as Field Medical Director.

Forrest CR: Association for Osteosynthesis and Synthese Maxillofacial, Salt Lake City, Utah, January 2009. Lecture: Monobloc distraction. AO challenges and advances in the management of craniomaxillofacial trauma and reconstruction focus: Distraction osteogenesis.

Forrest CR: The Royal College of Physicians and Surgeons of Canada and the Canadian Society of Plastic Surgeons, Ottawa, ON, February 2009. Mock Oral Examiner: Residents review course (brainchild of two former fellows).

Forrest CR: American Society of Head and Neck Radiology/Canadian Society of Head and Neck Radiology, Toronto, ON, September 2008. Craniofacial mandibular reconstructions in children.

Phillips JH: University of Parma, Department of Oral and Maxillofacial Surgery, Parma, Italy, July 2008. (1) Treatment of facial fractures in children, (2) Le Fort III osteotomy in syndromic cases, (3) Cleft orthognathic surgery.

Zuker RM: Moebius Syndrome Foundation, 8th International Moebius Syndrome Conference, Parsippany, New Jersey, July 2008. Muscle transplant surgery or Smile surgery.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

Angiogenic cytokine gene therapy for optimal augmentation of skin flap viability. *Pang CY: Canadian Institutes of Health Research.* (\$508,590 2007 - 2012.)

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

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

Palatal fistulae in the cleft lip and palate child: Classification and algorithm for management. *Zuker R: Cooper Foundation, Supporting a Clinical Fellowship and a Research Project.* (\$100,000 2008 - 2009.)

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

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

HONOURS RECEIVED

Clarke HM: Senior Fellow, Massey College, University of Toronto. April 2009.

Fisher DM: Inducted as Honorary Member of The Atlantic Society of Plastic Surgeons. October 2008.

Fisher DM: Recipient of Award for Best Chapter (Chapter 39, Bilateral Cleft Lip, pp 493-504 in Sections 3 and 4 - Basic Principles of Craniomaxillofacial Surgery and Craniofacial Surgery) of the book, Plastic Surgery: Indications and Practice. October 2008.

Division of Urology

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

PUBLICATIONS

Braga LH, Lorenzo AJ, Bagli DJ, Dave S, Eeg K, Farhat WA, Pippi Salle JL, Khoury AE: Ventral penile lengthening versus dorsal plication for severe ventral curvature in children with proximal hypospadias. *Journal of Urology*: October 2008; 180(4Suppl): pp 1743-1747: discussion 1747-1748. E-published ahead of print: August 21, 2008.

Braga LH, Lorenzo AJ, Bagli DJ, Keays M, Farhat WA, Khoury AE, Salle JL: Risk factors for recurrent ureteropelvic junction obstruction after open pyeloplasty in a large pediatric cohort. *Journal of Urology*: October 2008; 180(4 Suppl): pp 1684-1687. E-published ahead of print: August 16, 2008.

Braga LH, Lorenzo AJ, Farhat WA, Bagli DJ, Khoury AE, Pippi Salle JL: Outcome analysis and cost comparison between externalized pyeloureteral and standard stents in 470 consecutive open pyeloplasties. *Journal of Urology*: October 2008; 180(4 Suppl): pp 1693-1699: discussion 1698-1699. E-published ahead of print: August 16, 2008.

Braga LH, Lorenzo AJ, Pippi Salle JL, Lanna JCB: Patency of the "third inguinal ring" in children with unilateral cryptorchidism: Fact or fiction? *European Journal of Pediatric Surgery*: August 2008; 18(4): pp 237-240.

Braga LH, Moriya K, El-Hout Y, Farhat WA: Ureteral duplication with lower pole ureteropelvic junction obstruction: Laparoscopic pyeloureterostomy as alternative to open approach in children. *Urology*: November 2008; 73(2): pp 374-376.

Braga LH, Pace K, Demaria J, Lorenzo AJ: Systematic review and meta-analysis of robotic-assisted versus conventional laparoscopic pyeloplasty for patients with ureteropelvic junction obstruction: Effect on operative time, length of hospital stay, postoperative complications and success rate. *European Urology*: E-published ahead of print April 1, 2009.

Braga LH, Lorenzo AJ, Dave S, Eeg K, Bagli DJ, Farhat WA, Pippi Salle JL, Khoury AE: Ventral penile lengthening versus dorsal plication for severe ventral curvature in children with proximal hypospadias. *The Journal of Urology*: October 2008; 180(4): pp 1743-1747.

Dave S, Bagli DJ: A review of the effect of injected dextranomer/hyaluronic acid copolymer volume on reflux correction following endoscopic injection. *Advance Urology*: E-published ahead of print September 29, 2008.

Dave S, Lorenzo A, Khoury AE, Braga LH, Skeldon SJ, Suoub M, Farhat W, Pippi Salle JL, Bagli DJ: Learning from the learning curve: Factors associated with successful endoscopic correction of vesicoureteral reflux using dextranomer/hyaluronic acid copolymer. *Journal of Urology*: October 2008; 180(4 Suppl): pp 1594-1599: discussion 1599-1600. E-published ahead of print: August 16, 2008.

Dave S, Pippi Salle JL: Current status of bladder neck reconstruction. *Current Opinion in Urology*: July 2008; 18(4): pp 419-424.

Eeg KR, Khoury AE, Halachmi S, Braga LH, Farhat WA, Bagli DJ, Pippi Salle JL, Lorenzo AJ: Single center experience with application of the ALARA concept to serial imaging studies after blunt renal trauma in children - is ultrasound enough? *Journal of Urology*: April 2009; 181(4): pp 1834-1840.

Elkelini MS, Aitken K, Bagli DJ, Hassouna MM: Effects of doxycycline on voiding behaviour of rats with bladder outlet obstruction. *British Journal of Urology*: February 2009; 103(4): pp 537-540.

Farhat WA, Yeger H: Does mechanical stimulation have any role in urinary bladder tissue? *World Journal of Urology*: August 2008; 26(4): pp 301-305.

Halachmi S, Farhat WA: Interactions of constipation, dysfunctional elimination syndrome, and vesicoureteral reflux. *Advances in Urology*: E-published ahead of print June 4, 2008.

Moriya K, Farhat WA: Complete intracorporeal laparoscopic enterocystoplasty. *Dialogues in Pediatric Urology*: October 2008; 30(1): pp 11-12.

Pippi Salle JL: Chapter 69: Treatment alternatives for different types of neurogenic bladder dysfunction in children. In: *Textbook of the Neurogenic Bladder*, Second Edition: (Corcos J, Schick E, eds.) Informa Health Care, London, United Kingdom: 2008; pp 812-824.

Pippi Salle JL: Imaging of ambiguous genitalia classification and diagnostic approach. *Radiographics* (Nov-Dec Issue): November 2008; 28(7): pp 1891-1904.

Pippi Salle JL, Cook A, Papanikolaou F, Bagli DJ, Breen SL, Charron M, Braga LHP, Lorenzo AJ, Khoury AE: The importance of obtaining conjugate views on renographic evaluation of large hydronephrotic kidneys: An in vitro and ex vivo analysis. *The Journal of Urology*: October 2008; 180(4): pp 1559-1565.

Pippi Salle JL, Lorenzo AJ, Williams ER: Chapter 33: Surgical approaches for renal tumors. In: *Textbook of Clinical Pediatric Urology Study Guide*, Information Health Care 2008; (Kelalis King Belman, ed.) Informa Health Care, United Kingdom: 2008.

Sahba NS, Aitken KJ, Toelg C, Panchal T, Bagli DJ: Increased DNMT1 expression and activity in uroepithelial cells following uropathogenic E.coli infection. *The Journal of Urology*: April 2009; 181(4 Suppl): pp 18-19.

Suoub M, Dave S, El-Hout Y, Braga L, Farhat WA: Distal hypospadias repair with or without foreskin reconstruction: A single surgeon experience. *Journal of Pediatric Urology*: October 2008; 4(5): pp 377-380.

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. *Journal of Urology*: July 2008; 180(1): pp 317-321.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Bagli DJ: University of Michigan, Disorders of Sexual Differentiation Research and Quality Improvement Symposium, Ann Arbor, Michigan, April 2009. Invited speaker.

Bagli DJ: Federal University of Minas Gerais - Faculty of Medicine/Hospital das Clinicas, Pediatric Urology Symposium, Minas Gerais, Brazil, October 2008. Visiting Professor (1) Participated in interactive live hypospadias surgery, (2) Lecture: Bedside to research in hypospadias.

Farhat WA: University of Edmonton, Grand Rounds, Update on Laparoscopy in Pediatric Urology/Overview of Urinary Bladder Tissue Engineering, Edmonton, AB, January 2009. (1) Case management with residents, (2) Performed open and laparoscopic pyeloplasties.

Farhat WA: Society of Urodynamics and Female Urology, Las Vegas, Nevada, February 2009. Guest Speaker: Cell matrix interaction in urinary bladder tissue engineering.

Farhat WA: American Urological Association, Annual Meeting, Chicago, Illinois, April 2009. Reconstructive laparoscopic urology: Pediatric techniques and adult applications.

Farhat WA: Centre Hospitalier Universitaire de Quebec, Quebec City, PQ, October 2008. (1) Course for residents: Laparoscopy, (2) Lecture: Laparoscopy in pediatric urology from diagnostic to reconstructive, (3) Performed laparoscopic surgical procedures such as pyeloplasty, orchidopexy, orchiectomy, nephrectomy, renal cyst and unroofing, (4) Interactive video: Common laparoscopic procedures in pediatric urology.

Farhat WA: Kuwait Pediatric Surgery Organization, 2nd Kuwait International Congress in Pediatric Surgery, Kuwait City, Kuwait, November 2008. (1) Performed laparoscopic procedures such as pyeloplasty, orchidopexy, orchiectomy, nephrectomy, renal cyst and unroofing, (2) Moderator of panel discussion: Challenges in hypospadias surgery, (3) Update on laparoscopic pediatric urology, (4) Outcome analysis of minimal invasive approach to UPJ obstruction in children.

Lorenzo AJ: Chilean Urological Association Meeting, Chile, April 2009. (1) Bladder exstrophy, (2) Bladder tumours in children, (3) Cervical incontinence, (4) Paediatric reflux, (5) Round table: Reflux and neurogenic bladder.

Lorenzo AJ: Nationwide Children's Hospital, Pediatric Urology Research Rounds, Columbus, Ohio, April 2009. Antibiotic prophylaxis discontinuation in children with vesoureteral reflux: Analysis of the Hospital for Sick Children experience and critical review of the literature.

Lorenzo AJ: Children's Hospital of Orange County, Orange County, California, May 2009. Breakout Session: Common Problems in Pediatric Urology.

Lorenzo AJ: XL Congreso Nacional de Urologia, Medellin, Columbia, August 2008. (1) Botulinum toxin in pediatric bladder dysfunction: Laparoscopy in pediatric urology, (2) Moderator: (a) Podium and poster sessions on pediatric urology, (3) Plenary session: Varicocele in adolescent: What should we do?

Pippi Salle JL: Hamad Medical Corporation and Hamad University Hospital, Department of Surgery, Pediatric Surgery Section, Doha, Qatar, January 2009. (1) Alternative for hypospadias repair, (2) Management of ambiguous genitalia, (3) Update in the management of VUR.

Pippi Salle JL: Children's Hospital/London Health Sciences Centre, Division of Urology, London, ON, February 2009. New developments in the management of hypospadias.

Pippi Salle JL: Seattle Children's Hospital, Seattle, Washington, February 2009. (1) Decisions and dilemmas in disorders of sexual development (DSD), (2) Difficult cases with intersex, (3) New development in hypospadias, (4) State of the art: Exstrophy.

Pippi Salle JL: Children's Hospital of Eastern Ontario, Ottawa, ON, March 2009. (1) Management of urogenital sinus and cloacal anomalies, (2) Surgery (bladder exstrophy) with Dr. Leonard.

Pippi Salle JL: The Mostar University Clinical Hospital, 6th International Pediatric Surgery Symposium, Mostar, Bosnia, Herzegovina, April 2009. New developments in the management of hypospadias.

Pippi Salle JL: University Hospital, Department of Plastic Surgery, International Meeting on Hypospadias Surgery, Coventry, United Kingdom, May 2009. (1) Alternative for correction of penile curvature, (2) Correction of chordee, (3) Salvage of urethral plate, (4) Why should we avoid use of flaps in hypospadias surgery.

Pippi Salle JL: American Academy of Pediatrics, Boston, Massachusetts, October 2008. (1) Masters class - Complex reconstruction: Tricks of the trade, (2) Panelist: Approach to bladder exstrophy.

Pippi Salle JL: Federal University of Minas Gerais (UFMG), Faculty of Medicine/Hospital das Clinicas, Belo Horizonte, Brazil, October 2008. (1) Live hypospadias surgery, (2) Management of cloacal malformations.

Pippi Salle JL: Egyptian Pediatric Surgical Association (EPSA)/International Society for Hypospadias and DSD (ISHID), 24th Annual Meeting, Cairo, Egypt, November 2008. Pre-Congress Surgical Workshop on Female Genitoplasty: (1) Live surgery: Clitoral sparg dismembered clitoroplasty, (2) Feminizing genitoplasty: An update, (3) Live surgery: Proximal penile hypospadias: First stage chordee release with multiple transverse cuts of tunica albuginea and a covering preputial graft, (4) Update in the management of bladder exstrophy in the neonates.

Pippi Salle JL: Egyptian Urological Association/European Urological Association, 43rd Annual Congress, Hurgada, Egypt, November 2008. (1) Pyeloplasty, (2) Video Session: Surgical treatment of refractory urinary incontinence.

Pippi Salle JL: Dalhousie University, Department of Surgery, Halifax, NS, December 2008. (1) Management of congenital uropathies in adulthood, (2) Oral exam through case presentations to the residents.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

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

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

Disruptive technologies in pediatric and fetal intervention. *Kim P, Farhat WA, Wright J: Canadian Foundation of Innovation (CFI).* (\$3,200,000 2009 - 2012.)

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 H-L, Farhat WA, Stanisz GJ: University of Toronto Dean's Fund.* (\$9,957 2007 - 2012.)

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

HONOURS RECEIVED

Lorenzo AJ: Michael Jewett Award for Excellence in Teaching, Postgraduate Education. June 2009.

Mount Sinai Hospital

Jay Wunder

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



HEADS OF DIVISION

Dr. C. Swallow General Surgery
Dr. K. Jarvi Urology
Dr. J. Wunder Orthopaedic Surgery

A major focus within Mount Sinai Hospital and particularly our Department of Surgery has been around efforts at improving patient safety and outcomes. This has been hastened by public reporting of many safety indicators by the Ministry of Health. Efforts to improve patient outcomes may be best exemplified by Dr. Robin McLeod's Best Practices in General Surgery (BPIGS) program which has brought together all the University of Toronto teaching hospitals to standardize practice guidelines across general surgery. Another important safety initiative involved introduction of a new expanded surgical safety checklist following a multi-centre WHO study in the New England Journal of Medicine showing decreased patient morbidity and mortality. We are working towards replacing our current surgical safety checklist with an expanded version promoted by the Canadian Patient Safety Institute (CPSI). This was facilitated by holding educational patient safety rounds for the entire surgical program.

Both our surgical oncology and arthroplasty groups once again provided leadership within the Toronto Central LHIN by successfully increasing surgical volumes beyond our target and improving patient wait times. We also continued to make internal resource changes to facilitate accessibility for patients requiring emergency surgery, as part of the provincial Surgical Efficiency Target Program (SET).

While working on the new surgical safety checklist, the hospital received full approval by Accreditation Canada, including recognition as having 3 particular areas of Leading Practice that will be listed on the Accreditation Canada website, one of which was our multidisciplinary Sarcoma Program. This program is known nationally and internationally for best patient outcomes, development and implementation of new treatment strategies and translational research. In further support of our Sarcoma Program which is the largest in the country, Cancer Care Ontario established a Sarcoma Expert Panel made up



largely of individuals from our hospital program to make recommendations to Cancer Care Ontario (CCO) and the Ministry of Health to inform improvements in provision of care and case funding.

NEW STAFF, ADMINISTRATIVE APPOINTMENTS AND LECTURESHIPS

Dr. Rebecca Gladdy was recruited back to Mount Sinai Hospital and the Lunenfeld Research Institute after completing a surgical oncology fellowship at Memorial Sloan Kettering Cancer Centre in New York. Rebecca is a MD, PhD clinician scientist who will have a major laboratory commitment dealing with sarcoma translational genetics, and a limited clinical practice focusing on retroperitoneal sarcoma. The aims of Rebecca's research are: identifying targeted therapeutic agents for sarcoma using high-throughput screening, developing mouse models of sarcoma as a tool to validate genomic data and for pre-clinical drug testing, and translating laboratory findings to patient care via clinical trials. Rebecca was awarded an American Surgical Association Foundation Career Development Award as well as an Ontario Institute for Cancer Research (OICR) New Investigator Award. Rebecca's recruitment will support the Surgical Oncology Group, the Sarcoma Program as well as help further improve integration between the hospital and the Lunenfeld Research Institute.

Dr. Toni Zhong was a combined recruit to the Division of Plastic Surgery at the University Health Network together with the Department of Surgery at Mount Sinai Hospital. Toni completed her plastic surgery residency training at the University of Western Ontario during which she won numerous research and clinical awards. Her fellowship in Microvascular and Reconstructive Surgery at Memorial Sloan Kettering Cancer Center in New York City was supported by a Zeiss Canada Microsurgery Scholarship. Toni's recruitment will primarily support our surgical oncology programs, although she has a particular interest in functional and aesthetic outcomes after breast reconstructive surgery. To support her main research focus of developing a validated patient-reported outcome measure for evaluation of health-related quality of life following breast reconstructive surgery, she is currently pursuing her Masters of Science in Clinical Epidemiology at the Harvard School of Public Health.

Dr. Carol Swallow was appointed Head of the Division of General Surgery after an international search, following Dr. Robin McLeod's completion of a very successful 10-year term building the division. Carol is a well known surgeon-scientist specializing clinically in management of retroperitoneal sarcoma and advanced colorectal cancer, and with a research program studying molecular genetics of genome instability and cancer metastasis. Carol is Program Director of the University of Toronto Surgical Oncology Fellowship Training Program which under her leadership previously received accreditation by the Society of Surgical Oncology.

Dr. Irving Rosen in the Division of General Surgery helped facilitate a philanthropic donation by Mr. Mark Daniels and the Head and Neck Cancer Foundation of Canada to establish the Rosen-Daniels Visiting Professorship in Surgical Oncology Translational Research. Our inaugural lecturer was Professor Shekhar Kumta from the Department of Orthopaedic Surgery, University of Hong Kong. He presented on: Computer - Assisted Sarcoma Surgery: Redefining the Boundaries; Improving Outcomes for Giant Cell Tumor of Bone: Novel Therapeutic Targets; and Management of Locally Advanced Sarcomas. This lectureship will rotate annually and be shared by the oncology groups in the Mount Sinai Hospital Department of Surgery.

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 General Surgery

Zane Cohen completed a very successful term as Chair of the Division of General Surgery at the University of Toronto. Robin McLeod was awarded the Angelo and Alfredo De Gasperis Families Chair in Colorectal Cancer and IBD Research. Robin had an outstanding year as Surgical Lead for Quality Improvement at Cancer Care Ontario. Her broad mandate has included regionalization of high intensity services across the province based on quality of care data and widespread introduction of Multi-disciplinary Cancer Conferences (MCC) based on engagement

of the larger surgical oncology community. Robin also received numerous grants including: CIHR for knowledge translation; NCI with Carol Swallow for improving gastric cancer survival; and PSI with Helen MacRae for evaluating web-based versus standard journal clubs. Helen MacRae obtained additional funding for assessment and evaluation of technical skills, further supporting her role as Director of the University of Toronto Surgical Skills Centre. Carol Swallow was promoted to Full Professor. Andrea McCart was part of two large successful multi-institutional grants aimed at investigating new biotherapeutic approaches for the treatment of cancer including oncolytic viruses, one from CIHR for \$1.8M and another from OICR for \$10M.

Division of Orthopaedic Surgery

Peter Ferguson was appointed Associate Program Director in Orthopaedic Surgery and will play a major role in the roll-out, development and evaluation of the new Competency-Based Curriculum (CBC) pilot project starting July 1, 2009. Peter also became the Sarcoma Site Group Leader at Princess Margaret Hospital. Oleg Safir became the lead for developing the first clinical module for the CBC residency training initiative. David Backstein continued to improve the medical school's surgical curriculum in his leadership roles as Director of Undergraduate Education and Director of the Surgical Clerkship for the Department of Surgery. Oleg Safir and David Backstein continued their research programs in training and evaluation with five peer-reviewed grants, three of which came from the Network of Excellence in Simulation for Clinical Teaching and Learning (NESCTL). Jay Wunder was the Sarcoma Lead in a \$760,000 Cancer Stem Cell grant from the Ontario Institute for Cancer Research. John Theodoropoulos, appointed at both Mount Sinai and Women's College Hospitals in the sports program, was a co-applicant on a grant from the Canadian Arthritis Network investigating repair of cartilage defects.

Division of Urology

Ethan Grober became Chair of the Andrology Special Interest Group of the Canadian Fertility and Andrology Society. Ethan received a Canadian Urological Association scholarship, as well as funding from both The Physicians' Services Incorporated Foundation (PSI) and the Royal College of Physicians and Surgeons of Canada for his investigations into acquisition and evaluation of surgical skills. Kirk Lo was awarded the A.W. Bruce Faculty Undergraduate Teaching Award. Kirk was also nominated as Program Chair for the Society for the Study of Male Reproduction and the American Society of Reproductive Medicine. Alex Zlotta was an invited speaker at no less than ten international urologic oncology meetings. He also received over \$1M in grant funding, including a CIHR grant investigating the kallikrein family in prostate cancer, and two others together with Keith Jarvi involving PSA screening (OICR) and calcium ion transport in prostate cancer (CIHR).

Division of General Surgery

Dr. Z. Cohen	Professor
Dr. A.M. Easson	Assistant Professor
Dr. R.A. Gladdy	Assistant Professor
Dr. R. Gryfe	Assistant Professor
Dr. I.H. Koven	Associate Professor
Dr. H.M. MacRae	Associate Professor
Dr. J.A. McCart	Assistant Professor
Dr. R.S. McLeod	Professor
Dr. I.B. Rosen	Professor
Dr. C.J. Swallow	Professor (Division Head)

PUBLICATIONS

Barkun J, Neville A, Fitzgerald GW, Litwin D, McLeod RS, Evidence-Based Reviews in Surgery Group, Canadian Association of General Surgeons, American College of Surgeons: Canadian Association of General Surgeons and American College of Surgeons evidence-based reviews in surgery. 26. Watchful waiting versus repair of inguinal hernia in minimally symptomatic men. *Canadian Journal of Surgery*: October 2008; 51(5): pp 406-409.

Cleary SP, Kim H, Croitoru ME, Redston M, Knight JA, Gallinger S, Gryfe R: Missense polymorphisms in the adenomatous polyposis coli gene and colorectal cancer risk. *Diseases of the Colon and Rectum*: October 2008; 51(1): pp 1467-1473. E-published ahead of print: July 9, 2008.

Datta I, O'Conner B, Victor JC, Urbach DR, McLeod RS: Abdominal surgery impact scale (ASIS) is responsive in assessing outcome following IPAA. *Journal of Gastrointestinal Surgery* 2009; January 2009; 13(4): pp 687-694.

Davies RJ, O'Connor BI, Victor C, MacRae HM, Cohen Z, McLeod RS: A prospective evaluation of sexual function and quality of life following ileal pouch anal anastomosis. *Diseases of the Colon and Rectum*: July 2008; 51(7): pp 1032-1035.

Deng H, Tang N, Stief AE, Mehta N, Baig E, Head R, Sleep G, Yang X-Z, McKerlie C, Trudel S, Stewart AK, McCart JA: Oncolytic virotherapy for multiple myeloma using a tumour-specific double-deleted vaccinia virus. *Leukemia*: December 2008; 22(12): pp 2261-2264.

Devon KM, Brown CJ, McLeod RS: Cancer of the anus complicating perianal Crohn's disease. *Diseases of the Colon and Rectum*: February 2009; 52(2): pp 211-216.

Devon KM, McLeod RS: Pre and peri-operative erythropoietin for reducing allogeneic blood transfusions in colorectal cancer surgery. *Cochrane Database of Systematic Reviews*: January 2009; 1: pp CD007148. E-published January 21, 2009.

DuBay D, Lindsay T, Swallow CJ, McGilvray I: A cylindrical femoral vein panel graft for caval reconstruction. *Journal of Vascular Surgery*: January 2009; 49(1): pp 255-259.

Eng F, Easson AM, Knox J, Szentgyorgyi E: Sorafenib and surgical complications: A case report of adverse reaction to sorafenib during treatment for renal cell carcinoma. *European Journal of Surgical Oncology*: February 2009; 35(2): pp 219-221.

Gagliardi AR, Eskicioglu C, McKenzie M, Fenech D, Nathens A, McLeod R: Identifying opportunities for quality improvement in surgical site infection prevention. *American Journal of Infection Control*: June 2009; 37(5): pp 398-402.

Gagliardi AR, Wright FC, Davis D, McLeod RS, Urbach DR: Challenges in multidisciplinary cancer care among general surgeons in Canada. *BMC Medical Informatics and Decision Making*: December 2008; 8(1): pp 59.

Gryfe R: The chromosomal instability pathway and APC gene mutation in colorectal cancer. In: *Genetics of Colorectal Cancer*: (Potter JD, Lindor NM, eds.) Springer Publishing, New York, New York: 2009: pp 53-72.

Karanicolas PJ, Dubois L, Colquhoun PH, Swallow CJ, Walter SD, Guyatt GH: The more the better? The impact of surgeon and hospital volume on in-hospital mortality following colorectal resection. *The Annals of Surgery*: June 2009; 249(6): pp 954-959.

Latosinsky S, Dabbs K, Moffat F, McLeod RS, Evidence-Based Reviews in Surgery Group: Canadian Association of General Surgeons and American College of Surgeons Evidence-Based Reviews in Surgery. 27. Quality-of-life outcomes with sentinel node biopsy versus standard axillary treatment in patients with operable breast with sentinel node biopsy versus standard axillary treatment in operable breast cancer: The ALMANAC trial. *Journal of the National Cancer Institute*: December 2008; 98(9): pp 599-609.

LeBlanc VR, Tabak D, Kneebone R, Nestel D, MacRae HM, Moulton CA: Psychometric properties of an integrated assessment of technical and communication skills. *American Journal of Surgery*: January 2009; 197(1): pp 96-101.

Loisel-Meyer S, Felizardo T, Mariotti J, Mossaba ME, Foley JE, Kammerer R, Mizue N, Keefe R, McCart JA, Zimmermann W, Dropulic B, Fowler DH, Medin JA: Potent induction of B and T cell immunity against human CEA-expressing tumors in human CEA transgenic mice mediated by direct lentivector injection. *Molecular Cancer Therapeutics*: March 2009; 8(3): pp 692-702. E-published March 10, 2009.

Lun XQ, Jang JH, Tang N, Deng H, Head R, Bell JC, Stojdl DF, Nutt CL, Senger DL, Forsyth PA, McCart JA: Efficacy of systemically administered oncolytic vaccinia virotherapy for malignant gliomas is enhanced by combination therapy with rapamycin or cyclophosphamide. *Clinical Cancer Research*: April 2009; 15: pp 2777-2788. E-published April 7, 2009.

McCart JA, Bartlett DL: Vaccinia viral vectors. In: *Cell and Gene Therapy, Third Edition*: (Templeton N, ed.) CRC Press, Boca Raton, Florida: 2008: pp 245-262.

McLeod RS: Long-term results of laparoscopic-assisted colectomy are comparable to results after open colectomy. *The Annals of Surgery*: July 2008; 248(1): pp 1-7.

McLeod RS, Frieschlag J, Petrasek P, for Members of the Evidence-Based Reviews in Surgery Group: Canadian Association of General Surgeons and ACS evidence-based reviews in surgery. *Journal of the American College of Surgeons*: December 2008; 207(6): pp 951-953.

McLeod RS, Gryfe R: Management of colon cancer. In: *General Surgery: Principles and International Practice, 2nd Edition*: (Bland KI, Buchler MW, Csende A, Garden OJ, Sarr MG, Wong J, eds.) Springer: 2009: pp 875-884.

McLeod RS: Evidence-based surgery. In: *Surgery: Basic Science and Clinical Evidence*: (Norton JA, Barie PS, Bollinger RR, Chang AE, Lowry SF, Mulvihill SJ, Pass HI, Thompson RW, eds.) Springer, New York: 2008: pp 21-36.

Moulton CA, Tabak D, Kneebone R, Nestel D, MacRae HM, LeBlanc VR: Teaching communication skills using the integrated procedural performance instrument (IPPI): A randomized controlled trial. *American Journal of Surgery*: January 2009; 197(1): pp 113-118.

Scarpa M, Victor CJ, O'Conner BI, Cohen Z, McLeod RS: Validation of an English version of the padova quality of life instrument to assess quality of life following ileal pouch anal anastomosis. *Journal of Gastrointestinal Surgery*: March 2009; 13(3): pp 416-422. E-published ahead of print: December 17, 2008.

Wirtzfeld DA, Mikula L, Gryfe R, Ravani P, Dicks EL, Parfey P, Gallinger S, Pollett WG: Concordance with clinical practice guidelines for adjuvant chemotherapy in stage I-III colon cancer, experience in 2 Canadian provinces. *Canadian Journal of Surgery*: April 2009; 52(2): pp 92-97.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Cohen Z: Society of Coloproctology of Yugoslavia, Belgrade, Serbia, October 2008. (1) Developments in carcinoma of the rectum, (2) Genetic considerations in FAP.

MacRae HM: National Institute of Medical Science and Nutrition, Department of Surgery and Service of Colorectal Surgery (Chairman Salvador Zubiran), International Colorectal Meeting, Mexico City, Mexico, February 2009. Round table of select topics in colorectal surgery: (1) Current concepts in the management of colon cancer, (2) Laparoscopic sigmoidectomy in diverticular disease, (3) Sexual dysfunction in rectal surgery, (4) Surgical management of perineal Crohn's disease, (5) Total colectomy: How I do it.

MacRae HM: American Society of Colon and Rectal Surgeons, 2009 Meeting, Hollywood, Florida, May 2009. (1) How to develop (and pay for) a simulation centre, (2) Laparoscopic right hemicolectomy - How I do it.

MacRae HM: American College of Surgeons (ASC), Seattle, Washington, September 2008. Exploring new opportunities through the consortium of ASC-accredited education institutes.

McLeod RS: Canadian Prostate Cancer Group, Issues and Controversies in Prostate Care 2009, Cancun, Mexico, January 2009. Variations in the delivery of genitourinary cancer care: Perspectives from surgery.

McLeod RS: Louisville Surgical Society, Louisville, Kentucky, January 2009. Evidence-based practice in surgery - Can we do better?

McLeod RS: University of Louisville, School of Medicine, Department of Surgery, Section of Colon and Rectal Surgery, Louisville, Kentucky, January 2009. Translating evidence into practice: The Cancer Care Ontario experience.

McLeod RS: American College of Surgeons, Puerto Rico Chapter, Puerto Rico, February 2009. 29th F.L. Raffucci Honored Lecture: Evidence in surgery - Can we do better?

McLeod RS: University of Puerto Rico, Puerto Rico, February 2009. Controversies in inflammatory bowel disease surgery.

McLeod RS: University of British Columbia, Vancouver, BC, April 2009. (1) Improving the quality of cancer surgery - The Cancer Care Ontario experience, (2) Translating evidence into practice.

McLeod RS: University of Montreal, Montreal, PQ, April 2009. Translating evidence into practice.

McLeod RS: Cambridge Research Institute, Cambridge, United Kingdom, May 2009. (1) Outcome following surgery for rectal cancer, (2) Sexual function and fertility issues following ileal pouch anal anastomosis (IPAA).

McLeod RS: Canadian Association of General Surgeons, Halifax, NS, September 2008. (1) Collecting data to improve quality of care in systems, (2) Physicians' awareness and attitudes towards decision aids for cancer patients.

McLeod RS: American College of Surgeons, Clinical Congress, San Francisco, California, October 2008. (1) How to use data to improve patient care, (2) Update on management of inflammatory bowel disease.

Swallow CJ: Surgical Oncology Network, Halifax, NS, March 2009. Gastric Cancer.

Swallow CJ: University of Texas Southwestern, Dallas, Texas, April 2009. O.W. Gibbons Lecture: (1) The surgeon as a key force in optimizing multidisciplinary management of gastrointestinal cancer, (2) Management of recurrent rectal carcinoma, (3) Retroperitoneal sarcoma.

Swallow CJ: University of Ottawa, Colorectal Cancer Community of Practice Journal Club, Ottawa, ON, January 2009. Taking on the challenge of locally recurrent rectal cancer - Are we making progress?

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

A new approach to the assessment and evaluation of technical skills. *Sonnadara R, MacRae H, Safir O, Satterthwaite L, Tremblay L: Network of Excellence in Simulation for Clinical Teaching and Learning.* (\$49,650 2009 - 2010.)

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.)

Development of biological therapeutics. *Hampson D, Allen CJ, Bendayan R, Boyd SR, Bremner R, Garipey J, Mak TW, McCart JA, Medin JA, Monnier PP, Pang KCS, Reilly RM, Schimmer AD, Van Der Kooy DJ: Canadian Institutes of Health Research, Strategic Training Grant.* (\$1,787,630 2009 - 2015.)

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: Mount Sinai Hospital Foundation, The Sydney C. Cooper Program for the Prevention of Cancer Progression.* (\$1,000,000 2008 - 2011.)

Functional genetics and selective therapies in sarcoma. *Gladdy RA: Ontario Institute for Cancer Research, Clinician Investigator Award.* (\$350,000 2008 - 2013.)

Genetic mechanisms of sarcomagenesis. *Gladdy RA: American Surgical Association Foundation Fellowship, Career Development Award.* (\$150,000 2008 - 2010.)

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.)

Improving gastric cancer survival: Development and measurement of quality indicators using the RAND/UCLA appropriateness method and data analysis. *Coburn N, Gagliardi A, Law C, Helyer L, Swallow C, Sutradhar R, Quan ML, McLeod R, Paszat L, Rabeneck L: National Cancer Institute of Canada.* (\$552,446 2008 - 2011.)

Improving the quality of MRI reporting for rectal cancer staging in Ontario. *Kennedy E, McFadyen C, Smith A, McLeod R, Fruitman M, Brierly J, Gagliardi A, Schmocker S, Milot L, MacRae H, Krzyzanowski M, Pollett A, Chawla T, Metset U, Milgram L: Care Services Improvement Partnership (CSIP), Innovation Grant.* (\$186,582 2009 - 2011.)

Interdisciplinary research on the determinants and impact of colorectal cancer: Molecular genetic factors, risk modifiers and population health. *McLaughlin J, Gryfe R (Team Leader): Canadian Institutes of Health Research, Team Grant for Molecular Epidemiological Studies of Patient Outcome and Response to Treatment (\$203,706 over 3 years).* (\$3,627,210 2006 - 2010.)

Ontario Regional BioTherapeutics (ORBiT) Program. *Bell JC, Atkins H, Auer RC, Bramson J, Chow L, Foley RS, Keating A, Lichty BD, McCart JA, Medin JA, Ohashi P, Stojdl DF, Wan Y, Zhang L: Ontario Institute of Cancer Research.* (\$10,000,000 2009 - 2013.)

Plk4 and chromosomal instability. *Swallow CJ, Dennis JW: Canadian Institutes of Health Research.* (\$447,000 2006 - 2009.)

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: Honouree-Paul Penna Downtown Jewish Day School. June 2009.

Gladdy RA: Award of Courage, Groin Sarcoma Fellow, Memorial Sloan-Kettering Cancer Centre. July 2008.

McLeod RS: Angelo and Alfredo de Gasperis Families Chair in Colorectal Cancer and Inflammatory Bowel Disease (IBD) Research. October 2008.

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	Assistant Professor
Dr. J. Theodoropoulos	Lecturer
Dr. J.S. Wunder	Professor (Division Head)

PUBLICATIONS

Alman BA, Wunder JS: Parathyroid hormone-related protein regulates glioma-associated oncogene transcriptional activation: Lessons learned from bone development and cartilage neoplasia. *Annals of the New York Academy of Sciences*: November 2008: 1144: pp 36-41.

Backstein D: Fact vs. fiction of minimally invasive hip and knee arthroplasty. In: *Evidence-Based Orthopaedics*: (Wright J, ed.) Saunders: 2008: pp 574-581.

Backstein D: Intraoperative ibandronate reduced prosthesis migration after implantation of total knee prosthesis. *Journal of Bone and Joint Surgery (American)*: November 2008: 90: pp 2555.

Bar Ziv Y, Kardosh R, Debi R, Backstein D, Safir O, Kosashvili Y: An inexpensive and accurate method for hip injections without the use of imaging. *Journal of Clinical Rheumatology*: April 2009: 15(3): pp 103-105.

Brydges R, Carnahan H, Safir O, Dubrowski A: How effective is self-guided learning of clinical technical skills? It's all about process. *Medical Education*: June 2009: 43(6): pp 507-515.

Chahal J, McCarthy T, Safir O, Backstein D, Kosashvili Y, Gross AE: Late presentation of sciatic neuropathy after failure of acetabular reconstruction rings in revision hip arthroplasty: A report of two cases. *Current Orthopaedic Practice*: November 2008: 19(6): pp 688-690.

Davidge K, Bell R, Ferguson P, Turcotte R, Wunder J, Davis A: Patient expectations for surgical outcome in extremity soft tissue sarcoma. *Journal of Clinical Oncology*: E-published May 14, 2009.

Dickie CI, Parent AL, Griffin AM, Fung S, Chung PW, Catton CN, Ferguson PC, Wunder JS, Bell RS, Sharpe MB, O'Sullivan B: Bone fractures following external beam radiotherapy and limb-preservation surgery for lower extremity soft tissue sarcoma: Relationship to irradiated bone length, volume, tumor location and dose. *International Journal of Radiation Oncology, Biology, Physics*: E-published April 11, 2009.

Ferguson PC, Kulidjian AA, Jones KB, Deheshi BM, Wunder JS: Peripheral nerve considerations in the management of extremity soft tissue sarcomas. In: *Recent*

Results in Cancer Research, Treatment of Bone and Soft Tissue Sarcomas: (Tunn, P-U, eds.) Springer-Verlag, Berlin: 2008: pp 243-256.

Griffin AM, Shaheen M, Bell RS, Wunder JS, Ferguson PC: Oncologic and functional outcome of scapular chondrosarcoma. *Annals of Surgical Oncology*: August 2008: 15(8): pp 2250-2256. E-published ahead of print: May 28, 2008.

Gross AE, Backstein D, Safir O: Complex acetabular deficiency: Rebuilding the skeleton. *Seminars in Arthroplasty*: March 2009: 20(1): pp 77-84.

Gross AE, Kim W, Las Heras F, Backstein D, Safir O, Pritzker KP: Fresh osteochondral allografts for posttraumatic knee defects: Long-term follow-up. *Clinical Orthopaedics and Related Research*: August 2008: 466(8): pp 1863-1870. E-published ahead of print: May 9, 2009.

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*: (Della Valle CJ, ed.) Slack Incorporated, Thorofare, New Jersey: 2008: pp 173-176.

Jones KB, Seshadri T, Krantz R, Keating A, Ferguson PC: Cell-based therapies for osteonecrosis of the femoral head. *Biology of Blood and Marrow Transplantation*: October 2008: 14(10): pp 1081-1087.

Khokhotva M, Backstein D, Dubrowski A: Outcome errors are not necessary for learning orthopedic bone drilling. *Canadian Journal of Surgery*: April 2009: 52: pp 98-102.

Kosashvili Y, Backstein D: Laminar flow in total knee and hip arthroplasty: A time for re-evaluation? *Orthopedics Today*: January 2009: 29: pp 16.

Kosashvili Y, Friedman T, Backstein D, Safir O, Bar Ziv Y: The correlation between pes planus and anterior knee pain or intermittent low back pain. *Foot and Ankle International*: September 2008: 29(9): pp 910-913.

Kosashvili Y, Safir O, Gross AE, Morag G, Lakstein D, Backstein D: Distal femoral varus osteotomy for lateral osteoarthritis of the knee: A minimum ten-year follow-up. *International Orthopedics*: E-published May 26, 2009.

Kosashvili Y, Shasha N, Olschewski E, Safir O, White L, Gross AE, Backstein D: Digital versus conventional templating techniques in preoperative planning for total hip arthroplasty. *Canadian Journal of Surgery*: February 2009; 52(1): pp 6-11.

Kossashvili Y, Bar Ziv Y, Safir O, Backstein D: A biomechanical comparison between the thoracolumbo-sacral surface contact area (SCA) of a standard backboard with other rigid immobilization surfaces. *Journal of Trauma*: January 2009; 66(1): pp 191-419.

Lakstein D, Backstein D, Safir O, Kosashvili Y, Gross AE: Modified trochanteric slide for complex hip arthroplasty: Clinical outcomes and complication rates (Corrected Proof). *Journal of Arthroplasty*: E-published March 23, 2009.

Lakstein D, Backstein D, Safir O, Kosashvili Y, Gross AE: Revision total hip arthroplasty with a porous-coated modular stem: 5 to 10 years follow-up. *Clinical Orthopaedics and Related Research*: E-published June 26, 2009.

Lakstein D, Backstein D, Safir O, Kosashvili Y, Gross AE: Trabecular metal cups for large acetabular defects with up to 50% or less host bone contact. *Clinical Orthopaedics and Related Research*: March 2009; 467(9): pp 2318-2324. E-published March 11, 2009,

Macleod H, Bell RS, Deane K, Baker C: Creating sustained improvements in patient access and flow: Experiences from three Ontario healthcare institutions. *Healthcare Quarterly*: July 2008; II (3): pp 38-49.

Mahendra A, Gortzak Y, Ferguson PC, Deheshi BM, Lindsay TF, Wunder JS: Management of vascular involvement in extremity soft tissue sarcoma. In: *Recent Results in Cancer Research, Treatment of Bone and Soft Tissue Sarcomas*: (Tunn, P-U, eds.) Springer-Verlag, Berlin: 2008; pp 285-299.

Maman E, Morag G, Safir O, Benifla M, Mozes G, Boynton E: The anterior trunk of the axillary nerve: Surgical anatomy and guidelines. A fresh, cadavers study. *Journal of Orthopaedics*: July 2008; 5(2): pp e7.

Praamsma M, Carnahan H, Backstein D, Veillette CJ, Gonzalez D, Dubrowski A: Drilling sounds are used by surgeons and intermediate residents, but not novice orthopedic trainees, to guide drilling motions. *Canadian Journal of Surgery*: December 2008; 51(6): pp 442-446.

Robinson E, Bleakney RR, Ferguson PC, O'Sullivan B: Oncodiagnosis Panel: 2007: Multidisciplinary management of soft tissue sarcoma. *Radiographics*: December 2008; 28(7): pp 2069-2086.

Safir O, Dubrowski A, Mirsky L, Lin C, Backstein D, Carnahan H: What skills should simulation training in arthroscopy teach residents? *International Journal of Computer Assisted Radiology and Surgery*: November 2008; 3(5): pp 433-437.

Safir O, Kellet C, Flint M, Backstein D, Gross A: Revision of the deficient proximal femur with a proximal femoral allograft. *Clinical Orthopaedics and Related Research*: January 2009; 467(1): pp 206-212.

Seguin C, Kassis J, Busque L, Bestowros A, Theodoropoulos J, Alonso ML, Harvey EJ: Non-traumatic necrosis of bone (osteonecrosis) is associated with endothelial cell activation but not thrombophilia. *Rheumatology*: August 2008; 47(8): pp 1151-1155.

Theodoropoulos JS: Open release for lateral epicondylitis. *Canadian Orthopedic Association Bulletin*: October 2008; 82: pp 975.

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*: September 2008; 466(9): pp 2184-2189.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Backstein D: European Federation of National Associations of Orthopaedics and Traumatology, Vienna, Austria, June 2009. (1) The athlete with knee arthrosis: The role of hemi and total knee arthroplasty, (2) Acute and chronic total knee replacement infection, (3) Knee session moderator.

Backstein D: Surgical Advances in Orthopaedics, Collingwood, ON, September 2008. (1) Total knee replacement for distal femoral fractures, (2) Gender specific total knees are a must, (3) Minimally invasive total hip - here to stay, (4) Large heads in total hip replacement - got to have them.

Backstein D: University of Ottawa, Department of Surgery, Grand Rounds, Ottawa, ON, November 2008. A new model for technical skills development.

Backstein D: International Congress for Joint Replacement, Orlando, Florida, December 2008. (1) Alternate bearing surfaced in total hip replacement: What is the evidence-based medicine?, (2) Diagnosing and managing THA infection, (3) Diagnosis and management of infection in total hip replacement, (4) Distal femoral osteotomy: Indications, techniques and results, (5) What is the evidence-based data for bearing surfaces, (6) Femoral osteotomy: Indications, techniques, outcomes.

Bell RS: Canadian Health Services Research Foundation, Kananaskis, AB, February 2009. Becoming a leader for the use of research-based evidence in healthcare organizations.

Bell RS: Gulf Cooperation Council Conference on Patient Safety, Manama, Bahrain, April 2009. Making patient safety a strategic priority.

Bell RS: Economic Club, Toronto, ON, May 2009. Our public healthcare system - value for money and getting more value.

Bell RS: Ontario Hospital Association Convention, Toronto, ON, November 2008. Good governance is essential for improving hospital safety and quality.

Deheshi B: Musculoskeletal Tumor Society, Phoenix, Arizona, November 2008. Prediction of pathologic fracture risk of the femur after combined modality treatment for soft tissue sarcoma of the thigh.

Deheshi B: Israel Orthopaedic Association, Tel Aviv, Israel, December 2008. (1) A patient's perspective, (2) Prediction of pathologic fracture risk of the femur after combined modality treatment for soft tissue sarcoma of the thigh.

Gross AE: Royal National Orthopaedic Hospital, Stanmore, Middlesex England, January 2009. Long term results of fresh osteochondral allografts for posttraumatic knee defects.

Gross AE: Federal Drug Administration (FDA), Orthobiologics Educational Forum, Orthobiologics: Soft Tissue Options and Alternatives - 2008, Rockville, Maryland, August 2008. Long term results of fresh osteochondral allografts for posttraumatic knee defects.

Gross AE: Hellenic Orthopaedic Association, Meeting of the Hip and Knee Chapter, Athens, Greece, October 2008. (1) Cug cage reconstruction for acetabular revision with massive bone loss, (2) Revision arthroplasty of the hip femoral side: The surgical technique and long term results of proximal femoral allografts for massive proximal femoral bone loss.

Wunder JS: University of Pennsylvania, Orthopaedic Surgery Grand Rounds/Visiting Professorship Series, Philadelphia, Pennsylvania, January 2009. (1) Resident Conference Lecture: Current treatment of osteosarcoma, (2) Lumps and bumps: How to stay out of trouble.

Wunder JS: Kyoto University, Kyoto, Japan, July 2008. From development to chondrosarcoma: Hedgehog signaling in chondrocytes.

Wunder JS: Japanese Orthopaedic Association, 41st Annual Musculoskeletal Tumor Meeting, Hamamatsu, Japan, July 2008. Improving radiation morbidity for soft tissue sarcoma: The therapeutic ratio.

Wunder JS: American Academy of Orthopaedic Surgeons (AAOS), Salt Lake City, Utah, September 2008. Single nucleotide polymorphisms (SNPs) and copy number variants (CNVs): Towards identifying new sarcoma related genes.

Wunder JS: University of Glasgow, Glasgow Royal Infirmary, Glasgow, Scotland, October 2008. Overview of primary bone sarcomas.

Wunder JS: University of Strathclyde, Glasgow, Scotland, October 2008. The Ian Kelly Memorial Lecture: Advances in musculoskeletal oncology.

Wunder JS: Israel Orthopaedic Association, Israel, Jerusalem, December 2008. Management of extremity lumps: How to stay out of trouble.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

A new approach to the assessment and evaluation of technical skills. *Sonnadara R, MacRae H, Satterthwaite L, Safir O, Tremblay L: The Network of Excellence in Simulation for Clinical Teaching and Learning (NESCTL).* (\$49,650 2009 - 2010.)

Application of visuo-haptic simulation as a teaching aid for complex spatial relationships. *Backstein D, Pahuta M: University of Ottawa Educational Initiatives in Residency Education Fund.* (\$16,000 2008 - 2009.)

Cancer stem cells: Musculoskeletal tumours. *Alman B, Dick J, Wunder J: Ontario Institute for Cancer Research (OICR).* (\$759,000 2008 - 2012.)

Effect of bench model training on cognitive learning in the operating room. *Backstein D, Syed K: Physicians' Services Incorporated.* (\$32,000 2008.)

Effect of expert versus peer feedback on acquisition of urinary catheterization skills. *Walsh C, Backstein D, Dubrowski A, Carnahan H, Ling S, Rose D: Network of Excellence in Simulation for Clinical Teaching and Learning.* (\$24,743 2009 - 2010.)

Effectiveness of an internet-mediated network learning instrument in simulation-based training of clinical tasks. *Dubrowski A, Malcolm B, Carnahan H, Kapralos B, Macdonald-Jenkins J, Rose D, Safir O, Backstein D: The Network of Excellence in Simulation for Clinical Teaching and Learning (NESCTL).* (\$37,128 2009 - 2010.)

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

Improving outcomes after microfracture repair of cartilage defects by high resolution imaging and presurgical planning. *Hurtig M, Marks P, Whelan D, White L, Theodoropoulos, Buschmann M, Hoemann C, Stewart J, Kunz M: Canadian Arthritis Network, Strategic Research Program Grant Competition.* (\$179,000 2009 - 2011.)

Intraoperative assessment of combined anteversion in total hip replacement. *Gross A, Backstein D, Safir O, Lee P, Kosashvili Y, Lakstein D: Canadian Orthopaedic Foundation, Community Investment Fund Grant.* (\$5,000 2009.)

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, Grynypas 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. *Safir O, Carnahan H, Dubrowski A, Backstein D: 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: Physicians' Services Incorporated.* (\$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

Safir O: Wilson Centre Research Day Presentation Award, University of Toronto. October 2008.

Division of Plastic Surgery

Dr. N.H. McKee Professor

Division of Urology

Dr. E.D. Grober Assistant Professor
Dr. K. Jarvi Professor (Division Head)
Dr. K.C. Lo Assistant Professor
Dr. A.R. Zlotta Professor

PUBLICATIONS

Bacal V, Rumohr J, Sturm R, Lipshultz LI, Grober ED: Correlation of degree of penile curvature between patient estimates and objective measures among men with Peyronie's disease. *Journal of Sexual Medicine*: March 2009; 6(3): pp 862-865.

Baazeem A, Boman J, Libman J, Jarvi K, Zini A: Microsurgical varicocelectomy for infertile men with oligospermia: Differential effect of bilateral and unilateral varicocele on pregnancy outcome. *British Journal of Urology*: E-published March 26, 2009.

Binsaleh S, Margolis M, Jarvi K, Lo KC: The use of ultrasound and radiologic imaging in the diagnosis of male infertility. In: *Infertility in the Male*: (Lipshultz LI, Howards SS, Niederberger CS, eds.) Cambridge University Press, Cambridge University: 2009: pp 375-391.

Driessens G, Hoffmann P, Pouwels M, Zlotta A, Schulman C, Velu T, Bruyns CA: Synergy between dendritic cells and GM-CSF-secreting tumor cells for the treatment of a murine renal cell carcinoma. *Journal of Immunotherapy*: February 2009; 32(2): pp 140-144.

Fitzpatrick JM, Schulman C, Zlotta AR, Schroder FH: Prostate cancer: A serious disease suitable for prevention. *British Journal of Urology International*: April 2009; 103(7): pp 864-870.

Fradet Y, Klotz L, Trachtenberg J, Zlotta A: The burden of prostate cancer in Canada. *Canadian Urology Association Journal*: March 2009; 3(Suppl2): pp S92-S100.

Grober ED: A technical issue with CanMEDS. *Canadian Urological Association Journal*: October 2008; 2(5): pp 497.

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: 2009.

Grober ED, Lamb DJ, Khera M, Murthy L, Lipshultz LI: Correlation of simultaneous PSA and serum testosterone levels among hypogonadal men receiving testosterone replacement therapy and untreated eugonadal men. *International Journal of Impotence Research*: November 2008; 20(6): pp 561-565.

Gupta A, Karakiewicz PI, Roehrborn CG, Lotan Y, Zlotta AR, Shariat SF: Predictive value of plasma hepatocyte growth factor/scatter factor levels in patients with clinically localized prostate cancer. *Clinical Cancer Research*: November 2008; 14(22): pp 7385-7390.

Jarvi K, Grober E, Lo KC, Patry G: Mini-incision microsurgical vasectomy reversal using no-scalpel vasectomy principles and instruments. *Urology*: October 2008; 72(4): pp 913-915.

Khera M, Grober ED, Fishman IJ: Erectile dysfunction. In: *Urology and the Primary Care Practitioner*: (Lipshultz LI, ed.) Mosby-Wolfe, Philadelphia: 2009.

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: 2009.

Khera M, Grober ED, Najari B, Mohammed O, Colon J, Lamb DJ, Lipshultz LI: Testosterone replacement following radical prostatectomy. *Journal of Sexual Medicine*: April 2009; 6(4): pp 1165-1170. E-published ahead of print: January 22, 2009.

Klotz L, Drachenberg D, Fradet Y, Saad F, Trachtenberg J, Zlotta A: Gleason grading controversies: What the chemoprevention trials have taught us. *Canadian Urology Association Journal*: June 2009; 3(3Suppl2): pp S115-S120.

Kodama R, Weber B, Jarvi K: Post mortem sperm retrieval: The Canadian perspective. *Journal of Andrology*: January 2009; 30(4): pp 407-409. E-published January 22, 2009.

Liu KE, Binsaleh S, Lo KC, Jarvi K: Propecia induced spermatogenic failure: A report of two cases. *Fertility and Sterility*: September 2008; 90(3): pp 849.

Moskovtsev SI, Jarvi K, Mullen JBM, Cadesky K, Hannam T, Lo KC: Testicular spermatozoa have significantly lower DNA damage compared to ejaculated spermatozoa in patients with unsuccessful oral antioxidant treatment. *Fertility and Sterility*: E-published December 22, 2008.

Moskovtsev SI, Lecker I, Mullen JBM, Jarvi K, Willis J, White J, Lo KC: Cause-specific treatment in patients with high sperm DNA damage resulted in significant DNA improvement. *Systems Biology in Reproductive Medicine*: March 2009; 55(2): pp 109-115.

Musquera M, Fleshner NE, Finelli A, Zlotta AR: The REDUCE trial: Chemoprevention in prostate cancer using a dual 5alpha-reductase inhibitor, dutasteride. *Expert Review Anticancer Therapy*: July 2008; 8(7): pp 1073-1079.

Neill MG, Appu S, Zlotta AR: Strategies to preserve prostate health. *Drugs Today (Barcelona)*: January 2009; 45(1): pp 63-80.

Nickel JC, Alexander RB, Anderson R, Berger R, Comiter CV, Datta NS, Fowler JE, Krieger JN, Landis JR, Litwin MS, McNaughton-Collins M, O'Leary MP, Pontari MA, Schaeffer AJ, Shoskes DA, White P, Kusek J, Nyberg L, Chronic Prostatitis Collaborative Research Network Study Groups: Category III chronic prostatitis/chronic pelvic pain syndrome: Insights from the National Institutes

of Health chronic prostatitis collaborative research network studies. *Current Urology Reports*: July 2008; 9(4): pp 320-327.

Protzel C, Alcaraz A, Horenblas S, Pizzocaro G, Zlotta A, Hakenberg OW: Lymphadenectomy in the surgical management of penile cancer. *European Journal of Urology*: May 2009; 55(5): pp 1075-1088.

Van der Kwast TH, Zlotta AR, Fleshner N, Jewett M, Lopez-Beltran A, Montironi R: Thirty-five years of noninvasive bladder carcinoma: A plea for the use of papillary intraurothelial neoplasia as new terminology. *Analytical and Quantitative Cytology and Histology*: December 2008; 30(6): pp 309-315.

Zini A, Jarvi K, Baazeem A, Boman J: Varicocelectomy for infertile couples with advanced paternal age. *Urology*: July 2008; 7(1): pp 109-113.

Zlotta A: Weighing the data on diet and prostate cancer. *Canadian Urology Association Journal*: October 2008; 2(5): pp 516-517.

INVITED VISITS

Grober ED: Solvay Pharma/Primary Care Physicians of the Greater Toronto Area, Toronto, ON, March 2009. Testosterone replacement therapy: An emerging link between metabolic syndrome and type 2 diabetes.

Grober ED: Canadian Fertility and Andrology Society, Calgary, AB, November 2008. The symptomatic hypogonadal male: Strategies for preserving fertility.

Jarvi K: Assisted Human Reproduction on Canada/Canadian Institutes of Research (AHRC/CIHR), Montreal, PQ, October 2008. Assisted human reproduction research workshop.

Jarvi K: Canadian Fertility and Andrology Society, Calgary, AB, November 2008. A comparison of sperm DNA damage in ejaculated and testicular spermatozoa.

Jarvi K: Beth David Synagogue, Toronto, ON, December 2008. Prostate health.

Jarvi K: Expert Panel-Infertility and Adoption, Toronto, ON, December 2008. Male factor infertility.

Lo KC: American Society of Andrology, Philadelphia, Pennsylvania, April 2009. Program Chair: Male circumcision and HIV/HPV infection.

Lo KC: Canadian Cancer Society, Toronto, ON, April 2009. Bladder Cancer.

Zlotta AR: European Society of Oncological Urology (ESOU), 6th Meeting, Istanbul, Turkey, January 2009. Debate (Con Side): Prostate Cancer, Part I - Focal therapy will be the future treatment modality.

Zlotta AR: European Urology Association, European Urology Forum 2009, Challenge the Experts, Davos, Switzerland, February 2009. (1) Debate: Prostate specific antigen (PSA) relapse - hormones or radiotherapy?, (2) Panelist: (a) Urological challenge 2, (b) Urological challenge 3.

Zlotta AR: Controversies in Urology (CURy), 2nd World Congress, Meet the Experts - An Instructive Case Discussion on Bladder Cancer, Lisbon, Portugal, February 2009. (1) Session 7: Maintenance therapy - How many and how long?, (2) Section 13: Upper tract urothelial cancer. Bacillus calmette-guerin/Metomycin C (BMC/MMC) irrigation of the upper tracts.

Zlotta AR: European Association of Urology, 24th Annual Congress, Stockholm, Sweden, March 2009. (1) EAU TV Panel: Renal cell cancer, (2) How to write a paper for publication, (3) Chair, Poster Session 25: Technical issues of radical prostatectomy.

Zlotta AR: Halton Peel Journal Club, Oakville, ON, April 2009. Bladder cancer: Emerging treatments and approaches.

Zlotta AR: Sociedade Brasileira de Urologia, XI Jornada Paulista de Urologia, Campos do Jordao, Sao Paulo, Brazil, May 2009. (1) Bone alterations. How to prevent and diagnose bone loss, (2) Case presentation: Locally advanced prostate cancer, (3) Chemotherapy versus prostate tumour, myth or reality, (4) Is clinical follow-up safe for small solid renal masses?, (5) Target cell therapy for high risk and metastatic renal cancer.

Zlotta AR: Canadian Urological Association, 64th Annual Meeting, Toronto, ON, June 2009. Moderator of Podium Session 1: Oncology, prostate.

Zlotta AR: Bladder Cancer (BCAN) Think Tank, Mont Tremblant, PQ, August 2008. Risk and cause of bladder cancer (Zlotta A, Jewett M).

Zlotta AR: Belgian Association of Urology (BAU), Brussels, Belgium, October 2008. Prostate cancer: How do we see the future? Diagnosis and screening. Clinical cases on when to do a biopsy and to explain the results to the patients.

Zlotta AR: Russian Association of Oncological Urology, III Congress, Moscow, Russia, October 2008. (1) Biomarker-based pre-operative nomograms, (2) Optimization of hormonal treatment of metastatic prostate cancer. Monotherapy with luteinizing hormone-releasing hormone (LHRH) agonists.

Zlotta AR: Beth David-Beth Emeth Prostate Health Series, Beth Emeth Bais Yehuda Continuing Education, Toronto, ON, November 2008. Cancer prevention and screening - new advances in the field.

Zlotta AR: Spanish Urology Association, II Course of Urology, Madrid, Spain, November 2008. (1) Dialogo con los cirujanos, (2) Round Table Panelist: Non-muscle invasive bladder cancer.

Zlotta AR: Swiss Urological Association, 6th Symposium, Urology Arena, Non-Muscle-Invasive Bladder Cancer, Bern, Switzerland, November 2008. Endoscopic surgical management.

Zlotta AR: Association of Academic European Urologists (AAEU), 7th Meeting, Tel Aviv, Israel, December 2008. Bladder cancer. Does intravesical bacillus calmette-guerin prevent tumor progression in primary T1G3 bladder tumors? Is conservative treatment a reasonable approach?

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

A proteomic and genetic biomarker panel for improving prostate specific antigen performance and identifying individuals at risk of prostate cancer using a unique patient population accrued in the European randomized study for prostate cancer screening. *Zlotta A, Diamandis E, Ozcelik H, Briollais L, Fleshner N, Van der Kwast T, Jarvi K, Lockwood G, Klotz L, Recker H, Kwiatkoski M, Van Rhijn B, Sardana G: Ontario Institute for Cancer Research (OICR).* (\$631,232 2008 - 2011.)

Canadian Urological Association scholarship. *Grober E, Jewett MAS: Canadian Urological Association Scholarship Foundation.* (\$40,000 2008 - 2009.)

Clinical significance of calcium ion transport in prostate cancer. *Ozcelik H, Zlotta AR, Bapat B, Briollais L, Fleshner N, Kwiatkowski M, Recker F, van der Kwast T, Klotz L, Jarvi K, van Rhijn B, Lockwood G: Canadian Institutes of Health Research.* (\$588,241 2009 - 2012.)

Fertility preservation in adolescent males with cancer: Assessment of current practice and knowledge among health care professionals and adolescent males. *Gupta AA, Bartels U, Bouffet E, Chong AL, Hendershot E, Mills D, Jarvi K, Lo KC, Lorenzo A, Nathan P, Spencer L, Stuart M, Urbach S, Zlotnik-Shaul R: The Hospital for Sick Children, Clinical Advisory Committee.* (\$9,412 2008 - 2009.)

Genetic, epigenetic and proteomic analysis of the kallikrein family in search of novel diagnostic prognostic and risk susceptibility algorithms for prostate cancer. *Diamandis E, Van der Kwast T, Bapat B, Zlotta A, Fleshner N: Canadian Institutes of Health Research.* (\$100,000 2009 - 2010.)

Identification of prostate cancer biomarkers in semen. *Jarvi K, Lo KC, Diamandis E, Mullen B, Zlotta A: Canadian Uro-Oncology Group (CUOG).* (\$15,000 2008 - 2009.)

Male sexual and reproductive medicine digital patient resource program. *Grober E, Jarvi K: Eli Lilly Canada Inc.* (\$10,000 2009.)

Male reproductive and sexual medicine digital video atlas. *Grober ED, Jarvi KA: Lilly Canada.* (\$10,000 2008.)

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.* (\$59,500 2007 - 2008.)

Semen proteomics - discovery of prostate cancer biomarkers. *Lo KC, Jarvi K, Diamandis E: Cy pres - (Judgement of the Honourable Mr. Justice John Brockenshire).* (\$600,000 2009.)

Use of proteomics to identify new prostate cancer biomarkers from semen. *Jarvi K, Lo K, Grober E (co-Investigators), Diamandis E, Fleshner N, Finelli A, Zlotta A: Canadian Urological Association/Canadian Uro-Oncology Group (CUA/CUOG)/Abbott.* (\$15,000 2008.)

Use of seminal fluid protein patterns as biomarkers for diseases in the male reproductive tract: Prediction of spermatogenesis in men with azoospermia. *Jarvi K, Lo KC, Diamandis E, Mullen B: Physicians' Services Incorporated.* (\$145,500 2007 - 2009.)

HONOURS RECEIVED

Lo KC: A.W. Bruce Faculty Undergraduate Teaching Award, 2009. June 2009.

St. Joseph's Health Centre

Lloyd C. Smith

Surgeon-in-Chief



HEADS OF DIVISION

Dr. T. Harmantas	General Surgery
Dr. G. Vincent	Orthopaedic Surgery
Dr. L. Kasrai	Plastic Surgery
Dr. C. Compeau	Thoracic Surgery
Dr. U. Jain	Urology



The past year has been a good one for the Department of Surgery at St. Joseph's Health Centre. The 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. The hospital has been designated as a Level I Thoracic Centre and we are eagerly awaiting the arrival of Dr. Maurice Blitz, who will become our third thoracic surgeon.

In the spring of 2009, the Ministry of Health announced support for a University of Toronto collaborative program in bariatric surgery. St. Joseph's Health Centre is integrally involved in this program and the plan will be for us to do 180 bariatric surgical procedures annually. In the first year, which began April 1/09, we are planning to do 90 surgeries.

The teaching program of the Department of Surgery continues to increase in both residents and students. We are now receiving clinical clerks in general surgery as part of their core rotation.

The hospital has also approved the construction of two additional advanced MIS suites and we are planning for construction next year.

APPOINTMENTS AND PROMOTIONS

Dr. Martin Roscoe was promoted to Assistant Professor in the Division of Orthopaedic Surgery, recognizing his contribution to teaching and clinical excellence.

Dr. George Vincent was appointed the Head of the Division of Orthopaedic Surgery at St. Joseph's, effective July 1, 2008. He replaced Dr. Martin Roscoe whose term was finished.

AWARDS

Dr. Yaron Shargall won a Bruce Tovee Teaching Award for teaching undergraduate students. He also won the St. Joseph's Teaching Award for Thoracic Surgery.

Dr. Tom Harmantas won the Ernie Spratt Award for resident teaching in the Division of General Surgery, St. Joseph's Health Centre.

Dr. Amr ElMaraghy won the Award for Resident Teaching in the Division of Orthopaedic Surgery, St. Joseph's Health Centre.

Dr. Craig Fielding won the Award for Resident Teaching in the Division of Plastic Surgery, St. Joseph's Health Centre.

CONCLUSION

The Department of Surgery continues to work towards our vision of becoming the best community teaching hospital in Canada. We have residents and/or fellows in all of our surgical subspecialties 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

Division of Orthopaedic Surgery

Dr. A.W. ElMaraghy	Assistant Professor
Dr. M. Kliman	Lecturer
Dr. M. Roscoe	Lecturer
Dr. G. Vincent	Assistant Professor (Division Head)
Dr. M. Wood	Lecturer

PUBLICATIONS

ElMaraghy A, Devereaux M: Medial wear of the polyethylene component associated with heterotopic ossification after reverse shoulder arthroplasty. *Canadian Journal of Surgery*: October 2008; 51(5): pp E103-E104.

ElMaraghy A, Devereaux M: The biceps crease interval for diagnoses of complete distal biceps tendon ruptures. *Clinical Orthopaedics and Related Research*: September 2008; 466(9): pp 2255-2262.

ElMaraghy A, Devereaux M, Panchapakesan V: Extracapsular extrusion of a horizontal metacarpal head fracture. *Canadian Journal of Surgery*: February 2009; 52(1): pp 70.

Fung L, Wong B, Ravichandiran K, Agur A, Rindlisbacher T, ElMaraghy A: Three dimensional study of pectoralis major muscle and tendon architecture. *Clinical Anatomy*: March 2009; 22: pp 500-508.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

ElMaraghy AW: American Academy of Orthopaedic Surgeons, 2009 Annual Meeting, Las Vegas, Nevada, February 2009. Three-dimensional study of the pectoralis major muscle and tendon architecture.

ElMaraghy AW: United Arab Emirates 7th International Conference on Anesthesia, Critical Care, and Pain Management, Dubai, United Arab Emirates, February 2009. (1) Damage control orthopaedics, (2) Variability in the choice of surgical setting and anesthetic technique for carpal tunnel release.

ElMaraghy AW: Association for Osteosynthesis North America, Continuing Medical Education Orthopaedic Course, Toronto, ON, November 2008. Articular fractures of the proximal humerus.

ElMaraghy AW: Egyptian Orthopaedic Association, 60th Annual Congress, Cairo, Egypt, November 2008. The biceps crease interval test for the diagnosis of complete distal biceps tendon ruptures.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

Morphometric assessment of acromial interaction with the clavicular hook plate. *ElMaraghy AW, Devereaux MD: Synthes Canada Ltd.* (\$30,000 2007 - 2009.)

HONOURS RECEIVED

ElMaraghy AW: St. Joseph's Health Centre Award for the Best Scientific Research Presentation entitled, The Biceps Crease Interval Test. November 2008.



Division of Plastic Surgery

Dr. C. Fielding Lecturer
Dr. L. Kasrai Assistant Professor (Division Head)
Dr. R.H. Levine Professor
Dr. K.R. Wanzel Assistant Professor

INVITED VISITS

Kasrai L: The Caribbean Aesthetic Surgery Workshop (CASW), Tobago, West Indies, October 2008. Using a 3D cartilage frame for partial ear reconstructions.

Kasrai L: American Society of Plastic Surgeons, Chicago, Illinois, November 2008. Introduction to two-stage and subtotal auricular reconstruction - The fabrication of the three-dimensional costal cartilage framework (3-D frame).

Division of Thoracic Surgery

Dr. C. Compeau Assistant Professor (Division Head)
Dr. Y. Shargall Assistant Professor

PUBLICATIONS

Asano TK, Burns A, Pinchuk B, Shargall Y: Surgical images: Soft tissue: An unusual presentation of perforated sigmoid colon. Canadian Journal of Surgery: December 2008; 51(6): pp 474-475.

Sugimura H, Spratt EH, Compeau CG, Kattail D, Shargall Y: Thorascopic sympathetic clipping for hyperhidrosis: Long-term results and reversibility. Journal of Thoracic and Cardiovascular Surgery: June 2009: 137(6): pp 1370-1376: discussion 1376-1377.

INVITED VISITS

Shargall Y: 2009 Canadian Respirology Conference, Toronto, ON, April 2009. Moderator.

HONOURS RECEIVED

Shargall Y: The Bruce Tovee Teaching Award, Gallie Day - April 2009, University of Toronto, Department of Surgery

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

Ori Rotstein

Surgeon-in-Chief



HEADS OF DIVISION

Dr. L. Errett	Cardiovascular Surgery
Dr. A.B. Nathens	General Surgery
Dr. R.L. Macdonald	Neurosurgery
Dr. E. Schemitsch	Orthopaedic Surgery
Dr. J. Mahoney	Plastic Surgery
Dr. J. Honey	Urology
Dr. O. Rotstein	Vascular Surgery (Interim)

The Department has experienced another year of successes emanating from across our surgical programs.

We embraced change as the Chief Executive Officer of St. Michael's Hospital, Mr. Jeff Lozon, decided to step down from his position of 17 years. Mr. Lozon left a legacy of unsurpassed leadership, innovation, generosity and compassion. Our new Chief Executive Officer, Dr. Robert Howard, has been appointed and will imprint his own signature on the position and the Institution

In the clinical domain, our numbers of surgical cases and total hours of surgery increased over the prior year. Importantly, considerable innovation has been added to the operating room environment. Our endovascular cases have increased threefold with the arrival of Claudio Cina to our faculty. We have initiated a percutaneous aortic valve program under the leadership of Mark Peterson and our surgical robotics program headed by John Honey is thriving. Our clinical programs have been buttressed by the addition of new faculty in important areas: Ralph George who will lead our Breast Centre and Bernard Lawless to our trauma program with an academic focus on health care delivery in Trauma/Critical Care.

Our research efforts have been bolstered by targeted recruitment of researchers to complement the work of our existing scientists and clinician-scientists. Two such recruits, Katalin Szaszi and Wolfgang Kuebler, were successful in grant accrual including recent CIHR competitions. Dr. Subodh Verma was awarded a CIHR and several Heart and Stroke Foundation of Canada awards.

