

Department of Surgery

Annual Report

July 1, 2009 - June 30, 2010

R.S. MCLAUGHLIN PROFESSOR AND CHAIR

Dr. R.K. Reznick (May 24, 2010)

Dr. D.A. Latter (Interim Chair July 1, 2010 to March 31, 2011)

ASSOCIATE CHAIR AND VICE-CHAIRS

Dr. B.R. Taylor	Associate Chair / James Wallace McCutcheon Chair in Surgery
Dr. D.A. Latter	Vice-Chair, Education
Dr. R.R. Richards	Vice-Chair, Clinical
Dr. B. Alman	Vice-Chair, Research / A.J. Latner Professor and Chair of Orthopaedic Surgery

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Dr. J.G. Wright	The Hospital for Sick Children / Robert B. Salter Chair in Surgical Research
Dr. J.S. Wunder	Mount Sinai Hospital / Rubinoff-Gross Chair in Orthopaedic Surgery
Dr. L.C. Smith	St. Joseph's Health Centre
Dr. O.D. Rotstein	St. Michael's Hospital
Dr. R.R. Richards	Sunnybrook Health Sciences Centre
Dr. L. Tate	The Toronto East General Hospital
Dr. B.R. Taylor	University Health Network / James Wallace McCutcheon Chair in Surgery
Dr. J.L. Semple	Women's College Hospital

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Dr. M.J. Wiley	Anatomy
Dr. C. Caldarone	Cardiac Surgery
Dr. A. Smith	General Surgery / Bernard and Ryna Langer Chair
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. 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

David Latter

Interim Chair



In May of 2010, Richard Reznick, our 10th Chair of the Department of Surgery, accepted the position of Dean, Faculty of Health Sciences at Queen's University. As a search for the next Chair began, Dean Whiteside asked if I would accept the role of Interim Chair of this incredible department. I was honoured but also somewhat worried about taking this challenge on. With reassurances from my wife and my cardiac surgery partners, and some strong arm twisting from my fellow surgical colleagues in the Banting offices, I accepted. It is with pride that I write this annual report for this wonderful Department.

First of all, I must thank all of you, the surgeons of our Department, for your support. I am especially grateful to the administrative staff of the Banting for their patience and help, and my fellow executive officers and education leaders for their wise counsel and assistance. I would also like to acknowledge the dedicated work of our University Division Chairs, our Program Directors, our Surgeons-in-Chiefs, and our site chiefs who so effectively manage our clinical programs, our research efforts, and our teaching programs.

In the brief period of time from May to this writing, I have gained a significant appreciation of just how broad and deep the expertise of our faculty truly runs. Each of our divisions is populated with expert surgeons, teachers, and scientists; and all of our divisions effectively deliver expert health care, teach, and advance medical care and science through scientific research. We truly do have world experts in every one of our divisions. Through our clinical training programs and our Surgeon Scientist Program, we are preparing our students to be our successors in these roles.

It is often said that the sheer size of our medical faculty and campuses at the University of Toronto is a strength, but it also has its challenges. Our 250 surgeons and scientists, in eight divisions, spread over ten core teaching hospitals represent the largest surgical faculty in Canada by far. Collegial cooperation in such a large faculty is essential for us to leverage that size distinction to our advantage. I believe we have met that challenge and function more collaboratively and effectively than ever before.

The most important activity the Department can do to ensure its health is to recruit well. With mandatory searches for every recruit, we ensure that each new faculty member brings new strengths and guarantees our future. Into full-time appointments the Department welcomes: Jean François Boileau (General Surgery, Sunnybrook Health Sciences Centre), Gregory Borschel (Plastic & Reconstructive Surgery, The Hospital for Sick Children),

Tessa Gordon (Plastic and Reconstructive Surgery, The Hospital for Sick Children), Jeremy Hall (Orthopaedic Surgery, St. Michael's Hospital), Timothy Jackson (General Surgery, University Health Network), Marc Jeschke (Plastic and Reconstructive Surgery, Sunnybrook Health Sciences Centre), Todd Mainprize (Neurosurgery, Sunnybrook Health Sciences Centre), Fuad Moussa (Cardiac Surgery, Sunnybrook Health Sciences Centre), Lucas Murnaghan (Orthopaedic Surgery, Women's College Hospital, The Hospital for Sick Children, and Mount Sinai Hospital), Graham Roche-Nagle (Vascular Surgery, University Health Network), Marcus Selzner (General Surgery, University Health Network), Fiona Webster (Research, Sunnybrook Health Sciences Centre), and Thomas Willett (Research, Mount Sinai Hospital).

The Department also made a number of part-time and adjunct appointments. We welcome John Dickie (Thoracic Surgery, Toronto East General Hospital), Peter Stotland (General Surgery, North York General Hospital), Pradeep Alexander (Orthopaedic Surgery, William Osler), Thomas Bertoia (Orthopaedic Surgery, Southlake Regional Hospital), Gopal Bhatnagar (Cardiac Surgery, Trillium Health Centre), Peter Dauphinee (General Surgery, Royal Victoria Hospital), Cory Goldberg (Plastic and Reconstructive Surgery, Trillium Health Centre), Norman Hill (General Surgery, Trillium Health Centre), Mariana Kappala (General Surgery, Trillium Health Centre), Ziv Margalit (Plastic and Reconstructive Surgery, Trillium Health Centre), Donald Munnings (General Surgery, Trillium Health Centre), Marc Pope (Vascular Surgery, Trillium Health Centre), Morris Rebot (Plastic and Reconstructive Surgery, Trillium Health Centre), Hartz Schutz (Neurosurgery, Trillium Health Centre), Mark Taylor (General Surgery, Lakeridge Hospital), Michael Weinberg (Plastic and Reconstructive Surgery, Trillium Health Centre), and Joseph Wen (General Surgery, Trillium Health Centre).

Nineteen surgeons were successfully promoted this past academic year. Promoted to Assistant Professor was John Hagen. Promoted to Associate Professor were Najma Ahmed, David Fisher, Stephen Lewis, Eric Massicotte, Andrea McCart, Ian McGilvray, Kenneth Pace, Yaron Shargall, and Michael Taylor. Promoted to Full Professor were Darius Bagli, Magdy Hassouna, John Honey, Nizar Mahomed, Barry McLellan, Vivek Rao, William Tucker, Thomas Waddell, and Terrence Yau.

Over this past academic year, six respected and esteemed colleagues passed away. Sadly, we lost Clare Baker

1922-2010 (cardiac surgeon, St Michael's Hospital), David Hastings 1932-2010 (orthopaedic surgeon, St Michael's Hospital), Robert Jackson 1932-2010 (orthopaedic surgeon, University Health Network), Philip Klotz 1925-2010 (urologist, Mount Sinai Hospital), Robert Salter 1924-2010 (orthopaedic surgeon, The Hospital for Sick Children) and Shafie Fazel 1972-2010 (resident in cardiac surgery, University of Toronto.)

Jim Rutka completed his second term as Chair of the Division of Neurosurgery. In the eleven years that Jim served, the Division of Neurosurgery thrived and solidified its position as one of the premier neurosurgical divisions anywhere in the world. A vigorous search for a new Chair took place and resulted in the appointment of Andres Lozano as the new Chair of the division.

In 2010, Shaf Keshavjee was appointed as the Surgeon-in-Chief of University Health Network. This important position necessitates Shaf's full attention and accordingly Shaf stepped down from his position as Division Chair for Thoracic Surgery. Tom Waddell accepted my request to serve as Interim Chair while the Department conducts a search for the new Chair for the Division of Thoracic Surgery.

I would like to take this opportunity to thank Bryce Taylor for his loyal service for eleven years as Surgeon-in-Chief of University Health Network and also for his roles as Associate Chair of the Department of Surgery and Chair of the Continuing Appointment Review Committee for our Department.

The research activities of the Department will be reported in greater detail by Ben Alman in his Vice-Chair of Research report. In brief, our Department continues to enjoy great success in all areas of research with captured grant monies totalling over 38 million dollars. The highlight of our year was the Surgeon Scientist Program 25th Anniversary Gala held May 6th. The evening was a remarkable acknowledgement and celebration of the hundreds of scientists who have trained under the Surgeon Scientist Program. In attendance during this celebration were former Governor-General of Canada Adrienne Clarkson, CBC journalist/broadcaster Susan Ormiston, the Gordon Murray Lecturer Dr. Joseph Vacanti, Dean Catherine Whiteside, and over 500 hundred surgeons, residents and guests.

During this past year our faculty won many awards both in areas of research and for teaching. The winners of our Departmental educational awards are: Robert Mustard (Bruce Tovee Postgraduate Award), Robert Stewart (Bruce Tovee Undergraduate Award), Richard Holtby (Surgical Skills Laboratory Award), Rashid Jinnah (D.R. Wilson Award), and Osami Honjo (Zane Cohen Clinical Fellowship Achievement Award). Our Departmental research awards went to: Barry Rubin (Lister Prize), Subodh Verma (George-Armstrong Peters Award), Rebecca Gladys (Langer Surgeon Scientist Award), and Richard Reznick (Charles Tator Award).