Awards, honours, invited lectures were plentiful and are articulated in our individual hospital report. Notably, Nancy Baxter was successful in obtaining a Tier 1 Cancer Care Ontario Research Chair awarded in Health Services. Locally, St. Michael's Hospital hosted its Annual Physicians Education Achievement Day. Our Faculty has been recognized for their excellence in teaching by receiving a number of recognition awards. Dr. Danny Whelan received the William Horsey Post-graduate Teaching award and Dr. Julian Spears was awarded the Donald J. Currie Teaching award for Undergraduate Teaching. The newly created Jameel Ali Award in Continuing Education in Surgery was awarded to Dr. Lee Errett for his sustained contribution to the success of the Annual Terrence Donnelly Day. Dr. Teodor Grantcharov was appointed the Director of the Allan Waters' Family Patient Simulation Centre and Dr. Timothy Daniels was named Head of the University Foot and Ankle Program. We enthusiastically look forward to the opening of the Li Ka Shing Knowledge Institute in fall 2010. The Knowledge Institute will bring together leading edge research and new models of education to shape the future of surgery and medicine and bring advances to patient bedsides faster than ever before. Faculty members promoted to the level of Full Professor were Drs. James Mahoney and Andras Kapus. Promoted to the level of Assistant Professor were Drs. Vern Campbell and Wayne Tanner.

As we enter the new academic year, we look forward to the opportunities that arise out of the innumerable challenges of our profession.



Division of Cardiovascular 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

Al-Omran F, Mamdani MM, Dueck A, Lindsay TF, Melo M, Juurlink DN, Verma S for the Systematic Assessment of Vascular Risk (SAVR) Investigators: Suboptimal use of statin therapy in elderly patients with atherosclerosis: A population-based study. *Journal of Vascular Surgery*: September 2008; 48(3): pp 607-612.

Bollegala N, Bollegala D, Rawal S, Bhojwani R, Jakate KA, Valencia V, Fawzy H, Ledger G, Errett L, Perera A, Bhalerao S: Initial steps in constructing a delirium protocol: A neurotrauma and cardiovascular surgery experience. *Journal of Egyptian Society of Cardiothoracic Surgery*: August 2008; 16(3): pp 183-195.

Cina CS, Moore RD, Campbell V, Peterson M, Pawlowski E: Chapter 41: Unofficial use of the anaconda legs: The popliteal aneurysms. In: *Controversies and Updates in Vascular Surgery*: (Becquemin JP, Alimi YS, eds.) Minerva Medica, Turin, Italy: 2008: pp 272-278.

Desjardins J-F, Pourdjabbar A, Quan A, Leong-Poi H, Kuliszewska K, Verma S, Parker TG: Lack of S100A1 in mice confers a gender-dependent hypertensive phenotype and increased mortality after myocardial infarction. *American Journal of Physiology*: May 2009; 296(5): pp H1457-H1465.



Elmistekawy EM, Errett LE, Fawzy H: Predictors of packed red cell transfusion after isolated primary coronary artery bypass grafting - The experience of a single cardiac center: A prospective observational study. *Journal of Cardiothoracic Surgery*: May 2009; 4:20: pp 1-11.

Fawzy H, Alhodaib N, Mazer CD, Harrington A, Latter D, Bonneau D, Errett L, Mahoney J: Sternal plating for primary and secondary sternal closure: Can it improve sternal stability? *Journal of Cardiothoracic Surgery*: May 2009; 4: pp 19.

Grant G, Peterson M, Campbell V, Garrido-Olivares L: A study of pullout forces of the components of modular multi-manufacturer hybrid endografts used for aortic aneurysm repair. *European Journal of Vascular Surgery*: March 2009; 37(6): pp 671-680.

Gupta M, Braga M, Verma S: A randomized controlled trial of the effects of rosiglitazone on adipokines, inflammatory and fibrinolytic markers in diabetic patients - study design and protocol. *Canadian Journal of Cardiology*: October 2008; 24(10): pp e65-e69.

Kuo LT, Yang NI, Cherng WJ, Verma S, Hung MJ, Wang SY, Liu MH, Chen SY, Wang CH: Serum interleukin-6 levels, not genotype, correlate with coronary plaque complexity. *International Heart Journal*: July 2008; 49(4): pp 391-402.

Lovren F, Pan Y, Quan A, Teoh H, Wang G, Shukla PC, Levitt KS, Oudit GY, Stewart DJ, Slutsky AS, Peterson MD, Backx PH, Penninger JM, Verma S: Angiotensin converting enzyme-2 (ACE2) confers endothelial protection and attenuates atherosclerosis. *American Journal of Physiology. Heart and Circulatory Physiology*. October 2008; 295(4): pp H1377-H84. E-published ahead of print: July 25, 2008.

Lovren F, Pan Y, Shukla PC, Quan A, Teoh H, Szmítko PE, Peterson MD, Gupta M, Al-Omran M, Verma S: Visfatin activates eNOS via Akt and MAP kinases and improves endothelial cell function and angiogenesis in vitro and in vivo: Translational implications for atherosclerosis. *American Journal of Physiology, Endocrinology and Metabolism*: June 2009; 296(6): pp E1440-E1449. E-published ahead of print: April 7, 2009.

Peterson MD, Wheatley III GH, Kpodonu J, Williams JP, Ramaiah VR, Rodriguez-Lopez JA, Diethrich EB: Treatment of type II endoleaks associated with left subclavian artery coverage during thoracic aortic stent grafting. *Journal of Thoracic and Cardiovascular Surgery*: November 2008: 136(5): pp 1193-1199.

Teoh H, Quan A, Bang KWA, Wang G, Lovren F, Vu V, Haitsma JJ, Szmilko PE, Al-Omran M, Wang C-H, Gupta M, Peterson MD, Zhang H, Chan L, Freedman J, Sweeney G, Verma S: Adiponectin deficiency promotes endothelial activation and profoundly exacerbates sepsis-related mortality. *American Journal of Physiology, Endocrinology and Metabolism*: September 2008: 295(3): pp E658-E664. E-published ahead of print: July 15, 2008.

INVITED VISITS

Bonneau D: Sorin Group Canada, Lisbon, Portugal, September 2008. Aortic valve disease.

Bonneau D: Sorin Group Canada, Vancouver, BC, December 2008. Aortic surgery.

Errett LE: American Association for Thoracic Surgery (AATS), 89th Annual Meeting, Boston, Massachusetts, May 2009. Talk: Tricuspid valve repair: A new look at an old problem.

Latter DA: Centenary Hospital Cardiologists, Toronto, ON, April 2009. Mitral valve disease.

Peterson MD: Rouge Valley Health System - Cardiovascular/ Cardiology, Rouge Valley Centenary, Scarborough, ON, October 2008. Endovascular aortic procedures.

Peterson MD: Canadian Cardiovascular Society, Canadian Perspectives on the European Society of Cardiology/ American Heart Association (ESC/AHA'08), Toronto, ON, November 2008. SYnergy between PCI with TAXus and cardiac surgery (SYNTAX) study: Revascularization strategies for multi-vessel coronary disease.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

A pilot study of language and ethnic specific cardiovascular risk counseling versus usual care in South Asians with coronary heart disease. *Gupta M, Mamdani M, Verma S: Heart & Stroke Foundation of Ontario.* (\$50,000 2008 - 2010.)

A prospective study to compare the functionality of high density lipoprotein (HDL)-cholesterol to limit endothelial dysfunction in South Asian versus Caucasian patients with atherosclerosis. *Verma V, Teoh H: Heart & Stroke Foundation of Ontario.* (\$50,000 2008 - 2010.)

Angiotensin converting enzyme (ACE2) and atherosclerosis. *Levitt K, Verma S: The Physicians' Services Incorporated Foundation.* (\$20,000 2008 - 2009.)

Teoh H, Quan A, Lovren F, Wang G, Tirgari S, Szmilko PE, Szalai AJ, Ward ME, Verma S: Impaired endothelial function in C-reactive protein (CRP) overexpressing mice. *Atherosclerosis*: November 2008: 201(2): pp 318-325. E-published ahead of print: March 20, 2009.

Title LM, Lonn E, Charbonneau F, Fung M, Mather KJ, Verma S, Anderson TJ: Relationship between brachial artery flow-mediated dilatation, hyperemic shear stress, and the metabolic syndrome. *Vascular Medicine*: November 2008: 13(4): pp 263-270.

Peterson MD: St. Mary's General Hospital, Grand Rounds, Kitchener, ON, November 2008. Endovascular and aortic surgery: A paradigm shift in surgical practice?

Verma S: The International Academy of Cardiology, Toronto, ON, July 2008. Angiotensin converting enzyme (ACE2) is a novel regulator of endothelial function and atherosclerosis.

Verma S: Canadian Cardiovascular Congress, Toronto, ON, October 2008. (1) Expert insights into atherosclerotic vulnerability in the vulnerable patient, (2) Should cardiovascular specialists worry about glucose anymore (NO), (3) The world post-JUPITER, (4) The oncology-cardiology interface - lesions from breast cancer (BRCA1).

Verma S: Canadian Diabetes Association, Montreal, PQ, October 2008. Mechanisms of cardiovascular disease in diabetes.

Verma S: American Heart Association, New Orleans, Louisiana, November 2008. Angiotensin converting enzyme (ACE2): A novel regulator of cardiovascular and respiratory physiology and pathophysiology.

Angiotensin converting enzyme (ACE2): Novel target for endothelial function and atherosclerosis. *Verma S, Stewart DJ, Peninger J, Oudit G: Heart & Stroke Foundation.* (\$320,000 2007 - 2011.)

Plasma renin activity and cardiovascular outcomes in the heart outcomes prevention evaluation (HOPE) study. *Verma S, Gupta M, Lonn E, Yusuf S: Novartis Pharmaceuticals Canada Inc.* (\$230,345 2008 - 2010.)

Primary cArE AuDIt of Global risk Management (PARADIGM Study). *Gupta M, Verma S: AstraZeneca Canada.* (\$3,360,000 2008 - 2009.)



Rodent cardiovascular and physiological investigations. *Verma S: Canada Foundation for Innovation and Ontario Research Fund for Research Infrastructure Funding.* (\$259,000 2007 - 2009.)

Role of the tumor suppressor gene breast cancer (BRCA1) in adverse cardiac remodeling: In vivo integrative studies in cardiac specific breast cancer (BRCA1) knockout mice. *Szmitko P, Verma S: The Physicians' Services Incorporated Foundation.* (\$20,000 2008 - 2009.)

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 and development (Rx&D) companies.* (\$1,200,000 2006 - 2010.)

HONOURS RECEIVED

Errett LE: The Jameel Ali Award in Continuing Education in Surgery, from the Department of Surgery, during Education Achievement Day for St. Michael's Physicians. June 2009.

Errett LE: University of Toronto 2009 Award for Excellence in Postgraduate Medical Education in Development/Innovation. March 2009.

Verma S: Canada Research Chair in Atherosclerosis (Tier 2). August 2008.

Division of General Surgery

Dr. N. 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. R.L. George Associate Professor
Dr. T. Grantcharov Assistant Professor
Dr. A. Kapus Professor
Dr. J. Koo Associate Professor
Dr. W. Kuebler Associate Professor
Dr. B. Lawless Assistant Professor
Dr. J.C. Marshall Professor

Dr. R.A. Mustard Associate Professor
Dr. A.B. Nathens Professor (Division Head)
Dr. O.D. Rotstein Professor
Dr. K. Szaszi Assistant Professor

PUBLICATIONS

Aggarwal R, Darzi A, Grantcharov TP: Systematic review of skills transfer after surgical simulator training. *Annals of Surgery*: October 2008: 248(4): pp 690-691.

Ali J: Chapter 11 - Initial assessment and management commentary. In: *Trauma*, 6th Edition: (Feliciano D, Mattox K, Moore E, eds.) McGraw Hill Medical Publishing, New York: 2008: pp 181-184.

Ali J: The advanced trauma operative management (ATOM) course in a Canadian residency program. *Canadian Journal of Surgery*: July 2008: 51: pp 185-189.

Ali J, Al Ahmadi K, Williams JI, Cherry RA: The standardized live patient and mechanical patient models- their roles in trauma teaching. *Journal of Trauma, Injury, Infection and Critical Care*: January 2009: 66(1): pp 98-102.

Arora PD, Conti MA, Ravid S, Sacks DB, Kapus A, Adelstein RS, Bresnick AR, McCulloch CA: Rap1 activation in collagen phagocytosis is dependent on non-muscle myosin II-A. *Molecular Biology of the Cell*: December 2008: 19(2): pp 5032-5046.

Bagshaw SM, Lapinsky S, Dial S, Arabi Y, Dodek P, Wood G, Ellis P, Guzman J, Marshall J, Parrillo JE, Skrobik Y, Kumar A, The Cooperative Antimicrobial Therapy of Septic Shock (CATSS) Database Research Group: Acute kidney injury in septic shock: Clinical outcomes and impact of duration of hypotension prior to initiation of antimicrobial therapy. *Intensive Care Medicine*: May 2009: 35(5): pp 871-881. E-published ahead of print: December 9, 2008.

Ball J, Burton RA, Channarayapatn S, Ciraulo DL, Cooper A, Cooper GF, Eastman AB, Eichelberger MR, Esposito T, Esquenazi A, Jones MS, Kaufmann CR, Krohmer JR, Laskowski-Jones L, Makersie RC, Mann NC, Michaels H, Mullins R, Rotondo MF, Sanddal N, Soucy HA, Timmons SD, Whitney JR, Wielgosz M, Williams C, Winchell RJ: Regional Trauma Systems: Optimal Elements, Integration, and Assessment - Systems Consultation Guide: (Nathens AB, ed.) American College of Surgeons, Chicago: 2008.

Baxter NN: Is lymph node count an ideal quality indicator for cancer care? *Journal of Surgical Oncology*: March 2009: 99(4): pp 265-268.

Baxter NN, Durham SB, Phillips KA, Habermann EB, Virnig BA: Risk of dementia in older breast cancer survivors: A population-based cohort study of the association with adjuvant chemotherapy. *Journal of the American Geriatrics Society*: March 2009: 57(3): pp 403-411.

Baxter NN, Goldwasser MA, Paszat LF, Saskin R, Urbach DR, Rabeneck L: Association of colonoscopy and death from colorectal cancer. *Annals of Internal Medicine*: January 2009: 150(1): pp 1-8.

Bhattacharya, Koval M, Kuebler WM: The pulmonary circulation. In: *Handbook of Physiology, Volume: Microcirculation*: (Tuma R, Ley K, eds.) The American Physiological Society, Bethesda, August 2008: pp 712-734.

Beilman GJ, Blondet JJ, Nelson TR, Nathens AB, Moore FA, Rhee P, Puyana JC, Moore EE, Cohn SM: Early hypothermia in severely injured trauma patients is a significant risk factor for multiple organ dysfunction syndrome but not mortality. *Annals of Surgery*: May 2009: 249(5): pp 845-850.

Bordeianou L, Lee KY, Rockwood T, Baxter NN, Lowry A, Mellgren A, Parker S: Anal resting pressures at manometry correlate with the fecal incontinence severity index and with presence of sphincter defects on ultrasound. *Diseases of the Colon and Rectum*: July 2008: 51(7): pp 1010-1014. E-published ahead of print: April 25, 2008.

Bueltmann M, Kong X, Mertens M, Yin N, Liu Z, Koster A, Kuppe H, Kuebler WM: Inhaled milrinone attenuates experimental acute lung injury. *Intensive Care Medicine*: January 2009: 35(1): pp 171-178.

Burt CG, Cima RR, Koltun WA, Littlejohn CE, Ricciardi R, Temple LK, Rothenberger DA, Baxter NN: Developing a research agenda for the American Society of Colon and Rectal Surgeons: Results of a delphi approach. *Diseases of the Colon and Rectum*: May 2009: 52(5): pp 898-905.



- Cartmill C, Lingard L, Regehr G, Espin S, Bohnen J, Baker R, Rotstein L:** Timing of surgical antibiotic prophylaxis administration: Complexities of analysis. *BMC Medical Research Methodology*: June 2009; 9: pp 43.
- Charbonney E, Nathens AB:** Severe acute pancreatitis: A review. *Surgical Infections*: December 2008; 9(6): pp 573-578.
- Cherry RA, Ali J:** Current concepts in simulation-based trauma education. *Journal of Trauma*: November 2008; 65(5): pp 1186-1193.
- Cook D, Sinuff T, Zytaruk N, Rabbat C, Lee A, O'Donnell M, Thebane L, Linkins L, Treleaven D, Patel R, Meade M, Crowther M, Marshall J, Douketis J:** Event adjudication and data monitoring in an ICU observational study of thromboprophylaxis. *Journal of Critical Care*: March 2009; 24(2): pp 168-175.
- Cuschieri J, Freeman B, O'Keefe G, et al:** Inflammation and the host response to injury, a large-scale collaborative project: Patient-oriented research core standard operating procedure for clinical care X. Guidelines for venous thromboembolism prophylaxis in the trauma patient. *Journal of Trauma*: October 2008; 65(4): pp 944-950.
- Czaja A, Zimmerman J, Nathens AB:** Readmission and late mortality after pediatric severe sepsis. *Pediatrics*: March 2009; 123(3): pp 849-857.
- Dellinger RP, Marshall J, Vincent JL, Reinhart K:** Important issues in the design and reporting of clinical trials in severe infection and acute lung injury. *Journal of Critical Care*: December 2008; 23(4): pp 493-499. E-published ahead of print: April 28, 2008.
- Devon KM, Brown CJ, Burnstein M, McLeod RS:** Cancer of the anus complicating perianal Crohn's disease. *Diseases of the Colon and Rectum*: February 2009; 52(2): pp 211-216.
- Douketis J, Cook D, Meade M, Guyatt G, Geerts W, Skrobik Y, Albert M, Granton J, Hebert P, Pagliarello G, Marshall J, Fowler R, Freitag A, Rabbat C, Heels-Ansdell D, Anderson D, Crowther M, for the Canadian Critical Care Trials Group:** Prophylaxis against deep vein thrombosis in critically ill patients with severe renal insufficiency with the low molecular weight heparin, dalteparin: An assessment of safety and pharmacodynamics: The direct study. *Archives of Internal Medicine*: September 2008; 168(16): pp 1805-1812.
- Dubcenco E, Grantcharov T, Streutker CJ, Rotstein OD, Baxter NN, Jeejeebhoy KN, Baker JP:** The development of a novel intracolonic occlusion balloon for transcolonic natural orifice transluminal endoscopic surgery: Description of the technique and early experience in a porcine model (with videos). *Gastrointestinal Endoscopy*: October 2008; 68(4): pp 760-766.
- Finfer S, Ranieri M, Thompson T, Barie P, Dhainaut J-F, Douglas I, Gardlund B, Marshall J, Rhodes A:** Design, conduct, analysis and reporting of a multi-national placebo-controlled trial of activated protein C for persistent septic shock. *Intensive Care Medicine*: November 2008; 34(11): pp 1935-1947. E-published ahead of print: October 7, 2008.
- Goetin L, Shanafelt TD, Nathens AB, Curtis JR:** Effects of resident work hour limitations on faculty professional lives. *Journal of General Internal Medicine*: July 2008; 23(7): pp 1077-1083.
- Gomez D, Xiong W, Haas B, Goble S, Ahmed N, Nathens AB:** The missing dead: The problem of case ascertainment in the assessment of trauma center performance. *Journal of Trauma*: April 2009; 66(4): pp 1218-1225.
- Goodwin P, Ennis M, Bahl M, et al:** High insulin levels in newly diagnosed breast cancer patients reflect underlying insulin resistance and are associated with components of the insulin resistance syndrome. *Breast Cancer Research and Treatment*: April 2009; 114(3): pp 517-525. E-published: April 25, 2008.
- Govindarajan A, Baxter NN:** Lymph node evaluation in early-stage colon cancer. *Clinical Colorectal Cancer*: July 2008; 7(4): pp 240-246.
- Haas B, Jurkovich GJ, Wang J, Rivara FP, Mackenzie EJ, Nathens AB:** Survival advantage in trauma centers: Expedient intervention or experience? *Journal of the American College of Surgeons*: January 2009; 208(2): pp 28-36.
- Haas B, Nathens AB:** Future diagnostic and therapeutic approaches in surgical infections. *Surgical Clinics of North America*: April 2009; 89(2): pp 539-554.
- Haas B, Nathens AB:** Pro/con debate: Is the scoop and run approach the best approach to trauma services organization? *Critical Care*: September 2008; 12(5): pp 224. E-published September 10, 2008.
- Habermann EB, Virnig BA, Durham SB, Baxter NN:** Managed care enrollment and chronically disabled women with breast cancer. *American Journal of Managed Care*: August 2008; 14(8): pp 514-520.
- Huseynova K, Xiong W, Ray JG, Ahmed N, Nathens AB:** Venous thromboembolism as marker of quality care in trauma. *Journal of American College of Surgeons*: April 2009; 208(4): pp 547-552.
- Kakiashvili E, Speight P, Waheed F, Seth R, Lodyga M, Rotstein OD, Kapus A, Szasz K:** GEF-H1 mediates tumor necrosis factor-alpha-induced Rho activation and myosin phosphorylation: Role in the regulation of tubular paracellular permeability. *Journal of Biological Chemistry*: April 2009; 284(17): pp 11454-11466. E-published ahead of print: March 3, 2009.
- Khadaroo RG, Marshall JC:** Gastrointestinal dysfunction in the critically ill: Can we measure it? *Critical Care*: September 2008; 12(5): pp 180. E-published September 24, 2008.
- Kortbeek J, Al Turki S, Ali J, Antoine J:** Advanced trauma life support, 8th edition: The evidence of change. *Journal of Trauma*: June 2008; 64(6): pp 1638-1650.

Kundahl P, Grantcharov TP: Psychomotor performance measured in a virtual reality simulator correlates with technical skills in the operating room. *Surgical Endoscopy*: March 2009: 23(3): pp 645-649. E-published ahead of print: July 12, 2008.

Lodyga M, De Falco V, Bai XH, Kapus A, Melillo RM, Santoro M, Liu M: XB130, a tissue-specific adaptor protein that couples the RET/PTC oncogenic kinase to PI 3-kinase pathway. *Oncogene*: February 2009: 28(7): pp 937-949. E-published ahead of print: December 8, 2008.

Marshall JC: Glucose, insulin, and coagulation: Endotoxin as exohormone. *Blood*: July 2008: 112(1): pp 82-89.

Marshall JC: Multiple organ dysfunction: The systemic host response to critical surgical illness. In: *General Surgery: Principles and International Practice*: (Bland KI, Buchlerr MW, Csendes A, Garden OJ, Sarr MG, Wong J, eds.) Springer, London: 2008: pp 223-231.

Marshall JC: Risk prediction, disease stratification, and outcome description in critical surgical illness. In: *Surgery: Basic Science and Clinical Evaluation*: (Norton JA, Barie PS, Bollinger RR, Chang AE, Lowry SF, Mulvihill SJ, Pass HI, Thompson RW, eds.) Springer, New York: 2008: pp 433-445.

Marshall JC, Charbonney E, Duque Gonzalez P: The immune system in critical illness. In: *Clinics in Chest Medicine, Update in Sepsis*: (Levy MM, ed.) Elsevier Saunders, Philadelphia: 2008: pp 605-616.

Marshall JC, Cook DC, Canadian Critical Care Trials Group: Investigator-led clinical research consortia: The Canadian Critical Care Trials Group. *Critical Care Medicine*: January 2009: 37(1 Suppl): pp S165-S172.

McIntyre LK, Warner KJ, Nester TA, Nathens AB: The incidence of post discharge surgical site infection in the injured patient. *Journal of Trauma*: February 2009: 66(2): pp 407-410.

Monneuse O, Al-Ahmadi K, Ahmed N: Definitive repair of a stab wound to the right ventricle with skin staples in emergency. *Wounds*: August 2008: Issue 8: pp 219-220.

Monneuse O, Nathens AB, Woods NN, Mauceri JL, Xiong W, Canzian SL, Ahmed N: Attitudes about injury among high school students. *Journal of the American College of Surgeons*: August 2008: 207(2): pp 179-184. E-published ahead of print: April 24, 2008.

Moore FA, Nelson T, McKinlet BA, Moore EE, Nathens AB, Phee P, Puyana JC, Cohen SM, StO2 [Tissue (Muscle) Oxygen Saturation] Study Group: Is there a role for aggressive use of fresh frozen plasma in massive transfusion of civilian trauma patients? *American Journal of Surgery*: December 2008: 196(6): pp 948-960.

Nathens AB, Xiong W, Shafi M: Ranking of trauma center performance: The bare essentials. *Journal of Trauma*: September 2008: 65(3): pp 628-635.

NICE-SUGAR (Normoglycemia in Intensive Care Evaluation-Survival Using Glucose Algorithm Regulation) Study Investigators: Intensive versus conventional glucose control in critically ill patients. *New England Journal of Medicine*: March 2009: 360(13): pp 1283-1297. E-published March 24, 2009.

Ogilvie Jr JW, Goetz L, Baxter NN, Park J, Minami S, Madoff RD: Female sexual dysfunction after ileal pouch-anal anastomosis. *British Journal of Surgery*: July 2008: 95(7): pp 887-892.

Papia G, Burrows LL, Sinnadurai S, Marshall JC, Tawadros PS, Kapus A, Rotstein OD: Hypertonic saline resuscitation from hemorrhagic shock does not impair the neutrophil response to intraabdominal infection. *Surgery*: November 2008: 144(5): pp 814-821. E-published ahead of print: September 14, 2008.

Redlin M, Huebler M, Koster A, Boettcher W, Nagdymann N, Hetzer R, Kuppe H, Kuebler WM: Regional differences in tissue oxygenation during cardiopulmonary bypass for correction of congenital heart disease in neonates and small infants: Relevance of near-infrared spectroscopy. *The Journal of Thoracic and Cardiovascular Surgery*: October 2008: 136(4): pp 962-967.

Reimel BA, Klein MB, Matthew B, Nathens AB, Gibran NS: Delivery of critical care in North American burn centers. *Journal of Trauma* (September-October 2008): September 2008: 29(5): pp 713-177.

Ricciardi R, Ogilvie Jr JW, Roberts PL, Marcello PW, Concannon TW, Baxter NN: Epidemiology of clostridium difficile colitis in hospitalized patients with inflammatory bowel diseases. *Diseases of the Colon and Rectum*: January 2009: 52(1): pp 40-45.

Ricciardi R, Selker HP, Baxter NN, Marcello PW, Roberts PL, Virnig BA: Disparate use of minimally invasive surgery in benign surgical conditions. *Surgical Endoscopy*: September 2008: 22(9): pp 1977-1986. E-published ahead of print: July 2, 2008.

Rubulotta F, Marshall JC, Levy M, Nelson D, Ramsay G, Williams M: Predisposition, insult/infection, response, and organ dysfunction: A new model for staging sepsis. *Critical Care Medicine*: April 2009: 37(4): pp 1329-1335.

Salgado J, Grantcharov TP, Pappasavvas PK, Gagne DJ, Caushaj PF: Technical skills assessment as a part of the selection process for fellows in minimally invasive surgery. *Surgical Endoscopy*: March 2009: 23(3): pp 641-644. E-published ahead of print: September 23, 2008.

Shafi S, Stewart R, Nathens AB, Friese RF, Frankel H, Gentilello LM: Significant variations in mortality occur at similarly designated trauma centers. *Archives of Surgery*: January 2009: 144(1): pp 64-68.

Shandro JR, Rivara FP, Wang J, Jurkovich GJ, Nathens AB, MacKenzie EJ: Alcohol and risk of mortality in patients with traumatic brain injury. *Journal of Trauma*: June 2009: 66(6): pp 1584-1590.



Snell L, Baxter N, Semple JL: A survey of attitudes of Ontario plastic surgeons leading up to the return of silicone implants. *Plastic Reconstructive Surgery*: November 2008; 122(5): pp 148e-149e.

Sperry JL, Frankel HL, Nathens AB, O'Keefe GE, Cuschieri J, Moore EE, Maier RV, Minei JP; Inflammation and the Host Response to Injury Investigators: Characterization of persistent hyperglycemia: What does it mean postinjury? *Journal of Trauma*: April 2009; 66(4): pp 1076-1082.

Thirone AC, Speight P, Zulys M, Rotstein OD, Szasz K, Pedersen SF, Kapus A: Hyperosmotic stress induces Rho/Rho kinase/LIM kinase-mediated cofilin phosphorylation in tubular cells: Key role in the osmotically triggered F-actin response. *American Journal of Physiology - Cell Physiology*: March 2009; 296(3): pp C463-C475. E-published ahead of print: December 24, 2008.

Vincent JL, Marshall JC: Surviving sepsis: A guide to the guidelines. *Critical Care Medicine*: July 2008; 12(3): pp 162. E-published ahead of print: June 30, 2009.

Virnig BA, Baxter NN, Habermann EB, Feldman RD, Bradley CJ: A matter of race: Early-versus late-stage cancer diagnosis. *Health Affairs (Millwood)*: January-February 2009; 28(1): pp 160-168.

West MA, Moore EE, Shapiro MB, Nathens AB, Cuschieri J, Johnson JL, Harbrecht BG, Minei JP, Bankey PE, Maier RV and the Host Response to Injury Investigators Inflammation Group: Inflammation and the Host Response to Injury, a large-scale collaborative project: Patient-oriented research core standard operating procedures for clinical care VII. Guidelines for antibiotic administration in severely injured patients. *Journal of Trauma*: December 2008; 65(6): pp 1511-1519.

Whiteside C, Munk S, Ispanovic E, Wang H, Goldberg H, Kapus A, Xia L: Regulation of mesangial cell alpha-smooth muscle actin expression in 3-dimensional matrix by high glucose and growth factors. *Nephron Experimental Nephrology*: July 2008; 109(2): pp e46-e56.

Yeung T, Heit B, Dubuisson JF, Fairn GD, Chiu B, Inman R, Kapus A, Swanson M, Grinstein S: Contribution of phosphatidylserine to membrane surface charge and protein targeting during phagosome maturation. *Journal of Cell Biology*: June 2009; 185(5): pp 971-928.

Yin N, Kaestle SM, Yin J, Hentschel T, Pries AR, Kuppe H, Kuebler WM: Inhaled nitric oxide aerosolized iloprost for the treatment of pulmonary hypertension with left heart disease. *Critical Care Medicine*: March 2009; 27(3): pp 980-986.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Ali J: McMaster University, Department of Surgery, Trauma Division, Advanced Trauma Life Support Program Director, Hamilton, ON, January 2009. Instructor course on advanced trauma life support (ATLS).

Ali J: St. George's University, Grenada, January 2009. (1) Advanced trauma life support course for physicians, (2) Prehospital trauma life support (PHTLS) program for ambulance personnel.

Ali J: University of Manitoba, Winnipeg, Manitoba, January 2009. Instructor course on advanced trauma life support.

Ali J: Dalhousie University, Halifax, Nova Scotia, February 2009. Instructor course on advanced trauma life support.

Ali J: University of Manitoba, Department of Surgery, Advanced Trauma Life Support Program Director, Winnipeg, MB, February 2009. Instructor course on advanced trauma life support (ATLS).

Ali J: American College of Surgeons, ATLS Subcommittee, Chicago, Illinois, March 2009. Instructor course, 8th edition, on advanced trauma life support (ATLS).

Ali J: University of Western Ontario, London, Ontario, March 2009. Instructor course on advanced trauma life support.

Ali J: All India Institute of Medical Sciences, Ansari, Nagar, New Delhi, April 2009. (1) Provider and instructor courses: Promulgation of inaugural advanced trauma life support, (2) Second advanced trauma life support.

Ali J: University of West Indies, Mount Hope, Trinidad and Tobago/Barbados, West Indies, July 2008. External examiner for emergency medicine program.

Ali J: Advanced Trauma Course for Nurse (ATCN)/ Advance Trauma Life Support (ATLS), Phoenix Arizona, August 2008. Lecture on shock, head trauma.

Ali J: College of Physicians and Surgeons of Costa Rica, San Jose, Costa Rica, August 2008. Prehospital trauma life support (PHTLS) program.

Ali J: Trauma Association of Canada, Trauma Resident Paper Competition, Halifax, NS, September 2008. Chair: Canadian Surgery Forum.

Ali J: American College of Surgeons, International ATLS Meeting, San Francisco, California, October 2008. (1) Instructor course on advanced trauma life support (ATLS), (2) Presentation of curriculum for new ATLS instructor course and telemedicine ATLS project to American College of Surgeons.

Ali J: American College of Surgeons and Fujairah Hospital, Abu Dhabi, United Arab Emirates, October 2008. (1) Instructor provider for ATLS course, (2) Educator for two advanced trauma life support (ATLS) instructor courses, (3) Lecture at symposium on emergency and trauma.

Ali J: Parry Sound Health Centre, Parry Sound, ON, October 2008. Presentation of rural trauma team development program/course.

Ali J: Dalhousie University, Halifax, Nova Scotia, November 2008. Instructor course on advanced trauma life support.

Ali J: Fujairah Hospital, 2nd Emirates Emergency Surgery and Trauma Conference, Fujairah, United Arab Emirates, November 2008. Chairman of three sessions and keynote speaker: (1) Issues in trauma resuscitation in the emergency department, (2) Advanced trauma life support - Historical perspectives and lessons learned, (3) Inaugural instructor course on advanced trauma life support (ATLS) for (a) Physicians from India, (b) Physicians from United Arab Emirates.

Ali J: Queen Elizabeth Hospital, Dalhousie University, Nova Scotia, November 2008. Instructor course on advanced trauma life support (ATLS).

Ali J: Dalhousie University, Halifax, NS, December 2008. Instructor course on advanced trauma life support (ATLS).

Baxter N: University of Madison, Update in Colon and Rectal Surgery, Madison, Wisconsin, April 2009. (1) Optimizing standards in the surgical management of rectal cancer, (2) Should colon cancer be resected laparoscopically? What is the evidence?

Baxter N: Group of Physicians Developing an Organization, Ambulatory Clinic Endoscopy Day, Toronto, ON, May 2009. Quality of care: Procedure related issues.

Baxter N: Society of American Gastrointestinal and Endoscopic Surgeons, Postgraduate Course, Phoenix, Arizona, May 2009. Postgraduate colorectal course. Lymph node harvest: What are the data?

Baxter N: Society for Surgery of the Alimentary Tract, Annual Meeting, Postgraduate Course on Acute Care Gastrointestinal Surgery: Thinking on Your Feet; Dogma, Pearls, and Experience, Chicago, Illinois, May 2009. C-difficile in the ICU.

Baxter N: American Society of Clinical Oncology, Annual Meeting, Orlando, Florida, June 2009. Scientific discussant gastrointestinal cancer posters.

Baxter N: University of Minnesota, Advances in Gastrointestinal and GI Laparoscopic Surgery Course, Minneapolis, Minnesota, June 2009. (1) Adjuvant treatment for rectal cancer: When, why, and how?, (2) Lymphadenectomy for colorectal cancer: How much is enough?

Baxter N: Canadian Association of General Surgeons (CAGS), Canadian Surgery Forum/ Debate, Halifax, NS, September 2008. Controversies in general surgery in Canada in 2008. Increasing the number of lymph nodes removed in colorectal cancer surgery will decrease the probability of cancer recurrence. (CON Side).

Baxter N: Imidex, Perspectives in Colorectal Cancer, Miami, Florida, September 2008. (1) Advances in colorectal surgery, (3) Optimizing standards in the surgical management of rectal cancer.

Baxter N: University of Minnesota, Colon and Rectal Surgery: Current Principles and Practice Course, Minneapolis, Minnesota, October 2008. (1) Debates in colon and rectal surgery; surgery for diverticulitis - laparoscopic with washout pro, (2) Nodal harvest in colon cancer - does it matter?, (3) Young surgeons' guide to research: Using databases for clinical studies.

Bohnen JMA: Canadian Association of General Surgeons (CAGS), Canadian Surgery Forum, Halifax, NS, September 2008. (1) Serious soft tissue infections, (2) Surgical jeopardy (invited contestant), (3) Whither generalism: Is there a problem for surgery training?

Bohnen JMA: Janes Surgical Society, Jackson's Point, ON, September 2008. Surgery 25 years later... Are we better?

Burnstein MJ: University of Calgary, Calgary, AB, March 2009. Visiting Professor: (1) Rectal cancer: Have we perfected operative management?, (2) Royal College examination preparation for final year residents, (3) Case presentations with final year residents.

Burnstein MJ: Canadian Association of General Surgeons, Canadian Surgery Forum, Halifax, NS, September 2008. (A) Canadian Society of Colon and Rectal Surgeons (CSCRS) Postgraduate Courses: (1) Complications and emergencies - Consultants' corner, (2) Technical aspects of endoscopic polypectomy; (B) CSCRS Symposium: (1) The Perfect Stoma - How I do it?, (2) Haemorrhoidectomy: Avoiding complications - How I do it?

Burnstein MJ: Cook Surgis Biodesign, Toronto, ON, September 2008. Management of complex anal fistulas.

Burnstein MJ: University of Alberta, 20th Annual General Surgery Residents' Retreat, Jasper, AB, October 2008. Visiting Professor: (1) A potpourri of anal pathologies, (2) Rectal resection and reconstruction.

Burnstein MJ: Lahey Clinic Medical Center, Division of Colon and Rectal Surgery, 6th Annual Lahey Clinic Alumni Professorship, Boston, Massachusetts, November 2008. Visiting Professor: Rectal cancer management - A Canadian perspective.

George RL: Memorial University of Newfoundland, Department of Surgery, Residents Research Day, St. John's, NL, October 2008. (1) Visiting Professor, (2) Judge of resident research presentations, (3) Guest Speaker: Surgeons who have won the Nobel prize: Emphasis on Canadian winners.

Lawless B: Acute Care Services in New South Wales Public Hospitals, Special Commission of Inquiry, Sydney, Australia, September 2008. Models of delivery of acute care services.

Marshall JC: Czech Republic Intensive Care Society, 11th Postgraduate Course on Sepsis and MODS, Ostrava, Czech Republic, January 2009. The PIRO (predisposition/infection/response/organ) concept: A work in progress.

Marshall JC: American College of Physicians, Ontario Chapter Scientific Meeting, Toronto, ON, February 2009. Update in intensive care: Sepsis.



Marshall JC: Society of Critical Care Medicine, 38th Critical Care Congress, Nashville, TN, February 2009. Sepsis: What does infection have to do with it?

Marshall JC: Erasme Hospital, Department of Intensive Care Emergency Medicine/Free University of Brussels and the Belgian Society of Intensive Care Medicine, 29th International Symposium, Brussels, Belgium, March 2009. (1) MODS: An overview of the mechanisms, (2) Controlling bleeding in pelvic fractures, (3) Host-microbial interactions in health and critical illness, (4) From data to guidelines: A cautionary tale, (5) Pancreatitis: When (not) to operate, (6) Resuscitative thoracotomy.

Marshall JC: Scandinavian Critical Care Trials Group, 13th Meeting, Oslo, Norway, March 2009. Investigator-led critical care research: Why and how?

Marshall JC: McGill University, Continuing Health Care Education, Critical Care Symposium: The Critical Elements, Montreal, PQ, April 2009. Embracing controversy.

Marshall JC: Weill Cornell Medical College, 36th Preston A. Wade Memorial Lecture in Trauma, New York, New York, April 2009. Infection, inflammation, iatrogenesis: The multiple organ dysfunction syndrome in trauma.

Marshall JC: 19th European Congress of Clinical Microbiology and Infectious Disease, Helsinki, Finland, May 2009. Adjuvant therapy for community-acquired pneumonia: A role?

Marshall JC: Hospital Germao Osvaldo Cruz, International Symposium on Surgical Intensive Care, Sao Paulo, Brazil, May 2009. (1) The immune response in critical illness, (2) Approaches and challenges in large clinical trials in critical care.

Marshall JC: International Sepsis Forum, 8th Annual Colloquium: Convergences and Divergences of the Septic Phenotype, St. Charles, Illinois, May 2009. Phenotypes in sepsis: Matching the population to the intervention.

Marshall JC: Latin-American Sepsis Forum, 6th International Sepsis Forum, Sao Paulo, Brazil, May 2009. (1) State of the art: Critical care of the septic patient, (2) Challenges in the development of interventional strategies for sepsis.

Marshall JC: Surgical Infection Society, 29th Annual Conference, Chicago, Illinois, May 2009. The surviving sepsis campaign: Process and results.

Marshall JC: Surgical Infection Society of Latin America, First Annual Meeting, Rio de Janeiro, Brazil, May 2009. Keynote Address: Infection, sepsis and the surgical sensibility.

Marshall JC: Bayer Ltd., Symposium on New Therapeutic Options in Intensive Care Medicine, Koln, Germany, June 2009. Biomarkers of sepsis and critical illness.

Marshall JC: Canadian Critical Care Trials Group, Resident Research Education Day, Picton, ON, June 2009. The role of research in critical care practice.

Marshall JC: 18th Argentinean Congress of Intensive Care, Buenos Aires, Argentina, August 2008. (1) Adjuvant therapy in sepsis: Needs and prospects, (2) A clinician's guide to the biology of sepsis, (3) Rethinking the approach to clinical research in sepsis, (4) Management of severe necrotizing pancreatitis, (5) Modulating neutrophil apoptosis, (6) Measuring organ dysfunction in the critically ill.

Marshall JC: Asociacion Colombiana de Cirugia, 34th National Congress of Surgery, Bogota, Colombia, August 2008. (1) Management of acute necrotizing pancreatitis, (2) ICU-acquired infection, (3) The multiple organ dysfunction syndrome.

Marshall JC: European Society of Intensive Care Medicine, 21st Congress, Lisbon, Portugal, September 2008. (1) Maintenance of gut integrity: The role of enteral nutrition, (2) We need a biologic definition of sepsis, Pro.

Marshall JC: Pediatric Acute Lung Injury and Sepsis Investigators (PALISI) Network, 2008 Meeting, Montreal, PQ, September 2008. (1) Clinical trials in sepsis: Phenotype and stratification, (2) The Canadian Critical Care Trials Group model of programmatic research.

Marshall JC: La Societa Italiana di Anestesia Analgesia Rianimazione e Terapia Intensiva (SIAARTI), 62nd National Congress, Palermo, Sicily, October 2008. (1) The future of research in sepsis, (2) Guideline development: The Surviving sepsis campaign.

Marshall JC: Trauma, Accident and Emergency Congress, Abu Dhabi, United Arab Emirates, October 2008. (1) Sepsis: Bench to bedside, (2) ICU supportive care: An update.

Marshall JC: Critical Care Canada Forum, Toronto, ON, November 2008. (1) The PROWESS-Shock Trial, (2) Resuscitation and deresuscitation: What are the unanswered questions?, (3) Blunt cerebrovascular injury, (4) Host-microbial interactions in critical illness, (5) Investigator-led clinical research in critical care, (6) Commentary: Enteral feeding - Less is more?

Marshall JC: International Sepsis Forum, Sepsis 2008, International Forum of Acute Care Trialists, Granada, Spain, November 2008. (1) Peritonitis as a source of sepsis, (2) The Canadian Critical Care Trials Group.

Marshall JC: Intensive Care Society, Annual Meeting of the United Kingdom, State of the Art 2008 Meeting, London, United Kingdom, December 2008. Gillian Hanson Lecture: (1) Sepsis trials, current limitations and future prospects, (2) Surgical management of acute pancreatitis.

Marshall JC: Scottish Intensive Care Society, Intensive Care Medicine Meeting, Glasgow, Scotland, December 2008. Surgical management of acute pancreatitis.

Nathens AB: University of Medicine and Dentistry of New Jersey, Robert Wood Johnson Medical School, New Brunswick, New Jersey, October 2008. Trauma care: From policy to practice.

Nathens AB: Greater Toronto Area Data Quality Group, Toronto, ON, December 2008. Forum: Post-operative complications.

Rotstein OD: Bayer Healthcare, National Sales Meeting, Toronto, ON, January 2009. Management of intra-abdominal infections.

Rotstein OD: Dalhousie University, Department of Surgery, Grand Rounds, Halifax, NS, January 2009. Fluid resuscitation strategies following trauma.

Rotstein OD: Merck Frosst, Winnipeg, MB, February 2009. Management of complicated intra-abdominal infections.

Rotstein OD: Merck Frosst, Vancouver, BC, February 2009. Novel approaches to fluid resuscitation: From bench to bedside.

Rotstein OD: Royal Columbian Hospital, Vancouver, BC, February 2009. Management of intra-abdominal infections.

Rotstein OD: Surrey Memorial Hospital, ICU Rounds, Vancouver, BC, February 2009. Management of intra-abdominal infections.

Rotstein OD: Victoria General Hospital, Trauma Rounds, Vancouver, BC, February 2009. Management of intra-abdominal infections.

Rotstein OD: CD Pharma Interactive Medical Productions Ltd., Toronto, ON, May 2009. New developments in the management of bacterial and serious fungal infections.

Rotstein OD: Bayer Healthcare, Montreal, PQ, June 2009. Management of intra-abdominal infections.

Rotstein OD: Bayer Healthcare Inc., Stratford, ON, June 2009. Management of intra-abdominal infections.

Rotstein OD: The Canadian Society for Clinical Investigation, Annual Conference and Young Investigators Forum, Toronto, ON, September 2008. Mentoring of clinician-investigators: A joint responsibility of faculty and funders - What can the faculty do to help this process?

Rotstein OD: American College of Surgeons, Clinical Congress, San Francisco, California, October 2008. Moderator of General Session: Writing a grant and getting it right! What the pros say.

Rotstein OD: Bayer Healthcare, Moxifloxacin Expert Workshop on Hospital Infections (SSSI + IAI), Antalya, Turkey, November 2008. (1) Intra-abdominal infections overview - From basics to guidelines, (2) Moxifloxacin - Clinical results in intra-abdominal infections.

Rotstein OD: Merck Frosst Consultation Meeting, Managing Bacterial Infections Treated in Hospital in an Era of Antimicrobial Stewardship in the Canadian Setting, Toronto, ON, November 2008. A surgeon's perspective: Choices of antimicrobials in surgical intra-abdominal infections.

Rotstein OD: Ontario Association of General Surgeons, Annual General Meeting, Toronto, ON, November 2008. Wait time initiative: Is the wait strategy working?

Szaszi K: Canadian Society of Nephrology, Annual Meeting, Edmonton, AB, May 2009. Mechanism of tumor necrosis factor-1-induced Rho activation in the tubular epithelium: Role of the ERK pathway.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

Graduate Scholarship - Doctoral. *Hill A, Nathens AB, Fowler RA* (Supervisors): *Canadian Institutes of Health Research/Frederick Banting and Charles Best Canada*. (\$105,000 2008 - 2011.)

A multi-centre, randomised, double-blind, parallel group, placebo-controlled trial to evaluate the efficacy and safety of activated recombinant factor VII (rFVIIa/Novo-seven/Niastase) in severely injured trauma patients with bleeding refractory to standard treatment. *Baker A, Ahmed N, Chen R*: *Novo-Nordisk: Trial ID; F7Trauma - 1711*. (\$1,000 2006 - 2008.)

Age of blood evaluation (ABLE) trial in the resuscitation of critically ill patients. *Lacroix J, Blajchman MA, Callum JL, Cook DJ, Fergusson DA, Hebert PC, Marshall JC, McIntyre LL, Skrobik Y, Tinmouth AT*: *Canadian Institutes of Health Research*. (\$1,040,668 2008 - 2012.)

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 (NSERC), Equipment grant*. (\$32,000 2008 - 2009.)

Assessing care of patients with major traumatic injuries. *Kirkpatrick AW, Nathens AB, Stelfox HT, Straus SE, Bashaw SM, Baillie FG, Flemons WW, Ghali WA, Hameed SM, Morrison LJ, Tallon JM, Travers AH, Turgeon AF*: *Canadian Institutes of Health Research*. (\$77,299 2008 - 2011.)

Assessing care of patients with major traumatic injuries: A template for developing quality indicators. *Kirkpatrick AW, Nathens AB, Stelfox HT, Straus SE, Bagshaw SM, Baillie FG, Flemons WW, Ggali WA, Hameed SM, Morrison LJ, Tallon JM, Travers AH, Turgeon AF*: *Canadian Institutes of Health Research, New Investigator Award*. (\$49,967 2008 - 2009.)

Canada Research Chair in Trauma Systems Development. *Nathens AB*: *Canadian Government*. (\$500,000 2006 - 2011.)

Characterization of a novel, caspase-8 dependent survival pathway in inflammatory neutrophils. *Marshall JC*: *Canadian Institutes of Health Research*. (\$501,135 2009 - 2014.)

CIHR emerging team: Colorectal cancer screening. *Rabeneck L, Dobrow M, Paszat L, Ritvo P, Stukel T, Baxter NN*: *Canadian Institutes of Health Research*. (\$1,735,300 2008 - 2013.)



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.* (\$9 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 (NHLBI 1 P50 HL073996-01).* (\$1,707,032 2003 - 2008.)

Controversy in the management of differentiated thyroid cancer: Can 75% of surgeons be wrong? *Hall S, Groome PA, Irish J, George R, Archibald S, Kent W, Shelley W, Houlden R, Dreiger A, Isotalo P: Canadian Institutes of Health Research.* (\$270,000 2007 - 2010.)

Crash Injury Research and Engineering Network (CIREN) (10% Effort). *Nathens AB: National Highway Traffic Safety Administration (NHTSA).* (\$2,546,924 2005 - 2010.)

Development of a hospital-based youth violence intervention: A hospital-community collaboration. *Snider C, Abubakar S, Ahmad F, Anckle D, Kirst M, Nathens AB, Zakrisson TL: Canadian Institutes of Health Research.* (\$16,419 2008 - 2009.)

Expression, localization and function of epithelial ion transporters under physiological and pathological conditions. *Kapus A: National Sciences and Engineering Research Council (NSERC) of Canada.* (\$160,000 2005 - 2009.)

High contrast, large field of view optical coherence tomography. *Fraser J, George R, Yang V: Canadian Imaging Network Ontario.* (\$114,400 2007 - 2009.)

Impact of a structured training and assessment curriculum (STAC) on skills acquisition in minimally invasive surgery. *Grantcharov T: Network for Excellence in Simulation for Clinical Teaching and Learning.* (\$99,350 2008.)

Individual and neighbourhood level risk factors for recurrent intentional injury among youth. *Snider C, Nathens AB: The Physicians' Services Incorporated Foundation.* (\$9,000 2008 - 2009.)

Mechanisms of macrophage priming for LPS signaling by oxidative stress. *Rotstein OD: Canadian Institutes of Health Research.* (\$110,162 2005 - 2010.)

Multidisciplinary breast D cancer fellowship. *Hanrahan R, George R, Temple C: Canadian Breast Cancer Foundation.* (\$143,000 2007 - 2009.)

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.)

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.)

Quality indicators in trauma care. *Stelfox HT, Straus SE, Flemons WW, Goldsmith CH, Khandwala F, Kirkpatrick AW, McKibbin KA, Nathens AB: Canadian Institutes of Health Research.* (\$49,967 2008 - 2009.)

Regulation of epithelial paracellular permeability by apical transport processes. *Szaszi K: National Sciences and Engineering Research Council, Operating Grant.* (\$180,000 2006 - 2011.)

Regulation of intercellular contacts in kidney tubular epithelium. *Szaszi K: Kidney Foundation of Canada, Kidney Research Scientist Core Education and National Training (KRESCENT) Program, New Investigator Award, Kidney Foundation of Canada.* (\$180,000 2007 - 2010.)

Survival using glucose algorithm regulation (SUGAR). *Chittock DR, Marshall JC: Canadian Institutes of 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 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.)

Trauma system design: An evaluation of structure and process. *Nathens AB, Morrison L, Rubinfeld G: Canadian Institutes of Health Research.* (\$139,287 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 N: 2009 Canadian Association for Medical Education (CAME) New Educator's Award Nominee. January 2009.

Baxter N: Cancer Care Ontario Level I Research Chair. June 2009.

George RL: Nominee for the FitzGerald Academy Award. June 2009.

Marshall JC: Honorary Fellow, Colombian Association of Surgeons. August 2008.

Marshall JC: Honorary Member, Intensive Care Society of the Czech Republic. January 2009.

Mustard RA: Recognized for Outstanding Contribution to General Surgery Residency Training at the University of Toronto during the Annual Assembly of General Surgeons and Residents. June 2009.



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.A. Schweizer	Assistant Professor
Dr. J.S. Spears	Assistant Professor
Dr. W.S. Tucker	Associate Professor

PUBLICATIONS

Akiyama M, Munoz D, Ginsberg HJ: Spinal epidural cavernous hemangioma in an HIV positive patient. *Spine*: February 2009; 9(2): pp 6-8. E-published February 20, 2008.

Algird A, Macdonald RL: Vertebral artery and posterior inferior cerebellar artery aneurysms: Surgical technique. In: *Neurosurgical Operative Atlas. Vascular Neurosurgery* (2nd Edition): (Macdonald RL, ed.) Thieme Medical Publishers, New York: 2009: pp 81-85.

Clifford W, Sharpe H, Khu K, Cusimano MD, Knifed E, Bernstein M: Gamma knife patients' experience: Lessons learned from a qualitative study. *Neurooncology*: May 2009; 9(2): pp 387-392. E-published ahead of print: April 9, 2009.

Cusimano MD: Canadian minor hockey participants' knowledge about concussion. *The Canadian Journal of Neurological Sciences*: May 2009; 36(3): pp 315-320.

Cusimano MD, Mascarenhas AM, Manoranjan B: Spinal cord injuries due to diving: A framework and call for prevention. *Journal of Trauma*: November 2008; 65(5): pp 1180-1185.

Fischer C, Schweizer TA, Atkins JH, Bozanovic R, Norris M, Herrman N, Nisenbaum R, Rourke SB: Neurocognitive profiles in older adults with and without major depression. *International Journal of Geriatric Psychiatry*: August 2008; 23(8): pp 851-856.

Kawashima A, Macdonald RL: The nonhuman primate model of subarachnoid hemorrhage. *Animal Models of Acute Neurological Injuries*: (Chen J, Xu Z, Xu XM, Zhang J, eds.) Humana, Totawa, New Jersey: 2009: pp 315-328.

King J, Cusimano MD, Hawkins C, Dirks P: Extradural middle fossa approach to a clear cell meningioma in a child. *The Canadian Journal of Neurological Sciences*: March 2009; 36(2): pp 257-261.

Macdonald RL: *Neurosurgical Operative Atlas. Vascular Neurosurgery*: (Macdonald RL, ed.) Thieme Medical Publishers, New York: 2009: pp 1-280.

Mohammed S, Syro L, Abad V, Salehi F, Horvath E, Scheithauer B, Kovacs K, Cusimano MD: Silent somatotroph adenoma of the pituitary in an adolescent. *The Canadian Journal of Neurological Sciences*: January 2009; 36(1): pp 123-125.

Mohammed S, Syro LV, Scheithauer BW, Abad A, Uribe H, Rotondo F, Horvath E, Cusimano MD, Kovacs K: Pituitary adenoma with peliosis: A report of two cases. *Endocrine Pathology*: December 2008; 20(1): pp 41-45.

Moshkin O, Muller P, Scheithauer BW, Juco J, Horvath E, Patterson BJ, Kamel-Reid Z, Kovacs M: Primary pituitary lymphoma: A histological, immunohistochemical, and ultrastructural study with literature review. *Endocrine Pathology* (Spring Issue): February 2009; 20(1): pp 46-49.

Nolan CP, Macdonald RL: Middle cerebral artery aneurysm surgery. In: *Neurosurgical Operative Atlas. Vascular Neurosurgery, 2nd edition*: (Macdonald RL, ed.) Thieme Medical Publishers, New York: 2009: pp 38-44.

Pearl JD, Macdonald RL: Part 7, Vasospasm after aneurysmal subarachnoid hemorrhage: Need for further study. In: *Cerebral Hemorrhage* (of Book Series: *Acta Neurochirurgica Supplementum*): (Zhou LF, Xi G, Chen XC, Keep RF, Huang FP, Hua Y, Lu LC, Muraszko KM, eds.) Springer, *Acta Neurochirurgica* (Wein) (Suppl 105), Vienna: 2008: pp 207-210.

Rotondo F, Kovacs K, Scheithauer BW, Horvath E, Bell CD, Lloyd RV, Cusimano MD: Immunohistochemical expression of SNAP-25 protein in adenomas of the human pituitary. *Applied Immunohistochemical Molecule Morphology*: October 2008; 16(5): pp 477-481.

Salehi F, Kovacs K, Scheithauer BW, Lloyd RV, Cusimano MD: Pituitary tumor-transforming gene in endocrine and other neoplasms: A review and update. *Endocrine Related Cancer*: September 2008; 15(3): pp 721-743.

Vachhrajani S, Fawaz C, Mathieu D, Menard C, Cusimano MD, Gentili F, Hodaie M, Kenny B, Kulkarni AV, Laperriere N, Schwartz M, Tsao M, Bernstein M: Complications of gamma knife surgery: An early report from 2 Canadian centres. *Journal of Neurosurgery*: December 2008; 109: pp 2-7.

Vachhrajani S, Jea A, Rutka JA, Blaser S, Cusimano M, Rutka JT: Case Report: Meningioma with dural venous sinus invasion and jugular vein extension. *Journal of Neurosurgery: Pediatrics*: December 2008; 2(6): pp 391-396.

Yang YG, Iodigwe D, Macdonald RL: Meta-analysis of tirilazad mesylate in patients with aneurysmal subarachnoid hemorrhage. *Neurocritical care*: February 2009; 10(1): pp 141-147.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Cusimano MD: Xinxiang Medical University in China, Visiting Professor, Xinxiang, China, November 2008.

Ginsberg HJ: University of West Indies, Neuroscience Symposium, Montego Bay, Jamaica, January 2009. (1) Decision making in thoracolumbar trauma, (2) Update of surgical treatment of thoracic disc herniation.

Macdonald RL: American Heart Association, 34th International Stroke Conference, San Diego, California, February 2009. Statins for the prevention/treatment of cerebral vasospasm, concurrent symposia C, controversies in subarachnoid hemorrhage.

Macdonald RL: Kranzler, Dr. Leonard Invitation (Course Director), Chicago Review Courses, Chicago, Illinois, February 2009. Chicago Review Course in Neurosurgery: Pathophysiology of subarachnoid hemorrhage and vasospasm.

Macdonald RL: American Association of Neurological Surgeons, 77th Annual Meeting, San Diego, California, May 2009. Moderator of breakfast seminar: (1) Delayed neurological deterioration after subarachnoid hemorrhage, (2) Cerebral neuromonitoring.

Macdonald RL: Canadian Neurological Sciences Federation, 44th Annual Congress, Halifax, NS, June 2009. Concurrent Neurovascular Course (Clinical): Cerebral vasospasm following subarachnoid hemorrhage.

Macdonald RL: International Society for Cerebral Blood Flow and Metabolism, XXIVth International Symposium on CBF, Metabolism and Function/IXth International Conference on Quantification of Brain Function with PET, Chicago, Illinois, June 2009. Contribution of the remodeling response to cerebral vasospasm. Functional consequences of injury-induced phenotypic transformation in cerebral arteries.

Macdonald RL: Brain Aneurysm Foundation, 2nd Annual Research Grant Awards Symposium, Philadelphia, Pennsylvania, September 2008. Improving outcome after aneurysmal subarachnoid hemorrhage.

Macdonald RL: Congress of Neurological Surgeons, 58th Annual Meeting, Orlando, Florida, September 2008. (1) Cerebral ischemic disease, (2) Unruptured aneurysms.

Macdonald RL: Drexel University, College of Medicine, Department of Neurosurgery/Allegheny General Hospital, Pittsburgh, Pennsylvania, November 2008. Visiting Professor: Delayed neurological deterioration after subarachnoid hemorrhage.

Perrin RG: Buffalo State University, Division of Neurosurgery/Millard Fillmore Hospital, Buffalo, New York, June 2009. Canadian, Eh?

Perrin RG: Congress of Neurological Surgeons, Luncheon Seminar, Metastatic Spine Disease, Orlando, Florida, September 2008.

Perrin RG: Federacion Latinoamericana de Sociedades de Neurocirugia, XXXIII Congreso Latinoamericano de Neurocirugia, Bogota, Columbia, October 2008. (1) Carotid stenosis: Surgery versus stenting, (2) Clip versus coils for cerebral aneurysms.

Perrin RG: Society of Nervous System Surgery (SNSS), IV Congress, Antalya, Turkey, November 2008. (1) Stenting versus surgery for carotid stenosis, (2) Uniting neurosurgeons worldwide.

Spears JS: World Federation of Interventional Neuroradiologists, Montreal, ON, June 2009. Recurrence of aneurysm after endovascular treatment.

Tucker WS: American Orthopedic Association, Annual Meeting, Symposium 5: Beyond Medical Liability Reform: Keeping Our House in Order, Florida, June 2009. (1) Panelist, (2) Speaker.



RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in *Italics*

- (1) Photodynamic therapy: Basic and clinical science studies, (2) Prospective clinical trials in the use of photodynamic therapy (PDT) for the treatment of malignant brain tumors. *Muller P, Hetzel F, Chopp M, Hitchcock M, Patterson M, Singh G, Wilson B: National Institutes of Health.* (\$7,067,876 2004 - 2009.)
- 3-D computer simulator of spinal fusion surgery. *Ginsberg H, Whyne C: Stryker Canada.* (\$15,000 2006 - 2008.)
- A driving simulator study of brain tumour patients with focal cerebellar lesions. *Cusimano M, Schweizer TA, Cantelmi D: Brain Tumour Foundation of Canada.* (\$25,000 2008 - 2009.)
- Bicyclists' injuries and the cycling environment (BICE). *Teschke K (UBC-Vancouver), Cusimano M (Toronto Lead Investigator), Chipman M, Friedman S: Heart & Stroke Foundation.* (\$329,000 2007 - 2008.)
- Bicyclists' injuries and the cycling environment (BICE). *Teschke K (UBC-Vancouver), Cusimano M (Toronto Lead Investigator), Chipman M, Friedman S: Canadian Institutes of Health Research.* (\$250,000 2007 - 2008.)
- Bicyclists' injuries and the cycling environment (The BICE Study). *Teschke K, Babul S, Chipman M, Crompton 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: University of British Columbia/Health Care and Epidemiology.* (\$250,000 2007 - 2010.)
- Calcium channels in cerebral vasospasm. *Macdonald L: Physicians' Services Incorporated.* (\$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.)
- Cerebral infarction as a surrogate endpoint for outcome after subarachnoid hemorrhage. *Macdonald RL, Tam A (Queen's University medical student): Canadian Stroke Network.* (\$7,000 2009.)
- Clinical and cognitive correlates of functional outcome in Alzheimer's disease patients with delusions. *Schweizer TA, Fischer C, Hermann N, Nisenbaum R, Dawson D, Rourke, SB: Alzheimer Society of Canada.* (\$122,013 2008 - 2010.)
- Cognitive deficits after experimental subarachnoid hemorrhage. *Macdonald RL, Levine A (University of Western Ontario undergraduate student): Institute of Medical Science.* (\$4,800 2009.)
- Cognitive disorders following focal cerebellar lesions. *Alexander M, Cusimano MD, Schweitzer T, Stuss D: National Institutes of Health.* (\$931,820 2006 - 2010.)
- Cognitive neuroscience research lab. *Schweizer TA: St. Michael's Hospital, Research Start-Up Grant.* (\$18,000 2007 - 2010.)
- Cognitive rehabilitation in a population of adults with mild cognitive impairment. *Schweizer TA, Winocur G, Fischer C, Levine B, Rourke SB, Stuss DT: Canadian Institutes of Health Research.* (\$49,146 2008 - 2009.)
- Currently investigating novel strategies for intra-operative navigation during spinal instrumentation surgery. *Ginsberg H, Cobbold R: National Sciences and Engineering Research Council (NSERC)-\$15,000 and DePuy Spine (subsidiary of Johnson and Johnson)-\$30,000.* (\$45,000 2006 - 2008.)
- Design and testing of a novel posterior spinal fusion device providing a less invasive and faster alternative to current techniques. *Ginsberg H, Whyne C, Singh D: Canadian Institutes of Health Research.* (\$105,000 2009 - 2012.)
- Development of a prediction model for intracranial aneurysm recanalization risk after endovascular treatment. *Spears J: Heart & Stroke Foundation.* (\$64,000 2008 - 2009.)
- Development of a stroke model in non-human primates. *Macdonald RL: Canadian Stroke Network.* (\$334,000 2008 - 2010.)
- Endothelial and neuronal nitric oxide synthase expression after subarachnoid hemorrhage. *Macdonald RL, Sabri M: St. Michael's Hospital.* (\$4,000 2008.)
- Endothelial and vascular smooth muscle differential gene expression in microcirculatory vasospasm following subarachnoid hemorrhage. *Macdonald RL, Cook DJ: Brain Aneurysm Foundation, Research Grant.* (\$10,000 2008 - 2010.)
- Evaluations of natalizumab as continuous therapy (ENACT) trial: Evaluating neuroprotection in aneurysm coiling therapy. *Macdonald RL: St. Michael's Hospital.* (\$3,900 2008 - 2010.)
- Hippocampal radiosurgery exposure and memory. *Menard C, Cusimano MD: Brain Tumor Foundation.* (\$22,950 2007 - 2008.)
- Importance of vasospasm in determining outcome after subarachnoid hemorrhage. *Macdonald RL, Khezri N (University of Toronto medical student): Comprehensive Research Experience for Medical Students (CREMS), Summer Program.* (\$4,000 2009.)
- 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: Heart & Stroke Foundation, Microvention/Terumo.* (\$80,000 2007 - 2009.)
- International study of clinical and radiographic events in the management of medium and large cerebral aneurysms. *Spears J: Heart & Stroke Foundation, Clinician-Scientist Phase I Award, Renewed Grant.* (\$192,000 2008 - 2009.)
- Neurobehavioural effects of subarachnoid hemorrhage on rats. *Macdonald RL, Tariq A: Institute of Medical Sciences.* (\$4,000 2008.)

Pedicle screw insertion cadaver and simulator study. *Ginsberg H, Whyne C, Massicotte E, Martin A: St. Michael's Hospital, Trauma and Neurosurgery Multi-Disciplinary Small Grant Program.* (\$2,000 2008 - 2009.)

Preventing recurrence of chronic subdural hematomas. *Macdonald RL, Tang E: St. Michael's Hospital.* (\$4,000 2009.)

Simulated driving performance following brain damage. *Schweizer TA, Slutsky A: ACCELERATE Ontario, Ontario's Graduate Research Internship Program.* (\$15,000 2008 - 2009.)

Spinous process less invasive extendable (SPLINE) fusion - A less invasive extendable device for posterior spinal fusion. *Ginsberg H, Whyne C, Devin Singh D: Ministry of Research and Innovation, Ontario Research Commercialization Program, Proof of Principle Phase 1 Grant.* (\$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, MOP-79491.* (\$270,444 2006 - 2010.)

Treatment of subarachnoid hemorrhage with human albumin. *Macdonald RK: National Institutes of Health.* (\$60,000 2006 - 2009.)

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 Innovation.* (\$89,575 2007 - 2010.)

HONOURS RECEIVED

Spears JS: Alan R. Hudson Neurosurgery Resident Teaching Award. May 2009.

Spears JS: Donald J. Currie Undergraduate Teaching Award. June 2009.

Tucker WS: Canadian Medical Association Life Membership Award. March 2009.

Tucker WS: Squires Club Teaching Award. September 2008.



Division of Orthopaedic Surgery

Dr. H. Ahn	Assistant Professor
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

Ahn H, Bhandari M, Schemitsch EH: An evidence-based approach to the adoption of new technology. *The Journal of Bone and Joint Surgery (American)*: May 2009: 91(Suppl3): pp 95-98.

Ahn H, Court-Brown C, McQueen MM, Schemitsch E: The use of hospital registries in orthopaedic surgery. *The Journal of Bone and Joint Surgery (American)*: May 2009: 91(Suppl 3): pp 68-72.

Ahn H, Fehlings M: Prevention, identification and treatment of peri-operative spinal cord injury. *Neurosurgical Focus (sub-journal of Journal of Neurosurgery)*: November 2008: 25(5): pp 1-11.

Bhandari M, Guyatt G, Tornetta 3rd P, Schemitsch EH, Swiontkowski M, Sanders D, Walter SD: Randomized trial of reamed and unreamed intramedullary nailing of tibial shaft fractures. *The Journal of Bone and Joint Surgery (American)*: December 2008: 90(12): pp 2567-2578.

Bhandari M, Morshed S, Tornetta 3rd P, Schemitsch EH: Design, conduct, and interpretation of nonrandomized orthopaedic studies: A practical approach. (All) evidence matters. *The Journal of Bone and Joint Surgery (American)*: May 2009: 91(Suppl3): pp 1.

Bhandari M, Sprague S, Tornetta 3rd P, D'Aurora V, Schemitsch E, Shearer H, Brink O, Matthews D, Dosanjh S: (Mis)perceptions about intimate partner violence in women presenting for orthopaedic care: A survey of Canadian orthopaedic surgeons. *The Journal of Bone and Joint Surgery (American)*: July 2008: 90(7): pp 1590-1597.

Bogoch ER: Chapter 4: The lower limb extremity. In: *The Oatley McLeish Guide to Anatomy and Impairment*: (McLeish J, Oatley R, eds.) LexisNexis Canada, Toronto, Canada: 2009: pp 51-78.

Bogoch ER, Elliot-Gibson V, Escott BG, Beaton DE: The osteoporosis needs of patients with wrist fracture. *Journal of Orthopaedic Trauma*: September 2008: 22(Suppl8): pp S73-S78.

Bougherara H, Zdero R, Miric M, Shah S, Hardisty M, Zalzal P, Schemitsch EH: The biomechanics of the T2 femoral nailing system: A comparison of synthetic femurs with finite element analysis. *Proceedings of the Institute of Mechanical Engineers*: April 2009: 223(3): pp 303-314.

Busse JW, Bhandari M, Guyatt GH, Heels-Ansdell D, Mandel S, Sanders D, Schemitsch EH, Swiontkowski M, Tornetta 3rd P, Wai E, Walter SD (The SPRINT Investigators): Use of both short musculoskeletal function assessment questionnaire and short form-36 among tibial-fracture patients was redundant. *Journal of Clinical Epidemiology*: E-published April 11, 2009.

Daniels T, Thomas R: Etiology and biomechanics of ankle arthritis. *Foot and Ankle Clinics*: September 2008: 13(3): pp 341-352.

Daniels TR: Foot and ankle history and examination. *Audio-Digest Orthopaedics*: October 2008: 31(10).

Daniels TR, Mohamed MM: What is the best treatment for end-stage ankle arthritis? In: *Evidence-Based Orthopaedics: The best answers to clinical questions*: (Wright JG, ed.) Saunders, Philadelphia: 2009: pp 453-461.

Daniels TR, Thomas R: Etiology and biomechanics of ankle arthritis. In: *Foot and ankle clinics: Ankle arthritis*: (Raikin SM, Myerson M, eds.) W.B. Saunders Company, Philadelphia: 2008: pp 341-352.

Davis ET, Gallie PA, James SL, Waddell JP, Schemitsch EH: Proximity of the femoral neurovascular bundle during hip resurfacing. *Journal of Arthroplasty*: E-published April 8, 2009.

Davis ET, Olsen M, Zdero R, Papini M, Waddell JP, Schemitsch EH: A biomechanical and finite element analysis of femoral neck notching during hip resurfacing. *Journal of Biomechanical Engineering*: April 2009: 131(4): pp 041002.

Davis ET, Olsen M, Zdero R, Waddell JP, Schemitsch EH: Femoral neck fracture following hip resurfacing: The effect of alignment of the femoral component. *The Journal of Bone and Joint Surgery (British Volume)*: November 2008: 90(11): pp 1522-1527.

Emery SE, Waddell JP, Waddell AE, McCaslin M, Black K: AOA-COA Symposium: Orthopaedic education - Are we attracting the best and the brightest? *The Journal of Bone and Joint Surgery (American)*: May 2009: 91(5): pp 1253-1263.