Faculty of Medicine teaching award winners were: Peter Ferguson, Ron Kodama, and Mike Wiley all won W.T. Aikins Awards. Mike Wiley also won the university's highest teaching

award, the President's Teaching Award. William Kraemer won an Excellence in Post-Graduate Medical Education Award. Subodh Verma and David Backstein were co-winners of the Silver Shovel Chute Award.

There are too many research awards, grants and accomplishments by our faculty to fully list them here. The following examples will give some scope of the nature of their accomplishments: Ben Alman published in *Nature Medicine*, Michael Cusimano was awarded a 5-year CIHR strategic team grant, Michael Fehlings won the prestigious Olivecrona Award, Bernard Goldman and Patrick Gullane were both appointed to the Order of Canada, Andres Lozano was named as a Fellow of the Royal Society of Canada, Richard Reznick won the 2010 Karolinska Institute Prize, Jim Rutka was named the President of the American Association of Neurological Surgeons, Charles Tator received the Canadian Neurosurgical Society's Lifetime Achievement Award, Michael Taylor was a 2010 Royal College of Physicians and Surgeons of Canada Medalist, Subodh Verma was named as a "Top 40 Under 40" recipient, Richard Weisel received the American Association for Thoracic Surgery Scientific Achievement Award, and Hugh Scully was awarded the Canadian Medical Association Medal of Service.

Integrated Medical Education (IME) has developed into one of the major focuses of our Faculty of Medicine with the Mississauga campus for medical students officially opening September 2011. As a result, Trillium Health Centre and Credit Valley Hospital, are poised to become fully integrated medical education campuses over the next few years. There are numerous issues associated with the implementation of such a sudden and large expansion of integrated medical education to our partner community hospitals including remuneration, appointments, evaluations of learners and teachers, etc. The Department of Surgery will play a significant role in this initiative and will continue to ensure the best possible education to all our undergraduate and postgraduate students.

Another issue, which is clearly relevant to our Department, is the development of a University of Toronto policy regarding industry relationships with the University. Surgery has always had a good working relationship with our industry partners leading to innovations and cutting edge surgery. As well, industry support of our various educational and research efforts have been significant over the years. To be sure, conflict of interest does occur and must be managed if we are to remain true to our ideals. Be assured that the Department will work hard to influence the formulation of a policy that is a realistic workable document that manages conflict of interest but also allows appropriate industry support to continue.

Continued medical education has for too long been underappreciated in our educational mandate. With Terry Axelrod assuming the role of Director of CME, we are moving to enhance the Department's presence in this area of education. Increasing not just the quantity but also the quality and scholarship of Departmental CME is being promoted.

Finally, I would like to comment on the significance of the University of Toronto Department of Surgery brand name and our efforts in international surgery. To the outside world we are a leading institution and we should recognize this position of influence and use it for the benefit of others in the world. Clinical fellows from all over the globe come here to be educated and then return to their native lands to better the health of their countrymen, but through our clinical fellows we can only accomplish so much. We ought to do more, especially as the discrepancy between have and have not nations increases. A significant number of our Department faculty are already engaged in international surgery efforts ranging from tele-surgery, to medical missions, to partnerships. I hope that over the coming years the Department can better focus and coordinate its international surgery efforts and develop even more effective, longitudinal projects that have lasting benefits for our international partners.

RESEARCH

Benjamin Alman

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



Our academic footprint is a measure of how we impact academic surgery internationally. It is a measure of the impact of our publications, the number of our trainees who have developed successful academic careers outside of Toronto, and how our work improves the outcome for the patients we treat. We have one of the world's largest academic footprints, and this accomplishment is in no small part due to the establishment of our Surgeon Scientist Program (SSP).

This year marked the 25th anniversary of the SSP, which pioneered a formal training program for residents to participate in graduate level research training. To celebrate the anniversary, we held a special Gallie Day event, **"SHARP MINDS, SKILLED HANDS."** As part of the event, we invited former trainees to return to Toronto to update us on their research and to speak on the impact the SSP had on their lives. The work from our trainees highlighted the impact we are continuing to make in the research realm, and also showed our tremendous future potential, to continue to generate new knowledge at the highest level that will ultimately improve the outcome for the patients we treat. This program, which is the model for research training of clinicians world wide, is responsible for much of our department's academic footprint.

The past several years have seen the development of new technologies and research paradigms that have improved the quality and clinical applicability of our research work. These developments are associated with growth in the size of the biomedical research community and the expense of undertaking high quality research studies. Indeed there has been tremendous growth in the Toronto research community over the past decade. Unfortunately, national research funding has not kept pace with the increased costs associated with undertaking this high quality research. Despite these challenges, we continue to excel at research funding – totalling more than \$38,000,000 this year, which exceeds that of many other Universities in Canada. 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. 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 \$9,000,000 in funding received this past academic year

The Surgeon Scientist Program continues to grow, with over thirty residents participating this year. Over 85% of our Surgeon Scientist Program trainees were successful in receiving full or partial salary support from external granting agencies. For 2009-10, Johnson & Johnson Medical Products provided financial support under the Surgeon Scientist Program to four trainees who were Barbara Haas, Gregory Hawryluk, Simon Yang and Ali Zahrai.

Gallie Day this year was a celebration of the establishment of the Surgeon Scientist Program twenty-five years ago, and the theme was decades of surgical research at the University of Toronto. The day also included a Gordon Murray Lecturer in the person of Dr. Joseph P. Vacanti (Harvard Medical School, Massachusetts General Hospital, Department of Pediatric Surgery, Boston, Massachusetts.) He gave a fascinating lecture entitled, "Tissue Engineering and Regenerative Medicine: From Science to the Surgical Armamentarium."

There were 21 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. Among the SSP alumni presenters were: Peter J. Evans, Paul Fedak, John S. Ikonomidis, Douglas Kondziolka, Joan Lipa, Rajiv Midha, Sheila Singh, Larissa Temple and Dan Theodorescu. We were pleasantly taken back by our surgical leaders who conceptualized and directed the program over the years. They included: Steven Strasberg, Charles Tator and Richard Weisel.

The Gallie Bateman Awards (for Surgeon Scientist Program participants) and the McMurrich 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. Attendance for the day was larger than usual 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 **Douglas J. (DJ) Cook** (Michael Tymianski, supervisor): "Neuroprotection in the gyrencephalic brain: Effectiveness of the PSD-95 inhibitor NA-1 in treating experimental stroke in the cynomolgus macaque", 2nd place to **Mitesh V. Badiwala** (Vivek Rao,

supervisor): "Egfl7 suppresses ICAM-1 expression in response to H/R injury." There was a two-way tie for 3rd place between **Vanessa N. Palter** (Teodor P. Grantcharov, supervisor): "Development of an objective evaluation tool to assess technical skill in laparoscopic colorectal surgery: A Delphi methodology," and **Ali Zahrai** (Valerie Palda, supervisor): "The development of a preliminary preoperative education tool for patients undergoing lumbar microdiscectomy utilizing multiple stakeholder interviews."

McMurrichawardees were tied 1st place: **Francis Si Wai Zih**, Carla O. Rosario, Yosr Haffani, James W. Dennis (Carol J. Swallow, supervisor): "A novel role for the cell cycle regulator polo-like kinase 4 (PLK4) in cell migration and invasion;" **Tatiana K.S. Cypel**, Iona Leong, Cho Pang, Peter Dirks, Christopher R. Forrest: "In vitro assessment of osteoblast behavior in craniosynostosis;" 2nd prize: **Krishna K. Singh** (Subodh Verma, supervisor): "BRCA1 improves endothelial function and limits atherosclerosis;" 3rd prize: **Avi D. Vandersluis**, Natalie A. Venier, Neil E. Fleshner, Alexandra J. Colquhoun, Laurence H. Klotz, Vasundara Venkateswaran: "The effects of physical activity on prostate cancer in the active surveillance cohort."

Faculty research awards went to **Rebecca Gladly (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), **Subodh Verma (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), **Richard Reznick (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 **Barry Rubin (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.)

Our faculty includes more than 30 non-clinician scientists, all of whom are undertaking research work at the highest levels. They received numerous awards this past year, illustrating that their work is recognized internally, nationally and internationally. To name a few, Cho Pang received the Plastic Surgery Education Foundation Award for Outstanding Achievement in Basic and Translational Research; Mike Wiley, Chair of the Division of Anatomy, was the recipient of an Aiken's award this year which is the most prestigious teaching award given to a member of the Faculty of Medicine.

Faculty accomplishments in the past year were phenomenal. 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: Andres Lozano (Division of Neurosurgery) being elected as a Fellow of the

Royal Society of Canada for his work on developing novel surgical approaches to treat Parkinson's disease, depression and Alzheimer's disease; Michael Taylor winning the Young Investigator Award in biomedical science from the Canadian Cancer Society Awards for Excellence in Cancer Research.

The Departmental Research Committee continues 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 optimizing the strengths of Gallie Day and research educational activities. The non-clinician scientist retreat, organized by Andras Kapus and Val Cabral, was very well attended and collaborations were established.