- Gallimore CH, Zdero R, McKee MD, Koo H, McConnell AJ, Schemitsch EH:** The effect of cement mixing time on the biomechanics of cement augmented plated fractures in canine femora. *Journal of Orthopaedic Trauma*: October 2008; 22(9): pp 637-642.
- Hafez MA, Schemitsch EH:** Digital templating for revision total hip arthroplasty. In: *Hip Arthritis Surgery*: (Waddell JP, ed.) Saunders Elsevier, Philadelphia: 2008: pp 215-225.
- Hafez MA, Schemitsch EH:** Templating for primary total hip arthroplasty. In: *Hip Arthritis Surgery*: (Waddell JP, ed.) Saunders Elsevier, Philadelphia: 2008: pp 53-65.
- Hall J, Beuerlein MJ, McKee MD and the Canadian Orthopaedic Trauma Society:** Open reduction and internal fixation compared with circular fixator application for bicondylar tibial plateau fractures. *The Journal of Bone and Joint Surgery (American)*: March 2009; 91: pp 74-88.
- Hoppe DJ, Schemitsch EH, Morshed S, Tornetta 3rd P, Bhandari M:** Hierarchy of evidence: Where observational studies fit in and why we need them. *Journal of Bone and Joint Surgery (American)*: May 2009; 91(Suppl3): pp 2-9.
- Jaglal S, Hawker G, Bansod V, Salbach NM, Zwarenstein M, Carroll J, Brooks D, Cameron C, Bogoch ER, Jaakkimainen L, Kreder H:** A demonstration project of a multi-component educational intervention to improve integrated post-fracture osteoporosis care in five rural communities in Ontario, Canada. *Osteoporosis International*: February 2009; 20(2): pp 265-274.
- Karanicolas PJ, Bhandari M, Walter SD, Heels-Ansdell D, Guyatt GH; Collaboration for Outcomes Assessment in Surgical Trials (COAST) Musculoskeletal Group - Schemitsch EH, et al:** Radiographs of hip fractures were digitally altered to mask surgeons to the type of implant without compromising the reliability of quality ratings or making the rating process more difficult. *Journal of Clinical Epidemiology*: February 2009; 62(2): pp 214-223.
- Keast-Butler O, Schemitsch EH:** Biology versus mechanics in the treatment of distal radial fractures. *Journal of Orthopaedic Trauma*: September 2008; 22(8): pp 91-95.
- Keramaris NC, Calori GM, Nikolaou VS, Schemitsch EH, Giannoudis PV:** Fracture vascularity and bone healing: A systematic review of the role of VEGF. *Injury*: September 2008; Suppl2: pp S45-S57.
- Kim G, Ahn H:** What is the gold standard for anticoagulation in spine surgery? *COA Bulletin*: January 2009; 83: pp 281.
- Koo H, Leveridge M, Thompson C, Zdero R, Bhandari M, Kreder HJ, Stephen D, McKee MD, Schemitsch EH:** Interobserver reliability of the Young-Burgess and Tile classification systems for fractures of the pelvic ring. *Journal of Orthopaedic Trauma*: July 2008; 22(6): pp 379-384.
- Kuzyk PR, Lobo J, Whelan D, Zdero R, McKee MD, Schemitsch EH:** Biomechanical evaluation of extramedullary versus intramedullary fixation for reverse obliquity intertrochanteric fractures. *Journal of Orthopaedic Trauma*: January 2009; 23(1): pp 31-38.
- Levy B, Dajani K, Whelan DB, Stannard JP, Fanelli GC, Stuart MJ, Boyd JL, MacDonald PA, Marx RG:** Decision making in the multiligament injured knee: An evidence-based systematic review. *Arthroscopy*: April 2009; 25(4): pp 430-438.
- Lewis PM, Olsen M, Schemitsch EH, Waddell JP:** Echelon stems and primary total hip replacement surgery. *Orthopedics*: December 2008; 31(12): pp 100-105.
- Lewis PM, Moore CA, Olsen M, Schemitsch EH, Waddell JP:** Comparison of mid-term clinical outcomes after primary total hip arthroplasty with oxinium vs cobalt chrome femoral heads. *Orthopedics*: December 2008; 31(12Suppl2).
- Lewis PM, Al-Belooshi A, Olsen M, Schemitsch EH, Waddell JP:** Prospective randomized trial comparing alumina ceramic-on-ceramic with ceramic-on-conventional polyethylene bearings in total hip arthroplasty. *Journal of Arthroplasty*: E-published February 5, 2009.
- Li R, Stewart DJ, von Schroeder HP, MacKinnon ES, Schemitsch EH:** Effect of cell-based VEGF gene therapy on healing of a segmental bone defect. *Journal of Orthopaedic Research*: September 2008; 27(1): pp 8-14.
- MacLeod AM, Gollish J, Kennedy D, McGlasson R, Waddell J:** Toward a joint health and disease management program: Toronto hospitals partner to provide system leadership. *Healthcare Quarterly*: February 2009; 12(2): pp 56-65.
- McConnell A, Zdero R, Syed K, Peskun C, Schemitsch EH:** The biomechanics of ipsilateral intertrochanteric and femoral shaft fractures: A comparison of 5 fracture fixation techniques. *Journal of Orthopaedic Trauma*: September 2008; 22(8): pp 517-524.
- McKee MD:** Fracture healing: How strong is the effect of smoking on bone healing? In: *Evidence Based Orthopaedics*: (Wright JG, ed.) Saunders-Elsevier, Philadelphia: 2009: pp 349-353.
- McKee MD:** Fractures of the elbow. In: *AAOS Comprehensive Orthopaedic Review*: (Lieberman JR, ed.) American Academy of Orthopaedic Surgeons (AAOS) Publishing, Rosemont, Illinois: 2009: pp 887-899.
- McKee MD:** Humeral shaft fractures (E-published). In: *Orthopaedic Knowledge Online*: <http://www.aaos.org/oko>: (American Academy of Orthopaedic Surgeons, ed.) American Academy of Orthopaedic Surgeons, Rosemont, Illinois: 2008.
- McKee MD:** Supracondylar humeral fractures: Is open reduction and internal fixation or primary total elbow arthroplasty better in poor bone quality? In: *Evidence Based Orthopaedics*: (Wright JG, ed.) Saunders- Elsevier, Philadelphia: 2009: pp 373-379.
- McKee MD:** What is optimal treatment of displaced midshaft clavicle fractures? In: *Evidence Based Orthopaedics*: (Wright JG, ed.) Saunders-Elsevier, Philadelphia: 2009: pp 126-132.



McKee MD, Veillette CJ, Hall JA, Schemitsch EH, Wild LM, McCormack R, Perey B, Goetz T, Zomar M, Moon K, Mandel S, Petit S, Guy P, Leung I: A multicenter, prospective, randomized, controlled trial of open reduction-internal fixation versus total elbow arthroplasty for displaced intra-articular distal humeral fractures in elderly patients. *Journal of Shoulder and Elbow Surgery* (Jan-Feb 2009 Issue): January 2009; 18(1): pp 3-12. E-published ahead of print: September 26, 2008.

Nousiainen MT, McConnell AJ, Zdero R, McKee MD, Bhandari M, Schemitsch EH: The influence of the number of cortices of screw purchase and ankle position in Weber C ankle fracture fixation. *Journal of Orthopaedic Trauma*: August 2008; 22(7): pp 473-478.

Olsen M, Davis ET, Gallie P, Waddell JP, Schemitsch EH: The reliability of radiographic assessment of femoral neck-shaft and implant angulation in hip resurfacing arthroplasty. *Journal of Arthroplasty*: April 2009; 24(3): pp 330-340.

Olsen M, Davis ET, Waddell JP, Schemitsch EH: Imageless computer navigation for placement of the femoral component in resurfacing arthroplasty of the hip. *The Journal of Bone and Joint Surgery (British Volume)*: March 2009; 91(3): pp 310-315.

Olsen M, Gamble P, Chiu M, Turnia N, Boyle RA, Schemitsch EH: Assessment of accuracy and reliability in preoperative templating for hip resurfacing arthroplasty. *Journal of Arthroplasty*: E-published February 27, 2009.

Payandeh JB, McKee MD: Chapter 41: Fracture dislocations of the elbow with complex instability. In: *Operative Techniques in Orthopaedic Surgery*: (Ramsey M, Williams G, eds.) Lippincott Williams and Wilkins, Philadelphia, Pennsylvania: 2008.

Poolman RW, Swiontkowski MF, Fairbank JC, Schemitsch EH, Sprague S, de Vet HC: Outcome instruments: Rationale for their use. *Journal of Bone and Joint Surgery (American)*: May 2009; 91(Suppl3): pp 41-49.

Schemitsch EH, Bhandari M, McKee MD, Zdero R, Tornetta 3rd P, McGehee JB, Hawkins RJ: Orthopaedic surgeons: Artists or scientists? *Journal of Bone and Joint Surgery (American)*: May 2009; 91(5): pp 1264-1273.

Smythe HA, Bogoch ER: Common measures and analytic techniques provide flawed assessments of pain: Modeled data and hip replacement study. *Journal of Rheumatology*: December 2008; 35: pp 2400-2405. E-published ahead of print: November 15, 2008.

SPRINT (Study to Prospectively Evaluate Reamed Intramedullary Nails in Patients with Tibial Shaft Fracture) Investigators: Statistical issues in the design and analysis of expertise-based randomized clinical trials. *Statistics in Medicine*: December 2008; 27(30): pp 6583-6596.

SPRINT (Study to Prospectively Evaluate Reamed Intramedullary Nails in Patients with Tibial Shaft Fracture) Investigators including McKee MD: Randomized trial of reamed and unreamed intramedullary nailing of tibial shaft fractures. *The Journal of Bone and Joint Surgery (American)*: December 2008; 90(12): pp 2567-2578.

Whelan DB: Should first-time shoulder dislocators be stabilized surgically? In: *Evidence Based Orthopedics - The Best Answers to Clinical Questions*: [Wright JG (principal), Whelan DB (Section, eds.)] Saunders Elsevier, Philadelphia, Pennsylvania: 2009: pp 659-666.

Whelan DB, Dainty KN, Chan D, Mohtadi NG: Autograft choice in anterior cruciate ligament reconstruction: Should it be patellar tendon or hamstring tendon? In: *Evidence Based Orthopedics - The Best Answers to Clinical Questions*: [Wright JG (principal), Whelan DB (Section, eds.)] Saunders Elsevier, Philadelphia, Pennsylvania: 2009: pp 625-629.

Whelan DB, Levy B, Stannard JP, Fanelli GC, Stuart MJ, Boyd JL, MacDonald PA, Marx RG: Controversies in the treatment of knee dislocations and multiligament reconstruction. *Journal of the American Academy of Orthopedic Surgeons*: April 2009; 17(4): pp 197-206.

Wong J, El Beheiry H, Rampersaud YR, Lewis S, Ahn H, De Silva Y, Abrishami A, Baig N, McBroom RJ, Chung F: Tranexamic acid reduces perioperative blood loss in adult patients having spinal fusion surgery. *Anesthesia and Analgesia*: November 2008; 107(5): pp 1479-1486.

Zdero R, Olsen M, Bougherara H, Schemitsch EH: Cancellous bone screw purchase: A comparison of synthetic femurs, human femurs, and finite element analysis. *Proceedings of the Institution of Mechanical Engineers*: November 2008; 222(8): pp 1175-1183.

Zdero R, Olsen M, Elfatori S, Skrinkas T, Nourhosseini H, Whyne C, Schemitsch EH, Von Schroeder H: Linear and torsional mechanical characteristics of intact and reconstructed scapholunate ligaments. *Journal of Biomechanical Engineering*: April 2009; 131(4): pp 041009.

Zdero R, Olsen M, Elfatori S, Skrinkas T, Schemitsch EH, Whyne C, Von Schroeder H: A biomechanical assessment of the coupling of torsion and tension in the human scapholunate ligament. *Proceedings of the Institution of Mechanical Engineers*: August 2008; 222(6): pp 907-914.

Zdero R, Schemitsch EH: The effect of screw pullout rate on screw purchase in synthetic cancellous bone. *Journal of Biomechanical Engineering*: February 2009; 131(2): pp 024501.

Zlowodzki M, Tornetta 3rd P, Haidukewych G, Hanson BP, Petrisor B, Swiontkowski MF, Schemitsch EH, Giannoudis PV, Bhandari M: Femoral neck fractures: Evidence versus beliefs about predictors of outcome. *Orthopedics*: April 2009; 32(4): pp 260.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Ahn H: Association for Osteosynthesis (AO), Las Vegas, Nevada, January 2009. Spine trauma and regenerative spine Course.

Ahn H: International Fracture Repair Society - Osteoporosis, London, England, March 2009. Superior study design for clinical research studies.

Ahn H: Kyphon, Toronto, ON, October 2008. Kyphoplasty - A new minimally invasive approach to treating compression fractures.

Ahn H: Mohit Bandari, Mississauga, ON, November 2008. Principles and practise of clinical research course - Evidence-based medicine.

Ahn H: Stryker Spine, USA, Fort Lauderdale, Miami, November 2008. North South debate: Spinal surgery.

Ahn H: Stryker, Toronto, ON, December 2008. Canadian orthopaedic trauma review course for residents.

Bogoch ER: World Federation of Public Health Associations, 12th World Congress on Public Health, Istanbul, Turkey, April 2009. Strategies for fracture secondary prevention in Canada.

Bogoch ER: International Osteoporosis Foundation, IOF Committee of Scientific Advisors Fracture Working Group, London, United Kingdom, June 2009. Clinical pathways for fracture secondary prevention in Canada.

Bogoch ER: American Society of Bone and Mineral Research, 30th Annual Meeting, Montreal, PQ, September 2008. (1) Post-fracture osteoporosis intervention in Canada: ASBMR 2008 working group on systems based approaches to fracture secondary prevention.

Bogoch ER: University of Calgary, Division of Orthopaedic Surgery, Academic Half Day, Calgary, AB, September 2008. (1) Osteoporosis: The epidemic, implications and solutions, (2) Fracture intervention programs, (3) Osteoporosis: What's in it for our patients?

Daniels TR: University of Rochester, Grand Rounds, Rochester, New York, April 2009. Visiting Professor: Ankle arthritis: Outcomes of ankle fusion versus ankle arthroplasty.

Daniels TR: Smith and Nephew, Fox Harb'r, NS, September 2008. Keynote Speaker: Update in trauma treatment of interesting fractures: Lower limb fractures - (1) Hindfoot fracture cases (Talus and calcaneus), (2) Complications: My worst cases.

Daniels TR: University of Rochester School of Medicine, Rochester, New York, September 2008. TAR: The Toronto experience (Agility to STAR to Hintegra and Mobility) - Why mobile-bearing is so great.

Daniels TR: University of Manitoba, 48th Annual Manitoba Orthopaedic Symposium, ORTHO 2008, Winnipeg, MB, October 2008. Keynote Speaker: (1) Update on surgical management of end-stage ankle arthritis, (2) Update on surgical management of forefoot deformities.

Daniels TR: Stryker Canada, Toronto, ON, November 2008. Co-Chair of Association Internationale pour l'Osteosynthese Dynamique (AOID) Canada in foot and ankle fractures: (1) Talus fractures; (2) Medial malleolar osteotomy; (3) Cadaveric Sessions - Open Reduction Internal Fixation (ORIF) lisfranc, ORIF plafond with MIS, ORIF talar body, ORIF calcaneus, tarsal tunnel release and decompression of foot compartments.

Daniels TR: Integra LifeSciences Services, Liestal, Switzerland, December 2008. (1) Is TAR superior to ankle arthrodesis?, (2) The varus ankle: What is the problem?, (3) The valgus ankle: What is the problem?, (4) My worst case, (5) Case discussions, (6) The way to go: Indications/contraindications.

McKee MD: American Academy of Orthopaedic Surgeons/Orthopaedic Trauma Association (AAOS/OTA), Extremity War Injury Symposium IV, Washington, DC, January 2009. Participant in breakout groups.

McKee MD: Saudi Orthopaedic Association, Second Annual Meeting, Jeddah, Saudi Arabia, January 2009. (1) Fractures of the clavicle, (2) Total elbow arthroplasty (TEA) for fractures of the distal humerus, (3) Bone morphogenetic proteins (BMPs) in trauma, (4) Adult sequelae of paediatric elbow trauma.

McKee MD: Orthopaedic Trauma Association, Boston, Massachusetts, April 2009. Orthopaedic Trauma Fellows Course 2009: Prospective research: Why and How?

McKee MD: San Francisco General Hospital, Department of Orthopaedics, 4th Annual San Francisco Orthopaedic Trauma Course, San Francisco, California, April 2009. (1) Clavicle fractures, (2) Bone morphogenetic protein (BMP) and proximal tibial fractures, (3) Case discussions - Upper extremity, (4) Distal radial plating lab.

McKee MD: Landstuhl Regional Medical Center, Grand Rounds, Landstuhl Germany, September 2008. Clavicle fractures.

McKee MD: Orthopaedic Trauma Association and the United States Armed Forces, Landstuhl, Germany, September 2008. Landstuhl visiting scholar programme.

McKee MD: Orthopaedic Trauma Association, 2008 Basic Science Focus Forum, Denver, Colorado, October 2008. (1) Formatting your paper for success, (2) Local antibiotics: What is the evidence?, (3) Symposia: Displaced clavicle fractures: Indications and outcomes.

Schemitsch EH: Orthopaedic Research Society/Orthopaedic Trauma Association, Las Vegas, Nevada, February 2009. (1) Co-organizer of joint workshop: Bone morphogenetic proteins (BMPs) current evidence and future solutions, (2) Role of BMPs: Nonunions should they be standard of care.



Schemitsch EH: Osteosynthesis and Trauma Care Canada, Contemporary and Future Concepts of Orthopaedics, Whistler, BC, February 2009. (1) Course co-Chair, (2) Session Co-ordinator, (3) Moderator, (4) Panel discussion, (5) Tibia fractures: What is an acceptable reduction, (6) Delayed total hip for displaced acetabular fractures in the elderly.

Schemitsch EH: University of California San Francisco, Orthopaedic Trauma Course, San Francisco, California, April 2009. (1) Supracondylar humerus fractures, (2) Workshops: (a) Proximal humerus fracture plating, (b) Proximal tibia plating with bone morphogenetic proteins (BMP-7), (c) Tibia fracture nailing with blocking screws, (d) Indications for advanced radiographic studies, (3) Selecting an osteobiologic metaphysis, (4) Wound irrigation: Optimal pressure and solution.

Schemitsch EH: Columbia University, Orthopaedic Trauma 2009, New York, New York, May 2009. (1) Literature review, (2) Open reduction internal fixation (ORIF): Positioning, approaches, reduction maneuvers, (3) ORIF: Intramedullary nail-positioning, approaches, reduction maneuvers, (4) Case discussion, (5) Workshops: (a) Anterior approach to hip, (b) Elbow.

Schemitsch EH: Stryker Canada, Triathlon Primary and Revision Cadaveric Training, Toronto, ON, May 2009. Navigated total knee arthroplasty.

Schemitsch EH: KLEOS, Toronto, ON, June 2009. (1) Live surgery - Birmingham mid-head resection (BMHR), (2) Comparison of mechanics between the Birmingham hip resurfacing (BHR) and BMHR: What is the evidence?

Schemitsch EH: Osteosynthesis and Trauma Care Foundation, Leadership Forum, Nice, France, June 2009. Moderator: Orthopaedics in extreme conditions.

Schemitsch EH: International Society for Fracture Repair, Lake Tahoe, Nevada, July 2008. (1) Moderator - Publish or perish: What are the problems in fracture care, (2) Responding to reviewers: How to get your paper published.

Schemitsch EH: Australian Orthopaedic Association, Trauma and Spine Injury, Summer Meeting, Melbourne, Australia, August 2008. Guest Speaker: (1) Workshop intramedullary nailing, (2) Periprosthetic fractures around the hip, (3) Interventional management of fragility fractures.

Schemitsch EH: Greek Orthopaedic Association, Athens, Greece, August 2008. Guest Speaker: (1) Basic principles in the treatment of tibia fractures, (2) Overview of bone substitutes.

Schemitsch EH: John Hunter Hospital, Grand Rounds, New Castle, Australia, August 2008. (1) Current concepts in the management of open fractures.

Schemitsch EH: Charite Universitaetsmedizin Berlin, Institut fuer Anatomie, Bone Biology Congress, 5th European Clinical Symposium on Bone and Tissue Regeneration, Berlin, Germany, September 2008. (1) Moderator, (2) New concepts for fracture fixation.

Schemitsch EH: McMaster University, Orthopaedic Residents Day, Hamilton, ON, September 2008. (1) Visiting Professor, (2) 2008 Robert Lofthouse Memorial Lecture, (3) 2008 Nigel Colterjohn Memorial Lecture.

Schemitsch EH: Osteosynthesis and Trauma Care Foundation Canada, Surgical Advances in Orthopaedics, Collingwood, ON, September 2008. (1) Course co-Chair, (2) Moderator, (3) Panel Discussion, (4) Case discussion, (5) Proximal tibial fractures: Entry portal and blocking screws, (6) Distal humeral plating, (7) Total hip arthroplasty (THA) for proximal femur fracture, (8) Periprosthetic fracture case reviews, (9) Technique training: Hip resurfacing and extended trochanteric osteotomy, (10) Navigation for hip resurfacing.

Schemitsch EH: American College of Rheumatology/ Association of Rheumatology Health Professionals (ACR/ARHP), 2nd Annual U.S. Comprehensive Course on Total Hip Resurfacing Arthroplasty, Los Angeles, California, October 2008. Computer assisted resurfacing - My approach.

Schemitsch EH: Greek Orthopaedic Association, 64th Panhellenic Orthopaedic Meeting, Athens, Greece, October 2008. Guest speaker, (1) Basic principles in the treatment of tibia fractures, (2) Overview of bone substitutes.

Schemitsch EH: Orthopaedic Trauma Association, Basic Science Focus Forum, Denver, Colorado, October 2008. (1) Symposium moderator: (a) Current concepts in open fracture management, (b) Publishing a paper: How I do it, (2) Paper session moderator: (a) Open fracture paper session overview, (b) Why papers don't get published, (3) Symposium: Research grant writing.

Schemitsch EH: Canadian Orthopaedic Association, Clinical Research Course, 2nd Principles, Toronto, ON, November 2008. (1) Course Chair, (2) Session moderator, (3) Practical breakout sessions, (4) Study protocols: The bare bones, (5) Writing your paper for publication: Do's and don'ts, (6) Lessons learned from the OP-1 randomized trial.

Schemitsch EH: Osteosynthesis and Trauma Care Foundation, Practical Solutions for Difficult Fractures of the Elbow, Foot and Ankle, Toronto, ON, November 2008. (1) Course co-Chair, (2) Moderator, (3) Lab demonstrator, (4) Case discussions, (5) Comminuted distal humerus fracture.

Schemitsch EH: Canadian Orthopaedic Resident's Trauma Review Course, Toronto, ON, December 2008. (1) Course co-Chair, (2) Breakout sessions, (3) Moderator, (4) Distal humerus fractures, (5) Elbow fracture dislocations, (6) Midshaft forearm fractures.

Waddell JP: European Federation of National Associations of Orthopaedics and Traumatology, Art of Symposium: Fractures of the Proximal Femur, Vienna, Austria, March 2009. (1) Moderator, (2) Femoral neck fractures - internal fixation, (3) Intertrochanteric fractures - arthroplasty.

Waddell JP: Societe Internationale de Chirurgie Orthopedique et de Traumatologie (SICOT), Hong Kong, August 2008. (1) Infection after open fracture, (2) Mortality in open femur fractures, (3) Moderator: SICOT Trauma/ArtOf: Open fractures 1, (4) Moderator: SICOT/Trauma: Tibial fractures II.

Waddell JP: Institut de Appareil Locomoteur Universite Paul Sabtier, Hip ' 2008, Hip Surgery Congress, Toulouse, France, September 2008. (1) Moderator: (a) Dual mobility cup, (b) Total hip replacement (THR) in the treatment of post-acetabular fracture osteoarthritis, (2) Total hip replacement for complications of acetabular fractures, (3) Randomized clinical trial of alumina-alumina versus alumina-polyethylene: Results at 10 years, (4) Total hip replacement for complications of intertrochanteric fractures of the femur.

Waddell JP: Hellenic Association of Orthopaedic Surgery and Traumatology, 64th Panhellenic Orthopaedic Congress, Athens, Greece, October 2008. (1) From vascularized fibular graft to tantalum, (2) Imperatives of fixation the stem, (3) Ceramic-on-ceramic, (4) Cementless stems in revision surgery.

Waddell JP: Orthopaedic Trauma Association, Comprehensive Fracture Course for Residents, Denver, Colorado, October 2008. Polytrauma patients: Evaluation and assessment.

Waddell JP: Ontario Orthopaedic Association, Toronto, ON, November 2008. Ontario Orthopaedic Expert Panel: What it can (and can't) do for you.

Waddell JP: International College of Surgeons, XXXVI Biennial World Congress, Vienna, Austria, December 2008. (1) Classification and primary measures [trauma-open fractures I], (2) Infection after open fractures [trauma-open fractures II].

Whelan DB: Arthroscopy Association of North America (AANA), Chicago, Illinois, March 2009. Demonstrator and table instructor of Master's course for knee laboratory.

Whelan DB: Conmed Linvatec, Evening for Sport Medicine Surgeons, Mississauga, ON, April 2009. Anteromedial portal approach to the femoral tunnel for anterior cruciate ligament reconstruction.

Whelan DB: University of Minnesota and TRIA Orthopedic Center, Bloomington, Minnesota, June 2009. Evidence-based medicine for posteriolateral corner repair versus reconstruction.

Whelan DB: University of Manitoba, Ortho 2008, 48th Annual Manitoba Orthopaedic Symposium, Winnipeg, MB, October 2008. (1) Graft choice in anterior cruciate ligament (ACL) reconstruction, (2) Commentator - live surgery on anterior cruciate ligament (ACL) reconstruction, (3) The orthopaedic management of primary shoulder dislocations, (4) Knee dislocations.

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: Biomimetics.* (\$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 MD, Canadian Orthopaedic Trauma Society: Orthopaedic Trauma Association.* (\$50,000 2007 - 2008.)

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 versus sliding hip screws for femoral neck fractures. *FAITH Investigators [Bhandari M, Schemitsch EH (Co-Investigator, Steering Committee Member)]: Physicians' Services Incorporated (PSI).* (\$93,000 2008 - 2010.)

A randomized trial of cannulated screws versus sliding hip screws for femoral neck fractures. *FAITH Investigators [Bhandari M, Schemitsch EH (Co-Investigator, Steering Committee Member)]: National Institutes of Health (NIH).* (\$1,372,763 2008 - 2010.)

A randomized trial of cannulated screws versus sliding hip screws for femoral neck fractures. *Faith Investigators [Bhandari M (PI), Schemitsch EH (Co-PI and Steering Committee)]: Canadian Institutes of Health Research.* (\$160,267 2008 - 2010.)

A randomized trial of fluid lavage in open wounds. *FLOW Investigators [Bhandari M, Petrisor B, Schemitsch EH (Co-PI, Steering Committee Member)]: McMaster University, Department of Surgery.* (\$12,630 2008 - 2010.)

A randomized trial of fluid lavage in open wounds. *FLOW Investigators [Bhandari M, Petrisor B, Schemitsch EH (Co-PI, Steering Committee Member)]: Canadian Institutes of Health Research.* (\$1,748,487 2009 - 2013.)

A randomized trial of fluid lavage in open wounds. *FLOW Investigators [Bhandari M (PI), Petrisor B, Schemitsch EH (Co-PI and Steering Committee)]: Osteosynthesis and Trauma Care Foundation.* (\$50,000 2008 - 2010.)



A randomized trial of fluid lavage in open wounds. *FLOW Investigators [Bhandari M, Petrisor B, Schemitsch EH (Co-Investigator, Steering Committee-United States Department of Defence)]: Orthopaedic Trauma Research Program.* (\$953,924 2008 - 2010.)

A randomized trial of fluid lavage in the treatment of open wounds. *FLOW Investigators [Bhandari M (PI), Petrisor B, Schemitsch EH (Co-PI and Steering Committee)]: Orthopaedic Trauma Association.* (\$48,000 2006 - 2008.)

A randomized trial of hemiarthroplasty versus total hip arthroplasty for femoral neck fractures. *HEALTH Investigators [Bhandari M, Schemitsch EH (co-Investigator, Steering Committee Member)]: National Institutes of Health (NIH).* (\$540,708 2008 - 2012.)

A randomized trial of hemiarthroplasty versus total hip arthroplasty for femoral neck fractures. *HEALTH Investigators [Bhandari M, Schemitsch EH (Co-Investigator, Steering Committee Member)]: Canadian Institutes of Health Research.* (\$139,423 2008 - 2010.)

A randomized trial of non-operative versus operative treatment of acromioclavicular joint injuries. *McKee MD, Schemitsch EH, Canadian Orthopaedic Trauma Society: Osteosynthesis and Trauma Care Foundation.* (\$50,000 2007 - 2009.)

A randomized trial of non-operative versus operative treatment of acromioclavicular joint injuries. *McKee MD, Schemitsch EH, Canadian Orthopaedic Trauma Society: Orthopaedic Trauma Association.* (\$40,000 2007 - 2009.)

A randomized trial of total hip arthroplasty versus hemiarthroplasty for femoral neck fractures. *Health Investigators [Bhandari M, Schemitsch EH (Co-Investigator, Steering Committee Member)]: Canadian Institutes of Health Research.* (\$139,423 2008 - 2010.)

An 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 (AIOD) International.* (\$50,000 2008 - 2009.)

Bone marrow-derived stem cell-based gene therapy to accelerate fracture healing. *Schemitsch EH, Li R, Stewart DJ: Canadian Institutes of Health Research.* (\$57,839 2009 - 2010.)

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 L: Canadian Institutes of Health Research.* (\$88,193 2008 - 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 (AIOD) Canada.* (\$50,000 2006 - 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.)

Data collection and analysis from the Ontario Osteoporosis Strategy Post-fracture Osteoporosis Coordinator Program in Ontario fracture clinics. *Bogoch ER, Beaton DE: Province of Ontario Ministry of Health and Long-Term Care.* (\$325,000 2008 - 2009.)

Development of a fellowship in surgical navigation. *Schemitsch EH: Stryker.* (\$50,000 2006 - 2008.)

Effect of mesenchymal stem cell-based gene transfer of VEGF and eNOS on healing of a segmental bone defect. *Nauth A, Li R, Schemitsch EH: The Physicians' Services Incorporated Foundation.* (\$20,000 2008 - 2009.)

Effect of mesenchymal stem cell-based gene transfer of VEGF and eNOS on healing of a segmental bone defect. *Nauth A, Li R, Schemitsch EH: Orthopaedic Trauma Association.* (\$10,000 2008 - 2009.)

Effect of multiple and delayed administrations of cell-based vascular endothelial growth factor (VEGF) gene therapy administrations on a segmental bone defect. *Qamirani E, Li R, Schemitsch EH: Osteosynthesis and Trauma Care Foundation.* (\$10,000 2008 - 2010.)

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.)

Gait analysis of total ankle replacement patients. *Daniels TR: Integra Life Sciences.* (\$60,000 2008.)

Gait analysis of total ankle replacement patients. *Daniels TR: Integra Life Sciences.* (\$60,000 2009.)

GEM-OS1 randomized clinical trial. *Daniels TR: BioMimetics.* (\$100,000 2008 - 2009.)

Implementation and evaluation of collaborations between Sunnybrook Health Sciences Centre, AHSCs, Criticall and the LHIN in spinal care: A demonstration study to enhance acute spinal triage and patient care. *Ahn H, Ginsberg H, Yee A, Fehlings M: Ministry of Health Innovation Fund.* (\$60,000 2009 - 2011.)

International hip fracture research collaboration meeting. *Bhandari M, Devereaux PJ, Guyatt G, Schemitsch EH, Walter S, Einhorn T, Koval K, Rosen C, Swiontkowski M, Tornetta P, Heetveld M, Poolman RW, Richardson M: Canadian Institutes of Health Research.* (\$24,495 2009 - 2010.)

Microfracture technique and its effectiveness for osteopenic versus sclerotic bone. *Whelan DB, Marks P, Theodoropoulos J, Hurtig M: Canadian Arthritis Network.* (\$240,000 2009 - 2011.)

Osteoporosis exemplary fracture care program. *Bogoch ER: Alliance for Better Bone Health (Procter and Gamble Pharmaceuticals Canada Inc.)* (\$200,000 2008 - 2009.)

Outcome management: The importance of time. *Aileen D, 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.)

Regional osteoporosis coordinator knowledge exchange trial (ROCKET). *Jaglal S, Beaton DE, Bogoch ER, Cadarette S, Donescu S, Hawker G, Kloosek 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.)

Regulation of VEGF expression during cell-based gene therapy for bone healing. *Schemitsch EH, Li R: Osteosynthesis and Trauma Care Foundation.* (\$50,000 2008 - 2011.)

The use of EPC-based multi-gene transfer in healing of a segmental bone defect. *Schemitsch EH, Li R: The Physicians' Services Incorporated Foundation.* (\$92,000 2008 - 2011.)

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. *Trust Investigators [Guyatt G (PI), Bhandari M, Busse J, Sanders D, Schemitsch EH (Co-PI and Steering Committee)]: Canadian Institutes of Health Research/Smith and Nephew.* (\$2,025,469 2007 - 2010.)

Use of a novel scaffold to accelerate fracture healing. *Kuzyk P, Schemitsch EH, Davies J: Association Internationale for l'Osteosynthese Dynamique (AIOD) 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: Resident Program Director for St. Michael's Hospital. July 2008.

Daniels TR: Wyeth Award, Second Place awarded during Gallie Day to Syndie Singer in a competition for best non-bench research: Ankle arthroplasty and ankle arthrodesis - Prospective gait analysis compared to controls (Supervisor: Timothy R. Daniels). May 2009.

McKee MD: Best Paper Award at the International Society for Fracture Repair 2008 Annual Meeting to the S.P.R.I.N.T. Investigators for: A randomized controlled trial of reamed versus non-reamed intramedullary nail insertion on rates of re-operation in patients with fractures of the tibia. July 2008.

McKee MD: Medal of Excellence from the Canadian Forces, Chief of Defence. September 2008.

McKee MD: United States Navy Corpsman Medal. September 2008.

McKee MD: Winkvist Cup Award - Top teaching group, Orthopaedic Trauma Association (OTA) Residents Course 2009. October 2008.

Schemitsch EH: Best Scientific Paper: International Society for Fracture Repair (by SPRINT Investigators, including Schemitsch EH). July 2008.

Schemitsch EH: Gold Medal Award (\$5000.00) to SPRINT Investigators from The Royal College of Physicians and Surgeons of Canada (RCPSC). January 2009.

Schemitsch EH: Iscas Olympus Best Paper Award from The International Society for Computer Aided Surgery. June 2009.

Schemitsch EH: The Edwin G. Bovill Award for Best Paper to SPRINT Investigators (including Bhandari M, Schemitsch EH, Tornetta P, Swiontkowski M, Sanders D, Guyatt G) at the Orthopaedic Trauma Association, Annual Meeting 2007. July 2008.

Whelan DB: William Horsey Postgraduate Teaching Award in recognition of time spent with residents/fellows, using unique educational approaches, stimulating curiosity in the field and for serving as a role model. June 2009.



Division of Plastic Surgery

Dr. J.L. Mahoney Professor (Division Head)
Dr. M.A. Musgrave Assistant Professor

PUBLICATIONS

Fawzy H, Alhodaib N, Mazer CD, Harrington A, Latter D, Bonneau D, Errett L, Mahoney J: Sternal plating for primary and secondary sternal closure: Can it improve sternal stability? *Journal of Cardiothoracic Surgery*: May 2009; 4(19): pp 1-7.

Marchie A, Mahoney JL: Are there any correlations between social and hand functions in patients with carpal tunnel release surgery postoperatively? *The Canadian Journal of Plastic Surgery*: January 2009; 16(4): pp 216-220.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Mahoney JL: American Society of Plastic Surgeons, Transatlantic Innovations, Paris, France, April 2009. Effect of closure technique on sternal stability.

Mahoney JL: North American Center for Continuing Medical Education (NACCME), The Symposium on Advanced Wound Care and the Wound Healing Society, Spring Symposium, Dallas, Texas, April 2009. (1) Quality of life following pressure wound reconstruction, (2) The impact of diabetic foot wounds on patient health-related quality of life: Validation of the Cardiff wound impact schedule.

Mahoney JL: The University of Arizona, Technology Symposium, Tuscon, Arizona, May 2009. (1) Complex patient management: Stabilization of reconstruction of the thorax, (2) Sternal wound management: Principles of wound care and osteosynthesis.

Mahoney JL: McMaster University, Division of Plastic Surgery, Hamilton, ON, October 2008. Sternal infections.

Mahoney JL: Toronto Health Economics and Technology Assessment (THETA) - Ministry of Health and Long Term Care (Ontario) Collaborative, Toronto, ON, October 2008. Pressure ulcers expert panel.

Musgrave MA: Canadian Society of Aesthetic and Plastic Surgery Nurses, Mentor Symposium, Toronto, ON, November 2008. Breast reconstruction: What are the options?

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: Association for Osteosynthesis (AO) Foundation. (\$5,000 2006 - 2009.)*

Effect of breast reduction surgery on indicators of insulin resistance: A pilot study. *Neinstein R, Ray J, Mahoney JL, Musgrave M: The Physicians' Services Incorporated Foundation. (\$4,500 2008 - 2009.)*

Effect of breast reduction surgery on indicators of insulin resistance: A pilot study. *Neinstein R, Ray JG, Mahoney JL, Musgrave M: Canadian Society of Plastic Surgeons. (\$10,000 2008 - 2009.)*

Innovation proposal: Chiropractic rapid response service. *Ray J, Sargeant R, Mahoney JL, Leiter L: Ministry of Health and Long-Term Care, Innovation Fund. (\$63,000 2009 - 2010.)*

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: Association for Osteosynthesis (AO) Research Fund, Stettbachstrasse 6, 8600 Dubendorf (Switzerland). (\$35,000 2007 - 2008.)*

Wounds and surgical site infections: Development of web-based tool for patient education. *Mahoney JL, Musgrave M: Ministry of Health and Long Term Care, Innovation Fund. (\$7,500 2009 - 2010.)*



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

Braga LHP, Lorenzo AJ, DeMaria J, Pace K, Uleryk E: Systematic review and meta-analysis of robotic assisted versus conventional laparoscopic pyeloplasty for patients with ureteropelvic junction obstruction: Effect on operative time, length of hospital stay, postoperative complications, and success rate. *European Urology*: E-published April 1, 2009.

Dave S, 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.

Finelli A, Pace KT, Sharir S, Schultz S, Gunraj N, Wilton AS, Przbysz R, Simunovic M, Urbach DR: Surgery for prostate cancer. In: *Cancer Surgery in Ontario: ICES Atlas*: (Urbach DR, Simunovic M, Schultz SE, eds.) Institute for Clinical Evaluative Sciences (ICES), Toronto: 2008: pp 29-52.

Honey J: Treating lower pole renal stones: In defence of shock wave lithotripsy. *Canadian Urological Association Journal*: December 2008; 2(6): pp 625-626.

Pace K: Determining the best treatment for renal cell carcinoma in young patients. *Canadian Urological Association Journal*: December 2008; 2(6): pp 618.

Pace K: Kidney donation surgery: The benefits of laparoscopic donor nephrectomy. *St. Michael's Hospital Transplant Digest*: July 2008; 4: pp 3-4.

Pace KT, Schuler TD, Honey RJ: Long term health related quality of life (HRQOL) following laparoscopic (LDN) and open (ODN) donor nephrectomy. *Journal of Endourology*: November 2008; 22(1): pp 220.

Perks AE, Schuler TD, Lee J, Ghiculete D, Chung DG, Honey RJ, Pace KT: Stone attenuation and skin-to-stone distance on computed tomography (CT) predicts stone fragmentation with shock wave lithotripsy. *Urology*: October 2008; 72(4): pp 765-769.

Rane A, Rao P, Bradoo A, Shivde S, Elhilali M, Anidjar M, Pace KT, Honey RJ: The use of a novel thermosensitive polymer (backstop) to prevent ureteric stone retropulsion during intracorporeal lithotripsy. *Journal of Endourology*: November 2008; 22(1): pp 109-110.

Romaschin AD, Youssef Y, Chow TF, Siu KW, DeSouza LV, Honey RJ, Stewart R, Pace KT, Yousef GM: Exploring the pathogenesis of renal cell carcinoma: Pathway and bioinformatics analysis of dysregulated genes and proteins. *Biological Chemistry*: February 2009; 390(2): pp 125-135. E-published February 9, 2009.

Schuler TD, Perks AE, Fazio LM, Blew BDM, Mazer D, Hare G, D'A Honey JR, KT Pace: Impact of arterial and arteriovenous renal clamping with and without intrarenal cooling on renal oxygenation and temperature in a porcine model. *Journal of Endourology*: October 2008; 22(10): pp 2367-2372.

Schuler TD, Ray JA, Pace KT, Honey RJ: Optimizing outcomes following shock wave lithotripsy. *American Urological Association Update Series* 2009: April 2009: 28 (Lesson 16): pp 138-148.

Schuler TD, Shahani R, Honey RJ, Pace KT: Medical expulsive therapy as an adjunct to improve shockwave lithotripsy outcomes: A systematic review and meta-analysis. *Journal of Endourology*: March 2009; 23(3): pp 387-393.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Honey RJD: Chinese Urological Association/Chinese Medical Association, The 26th World Congress of Endourology and Shock Wave Lithotripsy (SWL), Shanghai, China, November 2008. (1) Invited Faculty, (2) Course Director and Designer: (a) Instructional Course 14: Transplantation and laparoscopy, (b) Cook/Storz Hands-on Course: Flexible ureteroscopy for renal stones.

Honey RJD: American Urological Association, Annual Meeting, Chicago, Illinois, April 2009. (1) Director of Hands-on Course: Flexible ureteroscopy for renal stones, (2) Speaker.

Pace KT: American Urological Association, Chicago, Illinois, April 2009. Introduction to flexible ureteroscopy: Indications, preparation, anesthesia and access.

Pace KT: Canadian Urological Association, Course on Advanced Urologic Laparoscopy, Toronto, ON, June 2009. (1) Complications of laparoscopy: Avoidance and management, (2) Practical tips for laparoscopic suturing, (3) Robotic-assisted radical prostatectomy: Separating hype from reality, (4) Percutaneous nephrolithotomy: Upper versus lower pole renal access, (5) Tubeless versus tubed percutaneous nephrolithotomy.

Pace KT: 26th World Congress on Endourology & SWL, Shanghai, China, November-December 2008. Course Director and Speaker: (1) Cook/Storz Hands-on-Course on flexible ureteroscopy for renal stones, (2) Course Director and Designer of Instructional Course 14: Transplantation and Laparoscopy.

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-centred randomized clinical trial, funded by Sanofi-Aventis. (\$100,000 2007 - 2009.)*

HONOURS RECEIVED

Pace KT: Urology Residents Clinical Teaching Award, University of Toronto. June 2009.



Division of Vascular Surgery

Dr. F.M. Ameli	Associate Professor
Dr. V.M. Campbell	Assistant Professor
Dr. C. Cina	Professor
Dr. A.G. Lossing	Associate Professor
Dr. W. Tanner	Assistant Professor

PUBLICATION

Bednarska E, Bryant D, Devereaux PJ: Orthopaedic surgeons prefer to participate in expertise-based randomized trials. *Clinical Orthopedics and Related Research*: July 2008: 466(7): pp 1734-1744.

Cadeddu M, Farrokhyar F, Thoma A, Haines T, Garnett A, Goldsmith CH: Users' guide to the surgical literature: How to assess power and sample size. *Laparoscopic versus open appendectomy*. *Canadian Journal of Surgery*: December 2008: 51(6): pp 476-482.

Cina CS: Chapter 35: Fenestrated and branched endograft for the treatment of juxtarenal and thoraco-abdominal aortic aneurysms. In: *Aortic Surgery and Anesthesia, How To Do It*: (Chiesa R, Melissano G, Alfieri O, eds.) Editrice San Raffaele, Milano, Italy: 2008: pp 160-162.

Cina CS, Clase CM: Chapter 20: When saving blood goes wrong. In: *When Research Studies Go Off the Rails, Solutions and Prevention Strategies*: (Streiner ED, Sidani S, eds.) Guilford Publications Inc., New York, New York: 2009: pp 177-182.

Cina CS, Mastracci TM: Chapter 37: Exposure of visceral arteries for aneurysm. In: *Atlas of Arterial Surgery (Atlante di Chirurgia Delle Arterie)*: (Cavallaro E, Sterpetti A, Barberini F, eds.) Piccin, Padova, Italy: 2009: pp 517-534.

Cina CS, Moore R, Maggisano R, Kucey D, Dueck A, Rapanos T: Endovascular repair of popliteal artery aneurysms with anaconda limbs: Technique and early results. *Catheter Cardiovascular Intervention*: November 2008: 72(5): pp 716-724.

Mastracci TM, Garrido-Olivares L, Cina CS, Clase CM: Endovascular repair of ruptured abdominal aortic aneurysms: A systematic review and meta-analysis (Author Reply on page 258). *Journal of Vascular Surgery*: July 2008: 48(1): pp 257-258.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Ameli FM: Rocky Mountain Traumatologic Society, 51st Annual Meeting, Snowmass, Colorado, January 2009. Impressions of vascular surgery in China.

Ameli FM: Association of International Vascular Surgeons, Jackson Hole, Wyoming, March 2009. (1) Chairman of session entitled, Abdominal Aortic Aneurysms, (2) Moderator of breakout session entitled, Ruptured Aortic Aneurysm, (3) Impressions of vascular surgery in China.

Ameli FM: Chinese Society of Vascular Surgery, 9th Annual Conference on Vascular Surgery of China, Taiwan, Shandong Province of The Peoples Republic of China, August 2008. Guest.

Ameli FM: Shandong University Clinical School/Shandong Provincial Qianfoshan Hospital, Jinan, Shandong Province, The Peoples Republic of China, August 2008. Visiting Professor.

Cina C: Jean-Pierre Becquemin and Yves S. Alimi for the Controverses et Actualites en Chirurgie Vasculaire (CACVS), Paris, France, January 2009. Canadian experience with the Anaconda system for EVAR controversies and updates in vascular surgery.

Cina C: Instituto Nacional de Ciencias Medicas - Academia Nacional de Medicina, Academia Mexicana de Cirurgia, Mexico City, Mexico, February 2009. The value of screening for abdominal aortic aneurysms.

Cina C: Santa Sofia Hospital, Palermo, Italy, May 2009. Proctoring Dr. Silvio Licata in endovascular repair of aortic aneurysms.

Cina C: University of Catania, Catania, Italy, May 2009. (1) Traditional open surgery for thoracoabdominal aortic surgery: The Canadian experience, (2) Fenestrated branched stent grafting versus hybrid procedures for thoraco-abdominal aneurysms. The pro fenestrated branched stent grafting, (3) Aortic arch debranching, (4) Identifying the patient at risk and strategies to minimize the risk of paraplegia.

Cina C: University of Messina, Messina, Italy, May 2009. Magistral Lecture: Ischemia of the spinal cord during thoracoabdominal aortic aneurysm repair: Identification of surgery at risk and techniques for prevention.

Cina C: Casa di Cura Francesco Basile, Catania, Italy, September 2008. Endovascular repair of complex aortic surgery. Updates in vascular surgery.

Cina C: The Australia-New Zealand Vascular Society, Vascular Symposium, Adelaide, Australia, September 2008. (1) Fenestrated stent grafting versus hybrid procedures for thoraco-abdominal aneurysms, (2) Identifying the patient at risk and strategies to minimize the risk of paraplegia, (3) The use of the Anaconda system in the management of aneurysmal disease: The Canadian experience and answer your questions.

Cina C: The Italian Vascular and Endovascular Society, Padova, Italy, November 2008. Debranching of the thoracic aorta for endovascular repair of arch aneurysms.

Cina C: San Raffaele Hospital, 3rd Aortic Surgery Meeting, Milan, Italy, December 2008. (1) Workshop in endovascular thoracic surgery. How I do it?, (2) Fenestrated and branched endografts for the treatment of juxtarenal and thoraco-abdominal aortic aneurysms. How I do it, (3) Canadian experience with the Anaconda system for EVAR controversies and updates in vascular surgery.

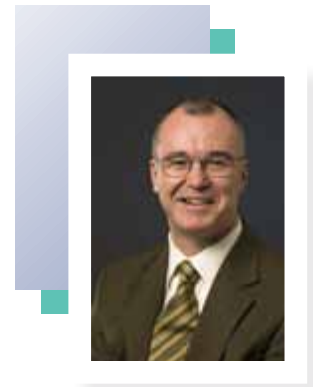
Lossing AG: Society for Vascular Nursing, Denver, Colorado, April 2009. The gender factor in aortic aneurysms: Reviewing the evidence.

Tanner W: The Rocky Mountain Traumatological Society, 51st Annual Meeting, Snowmass, Colorado, January 2009. Public health care – the Canadian version.

Sunnybrook Health Sciences Centre

Robin Richards

Surgeon-in-Chief



HEADS OF DIVISION

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

During 2008-2009 Sunnybrook experienced significant growth in its physical plant with the opening of an expanded Emergency Room facility and construction of four new floors on M Wing. The Department benefited from incremental wait time funding for hip and knee arthroplasty and the performance of surgical oncologic procedures. Strategic focusing continued to occur and the Department remained well aligned with the Hospitals' areas of emphasis.

Fuad Moussa was appointed as a Surgeon-Teacher in the Division of Cardiac and Vascular Surgery with a special interest in off-pump and minimally invasive coronary arterial procedures.

NEW STAFF

Leo da Costa was appointed as a Surgeon-Investigator in the Division of Neurosurgery with a special interest in vascular neurosurgery. Todd Mainprize was appointed as a Surgeon-Investigator in the Division of Neurosurgery with a special interest in neuro oncology. Diane Nam was appointed as a Surgeon-Scientist in the Division of Orthopaedic Surgery. Dr. Nam's clinical interest is in the upper extremity and she will study the immunology of fracture healing in the laboratory. Giuseppe Papia was appointed as a Surgeon-Teacher in the Division of Cardiac and Vascular Surgery and cross-appointed in the Department of Critical Care Medicine with a special interest in patient safety and percutaneous vascular surgical procedures.

APPOINTMENTS AND PROMOTIONS

Markku Nousiainen was promoted to Assistant Professor upon completion of his MEd degree at OISE. Gideon Cohen was promoted to Associate Professor for his contributions to the surgical treatment of atrial fibrillation and cardiac valvular surgery. Frances Wright was promoted to Associate Professor in recognition of her contributions to knowledge translation in surgical oncology.

Andy Smith was appointed to succeed Zane Cohen as Chair of the University Division of General Surgery. George Christakis was appointed Co-Ordinator of Undergraduate Education. Sandro Rizoli was appointed Chair of the Blood Transfusion and Tissue Bank Committee.

EDUCATIONAL ACTIVITY AND AWARDS

David Stephen presented at the 10th Annual Chicago Trauma Symposium. Andy Smith was the Chair and Natalie Coburn, Darlene Fenech, Claire Holloway, Calvin Law,



May Lynn Quan and Frances Wright presented at the Update in Surgical Oncology held in October. The staff of the Holland Centre held a successful symposium, also in October, on optimizing functional outcome following total joint replacement focusing on total knee arthroplasty. Robin Richards co-Chaired and Terry Axelrod, Stewart Wright, Richard Holtby, Paul Binhammer and Diane Nam presented at the 25th Annual Upper Extremity Update held in April. Fred Brenneman, Claire Holloway, Calvin Law, May Lynn Quan, Sandro Rizoli, Ted Ross, Andy Smith and Frances Wright presented at the 49th Annual Update in General Surgery held in April. Albert Yee, Cari Whyne, Hamilton Hall and Joel Finkelstein presented at the Inaugural University of Toronto SpineFEST Visiting Professorship.

Markku Nousiainen received a Canadian Orthopaedic Research Legacy award to study training femoral neck insertions skills to surgical trainees comparing computer assisted surgery to conventional fluoroscopic technique. Veronica Wadey received Dean's Funding for her educational research and was appointed an Associate Scientist in the Sunnybrook Research Institute.

Rob Cartotto received the Arnis Frieberg Resident Teaching Award, an award decided by the closed balloting of the residents enrolled in the University of Toronto Postgraduate Training Program in Plastic Surgery. David Stephen received the Orthopaedic Chair's Resident Teaching Award as voted by the orthopaedic trainees. Calvin Law received the Tovee Award for postgraduate teaching at Gallie Day. Paul Binhammer received the University of Toronto Surgical Skills Centre Distinguished Education Award for his outstanding educational contributions at the Centre. Peter Chu received a Peters-Boyd PBL Teaching Award and Calvin Law was nominated for a Peters-Boyd Academy Award. Richard Backstein (Plastic Surgery), Alexandra Mihailovic (General Surgery), Christopher Peskun (Orthopaedic Surgery) and Karen Wong (Plastic Surgery) received Harrison Awards for their teaching.

RESEARCH ACTIVITY AND AWARDS

Natalie Coburn received a Career Scientist Award from the Ministry of Health and Long Term Care. Claire Holloway and her colleagues received a CIHR operating grant for her breast cancer research. Paul Marks collaborated with colleagues in a strategic NSERC grant studying the restoration of joint function through subchondral delivery of therapeutics and also received a Canadian Arthritis Network Grant studying outcomes after microfracture repair of cartilage defects. Darlene Fenech, Andy Smith, Natalie Coburn, Calvin Law, May Lynn Quan, Frances Wright and Anna Gagliardi presented posters at the Society of Surgical Oncology meeting in March in Phoenix. Rob Cartotto, Shar Shahrokhi, Joel Fish, Manuel Gomez and colleagues delivered multiple presentations at the annual general meeting of the American Burn Association.

Hans Kreder, Homer Tien and Albert Yee received innovation funding from the Sunnybrook Alternative Funding Plan Association for health care delivery studies.

Laurie Klotz, Vasu Venkateswaran, Robert Nam, Cari Whyne and Albert Yee continued their laboratory research studies. Robert Nam received the George-Armstrong Peters Prize for outstanding productivity during his initial period as an independent investigator at Gallie Day. Robert's work was featured in the Annual Report of the National Cancer Institute of Canada.

OTHER AWARDS AND ACTIVITIES

Sandro Rizoli was appointed to the Anna Maria de Souza Chair of Trauma Research in recognition of his research contributions in the field. Barry McLellan, Robert Nam and Jeff Gollish participated in the Sunnybrook Schulich Advanced Leadership Program. Robin Richards delivered the RI Harris lecture "Orthopaedic Surgery - The Journey of a Lifetime, Lessons Learned Along the Way" at the Annual General Meeting of the Canadian Orthopaedic Association. Albert Yee was appointed as one of the inaugural co-Directors of the University of Toronto Spine Program, an integrated effort supported by the Divisions of Neurosurgery and Orthopaedic Surgery and the Department.

Fred Brenneman led a successful initiative to establish an Acute Care General Surgical Service. Andy Smith received funding from Sanofi-Aventis Canada for a project aimed at standardizing the management of colorectal cancer. Lesley Carr completed her term as President of the Medical-Dental Midwifery Staff Association. Sender Herschorn, Ted Ross and Mike Schwartz were recognized for their 30 years of service to Sunnybrook. Sandro Rizoli and Robert Maggisano received Tile Awards for their outstanding service to the Department. Marvin Tile was named a member of the Order of Canada for his contributions worldwide to the treatment of pelvic and acetabular trauma.

RETIREMENTS AND SABBATICALS

Anna Gagliardi accepted a position at the Toronto General Research Institute and May Lynn Quan gave notice that she would be accepting a position at the University of Calgary.

CONCLUSION

As the year concluded a Search Committee was being formed for the Goldman Chair in Cardiac Surgery. Ongoing efforts were underway to staff the Ross Tilley Burn Unit. The Department looked forward to working with the Institution in implementing the Strategic Plan recognizing the need to focus its activity while performing "heavy lifting" for patients in the Province requiring specialized surgical procedures. The Department remains thankful for the opportunity it has to play a leadership role in our Institution, 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. Maggisano	Associate Professor
Dr. G. Papia	Assistant Professor

PUBLICATIONS

Bitar R, Moody AR, Leung G, Symons S, Crisp S, Butany J, Rowsell C, Kiss A, Nelson A, Maggisano R: In vivo 3D high-spatial-resolution MR imaging of intraplaque hemorrhage. *Radiology*: October 2008: 249(1): pp 259-267.

Boodhwani M, Nathan HJ, Mesana TG, Rubens FD, Cardiomy Investigators: Effects of shed mediastinal blood on cardiovascular and pulmonary function: A randomized, double-blinded study. *Annals of Thoracic Surgery*: October 2008: 86(4): pp 1167-1173.

Cina CS, Moore R, Maggisano R, Kucey D, Dueck A, Rapanos T: Endovascular repair of popliteal artery aneurysms with anaconda limbs: Technique and early results. *Catherization and Cardiovascular Interventions*: November 2008: 72(5): pp 716-724.

Desai ND, Moussa F, Singh SK, Chu P, Fremes SE: Intraoperative fluorescence angiography to determine the extent of injury after penetrating cardiac trauma. *Journal of Cardiovascular Surgery*: July 2008: 136(1): pp 218-219.

Guru V, Fremes SE: What drugs decrease postoperative bleeding? In: *Evidence-Based Practice of Anesthesiology*, 2nd Edition: (Fleisher LE, ed.) Saunders Elsevier, Philadelphia: 2009: pp 169-176.

Guru V, Naylor CD, Fremes SE, Teoh K, Tu JV: Publicly reported provider outcomes: The concerns of cardiac surgeons in a single-payer system. *Canadian Journal of Cardiology*: January 2009: 25(1): pp 33-38.

Karkouti K, Wijesundera DN, Yau TM, Callum JL, Cheng DC, Crowther M, Dupuis JY, Fremes SE, Kent B, Laflamme C, Lamy A, Legare JF, Mazer CD, McCluskey SA, Rubens FD, Sawchuk C, Beattie WS: Acute kidney injury after cardiac surgery: Focus on modifiable risk factors. *Circulation*: February 2009: 119(4): pp 495-502.

Singh SK, Desai ND, Petroff SD, Deb S, Cohen EA, Radhakrishnan S, Schwartz L, Dubbin J, Fremes SE, Radial Artery Patency Study Investigators: The impact of diabetic status on coronary artery bypass graft patency: Insights from the radial artery patency study. *Circulation*: September 2008: 118(14): pp S222-S225.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Fremes SE: Foothills Medical Centre, Calgary, AB, February 2009. Cardiac surgery report cards: The Ontario experience.

Fremes SE: Foothills Medical Centre, Calgary, AB, September 2008. Improving the quality of coronary surgery.

Fremes SE: Southlake Regional Health Centre, Newmarket, ON, November 2008. Report card medicine: Ontario update.

Gideon C: Medtronic, First Annual Cardiac Innovators Symposium, Toronto, ON, July 2008. (1) Minimally invasive approaches to management of afib, (2) Lone atrial fibrillation procedures.

Goldman BS: The Royal Canadian Institute, 160th Anniversary Dinner, Toronto, ON, April 2009. Healing more than Hearts: Science that heals.

Goldman BS: Medtronic of Canada Ltd., Toronto, ON, July 2008. Reflection of cardiac surgery and the medical device industry.

Goldman BS: Canadian Cardiovascular Society, Continuing Medical Education Event, Niagara Falls, ON, September 2008. Heart surgery and perspective: A personal journey.

Goldman BS: Canadian Cardiovascular Society, Toronto, ON, October 2008. Looking back, Looking forward: The view from now.

Kucey DS: Canadian Society for Vascular Surgery, Saskatoon, SK, September 2008. Presidential Address: Bolstering the thin red line.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

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.)*

Carpentier-Edwards perimount magna ease pericardial bioprosthesis in the aortic position, model 3300 TFX study (MAGNA EASE). *Cohen GN, Fremes SE, Christakis GT, Moussa F: Edwards Lifesciences. (\$100,000 2008 - 2009.)*

Centre for global clinical trials. *Yusuf S, Anand S, Dagenais G, Roberts R, Cairns J, Devereaux P, Connolly S, Dorian P, Cox J, Gerstein H, Fremes SE: Canadian Institutes of Health Research and the Canadian Foundation for Innovation. (\$19,582,529 2008 - 2013.)*

Continuing education strategies in the implementation of clinical practice guidelines: Addressing a care gap. *Wooster DL, Dueck AD, Wooster E, Moneley D: University of Toronto, Office of Continuing Education. (\$5,000 2008 - 2009.)*

FREEDOM Trial - Future revascularization evaluation in patients with diabetes mellitus: Optimal management of multivessel disease. *Fuster V, Fremes SE (site PI) and the FREEDOM Study Investigators: National Heart, Lung and Blood Institute (NHLBI). (\$162,000 2006 - 2011.)*

Left atrial appendage occlusion study II (LAAOS II). *Whitlock R, Carrier M, Connolly S, Eikelboom J, Fremes SE, Healey J, Lam B, Lamy A, O'Donnell M, Teoh K, Tu J, Verma S: Canadian Network and Centre for Trials Internationally (CANNeCTIN)/McMaster University Surgical Associates. (\$7,500 2009 - 2014.)*

Say It Better Project: An online toolkit for excellence in electronic communication. *Wooster D, Dueck D, Wooster E: The Royal College of Physicians and Surgeons of Canada. (\$5,000 2008 - 2009.)*

The effect of acadesine on clinically significant adverse cardiovascular and cerebrovascular events in high-risk subjects undergoing coronary artery bypass graft (CABG) surgery using cardiopulmonary bypass. *Wang XL, Fremes SE: Schering-Plough Research Institute, a Division of Schering Corporation. (\$80,000 2009 - 2011.)*

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 & Stroke Foundation of Ontario. (\$260,950 2006 - 2009.)*

Vascular education inventory and web portal. *Wooster D, Wooster E, Dueck A: Canadian Society for Vascular Surgery, John L. Provan Award. (\$5,000 2007 - 2008.)*

HONOURS RECEIVED

Maggisano R: Marvin Tile Award. June 2009.

Division of General Surgery

Dr. F.D. Brenneman	Associate Professor
Dr. P. Chu	Associate Professor
Dr. N. Coburn	Associate Professor
Dr. D.S. Fenech	Associate Professor
Dr. A.R. Gagliardi	Associate 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	Associate Professor
Dr. S. Rizoli	Associate Professor
Dr. T.M. Ross	Associate Professor
Dr. A.J. Smith	Associate Professor (Division Head)
Dr. H.C. Tien	Assistant Professor
Dr. L. Tremblay	Assistant Professor
Dr. F. Wright	Associate Professor

PUBLICATIONS

Azoubel G, Nascimento B, Ferri M, Rizoli S: Operating room use of hypertonic saline solutions. *Clinicas*: December 2008; 63(6): pp 833-840.

Baerlocher MO, Zakrison TL, Tien HC, Aviv RL, Symons SP: A case of traumatic cervical vertebral artery transection associated with a dural tear leading to subarachnoid extravasation. *European Journal of Trauma and Emergency Surgery*: February 2009; 35(1): pp 67-70. E-published ahead of print: July 17, 2008.

Gagliardi AR, Wright FC, Davis D, McLeod R, Urbach D: Challenges in multidisciplinary cancer care among general surgeons in Canada. *BMC Medical Informatics and Decision Making*: December 2008; 8(1): pp 59.

Chughtai T, Ali S, Sharkey P, Lins M, Rizoli S: Update on managing diaphragmatic rupture in blunt trauma. *Review of 208 consecutive cases. Canadian Journal of Surgery*: May 2009; 52(3): pp 177-181.

Cil T, Hauspy J, Kahn H, Gardner S, Melnick W, Flynn C, Holloway CM: Factors affecting axillary lymph node retrieval and assessment in breast cancer patients. *Annals of Surgical Oncology*: December 2008; 15(12): pp 3361-3368. E-published ahead of print: October 1, 2008.

Coburn NG: Lymph nodes and gastric cancer. *Journal of Surgical Oncology*: March 2009; 99(4): pp 199-206.

Coburn NG, Cleary SP, Tan J, Law CH: Surgery for gallbladder cancer: A population-based analysis. *Journal of the American College of Surgeons*: September 2008; 207(3): pp 371-382. E-published ahead of print: May 12, 2008.

Coburn NG, Guller U, Baxter NN, Kiss A, Ringash J, Swallow CJ, Law CHL: Adjuvant therapy for resected gastric cancer - rapid, yet variable adoption following the results of the Intergroup 0116 Trial. *International Journal of Radiation Oncology, Biology, Physics*: September 2008; 70(4): pp 1073-1080.

Coburn N, Przybysz R, Barbera L, Hodgson D, Sharir S, Laupacis A, Law CH: CT, MRI and ultrasound scanning rates: Evaluation of cancer diagnosis, staging and surveillance in Ontario. *Journal of Surgical Oncology*: December 2008; 98(7): pp 490-499.

Diamond IR, Hamilton PA, Garber AB, Tien HC, Chughtai T, Rizoli SB, Tremblay LN, Brenneman FD: Extravasation of intravenous computed tomography scan contrast in blunt abdominal and pelvic trauma. *Journal of Trauma*: April 2009; 66(4): pp 1102-1107.

Wright FC, Law CHL, Berry S, Smith AJ: Clinically important aspects of lymph node assessment in colon cancer. *Journal of Surgical Oncology*: January 2009; 99(4): pp 248-255.

Gagliardi AR, Eskicioglu C, McKenzie M, Fenech D, Nathens A, McLeod R: Exploratory needs assessment for identifying opportunities for quality improvement in surgical site infection. *American Journal of Infection Control*: June 2009; 37(5): pp 398-402. E-published ahead of print: February 8, 2009.

Gagliardi AR, Wright FC, Davis D, McLeod RS, Urbach D: Challenges in multidisciplinary cancer care among general surgeons in Canada. *BMC Medical Informatics and Decision Making*: December 2008; 8: pp 59.

Gorey KM, Luginaah IN, Schwartz KL, Fung KY, Balagurusamy M, Bartfay E, Wright FC, 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*: January 2009; 113(3): pp 595-600. E-published ahead of print: March 11, 2008.

Govindarajan A, Fraser N, Cranford V, Wirtzfeld D, Gallinger S, Law CH, Smith AJ, Gagliardi AR: Predictors of multivisceral resection in patients with locally advanced colorectal cancer. *Annals of Surgical Oncology*: July 2008; 15(7): pp 1923-1930. E-published ahead of print: May 13, 2008.

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. *Annals of Surgical Oncology*: July 2008; 15(1): pp 175-185.

Hess JR, Brohi K, Dutton RP, Hauser CJ, Holcomb JB, Kluger Y, Mackway-Jones K, Parr MJ, Rizoli SB, Yukioka T, Hoyt DB, Bouillon B: The coagulopathy of trauma: A review of mechanisms. *Journal of Trauma*: October 2008; 65(4): pp 748-754.

Holloway CM, Gagliardi AR: Percutaneous needle biopsy for breast diagnosis: How do surgeons decide? *Annals of Surgical Oncology*: June 2009; 16(6): pp 1629-1636. E-published ahead of print: April 9, 2009.

Holloway CMB, Saskin R, Paszat L: Geographical variation in the use of percutaneous biopsy for breast diagnosis - Importance of physician specialization. *Canadian Journal of Surgery*: December 2008; 51(6): pp 454-463.

Hoyt DB, Dutton RP, Hauser CJ, Hess JR, Holcomb JB, Kluger Y, Mackway-Jones K, Parr MJ, Rizoli SB, Yukioka T, Bouillon B: Management of coagulopathy in the polytrauma patient: Results from an international survey of clinical practice. *Journal of Trauma*: October 2008; 65(4): pp 755-765.

Hoyt DB, Hess JR, Brohi K, Dutton R, Hauser CJ, Holcomb B, Kluger Y, Mackway-Jones K, Parr M, Rizoli SB, Yukioka T, Bouillon B [Educational Initiative on Critical Bleeding in Trauma (EICBT) Faculty 2008]: Coagulopathy associated with trauma. *Journal of Trauma*: October 2008; 65(4): pp 748-754.

Hui C, MacGregor JH, Tien HC, Kortbeek JB: Radiation dose from initial trauma assessment and resuscitation: Review of the literature. *Canadian Journal of Surgery*: April 2009; 52(2): pp 147-152.

Khalifa M, Smith AJ: Lymph node assessment: Issues in pathology. *Journal of Surgical Oncology*: March 2009; 99(4): pp 260-264.

Masella CA, Pinho VF, Passos ADC, Spencer Netto FA, Rizoli SB, Scarpelini S: Temporal distribution of trauma deaths: Quality of trauma care in a developing country. *Journal of Trauma*: September 2008; 65(3): pp 653-658.

Nofech-Mozes S, Holloway C, Hanna W: The role of cytokeratin 5/6 as an adjunct diagnostic tool in breast core needle biopsies. *International Journal of Surgical Pathology*: October 2008; 16(4): pp 399-406. E-published ahead of print: May 21, 2008.

Nofech-Mozes S, Hanna WM, Holloway C, Cil T, Quan ML, Khalifa MA: Intraoperative consultation for axillary sentinel lymph node biopsy: An 8-year audit. *International Journal of Surgical Pathology*: E-published February 17, 2009.

Ouellet JF, Trottier V, Kmet L, Rizoli S, Laupland K, Ball CG, Sirois M, Kirkpatrick AW: The OPTICC trial: A multi-institutional study of occult pneumothoraces in critical care. *American Journal of Surgery*: May 2009; 197(5): pp 581-586.

Parr MJ, Bouillon B, Brohi K, Dutton RP, Hauser CJ, Hess JR, Holcomb JB, Kluger Y, Mackway-Jones K, Rizoli SB, Yukioka T, Hoyt DB: Traumatic coagulopathy: Where are the good experimental models? *Journal of Trauma*: October 2008; 65(4): pp 766-771.

Paszat L, Sutradhar R, Grunfeld E, Gainford C, Benk V, Bondy S, Coyle D, Holloway C, Sawka C, Shumak R, Vallis K, van Walraven C: Outcomes of surveillance mammography after treatment of primary breast cancer: A population-based case series. *Breast Cancer Research and Treatment*: March 2009; 114(1): pp 169-178. E-published March 27, 2008.

Quan ML, Hodgson N, Lovrics P, Porter G, Poirier B, Wright FC: National adoption of sentinel node biopsy for breast cancer: Lessons learned from the Canadian experience. *The Breast Journal*: September-October 2008; 14(5): pp 421-427. E-published ahead of print: July 24, 2008.

Quan ML, Hodgson N, Schulz S, Prszybysz R, Gunraj N, Baxter N, Urbach D, Siminovic M: Surgery for breast cancer. In: *Cancer Surgery in Ontario: An ICES Atlas*: (Urbach D, Siminovic M, eds.) ICES, Toronto: 2008: pp 7-28.

Quan ML, McCready D: The evolution of lymph node assessment in breast cancer. *Journal of Surgical Oncology*: March 2009; 99(4): pp 194-198.

Ramjeesingh R, Quan ML, Gardner S, Holloway C: Prediction of involvement of sentinel and nonsentinel lymph nodes in a Canadian population with breast cancer. *Canadian Journal of Surgery*: February 2009; 52(1): pp 23-30.

De Rezende Neto JB, Guimaraes TN, Madureira Jr JL, Drumond DAF, Leal JC, Rocha Jr A, Oliveira RG, Rizoli SB: Non-operative management of right side thoracoabdominal penetrating injuries - The value of testing chest tube effluent for bile. *Injury*: May 2009; 40(5): pp 506-510.

Simunovic M, Smith AJ, Heald RJ: Rectal cancer surgery and regional lymph nodes. *Journal of Surgical Oncology*: March 2009; 99(4): pp 256-259.

Tien HC, Rizoli SB, Acharya SV, MacDonald JC: An evaluation of tactical combat casualty care interventions in a combat environment. *Journal of the American College of Surgeons*: August 2008; 207(2): pp 174-178.

Wong J, Chow E, de Sa E, Rowsell C, Probyn L, Christakis M, Sinclair E, Law CHL, Finkelstein J: Immediate pain relief and improved structural stability after percutaneous vertebroplasty for a severely destructive vertebral compression fracture. *Journal of Palliative Medicine*: January 2009; 12(1): pp 97-100.

Wright FC, Eskicioglu C, Glazier J, Jong R, Causer P, Quan ML: Women with locally advanced breast cancer are not at higher risk for contralateral synchronous breast cancer. *The Breast Journal*: December 2008: 14(6): pp 556-561. E-published ahead of print: October 13, 2008.

Wright FC, Gagliardi AR, Law CH, Last LD, Klevan AE, Hongjinda S, Stitt LW, Klar N, Ryan DP, Smith AJ: A randomized controlled trial to improve lymph node assessment in stage II colon cancer. *Archives of Surgery*: November 2008: 143(11): pp 1050-1055: discussion 1055.

Wright FC, Law CHL, Berry S, Smith AJ: Clinically important aspects of lymph node assessment in colon cancer. *Journal of Surgical Oncology*: March 2009: 99(4): pp 248-255.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Brenneman FD: Trauma Association of Canada, Vancouver, BC, January 2009. Accreditation of Vancouver Island Health Authority (VIHA).

Brenneman FD: Johnson & Johnson, Hernia Workshop, Auckland, New Zealand, February 2009.

Brenneman FD: New Zealand Upper G.I. Journal Club, Auckland, New Zealand, February 2009. Laparoscopic ventral hernia repair.

Brenneman FD: Grand River Hospital, Tri-City Emergency Medicine Conference, Kitchener, ON, March 2009. Interesting trauma cases.

Brenneman FD: Canadian Association of General Surgeons/Trauma Association of Canada Symposium at Canadian Surgery Forum Meeting, Halifax, NS, September 2008. The acute care surgery service in the allocation of surgical resources.

Brenneman FD: Abu Dhabi Medical Congress, Abu Dhabi, United Arab Emirates, October 2008. (1) Penetrating trauma, (2) Trauma systems.

Brenneman FD: Grey Bruce Regional Hospital, Owen Sound, ON, November 2008. OR teaching - Advanced laparoscopic ventral hernia repair techniques.

Brenneman FD: Johnson & Johnson, Professional Education Seminar, Owen Sound, ON, November 2008. Laparoscopic ventral hernia repair.

Brenneman FD: Pan-American Trauma Society, XXI Meeting, Campinas, Brazil, November 2008. (1) Trauma Association of Canada, (2) Trauma systems in Canada, (3) Management of severe liver trauma.

Fenech DS: Canadian Association of General Surgeons, Halifax, NS, September 2008. (1) Discussant: The medial to lateral approach to laparoscopic right hemicolectomy, (2) SSI prevention in colorectal surgery: Evidence versus practice.

Hanna SS: The Canadian Carcinoid Neuro Endocrine Tumour Society, International Carcinoid/Neuroendocrine Conference and Symposium for Patients and Medical Professionals, Toronto, ON, October 2008. Surgery: The first line of treatment.

Holloway CMB: The Royal College of Physicians and Surgeons of Canada, Examination Review, Milton, ON, April 2009. Breast cancer management in 2009: A review.

Holloway CMB: Canadian Association of General Surgeons, Halifax, NS, September 2008. Benign breast disease masquerading as malignancy.

Holloway CMB: Cancer Care Ontario Surgical Oncology Network, Toronto, ON, October 2008. Difficult questions in the management of breast disease.

Holloway CMB: Ontario Association of General Surgeons, Toronto, ON, November 2008. Surgical management of breast cancer: Current status.

Law CHL: Healthcare Information Technologies (HIT) Global, Gleeve Consultancy Sessions, Toronto, ON, January 2009. Clinical application of the CHOI Criteria: A case-based discussion - a WEB presentation.

Law CHL: Healthcare Information Technologies (HIT) Global, Gleeve Consultancy Sessions, Toronto, ON, February 2009. Web presentation given twice this month: Clinical application of the CHOI Criteria: A case-based discussion.

Law CHL: William Osler Health Centre Oncology Group, Brampton, ON, February 2009. (1) Advances in the multidisciplinary treatment of hepatic metastases from colorectal cancer, (2) Multidisciplinary management of colorectal liver mets: Old rules, new technologies and uncharted territory.

Law CHL: Community Oncologists of Metropolitan Toronto (COMET), Toronto, ON, April 2009. Case-based discussion of bile duct, pancreatic and hepatocellular cancer: Current surgical issues.

Law CHL: The Colorectal Cancer Association of Canada, The Canadian Round Table on Colorectal Cancer, Vancouver, BC, April 2009. A journey to a new hope: Advances in the management of colorectal liver mets.

Law CHL: British Columbia Cancer Agency, Annual Symposium, Vancouver, BC, September 2008. New frontiers in the management of metastatic colorectal cancer.

Law CHL: Georgian Bay Oncology Group, Barrie, ON, September 2008. When surgery met chemotherapy: An update on liver resection for metastatic colorectal cancer.

Law CHL: Canadian Advisory Board for Metastatic Colorectal Cancer, Montreal, PQ, November 2008. Reaching a consensus in the treatment of metastatic colorectal cancer.

Law CHL: Community Oncologists of Metropolitan Toronto (COMET), Toronto, ON, November 2008. A new overview of surgical approaches to neuroendocrine tumours.

Law CHL: Hepatobiliary Surgery Consultants, Advisor Board Meeting, Toronto, ON, November 2008. Where are we headed in the surgical management of hepatic metastatic colorectal cancer?

Law CHL: Central Local Health Integration Network, Southlake Oncology Rounds, Newmarket, ON, December 2008. The modern management of hepatic metastatic colorectal cancer.

Law CHL: Healthcare Information Technologies (HIT) Global, Gleevec Consultancy Sessions, Toronto, ON, December 2008. Clinical application of the CHOI criteria: A case-based discussion - a WEB presentation.

Quan ML: Canadian Society of Surgical Oncology, Toronto, ON, May 2009. Measuring the quality of sentinel lymph node biopsy for breast cancer in Ontario: A population-based evaluation.

Quan ML: Cancer Care Ontario, Toronto, ON, June 2009. Quality of sentinel node biopsy in Ontario: Research update.

Quan ML: University of Calgary, CityWide General Surgery Rounds, Calgary, AB, September 2008. Quality indicators in surgery: Academic exercise or tool for improvement?

Smith AJ: Queen's Medical Research Institute, Edinburgh, Scotland, May 2009. James IV Travelling Fellow: Colorectal cancer: Quality in Ontario, Canada.

Smith AJ: Western General Hospital, Edinburgh, Scotland, May 2009. James IV Travelling Fellow: Colorectal cancer: Quality in Ontario, Canada.

Smith AJ: Canadian Association of General Surgeons, Canadian Surgery Forum, Halifax, NS, September 2008. Increasing the number of lymph nodes removed in colorectal cancer.

Smith AJ: Mayo Clinic, Rochester, Minnesota, October 2008. 3rd Annual Roger R. Dozois Visiting Professor: Colorectal cancer: Province-wide quality improvement initiatives.

Smith AJ: The Royal College of Physicians and Surgeons of Canada/BC Cancer Agency, Rectal Cancer Update, Vancouver, BC, October 2008. Evidence-based approach to rectal cancer including laparoscopy.

Tien HC: Australasian Trauma Society and Trauma Association of Canada, Combined Annual Scientific Meeting, Auckland, New Zealand, March 2009. Chair (1) Military session, (2) Free paper session.

Tien HC: United States Department of Defense, Tactical Combat Casualty Care Committee, San Antonio, Texas, July 2008. Evaluating the performance of tactical combat casualty care (TCCC) interventions in a combat environment.

Tien HC: Institute for Defense and Government Advancement, San Diego, California, August 2008. Evaluating the performance of tactical combat casualty care (TCCC) interventions in a combat environment: Can we do better?

Tien HC: Canadian Society for Vascular Surgery, Saskatoon, SK, September 2008. Vascular injuries in Kandahar.

Tien HC: American College of Surgeons, San Francisco, California, October 2008. Discussant for paper: siRNA targeted at pro-apoptotic proteins, PUMA and BIM, inhibits sepsis-induced lymphocyte apoptosis.

Tien HC: Canadian Forces Health Services, Montreal, PQ, December 2008. The epidemiology of combat injuries.

Tremblay L: Eastern Association of Trauma, Orlando, Florida, January 2009. Discussant EAST Session.

Tremblay L: Panamerican Trauma Society, Campinas, Brazil, November 2008. (1) C-spine clearance in the obtunded trauma patients, (2) Fasciotomy: Indications, high risk patients and diagnosis, (3) What's new in the intensive care unit (ICU)?

Wright F: McMaster University, Ontario Melanoma Update, Mississauga, ON, April 2009. Pre-operative staging and post operative surveillance for melanoma patients.

Wright F: Canadian Society of Surgical Oncology, Toronto, ON, May 2009. (1) Is clinical breast examination, mammography or magnetic resonance imaging the best method for assessing residual disease after neo-adjuvant chemotherapy in women with locally advanced breast cancer?, (2) Measuring the quality of sentinel lymph node biopsy for breast cancer in Ontario: A population based evaluation, (3) Quality indicators for gastric cancer surgery - a survey of practicing pathologists in Ontario.

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 111 in-DTPA-rastuzumab Fab injection for radioimmunoguided surgery in women with Her2/neu-positive breast cancer. *Holloway C, Ehrlich L, Caldwell C, Kahn H, Rielly R, Quan ML, Wright F, Pritchard K: Ontario Cancer Research Network.* (\$380,807 2006 - 2009.)
- A phase I/II trial of III in-DTPA-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.)
- Bridging the information gap between patients and physicians for the treatment of colorectal cancer. *Kennedy E, Gagliardi AR, Urbach DR: Colon Cancer Canada.* (\$45,000 2008 - 2010.)
- Bridging the information gap between patients and physicians for the treatment of colorectal cancer. *Kennedy E, Gagliardi AR, Urbach D: Canadian Institutes of Health Research.* (\$99,124 2009 - 2010.)
- Career Scientist Award with the Ministry of Health and Long Term Care. *Coburn NG: Ministry of Health and Long Term Care.* (\$420,000 2008 - 2013.)
- Clinical research consortium to improve resuscitation outcomes. *Slutsky A, Tremblay L (Consultant): National Institute of Health, Consortium Grant.* (\$2,454,201 2004 - 2009.)
- Colonoscopy Collaborative Network. *Rabeneck L, Gandhi M, Feinberg S, Smith D, Smith A, Bertnick P, and others: Cancer Care Ontario.* (\$150,000 2007 - 2008.)
- CRC processes of care and outcomes in the United States and Canada. *Law CHL, Smith AJ, Coburn NG: Sunnybrook Health Sciences Centre.* (\$30,000 2008 - 2009.)
- Crisis in the general surgery workforce: Identifying barriers to career satisfaction and opportunities to manage attrition among resident and practicing general surgeons. *Ahmed N, Gagliardi AR, Pandya A, Teodoro L: Canadian Association of General Surgeons.* (\$10,000 2008 - 2009.)
- Damage control resuscitation: A randomized controlled trial. *Tien H, Callum J, Rizoli SB: Canadian Forces Health Services.* (\$350,000 2009 - 2011.)
- Developing capacity for knowledge translation: Identifying and evaluating factors that improve the effectiveness of practice guideline implementation. *Gagliardi A: Canadian Institutes of Health Research.* (\$300,000 2008 - 2013.)
- 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.)
- Developing, implementing and evaluating self-audit as a knowledge translation strategy for practice-based learning and practice guideline implementation. *Gagliardi AR, Finelli A, Brouwers MC, Marlow BA, Campbell CM, Silver IL: Canadian Institutes of Health Information.* (\$49,223 2009 - 2010.)
- Development of synoptic MRI reporting for primary rectal cancer. *Kennedy E, McLeod R, Smith A, Fruitman M, Milot L, Gagliardi A, Milgram L, O'Malley M, Metser U, Chawla T, Jhaveri K, MacRae H, McFayden C, Brierley J, Krzyzanowska M, Pollet A: Canadian Cancer Society-Cancer Care Ontario, Cancer Services Innovation Partnership Research Grant.* (\$186,297 2009 - 2011.)
- 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 improve lymph node retrieval in patients with bladder cancer? A mixed methods study. *Finelli A, Gagliardi G, Kulkarni G, Fleshner N: University of Toronto, Continuing Medical Education Research and Development Grant.* (\$5,000 2008 - 2009.)
- Establishing stakeholder priorities for research on quality improvement planning and implementation. *Gagliardi AR, Shojania K, Straus SE, Baker GR, Silver IL: Canadian Institutes of Health Research.* (\$15,000 2009 - 2010.)
- 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 mentorship as a strategy to build capacity for knowledge translation research and practice. *Gagliardi AR, Bell M, Levinson W, Straus SE, Leslie K, Morrison L, Tourangeau A, Rotstein O, Silver I: Canadian Institutes of Health Information.* (\$83,765 2009 - 2010.)
- Exploring the cancer-related information needs of general surgeons. *Gagliardi A, Smith AJ, Wright FC: University of Toronto, Faculty of Medicine, Grant Miller Cancer Research Grant.* (\$20,000 2006 - 2011.)

Exploring the cognitive processes influencing intra-operative 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 AR, Wright FC, Smith AJ: University of Toronto, Faculty of Medicine, Dean's Fund New Staff Grant.* (\$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: University of Toronto, Grant Miller Cancer Research Grant.* (\$20,000 2006 - 2009.)

Identifying opportunities for improving prevention of infections following colorectal cancer surgery. *McLeod R, Gagliardi A, Fenech D, Nathens A, McKenzie M: 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, Law CHL, Swallow CJ, Helyer L, McLeod R, Paszat L, Gagliardi A, Rabeneck L, Quan ML: National Cancer Institute of Canada (NCIC).* (\$552,446 2008 - 2011.)

Lobular carcinoma in situ: A population-based analysis. *Rakovitch E, Paszat L, Hanna W, Pignol J-P, 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 G, Wright F: University of Toronto Continuing Medical Education Research and Development Grant.* (\$3,937 2007 - 2008.)

Multidisciplinary Cancer Conferences: Exploring obstacles and facilitator to their establishment and function. *Wright FC, Look Hong N, Gagliardi AR, Bronskill S, Paszat LP: Colon Cancer Canada.* (\$5,000 2006 - 2008.)

Population-based assessment of lymphadenectomy during radical cystectomy for bladder cancer in Ontario. *Sharir S, Law CHL (Senior Mentor for Project): University of Toronto, Faculty of Medicine, Dean's Fund.* (\$10,000 2006 - 2011.)

Practice patterns and perceptions of breast conserving surgery in early stage breast cancer: National survey of Canadian surgeons and radiation oncologists. *Lovrics PJ, Whelan T, Hodgson N, Gordon M, Porter G, Wright FC, Farrokhvar F, Quan ML: Canadian Breast Cancer Research Alliance (CBCRA).* (\$19,204 2008 - 2009.)

Predictors of local recurrence in ductal carcinoma in situ: A population-based outcomes analysis. *Rakovitch E, Paszat L, Hanna W, Pignol JP, Kahn H, Wong J, Done S, Goodwin P, Holloway C, Tuck A, Elavathil L, Gravel D, Sengupta S, Escot N, Bonin M, Quan ML, Zhang L: Canadian Breast Cancer Research Alliance.* (\$1,274,373 2007 - 2012.)

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, Done 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 (CBCRA).* (\$1,464,000 2006 - 2011.)

Quality of breast cancer sentinel lymph node biopsy practice in Ontario. *Quan ML, Gagliardi A, Wright F, McCreedy D, Urbach D: Canadian Breast Cancer Foundation, Ontario Chapter.* (\$350,000 2007 - 2009.)

Quality of gastric cancer care in Ontario: A population-based cohort study. *Coburn NG, Rabeneck L: University of Toronto, Dean's Fund New Staff Grant 2007.* (\$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.)

Should all young women (<35) with breast cancer be treated with mastectomy? *Quan ML, Baxter N, Hanna W, Paszat L, Rakovitch E, Saad R, Wright F, Warner E, Sawka C: Canadian Breast Cancer Foundation.* (\$287,545 2008 - 2011.)

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, McCreedy 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.)

Surgical Care of Gastric Cancer Patients in Ontario: A Population-based study. *Coburn NG, Law CHL, Swallow CJ, Rabeneck L: University of Toronto, Connaught Grant Funds.* (\$23,000 2007 - 2008.)

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, Career Scientist Award.* (\$301,875 2004 - 2009.)

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 implementation of sentinel lymph node biopsy for breast cancer in rural Ontario: A question of quality and cost. *Wells B, Quan ML (supervisor), Urbach D: National Cancer Institute of Canada, Clinical Research Personnel Award.* (\$41,000 2008 - 2009.)

The implications of a sister's breast cancer diagnosis. *Metcalf K, Quan ML, Narod S: Canadian Breast Cancer Foundation.* (\$262,749 2007 - 2009.)

The processes of care and outcomes in colorectal cancer in the United States and Canada - A population-based study. *Law CHL, Coburn NG, Tan J: Colon Cancer Canada.* (\$45,000 2008 - 2010.)

The quality of sentinel node biopsy for breast cancer in low volume Ontario hospitals. *Wells B, Quan ML (supervisor): Canadian Breast Cancer Foundation.* (\$71,000 2008 - 2009.)

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

Chu P: Sunnybrook Hospital Peters-Boyd Academy Teaching Award. May 2009.

Chu P: Tyndale University and Seminary Graduating Class Valedictorian. May 2009.

Chu P: Tyndale University and Seminary Leadership Award. May 2009.

Coburn N: Career Scientist Award with the Ministry of Health and Long Term Care. August 2008.

Law CHL: Bruce Tovee Award, Postgraduate Education, Department of Surgery, University of Toronto. May 2009.

Rizoli S: Marvin Tile Award from Sunnybrook Health Sciences Centre, Department of Surgery. December 2008.

Tien HC: Centre for Health Services Sciences (CHSS) Safety Scholar Award. May 2009.

Wright F: College of Physicians and Surgeons of Ontario Peer Assessor. October 2008.

Wright F: Recipient of Ministry of Health Funding for Multidisciplinary Cancer Conference Coordinators for the Province for (\$300,000/year) and a one-time funding of MCCs in the province (\$185,000). January 2009.

Division of Neurosurgery

Dr. L. da Costa Assistant Professor
Dr. M. Fazl Associate Professor
Dr. D.A. Houlden Assistant Professor
Dr. T. Mainprize Assistant Professor
Dr. F. Pirouzman Assistant Professor
Dr. M.L. Schwartz Professor (Division Head)

PUBLICATIONS

Bedi H, Mitera G, Sahgal A, Pirouzman F, Bilbao J, Sinclair E, Fitch A, Chow E: Neurosurgical rescue of bradycardia induced by intracerebral hypertension: A case report and review of the literature. *Journal of Palliative Medicine*: June 2009; 12(6): pp 563-565.

da Costa L, Dehdashti AR, terBrugge G: Spinal cord vascular shunts: Spinal cord vascular malformation and dural arteriovenous fistulas. *Neurosurgical Focus*: January 2009; 26(1): pp 1-9. E-published January 2, 2009.

da Costa L, Thines L, Dehdashti AR, Wallace MC, Willinsky RA, Tymianski M, Schwartz ML, ter Brugge KG: Management and clinical outcome of posterior fossa arteriovenous malformations: Report on a single-centre 15 year experience. *Journal of Neurology, Neurosurgery and Psychiatry*: April 2009; 80(4): pp 376-379. E-published ahead of print: November 21, 2008.

da Costa L, Wallace MC, terBrugge K, O'Kelly C, Willinsky RA, Tymianski M: The natural history and predictive features of hemorrhage from brain arteriovenous malformations. *Stroke*: January 2009; 40: pp 100-105. E-published ahead of print: November 13, 2008.

da Costa LB, Thines L, Dehdashti AR, Wallace MC, Willinsky RA, Schwartz M, Tymianski M, terBrugge K: Management and clinical outcome of posterior fossa arteriovenous malformations report on a single center 15 years experience. *Journal of Neurology, Neurosurgery and Psychiatry*: November 2008; 80(4): pp 376-379. E-published November 21, 2008.

Dehdashti AR, da Costa L, terBrugge KG, Willinsky RA, Tymianski M, Wallace MC: Overview of the current role of endovascular and surgical treatment in spinal dural arteriovenous fistulas. *Neurosurgical Focus*: January 2009; 26(1): pp 1-5. E-published January 2, 2009: E8.

Fazl M: Upper dorsal sympathectomy for hyperhidrosis. In: *Surgery of Peripheral Nerves*: (Conerly KD, Ip I, Brandenburg B, eds.) Thieme, New York: 2008: pp 268-270.

Fazl M, Houlden DA, Kretschmer T, Tiel RL: Dorsal root entry zone: Lesioning for intractable deafferentation pain, a case-based research. In: *Surgery of Peripheral Nerves*: (Brandenburg B, Conerly KD, Ip I, eds.) Thieme, New York: 2008: pp 42-45.

Gunnarsson T, da Costa L, Souza MPS, Montanera W, Marotta TR: Guidewire tip detachment during stent-assisted coiling of an intracranial aneurysm. *Interventional Neuroradiology*: March 2009; 15(1): pp 93-98.

Vachhrajani S, Fawaz C, Mathieu D, Menard C, Cusimano M, Gentili F, Hodaie M, Kenny B, Kulkarni AV, Laperriere N, Schwartz M, Tsao M, Bernstein M: Complications of gamma knife surgery: An early report from 2 Canadian centers. *Journal of Neurosurgery*: December 2008; 109(Suppl): pp 2-7.

Willinsky RA, Peltz J, da Costa L, Agid R, Farb RI, terBrugge K: Clinical and angiographic follow-up of ruptured intracranial aneurysms treated with endovascular embolization. *American Journal of Neuroradiology*: May 2009; 30: pp 1035-1040. E-published ahead of print: March 19, 2009.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Fazl M: Peterborough Country Medical Society, Peterborough, ON, May 2009. Indications for surgery for low back pain.

Houlden DA: Charles E. Henry Society, April 2009. Instructional Course: Somatosensory evoked potential (SSEP), electroencephalography (EEG) and transcranial doppler (TCD) in carotid endarterectomy.

Houlden DA: Canadian Neurological Sciences Federation, Halifax, NS, June 2009. Instructional Course: Intraoperative electrophysiology.

Houlden DA: Serbian Neurological Society, 1th Congress of Serbian Neurosurgeons, Nis, Serbia, October 2008. Somatosensory evoked potential (SSEPs) in comatose patients with head injuries.

Houlden DA: Canadian Pediatric Spine Deformities Study Group, 4th Annual Meeting, Montreal, QC, November 2008. State of intraoperative neuromonitoring in Canada.

Schwartz ML: Serbian Neurosurgical Society, Nis, Serbia, October 2008. Radiosurgery for arteriovenous malformations.

Division of Orthopaedic Surgery

Dr. M.K. Akens Lecturer
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.E. Maki Professor
Dr. B.W. Malcolm Assistant Professor
Dr. P.H. Marks Associate Professor
Dr. J.J. Murnaghan Associate Professor
Dr. D. Nam Assistant 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

Akens MK, Hardisty MR, Wilson BC, Schwock J, Burch S, Whyne CM, Yee AJM: Defining the therapeutic window of vertebral photodynamic therapy in a murine pre-clinical model of breast cancer metastasis using the photosensitizer BPD-MA (Verteporfin). *Breast Cancer Research and Treatment*: March 2009. E-published March 5, 2009.

Amir E, Whyne CM, Freedman OC, Fralick M, Kumar R, Hardisty M, Clemons M: Radiological changes following second-line zoledronic acid treatment in breast cancer patients with bone metastases. *Clinical and Experimental Metastasis*: March 2009; 26(5): pp 479-484. E-published March 6, 2009.

Axelrod TS: Management of MP disease in rheumatoid arthritis (in CD or Cassette). *Audio-Digest Orthopaedics*: August 2008: 31.

Bhandari M, Guyatt G, Tornetta 3rd P, Schemitsch EH, Swiontkowski M, Sanders D, Walter SD, SPRINT Investigators including Kreder HJ: Randomized trial of reamed and unreamed intramedullary nailing of tibial shaft fractures. *The Journal of Bone and Joint Surgery (American)*: December 2008; 90(12): pp 2567-2578.

Borkhoff CM, Hawker GA, Kreder HJ, Glazier RH, Mahomed NN, Wright JG: Patients' gender affected physicians' clinical decisions when presented with standardized patients but not for matching paper patients. *Journal of Clinical Epidemiology and Community Health*: May 2009; 62(5): pp 527-541.

Boscart VM, Fernie GR, McGilton KS, Levchenko A, Hufton G, Holliday P: Acceptability of a wearable hand hygiene device with monitoring capabilities. *The Journal of Hospital Infection*: April 2009; 71(4): pp 389.

Cameron HU: The consequences of isolated liner exchange. *Orthopedics*: September 2008; 31(9): pp 914 - 915.

Cheng KC, Bateni H, Maki BE: Reducing adverse effects of walkers on stability. In: *Technology and Aging*: (Mihailidis A, Boger J, Kautz H, Normie L, eds.) IOS Press, Amsterdam: 2008: pp 197-204.

Cheng KC, McKay SM, King EC, Tung JY, Lee TA, Scovil CY, Maki BE: The moveable handhold: A new paradigm to study visual contributions to the control of balance-recovery reactions. *Gait and Posture*: February 2009; 29(2): pp 339-342.

Chesworth BM, Mahomed NN, Bourne RB, Davis AM, Kreder HJ, OJRR Study Group Members: Willingness to go through surgery again validated the WOMAC clinically important difference from THR/TKR surgery. *Journal of Clinical Epidemiology*: September 2008; 61(9): pp 907-918.

Chow E, Finkelstein J, Coleman R: Metastatic cancer to the bone. In: *Devita, Hellman and Rosenberg's Cancer: Principles and Practice of Oncology*. 8th Edition: (Devita V, Lawrence T, Rosenberg S, eds.) Lippincott, Williams and Wilkins, Philadelphia: 2008: pp 50-62.

Cribb NC, Boure LP, Hanna WJB, Akens MK, Mattson SE, Monteith GJ, Weese JS: In vitro and in vivo evaluation of ferric-hyaluronate implants for delivery of amikacin sulfate to the tarsocrural joint of horses. *Veterinary Surgery*: June 2009; 38(4): pp 498-505.

de Almeida J, Morris A, Whyne C, James A: Testing biomechanical strength of in vitro cerebrospinal fluid leak repairs. *Journal of Otolaryngology - Head and Neck Surgery*: February 2009; 38(1): pp 106-111.

- Fernie G, Dutta T, Li Y, Hsu J:** Minimum standards for new dwellings to facilitate aging in place. Proceedings of the 1st Canadian Building and Health Sciences Workshop: National Research Council of Canada: (Veitch JA, ed.) National Research Council of Canada, Ottawa, ON: 2008: pp 57-64.
- Fernie G, Levchenko A, Hufton G, Boscart V, McGilton K:** Technology to reduce institutional cross-infection rates by improving hand hygiene of caregivers. *Gerontechnology* 2009: (van Bronswijk JEMH, ed.) EurProBiol, Pisa, Italy: 2008: pp 102.
- Finkelstein J:** Odontoid fractures: Surgical management by fusion. *Canadian Orthopaedic Association Bulletin*: July 2008: 81: pp 1405.
- Finkelstein J, Lotan R, Bronstein Y, Indar R, Ford M, Yee A:** Unilateral pedicle screw fixation with transforaminal lumbar interbody fusion: Does less mean more? *The Spine Journal*: September 2008: 8(5Suppl): pp 82S.
- Flynn CJ, Danjoux C, Wong J, Christakis M, Rubenstein JA, Yee AJ, Yip D, Chow E:** Two cases of acrometastasis to the hands and review of the literature. *Current Oncology*: October 2008: 15(5): pp 51-58.
- Hardisty M, Whyne CM:** Whole bone strain quantification by image registration: A validation study. *Journal of Biomechanical Engineering*: June 2009: 131(6): pp 064502.
- Iordache SD, Axelrod TS:** Mycobacterium chelonae infection following silicone arthroplasty of the metacarpophalangeal joints: A case report. *Hand (NY)*: June 2009: 4(2): pp 129-133. E-published ahead of print: October 9, 2008.
- Jaglal SB, Hawker G, Bansod V, Salbach NM, Zwarenstein M, Carroll J, Brooks D, Cameron C, Bogoch E, Jaakkimainen L, Kreder HJ:** A demonstration project of a multi-component educational intervention to improve integrated post-fracture osteoporosis care in five rural communities in Ontario, Canada. *Osteoporosis International*: February 2009: 20(2): pp 265-274.
- Karanicolas PJ, Bhandari M, Kreder HJ, Moroni A, Richardson M, Walter SD, Norman GR, Guyatt GH - Collaboration for Outcomes Assessment in Surgical Trials (COAST) Musculoskeletal Group:** Evaluating agreement: Conducting a reliability study. *The Journal of Bone and Joint Surgery (American)*: May 2009: 91(Suppl 3): pp 99-106.
- Karanicolas PJ, Bhandari M, Walter SD, Heels-Ansdell D, Guyatt GH - Collaboration for Outcomes Assessment in Surgical Trials (COAST) Musculoskeletal Investigators, Kreder HJ included:** Radiographs of hip fractures were digitally altered to mask surgeons to the type of implant without compromising the reliability of quality ratings or making the rating process more difficult. *Journal of Clinical Epidemiology*: February 2009: 62(2): pp 214-223. E-published ahead of print: September 7, 2008.
- Mansfield A, Maki BE:** Are age-related impairments in change-in-support balance reactions dependent on the method of balance perturbation? *Journal of Biomechanics*: May 2009: 42(8): pp 1023-1031. E-published ahead of print: April 10, 2009.
- Martinoff R, Kreder HJ:** Finding evidence: Evidence-based practice. *Hand Clinics*: February 2009: 25(1): pp 15-27.
- McIntosh G, Hall H:** Low back pain (acute). *British Medical Journal (BMJ) Clinical Evidence*: October 2008: 10: pp 1102. (Available at <http://clinicalevidence.bmj.com>).
- McIntosh G, Hall H:** Low back pain (chronic) (Available at <http://clinicalevidence.bmj.com>). *British Medical Journal (BMJ) Clinical Evidence*: October 2008: 10: pp 1116.
- Moriyama Y, Nguyen J, Akens MK, Moriyama E, Lilge L:** In vivo effects of low level laser therapy on inducible nitric oxide synthase. *Lasers in Surgery and Medicine*: March 2009: 41(3): pp 227-231.
- Mulford JS, Ceulemans LJ, Nam D, Axelrod TS:** Proximal row carpectomy vs four corner fusion for scapholunate (Slac) or scaphoid nonunion advanced collapse (Snac) wrists: A systematic review. *Journal of Hand Surgery (European Volume)*: April 2009: 34(2): pp 256-263.
- Nousiainen MT, McConnell AJ, Zdero R, McKee MD, Bhandari M, Schemitsch EH:** The influence of the number of cortices of screw purchase and ankle position in Weber C ankle fracture fixation. *Journal of Orthopaedic Trauma*: August 2008: 22(7): pp 473-478.
- Nousiainen M, Whyne C, Yee A, Finkelstein J, Ford M:** Surgical management of bone metastasis. In: *Bone Metastases, A Translational and Clinical Approach*: (Kardamakis D, Vassilou V, Chow E, eds.) Springer 2009, Toronto: 2009: pp 263-280.
- O'Reilly M, Whyne CM:** Comparison of computed tomography based parametric and patient-specific finite element models of the healthy and metastatic spine using a mesh-morphing algorithm. *Spine*: August 2008: 33(17): pp 1876-1881.
- Perry SD, Radtke A, McIlroy WE, Fernie GR, Maki BE:** Efficacy and effectiveness of a balance-enhancing insole. *Journal of Gerontology: Medical Sciences*: December 2008: 63(6): pp 595-602.
- Razmjou R, Yee A, Holtby R, Vidmar M, Ford M, Finkelstein J:** Relationship between pre-operative patient characteristics and expectations in candidates for total knee arthroplasty. *Physiotherapy Canada*: January 2009: 61(1): pp 38-45.
- Razmjou H, Davis AM, Jaglal SB, Holtby R, Richards RR:** Cross-sectional analysis of baseline differences of candidates for rotator cuff surgery: A sex and gender perspective. *BMC Musculoskeletal Disorders*: E-published February 29, 2009.
- Razmjou H, Lincoln S, Axelrod T, Holtby R:** Factors contributing to failure of rotator cuff surgery in persons with work-related injuries. *Physiotherapy Canada*: July 2008: 60(2): pp 125-133.

Razmjou H, Schwartz CE, Yee A, Finkelstein JA: Traditional assessment of health outcome following total knee arthroplasty was confounded by response shift phenomenon. *Journal of Clinical Epidemiology*: January 2009; 62(1): pp 91-96.

Razmjou H, Yee A, Ford M, Holtby R, Vidmar M, Finkelstein JA: Relationship between preoperative patient characteristics and expectations in candidates for total knee arthroplasty. *Physiotherapy Canada*: February 2009; 61(1): pp 38-45.

Riazi S, Carmichael N, Awad I, Holtby RM, McCartney CJL: Effect of local anaesthetic volume (20 versus 5 ml) on the efficacy and respiratory consequences of ultrasound-guided interscalene brachial plexus block. *British Journal of Anaesthesia*: October 2008; 101(4): pp 549-556. E-published ahead of print: August 4, 2008.

Richards RR: Effectiveness evaluation of the shoulder. In: *The Shoulder, 4th Edition*: (Rockwood C, Matsen F, Wirth M, Lippitt S, Fehring E, Sperling J, eds.) Elsevier, Philadelphia: 2008; pp 267-275.

Richards RR: Sepsis of the shoulder: Molecular mechanisms and pathogenesis. In: *The Shoulder, 4th Edition*: (Rockwood C, Matsen F, Wirth M, Lippitt S, Fehring E, Sperling J, eds.) Elsevier, Philadelphia: 2008; pp 561-580.

Rush R, Ginsberg H, Jenkinson R, Whyne CM: Beyond the operating room: A simulator for sacro-iliac screw insertion. *Surgical Innovation*: December 2008; 15(4): pp 321-323.

Santaguida PL, Hawker GA, Hudak PL, Glazier R, Mahomed NN, Kreder HJ, Coyte PL, Wright JG: Patient characteristics affecting the prognosis of hip and knee joint arthroplasty: A systematic review. *Canadian Journal of Surgery*: December 2008; 51(6): pp 428-436.

Saupe N, White LM, Chiavaras MM, Essue J, Weller I, Kunz M, Hurtig M, Marks P: Anterior cruciate ligament reconstruction grafts: MR imaging features at long-term follow-up: Correlation with functional and clinical evaluation. *Radiology*: November 2008; 249(2): pp 581-590.

Schwartz C, Bode R, Razmjou H, Kim D, Finkelstein J: P60. Response shift in patients following lumbar spine surgery impact on interpretation of Oswestry disability index. *The Spine Journal*: September 2008; 8 (5 Suppl): pp 130S.

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, King EC and Maki BE: Determining the visual angle of objects in the visual field: An extended application of eye trackers. *IEEE Transactions on Biomedical Engineering*: March 2009; 56(3): pp 910-912. E-published ahead of print: October 21, 2008.

Scovil CY, Zettel JL, Maki BE: Stepping to recover balance in complex environments: Is online visual control of the foot motion necessary or sufficient? *Neuroscience Letters*: November 2008; 445(1): pp 108-112. E-published ahead of print: August 28, 2008.

Skrinskas T, Clemons M, Freedman O, Weller I, Whyne CM: Automated CT-based analysis to detect changes in the prevalence of lytic bone metastases from breast cancer. *Clinical and Experimental Metastasis*: October 2008; 26(2): pp 97-103. E-published October 22, 2008.

Wong J, Chow E, de Sa E, Rowsell C, Probyn L, Christakis M, Sinclair E, Law C, Finkelstein J: Immediate pain relief and improved structural stability after percutaneous vertebroplasty for a severely destructive vertebral compression fracture. *Journal of Palliative Medicine*: January 2009; 12(1): pp 97-100.

Yee AJ, Yoo JU, Marsolais B, Carlson G, Poe-Kochert C, Bohlman HH, Emery SE: A prospective randomized trial on the use of postoperative bracing in lumbar spinal fusion for degenerative conditions of the spine. *The Journal of Bone and Joint Surgery (American)*: October 2008; 90(10): pp 2062-2068.

Zdero R, Olsen M, Elfatori S, Skrinskas T, Nourhosseini H, Whyne C, Schemitsch EH, Von Schroeder H: Linear and torsional mechanical characteristics of intact and reconstructed scapholunate ligaments. *Journal of Biomechanical Engineering*: April 2009; 131(4): pp 041009.

Zdero R, Olsen M, Elfatori S, Skrinskas T, Schemitsch E, Whyne C, Von Schroeder H: A biomechanical assessment of the coupling of torsion and tension in the human scapholunate ligament. *Proceedings of the Institution of Mechanical Engineers, Part H, Journal of Engineering in Medicine*: August 2008; 222(6): pp 907-914.

Zettel JL, McIlroy WE, Maki BE: Effect of competing attentional demands on perturbation-evoked stepping reactions and associated gaze behavior in young and older adults. *Journal of Gerontology Medical Sciences, Series A*: December 2008; 63: pp 1370-1379.

Zettel JL, McIlroy WE, Maki BE: Gaze behavior of older adults during rapid balance-recovery reactions. *Journal of Gerontology Medical Sciences, Series A*: August 2008; 63: pp 885-891.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Axelrod TS: Healthstream, Concepts in Upper Extremity Restoration, San Diego, California, March 2009. (1) Clavicle fractures: Should they all be fixed?, (2) Diaphyseal humeral fractures: Non-unions, (3) Distal radius fractures: Are locking plates the answer?, (4) Laboratory exercise director: Open reduction internal fixation (ORIF) of distal radius fractures, (5) Scaphoid non-union: Fixation versus salvage, (6) The scaphulunate advanced collapse (SLAC) wrist dilemma: I'm partial to fusion debate.

Axelrod TS: Cleveland Case Western Reserve, MetroHealth, Cleveland, Ohio, May 2009. Duncan Visiting Professor: (1) Scaphoid fractures and non-unions, (2) The evolution of distal radius fracture.

Axelrod TS: American Society for Surgery of the Hand, Annual Meeting, Chicago, Illinois, September 2008. Precourse 3: Hand and wrist trauma, an international perspective. Case discussions on stiffness.

Axelrod TS: Association of Osteosynthesis North America, AO Basic Principles and Techniques of Operative Fracture Management, Toronto, ON, November 2008. (1) Course Chairman, (2) Case discussions in 3 sessions: (a) History of the AO, (b) Principles and philosophy: Progress, evolution and current research.

Axelrod TS: Association of Osteosynthesis (AO) International Education, AO International Hand and Wrist Course 2008, Basel, Switzerland, November 2008. (1) Bone defects, hand malunions and nonunions, (2) Cadaveric lab demonstrations: Surgical approaches to the hand, (3) Carpal instability and limited wrist fusions, (4) Fusion of the thumb and digits, (5) Lab exercises, fusions of the digits, (6) Surgical management of distal radius fractures.

Cameron JC: Rocky Mountain Traumatological Society, Colorado, USA, January 2009. Congenital dislocation of the patella.

Cameron JC: International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine (ISAKOS), Osaka, Japan, April 2009. Rotational osteotomy for recurrent instability of the patella.

Cameron HU: Current Concepts Institute, Current Concepts in Joint Replacement, Las Vegas, Nevada, May 2009. (1) Correcting valgus deformity, (2) Femoral neck modularity - love at first sight.

Cameron HU: British Orthopaedic Association, Orthopaedic Meeting, United Kingdom, September 2008. The oblong socket.

Cameron HU: International Society for Technology in Arthroplasty (ISTA), 21st Annual Meeting, Seoul, Korea, September 2008. (1) A new approach to neck sparing total hip arthroplasty (THA) stem, (2) A novel approach to reduction of wear in total hip arthroplasty, (3) Design considerations and results for a modular neck in cemented total hip arthroplasty, (4) Hydroxyapatite (HA) coated femoral components in total knee replacements, (5) Total hip replacement after intertrochanteric osteotomies.

Cameron HU: Current Concepts Institute, Current Concepts in Joint Replacement, Orlando, Florida, December 2008. (1) Fusion takedown: Don't promise too much, (2) Proximal modular fixation: Twenty years onward, (3) Hip fusion takedown, (4) Proximal modular fixation.

Fernie GR: Canadian Institutes of Health Research (CIHR) UK-Toronto Collaboration, International Workshop on the Implementation of Assistive Technology for People with Dementia Part 2, Bath, United Kingdom, March 2009.

Fernie GR: Canadian Engineering Leadership Forum, The National Engineering Summit 2009, Montreal, PQ, May 2009. The new engineer in society: Design for aging and disability.

Fernie GR: Mayo Clinic, Rochester, Minnesota, May 2009. Scott Named Visiting Professor: What is needed to conduct a successful program in the application of technology to geriatrics?

Fernie GR: Glenrose Rehabilitation Hospital, 2nd Bi-Annual The Greying Nation Conference 2009: Keeping Ahead of the Wave, Edmonton, AB, June 2009. (1) Videoconference: Overview of iDAPT (Intelligent Design for Adaptation, Participation and Technology), (2) Solutions for everyday living.

Fernie GR: Association of Engineers of Australia, Adelaide, Australia, September 2008. Special Symposium: Technology transfer.

Fernie GR: Australian Rehabilitation and Assistive Technology Association (ARATA) 2008, Adelaide, Australia, September 2008. A holistic approach to assistive technology (AT) development, use and evaluation - the Intelligent Design for Adaptation, Participation and Technology (iDAPT) story.

Fernie GR: American Congress of Rehabilitation Medicine-American Society of Neurorehabilitation (ACRM-ASNR), Joint Educational Conference, Toronto, ON, October 2008, October 2008. Early career course workshop.

Fernie GR: International Workshop on the Implementation of Assistive Technology for People with Dementia, Part 1, Toronto, ON, October 2008. Attendee.

Fernie GR: Canadian Urban Institute, Toronto, ON, December 2008. Dwellings and streets. Bracing for the demographic tsunami: From health care to community building.

Finkelstein JA: Israel Spine Society, Eilat, Israel, April 2009. Keynote Lecture: Response shift in spine surgery.

Finkelstein JA: North American Spine Society, Annual Meeting, Toronto, ON, November 2008. (1) McCulloch laminoplasty versus traditional decompression for spinal stenosis, (2) Unilateral pedicle screw fixation with transforaminal lumbar interbody fusion (TLIF).

Finkelstein JA: Stryker Canada, Toronto, ON, December 2008. Program Chair: Techniques in less invasive spine.

Hall H: University of Alberta, Edmonton, AB, February 2009. Improving the effectiveness of spinal treatment.

Hall H: University of Saskatchewan, Saskatoon, SK, February 2009. The patient with pain disorder: What the surgeon needs to know.

Hall H: CBI Health Group, Edmonton AB, March 2009. Effective management of whiplash-associated disorders.

Hall H: Stryker Spine, Santa Fe, New Mexico, March 2009. Cost effectiveness and social impact of spine surgery.

Hall H: Stryker Spine, Las Vegas, Nevada, April 2009. A practical assessment: Cervical spine.

Hall H: Bronson Hospital, Bronson Neurological Services, Kalamazoo, Michigan, May 2009. Keynote Presentation: What we know and where we go from here.

Hall H: CBI Health Group, Regina, SK, May 2009. Effective management of spinal injuries.

Hall H: CBI Health, Leduc, AB, June 2009. Treating the industrial athlete.

Hall H: CBI Health Group, Lethbridge, AB, June 2009. Seven minute back examination.

Hall H: Stryker Spine, Common Problems, Innovative Solutions, Fort Lauderdale, Florida, June 2009. (1) Non-operative care: Does anything really work?, (2) The value of surgery: What can we prove, (3) Medical economics: Are we getting our money's worth?

Hall H: University of Alberta, Edmonton, AB, June 2009. Managing chronic pain.

Hall H: Stryker Spine, Consideration and Techniques in Complex Cervical Spine Surgery, Baltimore Maryland, August 2008. Patient selection for cervical surgery.

Kreder HJ: Association for Osteosynthesis (AO) North America, Charlotte, North Carolina, January 2009. (1) Principles of operative fracture management: Bone healing, (2) Special fracture problems: Pathogenesis and history of technical errors leading to failed fixation.

Kreder HJ: Association Internationale pour l'Osteosynthese Dynamique (AIOD), Canadian Joint Symposium, Whistler, BC, February 2009. (1) Controversies regarding the interface in total hip replacement; ceramic, metal, cross-linked polyethylene, (2) Emerging trends and controversies in hip and knee arthroplasty, (3) Moderator: Controversies in total hip fixation, (4) Panelist: (a) Controversial primary total hip arthroplasty topics, (b) Interactive surgeon case reviews on primary total hip replacement problems, (c) Interactive surgeon case reviews on primary total knee replacement problems, (d) Interactive surgeon case reviews on revision total knee replacement problems, (5) Periprosthetic acetabular fracture management, (6) Bilateral total knee replacement controversies, (7) Periprosthetic fractures around a total knee replacement, (8) Panelist: Interactive surgeon case reviews on revision total knee replacement problems, (9) Periprosthetic fractures around a total knee replacement.

Kreder HJ: Association for Osteosynthesis (AO) North America, Indianapolis, Indianapolis, May 2009. (1) History of fracture care and evolution of principles, (2) Violation of principles leading to failed fixation: How to avoid disappointment.

Kreder HJ: Association for Osteosynthesis (AO) North America, Surgical Advances in Orthopaedics, Blue Mountain, ON, September 2008. (1) Case reviews in upper extremity trauma, (2) Case reviews of lower extremity trauma, (3) Distal tibial plating: Video vignettes, (4) Foot and ankle trauma: Current concepts update, (5) Gender specific total knee replacement debate, (6) Immediate total hip replacement for fragility fracture of the acetabulum, (7) Infected total hip replacement: Management for cure, (8) Knee problems: Case reviews, (9) Supracondylar femur fractures: Getting a better reduction, (10) Tibial plateau bone grafting debate: Autograft versus bone substitute, (11) Total knee replacement: Correcting varus/valgus deformity.

Kreder HJ: Bone and Joint Health Network, Toronto, ON, September 2008. Hip fractures in adults: How to improve outcomes.

Kreder HJ: Orthopaedic Trauma Association, Venous Thromboembolism Symposium, Denver, Colorado, October 2008. Fractures below the knee do not require prophylaxis.

Kreder HJ: Association for Osteosynthesis (AO) North America, Toronto, ON, November 2008. (1) Bone graft substitutes and tissue engineering in the management of complex fractures, (2) Management of periprosthetic fractures.

Marks PH: Ontario Medical Association, Sport Medicine Section, Toronto, ON, February 2009. Medial bone bruises and cartilage lesions in patients with anterior cruciate ligament (ACL) tear combined with medial-sided injuries: The second impact.

Marks PH: Swiss Radiologic Society, Annual Meeting, Switzerland, June 2009. Quantitative magnetic resonance (MR) imaging evaluation of the cartilage thickness and subchondral bone area in patients with ACL-reconstruction 7 years after surgery.

Marks PH: Boston Shoulder and Sports Symposium, Boston, Massachusetts, October 2008. (1) Biologic joint restoration: Current concepts in meniscus repair and enhancement in ligament reconstruction, (2) The anterior cruciate ligament (ACL) risk equation: Factors implicated in joint degeneration after ligament injury.

Marks PH: The American Orthopaedic Society for Sports Medicine, Post-Joint Injury Osteoarthritis Conference: Think Tank, New Orleans, Louisiana, December 2008. Participant.

Nousiainen M: Association for Osteosynthesis (AO) North America, AO North America Basic Principles and Techniques of Operative Fracture Management Course, Toronto, ON, November 2008. Podium Presentation: Tension band principles.

Richards RR: American Society for Surgery of the Hand, Annual Meeting, Precourse, Arlington, Virginia, September 2008. Surgical reconstruction of upper extremity injuries: An international perspective. Tendon transfers to restore function about the shoulder and elbow.

Richards RR: Orthopaedic Education, Inc., 9th Annual Advances in Arthritis, Arthroplasty and Trauma Course, Arlington, Virginia, September 2008. (1) Humeral diaphyseal aseptic nonunions: An algorithm of management, (2) Master video - Radial head fractures: Replacement pearls, (3) Pearls for avoiding the systemic impact of intramedullary nailing, (4) Treating aseptic complications following total shoulder arthroplasty, (5) Panel discussion: Challenges in shoulder arthritis.

Richards RR: Osteosynthesis and Trauma Care Foundation, Practical Solutions for Difficult Fractures of the Elbow, Foot and Ankle, Toronto, ON, November 2008. Comminuted distal humerus fracture in a 70 year old woman: Open reduction and internal fixation.

Stephen DGS: Association for Osteosynthesis (AO) North America, Basic Principles and Techniques of Operative Fracture Management Course for Residents, Charlotte, North Carolina, February 2009. (1) Course evaluator, (2) Unique learning resources of the AO Foundation.

Stephen DGS: Association for Osteosynthesis (AO), Basic Principles of Techniques and Operative Fracture Management, Sun Valley, Idaho, March 2009. (1) Course Director, (2) Ankle fractures, (3) Practical exercise VII: Ankle fractures - Type C malleolar.

Stephen DGS: Association for Osteosynthesis (AO), Pelvic and Acetabular Fracture Management Course - A Hands-on Course, including Cadaveric Dissection, Birmingham, Alabama, April 2009. (1) Faculty, (2) The role of embolization, (3) Sacroiliac fracture/dislocation, (4) Posterior pelvis: Sacrum and sacroiliac joint, (5) T-type fracture: Choice of approach; reduction techniques.

Stephen DGS: Association for Osteosynthesis (AO), Advanced Symposium: Solutions for Fracture Fixation Problems, Miami, Florida, April 2009. (1) Ankle fractures - Salvage of common treatment errors, (2) Ankle arthrodesis for salvage of trauma sequelae.

Stephen DGS: American Association of Orthopaedic Surgeons (AAOS), Advanced Course - Fractures of the Pelvis and Acetabulum, Barcelona, Spain, June 2009. (1) Classification of pelvic fractures, (2) Open reduction internal fixation - sacroiliac (ORIF SI) joint fracture dislocations, (3) Reduction and fixation techniques AC/AW.

Stephen DGS: Association for Osteosynthesis, Advances Course, Ribeirao Preto, Brazil, August 2008. (1) Advances in femoral intramedullary (IM) nailing, (2) Intra-articular calcaneal fracture: Reduction strategy, (3) Proximal femoral locking plates, (4) Subtrochanteric fracture - principles of intramedullary fixation, (5) Treatment of both column acetabular fracture.

Stephen DGS: Association for Osteosynthesis (AO), Basic Principles and Techniques Course for Residents, Seattle, Washington, August 2008. (1) Overview of AO Foundation, (2) Ankle fractures, (3) Lab: Ankle fractures, (4) Discussion groups.

Stephen DGS: Chicago Trauma Symposium, Chicago, Illinois, August 2008. (1) Lecture: Advances in femoral intramedullary (IM) nailing, (2) Practical exercise: Proximal femoral locking plate.

Stephen DGS: Association for Osteosynthesis (AO), Basic Principles and Techniques Course for Residents, Brunswick, New Jersey, September 2008. (1) What AO has to offer, (2) Tibial plateau fractures.

Stephen DGS: HealthStream, 20th Emile Letournel Institute Course and Workshop: Fractures of the Acetabulum and Pelvis (A Continuing Education Medical Activity), Santa Monica, California, September 2008. (1) Ilium fractures and sacroiliac (SI) fracture dislocations, (2) Radiographic classification of acetabular: Posterior wall, posterior column, (3) Choice of approach for transverse plus posterior wall, (4) Practical exercise: Reduction and internal fixation of pelvic fractures, (5) Cadaveric dissections, (6) Small group discussion.

Stephen DGS: Orthopaedic Trauma Association, 24th Annual Meeting, Denver, Colorado, October 2008. (1) Case Presentations: Ankle fractures, (2) Practical exercise: Techniques for open reduction internal fixation (ORIF) of distal femur, (3) Hands-on-skill lab: Calcaneus fractures.

Stephen DGS: Association for Osteosynthesis (AO), Advanced Principles and Techniques of Operative Fracture Management, Toronto, ON, November 2008. (1) Chairman, (2) Lecture: Calcaneus fractures, (3) Group discussion.

Stephen DGS: Synthes USA, Fall Annual Meeting, Trauma, Tuscon, Arizona, November 2008. (1) Surgeon clinical debates: (a) The fractured clavicle - To operate or not to operate: Conservative, (b) Femoral neck fractures - Best solution arthroplasty, (2) Group discussions.

Stephen DGS: Stryker Orthopedic Company, Canadian Orthopaedic Resident Trauma Review Course, Toronto, ON, December 2008. (1) Subtrochanteric fractures, (2) Hip dislocations.

Yee A: Canadian Spine Society, Symposium on Patient Attitudes Towards Spine Surgery - The Impact of Perception, Gatineau, PQ, March 2009. Talk: Do patient expectations relate to functional outcome in spinal surgery?

Yee A: Spinal Cord Injury Solutions Network/Pre-Canadian Spine Society Annual Meeting of the Acute Practice Network-Pre-Hospital Care Committee (with Dr. M. Fehlings as Chair and Drs. H. Ahn and A. Yee as co-Chairs), Gatineau, PQ, March 2009. Pre-hospital care update in spinal cord injury: Update on results of a systematic review.

Yee A: Spinal Cord Injury - Translational Research Network (SCI-TRN), Annual Meeting, Toronto, ON, November 2008. (1) Co-Chair (with Dr. H. Ahn) of the Pre-Hospital Care Committee in Acute Practice Network (APN), (2) Pre-hospital care update in spinal cord injury: Preliminary results of a systematic review.

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 novel delivery system for bone morphogenetic protein (BMP2) to enhance ACL graft integration. *Richards R, Yee A, Roberston C: The Physicians' Services Incorporated Foundation.* (\$80,000 2008.)

A phase I trial on the use of photodynamic therapy (PDT) in the treatment of breast cancer vertebral metastasis. *Yee AJM, Whyne CM, Bisland SK, Wilson BC, Akens MA, Chow E, Clemons M, Sahgal A, Burch S: Canadian Breast Cancer Foundation, Ontario Region.* (\$300,850 2009 - 2012.)

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 randomized, comparative multicenter clinical trial evaluating BST-CarGel and microfracture in repair of focal articular cartilage lesions on the femoral condyle. *Marks P, Restrep A, Shive M: BioSyntech Canada Inc.* (\$240,000 2005 - 2008.)

Academic trust fund application for a research workshop for musculoskeletal (MSK) on-line curriculum - Module #1. *Wadey V, Cividino A, McDonald-Blumer H, Wessel J, McIlroy J, Dauphinee D: Sunnybrook Hospital-University of Toronto Community (SHUTC).* (\$5,000 2007 - 2008.)

Advanced prototyping and testing of an intelligent patient lifting and handling device. *Fernie GR, Dongyun G, Hart A, Gilbert P, Jun WM, Dai K, et al: International Science and Technology Partnerships (ISTP) Canada.* (\$550,000 2009 - 2011.)

Autonomic dysreflexia and abnormal cardiovascular control following spinal cord injury - translating knowledge into best practice for health care professionals. *Ford MH, Krassioukov A, Warburton D, Draven BC, Workhoven E: Spinal Cord Injury Solutions Network.* (\$99,300 2009 - 2010.)

Biomechanical implications of a novel cancer treatment in the spine for the Teachers' Science and Technology Outreach Program (TSTOP). *Whyne C: Ministry of Research and Innovation (MRI), Ontario.* (\$9,270 2008 - 2009.)

Biomechanical implications of metastatic disease in the spine: Evaluation of stability and tumour burden in a preclinical model. Extension. *Whyne C, Yee A, Finkelstein J: Canadian Institutes of Health Research.* (\$40,096 2007 - 2008.)

Bone stability and tumor burden in mixed osteolytic/osteoblastic spinal metastases (funding declined). *Whyne CM, Yee AJM, Finkelstein J, Akens MK, Morris A, Probyn L: Canadian Breast Cancer Foundation.* (\$389,200 2008 - 2011.)

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.)

Bone stability and tumor burden in the metastatic spine: implications of variable disease patterns. *Whyne CM, Yee AJ (co-Principal Applicants), Finkelstein JA (co-Investigator), Probyn L (Collaborator): Canadian Institutes of Health Research, Renewal Operating Grant (Primary Institution: Cancer Research; Other Institution: MSK Health and Arthritis).* (\$379,862 2008 - 2012.)

Centre for Research in Image-Guided Therapeutics. *Hynynen K, Multiple Collaborators including Whyne CM: Canada Foundation for Innovation, Research Hospital Fund Large Scale Institutional Endeavours.* (\$14,337,919 2008 - 2011.)

- CIHR team for the development, testing and knowledge translation of innovative approaches to optimize gait and balance of older adults. *Maki BE, Bayley M, Brooks D, Fernie GR, Flint A, Jaglal S, Liu B, McIlroy WE, Mihailidis A, Perry S, Popovic M, Pratt J: Canadian Institutes of Health Research.* (\$1,499,982 2008 - 2014.)
- Clinical trial of novel technology to improve hand hygiene (year 1). *Fernie GR: Ministry of Health and Long-Term Care, Health Research Grants.* (\$177,165 2008 - 2009.)
- Cloud nine. *Fernie GR: Ontario Research Commercialization Program (ORCP) - BioDiscovery Toronto.* (\$50,000 2008 - 2009.)
- Collaborative academic rehabilitation engineering (CARE). *Chau TTK, Baecker R, Fernie GR, Maki BE, Santerre JP, Wong W, Popovic M, Naguib HE, Steele C, Mihailidis A, Colantonio A: Natural Sciences and Engineering Research Council, Collaborative Research and Training Experience (CREATE) Program.* (\$1,650,000 2009 - 2015.)
- 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 (CIHR).* (\$886,113 2004 - 2010.)
- Data processing and performance feedback software for an advanced hand hygiene compliance system. *Fernie GR, Marquez Chin C: Ontario Research Commercialization Program (ORCP) - Technology Transfer Toronto.* (\$10,000 2008 - 2009.)
- Development of an e-health visual-training program to improve balance and prevent falls in older adults. *Maki BE, Jadad AR, McKay S: Canadian Institutes of Health Research, Strategic Training Postdoctoral Fellowship in Health Care, Technology and Place.* (\$19,000 2007 - 2009.)
- Development of products to reduce burden of care at home. *Fernie GR, Lefebvre N: Ministry of Health and Long-Term Care.* (\$250,000 2008 - 2009.)
- Does an interactive on-line learning program involving simulation improve medical residents' knowledge and skill to manage patients with inflammatory arthritis? *Wadey V, McDonald-Blumer H (U of T), Cividino A (McMaster University), Wessel J (McMaster University), Levy D (McMaster University), McIlroy J (U of T), Dauphine D (McGill University): Canadian Initiatives for Outcomes in Rheumatology Care - CIORA.* (\$50,600 2009 - 2010.)
- Does an interactive on-line learning program involving simulation improve medical residents' knowledge and skill to manage patients with inflammatory arthritis? A pilot study. *Wadey V, McDonald-Blumer H (U of T), Cividino A (McMaster University), Wessel J (McMaster University), Levy D (McMaster University), McIlroy J (U of T), Dauphine D (McGill University): Dean's Fund New Staff Grant Competition, Fall 2008 - University of Toronto, Faculty of Medicine.* (\$10,000 2009 - 2012.)
- 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.)
- Economic impact analysis and process benchmarking appraisal of early surgical decompression for traumatic cervical spinal cord injury. *Furlan J, Fehlings M, Yee AJ (co-Investigators): Spinal Cord Injury (SCI) Solutions Network, Rapid Response Application.* (\$97,517 2008 - 2009.)
- Enhancing the application of health-related quality of life evaluations for guiding clinical care: An examination of changes in appraisal in lumbar degenerative disease patients before and after surgical intervention. *Finkelstein J: The Physicians' Services Incorporated Foundation.* (\$59,000 2009 - 2011.)
- Evaluation of pGLcNAc-derived materials as activator of intervertebral disc tissue repair. *Yee AJ, Seth A (co-Principal Investigators), Whyne CM (co-Investigator): Marine Polymers Technologies Inc.* (\$217,560 2007 - 2009.)
- 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.)
- Hand hygiene system. *Fernie GR, McGeer A, McGilton K, Mihailidis A, Jaglal S: Ontario Centres of Excellence.* (\$168,122 2008 - 2009.)
- Health care, technology and place (HCTP): A strategic training initiative. *Coyte P, Andrews G, Baecker R, Bayoumi A, Boydell K, Cameron J, Carter M, Clifford T, Colantonio A, Culyer A, Dunn J, Fernie G, Gignac M, Hoch J, Holmes D, Jadad A, Krahn M, Laporte A, Levin L, Maki B, Mihailidis A, Miller F, Mykhalovskiy E, O'Brien-Pallas L, Rosenberg M, Ushur R: Canadian Institutes for Health Research.* (\$1,950,000 2009 - 2015.)
- Identifying barriers to meeting the Ontario standards for time to treat hip fracture patients. *Kreder HJ: Sunnybrook Medical Services Alternative Funding Plan Association.* (\$75,000 2009 - 2011.)
- Improvement in the methods of handling human waste to reduce the probability of cross-infection in healthcare institutions: Problem analysis and concept development phase. *Fernie GR, McGeer A: Ministry of Health and Long-Term Care.* (\$300,000 2009 - 2011.)
- 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 (Innovation Fund).* (\$18,398,069 2004 - 2010.)
- Intelligent multiple user mounted hand hygiene dispenser. *Fernie GR: Ontario Research Commercialization Program (ORCP) - 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 (Research Hospital Fund).* (\$17,631,726 2004 - 2010.)

Metastatic breast cancer genome anatomy. *Seth A, Aubin J, Kahn H, 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 (NSERC).* (\$165,000 2006 - 2011.)

New radiofrequency ablation device of soft tissue and malignant tumor ablation. *Yee AJM, Whyne W, Gofeld M, Akens MK, Shah K, Godara N: Ontario Centres of Excellence (OCE) (OCE Funds \$220,000; Baylis \$335,000).* (\$555,000 2009 - 2010.)

New radiofrequency device for soft tissue and bone malignant tumor ablation. *Yee AJ, Whyne CM, Akens M (co-Investigators): Ontario Centres of Excellence (OCE) Grant (OCE Funds \$220,000; Baylis \$335,000 over 2 years - January 2009 to December 2010).* (\$550,000 2008 - 2009.)

Novel elastin-based polypeptides for tissue engineering strategies in orthopaedic surgery. *Yee AJ, Woodhouse K, Whyne CM: Advanced Regenerative Tissue Engineering Centre (ARTEC)/Ontario Ministry of Health, (Matched Funds - Elastin Specialties \$60,000; Ontario Ministry of Health \$50,400).* (\$110,400 2008 - 2009.)

Pedicle screw insertion simulator study. *Ginsberg H, Whyne C, Massicotte E, Martin A: St. Michael's Hospital, Trauma/Neurosurgery Program, Internal Multi-Disciplinary Small Grant Program.* (\$2,000 2008 - 2009.)

Portable sleep apnea diagnostic device for home use. *Bradley TD, Alshaer H, Fernie GR: Ontario Research Commercialization Program (ORCP) -Technology Transfer Toronto (Ministry of Research and Innovation).* (\$30,500 2008 - 2009.)

Predicting acetabular fracture prognosis through quantitative weight-bearing area damage evaluation. *Lubovsky O, Whyne C, Kreder H, Beek M: Osteosynthesis and Trauma Care Foundation.* (\$10,000 2009.)

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 Inc.* (\$29,633 2007 - 2008.)

Recombinant elastin-like polypeptide-based materials for use in spinal disc repair. *Woodhouse K, Yee AJ, Whyne CM: Advanced Regenerative Tissue Engineering Centre (ARTEC, Emerging Materials Knowledge Project (Ontario Centre for Excellence Project. with Ontario Research and Development Challenge Fund (ORDCF) through EMK \$51,400; matched by Elastin Specialties funding \$50,000 over 2 years).* (\$101,400 2006 - 2008.)

Recombinant elastin-like polypeptide-based materials for use in artificial spinal discs. *Woodhouse K, Whyne C, Yee A: Ontario Centres of Excellence, Emerging Materials Network Collaborative Grant.* (\$211,400 2006 - 2008.)

Rehabilitation Engineering Research Center on universal design and the built environment at Buffalo. *Steinfeld E: National Institute on Disability and Rehabilitation Research (NIDRR).* (\$5,538,000 2005 - 2009.)

Restoration of joint function through subchondral delivery of therapeutics. *Hoemann C, Marks P: Natural Sciences and Engineering Research Council of Canada.* (\$450,000 2008 - 2011.)

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.)

Role of peripheral vision in the control of stepping and grasping reactions. *Maki BE, King E: Toronto Western Research Institute/University Health Network/University of Toronto, Graduate Student Scholarship-Ontario Student Opportunity Trust Funds (OSOTF) Award, Vision Science Research Program.* (\$18,900 2007 - 2008.)

Role of spatial memory in the control of grasping reactions. *Maki BE, Cheng K: Toronto Western Research Institute/University Health Network/University of Toronto, Graduate Student Scholarship-Ontario Student Opportunity Trust Funds (OSOTF) Award, Vision Science Research Program.* (\$18,900 2007 - 2008.)

Role of spatial memory in the control of grasping reactions. *Maki BE, Cheng K: Toronto Western Research Institute/University Health Network/University of Toronto, Graduate Student Scholarship-Ontario Student Opportunity Trust Funds (OSOTF) Award, Vision Science Research Program.* (\$18,900 2008 - 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.)

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 (MRI), Ontario.* (\$10,000 2008.)

Spreader bar for patient lifting. *Fernie G: Ontario Research Commercialization Program (ORCP) -Technology Transfer Toronto.* (\$15,000 2009.)

The impact of photodynamic therapy on the biomechanical stability of the metastatic spine: Characterization of 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.)

Towards the development of a pervasive prompting system for older adults with dementia: Developing the COACH task guidance system for use in the home. *Mihailidis A, Boutilier C, Cameron J, Fernie GR, Naglie G: Canadian Institutes of Health Research (CIHR).* (\$265,155 2009 - 2012.)

Training femoral neck screw insertion skills to surgical trainees: Computer-assisted surgery versus conventional fluoroscopic technique. *Nousiainen M, Kreder H: Canadian Orthopaedic Research, Legal Award for Research Study.* (\$20,000 2008 - 2009.)

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, Summer Internship Program.* (\$12,000 2008.)

Which patients are most likely to benefit from total joint arthroplasty and what do they need to know? *Hawker GA, Badley E, Borkhoff C, Croxford R, Davis A, Dunn S, Gignac M, Jaglal S, Kreder HJ, Sale J: Canadian Institutes of Health Research.* (\$359,121 2008 - 2011.)

HONOURS RECEIVED

Fernie GR: Inducted into the Terry Fox Hall of Fame. October 2008.

Hall H: Tator Hall Visiting Professor Lectureship. June 2009.

Whyne C: Best Paper Award (with I Moss, K Woodhouse and A Yee), University of Toronto, Orthopaedic Research Day. January 2009.

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. S. Shahrokhi Lecturer

PUBLICATIONS

Antonyshyn O: Frontal basilar trauma. In: Classifications in Facial Plastic Surgery: (Oxley PJ, ed.) Plural Publishing Inc., San Diego, California: 2009: pp 161-162.

Antonyshyn O: High energy ballistic and avulsive facial injuries. In: Classifications in Facial Plastic Surgery: (Oxley PJ, ed.) Plural Publishing Inc., San Diego, California: 2009: pp 165-167.

Antonyshyn O: LeFort classifications. In: Classification in Facial Plastic Surgery: (Oxley PJ, ed.) Plural Publishing Inc., San Diego, California: 2009: pp 167-169.

Antonyshyn O: Nasal deviation. In: Classifications in Facial Plastic Surgery: (Oxley PJ, ed.) Plural Publishing Inc., San Diego, California: 2009: pp 172-173.

Antonyshyn O: Naso-orbito-ethmoidal complex fractures. In: Classifications in Facial Plastic Surgery: (Oxley PJ, ed.) Plural Publishing Inc., San Diego, California: 2009: pp 175-178.

Binhammer PA: Digital nerve injuries. In: Surgery of Peripheral Nerve Injuries: A Case-Based Approach: (Midha R, Zager E, eds.) Thieme, New York: 2008: pp 109-111.

Binhammer PA: What is the best treatment for acute injuries of the scapholunate ligament? In: Evidence Based Orthopedics: (Wright J, Graham B, eds.) Elsevier, Philadelphia: 2008.

Cartotto R: Use of high frequency oscillatory ventilation in inhalation injury. Journal of Burn Care and Research: January-February 2009: 30(1): pp 178-181.

Cartotto R, Walia G, Ellis S, Fowler R: Oscillation after inhalation: High frequency oscillatory ventilation in burn patients with the acute respiratory distress syndrome and co-existing smoke inhalation injury. Journal of Burn Care and Research: January-February 2009: 30(1): pp 119-127.

Eckhaus AA, Fish JS, Skarja G, Semple J, Sefton MV: A preliminary study of the effect of poly(methacrylic acid-co-methyl methacrylate) beads on angiogenesis in rodent skin grafts and the quality of the panniculus carnosus. Plastic and Reconstructive Surgery: November 2008: 122(5): pp 1361-1370.

Gomez M, Wong DT, Stewart TE, Redelmeier DA, Fish JS: The FLAMES score accurately predicts mortality risk in burn patients. Journal of Trauma: September 2008: 65(3): pp 636-645.

Murray D, Edwards G, Mainprize J, Antonyshyn O: Optimizing craniofacial osteotomies: Applications of haptic and rapid prototyping technology. Journal of Oral and Maxillofacial Surgery: August 2008: 66(8): pp 1766-1772.

Murray DJ, Edwards G, Mainprize JG, Antonyshyn O: Advanced technology in the management of fibrous dysplasia. Journal of Plastic, Reconstructive and Aesthetic Surgery: August 2008: 61(8): pp 906-916. E-published ahead of print: March 14, 2008.

Pahuta MA, Mainprize JG, Rohlf FJ, Antonyshyn OM: Biometric Morphing: A novel technique for the analysis of morphological outcomes after facial surgery. Annals of Plastic Surgery: January 2009: 62(1): pp 48-53.

Peck MD, Harrington D, Mlcak RP, Cartotto R: Potential studies of modes of ventilation in inhalation injury. Journal of Burn Care and Research: January-February 2009: 30(1): pp 181-183.

Singerman J, Gomez M, Fish JS: Long-term sequelae of low voltage electrical injury. Journal of Burn Care and Rehabilitation: October 2008: 29(5): pp 773.

Theman K, Singerman J, Gomez M, Fish JS: Return to work after low voltage electrical injury. Journal of Burn Care and Rehabilitation: November 2008: 29(6): pp 959-964.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Antonyshyn O: American Society of Head and Neck Radiology, 42nd Annual Meeting, Toronto, ON, September 2008. Keynote lecture: Craniofacial trauma and post-traumatic deformities: What the surgeon needs to know and why.

Antonyshyn O: Association for Osteosynthesis (AO) Challenges and Advances in the Management of Craniomaxillofacial Trauma and Reconstruction, Focus: Orthognathic Surgery, Quebec City, PQ, September 2008. (1) Alloplastic augmentation of the chin and face, (2) Orthognathic reconstruction of the post-traumatic patient.

Antonyshyn O: Anderson Study Group, Toronto, ON, October 2008. Keynote lecture. 3D imaging and computer modeling applications in craniofacial surgery.

Antonyshyn O: Advanced Craniomaxillofacial Forum (ACMF), Global Research Advisory Board, Paris, France, November 2008. (1) Development of an ACMF global research grant program, (2) Use of live surgery in craniofacial surgery education.

Antonyshyn O: American Society of Plastic Surgery, Annual Meeting, Chicago, Illinois, November 2008. Panelist: The expert's debate: Techniques in facial trauma.

Binhammer P: Groupe pour l'Avancement de la Microchirurgie Canada (GAM Canada), Kelowna, British Columbia, June 2009. Challenging reconstructions of the fingers, hand and forearm.

Cartotto RC: American Burn Association, Annual Meeting, San Antonio, Texas, March 2009. (1) Postgraduate Course A: Urine output is not the end point of resuscitation, (2) Research Symposium: What's new in mechanical ventilation of acute lung injury (ALI) and acute respiratory distress syndrome (ARDS) in burn patients?