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 that our research activities will continue to expand, with new avenues of investigation being developed and improvements in our research support 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

Ron Levine

Director



The Department of Surgery at the Postgraduate level is the largest in Canada with 248 residents and 194 clinical fellows. There have been many accomplishments and successes in the 2009-2010 academic year.

There are 11 surgical programs: 6 CaRMS entry and 5 subspecialty programs. The backbone of the 11 surgical programs is the Program Director and their administrative assistant. It is a huge thankless job to coordinate and maintain each of these surgical specialties.

There have been some changes this year. Dr. Richard Reznick has stepped down as Chairman after eight years to become Dean at Queen's University. Dr. Carol Swallow has stepped down as Program Director of Surgical Oncology after she has grown Surgical Oncology at the University of Toronto to one of the best programs in North America. Dr. Swallow has been replaced by Dr. Frances Wright.

Our surgical positions for all of our CaRMS entry specialty programs are sought after by medical students from across Canada. This year's CaRMS entry surgical positions were filled in the 1st reiteration. Most of these positions were filled with our top ranked applicants. Many of the surgical specialties also take IMGs (International Medical Graduates) and visa trainees from around the world.

The first two years of training in surgery is known as Core Surgery. Besides attending specialty-specific academic endeavors, the Core Surgery residents attend the Principles of Surgery (POS) lectures to prepare them for the POS Royal College Exam. These weekly seminars are coordinated by Dr. Robert Mustard. Dr. Mustard also organizes practice exams. The high success rate of our students at the POS Exam is a testament to all of Dr. Mustard's hard work.

Another important part of the postgraduate curriculum in all specialties is the Surgical Skills Lab at the Mount Sinai Hospital. All PGY1 residents attend one-year surgical skills courses where they learn fundamental surgical skills. Each of the surgical specialties also run their own courses where surgical skills specific to their specialty are taught. Dr. Helen MacRae is the Director and Lisa Satterthwaite is the Manager of this unique skills lab.

There are a number of academic days to enhance the educational experience of the surgical resident. In July, the Core Surgery residents attend "The Surgeon in Society" where medical legal issues are discussed. Dr. John Murnaghan runs "Residents as Teachers" for the PGY1 and PGY3 residents. This is a workshop to teach our residents to be better teachers. There is an orientation day organized by Dr. Ron Levine for all of our

new first year residents. All of our first year residents attend the ATLS course coordinated by Dr. Jameel Ali at St. Michael's Hospital.

Case logging on POWER is now mandatory for all surgical residents. All but two of the surgical specialties are using POWER case logging. The Program Directors can monitor the operating experience of the learner at each hospital and can compare the experience from one hospital to another.

The University of Toronto, The Royal College of Physicians and Surgeons and the Ministry of Health have all mandated an increased community experience for our residents. This mandate is called Distributed Medical Education. To meet this mandate, the Department of Surgery has increased the number of residents going to community hospitals. At the present time residents are going regularly to St. Joseph's Health Centre, Toronto East General Hospital, North York General Hospital, Humber River Regional Hospital, William Osler Heath Centre - Etobicoke General, Credit Valley Hospital and Trillium Health Centre. The feedback from residents rotating through these community hospitals has been excellent. In the future, we hope to be sending residents to South Lake.

The Competency Based Curriculum in Orthopaedic Surgery continued for the academic year 2009-2010. Three new residents were accepted into the program and thus far it seems to be extremely successful due to the hard work of Dr. Kraemer, the Program Director.

There was a new PAIRO agreement that went into effect on July 1, 2009. The new contract had the residents going home two hours post call. We felt that this would have a negative effect on the education of our residents. In the new contract there was an exemption process. Accordingly, the Department of Surgery applied for a department-wide exemption. We were the only department in the province to seek such an exemption. In September 2009, the department met with members of PAIRO, CAHO and a facilitator. As a result of this process, the status quo remains, i.e. home by noon.

The fellowship programs in the Department of Surgery are extremely important. Not only do the fellows learn important skills that they take back to their countries of origin, but they all bring their experiences from around the world to our residents and medical students. At the present time, we have 194 fellows in the Department of Surgery. The fellowship committee, under the leadership of Dr. David Latter, has moved to formalize all the fellowships in the Department of Surgery with definitive

goals and objectives and uniformity of remuneration. In an effort to improve the social environment for 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 Women in Surgery group under the leadership of Dr. Gail Darling met three times this year. This group discusses issues of finding the balance of family life with a surgical career. It is well attended by female medical students, residents and faculty. Dr. Darling will be stepping down and Dr. Melinda Musgrave has agreed to take over.

Dr. Robert Mustard was awarded the 2010 Bruce Tovee Award for Postgraduate Teaching. Dr. Richard Holtby won the 2010 Clinical Skills Centre Distinguished Educator Award. The 2010 D.R. Wilson Award for resident teaching of medical students was won by Dr. Rashid Jinnah.

The running of the Office of Postgraduate Education with 248 residents, 194 fellows and 265 faculty members is a huge endeavor. This is masterfully done by Tess Weber and her assistant Robert Gardin.

UNDERGRADUATE EDUCATION

David Backstein

Director



One of the major Surgical Clerkship developments this past year was the successful expansion of our clerkship into several "community" experiences to include **St. Joseph's Health Centre and Humber River Regional Hospital**. These locations add a new dynamic to our clerkship and are the result of Dr. Yaron Shargall's hard work.

The 2009-2010 academic year saw significant planning for the implementation of the new clerkship curriculum which commences in September of 2010.

Some of the major upcoming curricular changes include:

1. A reduction in the length of the Surgical Clerkship from two 6-week rotations to a single 8-week experience.
2. The implementation of a combined Medicine-Surgery OSCE, run centrally by the Faculty of Medicine.
3. The elimination of phase I and phase II rotations with completion of all rotations, by all students, prior to the CaRMS period. The latter portion of the fourth medical school year will be focusing on synthesis of information and performance of "selectives."

The Department of Surgery Undergraduate Education Committee (UEC) has altered the surgical curriculum to accommodate the changes mandated by the Faculty of Medicine. All changes were approved by the Chairman's Senior Advisory Committee this past academic year.

CURRICULUM

1. The **"Crash Course in Surgery"** will remain part of the curriculum and will continue to occur during the first week. This provides an excellent opportunity for orientation and introduction to fundamental skills and seminars.
2. Following the Crash Course, students will then perform **three sub-rotations**. This will include a chosen two-week rotation followed by another two-week rotation and end with a three-week rotation. Students will continue to have input into their choice of rotation and the Surgical Education offices will do their best to accommodate. Having a final three-week rotation will help offset lost clinical time which inevitably occurs during the examination week.
3. **General Surgery** will remain a mandatory rotation. It was the opinion of the UEC that there are certain experiences that the General Surgery rotation most reliably provides. These experiences include fluid and

electrolyte imbalance management as well as other critical areas. Therefore, one of the 3 sub-rotations will be mandated to include General Surgery.

EVALUATION

1. **Performance-based examination:** The Surgical Clerkship will utilize an expanded structured oral examination. This will be run with 4 stations and 2 examiners per station as follows:
 - Observed Directed History & Physical Examination (20 minutes)
 - Structured Oral Question 1 (20 minutes)
 - Structured Oral Question 1 (20 minutes)
 - Structured Oral Question 1 (20 minutes)
2. The "written" MCQ examination will consist of the **NBME shelf exam**. This exam is highly studied, psychometrically valid and different for each iteration. This examination has been in use by our Department as a supplement to our in-house examination for 6 years and has been very successful.
3. The clinical, ward evaluation will remain unchanged.

Undoubtedly, challenges will be encountered with such extensive change underway. However, with the patience and dedication of our faculty and residents, the Surgical Clerkship will continue to provide superb training for our medical students.

CONTINUING EDUCATION AND PROFESSIONAL DEVELOPMENT

Terry Axelrod

Director



2009-2010 marked my inaugural year in assuming the role as Director of Continuing Medical Education (CE) for the Department of Surgery.

CE is an integral part of what we, as surgeons, do on a weekly basis. That is to teach our peers and ourselves on an ongoing basis, be it through weekly rounds, short courses, workshops, skills sessions and formal academic society meetings.

The members of this Department have continued to be extremely productive in the organization and in the implementation of a multitude of formal CE events. Most of these events were run partly or completely through the Continuing Education and Professional Development office of the University of Toronto Faculty of Medicine under the direction of Vice-Dean Ivan Silver. In total, the Department of Surgery hosted 17 courses including the Annual Update in General Surgery, Urology Update 2009, the Upper Extremity Update, The Annual Assembly of General Surgeons, 10th Annual Toronto Breast Symposium, the 40th Annual University of Toronto Symposium on Aesthetic Plastic Surgery and a multitude of others over the course of the past academic year. Registration totalled over 2,170 participants and faculty.

This past year marked the 26th year of the Upper Extremity Update chaired by Robin Richards and James Mahoney. This is one of the longest running formal CE events, chaired since its outset by the same individuals within our Department. Robin and Jim are to be congratulated for their dedication to organizing this multi-disciplinary event year after year.

All of the courses were successful; all had excellent levels of attendance. For some, such as the Breast Cancer Symposia chaired by Dr. J. Escallon, the demand has been so high that, going forward, they will be run as annual rather than bi-annual events.

Other courses were chaired by our faculty members, but were sponsored and/or accredited by organizations outside of the CEPD offices. These events include formal CE events as well as programmes within larger meetings such as Instructional Course Lectures, Symposia and Pre-Courses within the structured programmes of Specialty Society Meetings. It is difficult to estimate the number of such events, however they measure in the hundreds.

Over the next academic year, it is my intention to raise the profile of this Educational section of our Department. Almost all of us are involved in CE, as faculty, chairs or simply as members participating in a case-based discussion at weekly ward rounds. This involvement needs to be better recognized and highlighted as yet another major strength of the Department of Surgery at the University of Toronto.

DIVISION OF ANATOMY

Michael J. Wiley

Chair



This past academic year saw a number of changes that will carry the Division forward in future years. Dr. Cindi Morshead was recruited as the new Chair of the Anatomy Division. Professor Morshead completed her Ph.D. in the Department of Anatomy and Cell Biology at the University of Toronto in 1994. Following postdoctoral training at U of T and the University of Calgary, she joined the Division of Anatomy in 2000. She is known internationally for her expertise in neural stem cell biology, and she leads a very active lab group including 3 MSc students, 3 PhD students, 2 Postdoctoral Fellows, and numerous senior undergraduate project students. She is a highly innovative and successful educator, and has taught Gross Anatomy and Neuroanatomy to students in Arts and Science, Radiation Science, Physical Therapy, and Medicine. Dr. Morshead will begin her term as Chair on January 1, 2011.

Dr. Hong-Shuo Sun was recruited to join the Division as an Assistant Professor in the tenure stream. Dr. Sun received his MD from Sun Yat-Sen University and his PhD from the University of Calgary, and followed this with postdoctoral training under the supervision of Michael Tymianski and John MacDonald at the Toronto Western Hospital Research Institute. His research focus is the role of ion channels in neuroprotection against cerebral ischemia and stroke. He is the winner of the Marlene Reimer Brain Star of the Year Award for 2010 from the Canadian Institutes of Health Research (CIHR), Institute of Neurosciences, Mental Health & Addiction (INMHA). Dr. Sun will begin his appointment on July 1, 2010.

The Anatomy component of the Structure and Function course for the first year medical class underwent substantial revision this past year. It was extended from 11 to 16 weeks which had the effect of decompressing the content, creating a more satisfactory learning experience for the students. In addition, a series of 'surgical anatomy' lectures was introduced into the course. These lectures were organized by Dr. Darlene Fenech and given by surgeons including Drs. Darling, Di Pasquale, Dueck, Fenech, Nam, Rotstein, Simone, Stotland, and Whelan. Based on the course reviews, these were definitely a highlight of the course for the students and they will undoubtedly raise awareness and interest in surgical residency programs. In the coming year, the 'One Day Matters' program will be introduced to the medical students during the Structure and Function block. 'One Day Matters' is an opportunity for first year students to shadow in General Surgery for a full day.

In response to enrolment increases, the Division created an additional teaching lab space and, in order to meet the shift to greater emphasis on digital media in anatomical education, four iMac workstations, connected to the internet, were installed in each of our 12 dissecting rooms.

The Division continues to be active in graduate supervision with 2 students completing Master of Science programs and 1 student completing a Doctoral program in the Division this past year. There are currently 3 students in master's programs and 5 in doctoral programs under supervision of faculty in the Anatomy Division.

HONOURS AND AWARDEES

Dr. Ian Taylor won the E. Mary Hollington Award for teaching with distinction in the preclinical or basic science portion of the medical curriculum. This is the 13th time Dr. Taylor has won this award. Dr. Wiley won the Harry Whittaker Memorial Teaching Award, the Aikins Award for Large Group Teaching, and the President's Teaching Award. Wenjun Xu, a graduate student in the Master of Science program under the supervision of Dr. Cindi Morshead, was awarded the James H. Richardson Fellowship in Anatomy; and Kate Sauks, a doctoral student under the supervision of Dr. Anne Agur, was awarded the Harland-Smith Research Fellowship in Anatomy.

DIVISION OF CARDIOVASCULAR SURGERY

Christopher Caldarone

Chair



FACULTY PROMOTIONS, APPOINTMENTS AND HONOURS

Osman Al-Radi was promoted to Assistant Professor of Surgery.

Christopher Caldarone was promoted to Professor of Surgery.

Gideon Cohen was promoted to Associate Professor of Surgery and was appointed as the Program Director for the Cardiac Surgery Residency Program.

Stephen Femes was selected as the inaugural recipient of the Dr. Bernard S. Goldman Chair in Cardiovascular Surgery.

Bernard Goldman was appointed a member of the Order of Canada.

David Latter was appointed Interim Chair of the Department of Surgery and stepped down from his role as the Program Director after a superlative tenure.

Vivek Rao was promoted to Professor of Surgery.

Hugh Scully received the Canadian Cardiovascular Society Annual Achievement Award 2010.

Subodh Verma was named one of Canada's Top 40 Under 40 for 2009. Dr. Verma was elected as the co-winner of the 2010 Silver Shovel Chute Award. Dr. Verma also received the George-Armstrong Peters Prize for Research at Gallie Day 2010. Additionally, Dr. Krishan Singh, under the supervision of Dr. Verma, received the 2009 Vivien Thomas Young Investigators Award from the American Heart Association for their work elucidating the role of the tumor suppressor gene BRCA1 as a regulator of endothelial dysfunction and atherosclerosis.

Richard Weisel received the 2010 AATS Scientific Achievement Award which represents the most prestigious scientific award bestowed by the AATS.

Terrence Yau was promoted to Professor of Surgery.

VISITING PROFESSORS

Matthew Howard, Chief of the Division of Neurosurgery at the University of Iowa, presented the Bigelow Lecture "From the Brain to the Heart: A Technology Transfer Story" on October 2, 2009.

Keith Horvath, Director of Cardiothoracic Surgery Research at the National Heart, Lung and Blood Institute and Chief of Cardiothoracic Surgery at the National Institutes of Health Heart Centre presented "Stem Cell Therapy and Transmyocardial Laser Revascularization: Is There Synergy?" during the University Rounds on November 20, 2009.

Eugene Blackstone, Director, Clinical Investigations Cleveland Clinic's Heart and Vascular Institute presented "A Learning Healthcare System: Infrastructure To Make It Work" at the March 26, 2010 University Rounds.

RESIDENCY PROGRAM

Mitesh Badiwala received second prize in the Gallie-Bateman Competition at Gallie Day 2010.

Edward Hickey received the Postgraduate Medical Trainee Leadership Award from the University of Toronto.

Gilbert Tang received the Canadian Cardiovascular Society 2010 Trainee Excellence in Education Award. Dr. Tang also received Residents Research grant awards from The Physicians' Services Incorporated Foundation under the supervision of Dr. Verma. Additionally, Dr. Tang successfully completed his RCPSC examination.

Bobby Yanagawa was the 2010 recipient of the AATS Lilliehei Research Award. Dr. Yanagawa also received Residents Research grant awards from The Physicians' Services Incorporated Foundation under the supervision of Dr. Verma.

Surgical Skills Sessions: A summer skills course has been established with the goal of providing junior residents additional practice in basic surgical skills. These sessions run bi-weekly throughout the summer in the Surgical Skills Centre at Mount Sinai Hospital. Using anatomical models, the specific objectives include gaining skill in coronary anastomoses, aortic tube graft placement, closure of atriotomy/aortotomy, and aortic valve replacement. These sessions will be supervised by Dr. Fuad Moussa, staff surgeon at SHSC. Drs. Gilbert Tang, Jack Wallen and Bobby Yanagawa are responsible for the planning and organization of the sessions. Generous corporate sponsorship has been provided by Sorin Group, St. Jude Medical, and Covidien.

On January 17, 2010 the Division lost one of its members. Dr. Shafie Fazel was respected and admired as a uniquely

gifted surgeon and his dedication and insights as a scientist identified him as a resident destined to make important contributions to our field. Perhaps more importantly, he was cherished as a colleague and friend. Few could balance his commitment to his patients and research with his devotion to his family and friends. He inspired us and will be remembered with respect.

GRANTS

Stephanie Brister holds a Canadian Institutes of Health Research grant.

Christopher Caldarone holds two Heart and Stroke Foundation of Ontario grants, a LeDug Foundation grant, a Children's Heart Foundation grant, and administers the CHSS Datacenter with a budget of \$260,000 per annum.

John Coles continues to hold two Heart and Stroke Foundation of Ontario grants and a Canadian Institute of Health Research grant.

Gideon Cohen was awarded two Cardiothoracic Surgery Network (NIH/CIHR) grants for "Mitral valve repair versus replacement for functional mitral regurgitation. A multicentre trial" and for "Coronary bypass surgery alone versus coronary bypass surgery plus mitral valve repair for moderate ischemic mitral regurgitation. A multicentre trial."

Christopher Feindel holds two Heart and Stroke Foundation of Ontario grants.