Cartotto RC: University of Montreal, Montreal, PQ, May 2009. Visiting Burn Professor: (1) Prediction of inhalation injury, (2) Recent research in toxic epidermal necrolysis, (3) Surgical management of facial burns, (4) Fluid creep: An on-going problem in burn resuscitation.

Fish JS: Workplace Safety Insurance Board, CEO/President and Senior Team, Toronto, ON, February 2009. Electrical injury program for specialty care.

Fish JS: Canadian Standards Association and Electrical Safety Authority, Electrical Injury and Safety Meeting, Toronto, ON, May 2009. Delivered the keynote address.

Fish JS: International Society of Burn Injuries, Montreal, PQ, September 2008. (1) Change over time in survival among older adults with burn injury: A ten-year analysis of the National Burn Repository of the American Burn Association, (2) Effectiveness of a prevention program for electrical burn injuries due to the use of multi-meters, (3) Vimentin immunostating: Is there a utility in burn depth determination?

Fish JS: Canadian Standards Association, Burnaby, BC, October 2008. Keynote Speaker: Fighting the invisible injury: An electrical injury program.

Fish JS: Canadian Standards Association, Safety Conference, Toronto, ON, November 2008. Electrical injury program.

Fish JS: Hydro One CEO, Toronto, ON, November 2008. Electrical injury program.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

Defining psychological 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.)

Finite element modeling of the human craniofacial skeleton. *Fialkov J, Whyne C: Stryker advanced cranio-maxillofacial (ACMF) forum.* (\$60,000 2009 - 2011.)

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.)

Research Summer Studentship Award. *Antonyshyn O, Hontscharuk R: Sunnybrook Research Trust.* (\$1,600 2009.)

Retrospective review of pain management during electrical injury. *Fish J, Li A: Electrical Injury Research Foundation.* (\$7,000 2007 - 2008.)

HONOURS RECEIVED

Binhammer P: Education Award, University of Toronto Surgical Skills Centre. May 2009.

Cartotto RC: 2009 Arnis Freiberg Faculty Excellence in Teaching Award, Division of Plastic Surgery, University of Toronto. March 2009.

Fialkov JA: Osteosynthesis and Trauma Care Foundation, Biomechanical Research Fellowship, Zuchwil, Switzerland. October 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

- Alkhateeb S, Klotz L:** Intestinal segments in urology. In: *Urology Review*: (Leslie SW, ed.) McGraw Hill, New York: 2009: pp 185-197.
- Bailly G, Herschorn S:** Chapter 54: Urinary diversion. In: *Textbook of the Neurogenic Bladder*, 2nd Edition: (Corcos J, Schick E, eds.) Informa Healthcare, London, United Kingdom: 2008: pp 1035-1070.
- Bapat B, Kron K, Pethe V, Briollais L, Sadikovic B, Ozcelik H, Sunderji A, Venkateswaran V, Pinthus J, Fleshner N, van der Kwast T:** Discovery of novel hypermethylated genes in prostate cancer using genomic CpG island microarrays. *PLoS ONE*: March 2009: 4(3): pp e4830. E-published March 13, 2009.
- Chapple C, Herschorn S, Abrams P, Sun F, Brodsky M, Guan Z:** Tolterodine treatment improves storage symptoms suggestive of overactive bladder in men treated with alpha-blockers. *European Urology*: E-published ahead of print November 24, 2008.
- Chi KN, Chin JL, Winqvist 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*: August 2008: 180(2): pp 565-570. E-published ahead of print: June 12, 2008.
- Ghoniem G, Corcos J, Comiter C, Bernhard P, Westney OL, Herschorn S:** Cross-linked polydimethylsiloxane injection for female stress urinary incontinence: Results of a multicentre, randomized, controlled, single-blind, study. *The Journal of Urology*: January 2009: 181(1): pp 204-210.
- Gleave M, Klotz L, Taneja SS:** The continued debate: Intermittent versus continuous hormonal ablation for metastatic prostate cancer. *Urologic Oncology*: January 2009: 27(1): pp 81-86.
- Herschorn S:** The artificial sphincter is the treatment of choice for post-radical prostatectomy incontinence. *Canadian Urological Association Journal*: October 2008: 2(5): pp 536-539.
- Herschorn S, Heesakkers J, Castro-Diaz D, Wang JT, Brodsky M, Guan Z, Disease Management Study Team:** Effects of tolterodine extended release on patient perception of bladder condition and overactive bladder symptoms. *Current Medical Research and Opinion*: December 2008: 24(12): pp 3513-3521.
- Irwin DE, Milsom I, Reilly K, Hunskaar S, Kopp Z, Herschorn S, Coyne KS, Kelleher CJ, Artibani W, Abrams P:** Overactive bladder is associated with erectile dysfunction and reduced sexual quality of life in men. *The Journal of Sexual Medicine*: December 2008: 5(12): pp 2904-2910.
- Jamnicky L, Nam RK:** *The Complete Canadian Guide to Prostate Cancer*: (Leask H, ed.) Wiley J, Toronto: 2008.
- Klotz L:** Active surveillance for favorable risk prostate cancer. In: *Prostate Cancer: A Clinical Guide*: (Gulley J, Dahut W, Moul J, Sandler H, eds.) Lippincott, Williams and Williams, Philadelphia: 2008: pp 69-78.
- Klotz L:** Active surveillance for prostate cancer: Trials and tribulations. *World Journal of Urology*: October 2008: 26(5): pp 43-42.
- Klotz L:** Maximal androgen blockade for advanced prostate cancer. *Clinical Endocrinology and Metabolism: Best Practice and Research*: July 2008: 22(2): pp 331-340.
- Klotz L:** What is the best approach for screen-detected low volume cancers? The case for observation. *Urologic Oncology*: October 2008: 26(5): pp 495-499.
- Klotz L, Boccon-Gibod L, Shore ND, Andreou C, Persson BE, Cantor P, Jensen JK, Olesen TK, Schroeder FH:** The efficacy and safety of degarelix: A 12-month, comparative, randomized, open-label, parallel-group phase III study in patients with prostate cancer. *British Journal of Urology International*: December 2008: 102(11): pp 1531-1538.
- Nam R, Klotz L:** Trends in prostate cancer screening: Canada. In: *Prostate Cancer Screening*: (Ankerst D, Tangen C, Thompson I, eds.) Humana Press, New York: 2009: pp 23-34.

Nam RK, Zhang WW, Trachtenberg J, Seth A, Klotz LH, Stanimirovic A, Punnen S, Venkateswaran V, Toi A, Loblaw DA, Sugar L, Siminovitch KA, Narod SA: Utility of incorporating genetic variants for the early detection of prostate cancer. *Clinical Cancer Research*: March 2009; 15(5): pp 1787-1793. E-published ahead of print: February 17, 2009.

Narod S A, 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*: July 2008; 99(2): pp 371-374. E-published ahead of print: June 24, 2008.

Narod SA, Seth A, Nam RK: Protein fusion in the ETS gene family and prostate cancer. *British Journal of Cancer - Mini Review*: September 2008; 99: pp 847-851. E-published September 9, 2008.

Ordon M, Nam RK: Lymph node assessment and lymphadenectomy in prostate cancer. *Journal of Surgical Oncology*: March 2009; 99(4): pp 215-224.

Padma-Nathan H, McCullough AR, Levine LA, Lipshultz LT, Siegel R, Montorsi F, Giulano F, Brock G, Andrienne R, Bell D, Broderick G, Carrier S, Cuzin B, Deeths HJ, Hellstrom W, Herschorn S, Lewis RW, Rosen RC, Shabisigh R, Stricker P: Randomized, double-blind, placebo-controlled study of postoperative nightly sildenafil citrate for the prevention of erectile dysfunction after bilateral nerve-sparing radical prostatectomy. *International Journal of Impotence Research*: July 2008; 20(5): pp 479-486. E-published July 24, 2008.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Herschorn S: European Association of Urology, Annual Meeting, Satellite Symposium, Stockholm, Sweden, March 2009. Fesoterodine for overactive bladder (OAB) Patients - applying research to clinical practice.

Herschorn S: Korean Continence Society, Annual Meeting, Seoul, South Korea, May 2009. Guest Speaker: (1) Update on overactive bladder pharmacotherapy, (2) Update on management of male lower urinary tract symptoms (LUTS), (3) Update on surgical treatment of post-radical prostatectomy incontinence.

Herschorn S: University of British Columbia, Department of Urology, Vancouver, BC, May 2009. Visiting Professor: (1) Challenges in major urologic reconstruction, (2) Advances in therapy of male lower urinary tract symptoms (LUTS).

Herschorn S: Canadian Urological Association, Annual Meeting, Toronto, ON, June 2009. Moderator of educational forum on post-radical prostatectomy incontinence.

Herschorn S: Taichung Medical Symposium, Taichung City, Taiwan, June 2009. Prevalence and impact of overactive bladder/lower urinary tract symptoms (OAB/LUTS): From the global to Asian perspective.

Parulekar WR, McKenzie M, Chi KN, Klotz L, Catton C, Brundage M, Ding K, Hiltz A, Meyer R, Saad F: Defining the optimal treatment strategy for localized prostate cancer patients: A survey of ongoing studies at the National Cancer Institute of Canada Clinical Trials Group. *Current Oncology*: August 2008; 15(4): pp 179-184.

Venkateswaran V, Klotz LH, Ramani M, Sugar LM, Jacob LE, Nam RK, Fleshner NE: A combination of micronutrients is beneficial in reducing the incidence of prostate cancer and increasing survival in the lady transgenic model. *Cancer Prevention Research (Philadelphia, PA)*: May 2009; 2(5): pp 473-83. E-published ahead of print: April 28, 2009.

Herschorn S: Tainan Chi-Mei Medical Centre, Tainan City, Taiwan, June 2009. Treatment outcomes for patients with overactive bladder (OAB).

Herschorn S: International Consultation on Urological Diseases (UCID) and Societe Internationale Urologie, 4th International Consultation on Urinary Incontinence, Paris, France, July 2008. Surgery for urinary incontinence in males.

Herschorn S: Montreal Area Urologists, Montreal, PQ, September 2008. Evidence for antimuscarinics in the management of male lower urinary tract symptoms (LUTS).

Herschorn S: Midland Family Practitioners, Midland, ON, November 2008. Overactive bladder in men.

Herschorn S: Turkish Urological Association, Biennial Meeting, Antalya, Turkey, November 2008. (1) Female pelvic reconstructive surgery, (2) How to avoid sling complications, (3) What has changed in 10 years in stress incontinence?

Klotz LH: Swiss Association of Multi-Disciplinary Oncology (SAMO), Lucerne, Switzerland, January 2009. Guest Speaker: Micronutrients and prostate cancer prevention.

Klotz LH: Fukuoka University, Jonan-ku, Fukuoka, Japan, February 2009. Guest Speaker: Active surveillance for prostate cancer.

Klotz LH: Gifu University, Gifu, Japan, February 2009. Guest Speaker: Active surveillance for prostate cancer.

Klotz LH: Hiroshima University, Higashi, Hiroshima City, Japan, February 2009. Guest Speaker: Active surveillance for prostate cancer.

Klotz LH: Niigata University, Nishi-ku, Niigata, Japan, February 2009. Guest Speaker: Active surveillance for prostate cancer.

Klotz LH: Takamatsu University, Takamatsu, Kagawa, Japan, February 2009. Guest Speaker: Active surveillance for prostate cancer.

Klotz LH: Mexican Society of Urologic Oncology, Acapulco, Mexico, July 2008. Guest Speaker.

Klotz LH: Israeli Urological Association, Eilat, Israel, November 2008. Guest Speaker: Active surveillance for prostate cancer.

Klotz LH: Quebec Urological Association, Quebec, PQ, November 2008. Guest Speaker: Active surveillance for prostate cancer.

Klotz LH: Societe Internationale Urologie (SIU), World Uro Oncology Update, Santiago, Chile, November 2008. Scientific Chair.

Kodama RT: Queen's University, Kingston, ON, February 2009. (1) Quest examiner, (2) Lecture: Urinary reconstruction and lower urinary tract trauma.

Kodama RT: Canadian Academy of Urologic Surgeons, Toronto, ON, June 2009. President and Moderator: The undergraduate curriculum and our shortlists.

Kodama RT: Eastern Virginia Medical School, Devine Institute of Reconstructive Urologic Surgery, Norfolk, Virginia, June 2009. Visiting Professor.

Nam RK: National Cancer Institute of Canada: Prostate Cancer Research Initiative Research Retreat, King City, ON, January 2009. Prostate cancer genetics.

Nam RK: University of Western Ontario, Division of Urology, London, ON, January 2009. Clinical application of prostate cancer genetics.

Nam RK: American Society of Clinical Oncology, GenitoUrinary Cancer Symposium, Orlando, Florida, February 2009. Should I have a prostate biopsy, doc.

Venkateswaran V: PacRim Breast and Prostate Cancer Group, 4th PacRim Breast and Prostate Cancer Meeting, Whistler, BC, August 2008. Prostate cancer chemoprevention – natural products.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

A multicenter, long-term follow-up study and efficacy of two dose levels of botox (botulinum toxin type A) purified neurotoxin complex in patients with urinary incontinence due to neurogenic detrusor overactivity. *Herschorn S, Carr L: Allergan.* (\$15,000 2008 - 2009.)

A phase III, randomized, double-blind, parallel group, placebo-controlled, multicenter study to assess the efficacy and safety of beta-3 agonist YM178 (25mg qd and 50mg qd) in subjects of overactive bladder. *Herschorn S: Astellas Pharma.* (\$20,000 2009.)

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: Sanofi.* (\$15,000 2008 - 2009.)

A randomized double-blind study of combination vitamin E, selenium and lycopene versus placebo in men undergoing radical prostatectomy for prostate cancer. *Fleshner NE, Finelli A, Jewett M, Venkateswaran V, Zlotta A, Laurence Klotz L, Evans A: Prostate Cancer Research Foundation of Canada.* (\$60,000 2008 - 2009.)

CORAL study (fosamax versus placebo in patients initiating therapy with LHRH analogues). Investigator-initiated (by Klotz L) multicentre trial, 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 (CURC).* (\$800,000 2005 - 2008.)

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.)

Dietary factors influencing insulin-like growth factor (IGF) signaling in prostate cancer. *Pollak M, Venkateswaran V, Martin Gleave M, Ong C: National Cancer Institute of Canada, Operating Grant.* (\$345,548 2007 - 2010.)

Dutasteride versus placebo in patients initiating intermittent androgen deprivation. Investigator-initiated (by Klotz L) multicentre trial, 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 (CURC).* (\$800,000 2006 - 2009.)

ETS gene translocations as biomarkers of prostate cancer. *Seth A, Nam R: National Cancer Institute of Canada (NCIC)*. (\$619,500 2008 - 2013.)

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: Canadian Urological Association (CUA)/ Abbott Grant Competition*. (\$25,000 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: Prostate Cancer Research Foundation of Canada*. (\$60,000 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 (CPCRI) and Ontario Institute for Cancer Research*. (\$749,561 2007 - 2010.)

Micronutrients and prostate cancer: Prevention to treatment. *Venkateswaran V, Klotz L, Fleshner N, Sugar L, Teahan S: Canadian Institutes of Health Research*. (\$247,413 2006 - 2009.)

Muscle cell mediated therapy for stress urinary incontinence. *Carr L, Herschorn S: Cook Myosite*. (\$10,000 2008 - 2009.)

Near infrared spectroscopy erectile dysfunction (NIRS ED) proof of concept study protocol. *Radomski S, Herschorn S, Barkin J: Urodynamix Technologies Ltd*. (\$10,800 2007 - 2008.)

Ontario Cancer Biomarker Network. *Diamantis E, Klotz L (Leader, Clinical Research Division): Ontario Cancer Research Network*. (\$6,000,000 2005 - 2008.)

Phase 1 evaluation of the feasibility and safety of MRI guided transurethral ultrasound therapy for localized prostate cancer, Grant No. 019437. *Klotz L, Chopra R, Bronskill M, Sugar L: National Cancer Institute of Canada*. (\$154,000 2008 - 2010.)

Randomized, double-blind, double-dummy, placebo-controlled, parallel group, multicentre trial to evaluate the efficacy and safety of fesoterodine in comparison to tolterodine ER in patients with overactive bladder. *Herschorn S: Pfizer*. (\$15,000 2008 - 2009.)

SELECT (Selenium and Vitamin E Cancer Prevention) Trial of Prostate Cancer: A randomized trial. Funded at \$170,000,000 over 10 years. *Coltman C, many co-investigators from the South Western Oncology Group including Klotz LH: National Institutes of Health*. (\$170,000 1999 - 2009.)

VECTOR: 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.)

Virtue male sling study: Prospective, non-randomized, multi-center global clinical trial. *Herschorn S: Coloplast Corporation*. (\$15,000 2009.)

HONOURS RECEIVED

Herschorn S: President-elect, Canadian Urological Association. June 2009.

Kodama RT: Postgraduate Resident Teaching Award, Special Recognition by the University of Toronto, Department of Surgery, Division of Urology. June 2009.

Nam RK: Faculty Postgraduate Teaching Award-Surgical, Division of Urology, University of Toronto. June 2009

Nam RK: George Armstrong-Peters Research Award, Department of Surgery, University of Toronto. June 2009

Toronto East General Hospital

Laura Tate

Surgeon-in-Chief



HEADS OF DIVISION

Dr. P. Bernick	General Surgery
Dr. P. Weiler	Orthopaedic Surgery
Dr. L. Tate	Plastic Surgery
Dr. R. Singal	Urology

The Surgical Department of the Toronto East General Hospital has 20 active surgeons including 3 urologists, 5 orthopedic surgeons, 5 general surgeons including 4 thoracic surgeons and 3 plastic surgeons, and one orthopedic surgeon on modified active staff.

OVERVIEW

Public access to newly collected provincial data in regards to infection rates, mortality rates, wait times and greater accountability for efficiency will continue to affect the perception of TEGH and influence our elective practices. Toronto East General Hospital has continued its focus on developing surgical oncology expertise. We have added a Surgical Oncologist, Dr. Hany Sawires, to join our General Surgery Division. Our Department has grown strategically this year in the development of the Thoracic Surgery Level 1 Initiative. Dr. John Dickie has joined our staff to grow our Thoracic Surgery Level 1 commitment. A recent joint venture with Barrie's Royal Victoria Hospital is being developed to further develop a shared model of thoracic



care similar to our arrangement with Sunnybrook Health Science Center. Our Division of Urology was highlighted in the CCO prostate surgical resection margin data as Best Practice. We continue to integrate the Safer Health Care Now initiatives and use the OR Checklist in all ORs and will be participating with the Rotman School of Management in developing a web based tool for implementation. The University of Toronto Bariatric Initiative will involve TEGH and Dr. Mary-Anne Aarts will be the outcome analysis lead for all Ontario. Increased teaching requests and excellence in teaching scores have been recognized again this year.

GENERAL SURGERY

Dr. Jamie Cyriac and Mary-Anne Aarts, our two fellowship trained MIS surgeons with Bariatric Surgical Training, are involved in the planning and implementation of the Bariatric Initiative. Dr. Rob Zeldin is focusing completely on thoracic surgery. Paul Bernick is the new Head of the Division of General Surgery and Medical Director of Surgical Education. TES scores for Drs. Zeldin, Cyriac, Bernick and MacKenzie are excellent. Dr. MacKenzie will continue to take call over the summer and plans to continue working in the Breast Time to Treat Clinic this coming year.

We undertook our first search in a strategy for developing new surgical recruits in line with University processes. Dr. Hany Sawires was our successful candidate and he will start in September 2009 with a special interest in Surgical Oncology. Drs. Jamie Cyriac and Paul Bernick have privileges at Women's College Hospital (WCH) for endoscopy.

Dr. Cyriac will be doing ASCM II teaching this year for the medical students. Drs. Jamie Cyriac and Paul Bernick have privileges at Women's College Hospital (WCH) for endoscopy.

THORACIC SURGERY

Dr. John Dickie has moved from Peterborough to join our Thoracic Surgeons in this Level 1 Center. He will also be a support for our pacemaker service. We plan to start our partnership with Royal Victoria Hospital in Barrie and the North Simcoe/Muskoka LHIN this year. With 3 fulltime and 1 part-time thoracic surgeons, we will provide thoracic surgical services to TEGH, Sunnybrook Health Sciences Centre, Odette Cancer Centre, North York General Hospital and Royal Victoria Hospital. We continue to work closely within the University Division of Thoracic Surgery to provide teaching and training to undergraduate and post-graduate trainees. We will take on our first Thoracic Fellow in January 2010.

UROLOGY

Peter Vlaovic became a Lecturer at the University of Toronto this year. Peter has also been teaching medical students at the ASCM II level. Dr. Bob MacMillan has retired and moved to British Columbia. We continue to fundraise actively for operating costs for the Da Vinci Robot. Our MIS capabilities have grown. Recent CCO best practice research has found that the quality of our prostate surgical resections have set the standard in provincial benchmarking. The Endourology Fellowship is in its 8th year. Tumour Boards have been arranged with the Radiation Oncologists at Sunnybrook and we are working to set up a multidisciplinary clinic at TEGH.

ORTHOPEDICS

Peter Weiler has been successful in implementing changes to our OR schedule to address patient flow and standardization for total joint replacement. Recently released University of Toronto Surgical Teaching Effectiveness Scores [TES] for Postgraduate teaching has applauded Drs. Mastrogiacomo and Kraemer as outstanding. TES scores for Fellowship teaching have made TEGH the highest scoring hospital in the University of Toronto, thanks to a strong orthopedic surgical division! Dr. Mastrogiacomo received a perfect score of 20.

Dr. Bill Kraemer is the Program Director for the Orthopaedic Residency Training Program, University of Toronto. Dr. Paul Wong is a member of the University Postgraduate Resident Committee.

PLASTIC SURGERY

We continue our search for a Division Head. Dr. Beber and Dr. Tate continue to be increasingly involved in the educational activity of the University Division and will be teaching our first resident in Plastic Surgery this July. We look forward to reaching the standards of teaching that our General Surgery and Orthopedic colleagues have developed here at TEGH. Dr. Beber participates in ASM teaching and is a member of the University Postgraduate Resident Committee. Dr. Tate was enrolled in the Advanced Health Leadership Program through the Rotman School of Management this Spring and is looking forward to using the new skills to manage change and support innovation in these challenging times within the Department.

Division of General Surgery

Dr. M.A. Aarts	Assistant Professor
Dr. P.E. Bernick	Assistant Professor (Division Head)
Dr. J. Cyriac	Lecturer
Dr. T. Gilas	Assistant Professor
Dr. R.L. Mackenzie	Assistant Professor
Dr. C. Simone	Lecturer
Dr. R. Zeldin	Assistant Professor

PUBLICATIONS

Eskicioglu C, Forbes SS, Aarts MA, Okrainec A, McLeod RS: Enhanced recovery after surgery (ERAS) programs for patients having colorectal surgery: A meta-analysis of randomized trials. *Journal of Gastrointestinal Surgery*: E-published ahead of print: May 21, 2009.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Simone C, Zeldin R: Royal Victoria Hospital, Annual Stakeholders Conference on Cancer Care, Barrie, ON, June 2009. Thoracic surgical partnership between TEGH and RVH/LHIN 12.

Division of Orthopaedic Surgery

Dr. M. Catre, Jr.	Lecturer
Dr. W. Kraemer	Assistant Professor
Dr. G. Maistrelli	Associate Professor
Dr. F. Mastrogiacomo	Lecturer
Dr. P. Weiler	Assistant Professor (Division Head)
Dr. P. Wong	Assistant Professor

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

Bryce Taylor

Surgeon-in-Chief/James Wallace McCutcheon Chair in Surgery



HEADS OF DIVISION

Dr. T.E. David	Cardiac Surgery
Dr. L. Rotstein	General Surgery
Dr. C. Wallace	Neurosurgery
Dr. N. Mahomed	Orthopaedic Surgery
Dr. S. Hofer	Plastic Surgery
Dr. S. Keshavjee	Thoracic Surgery

Dr. N. Fleshner	Urology
Dr. B. Rubin	Vascular Surgery

Surgical Programs and Critical Care, one of the seven programs at University Health Network, was active clinically and academically in the 2008-2009 year. Surgeons faced challenges of meeting volumes and wait times, and at the same time faced budgetary constraints that reduced elective surgery. Provincial mandates to clear emergency departments impacted significantly in terms of in-patient bed pressures and particularly on staff who tried every day to do more with less. Nevertheless, the academic mandates of teaching and research remained foremost in our objectives. The completed planning process (GATES – Growing Academically, Technologically, Efficiently and Safely) was articulated, and the 11 objectives were phrased along the lines of the organizational purpose statement "We are a caring, creative and accountable academic hospital transforming healthcare for our patients, our community and the world." UHN surgical teams adopted the *safe surgery checklist*, and applied it to each of the 25,000 operations performed. Our participation was an important factor in the checklist publication in *The New England Journal of Medicine* in January 2009, and was instrumental in beginning the dissemination of this tool across Canada. The Clinical Speciality Supply Chain contract in collaboration with the Ministry of Health and the Ministry of Finance in Ontario was officially signed and will act as a model for supply chain efficiency for other organizations.

The multi-purpose operating room (MPOR) was completed and at the end of the academic year was in the process of decommissioning in preparation for advanced EVAR and percutaneous cardiac procedures – significant advances in the care of patients with complex cardiovascular disease. At the same time, functional plans were being put into place for the adjacent guided therapeutics (GTx) operating

room at the TGH site which will also be a fertile ground for advances in the combination of imaging and interventions in operating room settings.

Toni Zhong was recruited as a microvascular specialist in the area of plastic and reconstructive surgery, and Anand Ghanekar became the latest member of a strong





transplantation team. The Transplantation Program was strengthened significantly by its designation as an “institute” at the University of Toronto with strong medical and surgical leadership. Catherine O’Brien was recruited as a surgeon-scientist in the Division of General Surgery with a special interest in stem cell research, and Gelareh Zadeh was recruited to the Division of Neurosurgery with expertise in surgical oncology. Kazuhiro Yasufuku was recruited from Chiba, Japan as an outstanding new member of the Division of Thoracic Surgery with an interest in transplantation and innovative approaches to the diagnosis of intrathoracic malignancies.

Shaf Keshavjee continued as Chair of Thoracic Surgery, Tom Lindsay as Chair of Vascular Surgery and Dimitri Anastakis as Chair of Plastic Surgery at the University of Toronto. Richard Weisel completed his term as Chair of Cardiac Surgery with the appointment of Dr. Chris Caldarone as the incoming Chair. Michael Fehlings was appointed as the first Director of a University of Toronto Neuroscience Program, and Nizar Mahomed was appointed as Division Head in Orthopedics following outstanding contributions by Rod Davey for the last 12 years.

In the academic year, Drs. Marc de Perrot and Raja Rampersaud were promoted to Associate Professor and Drs. Gail Darling, Sydney Radomski and Douglas Wooster were promoted to Full Professor.

The members of the Department of Surgery at UHN continued to be very active in both basic and clinical research. A comprehensive assessment of research output showed that 1,560 surgical services articles and reviews were published in the last four years, averaging 12.0 per investigator. Eighty papers appeared in journals with a JIF of greater than 10, with 187 manuscripts published in journals with JIF's between 5 and 10. In virtually all surgical divisions, the proportion of cited papers was significantly higher than those of the Mayo Clinic, and overall 20% of papers were highly cited.

The Belinda Stronach Chair in Breast Cancer Reconstructive Surgery was announced and will be awarded eventually to the successful candidate of an international recruitment search process to be conducted soon.

The members of the department were active in teaching at all levels. In general, teaching scores at the fellowship, resident and clerkship levels were strong, and teaching awards were given as follows: Wightman-Berris awards were given to Gail Darling, Stephanie Brister and Eric Massicotte, and Allan Okrainec was the 2009 recipient of the Ross Fleming Surgical Educator Award.

Dr. Wayne Johnston was given a Lifetime Achievement Award by the Society of Vascular Surgery, and Dr. Richard Weisel was awarded the prestigious American Association for Thoracic Surgery Scientific Achievement Award. Dr. Shaf Keshavjee made significant contributions during the year with his ex-vivo perfusion techniques for lung transplantation, which drew significant attention internationally. Dr. Barry Rubin, in addition to his clinical and academic productivity, remained as President of the Academic Medical Organization, a significant contribution to academic life for University of Toronto surgeons.



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

Angoulvant D, Fazel S, Weisel RD, Lai TYY, Fedak PW, Chen L, Rafati S, Seneviratne CK, Degousee N, Li R-K: Cell-based gene therapy modifies matrix remodeling after a myocardial infarction in tissue inhibitor of matrix metalloproteinase-3-deficient mice. *The Journal of Thoracic and Cardiovascular Surgery*: February 2009: 137(2): pp 471-480.e2.

Cheng AS, Yau TM: Paracrine effects of cell transplantation: Strategies to augment the efficacy of cell therapies. *Seminars in Thoracic and Cardiovascular Surgery* (2008 Summer): July 2008: 20(2): pp 94-101.

Cimini M, Tang G, Fazel S, Weisel RD, Li R-K: Tissue engineering applications for cardiovascular substitutes. In: *Fundamentals of Tissue Engineering and Regenerative Medicine*: (Meyer U, Meyer T, Handschel J, Weismann HP, eds.) Springer Berlin Heidelberg, Leipzig, Germany: 2009: pp 887-911.

David TE: Ross procedure at the crossroads. *Circulation*: January 2009: 119(2): pp 207-209.

David TE, Armstrong S, Maganti M, Butany J, Feindel CM, Bos J: Postimplantation morphologic changes of glutaraldehyde-fixed porcine aortic roots and risk of aneurysm and rupture. *The Journal of Thoracic and Cardiovascular Surgery*: January 2009: 137(1): pp 94-100.

David TE, Armstrong S, Maganti M, Ihlberg L: Clinical outcomes of combined aortic root replacement with mitral valve surgery. *Journal of Thoracic and Cardiovascular Surgery*: July 2008: 136(1): pp 82-87.

Farahmand P, Lai TY, Weisel RD, Fazel S, Yau T, Menasche P, Li RK: Skeletal myoblasts preserve remote matrix architecture and global function when implanted early or late after coronary ligation into infarcted or remote myocardium. *Circulation*: September 2008: 118(14Suppl): pp S130-S137.

Fazel SS, Angoulvant D, Butany J, Weisel RD, Li RK: Mesenchymal stem cells engineered to overexpress stem cell factor improve cardiac function but have malignant potential. *The Journal of Thoracic and Cardiovascular Surgery*: November 2008: 136(5): pp 1388-1389. E-published ahead of print: July 3, 2008.

Feindel CM: Counterpoint: Aortic valve replacement: Size does matter. *The Journal of Thoracic and Cardiovascular Surgery*: February 2009: 137(2): pp 284-285.

Furlani D, Ugurlucan M, Ong L, Bieback K, Pittermann E, Westien I, Wang W, Yerebakan C, Li W, Gaebel R, Li RK, Vollmar B, Steinhoff G, Ma N: Is the intravascular administration of mesenchymal stem cells safe? Mesenchymal stem cells and intravital microscopy. *Microvascular Research*: May 2009: 77(3): pp 370-376. E-published ahead of print: February 26, 2009.

Ghosh N, Wood MF, Li SH, Weisel RD, Wilson BC, Li RK, Vitkin IA: Mueller matrix decomposition for polarized light assessment of biological tissues. *Journal of Biophotonics*: March 2009: 2(3): pp 145-156.

Karkouti K, Beattie WS, Yau TM, Arellano R, Aye T, Bussieres JS, Callum J, Cheng D, Heinrich L, Kent B, Lee TWR, MacAdams C, Mazer D, Muirhead B, Rochon A, Rubens FD, Sawchuk C, Wang S, Waters T, Wong BI: Comprehensive Canadian review of the off-label use of recombinant activated factor VII in cardiac surgery. *Circulation*: July 2008: 118(4): pp 331-338. E-published: July 7, 2008.

Karkouti K, Wijeyesundera DN, Yau TM, Callum JL, Cheng DC, Crowther M, Dupuis JY, Fremes SE, Kent B, Laflamme C, Lamy A, Legare JF, Mazer CD, McCluskey SA, Rubens FD, Sawchuk C, Beattie WS: Acute kidney injury after cardiac surgery: Focus on modifiable risk factors. *Circulation*: February 2009: 119(4): pp 495-502. E-published ahead of print: January 19, 2009.

- Katznelson R, Djaiani GN, Minkovich L, Fedorko L, Carroll J, Borger MA, Cusimano RJ, Karski J:** Prevalence of claustrophobia and magnetic resonance imaging after coronary artery bypass grafting surgery. *Neuropsychiatric Disease and Treatment*: July 2008; 4(2): pp 487-493.
- Kayaniyil S, Ardern C, Stewart DE, Oh P, Brister S, Parsons C, Winstanley J, Grace SL:** Degree and correlates of cardiac knowledge and awareness among cardiac inpatients. *Patient Education and Counseling*: April 2009; 75(1): pp 99-107. E-published ahead of print: October 25, 2008.
- Khan NA, Butany J, Leong SW, Rao V, Cusimano RJ, Ross HJ:** Mitral valve-sparing procedures and prosthetic heart valve failure: A case report. *The Canadian Journal of Cardiology*: March 2009; 25(3): pp 86-88.
- Klopsch C, Furlani D, Gäbel R, Li W, Pittermann E, Ugurlucan M, Kundt G, Zingler C, Titze U, Wan W, Ong LL, Wagner K, Li RK, Ma N, Steinhoff G:** Intracardiac injection of erythropoietin induces stem cell recruitment and improves cardiac functions in a rat myocardial infarction model. *Journal of Cellular and Molecular Medicine*: April 2009; 13(4): pp 664-679.
- Lad V, David TE, Vegas A:** Mitral regurgitation due to myxomatous degeneration combined with bicuspid aortic valve disease is often due to prolapse of the anterior leaflet of the mitral valve. *The Annals of Thoracic Surgery*: January 2009; 87(1): pp 79-82.
- Lee PS, Yau TM:** Invited commentary. *The Annals of Thoracic Surgery*: April 2009; 87(4): pp 1203-1204.
- Li RK, Weisel RD:** Cell transplantation: Back to the bench: Introduction. *Seminars in Thoracic and Cardiovascular Surgery* (Summer 2008): August 2008; 20(2): pp 85-86.
- Li SH, Lai TYY, Sun Z, Han M, Moriyama E, Wilson B, Fazel S, Weisel RD, Yau T, Wu JC, Li RK:** Tracking cardiac engraftment and distribution of implanted bone marrow cells: Comparing intra-aortic, intravenous, and intramyocardial delivery. *The Journal of Thoracic and Cardiovascular Surgery*: May 2009; 137(5): pp 1225-1233.
- Luk A, Jegatheeswaran A, David TE, Butany J:** Redo mitral valve surgery: Morphological features. *Cardiovascular Pathology*: September 2008; 17(5): pp 309-317.
- Luk A, Nwachukwu H, Lim KD, Cusimano RJ, Butany J:** Cardiac angiosarcoma: A case report and review of the literature. *Cardiovascular Pathology*: E-published ahead of print: January 14, 2009.
- Maganti M, Rao V, Armstrong S, Feindel CM, Scully HE, David TE:** Redo valvular surgery in elderly patients. *Annals of Thoracic Surgery*: February 2009; 87(2): pp 525-526.
- Maganti M, Rao V, Brister S, Ivanov J:** Decreasing mortality for coronary artery bypass surgery in octogenarians. *The Canadian Journal of Cardiology*: February 2009; 25(2): pp e32-e35.
- Maganti M, Roa V, Cusimano RJ:** Sex differences in resource use after on-pump and off-pump coronary artery bypass surgery: A propensity score-matched cohort. *The Canadian Journal of Cardiology*: March 2009; 25(5): pp 151-156.
- Newcomb AE, David TE, Lad VS, Bobiarski J, Armstrong S, Maganti M:** Mitral valve repair for advanced myxomatous degeneration with posterior displacement of the mitral annulus. *The Journal of Thoracic and Cardiovascular Surgery*: December 2008; 136(6): pp 1503-1509.
- Sheikh AM, Elhenawy AM, Maganti M, Armstrong S, David TE, Feindel CM:** Outcomes of surgical intervention for isolated active mitral valve endocarditis. *The Journal of Thoracic and Cardiovascular Surgery*: January 2009; 137(1): pp 110-116.
- Stein JD, Lee P, Kuriya B, Tenenbaum J, Daniel LB, Butany J, Provost YL, David TE:** Critical coronary artery stenosis and aortitis in a patient with relapsing polychondritis. *The Journal of Rheumatology*: September 2008; 35(9): pp 1898-1900.
- Sun J, Li S-H, Liu S-M, Wu J, Weisel RD, Zhou Y-F, Yau TM, Li R-K, Fazel SS:** Improvement in cardiac function after bone marrow cell therapy is associated with an increase in myocardial inflammation. *American Journal of Physiology – Heart and Circulatory Physiology*: January 2009; 296(1): pp H43-H50. E-published ahead of print: November 15, 2008.
- Vaideeswar P, Dixit V, Butant J, David TE, Feindel C:** Surgical pathology of chronic ascending aortic dissections. *Pathology*: August 2008; 40(5): pp 505-512.
- Wang W, Li W, Ong L-L, Furlani D, Kaminski A, Liebold A, Lutzow K, Lendlein A, Wang J, Li R-K, Steinhoff G, Ma N:** Localized SDF-1 α gene release mediated by collagen substrate induces CD117+ stem cell homing. *Journal of Cellular and Molecular Medicine*: E-published ahead of print: December 24, 2008.
- Yoo KJ, Kim HO, Kwak YL, Kang SM, Jang YS, Lim SH, Hwang KC, Cho SW, Yang YS, Li R-K, Kim BS:** Autologous bone marrow cell transplantation combined with off-pump coronary artery bypass grafting in patients with ischemic cardiomyopathy. *Canadian Journal of Surgery*: August 2008; 51(4): pp 269-275.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Cusimano RJ: Peking University/Affiliated People's Hospital, Beijing, China, January 2009. (1) Heart transplant - A surgeon's guide, (2) Pacemaker implantation methods, (3) The role of the cardiac surgeon in cancer treatment, (4) The secrets of safe off-pump coronary artery bypass (OPCAB.)

Cusimano RJ: Xinxiang Medical University, Xinxiang, China, January 2009. (1) Secrets for safe off pump coronary artery bypass surgery, (2) Interpretation of coronary angiography, (3) Details to allow for safe pacemaker implantation, (4) Surgical methods in heart transplantation, (5) Vascular anastomosis, (6) Proximal anastomosis for coronary bypass: Method and tricks, (7) Surprises and pitfalls revealed by coronary angiography, (8) The role of the cardiac surgeon on oncologic surgery.

Cusimano RJ: Medtronic of Canada, Cardiac Innovator's Meeting, Toronto, ON, July 2008.

David TE: American Society of Echocardiography, Postgraduate Course: Valvular Heart Disease for the Surgeon and Cardiologist: New strategies That Unify Practice, St. Petersburg, Florida, February 2009. Guest Speaker: (1) Clinical outcomes of surgically managed low ejection fraction aortic stenosis, (2) Round Table: Valvular heart disease - how and why should we move towards earlier diagnosis and treatment?, (3) Primary aortic valve leaflet repair and valve sparing root reconstruction: How and when do I choose?

David TE: Hospital General Universitario Gregorio Marañón/University of Madrid, Madrid, Spain, April 2009. Visiting Professor: Aortic valve replacement and repair: Present and future.

David TE: American Association for Thoracic Surgery, 89th Annual Meeting, Boston, Massachusetts, May 2009. Presentations: (1) Paper #3: Long-term results of aortic valve sparing operations in patients with Marfan syndrome, (2) Paper #37: When is the Ross procedure a good option to treat aortic valve disease?

David TE: Baylor College of Medicine, Postgraduate Course - 7th Current Trends in Aortic and Cardiothoracic Surgery, Houston, Texas, May 2009. Guest Speaker: Aortic root replacement and Marfan syndrome.

David TE: Secrétariat de Chirurgie Cardiovasculaire et Thoracique Cliniques universitaires Saint-Luc, 9th Aortic Symposium on Aortic Reconstructive Surgery, Postgraduate Course - Evolving Concepts on Aortic Valve Repair, Brussels, Belgium, May 2009. Aortic valve sparing operations: A master's perspective.

David TE: University of Basel, Basel, Switzerland, May 2009. Visiting Professor: (1) Aortic valve sparing operations, (2) Aortic valve surgery: Repair and replacement.

David TE: University of Geneva, Geneva, Switzerland, May 2009. Visiting Professor: Aortic valve repair and replacement.

David TE: Cleveland Clinic Heart and Vascular Institute, Postgraduate Course - The Treatment of Cardiovascular Disease: Legacy and Innovation, Cleveland, Ohio, June 2009. (1) Anterior mitral leaflet repair, (2) Valve-sparing root surgery: What has time taught us?

David TE: Hospital Italiano de Buenos Aires, Simposio Aorta 2009, Buenos Aires, Argentina, July 2008. Guest Speaker: (1) When is aortic valve repair better than replacement, (2) Surgical management of acute type A aortic dissection.

David TE: The International Heart Institute of Montana - Foundation, Rocky Mountain Valve Symposium, Managing the Aortic Root Debate with Sir Magdi Yacoub, Missoula, Montana, July 2008. (1) Is my approach for every cardiac surgeon?, (2) Issues regarding the redo root replacement, (3) When and how do we tackle the redo root?

David TE: Australasian Society of Cardiac and Thoracic Surgeons, Annual Meeting, Noosa, Queensland, Australia, October 2008. Guest Speaker: (1) Aortic valve sparing operations: Techniques and outcomes, (2) Mitral valve repair for myxomatous degeneration: Is it better than mitral valve replacement?, (3) Bicuspid aortic valve: When to intervene, what to do?

David TE: American Heart Association, Scientific Sessions, New Orleans, Louisiana, November 2008. Guest Speaker: (1) Repair of incompetent bicuspid aortic valve, (2) How to repair ischemic mitral regurgitation, (3) Aortic valve sparing operations for aortic root aneurysm.

Feindel CM: Canadian Cardiovascular Society, Toronto, ON, October 2008. Chair of Trainee Day Workshop: Cardiology and cardiovascular case reviews.

Li R-K: Amrita Centre for Nanosciences, International Conference on Tissue Engineering and Stem Cell Research Using Nanomaterials, Kochi, India, February 2009. Speaker: (1) Cell therapy - fundamentals and advances, (2) Cell-and cytokine-based tissue engineering to repair cardiac defects.

Li R-K: University of Ottawa, Heart Institute, Ottawa, ON, April 2009. Visiting Professor: Cell therapy for restoring cardiac function.

Li R-K: Harbin Medical University, Second Affiliated Hospital, Harbin, China, May 2009. Visiting Professor: (1) Cardiac stem cells, (2) Cell therapy in cardiovascular disease.

Li R-K: CCN Society, 5th International Workshop on the CCN Family of Genes, Toronto, ON, November 2008. Invited Speaker: Cell transplantation and gene therapy preserves matrix homeostasis: A novel paracrine mechanism.

Li R-K: Queen's University, Canadian Undergraduate Conference on Healthcare, Kingston, ON, November 2008. Speaker: A novel therapy to repair damaged hearts cell transplantation to restore heart function: Bench to bedside.

Li R-K: Tissue Engineering and Regenerative Medicine International Society-Asian Pacific (TERMIS-AP), Chapter Meeting, Taipei, Taiwan, November 2008. Speaker: Cell- and cytokine-engineered tissue for cardiac repair and regeneration.

Li R-K: Fundação Cardiovascular São Francisco de Assis Verdade é Jesus, 3rd International Symposium of Cell Therapy, Curitiba, Brazil, October 2008. Speaker: Mesenchymal stem cells after myocardial infarction.

Li R-K: Tissue Engineering and Regenerative Medicine International Society - North America (TERMIS-NA), 2008 Scientific Advisory Committee, San Diego, California, December 2008. Speaker: Synergistic effect of cells and cytokines on tissue formation and regeneration after cardiac repair using a novel cell engineered biodegradable scaffold.

Rao V: Durham Regional Cardiovascular Association, Surgery Day, Whitby, ON, January 2009. Surgical therapy for end-stage heart disease.

Rao V: Society of Thoracic Surgeons, San Francisco, California, January 2009. Mitral valve repair for ischemic mitral regurgitation.

Rao V: Medtronic Canada, XXth Peak Performance, Lake Louise, AB, February 2009. Twenty-five year experience with the Hancock II bioprosthesis.

Rao V: King Fahd Armed Forces Hospital, 11th Jeddah International Cardiovascular Conference, Jeddah, Saudi Arabia, March 2009. (1) Surgical management of end-stage heart disease, (2) Mechanical circulatory support as a bridge to transplantation.

Rao V: Cardiology Journal Club, Cambridge, ON, April 2009. Cardiovascular surgical outcomes in the elderly.

Rao V: Canadian Institutes for Health Research, Young Investigator Forum, Ottawa, ON, May 2009. Innovations in mechanical circulatory support.

Rao V: McMaster University, Cardiovascular Surgery Teaching Rounds, Hamilton, ON, May 2009. Surgical management of heart failure.

Rao V: University of Wisconsin, Division of Cardiothoracic Surgery, Madison, Wisconsin, September 2008. The operating room as a laboratory.

Rao V: Libin Cardiovascular Institute of Alberta, Grand Surgical Rounds, Calgary, AB, November 2008. Surgical research: Bench to bedside.

Rao V: Mayo Clinic, Grand Surgical Rounds, Rochester, Minnesota, December 2008. Surgical research in cardiac transplantation.

Scully HE: Canadian Health Leadership Network, Montebello, PQ, September 2008. Leadership in motion: Changing systems, creating results.

Weisel RD: St. Luke's Hospital, Bethlehem, Pennsylvania, February 2009. Keynote Speaker: Cardiac regeneration by stem cell therapy.

Weisel RD: Society of Thoracic Surgery Education, Montego Bay, Jamaica, March 2009. The six-year training program in cardiac surgery - a ten year follow-up.

Weisel RD: American Association of Thoracic Surgery, Cardiac Surgery Biology Club, Boston, Massachusetts, May 2009. Future prospects for cell therapy.

Weisel RD: Japanese Association for Thoracic Surgery, Fukuoka, Japan, October 2008. Cardiac regeneration by cell transplantation.

Weisel RD: American Heart Association, New Orleans, Louisiana, November 2008. Current status of cellular therapies for heart failure - is there significant progress being made?

Yau TM: Canadian Cardiovascular Congress, Toronto, ON, October 2008. (1) Spontaneous termination of human ventricular fibrillation (VF) with K-ATP blocker in a human Langendorff model, (2) Cardiac repair and regeneration with cells and cytokines in a new biodegradable scaffold, (3) Effect of K-ATP modulation on dominant frequency in ventricular fibrillation in a human Langendorff, (4) Anatomic substrate as determinant of dominant frequency dynamics during human ventricular fibrillation, (5) Changing trends in emergent coronary artery bypass surgery, (6) Dominant refractory gradients and rotors during human ventricular fibrillation, (7) Human model for the study of cardio pulmonary resuscitation using wavelets, (8) Co-Chair, Scientific Session: Back to basics - stems cells and beyond.

Yau TM: American Heart Association, New Orleans, Louisiana, November 2008. (1) Stem cell transplantation as heart failure therapy, (2) Targeted and tailored: A new approach to regeneration after a myocardial infarction, (3) Anatomic substrate as determinant of dominant frequency dynamics during human ventricular fibrillation, (4) Cells and cytokines induce regeneration after cardiac repair with a new biodegradable scaffold.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

An angiogenic progenitor cell niche in the uterus: Potential implications for cell therapy. *Li RK: Canadian Institutes of Health Research.* (\$681,120 2008 - 2013.)

Autologous tissue-engineered grafts for congenital heart surgery. *Li RK: Canadian Institutes of Health Research.* (\$647,655 2003 - 2008.)

Cardiac regeneration by cell transplantation. *Weisel RD, Fazel S: Heart & Stroke Foundation.* (\$212,216 2006 - 2009.)

Cardiac regeneration: Improving the response to injury. *Weisel RD, Fazel S: Heart & Stroke Foundation.* (\$231,726 2007 - 2010.)

Epidermal growth factor like-7 (EGFL-7), rapamycin and transplant vasculopathy. *Rao V, Delgado D: Heart & Stroke Foundation of Canada.* (\$122,030 2008.)

Erythropoietin and hypertonic saline for cardiac transplant. *Feindel CM, Rao V: Heart & Stroke Foundation of Ontario.* (\$276,248 2006 - 2009.)

Inflammation, infection, trauma and repair cluster - Canada Research Chair in Cardiac Regeneration. *Li RK: Canadian Institutes of Health Research.* (\$1,400,000 2006 - 2014.)

Matrix modulation is required to restore cardiac function after cell therapy. *Li RK: Heart & Stroke Foundation of Ontario.* (\$185,740 2007 - 2009.)

Peptide modified photocrosslinkable chitosan for cell therapy in myocardial infarction. *Radisic M, Li RK: Heart & Stroke Foundation of Ontario.* (\$152,922 2007 - 2010.)

Restoration of cardiac function: Cellular regeneration and matrix reconstruction. *Li RK: Heart & Stroke Foundation of Ontario (Personal Support).* (\$439,750 2006 - 2011.)

The cardiac regeneration project: Quantitative cell tracking and response for cardiac regenerative approaches (CARE Project). *Li RK, Weisel RD, 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 RK, Sefton M, Wright G: Canada Foundation for Innovation and Ontario Research Fund.* (\$14,400,000 2006 - 2010.)

The regenerative medicine (REMEDI) Project. *Weisel RD, Li RK, Jaffray D, Wilson B, Kotra L, Keating A, Fehlings M, Radisic M, Medin J: Canada Foundation for Innovation.* (\$7,200,000 2007 - 2012.)

HONOURS RECEIVED

Brister SJ: Wightman-Berris Academy Individual Teaching Award (Postgraduate Medicine). May 2009.

David TE: The William Glenn Award from the American Heart Association. November 2008.

Rao V: Professional Male of the Year/INDO-Canada Chamber of Commerce. June 2009.

Weisel RD: Guest Section Editor for Seminars in Thoracic and Cardiovascular Surgery. August 2008.

Weisel RD: Scientific Achievement Award of the American Association of Thoracic Surgeons. June 2009.

Division of General Surgery

Dr. M.S. Cattral	Professor	Dr. M. Reedijk	Assistant Professor
Dr. S.P. Cleary	Assistant Professor	Dr. R.K. Reznick	Professor
Dr. J. Escallon	Associate Professor	Dr. L.E. Rotstein	Professor (Division Head)
Dr. S. Gallinger	Professor	Dr. B.R. Taylor	Professor
Dr. A. Ghanekar	Lecturer	Dr. D.R. Urbach	Associate Professor
Dr. R.M. Gorczynski	Professor	Dr. A.C. Wei	Assistant Professor
Dr. D. Grant	Professor	Dr. L. Wright	Assistant 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.D. McGilvray	Assistant Professor		
Dr. C. Moulton	Assistant Professor		
Dr. C.A. O'Brien	Assistant Professor		
Dr. A. Okrainec	Assistant Professor		
Dr. T.P. Penner	Lecturer		

PUBLICATIONS

Al-Sukhni W, Aronson M, Gallinger S: Hereditary colorectal cancer syndromes: Familial adenomatous polyposis and Lynch syndrome. *Surgical Clinics of North America*: August 2008; 88(4): pp 819-844.

Al-Sukhni W, Gallinger S: Germline copy number variation in control populations. *Cytogenetic and Genome Research*: March 2009; 123(1-4): pp 211-223. E-published March 11, 2009.

Al-Sukhni W, Rothenmund H, Eppel Borgida A, Zogopoulos G, O'Shea AM, Pollett A, Gallinger S: Germline BRCA1 mutations predispose to pancreatic adenocarcinoma. *Human Genetics*: October 2008; 124(3): pp 271-278.

Ball CG, Kirkpatrick AW, Feliciano DV, Reznick RK, McSwain NE: Surgeons and astronauts: So close yet so far apart. *Canadian Journal of Surgery*: August 2008; 51(4): pp 247-250.

Bapat B, Lindor NM, Baron J, Siegmund K, Li L, Zheng Y, Haile R, Gallinger S, Jass JR, Young JP, Cotterchio M, Jenkins M, Grove J, Casey G, Thibodeau SN, Bishop DT, Hopper JL, Ahnen D, Newcomb PA, Le Marchand L, Potter JD, Seminara D; Colon Cancer Family Registry: The association of tumor microsatellite instability phenotype with family history of colorectal cancer. *Cancer Epidemiology Biomarkers and Prevention*: March 2009; 18(3): pp 967-975. E-published March 3, 2009.

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*: April 2009; 114(3): pp 575-578.

Berry M, Reznick RK, Lystig T, Lonn L: The use of virtual reality for training in carotid artery stenting: A construct validation study. *Acta Radiologica*: September 2008; 49(7): pp 801-805.

Borozan I, Chen L, Paeper B, Heathcote JE, Edwards AM, Katze M, Zhang Z, McGilvray ID: MAID: A effect size based model for microarray data integration across laboratories and platforms. *BMC Bioinformatics*: July 2008; 9: pp 305.

Browne M, Sher D, Grant D, Deluca E, Alonso E, Whittington PF, Superina RA: Survival after liver transplantation for hepatoblastoma: A 2-center experience. *Journal of Pediatric Surgery*: November 2008; 43(11): pp 1973-1981.

Burn J, Bishop DT, Mecklin JP, Macrae F, Möslein G, Olschwang S, Bisgaard ML, Ramesar R, Eccles D, Maher ER, Bertario L, Jarvinen HJ, Lindblom A, Evans DG, Lubinski J, Morrison PJ, Ho JW, Vasen HF, Side L, Thomas HJ, Scott RJ, Dunlop M, Barker G, Elliott F, Jass JR, Fodde R, Lynch HT, Mathers JC; CAPP2 Investigators: Effect of aspirin or resistant starch on colorectal neoplasia in the Lynch syndrome. *New England Journal of Medicine*: December 2008; 359(24): pp 2567-2578.

Cleary SP, Cotterchio M, Jenkins MA, Kim H, Bristow R, Green R, Haile R, Hopper JL, LeMarchand L, Lindor N, Parfrey P, Potter J, Youngusband B, Gallinger S: Germline MutY human homologue mutations and colorectal cancer: A multisite case-control study. *Gastroenterology*: April 2009; 136(4): pp 1251-1260. E-published ahead of print: December 27, 2008.

- Cleary SP, Kim H, Croitoru ME, Redston M, Knight JA, Gallinger S, Gryfe R:** Missense polymorphisms in the adenomatous polyposis coli gene and colorectal cancer risk. *Diseases of the Colon and Rectum*: October 2008: 51(10): pp 1467-1473.
- Cotterchio M, Boucher BA, Manno M, Gallinger S, Okey AB, Harper PA:** Red meat intake, doneness, polymorphisms in genes that encode carcinogen-metabolizing enzymes, and colorectal cancer risk. *Cancer Epidemiology Biomarkers and Prevention*: November 2008: 17(11): pp 3098-3107.
- Darling G, Nenshi R, Schultz SE, Przybysz R, Gunraj N, Baxter N, Simunovic M, Urbach DR:** Chapter 5: Surgery for lung cancer. In: *Cancer Surgery in Ontario: ICES Atlas*: (Urbach DR, Simunovic M, Schultz SE, eds.) Institute for Clinical Evaluative Sciences, Toronto: 2008: pp 97-126.
- DuBay DA, Holtzman S, Adcock L, Abbey S, Greenwood S, Macleod C, Kashfi A, Jacob M, Renner EL, Grant DR, Levy GA, Therapondos G:** Adult right-lobe living liver donors: Quality of life, attitudes and predictors of donor outcomes. *American Journal of Transplantation*: May 2009: 9(5): pp 1169-1178.
- Easson AM, Rotstein LE, McCreedy DR:** Lymph node assessment in melanoma. *Journal of Surgical Oncology*: February 2009: 99(4): pp 176-185.
- Elit L, Barbera L, Schultz SE, Przybysz R, Gunraj N, Baxter N, Simunovic M, Urbach DR:** Chapter 8: Surgery for cervical cancer. In: *Cancer Surgery in Ontario: ICES Atlas*: (Urbach DR, Simunovic M, Schultz SE, eds.) Institute for Clinical Evaluative Sciences, Toronto: 2008: pp 167-188.
- Elit L, Barbera L, Schultz SE, Przybysz R, Gunraj N, Baxter N, Simunovic M, Urbach DR:** Chapter 9: Surgery for vulvar cancer. In: *Cancer Surgery in Ontario: ICES Atlas*: (Urbach DR, Simunovic M, Schultz SE, eds.) Institute for Clinical Evaluative Sciences, Toronto: 2008: pp 189-198.
- Elit L, Kwon JS, Schultz SE, Przybysz R, Gunraj N, Baxter N, Simunovic M, Urbach DR:** Chapter 6: Surgery for uterine cancer. In: *Cancer Surgery in Ontario: ICES Atlas*: (Urbach DR, Simunovic M, Schultz SE, eds.) Institute for Clinical Evaluative Sciences, Toronto: 2008: pp 127-146.
- Elit L, Schultz SE, Przybysz R, Gunraj N, Baxter N, Simunovic M, Urbach DR:** Chapter 7: Surgery for ovarian cancer. In: *Cancer Surgery in Ontario: ICES Atlas*: (Urbach DR, Simunovic M, Schultz SE, eds.) Institute for Clinical Evaluative Sciences, Toronto: 2008: pp 147-166.
- Esplen MJ, Stuckless N, Berk T, Butler K, Gallinger S:** The FAP self-concept scale (adult form). *Family Cancer*: February 2009: 8(1): pp 39-50. E-published ahead of print: August 13, 2008.
- Finelli A, Pace KT, Sharir S, Schultz SE, Przybysz R, Gunraj N, Baxter N, Simunovic M, Urbach DR:** Chapter 3: Surgery for prostate cancer. In: *Cancer Surgery in Ontario: ICES Atlas*: (Urbach DR, Simunovic M, Schultz SE, eds.) Institute for Clinical Evaluative Sciences, Toronto: 2008: pp 29-52.
- Gagliardi AR, Wright FC, Davis D, McLeod RM, Urbach DR:** Challenges in multidisciplinary cancer care among general surgeons in Canada. *BMC Medical Informatics and Decision Making*: December 2008: 22(8): pp 59.
- Gorczynski R, Boudakov I, Khatri I:** A comparison of the biological properties of small molecular weight agonists and antagonists of CD200:CD200R interactions. *Medicinal Chemistry*: November 2008: 4: pp 624-631.
- Gorczynski RH, Terzioglu E:** Aging and the immune system. *International Urology and Nephrology*: November 2008: 40(4): pp 1117-1125.
- Gorczynski RM, Sarygul M, Ulker M, Waelli T, Terzioglu E:** A key role for altered dendritic cell functioning in the impaired immunity seen in aged individuals. *Current Immunology*: June 2009: Rev 5: pp 102-110.
- Grantcharov TP, Reznick RK:** Training tomorrow's surgeons: What are we looking for and how can we achieve it? *Australia and New Zealand Journal of Surgery*: March 2009: 79(3): pp 104-107.
- Haynes AB, Weiser TG, Berry WR, Lipsitz SR, Breizat A-HS, Patchen Dellinger E, Herbosa T, Joseph S, Kibatala PL, Lapitan MCM, Merry AF, Moorthy K, Reznick RK, Taylor B, Gawande AA for the Safe Surgery Saves Lives Study Group:** Special Article: A surgical safety checklist to reduce morbidity and mortality in a global population. *The New England Journal of Medicine*: January 2009: 360(5): pp 491-499.
- Houlston RS, Webb E, Broderick P, Pittman AM, Di Bernardo MC, Lubbe S, Chandler I, Vijayakrishnan J, Sullivan K, Penegar S; Colorectal Cancer Association Study Consortium, Carvajal-Carmona L, Howarth K, Jaeger E, Spain SL, Walther A, Barclay E, Martin L, Gorman M, Domingo E, Teixeira AS; CoRGI Consortium, Kerr D, Cazier JB, Niittymäki I, Tuupanen S, Karhu A, Aaltonen LA, Tomlinson IP, Farrington SM, Tenesa A, Prendergast JG, Barnetson RA, Cetnarskyj R, Porteous ME, Gallinger S, et al:** Meta-analysis of genome-wide association data identifies four new susceptibility loci for colorectal cancer. *Nature Genetics*: December 2008: 40(12): pp 1426-1435. E-published ahead of print: November 16, 2008.
- Howe J, Richter W, Hawkins L, Rossle M, Alexander C, Fournier K, Mach JP, Waelli T, Gorczynski RM, Ulmer AJ, Brade H, Zamyatina A, Kosma P, Rietschel ET, Brandenburg K:** Hemoglobin enhances the biological activity of synthetic and natural bacterial (endotoxic) virulence factors: A general principle. *Journal of Medical Chemistry*: October 2008: 4(6): pp 520-525.
- Hui ABY, Shi W, Boutros PC, Miller N, Pintilie M, Fyles T, McCreedy DR, Wong D, Gerster K, Jurisica I, Penn LZ, Liu F-F:** Robust global micro-rna profiling with formalin-fixed paraffin-embedded breast cancer tissues. *Laboratory Investigation*: May 2009: 89(5): pp 597-606. E-published ahead of print: March 16, 2009.

- Jang JH, Cotterchio M, Gallinger S, Knight JA, Daftary D:** Family history of hormonal cancers and colorectal cancer risk: A case-control study conducted in Ontario. *International Journal of Cancer*: February 2009: 125(4): pp 918-925.
- Khatri I, Alexander C, Brandenburg K, Fournier K, Lee L, Mach JP, Rietschel ET, Ulmer AJ, Waelli T, Gorczynski RM:** A role for altered TLR gene expression in association with increased expression of CD200R in the induction of mucosal tissue CD4(+) Treg in aged mice following gavage with a liver extract along with intramuscular monophosphoryl lipid A (MPLA) injection. *Experimental Gerontology*: August 2008: 43(8): pp 771-781. E-published ahead of print: May 11, 2008.
- Knifed E, Taylor B, Bernstein M:** What surgeons tell their patients about the intraoperative role of residents: A qualitative study. *The American Journal of Surgery*: November 2008: 196(5): pp 788-794. E-published ahead of print: July 23, 2008.
- Kotsopoulos J, Zhang WW, Zhang S, McCreedy DR, Trudeau M, Zhang P, Sun P, Narod SA:** Polymorphisms in folate metabolizing enzymes and transport proteins and the risk of breast cancer. *Breast Cancer Research and Treatment*: December 2008: 112(3): pp 585-593.
- Kratz CP, Holter S, Etzler J, Lauten M, Pollett A, Niemeyer CM, Gallinger S, Wimmer K:** Rhabdomyosarcoma in patients with constitutional mismatch-repair-deficiency syndrome. *Journal of Medical Genetics*: June 2009: 46(6): pp 418-420. E-published ahead of print: March 16, 2009.
- Kreso A, O'Brien CA:** Colon cancer stem cells. *Current Protocols in Stem Cell Biology*: October 2008: 3(3.1): pp 309-321.
- LeBlanc VR, Tabak D, Kneebone R, Nestel D, MacRae H, Moulton C:** Psychometric properties of an integrated assessment of technical and communication skills. *The American Journal of Surgery*: January 2009: 197(1): pp 96-101.
- Lee L, Kos O, Gorczynski RM:** Altered expression of mRNAs implicated in osteogenesis under conditions of simulated microgravity is regulated by CD200:CD200R interactions. *Acta Astronautica*: December 2008: 63(11-12): pp 1326-1336.
- Lehoux P, Williams-Jones B, Miller F, Urbach DR, Tailliez S:** What leads to better health care innovation? Arguments for an integrated policy-oriented research agenda. *Journal of Health Services and Research Policy*: October 2008: 13(4): pp 251-254.
- Ling SC, Pfeiffer A, Avitzur Y, Fecteau A, Grant D, Ng VL:** Long-term follow-up of portal hypertension after liver transplantation in children. *Pediatric Transplantation*: March 2009: 13(2): pp 206-209.
- Liu H, Shalev I, Manuel J, He W, Leung E, Crookshank J, Liu MF, Diao J, Catral M, Clark DA, Isenman DE, Gorczynski RM, Grant DR, Zhang L, Phillips MJ, Cybulsky MI, Levy GA:** The FGL2-FcγRIIB pathway: A novel mechanism leading to immunosuppression. *European Journal of Immunology*: November 2008: 38(11): pp 3114-3126.
- Madarnas Y, Trudeau M, Messersmith H, McCreedy DR, Pritchard KI:** Adjuvant/neoadjuvant trastuzumab therapy in women with HER2/neu-overexpressing breast cancer: A systemic review. *Cancer Treatment Reviews*: October 2008: 34(6): pp 539-557.
- Moulton C, Tabak D, Kneebone R, Nestel D, MacRae H, LeBlanc VR:** Teaching communication skills using the integrated procedural performance instrument (IPPI): A randomized controlled trial. *The American Journal of Surgery*: January 2009: 197(1): pp 113-118.
- Mrkonjic M, Chappell E, Pethe VV, Manno M, Daftary D, Greenwood CM, Gallinger S, Zanke BW, Knight JA, Bapat B:** Association of apolipoprotein E polymorphisms and dietary factors in colorectal cancer. *British Journal of Cancer*: June 2009: 100(12): pp 1966-1974.
- Nenshi R, Baxter NN, Kennedy ED, Schultz SE, Gunraj N, Wilton AS, Urbach DR, Simunovic M:** Chapter 14: Surgery for colorectal cancer. *Cancer surgery in Ontario*. In: ICES Atlas: (Urbach DR, Simunovic M, Schultz SE, eds.) Institute for Clinical Evaluative Science, Toronto: 2008: pp 53-56.
- O'Brien CA, Kreso A, Dick JE:** Cancer stem cells in solid tumors: An overview. *Seminars in Radiation Oncology*: April 2009: 19(2): pp 71-77.
- O'Shea AM, Cleary SP, Croitoru MA, Kim H, Berk T, Monga N, Riddell RH, Pollett A, Gallinger S:** Pathological features of colorectal carcinomas in MYH-associated polyposis. *Histopathology*: August 2008: 53(2): pp 184-194. E-published ahead of print: June 28, 2008.
- Okraïnec A, Farcas M, Henao O, Choy I, Green J, Fotoohi M, Leslie R, Wight D, Karam P, Gonzalez N, Apkarian J:** Development of a virtual reality haptic veress needle insertion simulator for surgical skills training. *Studies in Health Technology and Informatics*: January 2009: 142: pp 233-238.
- Poynter JN, Siegmund KD, Weisenberger DJ, Long TI, Thibodeau SN, Lindor N, Young J, Jenkins MA, Hopper JL, Baron JA, Buchanan D, Casey G, Levine AJ, Le Marchand L, Gallinger S, Bapat B, Potter JD, Newcomb PA, Haile RW, Laird PW; Colon Cancer Family Registry Investigators:** Molecular characterization of MSI-H colorectal cancer by MLH1 promoter methylation, immunohistochemistry, and mismatch repair germline mutation screening. *Cancer Epidemiology, Biomarkers & Prevention*: November 2008: 17(11): pp 3208-3215.
- Quan ML, Hodgson N, Schultz SE, Przybysz R, Gunraj N, Baxter N, Simunovic M, Urbach DR:** Chapter 2: Surgery for breast cancer. In: *Cancer Surgery in Ontario: ICES Atlas*: (Urbach DR, Simunovic M, Schultz SE, eds.) Institute for Clinical Evaluative Sciences, Toronto: 2008: pp 7-28.

Quan ML, McCready DR: The evolution of lymph node assessment in breast cancer. *Journal of Surgical Oncology*: March 2009; 99(4): pp 194-198.

Reedijk M, Odorcic S, Zhang H, Chetty R, Tennert C, Dickson BC, Lockwood G, Gallinger S, Egan SE: Activation of notch signaling in human colon adenocarcinoma. *International Journal of Oncology*: December 2008; 33(6): pp 1223-1229.

Reedijk MD, Pinnaduwaage D, Dickson BC, Mulligan AM, Zhang H, Bull SB, O'Malley FP, Egan SE, Andrusis IL: JAG1 expression, associated with basal phenotype, predicts recurrence in lymph node-negative breast cancer. *Breast Cancer Research and Treatment*: October 2008; 111(3): pp 439-448.

Ross K, Pape D, Wright L: A review of ethical issues in the transplantation of HIV-infected patients. In: *Organ Transplantation: Ethical, Legal and Psychosocial Aspects. Towards A Common European Policy*: (Weimar W, Bos MA, van Busschbach JJ, eds.) Pabst Science Publishers, Lengerich, Germany: 2008; pp 416-422.

Selzner N, Girgrah N, Lilly L, Guindi M, Selzner M, Therapondos G, Adeyi O, McGilvray I, Cattral M, Greig PD, Grant D, Levy G, Renner EL: The difference in the fibrosis progression of recurrent hepatitis C after live donor liver transplantation versus deceased donor liver transplantation is attributable to the difference in donor age. *Liver Transplantation*: December 2008; 14(12): pp 1778-1786.

Shalev I, Wong KM, Foerster K, Zhu Y, Chan C, Maknoja A, Zhang J, Ma XZ, Yang XC, Gao JF, Liu H, Selzner N, Clark DA, Adeyi O, Phillips MJ, Gorczynski RR, Grant D, McGilvray I, Levy G: The novel CD4+ CD25+ regulatory T cell effector molecule fibrinogen-like protein 2 contributes to the outcome of murine fulminant viral hepatitis. *Hepatology*: February 2009; 49(2): pp 387-397.

Silva D, Wright L: Of altruists and egoists: Living anonymous donors. In: *Organ Transplantation: Ethical, Legal and Psychosocial Aspects. Towards A Common European Policy*: (Weimar W, Bos MA, van Busschbach JJ, eds.) Pabst Science Publishers, Lengerich, Germany: 2008; pp 291-297.

Thanos J, Reberia M, Shragge BW, Urbach DR: Health Technology Briefs: Vascular ultrasound screening for asymptomatic abdominal aortic aneurysm. *Healthcare Policy*: October 2008; 4(2): pp 72-80.

Toso C, Trotter J, Wei A, Bigam DL, Shah S, Lancaster J, Grant DR, Greig PD, Shapiro AM, Kneteman NM: Total tumor volume predicts risk of recurrence following liver transplantation in patients with hepatocellular carcinoma. *Liver Transplantation*: August 2008; 14(8): pp 1107-1115. E-published ahead of print: July 30, 2008.

Umoquit MJ, Dobrow MJ, Lemieux-Charles L, Ritvo PG, Urbach DR, Wodchis WP: The efficiency and effectiveness of utilizing diagrams in interviews: A comparison of participatory diagramming and graphic elicitation. *BMC Medical Research Methodology*: August 2008; 8(1): pp 53.

Urbach DR, Simunovic M: Chapter 10: Reflections and recommendations. In: *Cancer Surgery in Ontario: ICES Atlas*: (Urbach DR, Simunovic M, Schultz SE, eds.) Institute for Clinical Evaluative Sciences, Toronto: 2008; pp 199-206.

Urbach DR, Simunovic M, Schultz SE: Cancer Surgery in Ontario: ICES Atlas: (Urbach DR, Simunovic M, Schultz SE, eds.) Institute for Clinical Evaluative Sciences, Toronto: 2008; pp 1-212.

Urbach DR, Simunovic M, Schultz SE: Chapter 1: Introduction. In: *Cancer Surgery in Ontario: ICES Atlas*: (Urbach DR, Simunovic M, Schultz SE, eds.) Institute for Clinical Evaluative Sciences, Toronto: 2008; pp 1-6.

Wirtzfeld DA, Mikula L, Gryfe R, Ravani P, Dicks EL, Parfrey P, Gallinger S, Pollett WG: Concordance with clinical practice guidelines for adjuvant chemotherapy in patients with stage 1-111 colon cancer: Experience in 2 Canadian provinces. *Canadian Journal of Surgery*: April 2009; 52(2): pp 92-97.

Wong V, Wang DY, Warren K, Kulkarni S, Boerner S, Done SJ, Leong WL: The effects of timing of fine needle aspiration biopsies on gene expression profiles in breast cancers. *BioMed Central Cancer*: September 2008; 8: pp 277-287.