Stephen Fremes was awarded a Canadian Institutes of Health Research grant for "Steroids in Cardiac Surgery." Dr. Fremes continues to hold a National Heart, Lung and Blood Institute grant, two additional Canadian Institutes of Health Research grants, a CANNectIN grant, and a Schering-Plough Research Institute grant.

Vivek Rao was awarded a Heart and Stroke Foundation of Canada grant for "EGFL-7, Rapamycin and transplant vasculopathy."

Glen Van Arsdell was awarded a Heart and Stroke Foundation of Ontario grant for "Mechanical lung assist as a means to achieve primary in-series palliation for single ventricle neonates: a proof of concept study in neonates and infants." Dr. Van Arsdell continues to hold three additional Heart and Stroke Foundation of Ontario grants.

Subodh Verma was awarded a Heart and Stroke Foundation of Ontario grant for "Neuroregulin-1 as a novel treatment for endothelial dysfunction and atherosclerosis." Dr. Verma was also awarded two Canadian Institutes of Health Research grants for the "Role of the tumor suppressor gene BRCA1 in adverse cardiac remodeling" and for "Evaluation of BRCA1 as a novel therapeutic strategy for endothelial dysfunction and atherosclerosis." Dr. Verma continues to hold two additional Heart and Stroke Foundation of Ontario grants and one Canadian Institutes of Health Research grant.

Richard Weisel continues to hold two Heart and Stroke Foundation of Ontario grants and one Canadian Institutes of Health Research grant.

Terrence Yau was awarded a Heart and Stroke Foundation of Ontario grant for "Electrophysiological implications of regenerative therapy" and a Heart and Stroke Foundation of Canada grant for "Advance targeted transfusion in anaemic cardiac surgical patients for kidney protection."

DIVISION OF GENERAL SURGERY

Andy Smith

Bernard and Ryna Langer Chair



The Division of General Surgery continues to grow and develop. There has been significant accomplishment in all realms of academic endeavour including clinical care, research and education.

DIVISIONAL GROWTH AND DEVELOPMENT

New full-time faculty joined our ranks at our University affiliated hospitals. Timothy Jackson bolstered the ranks of the MIS program at UHN, Jean François Boileau joined the breast cancer surgery team at Sunnybrook Health Sciences Center and Shiva Jayaraman joined Richard Hart at St. Joseph's Health Centre as that unit became the 3rd centre of excellence for hepatobiliary surgery in Toronto.

Importantly, a number of adjunct and part-time appointments have been made at community-based hospitals that have formally joined the academic enterprise of the University of Toronto, Faculty of Medicine. Adjunct faculty appointments for this academic period included Peter Dauphinee (Royal Victoria Hospital), Norm Hill, Don Munnings, Mark Pope, Joe Wen (Trillium Health Centre) and Mark Taylor at the Lakeridge Health Centre. Peter Stotland joined as an Assistant Professor (part-time) at North York General Hospital. These appointments are important in the Faculty's development of *integrated medical education*.

Developments in education span the entire educational spectrum. The Division continues to expand its impact on the "early years" class in the medical school. Darlene Fenech has assumed the role of Course Director of the new second year medical school course, *Mechanisms, Manifestations and Management of Disease*. Furthermore, the *One Day Matters* program has been vigorously embraced by General Surgery faculty. One hundred and one (101) first year students had an opportunity to participate in this program in 2009-10 that allows students to gain exposure to General Surgery by positioning them in the operating room with active faculty.

The General Surgery Residency program proudly graduated the following newly minted surgeons:

Abdurrezagh Abujazia	Fayez Quereshey
Shady Ashamalla	Alia Qureshi
Gus Azoubel	Jensen Tan
Karen Devon	Andreas Tassis
William Johnson	Patrick Tawadros
Nicole Look Hong	Monica Torres
Sabrena Noria	Max Seddigh

In addition, the Division welcomed new trainees at the PGY1 level. The new residents come from diverse medical schools:

Solomon Azouz (University of Texas Medical School, San Antonio, Texas, USA)

Balisi Bakanisi (University of Zimbabwe)

Hunter Cape (University College, International Medical School, Dublin, Ireland)

Emily Claydon (University of Western Ontario, Canada)

Laurie Fasola (Universidad Central de Venezuela, International Medical School, Caracas, Venezuela)

Eleanor Fung (University of Toronto, Canada)

Pawan Kumar (International Medical School, Mumbai, India)

Debbie Li (Dalhousie University, Canada)

Marisa Louridas (University of Manitoba, Canada)

Jennifer Muir (University of Toronto, Canada)

Ashlie Nadler (University of Toronto, Canada)

Armen Paraghamian (University of Western Ontario, Canada)

Chetham Sathya (University of Toronto, Canada)

Matt Strickland (Northern Ontario School of Medicine, Sudbury, Ontario, Canada)

Elliot Wakeam (Jefferson Medical College of Thomas Jefferson University, Philadelphia, USA)

The General Surgery residency program continues to develop under the leadership of Najma Ahmed. Najma and her team have done an outstanding job of continually molding the structure of the residency and increasing the rigor of the component parts of the training program. Much of this has involved adding modules that augment the educational experience of the various rotations in our hospitals.

The seven fellowship programs in the General Surgery division continue to mature and are becoming more structured and integrated across the University. Dr. Paul Greig has assumed the leadership of the General Surgery Fellowship Council and the leaders within the various fellowships have worked towards consolidating common structures of the fellowships to strengthen the impact of fellowship programs.

The wide array of continuing education courses offered through the division is noteworthy. Courses, both large and small, increasingly reach across the entire city and beyond in their impact. For example, John Hagen and the MIS surgeons in Toronto have developed well attended recurring courses; monthly City-Wide MIS rounds and Bariatric rounds approximately six times per year. The Update Course in General Surgery celebrated its 50th anniversary in April 2010 with a record of 530 registrants. Finally, the CE offerings developed by our trauma colleagues are increasingly multidisciplinary and multi-institutional in the contribution of surgeons from our two major trauma centres, St. Michael's Hospital and Sunnybrook Health Sciences Centre. This reflects an ongoing trend towards multi-institutional input into our academic enterprise in the Division of General Surgery.

Finally, a highly notable change in the Department is the departure of Dr. Richard Reznick who proudly hailed from the Division of General Surgery. Dr. Reznick went on to become the Dean at Queen's University on July 1, 2010.

ACCOMPLISHMENTS

Accomplishments in the Division are numerous and are well articulated in the summary attached to each of the hospital departmental reports in this volume. As the department celebrated 25 years of the success of the Surgeon Scientist Program, General Surgery continued to have a robust presence within the surgical scientist training program. SSTP residents in General Surgery participated in a variety of labs with wide-ranging areas of expertise. A summary of lab investigators in the Division of General Surgery can be found on our website at <http://generalsurgery.utoronto.ca>

Fourteen general surgical trainees, six of whom are pursuing PhDs, are in the SSP as of July 1, 2010. Importantly, three graduates of the SSP rejoined the clinical stream. They include:

Greco, Elisa F.	MEd
Wells, Bryan J.	MSc
Yang, Simon	MSc

General Surgery faculty promotions include Najma Ahmed of SMH, Andrea McCart of MSH and Ian McGilvray of UHN-TGH who all became Associate Professors; John Hagen of the Humber River Regional Hospital ascended to the rank of Assistant Professor.

Several awards were garnered by General Surgery faculty over the past year. A full list can be seen in the Departmental reports in this volume but some are noted below.

Coburn N	GIRT Levy/Thomson Award for Outstanding Poster Presentation
Law CHL	Peters Boyd Academy Clinical Teaching Award
Rizoli S	2009 American Congress of Rehabilitation Medicine Best Paper Award
Moulton CA	Abstract of Distinction, by the International HPB Association; and Paper of Distinction, by the Association of Surgical Education

McGilvray I	Glenn Hillson Award
Reznick RK	Charles Tator Surgeon Scientist Mentoring Award
Selznor M	American Society of Transplant Surgeons Faculty Development Award
Langer, J	Pediatric Surgery Resident Teaching Award (Postgraduate)
Wales P	Best Clinical Paper, 41 st Annual Canadian Association of Pediatric Surgeons
Ahmed N	Nominee, RCPSC Best Program Director
Ali J	Diaspora Award for Excellence in Medicine (Consul General Trinidad & Tobago)
Bohnen J	Donald J. Currie Undergraduate Teaching Award (St. Michael's Hospital)
Mustard RA	Tovee Award for Undergraduate Teaching for 2002/2003
Cohen Z	Long Standing Achievement in IBD Research, University of Toronto, Division of Gastroenterology
Gladly RA	Bernard Langer Surgeon Scientist Award, University of Toronto
McLeod RS	Robert W. Beart 2009 Impact Paper of the Year Award
Swallow CJ	First Prize, McMurrich Award
Bernick PE	TEGH Chief of Staff Choice Award in Research Leadership

Finally, it is noteworthy that this volume shows a total of 311 publications that come forth from General Surgery faculty.

The 33rd Annual Assembly of General Surgeons, held on May 27, 2010, was an extraordinary success. The Assembly highlights the scientific and academic achievements of the division as well as celebrates the graduating resident class. Dr. Murray Brennan from Memorial Sloan Kettering Cancer Center in New York was the E. Bruce Tovee Lecturer and highlighted a day that featured the theme of "Mentorship" and also the history of our Division of General Surgery. The division has existed since 1967 and has developed considerably in the intervening years. Today the General Surgery faculty is comprised of 109 surgeons working at six fully affiliated and four partially affiliated hospitals. Divisional growth has increasingly helped us to meet our societal mandate in research and training of new surgeons.

Many metrics attest to the individual excellence that abound in the division but it should be highlighted that we are at our best, and will have the most impact, when we stretch ourselves to optimally harness all the expertise in the Toronto-wide division and work as a U of T-wide team. There is evidence that the trend towards collaborative endeavour between hospitals is increasing in research, in education programs and in clinical service delivery. One example is highlighted below.

BEST PRACTICES IN GENERAL SURGERY (BPiGS)

Our Division continues to be committed to the BPiGS initiative, now into its 4th year. Led by Robin McLeod and champions at each of our hospitals, this initiative seeks to harness our academic expertise in clinical epidemiology and guideline development as well as in stretching our ability to transfer knowledge and catalyze quality improvement in important areas that affect patients in all our hospitals. The goal is to achieve world class quality, consistently, in all of our 10 institutions. The concept is that this can best be achieved if we in the Division collaborate on achieving the goal. To support this goal, hospital administrators have been asked to "sign on" to the BPiGS initiative and adopt BPiGS as their guide to QI around key issues such as SSI, VTE and more. The hope is to get all the U of T hospitals aligned around this common approach to quality. At the time of writing this, several hospitals have committed to supporting BPiGS and this is evidence of increasing connection between our U of T hospitals.

DIVISION OF NEUROSURGERY

James T. Rutka

Leslie Dan Professor and Chair of Neurosurgery



RESIDENT ACHIEVEMENTS

ROYAL COLLEGE EXAMINATIONS

Fellows of The Royal College of Surgeons of Canada (FRCSC): Dr. Hussein Al-Ahmadi, Dr. Merdas Al-Otaibi, and Dr. Ratan Bhardwaj.

RESIDENT RESEARCH AWARDS (INTERNATIONAL/NATIONAL)

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

David Cadotte - 2009-10 Codman Neurotrauma Fellowship Award; Resident/Fellow Research and Education Grant from the Cervical Spine Research Society;

D.J. Cook - 2009 Physicians Services Incorporated (PSI) Resident Research Prize; Synthes Cerebrovascular Section Resident/Fellow Award, American Association of Neurological Surgeons (AANS)

Greg Hawryluk - 2010 Synthes Resident Spine Award

Zul Kaderali - abstract for the Congress of Neurological Surgeons meeting in San Francisco ranked among the top ten submitted

Betty Kim - overall top honors in 2010 neurosurgical Top Gun Competition, AANS

Carlo Santaguida - Codman Neurotrauma Fellowship

Demitre Serletis - top honor for bone scalpel station at 2010 neurosurgical Top Gun Competition, AANS

Shobhan Vachhrajani - CIHR Fellowship

Scellig Stone - KG McKenzie Memorial Prize for Basic Science Research

RESIDENT RESEARCH AWARDS (UNIVERSITY OF TORONTO)

D.J. Cook - first prize Gallie-Bateman Award for best resident research paper and presentation; Cerebrovascular Disease Award from the Section on Cerebrovascular Surgery of the AANS/CNS;

Ryan DeMarchi - AR Hudson Annual Resident Teaching Award

George Ibrahim - first place, Horsey Prize

Greg Hawryluk - second place, Horsey Prize

Betty Kim - 2010 Sopman Humanitarian Award

Demitre Serletis - Award for Best Poster Presentation, University of Toronto's Annual B.R.A.I.N. Neuroscience Research Day

Scellig Stone - first place, Morley Prize

Adrienne Weeks - second place, Morley Prize

Shobhan Vachhrajani - Warren Ho Memorial Scholarship

Kathryn Howe - Neurosurgery Literary Award

FACULTY ACHIEVEMENTS

HONOURS AND AWARDS

Leo da Costa - cross-appointed to the Department of Radiology at Sunnybrook Health Sciences Centre; Canadian Stroke Network grant

Michael Cusimano - 2-year grant from PSI; 5-year CIHR Strategic Team Grant in Applied Injury Research Study

Peter Dirks - Farber Lecturer, Society of Neuro-oncology

Michael Fehlings - Trustee of the AO Foundation; 3-year grant from CIHR; Associate Editor of the Journal Neurosurgery; 1-year grant from CIHR; North American Spine Society (NASS) 2009 Research Grant; North American Spine Society's 2009 Leon Wiltse Award; 3-year grant from CIHR; funding for 5 years for the NeuroDevNet Network Center of Excellence (NCE); 2009 Olivecrona Award, 1-year Mentor-Trainee-New Investigator Award in Spinal Cord Injury Research, Ontario Neurotrauma Foundation; NCE award; Vice-President and President-Elect of the Cervical Spine Research Society; The Spinal Cord Injury Solutions Network grant; funding from Tyco Healthcare Group LP; Editorial Board of Evidence-Based Spine-Care Journal as the Deputy Editor Clinical Sciences; Hansjorg Wyss Foundation Award; 2-year grant from PSI; two-year AOSpine North America Fellowship Award.

Ab Guha - 3-year CIHR Grant; 1-year grant from Novartis; 1-year grant from B.R.A.I.N Child; funding from Novartis; Schering-Plough Canada Unrestricted Educational Grant; 5-year Grant from the Canadian Institutes of Health Research; 3-year OICR Grant; 5-year Canadian Cancer Society Research Institute Grant.

Clement Hamani - board member of the American Society for Stereotactic and Functional Neurosurgery

Moji Hodaie and Karen Davis - grant from The PSI Foundation

David Houlden - first President of the Canadian Association of Neurophysiological Monitoring.

Abhaya Kulkarni - Associate Editor for Neurosurgery

Andres Lozano - Fellow of the Royal Society of Canada 2009; 2009 recipient of Donald Calne International Award for Parkinson's Disease Research; 2010 Hunt Wilson Lecturer, AANS

R. Loch Macdonald - grant from the PSI Foundation; Editorial Board of World Neurosurgery; 3-year grant from the New Jersey Commission on Science and Technology Edison Innovation R&D Fund

Eric Massicotte - two-year AOSpine North America Fellowship Award.

Jim Rutka - Honoured Guest, The Congress of Neurological Surgeons' Annual Meeting; 5-year Grant from CIHR; President, American Association of Neurological Surgeons; Board of Directors, Canadian Cancer Society; President-Elect, American Academy of Neurological Surgery

Michael Taylor - Board of Directors, The Society for Neuro-Oncology; Canadian Cancer Society Award for Excellence in Cancer Research; Central Nervous System Tumor Disease Committee, Children's Oncology Group (COG); Associate Section Editor (Pediatrics), for Neurosurgery; 3-year grant from the Canadian Institutes of Health Research; Gold Medal Award in Surgery, 2010 from The Royal College of Physicians and Surgeons of Canada; 5-year grant from the National Institutes of Health; 3-year renewal from the CIHR, Clinician Scientist Phase II Award; Chair, Young Investigators Committee, Society for Neuro-Oncology

Charles H. Tator - Canadian Neurosurgical Society's Lifetime Achievement Award from the Canadian Neurological Science Federation Congress

Michael Tymianski - 2 grants from the Heart and Stroke Foundation of Ontario

Taufik Valiante - 3-year operating grant from CIHR.

Chris Wallace - President of the Canadian Neurosurgical Society.

Gelareh Zadeh - BrainCHILD grant; Canadian Brain Tumor Foundation grant; neurosurgery representative on NCIC-Clinical Trials Group for CNS site; Neurosurgical Representative on CBTC-net

U OF T NEUROSURGERY INVITED LECTURESHIPS

Dr. Chris Getch, Northwestern University, Chicago. Annual Chairman's Canoe Trip Visiting Professor

Dr. Daniel Barrow, Emory University, Atlanta. Botterell Lectureship

Dr. James Fawcett, Cambridge University Centre for Brain Repair. Charles H. Tator-Barbara Turnbull Lectureship

Dr. Anil Nanda, LSU Health Sciences Centre, Shreveport, Louisiana. Keith Lectureship

Mr. William Harkness, Great Ormond Street Hospital, London, England. Hendrick Lectureship

Dr. Michael Avidan, Washington University in St. Louis. Annual Marshall Lecturer

Dr. Ed Benzel, Cleveland Clinic. U of T SpineFest Visiting Professor

Dr. William Harkness, Great Ormond Street Hospital. E. Bruce Hendrick Lecturer

CITY-WIDE ROUNDS

Dr. Chris Shaffrey, University of Virginia. Toronto Western Hospital

Dr. Fady Charbel, University of Illinois. St. Michael's Hospital

COURSES OFFERED AT THE SURGICAL SKILLS CENTRE

Lougheed Microvascular Course. Dr. Max Findlay, October 5-9, 2009

Lougheed Microvascular Course. Dr. Howard Lesiuk, University of Ottawa, March 22-26, 2010

Spine Course, June 22-24, 2010. Dr. Eric Massicotte, Course Leader.