Wright L: Ethical controversies in public solicitation for organs. *Transplantation Reviews (Orlando)*: July 2008; 22(3): pp 184-186. E-published ahead of print: March 28, 2008.

Wright L, Campbell M, Daar A: Ethics in kidney transplantation. In: *Kidney Transplantation: Principles and Practice*: (Morris PJ, Knechtle S, eds.) W.B. Saunders, Toronto: 2008; pp 694-708.

Wright L, Ross K, Daar A: The ethics of organ transplantation. In: *Bioethics for Clinicians*: (Singer P, MacRae S, eds.) Cambridge University Press, New York: 2008; pp 145-152.

Zogopoulos G, Jorgensen C, Bacani J, Montpetit A, Lepage P, Ferretti V, Chad L, Selvarajah S, Zanke B, Hudson TJ, Pawson T, Gallinger S: Germline EPHB2 receptor variants in familial colorectal cancer. *Public Library of Sciences (PLoS) One*: August 2008; 3(8): pp e2885.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Cattral MS: Dalhousie University, Atlantic Transplant 2008, Halifax, NS, October 2008. State of the art of pancreas transplantation.

Cattral MS: McMaster University, Department of Immunology, Hamilton, ON, November 2008. New insights into dendritic cell ontogeny.

Cleary SP: Canadian Association of General Surgeons, Canadian Surgical Forum, Halifax NS, September 2008. Laparoscopic cholecystectomy revisited.

Gallinger S: Metastasis Research Society/American Association for Cancer Research (AACR), Joint Conference on Metastasis, Vancouver, BC, August 2008. Liver metastasis.

Gallinger S: Canadian Association of General Surgeons (CAGS), Canadian Surgery Forum, HPB Surgery for the General Surgeon – Laparoscopic Cholecystectomy Revisited, Halifax, NS, September 2008. Educational issues around the introduction of laparoscopic cholecystectomy and impact on future.

Gallinger S: Canadian Cancer Society, 2008 Surviving Cancer and Living Well Conference, Hereditary Cancers - What does this mean?, Toronto, ON, November 2008. Speaker: Hereditary gastrointestinal cancer.

Gallinger S: Queen's Cancer Research Institute, Department of Oncology Lecture Series, Updated on HPB Surgical Oncology, Kingston, ON, November 2008. Colorectal liver metastases and pancreas cancer genetics.

Ghanekar A: University of Wisconsin Hospital and Clinics, Madison, Wisconsin, September 2008. Liver transplantation for hepatocellular carcinoma: The University of Toronto experience.

Grant D: Israel Transplant Society, Tel Aviv, Israel, January 2009. Live donor liver transplantation.

Grant D: British Gastroenterology Society, Glasgow, Scotland, March 2009. Intestine transplantation update.

Grant D: Canadian Transplantation Society, Banff, AB, March 2009. Live donor liver transplantation.

Greig PD: University of Calgary, Department of Surgery, Division of General Surgery, City Wide Rounds, Calgary, AB, January 2009. Invited Professor: Approach to the new liver tumor.

Greig PD: Harvard Medical School's Academy Center for Teaching and Learning, Boston, Massachusetts, April 2009. (1) At the Shapiro Institute for Education and Research during the Fellows Seminar Series: Readiness of the student to take the reigns: A surgeon's perspective, (2) During the Medical Education Grand Rounds: Learning through teaching: Reflections of a surgeon/teacher, (3) At Beth Israel Deconess Medical Centre during the Transplant Rounds: (a) Fellowship training following surgical residency: Caveat emptor, (b) Living donor liver transplantation.

Greig PD: Australian and New Zealand Hepatic Pancreatic and Biliary Association (ANZHPBA), Sydney, Australia, October 2008. (1) Extending the boundaries - concomitant extra hepatic disease, (2) Transplantation for hepatocellular carcinoma (HCC) - beyond Milan, (3) Ablation/resection - bridge or salvage transplantation?, (4) Adult to adult living related transplantation (LRT) in western societies, (5) What to do with small HCC (>3cm) - a Canadian view, (6) Techniques in liver surgery - water jet.

Kennedy ED: Surgical Outcomes Club, Fourth Annual Scientific Sessions, San Francisco, California, September 2008. Shared decision making: A strategy to maintain warranted and resolve unwarranted practice variation.

Kennedy ED: Cancer Care Ontario, Colorectal Cancer Symposium, Toronto, ON, December 2008. Disease pathway management initiative.

Kennedy ED: Colorectal Cancer Association of Canada, Rectal Advisory Board Workshop, Montreal, PQ, December 2008. Raising the standards of care in rectal cancer.

McCready DR: Roswell Park Cancer Institute, Buffalo, New York, May 2009. Visiting Professor: Breast conservation without irradiation: Legendary quest or defiable reality?

McCready DR: Canadian Surgical Forum, Halifax, NS, September 2008. Postgraduate Course: Breast conserving surgery and the role of intra-operative radiotherapy.

McGilvray ID: Centre hospitalier de l'Université de Montréal (CHUM), Combined Transplant Rounds, l'Hôpital Saint-Luc, Montreal, PQ, January 2009. Living donor liver transplantation: The Toronto translational experience.

McGilvray ID: Dalhousie University, Halifax, NS, February 2009. Living donor liver transplantation at the University of Toronto: Transplantation and translation.

McGilvray ID: University of Alberta, Transplantation Rounds, Edmonton, Calgary, November 2008. Genomics of hepatitis C virus infection.

Moulton C: Loma Linda University Medical Center, 5th Annual Program Directors' Retreat, Palm Springs, California, September 2008. Slowing down when you should: A new model of expert judgment.

Moulton C: Henry Ford Health System, Detroit, Michigan, November 2008. Perspectives in self-regulation: Slowing down when you should, a new model of expert judgment.

Moulton C: Kingston General Hospital, Medical Grand Rounds, Kingston, ON, November 2008. Liver metastases for colorectal cancer: Pushing the envelope.

Moulton C: Queen's University, Cancer Research Institute, Update on Hepato-Pancreato-Biliary Surgical Oncology, Kingston, ON, November 2008. Colorectal liver metastases and pancreas cancer genetics.

O'Brien CA: American Association of Orthopedic Surgeons, Salt Lake City, Utah, September 2008. Cancer stem cells and the role for the bone morphogenetic proteins (BMP) pathway.

O'Brien CA: National Cancer Institute, Cancer Therapy Evaluation Program, Bethesda, Maryland, September 2008. Colon cancer stem cells: Therapeutic implications.

Okraïnec A: Society of American Gastrointestinal and Endoscopic Surgeons (SAGES), Annual Meeting, Phoenix, AZ, April 2009. (1) Co-Chair: Learning Center, (2) Invited Faculty for hands-on course on advanced laparoscopic techniques: From reduced port and single incision to hand assist and other advanced techniques, (3) Surgeons in service: Experience with fundamental laparoscopic surgery (FLS) training via teleconference.

Okraïnec A: Centre for Minimal Access Surgery and Bethune Round Table on International Surgery, Fundamentals of Laparoscopic Surgery Workshop, Hamilton, ON, May 2009. Course Director.

Okraïnec A: Chinese College of Surgeons, Annual Meeting, Hangzhou, China, June 2009. Keynote Speaker: The development of an international educational program in the fundamentals of laparoscopic surgery.

Okraïnec A: Korle Bu Teaching Hospital, Accra, Ghana, July 2008. Fundamentals of laparoscopic surgery training course.

Okraïnec A: Hospital San Vicente de Paul, University of Antioquia, Grand Rounds, Medellin, Colombia, August 2008. The use of simulation and telesimulation in surgical education.

Okraïnec A: Nueva Granada University, Central Military Hospital, Grand Rounds, Bogota, Colombia, August 2008. Telesimulation in Colombia: How did we get here, where are we going?

Okraïnec A: Canadian Association of General Surgeons, Canadian Surgical Forum, Research Retreat, Halifax, NS, September 2008. (1) The inferior approach to laparoscopic mobilization of the right colon, (2) The use of laparoscopy in gastric cancer, (3) Tissue sealing devices in laparoscopic surgery, (4) Does virtual surgery translate to better surgery?: A randomized controlled trial using real world operations as an outcome, (5) Chair of Minimally Invasive Surgery Video Session: Tips and tricks for laparoscopic colon surgery.

Okraïnec A: Japan Society for Endoscopic Surgery, 11th World Congress of Endoscopic Surgery, Yokohama, Japan, September 2008. (1) Chair of Sessions: Avoiding complications in laparoscopic colorectal surgery, (2) Training and education in endoscopic surgery.

Okraïnec A: American College of Surgeons, 94th Annual Clinical Congress, San Francisco, California, October 2008. Hands-on skill course: Fundamentals of laparoscopic surgery.

Okraïnec A: Jose Reategui Hospital, Society of American Gastrointestinal and Endoscopic Surgeons (SAGES), Go Global Program, Piura, Peru, November 2008. Hands-on course: Laparoscopic surgery.

Okraïnec A: McGill University, Annual Minimally Invasive Surgery Day, Montreal, QC, November 2008. First year's experience with the use of telesimulation for teaching surgical skills in the developing world.

Okraïnec A: Ontario Association of General Surgeons, Annual Meeting, Mississauga, ON, November 2008. Negotiating and starting a job in an academic setting.

Reznick RK: American Board of Internal Medicine, Meeting on Competency Based Education and Training (CBET), Philadelphia, Pennsylvania, January 2009. The genesis of a new curriculum.

Reznick RK: Michael S. Gordon Center for Research in Medical Education, Lecture at the Society for Simulation in Healthcare, Orlando, Florida, January 2009. Training new surgeons: Fine tuning our methods or radical restructuring?

Reznick RK: Pan American Robotics Symposium, Houston, Texas, February 2009. See one, simulate 100, do 100, train one.

Reznick RK: Conference on Patient Safety, Kingdom of Bahrain, April 2009. The training of a surgeon: From competence to virtuosity.

Reznick RK: University of Massachusetts, Medical School, Worcester, Massachusetts, May 2009. H. Brownell Wheeler Lecturer: Transformative thinking or a surgeon educator gone mad?

Reznick RK: University of Rochester, Rochester, New York, May 2009. James A. deWeese Visiting Professor: 120 Years after Halsted: Are we ready to ditch the tried and true?

Reznick RK: Canadian Academy of Urological Surgeons, Annual Meeting, Toronto, ON, June 2009. Surgery as a career in 2009 - The challenges.

Reznick RK: Hong Kong Academy of Medicine, Hong Kong, June 2009. Surgical training: Turn it upside down?

Reznick RK: Vanderbilt University, Robert S. McCleery Master Teacher Award and Lectureship for Surgical Resident Education, Nashville, Tennessee, June 2009. The push for change: From Halsted to competency-based training.

Reznick RK: International Society for Quality in Health Care, Plenary Session, Copenhagen, Denmark, October 2008. Healthcare education and training.

Reznick RK: Hong Kong University and Chinese University of Hong Kong, Hong Kong, November 2008. Overseas advisor of accreditation team.

Reznick RK: University of Alberta, Department of Surgery, First Annual Retreat on Education and Professionalism, Grand Rounds Lecture, Edmonton, AB, November 2008. See one, practice 1,000, do one.

Reznick RK: Philippine College of Surgeons, Annual Meeting, Manila, Philippines, December 2008. (1) Surgical education - new solutions for a new time, (2) Innovations in teaching for colorectal surgery and endosurgery, (3) The importance of "soft stuff:" From team communications to patient safety, (4) The Toronto experience: Implementing the W.H.O. surgical safety checklist, (5) Minimally invasive colectomy: A new paradigm or passing fad, (6) Traditions and technologies in surgical training.

Taylor BR: BC Patient Safety and Quality Council, Vancouver, BC, February 2009. Health Quality Network of British Columbia - safe surgery checklist.

Taylor BR: Regina General Hospital, Regina, SK, February 2009. The World Health Organization and the Safe Surgery Saves Lives Campaign.

Taylor BR: Royal Jubilee Hospital, Victoria, BC, February 2009. Safe surgery saves lives Canada.

Taylor BR: University of Saskatoon, Saskatoon, SK, February 2009. The World Health Organization (WHO) and the Safe Surgery Saves Lives Campaign.

Taylor BR: Canadian Patient Safety Institute, Canadian Safe Surgery Saves Lives Workshop, Toronto, ON, March 2009. World Health Organization - Save Surgery Saves Lives pilot site experience.

Taylor BR: Hospital Insurance Forum, Annual Meeting, Phoenix, Arizona, March 2009. Surgical safety checklist.

Taylor BR: Canadian Patient Safety Institute, Canada's Forum on Patient Safety and Quality Improvement, Toronto, ON, April 2009. Hot topics session: Safe surgery saves lives.

Taylor BR: Healthcare Insurance Reciprocal of Canada (HIROC), Toronto, ON, May 2009. Video conference: The surgical safety checklist - a pilot site's experience.... before, during and after.

Taylor BR: University of Calgary, Surgical Retreat, Banff, AB, May 2009. The World Health Organization - Safe Surgery Saves Lives (WHO SSSL) Project.

Taylor BR: Association of Canadian Universities and Colleges, Department of Anesthesia, Annual Meeting, Vancouver, BC, June 2009. The surgical checklist - is it for real?

Taylor BR: Canadian Anesthesiologist's Society, Annual Meeting, Patient Safety Symposium, Vancouver, BC, June 2009. Safe surgery checklist - but I'm already doing that!

Taylor BR: L'Hôpital Maisonneuve-Rosemont, Department of Surgery, Grand Rounds, Montreal, Quebec, June 2009. La liste de contrôle...pourquoi et comment?

Taylor BR: Memorial University, Grand Rounds, St. John's, NL, June 2009. Is the surgical checklist making a difference?

Taylor BR: Ministry of Health and Long-Term Care, Toronto, ON, June 2009. Surgical safety checklist mandatory public reporting. Expert advice meeting. Background research and implementation experience.

Taylor BR: Operating Room Nurses Association of Canada (ORNAC), Annual Conference, St. John's, NL, June 2009. The safe surgery checklist...supporting implementation.

Taylor BR: Western Node - Safer Healthcare Now/Foothills Medical Centre, Division of General Surgery, Calgary, AB, June 2009. Videoconference: How the safe surgery checklist is making a difference.

Taylor BR: Canadian Association of General Surgeons, Canadian Surgery Forum, Halifax, NS, September 2008. Poster judge.

Taylor BR: Canadian Patient Safety Institute, In Country Safe Surgery Saves Lives Working Group, Winnipeg, MB, October 2008. (1) Co-Chair, (2) The checklist experience at University Health Network.

Taylor BR: Western Health, Surgical Services Working Group Video Conference, Corner Brook, NL, November 2008. The surgical scorecard and surgical services planning.

Taylor BR: Canadian Patient Safety Institute, Board of Directors Meeting, Ottawa, ON, December 2008. The surgical checklist: Experience and results.

Urbach DR: Columbian Surgical Association, 34th Annual Congress, Bogota, Columbia, August 2008. (1) Outcomes research and the surgeon, (2) What's new in Barrett's esophagus?, (3) Current management of achalasia.

Urbach DR: Society of American Gastrointestinal and Endoscopic Surgeons (SAGES), Academic Career Development Workshop, Chicago, Illinois, August 2008. Mistakes which will kill a grant.

Wei AC: Sanofi Aventis, Continuing Medical Education, Sault Ste. Marie, ON, October 2008. An update in the surgical management of colorectal liver metastases.

Wright L: Mayo Clinic, Transplant Grand Rounds, Rochester, Minnesota, September 2008. Public solicitations for organs: Innovative or offensive?

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

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.)

Age-related susceptibility to hepatic ischemia-reperfusion injury. *McGilvray I, Selzner M, Selzner N: Astellas Pharma Canada.* (\$150,000 2007 - 2009.)

Altered immune function with aging. *Gorczyński 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, Caddeu M, Charles C, Guyatt G, Straus S, Thabane L: Canadian Institutes of Health Research.* (\$503,248 2008 - 2011.)

Biomarkers following liver transplantation. *McGilvray I, Levy G: Novartis Pharmaceuticals.* (\$400,000 2006 - 2008.)

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, Leigh 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, Leigh N: Princess Margaret Hospital, Breast Cancer Clinical Research Program.* (\$400,000 2005 - 2009.)

Cancer risk evaluation (CaRE) program. *Zanke B, Gallinger S, Hudson T, Kustra R: National Cancer Institute of Canada, Program Project.* (\$300,000 2007 - 2010.)

CD200:CD200R regulation of bone growth and development in space-flight. *Gorczyński R: Canadian Institutes of Health Research-CSA Joint Initiative, Microgravity and Bone Cells.* (\$116,666 2006 - 2008.)

Characterisation of early molecular events in metastasis. *Done S, McCready DR, Clemons M, Fitzgerald B, Ma C: Canadian Breast Cancer Foundation.* (\$443,769 2008 - 2011.)

CIHR Fellowship. *Sandhu L, Urbach DR: Canadian Institutes of Health Research.* (\$40,000 2008 - 2010.)

CIHR team in interdisciplinary research on colorectal cancer. *McLaughlin J, 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.)

Combined surgical resection of intra-and-extra-hepatic metastases from colorectal cancer. *Wei AC, Gallinger S, Moore M, Coburn N: Colon Cancer Canada.* (\$45,000 2008 - 2009.)

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, Moore M, Dick J: Connaught New Staff Matching Grant, University of Toronto.* (\$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. *Okraïnec A, Apkarian J, Gilbert P: Health Technology Exchange.* (\$81,177 2008 - 2009.)

Development of an integrated surgical skills course supporting complex communication and procedural skill acquisition. *Tabak D, Moulton C, MacRae H, LeBlanc V: The Network of Excellence in Simulation for Clinical Teaching and Learning (NESCTL).* (\$68,000 2008.)

Discontinuity of chronic medications in seniors surviving ICU 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. *Okraïnec 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.)

fgl2/FGL2 and xenograft transplantation. *Grant DR, Levy G, Backx P, Adamson L, Lobe CG: Ontario Heart and Stroke Foundation.* (\$264,000 2008 - 2011.)

fgl2/FGL2 and xenograft transplantation. *Levy G, Gorczyński R, Grant D: Stroke Foundation of Canada.* (\$265,800 2007 - 2011.)

Formation and evaluation of a rapid diagnostic clinic for breast cancer. *McCready DR: Slight and Gattuso Family Foundation.* (\$12,500,000 2008 - 2018.)

From disease mapping to clinical practice. *Siminovitch K, McGilvray I, Heathcote J: Ontario Research Fund.* (\$5,000,000 2006 - 2009.)

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 J, McCready DR, Mulligan AM, O'Malley F, Youngson B: Canadian Breast Cancer Foundation.* (\$147,590 2007 - 2009.)

Genomic heterogeneity in duct carcinoma in situ (DCIS). *Done S, Miller N, Yongson B, Leong WL, Pintille M, Crystal P, Lakovlev V, Kumar M: Princess Margaret Hospital Foundation.* (\$100,000 2008 - 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 genetic pathways that regulate the survival and development of cancer and stem cells. *Guidos C, Danska J, Dick J, Dirks P, Done S, Egan S, Green D, Hitzler J, Leong W, Mak T, Minden M, Pa J, Vallis K, Beyene J, Howes S, McCready DR: Genome Canada.* (\$9,235,469 2006 - 2009.)

Identifying and characterizing colon cancer initiating cells. *Dick J, Gallinger S: Canadian Institutes of Health Research, Fellowship Salary Support for 4 years.* (\$220,000 2005 - 2009.)

Identifying and classifying errors in laparoscopic skills acquisition: Can simulators help? *Okrainec A, Greco E, Regehr G: The Royal College of Physicians and Surgeons of Canada, Medical Education Research Grant.* (\$24,930 2008 - 2009.)

Impact of a structured training and assessment curriculum on skills acquisition in minimally invasive surgery. *Grantcharov T, Orzech N, Okrainec A: Network of Excellence in Simulation for Clinical Teaching and Learning, Innovation and Evaluation Grant.* (\$99,350 2008 - 2009.)

Improving breast cancer care with a rapid diagnostic clinic. *Heisey R, Semple J, Cil T, Lord B, McCready D: Women's College Hospital, Alternate Funding Plan, Innovation Funding Competition.* (\$30,000 2009.)

Improving the quality of magnetic resonance imaging (MRI) reporting for rectal cancer staging in Ontario. *Kennedy E, Smith A, McLeod R: Care Services Improvement Partnership (CSIP), Innovation Grant.* (\$186,582 2009 - 2011.)

Integrated assessment of technical and communication skills: Integrated procedural performance instrument (IPPI). *Moulton C, McDonald C, MacRae H (co-PI), 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, Cheung A, Crump M, Done S, Leighl N, Leong WL, McCready D, Ng N, Pan J, Tannock I, Warr D: Campbell Family Institute for Breast Cancer Research (CFIBCR).* (\$108,300 2006 - 2010.)

Judgments and health innovation: How do upstream knowledge transfer and exchange among stakeholders contribute to design innovations? *Lehoux P, Urbach DR, Miller F, Battista R, Williams-Jones B: Canadian Institutes of Health Research.* (\$102,492 2008 - 2009.)

Life sciences research in space simulation using a bed rest model. *Hughson R, Shoemaker K, Hart D, Rush J, Gorczyński R: Canadian Institutes of Health Research-CSA, Joint Initiative.* (\$200,000 2007 - 2009.)

Mechanism(s) for immunoregulation induced in aging by interactions of lipopolysaccharide (LPS) and hemoglobin. *Gorczyński R: CLP Research Institute.* (\$300,000 2005 - 2009.)

Molecular pathogenesis of hepatitis C virus infection. *McGilvray I, Heathcote J: Canadian Institutes of Health Research.* (\$100,000 2009 - 2010.)

Non-alcoholic fatty liver disease: Role of fatty acid composition and gene expression. *Allard J, McGilvray I, Guindi M, Therapondos G: Canadian Institutes of Health Research.* (\$354,783 2008 - 2011.)

Ontario Familial Colorectal Cancer Registry - Phase III. *Gallinger S, Cotterchio M, Bapat B, Esplen MJ, Gryfe RN, McKeowan-Eyssen G, McLaughlin J, Pollet A, Woods M: National Institutes of Health Research, USA.* (\$1,100,000 2008 - 2012.)

Ontario hepato-pancreatic-biliary (HPB) clinical database project. *Wei AC, Gallinger S, Davies W, Fairfull-Smith R, Hanna S, Marcaccio M, Wall B, Jalink D, Barnett H, Langer B, MacLeod R: Cancer Care Ontario.* (\$35,000 2007 - 2009.)

Ontario laparoscopy telesimulation initiative. *Okrainec A: Ministry of Health and Long Term Care, Innovation Fund.* (\$185,674 2009 - 2011.)

Ontogeny of tolerogenic tumor dendritic cells. *Catral M, Diao J: Canadian Institutes of Health Research.* (\$100,000 2009.)

Pancreatic cancer linkage consortium. *Petersen GM, Gallinger S, and 27 others: National Institutes of Health.* (\$7,000,000 2002 - 2008.)

Pancreatic cancer linkage consortium (Renewal). *Petersen GM, Gallinger S, and 27 others: National Institutes of Health.* (\$4,000,000 2008 - 2013.)

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.)

Portal-venous hemodynamics after extended hepatectomies: Implication for postoperative morbidity/mortality and disturbance in intestinal barrier function. (PortaPresTor). Moulton C, Guba M, Gallinger S: *Colon Cancer Canada Grant*. (\$31,700 2008 - 2009.)

Positive emission tomography in colorectal adenocarcinoma metastases (PET CAM) (\$1200/case). Gallinger S, Moulton CA: *Ministry of Health and Long Term Care, Ontario Clinical Oncology Group*. (\$180,000 2005 - 2010.)

Proteomics and protein biomarkers of breast cancers. Done S, Leong WL, Kulkarni S, Boerner S, Vallis K, McCready DR, Woodgett JR, Leigh N: *Princess Margaret Hospital, Breast Cancer Clinical Research Program*. (\$400,000 2005 - 2009.)

Randomized clinical trials for breast cancer. McCready DR (PMH Site Principal Investigator): *National Adjuvant Breast and Bowel Project (NSABP)*. (\$47,700 2008.)

Role and regulation of cancer stem cells in hepatocellular carcinoma (HCC): Implications for liver transplantation. Ghanekar A: *Multi-Organ Transplant Program Academic Enrichment Fund*. (\$100,000 2009 - 2011.)

Role of CD200:CD200R in regulation of cardiac rejection and atherosclerosis. Gorczynski RM: *Heart & Stroke Foundation*. (\$100,000 2007 - 2010.)

Role of CD200:CD200R interactions in regulation of tumor growth. Gorczynski R: *Canadian Institutes of Health Research, Industry POPI Grant*. (\$300,000 2008 - 2009.)

Role of immediate DC precursors in allograft rejection and tolerance. Catral MS: *Multiorgan Transplantation Academic Enrichment Fund Competition*. (\$100,000 2008 - 2010.)

Role of immediate dendritic cell precursors in allograft rejection and tolerance. Catral MS: *Heart & Stroke Foundation*. (\$230,082 2008 - 2011.)

Role of immediate dendritic cell precursors in immunity and tolerance. Catral 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: *Physicians' Services Incorporated*. (\$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.)

Stress and anxiety with thyroid wait times. Goldstein D, Wei AC, Devins G, Sawka A, Rotstein L, Higgins K, Gullane P, Freeman J, Gilbert R, Brown D, Irish J: *University Health Network Foundation Grant, Thyroid Research Centre Endowment Fund*. (\$27,912 2008 - 2009.)

Structures and processes of care in colorectal cancer surgery (SPoCCS) study. Urbach DR, Simunovic M, Baxter N, Sutradhar R, Lix LM: *Canadian Institutes of Health Research*. (\$1,084,151 2008 - 2013.)

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 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 effect of screening colonoscopy use by primary care physicians on colorectal cancer incidence and mortality. Urbach DR, Baxter N, Del Giudice LM, Moineddin R, Sutradhar R: *Canadian Institutes of Health Research*. (\$84,598 2009.)

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 impact of positron emission tomography (PET) imaging prior to liver resection for colorectal adenocarcinoma metastases (CAM) - PETCAM: A prospective multicenter randomized clinical trial. Moulton C, Gallinger S: *Ministry of Health Ontario*. (\$980,000 2005 - 2010.)

The role of cancer stem cells in hepatocellular carcinoma progression and recurrence: Implications for immunosuppression after liver transplantation. Ghanekar A, Guba M: *Wyeth Pharmaceuticals*. (\$100,000 2008 - 2010.)

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 transplantation: A retrospective outcomes analysis. Greig G, Ghanekar A: *Genzyme Canada Inc.* (\$50,000 2007 - 2009.)

Transillumination breast spectroscopy (TIBS) and breast cancer risk assessment. Lilge L, Leong WL, Kulkarni S, Knight J, Liu FF, McCready DR, Done S: *National Cancer Institute of Canada*. (\$352,481 2006 - 2009.)

Unintentional discontinuation of chronic medications for seniors in long-term care facilities: An evaluation of a medication reconciliation and quality improvement strategy. Bell C, Urbach DR, Bierman A, Bronskill S, Etchells E, Fernandes O, Mamdani M, Rochon P: *Canadian Institutes of Health Research, Operating Grants*. (\$215,139 2008 - 2011.)

Using patient and physician perspectives to develop treatment decision-making tools that support patient-centered care for colorectal cancer. *Kennedy E, Urbach D, Gagliardi A: Canadian Institutes of Health Research.* (\$99,124 2009 - 2010.)

Validation and characterization of candidate germline familial pancreas cancer tumor suppressor genes. *Gallinger S: Princess Margaret Hospital Foundation, Invest in Research Program.* (\$100,000 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 (co-PI): Medical Council of Canada.* (\$62,000 2006 - 2008.)

HONOURS RECEIVED

Cleary SP: Frank Mills Award. July 2008.

Gallinger S: Named Oakdale Golf and Country Club/George Knudson Research Chair in Gastrointestinal Cancer Genetics. September 2008.

Ghanekar A: Canadian Institutes of Health Research, Phase 1 Clinician Scientist Training Award. April 2009.

Okrainec A: Ross Fleming Surgical Educator Award for Excellence in Surgical Education, from the University Health Network. April 2009.

Division of Neurosurgery

Dr. M. Bernstein	Professor	Dr. E.M. Massicotte	Assistant Professor
Dr. K.D. Davis	Professor	Dr. J.A. Saint-Cyr	Professor
Dr. J.H. Eubanks	Associate Professor	Dr. C.H. Tator	Professor
Dr. M.G. Fehlings	Professor	Dr. M. Tymianski	Professor
Dr. F. Gentili	Professor	Dr. T. Valiante	Assistant Professor
Dr. A. Guha	Professor	Dr. A.A. Velumian	Assistant Professor
Dr. C. Hamani	Assistant Professor	Dr. M.C. Wallace	Professor (Division Head)
Dr. M. Hodaie	Assistant Professor	Dr. G. Zadeh	Lecturer
Dr. A.R. Hudson	Professor		
Dr. W.D. Hutchison	Associate Professor		
Dr. K.M. Johnston	Assistant Professor		
Dr. S. Karimi-Abdolrezaei	Assistant Professor		
Dr. A.M. Lozano	Professor		

PUBLICATIONS

Ackery A, Provvidenza C, Tator CH: Concussion in hockey: Compliance with return to play advice and follow-up status. *The Canadian Journal of Neurological Sciences*: March 2009; 36(2): pp 207-212.

Ackery A, Tator CH: Anatomical locations and types of Ontarians' catastrophic injuries. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 119-128.

Ahmad Y, Tator CH: Canoeing. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 131-138.

Ahmad Y, Tator CH: Fishing. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 169-179.

Ahn H, Fehlings MG: Prevention, identification and treatment of perioperative spinal cord injury. *Neurosurgical Focus*: November 2008; 25(5): pp E15.

Anastakis DJ, Malessey MJ, Chen R, Davis KD, Mikulis DJ: Cortical plasticity following nerve transfer in the upper extremity. *Hand Clinics*: November 2008; 24(4): pp 425-444.

Babcock MA, Kostova FV, Guha A, Packer RJ, Pollack IF, Maria BL: Tumors of the central nervous system: Clinical aspects, molecular mechanisms, unanswered questions, and future research directions. *Journal of Child Neurology*: October 2008; 23(10): pp 1103-1121.

Bachar G, Goldstein DP, Shah M, Tandon A, Ringash J, Pond G, Gullane PJ, Perez-Ordóñez B, Gilbert RW, Brown DH, Gentili F, O'Sullivan B, Irish JC: Esthesioneuroblastoma: The Princess Margaret Hospital experience. *Head and Neck Surgery*: December 2008; 30(12): pp 1607-1614.

Bacigaluppi S, Dehdashti AR, Agid R, Krings T, Tymianski M, Mikulis D: The contribution of imaging in diagnosis, preoperative assessment, and follow up of moyamoya disease: A review. *Neurosurgical Focus*: April 2009; 26(4): pp E3.

Baerlocher MO, Tator CH: Tobogganing and sledding. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 353-362.

Ballanger B, Lozano AM, Moro E, van Eimeren T, Hamani C, Chen R, Cilia R, Houle S, Poon YY, Lang AE, Strafella AP: Cerebral blood flow changes induced by pedunculopontine stimulation in patients with advanced Parkinson's disease: A [(15)O] H(2)O PET study. *Human Brain Mapping*: E-published ahead of print: May 28, 2009.

Baptiste DC, Austin JW, Zhao W, Nahirny A, Sugita S, Fehlings MG: Systemic polyethylene glycol promotes neurological recovery and tissue sparing in rats after cervical spinal cord injury. *Journal of Neuropathology and Experimental Neurology*: June 2009; 68(6): pp 661-676.

Baptiste DC, Tighe A, Fehlings MG: Spinal cord injury and neural repair: Focus on neuroregenerative approaches for spinal cord injury. *Expert Opinion on Investigational Drugs*: May 2009; 18(5): pp 663-673.

Baumann DM, Austin JW, Fehlings MG, Shoichet MS: A quantitative ELISA for bioactive anti-Nogo-A, a promising regenerative molecule for spinal cord injury repair. *Methods*: February 2009; 47(2): pp 104-108. E-published ahead of print: August 12, 2008.

- Bernstein M, Menard C:** Gamma knife facility for neurological conditions: A provincial resource (Readers' Views). *Ontario Medical Review*: October 2008: 75(9): pp 45.
- Bernstein M, Upshur R:** Beware patients bearing gifts. *Parkhurst Exchange*: December 2008: 16(12): pp 72-73.
- Bernstein M, Vachhrajani S, Fawaz C, Mathieu D, Menard C, Cusimano MD, Gentili F, Hodaie M, Kenny B, Kulkarni AV, Laperriere N, Schwartz M, Tsao M:** Complications of gamma knife radiosurgery. A report from two Canadian Centres. *Journal of Neurosurgery*: December 2008: 109: pp 2-76.
- Blankstein U, Chen JYW, Mincic AM, McGrath PA, Davis KD:** The complex minds of teenagers: Neuroanatomy of personality differs between sexes. *Neuropsychologia*: January 2009: 47(2): pp 599-603.
- Butt B, Motwani P, Tator CH:** Floor hockey. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 573-579.
- Butt B, Tator CH:** Skateboarding. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 395-404.
- Butt F, Tator CH:** Other air sports ultralight air sports, hang-gliding, para-gliding. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 428-435.
- Butt F, Tator CH:** Running and Jogging. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 405-416.
- Carrabba G, Dehdashti AR, Gentili F:** Surgery for clival lesions: Open versus the expanded endoscopic endonasal approach. *Neurosurgical Focus*: December 2008: 25(6): pp E7-E7.
- Chan P, Boriani S, Fourney DR, Biagini R, Dekutoski MB, Fehlings MG, Ryken TC, Gokasian ZL, Vrionis FD, Harrop JS, Schmidt MH, Vialle LR, Gerszten PC, Rhines LD, Ondra SL, Pratt SR, Fisher CG:** An assessment of the reliability of the Enneking and Weinstein-Boriani-Biagini classifications for staging of primary spinal tumors by the spine oncology study group. *Spine*: February 2009: 34(4): pp 384-391.
- Chin GD, Hutchison WD:** Effects of cobalt and bicuculline on focal microstimulation of rat pallidal neurons in vivo. *Brain Stimulation*: July 2008: 1(3): pp 134-150.
- Chu GKT, Fehlings MG:** Timing of surgery for spinal injuries. In: *Neurotrauma and Critical Care of the Spine*: (Jallo J, Vaccaro AR, eds.) Thieme Medical Publishers, Inc, New York: 2008: pp 117-125.
- Cook DJ, Tator CH:** Personal watercraft. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 148-157.
- da Costa L, Wallace C, terBrugge K, O'Kelly C, Willinsky R, Tymianski M:** The natural history and predictive features of hemorrhage from brain arteriovenous malformations. *Stroke*: January 2009: 40(1): pp 100-105. E-published ahead of print: November 13, 2008.
- daCosta L, Thines L, Dedashti A, Wallace MC, Willinsky R, Schwartz ML, Tymianski M, TerBrugge K:** Management and clinical outcome of posterior fossa arteriovenous malformations: Report on a single center 15 years experience. *Journal of Neurology, Neurosurgery and Psychiatry*: April 2009: 80(4): pp 376-379. E-published ahead of print: November 21, 2008.
- Defrin R, Pope G, Davis KD:** Interactions between spatial summation, 2-point discrimination and habituation of heat pain. *European Journal of Pain*: October 2008: 12(7): pp 900-909. E-published ahead of print: February 14, 2008.
- Dehdashti AR, Ganna A, Witterick I, Gentili F:** Expanded endoscopic endonasal approach for anterior cranial base and suprasellar lesions. Indications and limitations. *Neurosurgery*: April 2009: 64(4): pp 677-687.
- Dehdashti AR, Karabatsou K, Ganna A, Witterick I, Gentili F:** Expanded endoscopic approach for the treatment of clival chordomas: Early results in 12 patients. *Neurosurgery*: August 2008: 63(2): pp 299-307.
- Ehsani S, Hodaie M, Liebsch NJ, Gentili F, Kiehl TR:** Anaplastic glioma after high-dose proton-photon radiation treatment for a low grade skull base chondrosarcoma. *Journal of Neurosurgery*: July 2008: 88(2): pp 231-236.
- Erlich SA, Tymianski M, Kiehl TR:** Cellular schwannoma of the abducens nerve: Case report and review of the literature. *Clinical Neurology and Neurosurgery*: June 2009: 111(5): pp 467-471. E-published ahead of print: February 5, 2009.
- Erwin WM, Las Heras F, Islam D, Fehlings MG, Inman RD:** The regenerative capacity of the notochordal cell: Tissue constructs generated in vitro under hypoxic conditions. *International Journal of Radiation Oncology, Biology, Physics*: June 2009: 10(6): pp 513-521.
- Fady S, Simson H, Tator CH:** Bicycling. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 371-381.
- Fallah A, Ebrahim S, Englesakis M, Bernstein M:** Do subspecialized neurosurgeons experience higher complication rates for non-subspecialty emergency surgery: A systematic review. *Canadian Journal of Neurological Sciences*: February 2009: 36(Suppl10): pp S32.
- Fatima M, Tator CH:** Basketball. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 563-572.

- Fehlings MG:** Is cerebrospinal fluid drainage safe and of potential therapeutic benefit after acute traumatic spinal cord injury? *Journal of Neurosurgery: Spine*: March 2009: 10(3): pp 179-180.
- Fehlings MG, Arvin B:** Recurrent tethered cord syndrome: A novel approach for a difficult surgical condition? *Journal of Neurosurgery: Spine*: April 2009: 10(4): pp 275-276.
- Fehlings MG, Arvin B:** The timing of surgery in patients with central spinal cord injury. *Journal of Neurosurgery: Spine*: January 2009: 10(1): pp 1-2.
- Fehlings MG, Gray RJ:** Posterior cervical foraminotomy for the treatment of cervical radiculopathy. *Journal of Neurosurgery: Spine*: April 2009: 10(4): pp 343-344.
- Fehlings MG, Tighe A:** Spinal cord injury: The promise of translational research. *Neurosurgical Focus*: November 2008: 25(5): pp E1. E-published ahead of print: October 31, 2008.
- Fontaine D, Hamani C, Lozano A:** Efficacy and safety of motor cortex stimulation for chronic neuropathic pain: Critical review of the literature. *Journal of Neurosurgery*: February 2009: 110(2): pp 251-256.
- Forder JP, Tymianski M:** Postsynaptic mechanisms of excitotoxicity: Involvement of postsynaptic density proteins, radicals and oxidant molecules. *Neuroscience*: January 2009: 158(1): pp 293-300. E-published ahead of print: November 1, 2008.
- Furlan JC, Fehlings M:** The impact of age on mortality, impairment and disability among adults with acute traumatic spinal cord injury. *Journal of Neurotrauma*: E-published April 14, 2009.
- Furlan JC, Fehlings MG:** Attitudes toward the elderly with CNS trauma: A cross-sectional study of neuroscientists, clinicians, and allied-health professionals. *Journal of Neurotrauma*: February 2009: 26(2): pp 209-225.
- Furlan JC, Fehlings MG:** Cardiovascular complications after acute spinal cord injury: Pathophysiology, diagnosis and management. *Neurosurgical Focus*: November 2008: 25(5): pp E13. E-published ahead of print: October 31, 2008.
- Furlan JC, Fehlings MG:** Hyponatremia in the acute stage after traumatic cervical spinal cord injury: Clinical and neuroanatomic evidence for autonomic dysfunction. *Spine*: March 2009: 34(5): pp 501-511.
- Furlan JC, Fehlings MG, Tator CH, Davis AM:** Motor and sensory assessment of patients in clinical trials for pharmacological therapy of acute spinal cord injury: Psychometric properties of the ASIA standard. *Journal of Neurotrauma*: November 2008: 25(11): pp 1273-1301.
- Furlan JC, Kattail D, Fehlings MG:** The impact of comorbidities on age-related differences in mortality after acute traumatic spinal cord injury. *Journal of Neurotrauma*: E-published March 10, 2009.
- George W, Rose D, Hazrati L, Majl L, Hodaie M:** Cerebral schistosomiasis - An unusual presentation of an intracerebral mass lesion. *Canadian Journal of Neurological Science*: March 2009: 36(2): pp 244-247.
- Hamani C, Andrade D, Hodaie M, Wennberg RA, Lozano A:** Deep brain stimulation for the treatment of epilepsy. *International Journal of Neural Systems*: June 2009: 19(3): pp 213-226.
- Hamani C, Ewerton FIS, Marcolin de Almeida F, Bonilha SM, Covalan L, Fantin Cavarsan C, Ballester G, Mello LE, Lozano AM:** Bilateral anterior thalamic nucleus lesions are not protective against seizures in chronic pilocarpine epileptic rats. *Stereotactic and Functional Neurosurgery*: March 2009: 87(3): pp 143-147. E-published March 24, 2009.
- Hamani C, Fontaine D, Lozano AM:** DBS for persistent non-cancer pain. In: *Textbook of Stereotactic and Functional Neurosurgery*: (Lozano AM, Gildenberg PL, Tasker RR, eds.) Springer-Verlag, Berlin: 2009: pp 2237-2238.
- Hamani C, Mayberg H, Snyder B, Giacobbe P, Kennedy S, Lozano AM:** Deep brain stimulation of the subcallosal cingulate for gyrus depression: Anatomical location of the active contacts in clinical responders and a suggested guideline for targeting. *Journal of Neurosurgery*: E-published May 29, 2009.
- Hamani C, Snyder B, Laxton A, Lozano A:** Deep brain stimulation for depression. In: *Textbook of Stereotactic and Functional Neurosurgery*: (Lozano AM, Gildenberg PL, Tasker RR, eds.) Springer-Verlag, Berlin: 2009: pp 2983-2961.
- Hashmi JA, Davis KD:** Effect of static and dynamic heat pain stimulus profiles on the temporal dynamics and interdependence of pain qualities, intensity and affect. *Journal of Neurophysiology*: October 2008: 100: pp 1706-1715.
- Hawryluk G, Fehlings MG:** The evolution of classification systems for neurological function following human spinal cord injury. In: *The AOSpine Spine Classifications and Severity Measures*: (Chapman J, Dettori JR, Norvell DC, eds.) Thieme, New York: 2009: pp 331-335.
- Hawryluk GWJ, Fehlings MG:** The center of the spinal cord may be central to its repair. *Cell Stem Cell*: September 2008: 3(3): pp 230-232.
- Hawryluk GWJ, Rowland JW, Fehlings MG:** Protection and repair of the injured spinal cord: A review of completed, outgoing and planned clinical trials for acute spinal cord injury. *Neurosurgical Focus*: November 2008: 25(5): pp E14.
- Hawrylyk GWJ, Fehlings MG:** Cellular transplantation approaches for repair of the injured spinal cord: Ongoing and pending clinical trials. *Topics in Spinal Cord Injury Rehabilitation*: May 2009: 14(4): pp 47-61.
- Heinicke S, Tator CH:** All terrain vehicle riding. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 243-256.
- Heinicke S, Tator CH:** Diving. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto,: 2008: pp 180-191.

- Heinicke S, Tator CH:** Snowmobiling. In: Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 229-242.
- Hodaie M, Bernstein M:** Trigeminal neuralgia: Neurosurgeon meets dentist. Ontario Dentist: November 2008: 85: pp 30-31.
- Hodaie M, Hamani C, Wennberg R, Hutchison W, Dostrovsky J, Lozano AM:** Anterior nucleus DBS in epilepsy. In: Textbook of Stereotactic and Functional Neurosurgery: (Lozano AM, Gildenberg PL, Tasker RR, eds.) Springer-Verlag, Berlin: 2009: pp 2793-2800.
- Hodaie M, Hamani C, Wennberg R, Hutchison W, Dostrovsky JO, Lozano AM:** Under Part 9, Management of Epilepsy: Anterior nucleus DBS in epilepsy. In: Textbook of Stereotactic and Functional Neurosurgery (Second Edition): (Lozano AM, Gildenberg PL, Tasker RR, eds.) Springer Berlin Heidelberg, New York: 2009: pp 2793-2800.
- Hunter JP, Katz J, Davis KD:** Stability of upper limb phenomena after upper limb amputation: A longitudinal study. Neuroscience: October 2008: 156(4): pp 939-949.
- Hutchison WD:** Part 2 - Operative physiological techniques and post-operative stimulator programming. 5: William Hutchison: Microelectrode recording. In: Deep Brain Stimulation (Bain P, Aziz T, Liu X, Nadi D, eds.) Oxford University Press: April 2009: pp 232.
- Hutchison WD, Dostrovsky JO, Hodaie M, Davis KD, Lozano AM, Tasker RR:** Microelectrode recording in functional neurosurgery. In: Textbook of Stereotactic and Functional Neurosurgery: (Lozano AM, Gildenberg PL, Tasker RR, eds.). Springer-Verlag, Berlin: 2009: pp 1283-1323.
- Hutchison WD, Dostrovsky JO, Hodaie M, Davis KD, Lozano AM, Tasker RR:** Under Part 6, Functional neurosurgery - technical aspects: Microelectrode recording in functional neurosurgery. In: Textbook of Stereotactic and Functional Neurosurgery: (Lozano AM, Gildenberg PM, Tasker RR, eds.) Springer Berlin Heidelberg, New York: 2009: pp 1283-1323.
- Jabbour P, Fehlings M, Vaccaro AR, Harrop JS:** Traumatic spine injuries in the geriatric population. Neurosurgical Focus: December 2008: 25(5): pp E16.
- Jalal A, Tator CH:** Ice skating. In: Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 305-317.
- Kalsi-Ryan S, Curt A, Fehlings MG, Verrier MC:** Assessment of the hand in tetraplegia using the Graded Redefined Assessment of Strength, Sensibility and Prehension (GRASSP): Impairment versus function. Topics in Spinal Cord Injury Rehabilitation: May 2009: 14(4): pp 34-46.
- Kane A, Hutchison WD, Hodaie M, Lozano AM, Dostrovsky JO:** Enhanced synchronization of thalamic theta band local field potentials in patients with essential tremor. Experimental Neurology: May 2009: 217(1): pp 171-176. E-published ahead of print: February 20, 2009.
- Kang CE, Poon PC, Tator CH, Shoichet MS:** A new paradigm for local and sustained release of therapeutic molecules to the injured spinal cord for neuroprotection and tissue repair. Tissue Engineering. Part A: March 2009: 15(3): pp 595-604.
- Karabatsou K, O'Kelly C, Ganna A, Dehdashti AR, Gentili F:** Outcomes and quality of life assessment in patients undergoing endoscopic surgery for pituitary adenomas. British Journal of Neurosurgery: October 2008: 22(5): pp 630-635.
- Kelleher MO, Furlan JC, Fehlings MG:** Is neuromonitoring beneficial during spinal surgery? In: Evidence Based Orthopaedics: (Wright JG, ed.) Elsevier, Philadelphia: 2009: pp 46-55.
- Khu KJ, Rozmovits L, Bernstein M:** Information needs of patients undergoing craniotomy for benign but life-threatening intracranial lesions: A qualitative study. Canadian Journal of Neurological Sciences: March 2009: 36(Suppl10): pp S32.
- Kim H, Tator CH, Shoichet MS:** Design of protein-releasing chitosan channels. Biotechnology Progress: August 2008: 24(4): pp 932-937.
- Kristman VL, Tator CH, Kreiger N, Richards D, Mainwaring L, Jaglal S, Tomlinson G, Comper P:** Does the apolipoprotein epsilon 4 allele predispose varsity athletes to concussion? A prospective cohort study. Clinical Journal of Sport Medicine: July 2008: 18(4): pp 322-328.
- Kulbatski I, Tator CH:** Chapter IV: Radial glia in the repair of central nervous system injury. In: Progress in Stem Cell Applications: (Faraday AV, Dyer JT, eds.) Nova Science Publishers, Inc., New York: 2008: pp 123-151.
- Kulbatski I, Tator CH:** Region-specific differentiation potential of adult rat spinal cord neural stem/precursors and their plasticity in response to in vitro manipulation. Journal of Histochemistry and Cytochemistry: May 2009: 57(5): pp 405-423. E-published ahead of print: January 5, 2009.
- Kwon BK, Mann C, Sohn HM, Hilibrand HS, Phillips FM, Wang JC, Fehlings MG:** Hypothermia for spinal cord injury. The Spine Journal: November 2008: 8(6): pp 859-874.
- Lafreniere-Roula M, Hutchison WD, Lozano AM, Hodaie M, Dostrovsky JO:** Microstimulation-induced inhibition as a tool to aid targeting the ventral border of the subthalamic nucleus. Journal of Neurosurgery: E-published May 1, 2009.
- Laperriere N, Bahl G, Menard C, Millar B, Mason W, Hodaie M, Schwartz M, Bernstein M:** Reirradiation for recurrent meningiomas: Outcomes and complications. International Journal of Radiation Oncology, Biology, Physics: September 2008: 72 (1Suppl): pp S220.

Laxton A, Hamani C, Moro E, Lozano AM: Basal ganglia: Movement disorders treatment - DBS. In: *New Encyclopedia of Neurosciences*: (Squire LR, ed.) Elsevier, New York: 2008: pp 369-373.

Laxton AW, Dostrovsky JO, Lozano AM: Stimulation physiology in functional neurosurgery. In: *Textbook of Stereotactic and Functional Neurosurgery*, 2nd Edition: (Lozano AM, Gildenberg P and Tasker RR, eds.) Springer-Verlag, Berlin: 2009: pp 1383-1399.

Lozano AM, Mayberg HS, Giacobbe P, Hamani C, Craddock RC, Kennedy SH: Subcallosal cingulate gyrus deep brain stimulation for treatment-resistant depression. *Biological Psychiatry*: September 2008: 64(6): pp 461-467.

Lozano AM, Snyder BJ: Deep brain stimulation for Parkinsonian gait disorder. *Journal of Neurology*: August 2008: 255(Suppl4): pp 30-31.

Marquez-Chin C, Popovic MR, Cameron T, Lozano AM, Chen R: Control of a neuroprosthesis for grasping using off-line classification of electrocorticographic signals: Case study. *Spinal Cord*: E-published April 21, 2009.

McCrorry P, Meeuwisse W, Johnston KM, Dvorak J, Aubry M, Molloy M, Cantu R: Consensus statement on concussion in Sport 3rd International Conference on Concussion in Sport held in Zurich. *Clinical Journal of Sport Medicine*: May 2009: 19(3): pp 185-200.

Moro E, Piboolnurak P, Arenovich T, Hung SW, Poon YY, Lozano AM: Pallidal stimulation in cervical dystonia: Clinical implications of acute changes in stimulation parameters. *European Journal of Neurology*: April 2009: 16(4): pp 506-512.

Mothe AJ, Tator CH: Transplanted neural stem/progenitor cells generate myelinating oligodendrocytes and Schwann cells in spinal cord demyelination and dysmyelination. *Experimental Neurology*: September 2008: 213(1): pp 176-190. E-published ahead of print: June 10, 2008.

Motwani P, Butt B, Tator CH: Ball hockey. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 684-700.

Muzumdar P, Tator CH: Other boating activities. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 158-168.

Muzumdar P, Tator CH: Other winter sports ringette, curling, boot hockey, broomball. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 363-367.

Nomura H, Baladie B, Katayama Y, Morshead CM, Shoichet MS, Tator CH: Delayed implantation of intramedullary chitosan channels containing nerve grafts promotes extensive axonal regeneration after spinal cord injury. *Neurosurgery*: July 2008: 63(1): pp 127-141.

Omahen D, Doglietto F, Mukherjee D, Gentili F: Intraoperative image guidance in skull base tumours. In: *Textbook of Stereotactic and Functional Neurosurgery*, 2nd Edition: (Lozano A, Gildenberg P, Tasker R, eds.) Springer-Verlag, Berlin: 2009: pp 815-830.

Paesani VI, Tator CH: Motorbiking. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 257-267.

Parr AM, Kulbatski I, Wang XH, Keating A, Tator CH: Fate of transplanted adult neural stem/progenitor cells and bone marrow-derived mesenchymal stromal cells in the injured adult rat spinal cord and impact on functional recovery. *Surgical Neurology*: December 2008: 70(6): pp 600-607.

Parr AM, Kulbatski I, Zahir T, Wang X, Yue C, Keating A, Tator CH: Transplanted adult spinal cord-derived neural stem/progenitor cells promote early functional recovery after rat spinal cord injury. *Neuroscience*: August 2008: 155(3): pp 760-770. E-published ahead of print: June 5, 2008.

Pollard SM, Yoshikawa K, Clarke ID, Danovi D, Stricker S, Russell R, Bayani J, Head R, Lee M, Bernstein M, Squire JA, Smith A, Dirks P: Glioma stem cell lines expanded in adherent culture have tumor-specific phenotypes and are suitable for chemical and genetic screens. *Cell Stem Cell*: June 2009: 4(6): pp 568-580.

Prescott IA, Dostrovsky JO, Moro E, Hodaie M, Lozano AM, Hutchison WD: Levodopa enhances synaptic plasticity in the substantia nigra pars reticulata of Parkinson's disease patients. *Brain*: February 2009: 132(2): pp 309-318. E-published ahead of print: December 2, 2008.

Provvidenza C, Johnston KM: Knowledge transfer principles as applied to sport concussion education. *British Journal of Sport Medicine*: May 2009: 43(Suppl1): pp i68-i75.

Provvidenza C, Tator CH: Playgrounds and play tree climbing, slides, monkey bars. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 623-634.

Provvidenza C, Tator CH: Sports injury prevention: General principles. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 58-78.

Quraishi NA, Lewis SJ, Kelleher MO, Sarjeant R, Rampersaud YR, Fehlings MG: Intraoperative multimodality monitoring in adult spinal deformity: Analysis of a prospective series of one hundred two cases with independent evaluation. *Spine*: June 2009: 34(14): pp 1504-1512.

Rahman S, Tator CH: Badminton. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 505-514.

- Robins SL, Fehlings MG:** Models of experimental spinal cord injury: Translational relevance and impact. *Drug Discovery Today: Disease Models*: December 2008: 5(1): pp 5-11.
- Rowland JW, Hawryluk GWJ, Kwon BK, Fehlings MG:** Current status of spinal cord injury pathophysiology and emerging therapies: Promise on the horizon. *Neurosurgical Focus*: November 2008: 25(5): pp E2.
- Saleh F, Tator CH:** Ice hockey. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 291-304.
- Simson H, Tator CH:** Alpine Skiing. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 318-332.
- Smith HE, Kerr SM, Maltenfort M, Chaudhry S, Norton R, Albert TJ, Harrop J, Hilibrand AS, Anderson DG, Kopjar B, Brodke DS, Wang JC, Fehlings MG, Chapman JR, Patel A, Arnold PM, Vaccaro AR:** Early complications of surgical versus conservative treatment of isolated type II odontoid fractures in octogenarians: A retrospective cohort study. *Journal of Spinal Disorders & Techniques*: December 2008: 21(8): pp 535-539.
- Smith HE, Vaccaro AR, Maltenfort M, Albert TJ, Hilibrand AS, Anderson DG, Harrop J, Fehlings MG, Kopjar B, Brodke DS, Arnold PM, Shaffrey CI:** Trends in surgical management for type II odontoid fracture: 20 years of experience at a regional spinal cord injury center. *Orthopedics (Online)*: July 2008: 31(7): pp 650.
- Soriano FX, Martel MA, Papadia S, Vaslin A, Baxter P, Rickman C, Forder J, Tymianski M, Duncan R, Aarts M, Clarke PGH, Wyllie DJA, Hardingham GE:** Specific targeting of pro-death NMDA receptor signals with differing reliance on the NR2B PDZ ligand. *The Journal of Neuroscience*: October 2008: 28(42): pp 10696-10710.
- Stewart LS, Wu Y, Eubanks JH, Han H, Leschenko Y, Perez Velasquez JL, Cortez MA, Snead 3rd OC:** Severity of atypical absence phenotype in GABAB transgenic mice is subunit specific. *Epilepsy and Behavior*: April 2009: 14(4): pp 577-581. E-published ahead of print: January 31, 2009.
- Stone S, Hamani C, Lozano AM:** PPN stimulation for Parkinson's disease. In: *Textbook of Stereotactic and Functional Neurosurgery*: (Lozano AM, Gildenberg PL, Tasker RR, eds.) Springer-Verlag, Berlin: 2009: pp 1649-1663.
- Sun HS, Doucette TA, Liu Y, Fang Y, Teves L, Aarts M, Ryan CL, Bernard PB, Lau A, Forder JP, Salter MW, Wang YT, Tasker A, Tymianski M:** Effectiveness of PSD95 inhibitors in permanent and transient focal ischemia in the rat. *Stroke* 2008: September 2008: 39(9): pp 2544-2553. E-published ahead of print: July 10, 2008.
- Tator CH:** Conclusions. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 719-723.
- Tator CH:** Concussions are brain injuries and should be taken seriously. *Canadian Journal of Neurological Sciences*: May 2009: 36(3): pp 269-270.
- Tator CH:** Description of the study. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 1-20.
- Tator CH:** Geographical locations where 2,154 catastrophic sports and recreation injuries were sustained. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 79-118.
- Tator CH:** Overview of the results of the Ontario study, 1986-1995. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study*: (Tator CH, ed.) University of Toronto Press Inc., Toronto: 2008: pp 21-57.
- Tator CH:** Recognition and management of spinal cord injuries in sports and recreation. In: *Sports Neurology - Physical Medicine and Rehabilitation Clinics of North America*: (Toth C, Kraft GH, eds.) W.B. Saunders, Philadelphia: 2009: pp 69-76.
- Tator CH:** Spinal cord regeneration. In: *Neurotrauma and Critical Care of the Spine*: (Jallo J, Vaccaro AR, eds.) Thieme, New York: 2008: pp 28-44.
- Tator CH:** Spine fractures in motor vehicle crashes are preventable by the combination of seat belts and air bags. *Journal of Neurosurgery. Spine*: February 2009: 10(2): pp 83-85.
- Tator CH, Poon P:** Chapter 38: Acute clip impact-compression model. In: *Animal Models of Acute Neurological Injuries*: (Chen J, Xu ZC, Xu XM, Zhang JH, eds.) Humana Press, New York: 2008: pp 449-460.
- Taub E, Lozano AM:** Image-guided management of brain abscess. In: *Textbook of Stereotactic and Functional Neurosurgery*: (Lozano AM, Gildenberg PL, Tasker RR, eds.) Springer-Verlag, Berlin: 2009: pp 769-777.
- Thambirajah AA, Eubanks JH, Ausio J:** MeCP2 post-translational regulation through PEST domains: Two novel hypotheses: Potential relevance and implications for Rett syndrome. *Bio Essays*: May 2009: 31(5): pp 561-569.
- Torres CV, Lozano AM:** Deep brain stimulation in the treatment of therapy-refractory depression. *Revista de Neurologia*: November 2008: 47(9): pp 447-482.
- Tymianski M:** International Stroke Conference 2009: Translation of high impact targets into clinical trials. *Investigational Drugs Journal*: April 2009: 12(4): pp 217-219.
- Vachhrajani S, Fawaz C, Mathieu D, Ménard C, Cusimano MD, Gentili F, Hodaie M, Kenny B, Kulkarni AV, Laperriere N, Schwartz M, Tsao M, Bernstein M:** Complications of gamma knife surgery: An early report from 2 Canadian centers. *Journal of Neurosurgery*: December 2008: 109(Suppl): pp 2-7.

Vincent F, Kelleher MO, Fehlings MG: Monitoring during spinal surgery for fractures and extramedullary tumors. In: *Handbook of Clinical Neurophysiology, Volume 8, Intraoperative Monitoring of Neural Function: (Nuwer MR, ed.)* Elsevier, Amsterdam, The Netherlands: 2008: pp 618-631.

Volkman J, Albanese A, Kulisevsky J, Tornqvist AL, Houeto JL, Pidoux B, Bonnet AM, Mendes A, Benabid AL, Fraix V, Van Blercom N, Xie J, Obeso J, Rodriguez-Oroz MC, Guridi J, Schnitzler A, Timmermann L, Gironell AA, Molet J, Pascual-Sedano B, Rehncrona S, Moro E, Lang AE, Lozano AM, Bentivoglio AR, Scerrati M, Contarino MF, Romito L, Janssens M, Agid Y: Long-term effects of pallidal or subthalamic deep brain stimulation on quality of life in Parkinson's disease. *Movement Disorder*: June 2009; 24(8): pp 1154-1161.

von Maltzahn M, Baerlocher MO, Tator CH: Mountain Climbing. In: *Catastrophic Injuries in Sports and Recreation: Causes and Prevention - A Canadian Study: (Tator CH, ed.)* University of Toronto Press Inc., Toronto: 2008: pp 701-710.

Voon V, Krack P, Lang AE, Lozano AM, Dujardin K, Schupbach M, D'Ambrosia J, Thobois S, Tamma F, Herzog J, Speelman JD, Samanta J, Kubu C, Rossignol H, Poon YY, Saint-Cyr JA, Ardouin C, Moro E: A multicenter study on postoperative suicide outcomes following subthalamic stimulation for advanced Parkinson's disease. *Brain*: October 2008; 131(pt 10): pp 2720-2728.

Wan MJ, Nomura H, Tator CH: Conversion to symptomatic Chiari I malformation after minor head or neck trauma. *Neurosurgery*: October 2008; 63(4): pp 748-753.

Weinberger M, Hutchison WD, Lozano AM, Hodaie M, Dostrovsky JO: Increased gamma oscillatory activity in the subthalamic nucleus during tremor in Parkinson's disease patients. *Journal of Neurophysiology*: February 2009; 101(2): pp 789-802.

Wennberg RA, Tator CH: Concussion incidence and time lost from play in the NHL during the past ten years. *Canadian Journal of Neurological Sciences*: November 2008; 35(5): pp 647-651.

Wong DM, Prabhu A, Chakraborty S, Tan G, Massicotte EM, Cooper R: Cervical spine motion during flexible bronchoscopy compared with the Lo-Pro Glidescope. *British Journal of Anesthesia*: February 2009; 102(3): pp 424-430.

Yu W, Baptiste DC, Liu T, Odrobina E, Stanisz GJ, Fehlings MG: Molecular mechanisms of spinal cord dysfunction and cell death in the spinal hyperostotic mouse: Implications for the pathophysiology of human cervical spondylotic myelopathy. *Neurobiology of Disease*: February 2009; 33(2): pp 149-163.

Yu W, Liu T, Fehlings TK, Fehlings MG: Involvement of mitochondrial signaling pathways in the mechanism of Fas-mediated apoptosis after spinal cord injury. *European Journal of Neuroscience*: January 2009; 29(1): pp 114-131.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Bernstein M: University of California Los Angeles (UCLA), Los Angeles, California, January 2009. Visiting Professor: (1) Experience empowers innovation: Outpatient brain tumour surgery, (2) What brain surgeons can learn from chatting to patients: A qualitative journey.

Bernstein M: University of the West Indies, Caribbean Neurosciences Symposium, Montego Bay, Jamaica, January 2009. Honoured Guest: (1) Error and patient safety in neurosurgery, (2) Awake and outpatient craniotomy for tumour, (3) Surgery for low grade glioma.

Bernstein M: Tokyo Women's Medical University, Tokyo, Japan, March 2009. Invited Lecturer: Experience empowers innovation: Outpatient brain tumour surgery.

Bernstein M: Queen's University, Department of Surgery, Kingston, ON, April 2009. William Ersil Visiting Professor: (1) Ethical challenges in clinical research, (2) Qualitative research for surgeons: A different journey of inquiry.

Bernstein M: World Society for Stereotactic and Functional Neurosurgery, Quadrennial Meeting, Toronto, ON, May 2009. Ethical issues in clinical research.

Bernstein M: Canadian Neurological Sciences Federation, 44th Annual Congress, Halifax, NS, June 2009. The voices of patients: What brain doctors can learn by talking with patients.

Bernstein M: All India Institute of Medical Sciences, Delhi, India, October 2008. Visiting Professor: Ethical issues in clinical research.

Bernstein M: Amrita Institute of Medical Sciences, Cochin, India, October 2008. Visiting Professor: Awake and outpatient craniotomy.

Bernstein M: Cochin Neurological Society, Cochin, India, October 2008. Invited Speaker: Learning about bioethics issues by chatting with patients.

Bernstein M: McGill University and University de Montreal, Institut de recherches cliniques de Montreal (ICRM), Montreal, PQ, November 2008. Invited Speaker: Ethics in clinical research: Myth, mystery or missing in action.

Davis KD: World Society for Stereotactic and Functional Neurosurgery, 15th Quadrennial Meeting, Toronto, ON, May 2009. Imaging and brain function.

Davis KD: Ghent University, Department of Experimental Clinical and Health Psychology, Special Interest Meeting on Symptom, Perception, Illness Behaviour and Disability, Bellem, Belgium, September 2008. Common and unique brain mechanisms of pain and attention: The impact of individual variability in brain imaging of pain and attention.

Eubanks JH: Italian Association for Rett Syndrome Meeting, Milan, Italy, June 2009. (1) Altered prevalence but preserved distribution of NMDA receptor subunits in the MeCP2-null mouse brain, (2) Mouse models are critical tools for developing treatments for Rett syndrome.

Eubanks JH: Advances in Epilepsy Care Conference, Toronto, ON, August 2008. Progress towards prospective gene therapy treatments for Rett syndrome?

Eubanks JH: University of Victoria, Department of Biology, Victoria, BC, August 2008. Are we making progress towards correcting the behavioural deficits of Rett syndrome?

Eubanks JH: Ontario Rett Syndrome Association, Run 4 Rett Event, Toronto, ON, October 2008. Summary of current experimental efforts to correct Rett syndrome.

Eubanks JH: World Rett Syndrome Congress, Paris, France, October 2008. (1) Cortical and hippocampal EEG recordings from MeCP2-deficient mice reveal alterations in brain wave activity and heightened sensitivity to agonist-induced epileptiform discharges, (2) Partila phenotype correction of femal MeCP2-deficient mice by exogenous gene therapy, (3) The MeCP2-null hippocampus displays altered basal inhibitory rhythm and is prone to hyper-excitability.

Eubanks JH: Canadian Rett Syndrome Congress, Annual Retreat, London, ON, November 2008. Recent experimental advances in the field of Rett syndrome.

Eubanks JH: University of Western Ontario, London, ON, November 2008. Rett-like behavioural deficits in female MeCP2- deficient mice can be prevented by targeted delivery of an MeCP2 transgene to forebrain neurons.

Fehlings MG: International Collaboration On Repair Discoveries (ICORD), Vancouver, BC, January 2009. Debate Panel: Cell transplants for spinal cord injury: Reality or pipe dream? Are we ready now for cell transplant trials in human spinal cord injury.

Fehlings MG: Mayo Clinic Rochester, Rochester, Minnesota, January 2009. Visiting Biomedical Engineering Professor: Repair and regeneration of the injured spinal cord: Opportunities for clinical translation of basic discoveries.

Fehlings MG: Spine Trauma Study Group, Denver, Colorado, January 2009. Surgical treatment of acute spinal cord injury study (STASCIS): Update and discussion on publication strategy.

Fehlings MG: Association for Osteosynthesis (AO) Spine North America, Sun Valley, Idaho, February 2009. Invited Faculty: Motion preservation: Posterior based, pedicle screw based.

Fehlings MG: Christopher Reeve Foundation, Houston, Texas, February 2009. Update on the GRASSP outcome measure development.

Fehlings MG: National Neuroscience Institute, Singapore, February 2009. Visiting Professor: New horizons in spinal cord injury.

Fehlings MG: American Association of Neurological Surgeons/Congress of Neurological Surgeons (AANS/CNS), Joint Section on Disorders of the Spine and Peripheral Nerves, Phoenix, Arizona, March 2009. (1) Faculty, (2) Neural repair through stem cells: Reality or dream?, (3) Revision spine surgery and management of complications.

Fehlings MG: American Association of Neurological Surgeons/Congress of Neurosurgical Surgeons (AANS/CNS), Joint Section on Neurotrauma and Critical Care, Toronto, ON, March 2009. (1) Role and timing of decompression for acute spinal cord injury: STASCIS trial update, (2) Toronto research - New horizons.

Fehlings MG: Canadian Spine Society, Gatineau, PQ, March 2009. Symposium Moderator: Patients attitudes towards spine surgery: The impact of perception.

Fehlings MG: Association of Osteosynthesis (AO) Spine North America, Fellows Forum, Banff, AB, April 2009. (1) Chair, (2) The treatment of cervical spondylotic myelopathy: A prospective study, (3) Moderator: How should young doctors avoid complications?

Fehlings MG: Spine Society of Australia, Brisbane, Australia, April 2009. (1) Controversies in treatment of cervical spine - Predictors of outcome in cervical myelopathy: The importance of early diagnosis and surgical intervention.

Fehlings MG: American Association of Neurological Surgeons, San Diego, California, May 2009. Current active clinical trials in spinal cord injury.

Fehlings MG: Association of Osteosynthesis (AO) Spine North America, Session on Complications of Anterior Cervical Spine Surgery, Nassau, Bahamas, May 2009. (1) Faculty, (2) Beyond the dura: Cerebrospinal fluid (CSF) leak and neurologic complications, (3) Perioperative spinal cord injury (SCI), (4) Lecture: Postoperative C5 radiculopathy, (5) Case presentations and discussion.

Fehlings MG: International Cartilage Repair Society, 8th World Congress, Miami, Florida, May 2009. Invited speaker: Repair and regeneration of the injured spinal cord: Opportunities for clinical translation of basic discoveries.

Fehlings MG: Open Medical Institute, Salzburg Weill Cornell Seminar: Neurosurgery Spine and Trauma, Salzburg, Austria, May 2009. (1) Repair and regeneration of the injured spinal cord, (2) Management of cervical spondylotic myelopathy: From basic science to recent clinical trials.

Fehlings MG: Association for Osteosynthesis (AO) Spine, San Francisco, California, June 2009. Global Spine Congress: (1) Case Presentation: Disc degeneration treatment with fusion and subsequent adjacent segment degeneration, (2) Management options, fusion versus non-fusion and options of non-fusion treatment, (3) Biological approaches for spinal cord injury: Reality or pipedream?, (4) Co-Chair of Symposium 9: Biologics for spinal disorders, (5) Moderator of scientific sessions: (a) B11 basic science, (b) B12 Biomechanics.

Fehlings MG: Canadian Neurological Sciences Federation, Halifax, NS, June 2009. Treatment option #2 - Early surgical decompression.

Fehlings MG: University of California San Francisco, Spine Symposium, San Francisco, California, June 2009. (1) Repair and regeneration of the injured spinal cord: Opportunities for clinical translation of basic discoveries, (2) New direction in the treatment of cervical spondylotic myelopathy: Insights from the multicenter AOSpine trial in 30 patients.

Fehlings MG: National Neurotrauma Society, 26th Annual Symposium, Lake Buena Vista, Florida, July 2008. (1) Poster judge, (2) Chair: Session 3B - Clinical update on management of spinal cord injury, (3) Talk - Surgical decompression for spinal cord injury (SCI): Update on the Surgical Treatment of Acute Spinal Cord Injury (STASCIS) trial, (4) Chair: Session 4B - Hands on workshop: Spinal stabilization following trauma, (5) Member of the International Neurotrauma Society/National Neurotrauma Society (INTS/NNS) 2009 organizing committee.

Fehlings MG: Vanderbilt University Medical Center, Grand Rounds, Nashville, Tennessee, July 2008. Visiting Professor: New directions in the pathophysiology and treatment of acute spinal cord injury: Opportunity for clinical translation of basic research discoveries.

Fehlings MG: North American Clinical Trials Network, Louisville, Kentucky, August 2008. Safety and pharmacokinetics of riluzole in patients with acute traumatic spinal cord injury.

Fehlings MG: Congress of Neurological Surgeons, Orlando, Florida, September 2008. (1) Moderator: Injury prevention: Neurosurgery and public health, (2) Faculty - Spine trauma and spinal cord injury, (3) Cervical arthroplasty: The pros and cons of motion preservation.

Fehlings MG: American Society of Neurorehabilitation, Toronto, ON, October 2008. Session III: Review of animal to human translation of pharmacological interventions in spinal cord injury, from solumedrol and sygen through 4 AminoPyridine to riluzole and the current Cethrin trial: Pharmacological interventions in spinal cord injury - neuroprotection and regeneration strategies.