Publications by neurosurgery faculty and residents: 255

Visiting Professorships by U of T Faculty: 152

PROMOTIONS

Eric Massicotte, to Associate Professor in the Department of Surgery, University of Toronto

Michael Taylor, to Associate Professor in Department of Surgery, University of Toronto

William Tucker, to Full Professor in the Department of Surgery, University of Toronto

DIVISION OF ORTHOPAEDIC SURGERY

Ben Alman

A.J. Latner Professor and Chair of Orthopaedic Surgery



Our divisional faculty members identified a focus on working together to develop innovations in research, education, and clinical care, as our priorities during our divisional strategic planning session four years ago. I am delighted to report that this past year saw concrete results from our focus on these priorities.

In the education realm, we completed the first year of our competency-based curriculum. This pilot program, approved by The Royal College of Physicians and Surgeons of Canada, and funded by the Ontario Ministry of Health and Long Term Care is the only entirely competency-based residency training program that we are aware of in the world. Peter Ferguson, our Associate Program Director; Bill Kraemer, our Program Director; and Connie Johnson, the Administrative Coordinator, as well as all of the module leaders for the program, have done a phenomenal job in running this for its inaugural year. By all measures this program has been a phenomenal success, with residents in the program achieving levels of competency in a single year that would have taken several in the traditional stream. Some of the components have been so overwhelmingly successful, such as the initial module that we are planning to incorporate this into our training program for all residents. Our second cohort of trainees entered the program this year, and we are looking forward to reporting our results of this very innovative educational program.

In the clinical realm, we formalized our sports program, and Darrel Ogilvie-Harris was selected as its interim head. This program united clinicians from several of our hospitals and encouraged shared clinical resources for outpatient care at Women's College Hospital towards the development of an innovative comprehensive sports clinical, education, and research program. Sports now join Spine, Foot and Ankle, and Hand as formal programs within our University framework.

Our academic footprint is a measure of how we impact orthopaedics internationally. It is a measure of the impact of our publications, the number of our trainees who have developed successful academic careers outside of Toronto, and how our work improves the outcome for the patients we treat. We have one of the world's largest academic footprints, having ranked third in the world in peer-reviewed publications last year, and this accomplishment is in no small part due to our strong focus on research.

Sevan Hopyan and Cari Whyne, as co-Chairs of our research committee, have done a fabulous job overseeing and mentoring the residents who entered their integrated research and clinical year. Their participation in this

novel combined clinical and research training program has facilitated the ability of our trainees to participate in high level research, resulting in an overall increase in our research productivity. As evidence of this, Ali Zahrai received the JA Nutter Award for best paper presentation at the Canadian Orthopaedic Residents Association meeting. His paper had a title "Quality of life and educational benefit among orthopedic surgery residents: a prospective, multi-centre comparison of the night float and the standard call systems."

The past several years have seen the development of new technologies and research paradigms that have improved the quality and clinical applicability of our research work. These developments are associated with growth in the size of the biomedical research community and the expense of undertaking high quality research studies. Indeed there has been tremendous growth in the Toronto research community over the past decade. Unfortunately, national research funding has not kept pace with the increased costs associated with undertaking this high quality research. Despite these challenges, we continue to attain research funding at a high level, with funds totaling more than \$6,000,000.

We welcomed two new recruits this academic year, Kellie Leitch and Lucas Murnaghan. Both are pediatric orthopaedists. Lucas has a clinical practice focused on pediatric sports and an academic focus on education. Kellie has a general pediatric practice, but a special interest in cerebral palsy, and an academic focus on medical leadership development and public service, and advocacy. We all welcome Kellie and Lucas to our faculty.

Congratulations to our faculty who were successful at academic promotion this year at the university. Nizar Mahomed was promoted to full Professor; and Steve Lewis was promoted to Associate Professor. Also thanks to our division member, Robin Richards, who chairs the Departmental Promotions Committee.

Our members received a number of awards on Gallie Day this year. Ali Zahrai (supervised by Valerie Palda, Aileen Davis, and Albert Yee) received the Gallie Award - 3rd prize for his work on "The development of a preliminary preoperative education tool for patients undergoing lumbar microdiscectomy utilizing multiple stakeholder interviews." Rashid Jinnah received the D.R. Wilson Award, as the surgical resident rated by undergraduate students for being an outstanding teacher. Richard Holtby received the Surgical Skills Centre Distinguished Educator Award, which recognizes an individual who made exemplary, innovative

contributions to teaching and learning in the Surgical Skills Centre over the past year.

Our Graduation Day Visiting Professor was John Healey, Chief of Orthopaedic Oncology Service at Memorial Sloan-Kettering Cancer Center and Professor of Orthopaedic Surgery and Vice-Chair, Department of Surgery, Weill Medical College of Cornell University. He gave a fabulous and very insightful talk on "Oncologic and Functional Treatment of Osteogenic Sarcoma: An Orthopaedic Success Story" 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 Isaac Moss, and the Meisami Award for most compassionate resident, as selected by faculty, went to Rashid Jinnah. The R.I. Harris Award for the best presentation during Graduation Day went to Isaac Moss, and the Bob Jackson Award (for the best sports medicine talk) and the Canadian Back Institute Award (for the best spine talk) went to Jas Chahal and Mehdi Sadoughi, respectively. The James Waddell Award for the best PGY 4 resident was awarded to Om Sharma. Danny Whelan received the Divisional Award for Best Teacher as selected by the residents.

Bill Maloney (Stanford University School of Medicine), Brian Snyder (Boston Children's Hospital), Jed Davies (Faculty of Dentistry, U of T), Paul Tornetta (Boston Medical Center), Mark Myerson (Mercy, Mercy Medical Center, Baltimore, MD), John Healey, Arlen Hanssen (Mayo Clinic Rochester, Minnesota) and Dave Williams (McMaster University and Canadian Space Agency astronaut) all visited Toronto this year and gave University-wide grand rounds.

There were a large number of awards that our faculty received this past year. These are too many to mention here, and they are listed elsewhere in this annual report. Our faculty members received three University-wide education awards: Bill Kraemer, the Award for Excellence in Postgraduate Medical Education; Peter Ferguson, the W.T. Aikins for Individual Teaching Performance (Small Group); and David Backstein, the Dean Chute Silver Shovel Award for excellence in overall clinical teaching in the undergraduate medical program.

Our division lost two members who were icons in orthopaedics this year. Robert Salter, past divisional chair and faculty member for more than 50 years, was the world's most well known orthopaedic surgeon. He revolutionized the treatment of childhood dislocated hips, and pioneered the concept of applying basic science to improve clinical care. His classification system of children's fractures is universally used worldwide. His support for the University and The Hospital for Sick Children, where he spent his entire career, was unwavering. He was still active in teaching and research up until a few weeks before his death.

In addition to his academic achievements, Bob was known for doing his best to help anyone who came to him with a problem. Bob Jackson was a pioneer in the

use of arthroscopy for intrarticular procedures, and in the development of sports medicine. He worked at the western and then became head of the osteoarthritis and arthritis hospital (now part of Sunnybrook). He played a critical role establishing the Special Olympics in Canada and supporting this endeavor worldwide. He was the only physician that Sport Illustrated named as one of the most influential figures in sports. Although he did move to Dallas towards the end of his career, he had returned to Toronto after he retired from active clinical practice. We will miss both of these individuals who were exceptional role models and gave so much to our division, Toronto, Orthopaedics, and to the world.

The University of Toronto's Division of Orthopaedic Surgery is continuing in its long history of excellence in clinical care, teaching, and research. Our faculty's renewed focus on innovation and integration has resulted in new education, research, and clinical advances. I am proud of how well our division members are working together to develop innovative new programs, which will undoubtedly increase our division's academic footprint.

DIVISION OF PLASTIC AND RECONSTRUCTIVE SURGERY

Dimitri Anastakis

Chair



The Division of Plastic and Reconstructive Surgery has experienced continued growth and development over 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

Marc Jeschke was appointed to the Department as Surgeon-Scientist and to the Ross Tilley Burn Centre as its Medical Director. Dr. Jeschke's clinical interests include burn and critical care. Dr. Jeschke has been caring for burn patients and conducting research in the field of burns for nearly 20 years. The quality of his research is reflected by his funding and he was just recently awarded a grant from the CFI.

Greg Borschel was recruited to The Hospital for Sick Children as a Surgeon-Scientist. His clinical interests include pediatric hand, nerve and microsurgery. His research focuses on using tissue engineering and regenerative medicine to address peripheral nerve injuries. With Dr. Borschel establishing a basic science lab in peripheral nerve research, we will see a significant growth and development in this regard.

Tessa Gordon was recruited to The Hospital for Sick Children Research Institute as a Scientist and as a Professor within the Department of Surgery. Dr. Gordon will collaborate with Dr. Borschel in his research lab. This partnership will further strengthen our position as a leader in peripheral nerve basic science.

The Trillium Health Centre is our Division's newest teaching site and will become a new community rotation site for our residents. I look forward to the Trillium group's active participation in our Division as we grow our capacity to provide a community experience to our trainees. We welcome five new Adjunct Lecturers to the Trillium Centre, namely: **Michael Weinberg** (who is also the incumbent Chief of Plastic Surgery), **Cory Goldberg**, **Zvi Margalot**, **Morris Rebot** and **Frank Lista**.