Fehlings MG: Canadian Institutes of Health Research, Cafe Scientific, Toronto, ON, October 2008. Panel member: Regenerative medicine: Can it diminish the economic demands on our health care system?

Fehlings MG: Christopher and Dana Reeve Foundation, New York, New York, October 2008. Basic mechanism and science of riluzole: Consideration of how much recovery justifies moving to a clinical trial.

Fehlings MG: Harborview Medical Center/University of Washington, Seattle, Washington, October 2008. (1) Visiting Professor: Improving outcomes of spinal injury forum, (2) Insights in spinal cord injury recovery from myelopathy studies, (3) What prevents spinal cord injury recovery?, (4) Panel discussion: How can we practically improve spinal cord injury care, (5) Surgical lab: Anterior TL techniques.

Fehlings MG: New York University, School of Medicine, Spine Grand Rounds, New York, New York, October 2008. Visiting Professor: Advances in spinal cord repair and regeneration: Opportunities for clinical translation of basic science discoveries.

Fehlings MG: North American Spine Society, Toronto, ON, October 2008. (1) Moderator for pre-course: Spinal cord injury: New developments in late stage preclinical research and clinical trials, (2) Translational strategies for repairing the injured spinal cord: Update on current trials, (3) Biologics and clinical application - Basic science review: Role of bone morphogenetic proteins (BMP) -2, -7, (4) Update on Biologics and Basic Research for Spinal Disorders Symposium: Biological treatments for spinal cord injury: A review of the current evidence.

Fehlings MG: Yale University, New Haven, Connecticut, October 2008. Visiting Professor: Advances in spinal cord repair and regeneration: Opportunities for clinical translation of basic science discoveries.

Fehlings MG: Australian and New Zealand Spinal Cord Society, Christchurch, New Zealand, November 2008. (1) Keynote Speaker: Can we fix it? Stem cell regeneration, (2) Participation in panel discussion on using fentanyl: (a) Early intervention, (b) Acute management debate with invited speakers.

Fehlings MG: Toronto Rehabilitation Institute, Toronto, ON, November 2008. (1) Chair of Workshop: Update on hot pharmacological, bioengineered and cellular therapies for spinal cord injuries, (2) Speaker: Drugs: Where we are/ what is coming?

Fehlings MG: Association for Osteosynthesis (AO) Spine, Davos, Switzerland, December 2008. Invited Faculty: (1) Getting your scientific paper published, (2) Results of AOSpine multicenter cervical spondylotic myelopathy treatment trial, (3) Fractures - challenges.

Fehlings MG: Cervical Spine Research Society, Austin, Texas, December 2008. (1) Scientific Program Chair. (2) Keynote Address: Advances in regenerative medicine strategies for spinal cord injury.

Gentili F: Egyptian Society of Neurological Surgeons, 34th Annual Meeting, Hurgada, Egypt, March 2009. Speaker: The role of endoscopy in skull base surgery.

Gentili F: University of Tanta, Department of Neurological Surgery, Tanta, Egypt, March 2009. The evolution of skull base surgery from open to minimally invasive techniques.

Gentili F: European Skull Base Society, Rotterdam, Netherlands, April 2009. Invited Faculty: (1) Minimally invasive skull base surgery, (2) Endoscopy in pituitary surgery - State of the art.

Gentili F: American Association of Neurological Surgeons, Annual Meeting, San Diego, California, May 2009. Invited Faculty: Breakfast seminar: Open versus endoscopic approaches to the anterior skull base.

Gentili F: Society of University Neurosurgeons, Naples, Italy, June 2009. Evolution of skull base surgery.

Gentili F: University of Naples, Naples, Italy, June 2009. Invited Faculty: Endoscopic cadaver dissection course: The evolution of skull base surgery - from open to endoscopic techniques.

Gentili F: University of Rome, Rome Italy, June 2009. Invited Speaker: The management of tuberculoma sellae meningiomas.

Gentili F: American Association of Neurosurgeons/Brigham and Women's Hospital, Department of Neurosurgery/Brainscience Foundation (Jointly), 6th International Congress on Meningioma and the Cerebral Venous System, Boston, Massachusetts, September 2008. (1) Moderator and Speaker: Video seminar endoscopy and minimally invasive surgery for meningiomas, (2) Moderator of breakfast seminar: Orbital and ventricular meningiomas, (3) Panelist: Seminar on tuberculoma sella meningiomas.

Gentili F: Congress of Neurological Surgeon, Annual Meeting, Luncheon Seminar, Orlando, Florida, September 2008. Invited Faculty: Anterior skull base approaches: Endoscopic skull base approaches.

Gentili F: World Federation of Neurosurgical Societies (WFNS), Education Committee Continuing Medical Education, Mumbai, India, October 2008. Invited Faculty: Educational cadaver workshop and course on skull base surgery.

Gentili F: World Federation of Skull Base Societies 5th International Congress and North American Skull Base Society (NASBS) 19th Annual Meeting, Vancouver, BC, September 2008. (1) Speaker: Plenary session on chordomas, (2) Moderator of breakfast seminar: Paragangliomas.

Gentili F: Skull Base Society of India, 10th Annual Conference, Mumbai, India, October 2008. (1) Endoscopic pituitary surgery - is it the standard of practice?, (2) Moderator: Live endoscopic pituitary surgery, international telecast.

Guha A: Ontario Institute of Systems Biology, Ottawa, ON, April 2009. Collapsin response mediator (CRMP1) in glioblastoma multiforme (GBMs).

Guha A: American Association for Cancer Research, Denver, Colorado, June 2009. Validation and functional characterization of novel neurofibromin 1 interaction proteins.

Guha A: Cold Spring Harbor Laboratories, Sponsor of Course - Epidermal Growth Factor (EGFR), Cold Spring Harbour, New York, July 2008. Course co-organizer:

Mechanisms of neural differentiation and brain tumors: Oncogenic mechanisms of EGFR mutants prevalent in glioblastoma multiforme.

Hodaie M: Canada Trigeminal Neuralgia Association, Toronto, ON, November 2008. Trigeminal neuralgia.

Karimi-Abdolrezaee S: University of Shiraz, Department of Anatomy, Shiraz, Fars Iran, January 2009. Adult neural stem cells for the repair of the central nervous system.

Karimi-Abdolrezaee S: University of Manitoba, Winnipeg, MB, February 2009. Repair and regeneration of the central nervous system using adult neural stem cells.

Karimi-Abdolrezaee S: Association for Osteosynthesis (AO) Spine North America, Banff, AB, April 2009. Repair of chronic spinal cord injury: Impact of a combinatorial strategy using neural precursor cells, growth factor delivery and inhibition of glial scar.

Karimi-Abdolrezaee S: North American Spine Society, Annual Meeting, Toronto, ON, October 2008. Under Section on Spine Biologics Research: Delivered a pre-course lecture.

Karimi-Abdolrezaee S: Toronto Rehabilitation Institute, 3rd National Spinal Cord Injury Conference/The 16th Inter-Urban Spinal Cord Injury Conference, Spinal Cord Rehabilitation: Innovation, Impact and Future Directions, Toronto, ON, November 2008. Lecture: Combinatorial strategies for the repair of spinal cord injury.

Lozano AM: Alzheimer's Disease Cooperative Study (ADCS) Group, Winter Steering Committee Meeting, San Diego, California, January 2009. Feasibility study for deep brain stimulation in mild Alzheimer's disease.

Lozano AM: Asian Australasian Society of Stereotactic and Functional Neurosurgery (AASSFN) and The Chinese Society of Stereotactic and Functional Neurosurgery (CSSFN), Conjoint Meeting, Hong Kong, China, January 2009. Speaker: (1) Surgery for Parkinson's disease, (2) Deep brain stimulation (DBS) for epilepsy.

Lozano AM: Ecole Polytechnique Federale de Lausanne (EPFL), Neuroprosthetics Workshop, Lausanne, Switzerland, February 2009. Speaker: Improving brain function with deep brain stimulation.

Lozano AM: Constantiaberg Hospital, Capetown, South Africa, March 2009. Speaker: Novel therapeutic applications of deep brain stimulation.

Lozano AM: European Association of Neurosurgical Societies-Societe Francaise de Neurochirurgie (EAANS-SFNC), Marseille Neurosurgery 2009 Joint Annual Meeting, Marseille, France, March 2009. Speaker: (1) Where have we been, where are we and where are we heading?, (2) Anatomopathological bases of psychiatric surgery.

Lozano AM: Emory School of Medicine, Emory Neurosciences Symposium in Honour of Dr. Mahlon Delong, Atlanta, Georgia, April 2009. Speaker: DBS for tremor and PD: New applications.

Lozano AM: St. Jude Medical Corporation, Workshop on Surgical Treatment of Depression, Brussels, Belgium, April 2009. Speaker: Targeting depression.

Lozano AM: McGovern Institute for Brain Research, Cambridge, Massachusetts, May 2009. Speaker: Deep brain stimulation therapy for movement disorders.

Lozano AM: Polish Academy of Science, Warsaw Symposium on Brain Stimulation, Warsaw, Poland, May 2009. Invited Speaker: Deep brain stimulation-going where transcranial magnetic stimulation (TMS) cannot.

Lozano AM: Spanish Society of Neurosurgery, Annual Congress, Seville, Spain, May 2009. Keynote Speaker: The promise of deep brain stimulation in improving human brain function.

Lozano AM: University of Miami, Lectureship in Honour of Dr. H. Rosomoff, Miami, Florida, May 2009. Visiting Professor: The future of neurosurgery is stimulating.

Lozano AM: University of Wisconsin, Madison, Wisconsin, May 2009. Visiting Professor: (1) Improving brain function with deep brain simulation. (2) A brief history of psychiatric disorder surgery.

Lozano AM: World Society of Stereotactic and Functional Neurosurgery (WSSFN), Fifteenth Quadrennial Meeting, Toronto, ON, May 2009. (1) Meeting Chair, (2) Presidential Address: Discovery in functional neurosurgery, (2) Pedunculopontine surgery for Parkinson's disease.

Lozano AM: Movement Disorder Society, 13th International Congress of Parkinson's Disease and Movement Disorders, Paris, France, June 2009. (1) Co-Chaired session on Therapeutic Plenary II: Management of motor complications - medical and surgical, (2) Speaker: The secrets of the basal ganglia: Linking anatomy and physiology: Historical contributions of neurosurgery.

Lozano AM: Advanced Neuromodulation Systems, Dallas, Texas, September 2008. Deep brain stimulation: Realizing the opportunity.

Lozano AM: German Society of Neurology, 81st Annual Congress, Hamburg, Germany, September 2008. Presidential Lecture: Translational research in neurology.

Lozano AM: 21st European Congress of Neuropharmacology, Barcelona, Spain, September 2008. Breaking News Speaker: Subcallosal cingulate gyrus deep brain stimulation in 20 patients with treatment resistant depression.

Lozano AM: Baylor College of Medicine, Department of Neurosurgery, Gildenberg Lecture, Houston, Texas, October 2008. Speaker: (1) The history of psychosurgery, (2) Adjusting the activity of brain circuits to improve function.

Lozano AM: Congress of the European Society for Stereotactic and Functional Neurosurgery (ESSFN), Rimini, Italy, October 2008. (1) Functional neurosurgery for mind and mood, (2) Deep brain stimulation (DBS) in pedunculopontin nucleus: Indications, technique and results, (3) DBS for depression.

Lozano AM: Congress of Latin American Neurosurgeons (CLAN) 2008, Bogota, Columbia, October 2008. (1) Neuromodulation en desordenes alimentarios, (2) Manejo quirurgico de depersions.

Lozano AM: Sixth International Congress on Mental Dysfunctions and Other Non-Motor Features in Parkinson's Disease and Related Disorders, Dresden, Germany, October 2008. Deep brain stimulation (DBS) in motor and non-motor disorders.

Lozano AM: Society of Neurological Surgeons, Maine Biological Laboratory, Research Update in Neuroscience for Neurosurgeons 2000 (RUNN), Woods Hole, Massachusetts, October 2008. Stimulating human brain circuits.

Lozano AM: University of Rochester, Frank Pye Smith Lecture in Neurosurgery, Rochester, New York, October 2008. Adjusting the activity of the circuits in the human brain to improve function.

Lozano AM: March of Dimes Canada, Toronto, ON, November 2008. 2008 Jonas Salk Award Lecture: Deep brain stimulation to improve motor function.

Lozano AM: Sociedad de Neurocirugia dela Comunidad Autonoma de Madrid (SONCAM), VII Annual Congress, Madrid, Spain, November 2008. Inaugural Lecturer: Intervening in brain circuits to improve function.

Lozano AM: Spanish Neuromodulation Society Meeting, Madrid, Spain, November 2008. Invited Speaker. New indications for DBS.

Lozano AM: Ho Chi Minh City University, International Neurology Forum, Ho Chi Minh City, Vietnam, December 2008. Speaker: Functional neurosurgery for movement disorders.

Massicotte EM: American Spinal Injury Association, Las Vegas, Nevada, February 2009. The STASCIS study: What we have learned regarding timing of surgery.

Massicotte EM: Cervical Spine Research Society, Las Vegas, Nevada, February 2009. Pro surgery - Minimally symptomatic cervical cord compression with T2 signal changes on magnetic resonance imaging (MRI).

Massicotte EM: Canadian Spine Society, Lac Leamy, PQ, March 2009. Neck disability index in cervical fusion surgery.

Massicotte EM: Association for Osteosynthesis (AO) Spine North America, Spine Fellows Forum, Banff, AB, April 2009. Krembil neuroscience spine program research.

Massicotte EM: American Association of Neurological Surgeons, San Diego, California, May 2009. Lumbar fusion: minimally invasive technique

Massicotte EM: Canadian Neurological Sciences Federation, Halifax, NS, June 2009. Chairman: Spine course - What is new in neurosurgery?

Massicotte EM: Association for Osteosynthesis (AO) North America, Continuing Medical Education, Baltimore, Maryland, September 2008. Chairman: AOSpine North America principles and treatment of spinal disorders for resident and fellows course.

Massicotte EM: Congress of Neurological Surgeons, Orlando, Florida, September 2008. Timing of surgical intervention in spinal cord injury.

Massicotte EM: DePuy Spine Inc., Miami, Florida, October 2008. Controversies in spinal surgery.

Massicotte EM: University of China, Hong Kong, China, October 2008. (1) Chairman: Comprehensive cadaver course, (2) Lectures on the management of thoracic spinal cancer surgery.

Tator CH: London Hockey, Concussion Summit, London, ON, January 2009. Hockey concussions - Definition, mechanisms and current issues. Concussion prevention-ThinkFirst education and awareness programs.

Tator CH: Ontario Orthopaedic Association, Sport Med '09, Toronto, ON, February 2009. The ten riskiest sports and recreational activities for catastrophic injury in Ontario.

Tator CH: Professor Giorgio Brunelli of Studio Congress/Fondazione per la Ricerca sulle Lesioni del Midollo Spinale, 7th International Symposium on Experimental Spinal Cord Repair and Regeneration, Brescia, Italy, February 2009. Neural stem cells for spinal cord repair.

Tator CH: Canadian Paraplegic Association, Knowledge Mobilization Seminar Series, Toronto, ON, March 2009. Update on clinical trials with stem cells and other strategies.

Tator CH: Synthes/Association for Osteosynthesis (AO) Spine, Management of the Neurotrauma Patient Course, Toronto, ON, March 2009. Sport Injuries.

Tator CH: Burlington Eagles Hockey Club/ThinkFirst Canada, Halton Concussion Seminar on Diagnosis, Management and Prevention of Concussion, Burlington, ON, May 2009. Concussions in sports: Definitions, mechanisms and current issues.

Tator CH: Korea University, Department of Neurosurgery, International Symposium, Seoul, Korea, May 2009. Spinal cord injury: Past achievements, current management, current trials and future prospects.

Tator CH: Canadian Paraplegic Association with Oatley Vigmond of McLeish Orlando, LLP as sponsors, Practical Strategies for Health Care Professionals, Advances in Spinal Cord Rehabilitation, Toronto, ON, June 2009. Keynote Speaker: Current clinical trials in spinal cord injury.

Tator CH: Congress of Neurological Surgeons, Orlando, Florida, September 2008. (1) Putting the neurosurgeon out of business: Spinal injury prevention and ThinkFirst, (2) Making sports safer: Head injuries and spinal injuries.

Tator CH: Hockey Canada, Concussion Seminar, Winnipeg, MB, November 2008. (1) Concussion history/evaluation, (2) Post concussion syndrome and return to play protocol.

Tator CH: Thomas Jefferson University, 20th Annual Pan Philadelphia Neurosurgery Conference, Philadelphia, Pennsylvania, December 2008. Spinal cord injury: Past, present and future.

Tymianski M: University of Alberta, Department of Neurosurgery, Edmonton, AB, January 2009. ENACT: A phase II clinical trial for stroke prevention in patients undergoing coiling of brain aneurysms.

Tymianski M: American Stroke Association, International Stroke Conference, San Diego, California, February 2009. Speaker: NMDA-PSD -95 antagonists.

Tymianski M: Stanford University, 3rd International Symposium, Program Faculty Flow Measurement in Cerebrovascular Surgery, Stanford, California, February 2009. Moderator of Session IV: Flow measurement to assess vascular interventions.

Tymianski M: University of the Philippines, Department of Neurosciences/Philippine General Hospital, Manila, Philippines, March 2009. (1) Natural history of hemorrhage and the surgical management of brain arteriovenous malformations, (2) Non-excitotoxic mechanisms of ischemic brain damage: The future of ischemia therapy, (3) Surgical management of complex brain aneurysms, (4) The road from bench-to bedside in the treatment of ischemic stroke.

Tymianski M: Ottawa Hospital, Department of Neurosurgery, General Campus, Ottawa, ON, October 2008. Evaluating neuroprotection in aneurysm coiling therapy (ENACT) - a multi-center phase IIB clinical trial of a PSD-95 inhibitor.

Tymianski M: University of Kentucky, Kentucky Spinal Cord Injury Research Center, Departments of Neurological Surgery and the Department of Anatomy/Neurobiology, Louisville, Kentucky, October 2008. Speaker: Excitotoxic and non-excitotoxic mechanisms of ischemic brain damage.

Tymianski M: Heart & Stroke Foundation of Canada, Annual Meeting, Ottawa, ON, December 2008. Scientific review committee member.

Tymianski M: L'Hôpital de l'Enfant-Jésus du Centre hospitalier affilié universitaire de Québec (CHA), Department of Neuroradiology, Québec City, PQ, December 2008. ENACT: Evaluation neuroprotection in aneurysm coiling therapy - a multi-center phase IIB clinical trial of a PSD-95 inhibitor.

Velumian AA: Jagiellonian University, White Matter Study Group, White Matter Workshop: Pathogenesis and Mechanisms of White Matter Injury, Krakow, Poland, September 2008. Animal models of traumatic and congenital de/dysmyelination and reparative approaches with stem cells.

Wallace MC: American Association of Neurological Surgeons/Congress of Neurological Surgeons (AANS/CNS) Cerebrovascular Section Meeting, Luncheon Seminar II - Advanced Techniques in the Treatment of Cranial Dural Fistulae, San Diego, California, February 2009. Panelist: Dural arteriovenous fistulae: Surgical management.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

(1) VEGF zinc finger transcription factor gene therapy for the treatment of stroke \$267,400, (2) 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 #1 only): *Sangamo BioSciences, Inc.* (\$593,600 2007 - 2009.)

2008 American Association of Neurological Surgeons medical student summer research fellowship awarded to Derek Chew. *Chew D, Fehlings MG*: *American Association of Neurological Surgeons.* (\$2,502 2008.)

2009 American Association of Neurological Surgeons medical student summer research fellowship awarded to Shelly Wang. *Wang S, Fehlings MG*: *American Association of Neurological Surgeons.* (\$2,500 2009.)

A combinatorial strategy to optimize neural repair and plasticity after chronic spinal cord injury. *Karimi S, Fehlings MG, Rossignol S*: *Christopher and Dana Reeve Foundation.* (\$149,495 2008 - 2010.)

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, Equipment Grant.* (\$66,000 2008.)

Anterior thalamic nucleus stimulation in patients with epilepsy: A PET study. *Andrade D, Hamani C*: *University Health Network.* (\$30,000 2009 - 2010.)

Antidepressant effects of deep brain stimulation in animal models: Symptom specificity and mechanisms of action. *Nobrega J, Hamani C* (co-applicant): *Ontario Mental Health Foundation.* (\$150,000 2009 - 2011.)

Association for Osteosynthesis (AO) Spine North America Fellowship Program, 2-Year Merit Award. *Fehlings MG, Massicotte EM, Rampersaud YR, Lewis S*: *Association for Osteosynthesis (AO) Spine North America.* (\$150,000 2007 - 2009.)

Attenuated NMDA receptor development in MeCP2-deficient mice: Relevance to Rett syndrome. *Eubanks JH, Zhang L, Brotchie J*: *Canadian Institutes of Health Research.* (\$610,225 2006 - 2011.)

Building the University Health Network (UHN) advanced therapeutics research platform. *Paige C, Fehlings MG, Davis KD*, (one of 35 principle investigators across 7 themes): *Canada Foundation for Innovation, Research Hospital Fund Large Scale Institutional Endeavours (RHF-LSIE).* (\$92,255,967 2008 - 2012.)

Can MBD2 be targeted to improve the Rett-like behavioural impairments of MeCP2-deficient mice? *Eubanks JH*: *Ontario Rett Syndrome Association.* (\$15,000 2008 - 2009.)

Canada Research Chair in Neuroscience, Tier 1. *Lozano AM*: *Canada Institutes for Health Research.* (\$1,400,000 2005 - 2012.)

Congress of Neurological Surgeons (CNS) Wilder Penfield Clinical Investigator Scholarship awarded to Dr. Dwarakanath Srinivas (Supervisor: Lozano A). *Congress of Neurological Surgeons.* (\$10,000 2008.)

Combinatorial therapeutic approaches to promote repair mechanisms mediated by endogenous neural stem/progenitor cells after spinal cord injury. *Karimi S, Fehlings MG, Rossignol S*: *Craig H. Neilsen Foundation.* (\$240,407 2008 - 2010.)

Cancer Research Society (CRS) Group Grant to the University Health Network (UHN) and the Hospital for Sick Children (HSC). *Dick J*: *Ontario Institute for Cancer Research.* (\$80,000 2008 - 2012.)

Defining neural precursor cell-host interactions to optimize repair of traumatic spinal cord injury. *Hawryluk GWJ, Fehlings MG*: *Cervical Spine Research Society.* (\$18,342 2008 - 2009.)

Development of a stroke model in non-human primates. (Please note: Application under review). *Tymianski M*: *Canadian Stroke Networks.* (\$289,106 2008 - 2010.)

Economic evaluation of early surgical decompression for traumatic cervical spinal cord injury (SCI) (2009-33). *Furlan J, Fehlings M, Yee A*: *Rick Hansen Foundation.* (\$94,824 2008 - 2009.)

Economic impact of early surgical decompression after traumatic cervical spinal cord injury (SCI): Cost-effectiveness and cost-utility analyses using Ontario-based health costing data. *Furlan JC, Fehlings MG*: *Cervical Spine Research Society.* (\$31,464 2008 - 2009.)

Embryonic stem cell based models of low grade glioma. *Guha A*: *Brain Tumour Research Assistance and Information Network (B.R.A.I.N.Child).* (\$30,000 2008 - 2009.)

Enhancing access of the spinal cord injury community to translational clinical research trials (R008-06). *Fehlings MG*: *Rick Hansen Foundation.* (\$106,361 2009.)

- 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.)
- Fellowship to J. Buttigieg: Characterization of the physiological incorporation of oligodendroglial precursor cells in the injured spinal cord. *Buttigieg J, Fehlings MG: Ontario Neurotrauma Foundation.* (\$90,000 2009 - 2011.)
- Fellowship to K. Satkunendrarajah: Adult derived neural precursor cells transplanted into the acutely injured spinal cord promote recovery of somatic and autonomic nerve function. *Satkunendrarajah K, Fehlings MG: Ontario Neurotrauma Foundation.* (\$90,000 2009 - 2011.)
- Fellowship to YC Wu: Define the therapeutic window of riluzole for the treatment of spinal cord injury: Aim at protection for axons and oligodendrocytes. *Wu YC, Fehlings MG: Ontario Neurotrauma Foundation.* (\$45,000 2009 - 2010.)
- From research to clinic, the translational step with functional magnetic resonance imaging of the human spinal cord (spinal fMRI). *Stroman P, Fehlings M, Mikulis D, Pokrupa R, Smith K: Rick Hansen Foundation.* (\$97,015 2008 - 2009.)
- 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.) *Guha A: National Cancer Institute of Canada, Grant No. 017478* (\$135,000 2006 - 2009.)
- Functional magnetic resonance imaging 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 Group (RTOG), Translational Research Seed Grant.* (\$15,000 2008 - 2009.)
- Glioblastoma multiforme biomarkers. *Siu KWM, Guha A, Jorg Grigull A: Canadian Institutes of Health Research, One-Year Bridge Funding.* (\$100,000 2009.)
- Globus pallidus deep brain stimulation in children with dystonia. *Soman T, Moro E, Lozano AM, Hodaie M, Westmacott R, Gorman D: Hospital for Sick Children Foundation.* (\$118,617 2008 - 2010.)
- Health applications of cell signaling in mucosal inflammation and pain. *Ellen R, McCulloch CAG, Brumell J, Cvitkovitch D, Davis K, Finlay B, Fish E, Glogauer M, Jadad A, Jones N, Maksym G, Manolson M, Overall C, Philpott D, Santerre P, Sessle B, Sherman P, Vergnolle N: Canadian Institutes of Health Research, Strategic Training Initiative.* (\$1,950,000 2009 - 2015.)
- High-performance cone-beam CT guidance of head and neck surgery (U.S. dollars). *Siewerdsen JH, Brock KK, Easty A, Gentili F, Irish JC, Jaffray DA, Kucharczyk W, Witterick I: National Institutes of Health, R01 Grant No. IR01-CA127444.* (\$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 (CIHR).* (\$634,713 2007 - 2012.)
- John D. Schultz Science Student (Summer) Scholarship 2008 awarded to Ms. Eunae Cho. *Cho E, Fehlings MG: Heart and Stroke Foundation of Ontario.* (\$4,000 2008.)
- John D. Schultz Science Student (Summer) Scholarship 2009 awarded to Ms. Stefania Spano. *Spano S, Fehlings MG: Heart and Stroke Foundation of Ontario.* (\$4,000 2009.)
- Methyl DNA-binding factor complexes and neurodegeneration. *Eubanks JH: Heart & Stroke Foundation of Ontario.* (\$255,036 2006 - 2009.)
- Microenvironment induced molecular heterogeneity in glioblastoma multiforme (GBM). *Guha A: Canadian Institutes of Health Research, Grant No. 171871.* (\$125,000 2008 - 2012.)
- Modulation of cognitive function with deep brain stimulation. *Laxton A, Lozano AM: American Association of Neurological Surgeons, Neurosurgical Research Foundation Award.* (\$70,000 2006 - 2009.)
- 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 multiple sclerosis. *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.)
- Neurophysiology of human subthalamic nucleus. *Dostrovsky JO, Hutchison WD, Lozano AM: Canadian Institutes of Health Research.* (\$625,000 2004 - 2009)
- Neuroprotection of the injured spinal cord using an anti-apoptotic molecule delivered through a novel bioengineered drug delivery system. *Fehlings MG, Shoichet MS: The Physicians' Services Incorporated Foundation.* (\$147,000 2008 - 2010.)
- 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 (CTN4-2008 F-T). *Fehlings MG, Tator CH: Christopher Reeve Foundation.* (\$195,200 2008.)

North American Clinical Trials Network for the treatment of spinal cord injury (CTN5-2009 F-T). *Fehlings MG, Tator CH: Christopher Reeve Foundation.* (\$121,500 2009.)

NREF/AANS Research Fellowship Award to H. Francis Farhadi: Transcriptional programming of the myelin basic protein gene following spinal cord injury in the mouse. *Fehlings MG, Farhadi HF: Neurosurgery Research and Education Foundation (NREF) of the American Association of Neurological Surgeons (AANS).* (\$70,000 2007 - 2009.)

Ontario Spinal Cord Injury Research Network - acute care infrastructure support (2006-SCI-RNACUTE-471). *Fehlings MG: Ontario Neurotrauma Foundation.* (\$400,000 2007 - 2009.)

Optimizing neural repair and plasticity after chronic spinal cord injury: A combined approach with adult neural precursor cells, inhibition of glial scar and active rehabilitation. *Karimi S, Fehlings M, Rossignol S: Christopher and Dana Reeve Foundation.* (\$150,000 2009 - 2011.)

Phase I trial of riluzole in patients with acute spinal cord injury (SIR-P). *Fehlings MG: Association of Osteosynthesis (AO) Spine International.* (\$258,000 2008 - 2010.)

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/Institute of Neurosciences, Mental Health and Addiction (INMHA) Doctoral Award.* (\$61,500 2006 - 2008.)

Regenerative approach to intervertebral disc research. *Fehlings MG: Synthes Spine Company, L.P.* (\$210,000 2008 - 2009.)

Regenerative medicine strategies for spinal cord injury repair: Integration of stem cell biology, nanotechnology, bioengineering approaches and neurosurgical application. *Fehlings M, Tator CH: Canadian Institutes of Health Research.* (\$1,500,000 2004 - 2009.)

Regenerative medicine strategies for spinal cord injury repair: Integration of stem cell biology, nanotechnology, bioengineering approaches and neurosurgical application (RMF-72552). *Fehlings MG, Morshead C, Shoichet M, Stanisz G, Tator CH, van der Kooy D: Canadian Institutes of Health Research (CIHR).* (\$1,500,000 2004 - 2009.)

Regulation and function of kallikreins in spinal cord injury and repair. *Scarlsbrick IA, Blaber M, Fehlings MG: National Institutes of Health.* (\$1,654,708 2008 - 2013.)

Regulation of antiretroviral drug transport and metabolism in the brain. *Bendayan R, Valiante T: Canadian Institutes of Health Research.* (\$234,198 2005 - 2008.)

Role of TRPM channels in ischemic brain damage. *Tymianski M: Canadian Institutes for Health Research, MOP-89720.* (\$900,000 2008 - 2013.)

Role of TRPM channels in ischemic brain damage. *Tymianski M: Canadian Institutes for Health Research, IAO-86309.* (\$41,513 2008.)

Spinal cord repair. *Fehlings MG, Morshead C, Shoichet M, Tator C, van der Kooy D: McLaughlin Centre for Molecular Medicine.* (\$100,000 2008 - 2009.)

States of mind: Emerging issues in neuroethics. *Baylis F, Bernstein M, Fine A, Glannon W, Kimmelman J, Reid L: Canadian Institutes of Health Research.* (\$1,375,000 2006 - 2011.)

Strategies to activate endogenous neural stem cells after spinal cord injury. *Soheila KK, Fehlings M, Rossignol S: The Craig H. Neilsen Foundation.* (\$240,406 2008 - 2010.)

Studentship award to James Rowland. *Rowland J, Fehlings MG: Multiple Sclerosis Society of Canada.* (\$36,000 2007 - 2009.)

Studentship to A. Karpova: The development of standardized, objective MRI assessments and prognostic model for non-traumatic cervical spinal cord injury due to cervical spondylosis. *Karpova A, Fehlings MG: Ontario Neurotrauma Foundation.* (\$23,000 2009 - 2011.)

Studentship to R. Salewski: Investigation of induced pluripotent stem cells, derived by novel, non-viral transposition reprogramming, as a regenerative strategy for spinal cord remyelination. *Salewski R, Fehlings MG: Ontario Neurotrauma Foundation.* (\$46,000 2009 - 2011.)

Summer Studentship awarded to Newton Cho: Examination of the neuroprotective role of IgG for spinal cord injury. *Cho N, Fehlings MG: Canadian Institutes of Health Research.* (\$4,950 2009.)

Surgical versus conservative treatment of metastatic epidural spinal cord compression (MESCC). Quality of life and cost-effectiveness outcomes. *Fehlings MG: Association for Osteosynthesis (AO) Spine 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.)

Tasker Chair in Functional Neurosurgery. *Lozano AM: Radionics Inc.* (\$15,000 1998 - 2008.)

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, Hilibrand AS: Cervical Spine Research Society.* (\$50,000 2008.)

The ischemic axon: Cross-talk with myelin in K⁺ channel terms (T 6328). *Fehlings MG, Velumian AA: Heart & Stroke Foundation.* (\$253,167 2008 - 2011.)

The living myelin sheath: Functional organization and role in dynamic modulation of axonal function in CNS. *Velumian AA, Fehlings M.G: Natural Sciences and Engineering Research Council of Canada (NSERC).* (\$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.)

Therapeutic hopes and ethical concerns: Clinical research in the neurosciences. *Baylis F, Bernstein M, Fine A, Kimmelman J, Reid L: Canadian Institutes of Health Research.* (\$604,032 2005 - 2009.)

Tissue factor in tumor progression, angiogenesis. *Rak J, Guha A: National Cancer Institute of Canada, Grant No. 018173.* (\$117,000 2007 - 2010.)

Towards the correction of Rett-like behaviour in MeCP2-deficient mice by exogenous gene transfer. *Eubanks JH, Burnham WM, Snead III 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: Neuroscience Canada- Brain Repair Program.* (\$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: Association of Osteosynthesis (AO) Spine North America.* (\$30,420 2008 - 2009.)

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 Network.* (\$329,000 2006 - 2008.)

University of Toronto spine collaborative (UT-SpineLINK). *Fehlings MG: Ministry of Health and Long-Term Care.* (\$98,010 2009 - 2011.)

Using transgenic glioma models to explore the role of inhibitors of apoptosis (IAPs) in glioblastoma multiforme (GBMs). *Guha A: Brain Tumor Society.* (\$75,000 2007 - 2009.)

Vanier Canada doctoral research scholarship awarded to James W. Austin: Neuroprotective and regenerative bioengineered approaches for the treatment of spinal cord injury. *Austin JW, Fehlings MG: Canadian Institutes of Health Research.* (\$150,000 2009 - 2012.)

HONOURS RECEIVED

Davis KD: Induction to Johns Hopkins University Society of Scholars. May 2009.

Fehlings MG: Best Paper by an American Spinal Injury Association (ASIA) Member in 2008 for Motor and Sensory Assessment of Patients in Clinical Trials for Pharmacological Therapy of Acute Spinal Cord Injury: Psychometric Properties of the ASIA Standards (Furlan J, Fehlings M et al). April 2009.

Fehlings MG: Outcomes Award from the American Association of Neurological Surgeons/Congress of Neurological Surgeons (AANS/CNS) Section on Disorders of the Spine and Peripheral Nerves for paper: Key predictors of outcome in patients undergoing surgical treatment for cervical spondylotic myelopathy: Analysis of a prospective multicenter study. December 2008.

Fehlings MG: Outstanding Outcomes Research Award for Key Predictors of Outcomes in Patients Undergoing Surgical Treatment for Cervical Spondylotic Myelopathy...." at the 2009 American Association of Neurological Surgeons/ Congress of Neurological Surgeons (AANS/CNS) Section on Disorders of the Spine and Peripheral Nerves. March 2009.

Fehlings MG: Poster Winner Award for the Highest Ranked Abstract on Education at the 3rd National Spinal Cord Injury Conference and the 16th Interurban Spinal Cord Injury Conference, Toronto, ON, November 2008. Attitudes toward elderly individuals with SCI: A questionnaire-based survey among registered nurse. November 2008.

Fehlings MG: Poster Winner Award as the highest ranked abstract on patient care at the 3rd National Spinal Cord Injury Conference and the 16th Interurban Spinal Cord Injury Conference in Toronto, ON, for: The Potential Effects of Age and Co-Morbidities on the Clinical Outcomes after Acute Spine Trauma. November 2008.

Lozano AM: Designated as a key opinion leader in the area of Deep Brain Stimulation by Authoratory, a privately funded search engine. With over 7000 citations of publications in the this specific area to date, Lozano's rank is #1 when compared to all other authors using the same keywords. July 2008.

Lozano AM: Jonas Salk Award, March of Dimes 2008. November 2008.

Massicotte EM: The Wightman-Berris Academy Award for Individual Teaching Excellence. May 2009.

Tator CH: Inducted into the Canadian Medical Hall of Fame. April 2009.

Tator CH: The Social Responsibility Award (part of the Values in Action Awards Program of St. Michael's Hospital) for being one of the founders of TIPSYPY (Think First Injury Prevention Strategy for Youth). September 2008.

Wallace MC: Postgraduate Medical Education (PGME) 2009 Award for Excellence in Teaching Performance, Mentorship and Advocacy. March 2009.

Division of Orthopaedic Surgery

Dr. J.R. Davey	Associate Professor (Division Head)
Dr. W.M. Erwin	Assistant Professor
Dr. R. Gandhi	Lecturer
Dr. B. Graham	Assistant Professor
Dr. J. Lau	Assistant Professor
Dr. S.J. Lewis	Assistant Professor
Dr. N. Mahomed	Associate Professor
Dr. K.W. Marshall	Assistant Professor
Dr. D.J. Ogilvie-Harris	Associate Professor
Dr. Y.R. Rampersaud	Associate Professor
Dr. K.A. Syed	Lecturer
Dr. C.J.H. Veillette	Assistant Professor
Dr. H.P. von Schroeder	Associate Professor

PUBLICATIONS

- Anraku M, Waddell TK, de Perrot M, Lewis SJ, Pierre AF, Darling GE, Johnston MR, Zener RE, Rampersaud YR, Shepherd FA, Leighl N, Bezjak A, Sun AY, Hwang DM, Tsao MS, Keshavjee S:** Induction chemoradiotherapy facilitates radical resection of T4 non-small cell lung cancer invading the spine. *The Journal of Thoracic and Cardiovascular Surgery*: February 2009: 137(2): pp 441-447. E-published ahead of print: December 19, 2008.
- Cil A, Veillette CJH, Sanchez-Sotelo J, Morrey BF:** Linked elbow replacement: A salvage procedure for distal humeral nonunion. *Journal of Bone and Joint Surgery (American)*: September 2008: 90(9): pp 1939-1950.
- Cil A, Veillette CJH, Sanchez-Sotelo J, Sperling JW, Schleck C, Cofield RH:** Revision of the humeral component for aseptic loosening in arthroplasty of the shoulder. *The Journal of Bone and Joint Surgery (British)*: January 2009: 91-B(1): pp 75-81.
- Cofield RH, Sperling JW, Fox, TJ, Cil A, Veillette CJH:** Mayo Clinic joint registry experience with shoulder arthroplasty. In: *Revision and Complex Shoulder Arthroplasty*: (Cofield RH, Sperling JW, eds.) Lippincott Williams & Wilkins, Philadelphia: 2009: pp 12-15.
- Dailey AT, Shaffrey CI, Rampersaud R, Lee J, Brodke DS, Arnold P, Nassr A, Harrop JS, Grauer J, Bono CM, Dvorak M, Vaccaro A:** Utility of helical computed tomography in differentiating unilateral and bilateral facet dislocations. *The Journal of Spinal Cord Medicine*: February 2009: 32(1): pp 43-48.
- Dutly-Guinand M, von Schroeder HP:** Three-corner midcarpal arthrodesis and scaphoidectomy: A simplified volar approach. *Techniques in Hand and Upper Extremity Surgery*: March 2009: 13(1): pp 54-58.
- Erwin WM:** The notochord, notochordal cell and CTGF/CCN-2: Ongoing activity from development through maturity. *Journal of Cell Communication and Signaling*: December 2008: 2(3-4): pp 59-65.
- Erwin WM, Las Heras F, Islam D, Fehlings MG, Inman RD:** The regenerative capacity of the notochordal cell: Tissue constructs generated in vitro under hypoxic conditions. *Journal of Neurosurgery-Spine*: June 2009: 10(6): pp 513-521.
- Ferguson P, Kraemer W, Nousiainen M, von Schroeder HP:** Chapter 21: Orthopaedics. In: *The Toronto Notes (Tang T, Wong P, eds.) TTNMS (The Toronto Notes for Medical Students) Inc., Toronto: 2009: pp OR1-OR44.*
- Gandhi R, Ayeni O, Davey JR, Mahomed NN:** High tibial osteotomy compared with unicompartmental arthroplasty for the treatment of medial compartment osteoarthritis: A meta-analysis. *Current Orthopaedic Practice*: April 2009: 20(2): pp 164-169.
- Gandhi R, Davey JR:** What is the role of antibiotic cement in total joint replacement? In: *Evidence Based Orthopaedics*: (Wright J, ed.) Elsevier Publishing, Philadelphia, Pennsylvania: 2009: pp 556-560.
- Gandhi R, Davey JR, Mahomed NN:** Patient expectations predict greater pain relief with joint arthroplasty. *The Journal of Arthroplasty*: August 2008: 24(5): pp 716-721. E-published August 13, 2008.
- Gandhi R, Davey JR, Mahomed NN:** Predicting patient dissatisfaction following joint replacement surgery. *The Journal of Rheumatology*: December 2008: 35(12): pp 2415-2418.
- Gandhi R, Mahomed NN:** Unicompartmental knee arthritis. *Knee Bracing. Canadian Orthopaedic Association Bulletin, Summer 2008 Issue*: July 2008: 81: pp 28-29.
- Gandhi R, Mahomed NN:** Juvenile rheumatoid arthritis and total hip arthroplasty. *Seminars in Arthroplasty*: December 2008: 19(3): pp 261-266.
- Gandhi R, Razak F, Davey JR, Syed K, Pathy R, Mahomed NN:** Antibiotic bone cement and the incidence of deep infection following total knee arthroplasty. *The Journal of Arthroplasty*: E-published September 25, 2008.

Gandhi R, Razak F, Mahomed NN: Ethnic differences in the relationship between obesity and joint pain and function in joint arthroplasty. *The Journal of Rheumatology*: September 2008; 35(9): pp 1874-1877. E-published ahead of print: August 1, 2008.

Gandhi R, Razak F, Tso P, Davey JR, Mahomed NN: Asian ethnicity and the prevalence of metabolic syndrome in the osteoarthritic total knee arthroplasty population. *The Journal of Arthroplasty*: E-published March 9, 2009.

Gandhi R, Tso P, Davey JR, Mahomed NN: High-flexion implants in primary total knee arthroplasty: A meta-analysis. *The Knee*: January 2009; 16(1): pp 14-17.

Graham B: Nonsurgical treatment of carpal tunnel syndrome. *Journal of Hand Surgery*: March 2009; 34(3): pp 531-534.

Graham B, Schofield M: Self-reported symptoms of cold intolerance in workers with injuries of the hand. *Hand*: September 2008; 3(3): pp 203-209.

Jhaveri S, Zeller R, Miller S, Lewis S: The effect of intra-operative skeletal (skull femoral) traction on apical vertebral rotation. *European Spine Journal*: March 2009; 18(3): pp 352-356. E-published ahead of print: December 24, 2008.

Lau J: What is the best treatment for end-stage hallux rigidus? In: *Evidence-Based Orthopaedics: The Best Answers to Clinical Questions*: (Wright JG, ed.) Saunders Elsevier, Philadelphia, Pennsylvania: 2009; pp 473-478.

Lewis SJ, Canavese F, Keetbaas S: Intralaminar screw insertion of thoracic spine in children with severe spinal deformities. *Spine*: April 2009; 34(7): pp E251-E254.

Li R, Stewart DJ, von Schroeder HP, Mackinnon ES, Schemitsch EH: Effect of cell-based VEGF gene therapy on healing of a segmental bone defect. *Journal of Orthopaedic Research*: January 2009; 27(1): pp 8-14.

Macadam S, Gandhi R, Bezuhly M, LeFaivre K: Simple decompression versus anterior subcutaneous and submuscular transposition of the ulnar nerve for cubital tunnel syndrome: A meta-analysis. *The Journal of Hand Surgery*: October 2008; 33(8): pp 1314.e1-e-12.

Mahomed N, Davis A, Badley E: Expanding roles in orthopaedic care: A comparison of physiotherapist and orthopaedic surgeon recommendations for triage. *Journal of Evaluation in Clinical Practice*: February 2009; 15(1): pp 178-183.

Mahomed N, Gandhi R, Davey JR: Hydroxyapatite stems in hip arthroplasty: A meta-analysis. *Journal of Arthroplasty*: January 2009; 24(1): pp 38-42.

Mahomed N, Syed K, Gandhi R: THA for failed internal fixation of proximal femur fractures and retained hardware. *Seminars in Arthroplasty*: December 2008; 19(4): pp 307-313.

Mahomed NN, Davis AM, Hawker G, Badley E, Davey JR, Syed KA, Coyte PC, Gandhi R, Wright JG: Inpatient compared with home-based rehabilitation following primary unilateral total hip or knee replacement: A randomized controlled trial. *Journal of Bone and Joint Surgery (American)*: August 2008; 90(8): pp 1673-1680.

Mahomed NN, Gandhi R, Davey R, Tso P: High-flexion implants in primary total knee arthroplasty: A meta-analysis. *Knee*: January 2009; 16(1): pp 14-17. E-published ahead of print: September 11, 2008.

McKee MD, Veillette CJ, Hall JA, Schemitsch EH, Wild LM, McCormack R, Perey B, Goetz T, Zomar M, Moon K, Mandel S, Petit S, Guy P, Leung I: A multicenter, prospective, randomized, controlled trial of open reduction-internal fixation versus total elbow arthroplasty for displaced intra-articular distal humeral fractures in elderly patients. *Journal of Shoulder and Elbow Surgery (Jan-Feb 2009 Issue)*: January 2009; 18(1): pp 3-12. E-published ahead of print: September 26, 2008.

Praamsma M, Carnahan H, Backstein D, Veillette CJH, Gonzalez D, Dubrowski A: Drilling sounds are used by surgeons and intermediate residents, but not novice orthopedic trainees, to guide drilling motions. *Canadian Journal of Surgery*: December 2008; 51(6): pp 442-446.

Qu G, von Schroeder HP: The osteogenic potential of pseudoarthrosis tissue and bone from human scaphoid non-unions. *The Journal of Hand Surgery (European Volume)*: August 2008; 33(4): pp 449-456. E-published ahead of print: June 25, 2008.

Rajiv R, Razak F, Davey JR, Syed K, Pathy R, Mahomed NN: Antibiotic bone cement and the incidence of deep infection after total knee arthroplasty. *The Journal of Arthroplasty*: E-published September 26, 2008.

Weyand B, Israelowitz M, von Schroeder HP, Vogt PM: Fluid dynamics in bioreactor design: Considerations for the theoretical and practical approach. *Advances in Biochemical Engineering/Biotechnology*: March 2009; 112: pp 251-268. E-published ahead of print: October 1, 2008.

Zdero R, Olsen M, Elfatori S, Skrinkas T, Schemitsch E, Whyne C, von Schroeder HP: A biomechanical assessment of the coupling of torsion and tension in the human scapholunate ligament. *Proceedings of the Institution of Mechanical Engineers [H]*: August 2008; 222(6): pp 907-914.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Davey JR: Biomet Orthopaedics Inc, 2009 Canadian Joint Symposium, Whistler, BC, February 2009. (1) Component options for acetabular revision, (2) Longterm results in hydroxyapatite total hip arthroplasty (HA THA), (3) Revision total knee: Approach options, (4) Stability - optimizing range of motion in primary total knee arthroplasty (TKA).

Davey JR: Contemporary and Future Concepts of Orthopaedics, Whistler, British Columbia, February 2009. (1) The post traumatic hip, (2) You break the femur during a total hip replacement (THR).

Davey JR: Triathlon Primary and Revision Cadaveric Training, Toronto, ON, May 2009. (1) Triathlon cadaver demo, (2) Triathlon total stabilized (TS) design rationale.

Davey JR: Surgical Advances in Orthopaedics, Collingwood, ON, September 2008. (1) Distal radius total knee design, (2) High flexion revision total knee, (3) The cup in revision total hip arthroplasty, filling the hole.

Erwin WM: World Federation of Chiropractic, 10th Biennial Congress, Montreal, PQ, April 2009. Invited Speaker: Canadian Chiropractic Research Foundation (CCRF) scientist in disc biology: A view from the University of Toronto.

Erwin WM: International Cartilage Repair Society, 8th World Congress (Research Meeting), Miami, Florida, May 2009. Poster presentation: The regenerative capacity of the notochordal cell: Tissue constructs generated in vitro under hypoxia.

Erwin WM: Association for Osteosynthesis (AO) Spine, Global Spine Congress, San Francisco, California, June 2009. Lecture: The regenerative capacity of the notochordal cell: Tissue constructs generated in vitro under hypoxic conditions.

Lau J: Saudi Orthopaedic Association, 2nd International Conference, Jeddah, Saudi Arabia, January 2009. (1) Ankle arthritis: Fusion or replacement, (2) Complex charcot ankle reconstruction, (3) Evolving treatment of hallux rigidus, (4) Hallux valgus reconstruction: Tips and tricks.

Lau J: Union Memorial, Reunion of Baltimore Fellows, Foot and Ankle Meeting, Steamboat Springs, Colorado, March 2009. Evidence-based medicine: Ankle arthritis.

Lau J: Ontario Society of Chiropractors, Toronto, ON, April 2009. Chronic ankle pain after ankle sprain.

Lau J: University of Calgary/Canadian Orthopaedic Foot and Ankle Society, 9th Annual Foot & Ankle Symposium, Calgary, AB, April 2009. (1) Diabetic foot and ulcers, (2) Moderator: Common forefoot disorders, (3) Calgary Orthopaedic Review Course, Foot and Ankle Session 2009.

Lau J: St. Louis University, Practical Anatomy and Surgical Education, St. Louis, Missouri, June 2009. Surgical techniques: (1) Bunionette correction, (2) Chevron osteotomy, (3) Proximal interphalangeal (PIP) correction.

Lau J: Ontario Podiatric Medical Association, 84th Annual Scientific Conference, Toronto, ON, September 2008. First metatarsophalangeal (MTP) joint arthroplasty and fusion: Review of the literature.

Lau J: University of Rochester, Inbone Total Ankle Replacement Course, Rochester, New York, September 2008. Lateral approach for total ankle replacement.

Lau J: University of Michigan, 8th Annual Foot and Ankle Lectureship, Ann Arbor, Michigan, October 2008. Hallux rigidus.

Lau J: St. Louis University, Stryker Tauma Symposium, Practical Solutions for Difficult Fractures of the Elbow, Foot and Ankle, Toronto, ON, November 2008. (1) Debate: Comminuted distal tibial plafond fracture in 50 year old -- I use a locked plate, (2) Syndesmotic injuries and the role of ligament reconstruction in ankle trauma, (3) (Videos) How I do it: Ankle spanning external fixator.

Lewis SJ: Baxter (sponsor), Gatineau, PQ, March 2009. Guest Speaker: Blood conservation strategies in spine deformities workshop.

Lewis SJ: Canadian Spine Society, Ninth Annual Meeting, Gatineau, PQ, March 2009. (1) A look at an interdependent practice model for the nurse practitioner in spine, (2) Combined anterior/posterior spinal fusion compared to posterior fusion with intra-operative traction in the correction of scoliosis curves greater than 75 degrees, (3) Current trends in the surgical treatment of neuromuscular scoliosis in Canada, (4) Validation of the Enneking oncologic classification in the management of primary tumours of the spine: A cohort study.

Lewis SJ: Stryker, Current Controversies in Deformity Correction Symposium, Phoenix, Arizona, March 2009. Intra-operative traction in spinal deformity.

Lewis SJ: Stryker, Eleventh Spine International Symposium, Barcelona, Spain, April 2009. (1) Case Presentation: Adult kypho-scoliosis, (2) The use of intra-operative skull-skeletal traction to facilitate scoliosis correction in adults.

Lewis SJ: Scoliosis Research Society, Burr Ridge, Illinois, May 2009. Planning osteotomies: The science of spinal alignment, available algorithms, and how to determine the necessary re-alignment for the adult deformity patient. Research and OR tips and insights.

Lewis SJ: Trillium Health Centre, Mississauga, ON, May 2009. Extradural cervical spine tumours.

Lewis SJ: The E. Wolfson Medical Center, Holon, Israel, October 2008. Advances in spinal deformity surgery.

Rampersaud YR: Spine Trauma Study Group Meeting, Denver, Colorado, January 2009. SAVES - Inter-observer reliability study.

Rampersaud YR: Medtronic Canada, Motion Sparring Technologies, 3rd Annual Meeting, Tampa, Florida, February 2009. Device for intervertebral assisted motion (DIAM) versus fusion for spondylolisthesis.

Rampersaud YR: OneSpine, Course, Cancun, Mexico, February 2009. (1) Best treatment option is kyphoplasty, (2) Ideal indications for minimally invasive procedures faculty, (3) Interspinous process decompression is the preferred treatment over simple decompression, (4) Transforaminal lumbar interbody fusion (TLIF) is preferred over any other surgical option to include anterior lumbar interbody fusion (ALIF), pars repair, axial lumbar interbody fusion (LIF), (5) Optimal treatment in multi-level cervical decompression and fusion.

Rampersaud YR: Degenerative Spine Study Group, Dallas, Texas, May 2009. Minimally invasive surgery (MIS) versus open fusion.

Rampersaud YR: Spine Trauma Study Group (STSG), Chicago, Illinois, June 2009. SAVES - Intra-observer reliability study.

Rampersaud YR: North American Spine Society, 23rd Annual Meeting, Toronto, ON, October 2008. (1) Direct cost per quality adjusted life years of surgical intervention for focal spinal stenosis compared to primary hip and knee replacement for osteoarthritis at two years post-intervention, (2) Intraoperative multimodality monitoring in adult spinal deformity: Analysis of a prospective series of 102 cases with independent evaluation, (3) Patient self-reported concerns in the period post-referral and prior to seeing a spine surgeon.

Rampersaud YR: Society for Minimally Invasive Spine Surgery, 2008 Annual Meeting, Henderson, Nevada, November 2008. Two-year health related quality of life following minimal access decompression and fusion for low grade (I-II) spondylolisthesis compared to the normative population.

Veillette CJH: Association of Bone and Joint Surgeons, Carl T. Brighton Workshop on Orthopaedic Informatics, Tampa Bay, Florida, July 2008. Attendee.

Veillette CJH: Canadian Orthopaedic Association, Basic Science Course, Edmonton, AB, October 2008. Informatics for the orthopaedic surgeon.

von Schroeder HP: Regina Orthopaedic Group, Regina, SK, May 2009. Delivered six lectures.

von Schroeder HP: Rehabilitation Solutions (Mississauga Site), Toronto, ON, July 2008. Guest Speaker: Physical examination of the wrist.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

A care model for patients with cognitive impairment in rehabilitation following hip fracture surgery. *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.)

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 Grant.* (\$400,000 2008 - 2010.)

An in-patient rehabilitation model of care targeting cognitive impairment for patient's post hip fracture surgery: A demonstration project. *McGilton KS, Mahomed N, Davies A, Naglie G, Jaglal S, Rochon E, Flannery J: Canadian Institutes of Health Research.* (\$381,095 2008 - 2011.)

Apoptosis and molecular signaling in intervertebral disc notochordal cells cultured under hypoxic conditions. *Erwin WM, Fehlings MG: Association for Osteosynthesis (AO) Spine North America.* (\$30,000 2008 - 2009.)

Assessment of informatics competency and information management strategies in surgical trainees. *Veillette CJH, Kanampuzha J: University of Toronto.* (\$10,000 2009.)

Centre for Research Expertise in Improved Disability Outcomes (CREIDO). *Cassidy JD, Cote P, Carette S, Mahomed N, Hamer H, Inman R, von Schroeder HP, 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 [matching funds from the University Health Network and the Institute for Work and Health (IWH)].* (\$3,750,000 2006 - 2011.)

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 (WSIB), Centres for Research Expertise Program.* (\$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.)

Development of a collaborative orthopaedic knowledgebase using wiki technologies - Orthopaedia.com. *Veillette CJH, Bernstein J: Association of Bone and Joint Surgeons.* (\$180,000 2007 - 2010.)

Development of a collaborative orthopaedic knowledgebase using wiki technologies - Orthopaedia.com. *Veillette CJH, Bernstein J: Association of Bone and Joint Surgeons.* (\$750,000 2009 - 2012.)

Efficacy of intraoperative topical application of tranexamic acid in reducing perioperative bleeding in total knee arthroplasty. *Wong J, Chung F, Mahomed NN, Davey JR, Syed K: The Physicians' Services Incorporated (PSI) Foundation.* (\$116,500 2007 - 2009.)

Harnessing collective intelligence for the management of subcapital hip fractures. *Ahn J, Veillette CJH, Bernstein J: Orthopaedic Trauma Association.* (\$10,000 2009.)

Investigation of DRS-induced recovery of IL-1-induced degeneration of IVD NP cells. *Erwin WM: Skoll Foundation.* (\$53,000 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 randomized controlled trial (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 arthroplasty. *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, Inman R: 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. *Esdaille 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: New Emerging Team.* (\$1,495,170 2004 - 2009.)

Variation in patient and physician attitudes towards lumbar spinal stenosis surgery and their influence on regional surgical rates. *Mahomed N, McIsaac W, Coyte P, Kreder H, Mahomed N, Wright J, Bederman S: Ontario Neurotrauma Foundation/Ministry of Health and Long-Term Care.* (\$74,988 2007 - 2009.)

HONOURS RECEIVED

Gandhi R: The Royal College of Physicians and Surgeons of Canada Traineeship Grant. September 2008.

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. D. Ford	Lecturer
Dr. B. Graham	Assistant Professor
Dr. S.O.P. Hofer	Associate Professor (Division Head)
Dr. R.T. Manktelow	Professor
Dr. H.P. von Schroeder	Associate Professor
Dr. T. Zhong	Lecturer

PUBLICATIONS

Anastakis DJ, Malessy MJA, Chen R, Davis K, Mikulis D: Cortical plasticity following nerve transfers in the upper extremity. *Hand Clinics*: November 2008: 24(4): pp 425-444.

Damen TH, Mureau MA, Timman R, Rakhorst HA, Hofer SOP: The pleasing end result after DIEP flap breast reconstruction: A review of additional operations. *Journal of Plastic, Reconstructive and Aesthetic Surgery*: January 2009: 62(1): pp 71-76.

Frijters E, Hofer SOP, Mureau MAM: Long-term subjective and objective outcome after primary repair of traumatic facial nerve injuries. *Annals of Plastic Surgery*: August 2008: 61(2): pp 181-187.

Hofer SOP, Mureau MAM: Surgical reconstruction of large nasal defects. *Nederlands Tijdschrift voor Geneeskunde*: July 2008: 152: pp 1657-1664.

Hofer SOP, Nelligan P: Editorial: The 25th annual meeting of the American Society for Reconstructive Microsurgery. *Journal of Plastic Reconstructive and Aesthetic Surgery*: May 2009: 62(5): pp 567-568.

Hundepool AC, Dumans AG, Hofer SOP, Fokkens NJ, Rayat SS, van der Meij EH, Schepman KP: Rehabilitation after mandibular reconstruction with fibula free-flap: Clinical outcome and quality of life assessment. *International Journal of Oral and Maxillofacial Surgery*: November 2008: 37(11): pp 1009-1013.

Jensen AR, Wright AS, Levy AE, McIntyre LK, Foy HM, Pellegrini CA, Horvath KD, Anastakis DJ: Acquiring basic surgical skills: Is a faculty mentor really needed? *American Journal of Surgery*: January 2009: 197(1): pp 82-88.

Jensen AR, Wright AS, McIntyre LK, Levy AE, Foy HM, Anastakis DJ, Pellegrini CA, Horvath KD: Laboratory-based instruction for skin closure and bowel anastomosis for surgical residents. *Archives of Surgery*: September 2008: 143(9): pp 852-859.

Moolenburgh SE, Mureau MA, Hofer SOP: Aesthetic outcome after nasal reconstruction: Patient versus panel perception. *Journal of Plastic, Reconstructive and Aesthetic Surgery*: December 2008: 61(12): pp 1459-1464.

Moolenburgh SE, Mureau MAM, Duivenvoorden HJ, Hofer SOP: Validation of a questionnaire assessing patient's aesthetic and functional outcome after nasal reconstruction: The patient NAFEQ-score. *Journal of Plastic, Reconstructive and Aesthetic Surgery*: May 2009: 62(5): pp 656-662.

Novak CB, Anastakis DJ, Beaton DE, Katz J: Patient reported outcomes following peripheral nerve injury. *Journal of Hand Surgery*: February 2009: 34-A(2): pp 281 - 287.

Zhong T, Antony A, Cordeiro P: Surgical outcomes and nipple projection using the modified skate flap for nipple-areolar reconstruction in a series of 422 implant reconstructions. *Annals of Plastic Surgery*: May 2009: 62(5): pp 591-595.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Anastakis DJ: Association for Surgical Education/American College of Surgeons, 94th Annual Clinical Congress, San Francisco, California, October 2008. SERF workshop course instructor (postgraduate education).

Anastakis DJ: University of Lausanne (CHUV), Plastic Surgery Research Meeting, Lausanne, Switzerland, November 2008. Cortical plasticity following upper limb reconstruction. What every plastic surgeon needs to know.

Anastakis DJ: Hackensack University Medical Center, Department of Surgery, Hackensack, New Jersey, December 2008. Surgeons as educators.

Hofer SOP: American Society for Reconstructive Microsurgery, Master Series in Microsurgery, Maui, Hawaii, January 2009. (1) International Panel: Disasters of the masters - highlighting microsurgery complications and problems, (2) Session Chair for CLINICAL: Head and Neck I.

Hofer SOP: Canadian Association of Plastic Surgeons, General Annual Meeting, Kelowna, BC, June 2009. Session III co-Chair with Jason Gray.

Hofer SOP: Hanyang University, School of Medicine, Department of Plastic and Reconstructive Surgery, Seoul, Korea, June 2009. Visiting Professor Lecture: DIEP flap breast reconstruction: How to stay and get out of trouble.

Hofer SOP: World Society for Reconstructive Microsurgery, 5th Congress, Okinawa, Japan, June 2009. (A) Panel Discussions: (1) Disasters in breast reconstruction: How to stay and get out of trouble, (2) Mucosal tissue engineering for reconstructive surgery, (B) Symposium: Breast reconstruction.

Hofer SOP: University Medical Center Groningen, Robinson International Scientific Symposium, Groningen, The Netherlands, July 2008. Peter, bedankt: An overview of Professor Robinson's clinical and scientific career.

Zhong T: Canadian Society of Plastic Surgeons, General Annual Meeting, Kelowna, BC, June 2009. Ziess Scholarship Lecture: Sloan Kettering and its impact on my first year of practice.

Zhong T: London Health Sciences Centre, London Regional Cancer Program, Multidisciplinary Breast Disease Site Team, Annual Guidelines Retreat, Grand Bend, ON, June 2009. Expert panel presentation on implants versus radiation: To reconstruct or not.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

Acellular dermal matrix in one-stage breast reconstruction: A randomized, controlled trial. *Zhong T, Hofer S, Brown M, Semple J, Beber B: Plastic Surgery Educational Foundation, National Endowment for Plastic Surgery.* (\$56,000 2009 - 2010.)

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 Incorporated.* (\$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, Division of Experimental ENT, Erasmus University Rotterdam: 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. Distinction in Research Program.* (\$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, Divisions of Genetics and Surgical Oncology, Erasmus Medical Center in Rotterdam: Vanderes Foundation.* (\$200,000 2006 - 2008.)

Division of Thoracic Surgery

Dr. G.E. Darling	Professor
Dr. M. de Perrot	Associate Professor
Dr. S. Keshavjee	Professor (Division Head)
Dr. M. Liu	Professor
Dr. A.F. Pierre	Assistant Professor
Dr. T.K. Waddell	Associate Professor
Dr. K. Yasufuku	Assistant Professor

PUBLICATIONS

Anraku M, Cameron MJ, Waddell TK, Liu M, Arenovich T, Sato M, Cypel M, Pierre AF, de Perrot M, Kelvin DJ, Keshavjee S: Impact of human donor lung gene expression profiles on survival after lung transplantation: A case-control study. *American Journal of Transplantation*: October 2008; 8(10): pp 2140-2148. E-publishead ahead of print: August 22, 2008.

Anraku M, Waddell TK, de Perrot M, Lewis SF, Pierre AF, Darling GE, Johnston MJ, Zener RE, Rampersaud YR, Shepherd FA, Leighl N, Bezjak A, Sun AY, Hwang DM, Tsao MS, Keshavjee S: Induction chemoradiotherapy facilitates radical resection of T4 non-small cell lung cancer invading the spine. *The Journal of Thoracic and Cardiovascular Surgery*: February 2009; 137(2): pp 441-448.

Boasquevisque CH, Yildirim E, Waddell TK, Keshavjee S: Surgical techniques: Lung transplant and lung volume reduction. *The Proceedings of the American Thoracic Surgery*: January 2009; 6(1): pp 66-78.

Buys TP, Aviel-Ronen S, Waddell TK, Lam WL, Tsao MS: Defining genomic alteration boundaries for a combined small cell and non-small cell lung carcinoma. *Journal of Thoracic Oncology*: February 2009; 4(2): pp 227-239.

Charania J, de Perrot M, McRae K, David T, Fadel E, Shoemaker G: Outcome after combined pulmonary endarterectomy and mitral valve replacement. *The Thoracic and Cardiovascular Surgeon*: April 2009; 57(3): pp 172-174. E-published ahead of print: March 27, 2009.

Coonar AS, Hughes JA, Walker S, de Perrot M, Waddell TK, Pierre AF, Darling DE, Johnston MR, Keshavjee S: Implementation of real-time ultrasound in a thoracic surgery practice. *The Annals of Thoracic Surgery*: May 2009; 87(5): pp 1577-1581.

Cserti-Gazdewich CM, Waddell TK, Singer LG, Chaparro C, Pendergast JM, Hawes J, denHollander N, Tinckam K, Keshavjee S: Passenger lymphocyte syndrome with or without immune hemolytic anemia in all Rh-positive recipients of lungs from rhesus alloimmunized donors: Three new cases and a review of the literature. *Transfusion Medicine Reviews*: April 2009; 23(2): pp 134-145.

Cypel M, Yeung JC, Hirayama S, Rubacha M, Fischer S, Anraku M, Sato M, Harwood S, Pierre A, Waddell TK, de Perrot M, Liu M, Keshavjee S: Technique for prolonged normothermic ex vivo lung perfusion. *The Journal of Heart and Lung Transplantation*: December 2008; 27(12): pp 1319-1325.

Dahele M, Hwang D, Peressotti C, Sun L, Kusano M, Okhai S, Darling G, Yaffe M: Developing a methodology for three-dimensional correlation of PET-CT images and whole-mount histopathology in non-small-cell lung cancer. *Current Oncology*: August 2008; 15(5): pp 62.

Darling G: Malignant tumors of the esophagus. In: *Surgery: Basic Science and Clinical Evidence, 2nd Edition*: (Norton JA, Smith D, eds.) Springer, New York: 2008: pp 827.

Darling G: The role of lymphadenectomy in esophageal cancer. *Journal of Surgical Oncology*: March 2009; 99(4): pp 189-193.

Darling G, Nenshi R, Schultz S, Gunraj N, Wilton A, Simunovic M, Urbach D: Surgery for lung cancer. In: *Cancer Surgery in Ontario*: (Urbach D, Simunovic M, Schultz S, eds.) ICES Atlas: Institute for Clinical Evaluative Sciences, Toronto: 2008: pp 97-126.

Darling GE: Chapter 42: Bacterial infections of the lung. In: *Thoracic Surgery, 3rd Edition*: (Patterson GA, Cooper JD, Deslauriers J, Lerut A, Luketich JD, Rice TW, eds.) Elsevier, Philadelphia: 2008: pp 478.

de Perrot M: Tracheal sleeve pneumonectomy. In: *General Thoracic Surgery, 7th Edition*: (Shields TW, LoCicero J, Reed CE, Feins RH, eds.) Lippincott Williams & Wilkins, Philadelphia: 2009: pp 471-478.

de Perrot M, Feld R, Cho J, Bezjak A, Anraku M, Burkes R, Roberts H, Tsao MS, Leighl N, Keshavjee S, Johnston MR: Tri-modality therapy with induction chemotherapy followed by extrapleural pneumonectomy and adjuvant high-dose hemithoracic radiation for malignant pleural mesothelioma: The Toronto experience. *Journal of Clinical Oncology*: March 2009; 27(9): pp 1413-1418.

- Ferri L, Keshavjee S:** Reconstruction after pharyngolaryngectomy. In: Pearson's Thoracic and Esophageal Surgery, 3rd Edition: (Patterson GA, Cooper JD, Deslauriers J, Lerut AE, Luketich JD, Rice TW, eds.) Churchill Livingstone Elsevier, New York: 2008: pp 643-649.
- Fung SF, Yang H, Bhola PT, Sadatmousavi P, Muzar E, Liu M, Chen P:** Self-assembling peptide as a potential carrier for hydrophobic anticancer drug ellipticine: Complexation and release. *Advanced Functional Material*: February 2009: 19(1): pp 74-83.
- Greenwald AG, Jin R, Waddell TK:** Galectin-3-mediated xenoactivation of human monocytes. *Transplantation*: January 2009: 87(1): pp 44-51.
- Herth FJF, Annema JT, Eberhardt R, Yasufuku K, Ernst A, Krasnik M, Rintoul RC:** Endobronchial ultrasound with transbronchial needle aspiration for restaging the mediastinum in lung cancer. *Journal of Clinical Oncology*: July 2008: 26(2): pp 3346-3350. E-published ahead of print: June 2, 2008.
- Ko M, McRae K, Darling G, Waddell TK, McGlade D, Cheung K, Katz J, Slinger P:** The use of air in the inspired gas mixture during two-lung ventilation delays lung collapse during one-lung ventilation. *Anesthesia & Analgesia*: April 2009: 108(4): pp 1092-1096.
- Ku CM, Slinger P, Waddell TK:** A novel method of treating hypoxemia during one-lung ventilation for thoracoscopic surgery. *Journal of Cardiothoracic and Vascular Anaesthesia*: E-published February 24, 2009.
- Lodyga M, De Falco V, Kapus A, Bai XH, Melillo RM, Santor M, Liu M:** XB130, a tissue-specific adaptor protein that couples RET/PTC oncogenic kinase to PI 3-kinase pathway. *Oncogene*: February 2009: 28(7): pp 937-949. E-published ahead of print: December 8, 2008.
- Menezes RJ, Roberts HC, Paul NS, McGregor M, Chung TB, Patsios D, Weisbrod G, Herman S, Pereira A, McGregor A, Dong Z, Sitartchouk I, Boerner S, Tsao MS, Keshavjee S, Shepherd FA:** Lung cancer screening using low-dose computed tomography in at risk individuals: The Toronto experience. *Lung Cancer*: E-published May 6, 2009.
- Mercier O, Fadel E, de Perrot M, Sage E, Mussot S, Dartevelle P:** Surgical treatment of celiac artery aneurysm associated with median arcuate ligament. *The Journal of Cardiovascular Surgery (Torino)*: June 2009: 50(3): pp 391-394. E-published ahead of print: October 24, 2008.
- Mercier O, Sage E, de Perrot M, Tu L, Marcos E, Decante B, Baudet B, Herve P, Dartevelle P, Eddahibi S, Fadel E:** Regression of flow-induced pulmonary arterial vasculopathy after flow correction in piglets. *Journal of Thoracic and Cardiovascular Surgery*: June 2009: 137(6): pp 1538-1546. E-published ahead of print: February 7, 2009.
- Mohamed S, Yasufuku K, Nakajima T, Hiroshima K, Chiyo M, Yoshida S, Suzuki M, Sekine Y, Shibuya K, Agamy G, El-Shahhat H, Fujisawa T, Yoshino I:** Nuclear surviving in pN2 nonsmall cell lung cancer: Prognostic and clinical implications. *European Respiratory Journal*: January 2009: 33(1): pp 127-133. E-published ahead of print: August 20, 2008.
- Mohamed S, Yasufuku K, Nakajima T, Hiroshima K, Kubo R, Iyoda A, Yoshida S, Suzuki M, Sekine Y, Shibuya K, Farouk A, Fujisawa T:** Analysis of cell cycle-related proteins in mediastinal lymph nodes of N2-NSCLC patients obtained by EBUS-TBNA: Relevance to chemotherapy response. *Thorax*: July 2008: 63(7): pp 642-647.
- Nakajima T, Yasufuku K, Fujiwara T, Chiyo M, Sekine Y, Shibuya K, Hiroshima K, Yoshino I:** Endobronchial ultrasound-guided transbronchial needle aspiration for the diagnosis of intrapulmonary lesions. *Journal of Thoracic Oncology*: September 2008: 3(9): pp 985-988.
- Nakajima T, Yasufuku K, Suzuki M, Fujiwara T, Shibuya K, Takiguchi Y, Hiroshima K, Kimura H, Yoshino I:** Assessment of chemosensitivity-related aberrant methylation of non-small cell lung cancer by EBUS-TBNA. *Journal of Bronchology and Interventional Pulmonology*: January 2009: 16(1): pp 10-14.
- Nakajima T, Yasufuku K, Yoshino I:** Diagnosis of lung neoplasia by endobronchial ultrasound-guided transbronchial needle aspiration-diagnosis of metastasis and therapeutics. *Gan To Kagaku Ryoho. Cancer & Chemotherapy*: August 2008: 35(8): pp 1292-1298.
- Ng YL, Paul N, Patsios D, Walsham A, Chung TB, Keshavjee S, Weisbrod G:** Imaging of lung transplantation: Review. *American Journal of Roentgenology*: March 2009: 193(3Supp): pp S1-S13.
- Roberts HC, Patsios DA, Paul NS, de Perrot M, Teel W, Bayanati H, Shepherd F, Johnston MR:** Screening for malignant pleural mesothelioma and lung cancer in individuals with a history of asbestos exposure. *Journal of Thoracic Oncology*: May 2009: 4(5): pp 620-628.
- Safieddine N, Xu W, Quadri SM, Knox JJ, Hornby J, Sulman J, Wong R, Guindi M, Keshavjee S, Darling G:** Health-related quality of life in esophageal cancer: Effect of neoadjuvant chemoradiotherapy followed by surgical intervention. *The Journal of Thoracic and Cardiovascular Surgery*: January 2009: 137(1): pp 36-42.
- Sato M, Hirayama S, Hwang DM, Lara-Guerra H, Wagnetz D, Waddell TK, Liu M, Keshavjee S:** The role of intrapulmonary de novo lymphoid tissue in obliterative bronchiolitis after lung transplantation. *Journal of Immunology*: June 2009: 182(11): pp 7307-7316.
- Sato M, Hirayama S, Lara-Guerra H, Anraku M, Waddell TK, Liu M, Keshavjee S:** MMP-dependent migration of extrapulmonary myofibroblast progenitors contributing to posttransplant airway fibrosis in the lung. *American Journal of Transplantation*: May 2009: 9(5): pp 1027-1036.
- Sato M, Keshavjee S:** Bronchiolitis obliterans syndrome: Alloimmune-dependent and independent injury with aberrant tissue remodeling. *Seminars in Thoracic and Cardiovascular Surgery*: July 2008: 20(2): pp 173-182.
- Springmeyer SC, Bolliger CT, Waddell TK, Gonzalez X, Wood DE, IBV Valve Pilot Trials Research Teams:** Treatment of heterogeneous emphysema using the spiration IBV valves. *Thoracic Surgery Clinics*: May 2009: 19(2): pp 247-253.

Sun Y, Yang R, Zhong JG, Fang F, Jiang JJ, Liu M, Lu J: Aerosolized surfactant generated by a novel noninvasive apparatus reduced acute lung injury in rats. *Critical Care*: April 2009: 13(2): pp R31. E-published ahead of print: March 4, 2009.

Suzuki M, Mohamed S, Nakajima T, Kubo T, Tian L, Fujiwara T, Suzuki H, Nagato K, Chiyo M, Motohashi S, Yasufuku K, Iyoda A, Yoshida S, Sekine Y, Shibuya K, Hiroshima K, Nakatani Y, Yoshino I, Fujisawa T: Aberrant methylation of CXCL12 in non-small cell lung cancer is associated with an unfavorable prognosis. *International Journal of Oncology*: July 2008: 33(1): pp 113-119.

Tazzeo T, Zhang Y, Keshavjee S, Janssen LJ: Ryanodine receptors decant internal Ca²⁺ store in human and bovine airway smooth muscle. *European Respiratory Journal*: August 2008: 32(2): pp 275-284.

Tochigi T, Yasufuku K, Nakajima T, Fujiwara T, Kubota K, Takahashi Y, Yoshino I: Initial diagnosis of mediastinal lymph node metastases from prostate cancer by endobronchial ultrasound-guided transbronchial needle aspiration. *Journal of Bronchology & Interventional Pulmonology*: January 2009: 16(1): pp 59-60.

Tomaszek S, Wigle DA, Keshavjee S, Fischer S: Thymomas: Review of current clinical practice. *Annals of Thoracic Surgery*: June 2009: 87(6): pp 1973-1980.

Wong AP, Keating A, Lu W, Duchesneau P, Wang X, Sacher A, Hu J, Waddell TK: Identification of a bone marrow-derived epithelial-like population capable of repopulating injured mouse airway epithelium. *The Journal of Clinical Investigation*: February 2009: 119(2): pp 1-14.

Xiao H, Eves R, Yeh C, Kan W, Xu F, Make AS, Liu M: Phorbol ester-induced podosomes in normal human bronchial epithelial cells. *Journal of Cell Physiology*: February 2009: 218(2): pp 366-375. E-published ahead of print: October 17, 2008.

Yasufuku K, Fujisawa T, Mathur P: Endobronchial ultrasound: Indications, advantages, and complications. In: *UpToDate*: (Basow DS, ed.) Waltham, Massachusetts: February 2008.

Yasufuku K, Fujisawa T, Mathur P: Endobronchial ultrasound: Technical aspects. In: *UpToDate*: (Basow DS, ed.) Waltham, Massachusetts. February 2008.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Darling GE: University of Nebraska, 3rd Annual Fall Midwest Thoracic and Gastrointestinal Oncology Conference, Omaha, Nebraska, November 2008. Lecture: Surgical options in the management of advanced stage lung cancer.

de Perrot M: Canadian Association of Cardiopulmonary Technologists, Canadian Cardiovascular Congress, Toronto, ON, October 2008. Pulmonary endarterectomy.

Keshavjee S: International Society of Heart and Lung Transplantation, Paris, France, April 2009. Ex-vivo lung resuscitation: The new frontier in donor management.

Keshavjee S: American Thoracic Society, International Conference, San Diego, California, May 2009. (1) Bilateral lung transplantation is the procedure of choice for patients with COPD OR IPF: PRO, (2) Donor evaluation and management: Expanding the pool yet maximizing function.

Keshavjee S: University of Pennsylvania, Department of Surgery, Philadelphia, Pennsylvania, May 2009. Julian Johnson Distinguished Professor: Ex-vivo repair of organs for transplantation.

Keshavjee S: 8th International Congress on Lung Transplantation, Paris, France, September 2008. (1) Lung transplantation: 25 years later!, (2) Ex-vivo lung repair.

Keshavjee S: American College of Chest Physicians, Philadelphia, Pennsylvania, October 2008. Staging: Endobronchial ultrasonography versus mediastinoscopy - The thoracic surgeon's view.

Keshavjee S: Seoul National University, 2nd Annual Hahn Sang Koo Thoracic Surgical Lecture, Seoul, Korea, November 2008. The future of lung transplantation.

Keshavjee S: The Royal Society of Medicine, London, England, November 2008. (1) Airway surgery: State of the art, (2) Lung transplantation: Current and future practice.

Mingyao L: National Chiao Tung University, College of Life Science, Hsinchu, Taiwan, May 2009. XB130, a novel adaptor protein in signal transduction and tumorigenesis.

Mingyao L: The First Affiliated Hospital of Zhengzhou University, Zhengzhou, Henan, China, October 2008. Critical care and molecular medicine.

Mingyao L: Xinxiang Medical University, Xinxiang, Henan, China, October 2008. (1) Translational medical research: Acute lung injury, (2) Graduate studies at the University of Toronto.

Pierre AF: Canadian Association of Critical Care Nurses, Annual Meeting, Toronto, ON, April 2009. Percutaneous tracheostomy.

Pierre AF: Quebec Transplant and Trillium Gift of Life, Ontario-Quebec Collaborative Transplant Meeting, Quebec, PQ, May 2009. Ex-vivo lung perfusion for transplantation.

Waddell TK: 8th International Congress on Lung Transplantation, Paris, France, September 2008. Prospects for bone-marrow derived cell therapy.

Waddell TK: McGill University, Meakins-Christie Labs Beer Seminar, Montreal, PQ, September 2008. Prospects for cell therapy of the lung.

Yasufuku K: The University of Texas, MD Anderson Cancer Center, Interventional Pulmonology in Cancer Patients Workshop: An Intensive Hands-On Workshop, Houston, Texas, February 2009. (1) Autofluorescence bronchoscopy and narrow band imaging, (2) Hands-on teaching EBUS-TBNA.

Yasufuku K: Lahey Clinic, Interventional Pulmonology, The 26th Year, Burlington, Massachusetts, March 2009. Thoracic Ultrasound for the Pulmonologist, An Introductory Course: (1) Endobronchial ultrasound guided TBNA (EBUS-TBNA scope), (2) Hands-on seminar.

Yasufuku K: The Lung Association, 2009 Canadian Respiratory Conference, Toronto, ON, April 2009. Update on bronchoscopic diagnosis.

Yasufuku K: American Thoracic Society International Conference 2009, San Diego, California, May 2009. (1) Interventional pulmonology with practical demonstration: Something for every pulmonologist - (a) Early lung cancer detection - mucosal imaging, (b) Endoscopic ultrasound transbronchial needle aspiration, (2) ATS clinical workshop 2009: Endobronchial ultrasound - EBUS for non-cancerous disorders, (3) Meet the Professor: Minimally invasive endoscopic staging of lung cancer, (4) ATS clinical topics in pulmonary medicine: (a) Lung cancer clinic - state of the art, (b) Clinical integration of novel molecular markers in lung cancer: Pre-operative evaluation using endoscopic procedures.

Yasufuku K: Kansai Association for Thoracic Surgery, 52nd Annual Meeting, Okayama, Japan, June 2009. (1) Lung transplantation - The Toronto General Hospital experience, (2) Interventional pulmonology for thoracic surgeons, (3) Minimally invasive staging for lung cancer.

Yasufuku K: Okayama University, Department of Thoracic Surgery, Grand Rounds, Okayama, Japan, June 2009. Minimally invasive endoscopic staging of lung cancer.

Yasufuku K: Chonnam National University, Hwasun Lung Cancer Symposium, Jeonnam, South Korea, July 2008. Endobronchial ultrasound - Role in lung cancer staging.

Yasufuku K: American College of Surgeons, 94th Clinical Congress, Symposium on Interventional Pulmonology for the Thoracic Surgeons, San Francisco, California, October 2008. Staging lung cancer: Endobronchial ultrasound.

Yasufuku K: American Association for Bronchology and Interventional Pulmonology, 16th Annual Assembly, Philadelphia, Pennsylvania, October 2008. American College of Chest Physicians (ACCP) Postgraduate Course 2008: Endoscopic staging is the standard of care.

Yasufuku K: European Association for Bronchology and Interventional Pulmonology, Marseilles, France, November 2008. Interventional Bronchoscopy Course 2008: (1) Endobronchial ultrasound "staging lung cancer," (2) Hands-on teaching endobronchial ultrasound guided-transbronchial needle aspiration (EBUS-TBNA), (3) Live demonstration EBUS-TBNA.

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 EGFR positive tumor (RADIANT). *Keshavjee S, Darling G, Waddell T, de Perrot M, Pierre A, Johnston M: OSI Pharmaceuticasl.* (\$200,000 2007 - 2008.)

A phase III randomized trial of lobectomy versus sublobar resection for small (less than or equal to 2 cm) peripheral non-small cell lung cancer (CALGB 140503, NCIC BRC.5). *de Perrot M, Waddell T, Darling G, Keshavjee S, Pierre A: National Cancer Institute of Canada, Clinical Trials Group.* (\$120,000 2008.)

A randomized comparison of laparoscopic myotomy and pneumatic dilatation for achalasia. *Urbach D, Darling G, Diamant N, Kortan P, Tomlinson G, Laporte A, Deitel W: Canadian Institutes of Health Research.* (\$445,410 2005 - 2010.)

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.)

Combination of cyclosporine and type V collagen derived regulatory T cells for induction of tolerance in lung transplantation. *Yoshida S, Yasufuku K, Fujisawa Y, Sekine Y, Suzuki H: Grant-in-Aid for Scientific Research from the Ministry of Education, Culture, Sports, Science and Technology of Japan (No. 19591612).* (\$44,800 2007 - 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&D Clinical Research Chairs: Transplantation.* (\$1,100,000 2008 - 2013.)

Ex-vivo perfusion for lung transplantation. *Keshavjee S: McEwen Centre Commercialization Award.* (\$125,000 2009 - 2010.)

GABAergic regulations of airway epithelium in asthma. *Lu WY, Inman M, Liu M: 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.)

Health-related quality of life in advanced lung disease and lung transplantation. *Singer L: Canadian Institutes of Health Research.* (\$290,000 2006 - 2009.)

Impact of recipient lung gene expression profiles on primary graft dysfunction incidence and survival after lung transplantation for pulmonary fibrosis. *Perrot M, Keshavjee S, Mura M, Anraku M: Multi Organ Transplant Academic Enrichment Fund.* (\$100,000 2009 - 2011.)

Lung transplant proposal. *Keshavjee K, Singer L: Canadian Cystic Fibrosis Foundation, CF Transplant Center Incentive Grant.* (\$60,241 2008.)

Lung transplant proposal. *Keshavjee S, Singer L: Canadian Cystic Fibrosis Foundation, CF Transplant Centre Incentive Grant.* (\$55,598 2009 - 2010.)

Molecular diagnostic strategies for the selection of donor lungs for transplantation. *Keshavjee S: Roche Organ Transplantation Research Foundation (ROTRF).* (\$300,000 2009 - 2012.)

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.)

Research in immune tolerance and transplantation. *Levy G: Canadian Foundation of Innovation.* (\$10,000,000 2004 - 2009.)

Signal cross-talk in acute lung injury. *Liu M: Canadian Institutes of Health Research, Operating Grant, MOP-42546.* (\$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 Institute of Canada (NCIC), Grant No. 01757.* (\$705,000 2006 - 2011.)

The role of bone marrow progenitors in lung regeneration. *Waddell TK: Canadian Institutes of Health Research.* (\$565,000 2008 - 2013.)

The role of galectin-3 in xenograft rejection. *Waddell TK: Heart & Stroke Foundation of Ontario.* (\$275,934 2007 - 2010.)

Tissue remodelling and the immune response in obliterative bronchiolitis after lung transplantation. *Keshavjee S: Canadian Cystic Fibrosis Foundation.* (\$270,000 2009 - 2012.)

Translational and clinical studies in mesothelioma. *de Perrot M, Feld R, Tsao M: Imperial Oil Foundation.* (\$500,000 2009 - 2014.)

Ventilator-induced acute lung injury: From mechano-transduction to molecular therapies. *Liu M, Chen P Han B: Canadian Institutes of Health Research.* (\$789,240 2006 - 2011.)

HONOURS RECEIVED

Keshavjee S: Colin Woolf Award for Excellence in Long-Term Contribution to Continuing Medical Education, University of Toronto. December 2008.

Keshavjee S: Pearson-Ginsberg Chair in Thoracic Surgery, Toronto General Hospital and Toronto Western Hospital Foundation. December 2008.

Yasufuku K: Minister of Health, Labour and Welfare of Japan Award for Persons of Merit in Industry-Academia-Government Collaboration, Kyoto. June 2009.

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	Professor
Dr. M. Robinette	Associate Professor
Dr. J. Trachtenberg	Professor

PUBLICATIONS

Almoussa R, Hassouna M: Electrical stimulation in the treatment of neurogenic bladder dysfunction. *Current Bladder Dysfunction Reports*: December 2008: 3(4): pp 195-202. E-published ahead of print: November 23, 2008.

Atri M, Gertner MR, Haider MA, Weersink RA, Trachtenberg J: Contrast-enhanced ultrasonography for real-time monitoring of interstitial laser thermal therapy in the focal treatment of prostate cancer. *Canadian Urology Association*: April 2009: 3(2): pp 125-130.

Breda A, Finelli A, Janetschek G, Porpiglia F, Montorsi F: Complications of laparoscopic surgery for renal masses: Prevention, management, and comparison with the open experience. *European Urology*: April 2009: 55(4): pp 836-850. E-published ahead of print: January 20, 2009.

Cheng HL, Haider MA, Dill-Macky MJ, Sweet JM, Trachtenberg J, Gertner MR: MRI and contrast-enhanced ultrasound monitoring of prostate microwave focal thermal therapy: An in vivo canine study. *Journal of Magnetic Resonance Imaging*: July 2008: 28(1): pp 136-143.

Davidson SR, Weersink RA, Haider MA, Gertner MR, Bogaards A, Giewercer D, Scherz A, Sherar MD, Elhilali M, Chin JL, Trachtenberg J, Wilson BC: Treatment planning and dose analysis for interstitial photodynamic therapy of prostate cancer. *Physics in Medicine and Biology*: April 2009: 54(8): pp 2293-2313. E-published ahead of print: March 20, 2009.

Dinniwel R, Chan P, Czarnota G, Haider MA, Jhaveri K, Jewett M, Fyles A, Jaffray D, Milosevic M: Pelvic lymph node topography for radiotherapy treatment planning from ferumoxtran-10 contrast-enhanced magnetic resonance imaging. *International Journal of Radiation Oncology, Biology, Physics*: December 2008: 74(3): pp 844-851.

Evans AJ, Henry PC, Van der Kwast TH, Tkachuk DC, Watson K, Lockwood GA, Fleshner NE, Cheung C, Belanger EC, Amin MB, Boccon-Gibod L, Bostwick DG, Egevad L, Epstein JI, Grignon DJ, Jones EC, Montironi R, Moussa M, Sweet JM, Trpkov K, Wheeler TM, Srigley JR: Interobserver variability between expert urologic pathologists for extraprostatic extension and surgical margin status in radical prostatectomy specimens. *The American Journal of Surgical Pathology*: October 2008: 32(10): pp 1503-1512.

Finelli A, Pace KT, Sharir S, Schultz SE, Gunraj N, Wilton AS, Przybysz R, Simunovic M, Urbach DR: Surgery for prostate cancer. In: *The ICES Atlas on Cancer Surgery in Ontario* (Urbach D, Simunovic M, Schultz S, eds.): Institute of Clinical Evaluative Sciences (ICES), Toronto: 2008: pp 29-52.

Fleshner N, Lawrentschuk N: Risk of developing prostate cancer in the future: Overview of prognostic biomarkers. *Urology*: May 2009: 73(5 Suppl): pp S21-S27.

Fradet Y, Klotz L, Trachtenberg J, Zlotta A: The burden of prostate cancer in Canada. *Canadian Urological Association Journal*: June 2009: 3(3Suppl2): pp S92-S100.

Goldenberg L, So A, Fleshner N, Rendon R, Drachenberg D, Elhilali M: The role of 5-alpha reductase inhibitors in prostate pathophysiology: Is there an additional advantage to inhibition of type 1 isoenzyme? *Journal of the Canadian Urological Association Journal*: June 2009: 3(Suppl 2): pp S109-S114.

Hassouna M, Elmayergi N, Abdelhady M: Pathophysiology of spinal shock. In: *Textbook of the Neurogenic Bladder*: (Corcos J, Schick E, eds.) Informa Healthcare, London, United Kingdom: 2008: pp 212-226.

Klotz L, Drachenberg D, Fradet Y, Saad F, Trachtenberg J, Zlotta A: Gleason grading controversies: What the chemoprevention trials have taught us. *Canadian Urological Association Journal*: June 2009: 3(3Suppl2): pp S115-S120.

Kotsopoulos J, Shen H, Rao AV, Poll A, Ainsworth P, Fleshner N, Narod SA: A BRCA1 mutation is not associated with increased indicators of oxidative stress. *Clinical Breast Cancer*: December 2008: 8(6): pp 506-510.

Kron K, Pethe V, Briollais L, Sadikovic B, Ozelik H, Sunderji A, Venkateswaran V, Pinthus J, Fleshner N, van der Kwast T, Bapat B: Discovery of novel hypermethylated genes in prostate cancer using genomic CpG island microarrays. *Public Library of Science One*: March 2009: 4(3): pp e4830.

Kulkarni GS, Finelli A, Lockwood G, Saravanan A, Evans A, Jewett MA, Trachtenberg J, Robinette M, Fleshner NE: Effect of healthcare provider characteristics on nodal yield at radical cystectomy. *Urology*: July 2008: 72(1): pp 128-132. E-published ahead of print: May 2, 2008.

Kulkarni GS, Laupacis A, Urbach DR, Fleshner NE, Austin PC: Varied definitions of hospital volume did not alter the conclusions of volume-outcome analyses. *Journal of Clinical Epidemiology*: April 2009; 62(4): pp 400-407. E-published ahead of print: November 14, 2008.

Lawrentschuk N, Fleshner N: Severe irritant contact dermatitis causing skin ulceration secondary to a testosterone patch. *Scientific World Journal*: May 2009; 20(9): pp 333-338.

Lawrentschuk N, Fleshner N, Lindner U: Current textbooks and anatomy of the prostate - a case for an update. *British Journal of Urology International*: May 2009; 103(10): pp 1319-1322. E-published ahead of print: February 23, 2009.

Lawrentschuk N, Fleshner N: The role of magnetic resonance imaging in targeting prostate cancer in patients with previous negative biopsies and elevated prostate-specific antigen levels. *British Journal of Urology International*: March 2009; 103(6): pp 730-733.

Leveridge MJ, Jewett MA: Which urinary diversion is best after radical cystectomy? The case for "incontinent" diversion. *Canadian Urological Association Journal*: August 2008; 2(4): pp 410-411.

Lu JP, Monardo L, Bryskin I, Hou ZF, Trachtenberg J, Wilson BC, Pinthus JH: Androgens induce oxidative stress and radiation resistance in prostate cancer cells through NADPH oxidase. *Prostate Cancer and Prostatic Diseases*: E-published June 23, 2009.

Musquera M, Fleshner NE, Finelli A, Zlotta AR: The REDUCE trial: Chemoprevention in prostate cancer using a dual 5alpha-reductase inhibitor, dutasteride. *Expert Review of Anticancer Therapy*: July 2008; 8(7): pp 1073-1079.

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 Prostatic Diseases*: September 2008; 11(3): pp 241-246.

Nam RK, Zhang WW, Trachtenberg J, Seth A, Klotz LH, Stanimirovic A, Punnen S, Venkateswaran V, Toi A, Loblaw DA, Sugar L, Siminovitch KA, Narod SA: Utility of incorporating genetic variants for the early detection of prostate cancer. *Clinical Cancer Research*: March 2009; 15(5): pp 1787-1793. E-published ahead of print: February 17, 2009.

Neill MG, Jewett MA: The once and future role of cytoreductive nephrectomy. *Urological Oncology*: July 2008; 26(4): pp 346-352.

Panju AH, Breunis H, Cheung AM, Leach M, Fleshner N, Warde P, Duff-Canning S, Krahn M, Naglie G, Tannock I, Tomlinson G, Alibhai SM: Management of decreased bone mineral density in men starting androgen-deprivation therapy for prostate cancer. *British Journal of Urology International*: March 2009; 103(6): pp 753-757. E-published ahead of print: October 23, 2008.

Satkunasivam R, Appu S, Al-Azab R, Hersey K, Lockwood G, Lipa J, Fleshner N: Recovery of erectile function after unilateral and bilateral cavernous nerve interposition grafting during radical pelvic surgery. *Journal of Urology*: March 2009; 181(3): pp 1258-1263.

Schroder FH, Roobol MJ, Andriole GL, Fleshner N: Defining increased future risk for prostate cancer: Evidence from a population based screening cohort. *The Journal of Urology*: January 2009; 181(1): pp 74.

Sharir S, Fleshner N: Lymph node assessment and lymphadenectomy in bladder cancer. *Journal of Surgical Oncology*: March 2009; 99(4): pp 225-231.

Supiot S, Shubbar S, Fleshner N, Warde P, Hersey K, Wallace K, Cole H, Sweet J, Tsihlias J, Jewett MA, Klotz L, Bristow RG: Phase I trial of pre-operative radiotherapy for prostate cancer: Clinical and translational studies. *Radiotherapy and Oncology*: July 2008; 88(1): pp 53-60. E-published ahead of print: April 16, 2008.

Symes JC, Kurin M, Fleshner N, Medin JA: Fas-mediated killing of primary prostate cancer cells is increased by mitoxantrone and docetaxel. *Molecular Cancer Therapy*: September 2008; 7(9): pp 3018-3028.

van der Kwast TH, Zlotta AR, Fleshner N, Jewett M, Lopez-Beltran A, Montironi R: Thirty-five years of noninvasive bladder carcinoma: A plea for the use of papillary intraurothelial neoplasia as new terminology. *Analytical and Quantitative Cytology and Histology*: December 2008; 30(6): pp 309-315.

Venkateswaran V, Klotz LH, Ramani M, Sugar LM, Jacob LE, Nam RK, Fleshner N: A combination of micronutrients is beneficial in reducing the incidence of prostate cancer and increasing survival in the lady transgenic model. *Cancer Prevention Research*: May 2009; 2(5): pp 473-483.

Volpe A, Mattar K, Finelli A, Kachura JR, Evans AJ, Geddie WR, Jewett MA: Contemporary results of percutaneous biopsy of 100 small renal masses: A single center experience. *The Journal of Urology*: October 2008; 180(6): pp 2333-2337.

Wood C, Srivastava P, Bukowski R, Lacombe L, Gorelov AI, Gorelov S, Mulders P, Zielinski H, Hoos A, Teofilovici F, Isakov L, Flanigan R, Figlin R, Gupta R, Escudier B; for the C-100-12 RCC Study Group: An adjuvant autologous therapeutic vaccine (HSPPC-96; vitespen) versus observation alone for patients at high risk of recurrence after nephrectomy for renal cell carcinoma: A multicentre, open-label, randomised phase III trial. *Lancet*: July 2008; 372(9633): pp 145-154.

Zuniga A, Jewett MAS: Renal tumor natural history: The rationale and role for active surveillance. *Urology Clinics of North America*: November 2008; 35(4): pp 627-634.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Finelli A: The Canadian Kidney Cancer Consortium, 2nd Canadian Kidney Cancer Forum, King City, ON, January 2009. Kidney cancer: Localized.

Finelli A: Society of Urologic Surgeons of Ontario, Toronto, ON, February 2009. Self-audit as a knowledge translation strategy in urologic oncology.

Finelli A: The World Congress on Controversies in Urology (CURy), Lisbon, Portugal, February 2009. Debates: (1) Laparoscopic nephrectomy in difficult situations: Is there a limit?, (2) Open versus laparoscopic versus robotic partial nephrectomy.

Finelli A: Ontario Pharmacists Association, Men's Health Program, Toronto, ON, June 2009. Update on benign prostatic hyperplasia (BPH).

Finelli A: American Brachytherapy Society, Chicago, Illinois, July 2008. Salvage HIFU after radiation failure in prostate cancer.

Finelli A: Colombian Society of Urology, Bogota, Colombia, October 2008. (1) Laparoscopic radical prostatectomy: Technical aspects for preservation of continence and surgical margins, (2) Performed live surgery: Laparoscopic radical prostatectomy, (3) Ureterovesical anastomosis on laparoscopic radical prostatectomy.

Finelli A: American Society of Nephrology, Philadelphia, Pennsylvania, November 2008. Renal neoplasms: What the nephrologist should know.

Jewett MAS: The Prostate Centre at Vancouver General Hospital/The University of British Columbia, University Health Network-Princess Margaret Hospital, Issues and Controversies in Prostate Care (ICPC) 2009, Cancun, Mexico, January 2009. (1) Moderator: What does a provincial agency provide to ensure high standards of care?, (2) Value of the biopsy in renal cell carcinoma.

Jewett MAS: University of Sao Paulo, Faculty of Medicine, Cancer Urologico, Sao Paulo, Brazil, March 2009. Visiting Professor: (1) At the Open Session on Renal Cell Carcinoma: (a) Talk: Update on renal cell carcinoma, (b) Presented during 3 Slides - 3 Minutes - Controversies: Treatment strategy in Von Hippel-Lindau, (2) At the Testicular Cancer session: Presented 3 Slides - 3 Minutes - Controversies: Sarcomatous transformation after chemo: Treatment, (3) Talk at the Conference: The role of PET-CT in urologic cancer, (4) Presented during Bladder Cancer - 3 Slides - 3 Minutes Controversies: Bleeding in inoperable patients: What can be done?

Jewett MAS: American Urological Association, Annual Meeting/Plenary Session, April 2009. Take Home Message: Testic cancer.

Jewett MAS: Duke University and University of Amsterdam, Workshop on Focal Therapy and Imaging in Prostate and Kidney Cancer, Amsterdam, Holland, June 2009. (1) Active monitoring versus active treatment, (2) Assessment of outcomes with focal therapy of small renal tumours, (3) Moderator: Live surgery - cryotherapy kidney cancer.

Jewett MAS: European Germ Cell Cancer Consensus Group (EGCCCG), International Germ Cell Cancer Consensus Meeting, Munich, Germany, August 2008. Participant.

Matthew AG: Us Two!, Brampton, ON, February 2009. Sex, intimacy and prostate cancer.

Matthew AG: Toronto Man-to-Man (Prostate Support Group), Awareness Night, Toronto, ON, September 2008. Couples adaptation to prostate cancer.

Matthew AG: Urology Nurses of Canada, Toronto, ON, October 2008. Prostate cancer survivorship: The psychosocial impact of erectile dysfunction on couples.

Matthew AG: Canadian Cancer Society, Toronto, ON, November 2008. Surviving cancer and living well: Identity, relationships and intimacy.

Matthew AG: Kidney Cancer Canada, Toronto, ON, November 2008. Coping with the emotional side-effects of kidney cancer.

Radomski SB: Wellspring Prostate Cancer Support Group, Toronto, ON, January 2009. Erectile dysfunction and incontinence after prostate cancer treatment.

Radomski SB: West Park Hospital, Medical Staff Association Meeting, Toronto, ON, January 2009. OAB in the elderly.

Radomski SB: Sexual Medicine Society of North America, Annual Meeting, Toronto, ON, October 2008. Moderator: Session on prostate cancer related issues.

Radomski SB: Toronto Man-to-Man Prostate Cancer Support Group, Toronto, ON, November 2008. Incontinence and impotence after prostate cancer treatment.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

2-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.)

A phase III randomized, double-blind, parallel group, placebo controlled, multicentre study to assess the efficacy and safety of the Beta-3 agonist YM178 in subjects with symptoms of overactive bladder. *Radomski SB: Astellas Canada.* (\$106,000 2008 - 2009.)

A phase 2, randomized, double-blind, parallel group, placebo-controlled, multicenter 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, Inc.* (\$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 phase III, randomized, double-blind, placebo controlled trial of PROSCAR in men with initial negative prostate biopsies. *Finelli A, Fleshner N, Jewett M, Radomski SB, Toi A, Trachtenberg J, Zlotta A: Merck Canada.* (\$150,000 2008 - 2010.)

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, Venkateswaren V, Klotz L: Prostate Cancer Research Foundation.* (\$60,000 2008.)

A randomized, double-blind study to assess the safety and efficacy of solifenacin (Vesicare) in comparison to oxybutynin for overactive bladder patients. *Radomski SB: Astellas Pharma Canada Inc.* (\$26,000 2006 - 2008.)

A randomized, double-blind, parallel group active controlled, multicentre 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. A long-term phase III study to assess the safety and efficacy of Beta 3 agonist YM178 after treatment of subjects with OAB symptoms. *Radomski SB: Astellas Canada.* (\$112,000 2008 - 2009.)

A randomized, double-blind, placebo-controlled study to evaluate the efficacy and safety of fesoterodine as an "add-on" therapy in men with persistent overactive bladder symptoms under monotherapy of an alpha-blocker for lower urinary tract symptoms. *Radomski SB: Pfizer Canada.* (\$18,500 2008.)

Application of selective nerve stimulation (SNS) signal in a spinalized rodent overactive bladder (OAB) model to understand the mechanism of sacral neuromodulation. *Hassouna M: Ethicon; Johnson & Johnson.* (\$75,000 2008 - 2009.)

Applying a knowledge transfer intervention to reduce positive surgical margins following radical prostatectomy in Ontario. *Finelli A, Fleshner NE, Sawka C, McLeod R, Evans A, Chin J, Lockwood G, Crossley C: Canadian Urological Association; Canadian Urological Oncology Group, and Abbott Oncology.* (\$15,000 2008 - 2009.)

Assessment of the clinical utility 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.)

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: The Princess Margaret Hospital Foundation.* (\$1,000,000 2000 - 2010.)

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.)

DNA repair inhibition in prostate cancer cells as a means of individualizing cancer therapy. *Bristow R, Trachtenberg J: Prostate Cancer Research Foundation of Canada.* (\$60,000 2008 - 2009.)

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 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.)

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 A, 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.)
- Genomic characterization of clinically distinct pathways of prostate carcinogenesis. *van der Kwast T, Trachtenberg J: Prostate Cancer Research Foundation of Canada.* (\$60,000 2008 - 2010.)
- 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.)
- Identification of novel treatment strategies of obstructive bladder diseases. *Bagli D, Hassouna M, Adam R: Kidney Foundation of Canada.* (\$100,000 2008 - 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 (CUA/CUOG)/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 stage prostate cancer. *Fleshner N, Haider M, Venkateswaran V: Prostate Cancer Research Foundation of Canada.* (\$60,000 2007 - 2008.)
- Mentoring and strength in impoverished young males. *Ritvo P, Katz J, Matthew A, Cappelli M, James C, Dipppo D, Flicker S, Baker J, Brown P, Willms D: Canadian Institutes of Health Research.* (\$98,860 2008 - 2009.)
- Mentoring and strength in young females in the Jane-Finch community of Toronto. *Ritvo P, Katz J, Matthew A, Cappelli M, James C, Dipppo D, Flicker S, Baker J, Brown P, Willms D: Toronto Community Foundation, Growing Active Kids.* (\$100,000 2008 - 2009.)
- Micronutrients and prostate cancer: Prevention to treatment. *Venkateswaran V, Fleshner N, Klotz L, Sugar L, Teahan S: Canadian Institutes for Health Research.* (\$315,176 2006 - 2009.)
- Magnetic resonance (MR) guided robotic assisted surgery of prostate cancer. *Trachtenberg J, Goldenberg A: Health Technology Exchange (HTx).* (\$100,000 2009 - 2010.)
- Magnetic resonance imaging (MRI) guided and tumor-targeted high dose rate (HDR) brachytherapy for recurrent prostate cancer. *Mendard 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, Wilson J, McGillivray C: Ontario Neurotrauma Foundation.* (\$401,204 2007 - 2010.)
- Near infrared (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.)
- Novel radiofrequency ablation technology for treatment of solid tumours. *Sherar M, Jewett M, McCann C: Ontario Institute for Cancer Research Award.* (\$300,000 2009 - 2011.)
- Novel therapeutic strategies for obstructive bladder disease. *Bagli D, Hassouna M: Canadian Institutes of Health Research.* (\$440,000 2008 - 2012.)
- 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 - Basic science studies: Project 3-prostate preclinical. *Hetzel FW, Chen Q, Wilson BC, Trachtenberg J: National Institutes of Health (US), Program Project Grant.* (\$1,000,000 2002 - 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 Inc.* (\$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.)
- Prostate cancer prevention clinic. *Trachtenberg J, Matthew AG, Horsburgh S: The Princess Margaret Hospital Foundation.* (\$1,000,000 2005 - 2011.)
- Randomized study to investigate the efficacy and safety of treatment with dutasteride and tamsulosin once daily for 4 years on the improvement of symptoms and outcome of benign prostatic hyperplasia. *Hassouna MH, 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 for Health Research.* (\$262,730 2006 - 2008.)

Reduction in progression among men on watchful waiting using dutasteride. *Fleshner N (investigator initiated), 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, Tshilias J, Shaw B, Katz J, Weitzman E: Canadian Institutes of Health Research.* (\$120,600 2005 - 2008.)

The SELECT Trial. *Trachtenberg J, Jewett M, Tshilias J: National Cancer Institute (USA), SouthWest Oncology Group (SWOG).* (\$250,000 2000 - 2009.)

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

Hassouna MM: A.W. Bruce Faculty Undergraduate Teaching Award. June 2009.

Jewett MAS: Best of Posters Award, European Urological Association Annual Meeting. March 2009.

Jewett MAS: Best Paper at the 2008 Annual Meeting of the European Urological Association for "Post-chemotherapy retroperitoneal lymph node dissection for testicular germ cell tumours. Is surgery indicated in all and is bilateral template necessary?" (Jewett MAS, senior author). February 2009.

Jewett MAS: Chair, Canadian Kidney Cancer Forum 2009. January 2009.

Jewett MAS: Chair, Steering Committee, Kidney Cancer Research Network of Canada. March 2009.

Jewett MAS: Honorary Membership, American Urological Association for: (1) Diligence and commitment surpassing their greatest expectations, (2) Participation in initial anatomy and surgery for nerve sparing retroperitoneal lymph node dissection (RPLND), (3) Leadership in the management of small renal masses. February 2009.

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. L. Tse	Assistant Professor
Dr. D.L. Wooster	Professor

PUBLICATIONS

Chi L, Masani K, Miyatani M, Thrasher TA, Johnston KW, Mardimae A, Kessler C, Fisher JA, Popovic MR: Cardiovascular response to functional electrical stimulation and dynamic tilt table therapy to improve orthostatic tolerance. *Journal of Electromyography and Kinesiology*: December 2008; 18(6): pp 900-907. E-published ahead of print: October 2, 2008.

Degousee N, Konecny F, Angoulvant D, Fazel S, Stefanski E, Wang X-H, Lindsay TF, Butany J, Jakobsson P-J, Keating A, Li R-K, Rubin BB: La délétion de microsomal prostaglandin E2 synthase-1 (mPGES-1) dans les leucocytes de la moelle osseuse entraîne un remodelage ventriculaire gauche défavorable en post infarctus du myocarde. *Archives of Cardiovascular Diseases*: March 2009; 102(numéro S1): pp 53-54. E-published April 17, 2009.

Johnston KW: Presidential Address: The Society for Vascular Surgery - state of the society 2008. *Journal of Vascular Surgery*: December 2008; 48(6): pp 1613-1619.

Roche-Nagle G, Oreopolous G: Endovascular treatment of a bleeding secondary aorto-enteric fistula in a high risk patient. *American Journal of Emergency Medicine*: March 2009; 27(3): pp 374.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Johnston KW: University of Manitoba, Winnipeg Vascular and Endovascular Symposium, Winnipeg, MB, April 2009. What I learned co-editing the Rutherford text.

Johnston KW: Northwestern University, Chicago, Illinois, December 2008. (1) A tribute to Dr. Robert Rutherford, (2) SVS initiatives and programs.

Lindsay TF: Athersys, Inc, Regenerative Medicine, Peripheral Vascular Disease (PVD) Meeting, Portland, Oregon, January 2009. Attendee.

Lindsay TF: University of Manitoba, Winnipeg Vascular and Endovascular Symposium, Winnipeg, MB, April 2009. Abdominal aortic aneurysm (AAA) screening in Canada.

Lindsay TF: The Royal College of Surgeons of Ireland, The XVIII Waterford Surgical Meeting, Waterford, Ireland, October 2008. EVAR (Endovascular Repair) for ruptured abdominal aortic aneurysm (RAAA): Can it really change outcomes?

Lindsay TF: American College of Surgeons, Manitoba Chapter, Winnipeg, MB, November 2008. Guest Speaker: Science and technology: Can it improve surgical outcomes?

Lindsay TF: Scarborough Family Practitioners Group, General Practitioners Workshop, Markham, ON, November 2008. Diffuse vascular disease and peripheral arterial disease.

Lindsay TF: Cook Australia, Perth, Australia, December 2008. Advanced endovascular repair (EVAR) cases - Toronto General Hospital experience.

Oreopoulos GD: Canadian Association of Nephrology Nurses and Technologies (CANNT), Quebec, PQ, October 2008. Accessing our past, present and future.

Tse L: Le Entretiens Vasculaires du Québec Inc., The Entretiens Vasculaires XXVII, Montreal, PQ, May 2009. Approaches to inadvertent branch coverage during EVAR: Case report and review (prepared and presented by vascular resident, Dr. Heather Cox). Dr. Cox won second place in the CONCOURS PAUL-CARTIER resident competition for this talk.

Wooster DL: American Registry of Diagnostic Medical Sonographers, Boardroom Meeting, Puerto Rico, March 2009.

Wooster DL: University of Manitoba, Department of Surgery, Division of Vascular Surgery, Winnipeg Vascular and Endovascular Meeting, Winnipeg, MB, April 2009. Duplex ultrasound interpretation parameters: What numbers should we use?

Wooster DL: University of Rochester, Department of Surgery, Division of Vascular Surgery, Rochester Vascular Meeting, Rochester, New York, April 2009. (1) Effective electronic presentations, (2) Extended applications of aortic ultrasound, (3) Peripheral vascular disease and abdominal aortic aneurysm screening initiatives, (4) Use of personal practice audits in a vascular practice.

Wooster DL: University of Southern California, Keck School of Medicine, Los Angeles, California, April 2009. (1) Resident Rounds - Discussion: Complications associated with hybrid endovascular grafts, (2) Vascular Grand Rounds: Perspectives on self-assessment in maintenance of certification, (3) Visiting Professor at the Surgical Grand Rounds: Perspectives on self-assessment in surgical practice.

Wooster DL: Alberta Society of Radiologists, Calgary, AB, October 2008. Ultrasound of the abdominal aorta.

Wooster DL: Cleveland Clinic Heart and Vascular Institute, Advances in Vascular Imaging and Diagnosis (AVID), New York, New York, November 2008. (1) Customizing the interpretation and reporting of the ankle brachial index (ABI) based on the referral indication, (2) More on screening for abdominal aortic aneurysm (AAA): One centers experience on why and how to do it.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

Complement activation following ruptured abdominal 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, Moneley D: University of Toronto, Faculty of Medicine, Office of Continuing Education.* (\$5,000 2007 - 2008.)

Role of microsomal prostaglandin E2 synthase in ventricular remodeling after myocardial infarction. *Rubin BB: Canadian Institutes of Health Research.* (\$384 2007 - 2011.)

The Say It Better Project: An online toolkit for excellence in electronic communication. *Wooster D, Dueck A, Wooster E: The Royal College of Physicians and Surgeons of Canada.* (\$5,000 2008 - 2009.)

Vascular education inventory and web portal. *Wooster D, Wooster E, Dueck A: Canadian Society for Vascular Surgery, John L. Provan Award.* (\$5,000 2007 - 2008.)

HONOURS RECEIVED

Tse L: Barbara and Frank Milligan Graduate Fellowship (\$5400). January 2009.

Tse L: National Sciences and Engineering Research Council - Canadian Graduate Scholarship M (NSERC CGS-M) Award (\$17,500). May 2009.

Tse L: Ontario Graduate Scholarship (\$15,000) - Declined offer of award in order to accept NSERC CGS-M. April 2009.

Tse L: University of Toronto Fellowship, Institute of Biomedical Engineering (\$5,000). September 2008.

Wooster DL: Chair, Continuing Professional Education Committee of the American College of Surgeons. October 2008.

Wooster DL: Subject Matter Expert, Physician Vascular Ultrasound (PVI) Interpretation Specialty Group on the American Registry for Diagnostic Medical Sonography (ARDMS) Exam Development Task Force (EDTF). February 2009.

Women's College Hospital

John Semple

Surgeon-in-Chief



Dr. M.H. Brown	Associate Professor
Dr. T. Cil	Assistant Professor
Dr. E.D. Groberv	Assistant Professor
Dr. G.Y. Hiraki	Assistant Professor
Dr. L. Lickley	Professor
Dr. J. Theodoropoulos	Lecturer
Dr. J.L. Semple	Professor

Surgical programs with a focus in Ambulatory Care continue to be a dominant theme in the evolving structure of Women's College Hospital as this institution continues to progress as an Academic Ambulatory Surgical Centre that is fully integrated with the hospital's primary ambulatory strategic plan and current services. Women's College Hospital is a designated facility for ambulatory surgery in the Toronto Central LHIN. Women's College is developing 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 cancers common in women including Breast Cancer/Breast Reconstruction and Thyroid Cancer. Women's College continues to develop

a focus in orthopaedic sports medicine and building surgical strength in Urology, Orthopedics, Plastic Surgery and General Surgery.

NEW STAFF

Dr. Tulin Cil came on staff in July 2008 in General Surgery with a focus on Breast Oncology. Dr Cil's appointment is in partnership with UHN with activities at MSH and PMH. Dr. Cil has a master's degree in education and will carry out her research in the Wilson Centre for Research in Education at UHN. Terri Stuart-McEwan has been recruited as the Clinical Director of Surgical Program. Terri has been instrumental in aligning our



surgical wait times and integration of our surgical oncology programs with Cancer Care Ontario. Women's College will continue to actively recruit in surgical areas that are central to key programs.

APPOINTMENTS AND ACTIVITIES

The Department of Surgery at WCH has been awarded a Canadian Breast Cancer Foundation (Ontario Chapter) Chair in Breast Cancer Surgical Research. A search process is underway which we hope will attract the highest possible candidates for this exciting initiative. Overall, for a new Department of Surgery (3 years old) of which the majority of members still qualify as new recruits, we have had an excellent output in grant capture (9), manuscripts published (19) and invited lectures (17). Other activity highlights include Dr. Mitch Brown and Dr. John Semple who co-Chaired the 9th Annual Toronto Breast Surgery Symposium held this past April. Women's College Hospital continues to host international candidates under the new Allergan Breast Reconstruction clinical fellowship. The Dept of Surgery was successful in two Women's College Hospital Alternate Funding Plan, Innovation Funding Competition titled "Creating a coordinated and integrated approach to thyroid cancer assessment: Semple JL, Kelly C, Stuart-McEwan T - "Diagnosis & Treatment, A Rapid Diagnostic Assessment Centre" (\$30,000) and "Improving breast cancer care with a rapid diagnostic clinic." Heisey R, Semple J, Cil T, Lord B, McCready D: (\$30,000 2009.)

Research in lymphedema continues to progress. Graduate Student, Amy Baker, co-supervised by Dr. Semple with Dr. Miles Johnston at the Sunnybrook Research Centre, won a prize for research awards at the 8th Annual Graduate Student Research Day, Women's College Research Institute on May 7, 2009 for the paper presentation "Experimental Assessment of Autologous Lymph Node Transplantation and Lymphangiogenic Growth Factor Therapy as Treatments for Post-Surgical Lymphedema."

In April 2009 we moved into our new Department of Ambulatory Surgery which is a newly renovated area on the 2nd floor of the hospital and provides surgical clinic area with 8 exam rooms and 2 state-of-the art minor procedure rooms. It also provides offices and administrative space for core and affiliate surgeons. This space will house much of the core surgical activities and programs of the Department of Ambulatory Surgery. Planning for a new WCH building is well underway with "shovel in the ground" expected for phase I to be in 2010. The WCH Department of Surgery looks forward to further exciting developments in recruitment and development in ambulatory surgical programs and continue to work towards innovative and quality initiatives.

Division of General Surgery

Dr. T. Cil Assistant Professor
Dr. G.Y. Hiraki Assistant Professor
Dr. L. Lickley Professor

PUBLICATIONS

Axelrod DE, Miller NA, Lickley L, Qian J, Christens-Barry WA, Yuan Y, Fu Y, Chapman J-AW: Effect of quantitative nuclear image features on recurrence of ductal carcinoma in situ (DCIS) of the breast. *Cancer Informatics* 2008; September 2008; 6: pp 99- 109.

Cil T, Kahn H, Gardner S, Melnick W, Flynn C, Holloway C: Factors affecting axillary lymph node retrieval and assessment in breast cancer patients. *Annals of Surgical Oncology*; September 2008; 15(12): pp 3361-3368.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

Breast Cancer Prevention Trials. *Lickley L, Messner S, Lenkov P: National Cancer Institute of Canada-Clinical Trials Group (NCIC-CTG) - (\$36,900) and National Surgical Adjuvant Breast and Bowel (NSABP) Project (\$60,012.60) given to Women's College Hospital (centre for NSABP). (\$96,912.00 2008 - 2009.)*

Improving breast cancer care with a rapid diagnostic clinic. *Heisey R, Semple J, Cil T, Lord B, McCreedy D: Women's College Hospital, Alternate Funding Plan, Innovation Funding Competition. (\$30,000 2009.)*

Teaching the sensitive physical exam: An evaluation of student learning and retention. *Cil T, Wright F, Woods N: Centre for Faculty Development at St. Michael's Hospital, Education Development Fund. (\$12,300 2008.)*

Division of Orthopaedic Surgery

Dr. J. Theodoropoulos Lecturer

Division of Plastic Surgery

Dr. M.H. Brown Associate Professor
Dr. J.L. Semple Professor

PUBLICATIONS

Eckhaus AA, Fish JS, Skarja G, Semple JL, Sefton MV: A preliminary study of the effect of poly (methacrylic acid-co-methyl methacrylate) beads on angiogenesis in rodent skin grafts and the quality of the panniculus carnosus. *Plastic and Reconstructive Surgery*: November 2008; 122(5): pp 1361-1370.

Firth PG, Zheng H, Windsor JS, Sutherland AI, Imray CH, Moore GWK, Semple JL, Roach RC, Salisbury RA: Mortality on Mount Everest, 1921-2006; descriptive study. *BMJ (Clinical Research Edition)*: December 2008; 337: pp a2654.

Panchapakesan V, Brown MH: Management of tuberous breast deformity with anatomic cohesive silicone gel breast implants. *Aesthetic Plastic Surgery*: January 2009; 33(1): pp 49-53. E-published ahead of print: August 28, 2008.

Semple JL, Moore GWK: First observations of surface ozone concentration from the summit region of Mount Everest. *Geophysical Research Letters*: October 2008; 35: pp L20818.

Semple JL, Moore GWK: Long-term ozone exposure and mortality. *The New England Journal of Medicine*: March 2009; 360(11): pp 1085-1095.

Snell L, Baxter N, Semple JL: A survey of attitudes of Ontario plastic surgeons leading up to the return of silicone implants. *Plastic and Reconstructive Surgery*: November 2008; 122(5): pp 148e-149e.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Brown MH: Southeastern Society of Plastic and Reconstructive Surgeons/Northside Hospital/American Society of Plastic Surgeons, Atlanta Breast Surgery Symposium, Atlanta, Georgia, January 2009. (1) Texture versus smooth surface implants: Trends and rationales, (2) Vertical scar mastopexy with autoaugmentation of the upper pole, (3) Panel of Experts Member : Problem cases in breast surgery.

Brown MH: Canadian Society of Plastic Surgeons, Canadian Senior Resident Review Course, Ottawa, ON, March 2009. Breast and body contouring.

Brown MH: Allergan Academy, Las Vegas, Nevada, May 2009. Management of breast implant malposition.

Brown MH: American Society of Plastic Surgical Nurses, Annual Meeting, Las Vegas, Nevada, May 2009. Combination therapy in aesthetic surgery.

Brown MH: Canadian Society of Aesthetic Plastic Surgery, Montreal, Quebec, September 2008. Faculty.

Brown MH: Allergan, Chicago, Illinois, October 2008. Faculty Member of Allergan Academy: (1) Masters panel on implant malposition, (2) Clinical application of core principles in breast implant surgery.

Brown MH: Allergan - Latin America, Brasilia, Brazil, November 2008. Shaped gel implants in aesthetic and reconstructive breast surgery.

Brown MH: Brazilian Society of Plastic Surgery, Brasilia, Brazil, November 2008. (1) Breast implant selection, (2) Shaped gel implants in breast augmentation and tuberous breast deformity.

Brown MH: National Capital Society of Plastic Surgery, Ottawa, ON, November 2008. (1) Alloderm assisted breast reconstruction, (2) Shaped gel implants in aesthetic and reconstructive breast surgery, (3) Texture versus smooth surface gel implants.

Brown MH: Plastic Surgery Education Foundation, Breast and Body Contouring Symposium, Chicago, Illinois, November 2008. Textured gel implants in breast surgery.

Brown MH: Allergan, Chicago, Illinois, December 2008. Texture implant advisory meeting.

Semple JL: Canadian Standards Association, Toronto, ON, March 2009. Smoke plume safety issues.

Sample JL: Harvard School of Public Health, Epidemiology, Exposure and Risk (EER) Program, Boston, Massachusetts, April 2009. Ozone on Mount Everest: Atmospheric and population exposure issues.

Sample JL: Allergan, Medical Advisory Meeting, Chicago, Illinois, December 2008. Design factors in naturally derived scaffolds.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

Acellular dermal matrix in one-stage breast reconstruction: A randomized controlled trial (RCT). *Brown MH, Beber B: American Society of Plastic Surgeons/Plastic Surgery Educational Fund (ASPS/PSEF) National Endowment Fund. (\$50,000 2009 - 2010.)*

Advanced Regenerative Tissue Engineering Centre (ARTEC). The ARTEC program is based at Sunnybrook Health Sciences Centre (SHSC) in partnership with University of Toronto and APOTEC Research Inc., Rimon Therapeutics, Elastin Specialties and matRegen. Multiple projects and principal investigators (PIs) from Engineering, Basic Science and Surgery receive funding. Funds also support new laboratory space at the Sunnybrook site, new hires and network development. *Sample JL, Woodhouse K, Sefton M, Shoichet M, Dumont D, Midha R, Fish J: Ontario Research Development Challenge Fund (ORDCF). (\$12,568,500 2003 - 2008.)*

Investigation of lymph node transplantation as therapy for breast cancer related lymphedema. *Johnston M, Dumont M, Shoichet M, Sample JL: Canadian Breast Cancer Foundation. (\$440,996 2007 - 2010.)*

Division of Urology

Dr. E.D. Grober Assistant Professor

PUBLICATIONS

Bacal V, Rumohr J, Sturm R, Lipshultz LI, Grober ED: Correlation of degree of penile curvature between patient estimates and objective measures among men with Peyronie's disease. *Journal of Sexual Medicine*: March 2009: 6(3): pp 862-865.

Grober ED: A technical issue with CanMEDS. *Canadian Urological Association Journal*: October 2008: 2(5): pp 497.

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: 2009.

Grober ED, Lamb DJ, Khera M, Murthy L, Lipshultz LI: Correlation of simultaneous PSA and serum testosterone levels among hypogonadal men receiving testosterone replacement therapy and untreated eugonadal men. *International Journal of Impotence Research*: November 2008: 20(6): pp 561-565.

Jarvi KA, Grober ED, Patry G, Lo K: Mini-incision microsurgical vasectomy reversal using no-scalpel vasectomy principles and instruments. *Urology*: October 2008: 72(4): pp 913-915.

Khera M, Grober ED, Fishman IJ: Erectile dysfunction. In: *Urology and the Primary Care Practitioner*: (Lipshultz LI, ed.) Mosby-Wolfe, Philadelphia: 2009.

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: 2009.

Khera M, Grober ED, Najari B, Mohammed O, Colon J, Lamb DJ, Lipshultz LI: Testosterone replacement following radical prostatectomy. *Journal of Sexual Medicine*: April 2009: 6(4): pp 1165-1170. E-published ahead of print: January 22, 2009.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Grober ED: Solvay Pharma/Primary Care Physicians of the Greater Toronto Area, Toronto, ON, February 2009. Testosterone replacement therapy: An emerging link between metabolic syndrome and type 2 diabetes.

Grober ED: Canadian Fertility and Andrology Society, Calgary, AB, November 2008. The symptomatic hypogonadal male: Strategies for preserving fertility.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

Canadian Urological Association scholarship. *Grober E, Jewett MAS: Canadian Urological Association Scholarship Foundation.* (\$40,000 2008 - 2009.)

Male reproductive and sexual medicine digital video atlas. *Grober ED, Jarvi KA: Lilly Canada.* (\$10,000 2008.)

HONOURS RECEIVED

Grober ED: Lilly Canada Research Grant. July 2008.

Division of Anatomy

Michael J. Wiley

Chair



Dr. A. Agur	Professor
Dr. B. Ballyk	Senior Lecturer
Dr. S. Karimi-Abdolrezaee	Assistant Professor
Dr. P. Koeberle	Assistant Professor
Dr. C.M. Morshead	Associate Professor
Dr. J.A. Saint-Cyr	Professor
Dr. I.M. Taylor	Professor
Dr. M.J. Wiley	Professor (Division Head)

PUBLICATION

Coles-Takabe B, Brain I, Purpura K, Karpowicz P, Zandstra P, Morshead C, van der Kooy D: Don't look: Growing clonal versus non-clonal neural stem cell colonies. *Stem Cells*: October 2008: 26(11): pp 2938-2944.

Fung L, Wong B, Ravichandiran K, Rindlisbacher T, Agur A, ElMaraghy A: Three dimensional study of pectoralis major muscle and tendon architecture. *Clinical Anatomy*: May 2009: 22: pp 500-508.

Khan A, Sándor G, Dore E, Morrison A, Alshahli M, Amin F, Peters E, Hanley D, Chaudry S, Lentle B, Dempster D, Glorieux F, Neville A, Talwar R, Clokie C, Mardini M, Paul T, Khosla S, Josse R, Sutherland S, Lam D, Carmichael R, Blanas N, Kendler D, Petak S, Ste-Marie L, Brown J, Evans A, Rios L, Compston J: Bisphosphonate related osteonecrosis of the jaw. *Journal of Rheumatology*: March 2009: 36(3): pp 478-490.

Khan A, Sándor G, Dore E, Morrison A, Alshahli M, Amin F, Peters E, Hanley D, Chaudry S, Lentle B, Dempster D, Glorieux F, Neville A, Talwar R, Clokie C, Mardini M, Paul T, Khosla S, Josse R, Sutherland S, Lam D, Carmichael R, Blanas N, Kendler D, Petak S, Ste-Marie L, Brown J, Evans A, Rios L, Compston J: Canadian consensus practice guidelines for bisphosphonate osteonecrosis of the jaw. *Journal of Rheumatology*: July 2008: 35(7): pp 1391-1397.

McClatchie L, Laprade J, Martin S, Jaglal S, Richardson D, Agur A: Mobilizations of asymptomatic cervical spine can reduce signs of shoulder dysfunction in adults. *Manual Therapy*: August 2009: 14: pp 369-374.

Nomura H, Baradie B, Katayama Y, Morshead C, Shoichet M, Tator C: Delayed implantation of intra-medullary chitosan channels containing nerve grafts promotes extensive axonal regeneration after spinal cord injury. *Neurosurgery*: July 2008: 63: pp 127-141.

Nomura H, Zahir T, Kim H, Katayama Y, Kulbatski I, Morshead C, Shoichet M, Tator C: Extramedullary chitosan channels promote survival of transplanted neural stem and progenitor cells and create a tissue bridge after complete spinal cord transection. *Tissue Engineering Part A*: May 2008: 14: pp 649-665.

Sachewsky N, Morshead C: Adult stem cells and their role in endogenous tissue repair. In: *Emerging Technology Platforms for Stem Cells* (Lakshmi U, Chesnut J, Thyagarajan B, eds.): March 2009: John Wiley & Sons: Hoboken, New Jersey: pp 89-110.

Talwar R, Chenaly D: Information and computer technology in oral and maxillofacial surgery. *Oral and Maxillofacial Surgical Clinics in North America*: February 2008: 20(1) pp 79-89.

Tropepe V, Alton K, Sachewsky N, Cheng V, Kuo C, Morshead C: Embryonic mesoderm derived stem cells with neurogenic potential can be isolated from somites and heart. *Stem Cells and Development*: E-published ahead of print: March 27, 2009.

Wasserman J, Koeberle P: Development and characterization of a rodent model of thalamic syndrome: Central post-stroke pain. *Neuroscience*: June 2009: 161(1): pp173-183.

Wells P, McCallum G, Chen C, Henderson J, Lee C, Perstin J, Preston T, Wiley M, Wong A: Oxidative stress in developmental origins of disease: Teratogenesis, neurodevelopmental deficits, and cancer. *Toxicological Science*: March 2009: 108(1): pp 4-18.

Zahir T, Nomura H, XiaoDong G, Kim H, Tator C, Morshead C, Shoichet M: Bioengineering neural stem/progenitor cell-coated tubes for spinal cord injury repair. *Cell Transplantation*: November 2008:17(3): pp 245-254.

INVITED VISITS

Karimi S: Spinefest, Visiting Professorship, Toronto, ON, June 2009. MR Imaging of neural stem cell-based remyelination of the injured spinal cord.

Karimi S: Association for Osteosynthesis (AO) Spine North America Forum, Banff, AB, April 2009. Repair of chronic spinal cord injury: Impact of a combinatorial strategy using neural precursor cells, growth factor delivery and inhibition of glial scar.

Karimi S: University of Manitoba, Winnipeg, MB, February 2009. Adult neural stem cells for functional repair of the central nervous system.

Karimi S: Shiraz University, Shiraz, Iran, January 2009. Functional repair and plasticity of injured spinal cord.

Karimi S: Third National Spinal Cord Injury Symposium, Toronto, ON, November 2008. Update on pharmacological, bio-engineered and cellular therapies for spinal cord injuries.

Karimi S: North American Spine Society (NASS), 23rd Annual Meeting, Toronto, ON, October 2008. New developments in late stage preclinical research and clinical trials.

Morshead C: Learning Unlimited, Toronto, ON, December 2008. Public Lecture: Stem cells in biomedical research: An introduction.

Morshead C: North American Spine Society (NASS), 23rd Annual Meeting, Toronto, ON, October 2008. Section on spine biologics and research.

Morshead C: Toronto Stem Cell Initiative (TSCI), Stem Cell Rounds, Toronto, ON, October 2008. The stem cell therapeutic niche: Cells versus molecules.

Talwar R: Wellington-Waterloo Dental Society, Waterloo, ON, February 2009. Surgically guided implant surgery.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

Anatomy glove and video. *McKee P, Agur A: Education Development Fund, Faculty of Medicine, University of Toronto.* (\$10,000 2008 - 2009.)

Approaches to induce repair mechanisms mediated by endogenous neural stem/progenitor cells after spinal cord injury. *Karimi S, Fehlings M, Rossignol S: Craig H Neilson Foundation.* (\$240,406 2009 - 2010.)

Approaches to self-repair: Characterizing the endogenous responses of neural stem cells following brain injury. *Morshead C: Premier's Research Excellence Award (PREA).* (\$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 (NSERC/CIHR, CHRP) 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.)

Enveloping anatomy learning system (anatomy glove and video). *McKee P, Agur A: Ontario Research Commercialization Program - Proof of Principal (ORCP-POP) Grant.* (\$10,000 2008 - 2009.)

In vivo monitoring of neural recovery following stem cell therapies to treat stroke. *Stanisz G, Morshead C, Lobough N: Canadian Institutes of Health Research (CIHR).* (\$450,000 2007-2010.)

Long term imaging and cell tracking for stem cell lineage analysis. *Morshead C, Jarvis E: Stem Cell Network - Network of Centres of Excellence (NCE).* (\$380,000 2005 - 2008.)

Mechanisms of central nervous system degeneration after injury: *Koeberle P: Canadian Foundation for Innovation Infrastructure Operating Fund.* (\$35,000 2008 - 2013.)

Mechanisms of neuronal degeneration after traumatic CNS injury or stroke. *Koeberle P: Canadian Foundation for Innovation (Leadership Opportunity Fund)/Ontario Research Fund.* (\$249,000 2007 - 2008.)

Optimizing neural repair and plasticity after chronic spinal cord injury: A combined approach with adult neural precursor cells, inhibition of glial scar and active rehabilitation. *Karimi S, Fehlings M, Rossignol S: Christopher and Dana Reeve Paralysis Foundation.* (\$149,494 2009 - 2011.)

Real time RT-PCR for advanced tissue engineering. *Shoichet M, Morshead C, Radisic M: National Sciences and Engineering Research Council - Research tools and Instruments.* (\$112,000 2008 - 2010.)

Regenerative medicine strategies for spinal cord injury repair: Integration of stem cell biology, nanotechnology, bioengineering approaches and neurosurgical application. *Fehlings M, Morshead C, Van der Kooy D, Tator C: Canadian Institutes of Health Research (CIHR) - New Emerging Teams Grant.* (\$1,500,000 2004 - 2007.)

Regulating adult neural stem cells using in vivo and in vitro manipulation. *Morshead C: Canadian Institutes of Health Research (CIHR).* (\$330,000 2005 - 2008.)

Stem cells to treat stroke: *Morshead C, Kolb B, Weiss S, Miller F, Corbett D: Canadian Institutes of Health Research (CIHR) - Network for Centres of Excellence - Stem Cell Network.* (\$595,000 2005 - 2008.)

Stem cells to treat stroke. *Weiss S, Morshead C, Kolb B, Miller F, Corbett D: Canadian Institutes of Health Research (CIHR) - Network for Centres of Excellence - Canadian Stroke Network.* (\$985,000 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 & 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 (CIHR).* (\$257,217 2008 - 2011)

Translating the promise of cellular-based strategies for repair of spinal cord injury. *Karimi S, Fehlings M: AO Spine North America.* (\$60,000 2007 - 2009.)

Using bone marrow transplantation for analysis of gene function in disease. *Gommerman J, Morshead C, Vogel W: Canadian Foundation for Innovation - Leadership Opportunity Fund.* (\$220,000 2007 - 2009.)

VEGF zinc finger transcription factor therapy for stroke. *Koeberle P, Fehlings M: Sangamo Pharmaceuticals Research and Development Grant.* (\$190,000 2008 - 2010.)

HONOURS AND AWARDS

Agur A: Occupational Therapy Alumni Achievement Award. June 2009

Agur A: Recognition Award for Excellence in Teaching and Mentoring Physical Therapy Students. June 2009

Agur A: President-Elect of the American Association of Clinical Anatomists. May 2009

Taylor I: Dr. E. Mary Hollington Award. May 2009.

Wiley M: Harry Whittaker Memorial Award, Faculty of Medicine. May 2009.

Research In Education

Dr. G. Regehr Professor
Dr. H. Carnahan Professor
Dr. R. Sonnadara Assistant Professor

PUBLICATIONS

Baghdady M, Pharoh M, Regehr G, Lam E, Woods NN: The role of basic sciences in diagnostic oral radiology. *Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology and Endodontics*: April 2009: 107(4): pe27.

Brydges R, Carnahan H, Safir O, Dubrowski A: How effective is self-guided learning of clinical technical skills? It's all about process. *Medical Education*: June 2009: 43(6): pp 507-515.

Kennedy TJT, Regehr G, Baker GR, Lingard L: Point-of-care assessment of medical trainee competence for independent clinical work. *Academic Medicine*: October 2008: 83 (10 Suppl): pp S89-S92.

Monneuse OJ, Nathens A, Woods NN, Mauceri J, Canzian S, Xiong W, Ahmed NA: Attitudes about injury among high school students. *Journal of the American College of Surgeons*: 207(2): pp 179-184. E-published ahead of print: April 24, 2008.

Mylopoulos M, Woods NN: Having our cake and eating it too: Seeking the best of both worlds in expertise research. *Medical Education*: 43(5): pp 406-413.

Praamsma M, Carnahan H, Backstein D, Dubrowski A, Gonzalez D, Dubrowski A: Drilling sounds are used by surgeons and intermediate residents, but not novice orthopedic trainees, to guide drilling motions. *Canadian Journal of Surgery*: December 2008: 51(6): pp 442-446.

Regehr G, Mylopoulos M: Maintaining competence in the field: Learning about practice, through practice, in practice. *Journal of Continuing Education in the Health Professions*: December 2008: 28 (SI), pp 19-23.

Safir O, Dubrowski A, Mirsky L, Lin C, Backstein D, Carnahan H: What skills should simulation training in arthroscopy teach residents? *International Journal of Computer Assisted Surgery*: November 2008: 3(5), pp 433-437. E-published ahead of print: July 23, 2008.

Schneider S, Askew CD, Mierau A, Diehl J, Kleinert J, Abel T, Carnahan H, Strüder HK: EEG activity and mood in health orientated runners after different exercise intensities. *Physiology and Behavior*: March 2009: 96(4-5), pp 709-716.

Schneider S, Guardiera S, Abel T, Carnahan H, Strüder HK: Artificial gravity results in changes in frontal lobe activity measured by EEG tomography. *Brain Research*: August 2009: 1285: pp 119-126. E-published ahead of print: June 13, 2009.

Schneider S, Guardiera S, Kleinert J, Steinbacher A, Abel T, Carnahan H, Strüder HK: Centrifugal acceleration to 3Gz is related to increased release of stress hormones and decreased mood in men and women. *Stress*: 2008 11(5): pp 339-347.

Whyte S, Lingard L, Espin S, Baker R, Bohnen J, Orser B, Doran D, Reznick R, Regehr G: Paradoxical effects of interprofessional briefings on OR team performance. *Cognition, Technology and Work*: October 2008: 10(4): pp 287-294.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Regehr G: National Council of State Boards of Nursing, Annual General Meeting, Nashville, Tennessee, August 2008. Plenary Address: Self-assessment, self-direction and self-regulation: Deconstructing the myth of the adult learner.

Regehr G: American Urogynecologic Society, Annual Meeting, Chicago, Illinois, September 2008. Keynote address: Self-assessment, self-direction and self-regulation: Deconstructing the myth of the adult learner.

Regehr G: The Royal College of Physicians and Surgeons of Canada, Resident Education Meeting, Ottawa, ON, September 2008. Editors' Plenary Panel Presentation: Harnessing research to improve education programs.

Regehr G: University of Western Ontario, Medical Education Research Day, London, ON, October 2008. Keynote Address: It's NOT rocket science: Rethinking our metaphors for professions education research.

Regehr G: Behavioral and Social Sciences Teaching in Medical Education, Annual Meeting, Cardiff, United Kingdom, November 2008. Plenary Address: It's Not a rocket science: Rethinking our metaphors for professions education research.

Sonnadara RR: Canadian Fencing Federation/Sport Canada, Special Symposium on Long Term Athlete Development, Ottawa, ON, January 2009. A new model for sport participation.

Sonnadara RR: McMaster University, Hamilton, ON, May 2009. Evaluation and surgical education.

Woods NN: Association of Biochemistry, Course Directors' Annual Meeting, February 2009. Keynote Address: Basic science education and adult learning theory: Two worlds apart.

Woods NN: Meeting of Theory Oriented Researchers, Bayfield, ON, July 2008. Seeking the best of both worlds in expertise research.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

A new approach to the assessment and evaluation of technical skills. *Sonnadara R, MacRae H, Safir O, Satterthwaite L, Tremblay L: Network of Excellence in Simulation for Clinical Teaching and Learning.* (\$49,650 2009 - 2010.)

Causal knowledge and clinical reasoning. *Woods NN: Dean's Fund New Staff Grant.* (\$9,978 2007 - present.)

Documenting and disseminating the daily educational innovations of clerks: A pilot project in surgery. *Woods NN, Mylopoulos M, Regehr G: Education Development Fund for Innovation in Education.* (\$20,000 2007 - 2008.)

Enhancing undergraduate molecular medicine. *Woods NN, Massicotte EM, Kandel R, Backstein DJ: McLaughlin Centre for Molecular Medicine.* (\$8,898 2007 - present.)

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 (co-PI), Cooper M, Gayman K: Cancer Care Ontario.* (\$15,500 2008 - 2009.)

Identifying and classifying error in laparoscopic skills acquisition: Can simulators help? *Okraibnec A, Greco E, Regehr G: The Royal College of Physicians and Surgeons of Canada, Medical Education Research Grant.* (\$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.)

Slowing down when you should: A new model of surgical judgment. *Moulton CA, 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 (HSR).* (\$311,735 2004 - 2009.)

Teaching the sensitive physical exam: An evaluation of student learning and retention. *Woods NN, Cil T, Wright F: Education Development Fund for Innovation in Education.* (\$14,000 2008 - present.)

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 (KTP).* (\$194,939 2005 - 2008)

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. 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. Narold (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. R. Talwar (Dentistry)
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 (Bio-Medical Communications)
Dr. I. Witterick (Otolaryngology)