PROMOTIONS

David Fisher now holds the rank of Associate Professor.

FACULTY AND RESIDENT GRANTS

Marc Jeschke: Research endeavour entitled 'Characterization of Burn-Induced Hepatic Apoptosis' funded by an NIH grant for \$1,912,500 over 5 years.

Cho Pang, Stefan Hofer, Toni Zhong: Research endeavour entitled 'Hypoxic Post conditioning of Human Skeletal Muscle Against Reoxygenation Injury' funded by a CHIR grant for \$380,000 over 3 years.

Toni Zhong: Research endeavour entitled 'The Use of Acellular Dermal Matrix in One-Stage Breast Reconstruction: A Randomized Controlled Trial' funded by a USDAPS-PSEF (Plastic Surgery Endowment Fund) National Endowment grant for \$50,000 over 18 months.

Oleh Antonyshyn: Research endeavour entitled 'Results of Primary Orbital Fracture Repair: An Analysis of Morphological and Aesthetic Outcomes' (Antonyshyn O, Fialkov J, Binhammer P, MacMillan C), funded by an Educational Foundation of the Canadian Society of Plastic Surgeons grant for \$10,000 from September 1, 2009-September 2, 2010.

'3D Statistical Skull and Face Model: Development and Application in the Design and Outcome Analysis of Craniofacial Surgery' (Antonyshyn O, Mainprize J), funded by the AO CMF CPP (AO Craniomaxillofacial Clinical Priorities Program) for \$125,000 from September 2009 - August 2011.

Jeff Fialkov: The Department of Defense Peer-Reviewed Orthopaedic Research Program (PRORP) Hypothesis Development Award supports his research entitled 'Development of a Novel Method for Stabilizing Traumatic Craniofacial Injuries' for U.S.\$100,000.

Marc Jeschke: Shriners Grant SHG 8660 funds his research entitled 'Assessment of Mechanisms of Improved Wound Healing and Protein Metabolism of Insulin in Severely Burned Patients' for \$350,000 per year from 2008-2010.

Shriners Grant SHG 8640 supports research endeavour entitled 'Insulin Attenuates Inflammation and Hypermetabolism After Severe Burn Via Modulation of PI3K and the PI3K Signaling Pathway' for \$250,000 per year from 2008-2010.

Carl C. Sr. and Marie Jo Anderson Charitable Foundation funds 'Design of Custom Made Skin from Cord Lining and Amniotic Stem Cells' for \$150,000 per year from 2008-2010.

CFI Leader's Opportunity Fund application (Project # 25407), received \$1 million in 2010.

NIH RO1 GM087285-01A2 grant supports 'Characterization of Burn Induced Hepatic Dysfunction' for \$1.9 million over 5 years from 2010-2015.

Paul Binhammer: CREMS grant supports his research, 'Three Dimensional Cartilage Thickness Mapping of the PIP Joint' for \$2750 in 2010 while 'Impact of Psychosocial Factors and Treatment Choice on Return to Work in Carpal Tunnel Syndrome' will receive AFSH funding for \$16,000 from 2009-2011.

James Mahoney: His research entitled 'Effect of Breast Reduction Surgery on Indicators of Insulin Resistance: A Pilot Study' (**Neinstein R, Ray J, Mahoney JL, Musgrave M**), was funded by a PSI Foundation grant for \$4,500 from 2008-2009.

Canadian Society of Plastic Surgeons grant supported the research entitled 'Effect of Breast Reduction Surgery on Indicators of Insulin Resistance: A Pilot Study' (**Neinstein R, Ray JG, Mahoney JL, Musgrave M**), for \$10,000 from 2008-2009.

Innovation Fund Ministry of Health grant funded the research entitled 'Wounds and Surgical Site Infections: Development of Web Based Tool for Patient Education' (**Mahoney JL, Musgrave M**), for \$7,500 from 2009 - 2010.

Innovation Fund Ministry of Health grant also funded the research entitled 'Innovation Proposal: Chiropractic Rapid Response Service' (**Ray J, Sargeant R, Mahoney JL, Leiter L**) for \$63,000 from 2009 - 2010.

Melinda Musgrave: The Keenan Research Centre Summer Student Scholarship funded 'Development of Guidelines for Venous Thromboembolism (VTE) in Plastic Surgery: The Canadian Experience' (Musgrave M, Mutter E) for \$2,500 for 2010.

RESIDENTS HONOURS/AWARDS/ POSITIONS HELD

Siba Haykal: John Edward DeToro Award, Division of Plastic and Reconstructive Surgery. PSI Resident Research Grant for 'Determining the Structural Integrity of Decellularized Tracheal Allografts.' MOH Funding awarded for 2010-2011.

Kristen Davidge: Epidemiology and Biostatistics Award for the Best Presentation by a Resident for 'Strategies for Handling Treatment Selection Bias in Nonrandomized Surgical Studies: A Functional Outcomes Analysis of Extremity Soft Tissue Sarcoma Patients Undergoing Extremity Salvage With and Without Reconstruction.' CSPA. Received her MSc I in HPME Clinical Epidemiology. Thesis title: 'Function and Health Status Following Soft Tissue Reconstruction for Limb Preservation in Extremity Soft Tissue Sarcoma.'

Karen Cross: Best Basic Science Award, Division of Plastic and Reconstructive Surgery. Received her Ph.D. Title of thesis: 'Assessment of Tissue Viability in Acute Thermal Injuries using Near Infrared Point Spectroscopy.'

Mary-Helen Mahoney: Mentor Canada Prize for Best Clinical Paper Award, Division of Plastic and Reconstructive Surgery.

Ryan Neinstein: Mentor Canada Prize for Best Clinical Paper Award, Division of Plastic and Reconstructive Surgery.

Karen Wong: Best Clinical Paper Award, Division of Plastic and Reconstructive Surgery. PSI Resident Research Grant for 'CLEFT-Q: Development of a Patient-Reported Outcome Measure for Cleft Lip and Palate.'

FELLOWS HONOURS/AWARDS/ POSITIONS HELD

Tatiana Cypel: Received this year's McMurrich Award presented at Gallie Day held on May 7, 2010 for 'In Vitro Assessment of Osteoblast Behavior in Craniosynostosis,' supervised by Dr. Christopher Forrest and co-supervised by Dr. Cho Pang, Dr. Peter Dirks and Dr. Iona Leong.

Sean Marcy: Orthodontic Research Fellow and MSc Candidate in the Post-Graduate Program, Orthodontics, Faculty of Dentistry, under the supervision of Dr. Chris Forrest, received the Clinical Science First Place - Charley Shultz Resident Scholar Award at the American Association of Orthodontists Annual Meeting in Washington, for 'Perceptions of Plastic Surgeons, Orthodontists and Laypersons to Altered Facial Symmetry.'

Laura Snell: Masters Degree in Biostatistics (MS), the Clinical Research Methods Track, at the Mailman School of Public Health, Columbia University. Her thesis project: 'Clarifying Expectations for Breast Reconstruction: The Development of a New Patient Assessment Tool.'

FACULTY HONOURS/AWARDS/ POSITIONS HELD

John Semple: Chair in Surgical Breast Cancer Research by the Canadian Breast Cancer Foundation - Ontario Region. The Chair is the first Surgical Research Chair awarded by the Canadian Breast Cancer Society, and also the first endowed Chair based in the Department of Surgery at Women's College Hospital.

Cho Pang: Plastic Surgery Education Foundation Award for Outstanding Achievement in Basic and Translational Research. This award was established to recognize outstanding achievements in basic and translational research impacting the practice of plastic surgery. This prestigious award recognizes an investigator whose novel and significant work has had or may have a far-reaching impact on the treatment of surgical disorders and the practice of plastic surgery.

Christopher Forrest: Arnis Freiberg Faculty Teaching Excellence Award, 2010.

Oleh Antonyshyn: William K. Lindsay Faculty Research Mentor Award, 2010.

Stefan Hofer: Appointed to Editor of the Journal of Plastic, Reconstructive and Aesthetic Surgery (JPRAS), formerly known as the British Journal of Plastic Surgery. Dr. Hofer is the first non-British Plastic Surgeon to hold this position.

Ralph Manktelow: Recipient of the 2010 CSPS Lifetime Achievement Award. This award honours members of the CSPS who have made an outstanding contribution in plastic surgery as well as to Society.

VISITING PROFESSORS

2010 HOYLE CAMPBELL VISITING PROFESSOR

This year's Hoyle Campbell Visiting Professor was Dr. Douglas Ross from Dalhousie University. Dr. Ross is a graduate of the University of British Columbia (BSc, MD). He also holds a Masters of Education from the Ontario Institute for Studies in Education at the University of Toronto. He completed his plastic surgery training at the University of Toronto.

This was followed by two years of fellowship training in Toronto (Hand and Microsurgery) and in Louisville, Kentucky (Hand Surgery). He has been a faculty member at the University of Western Ontario since 1992. He is Chair of the Division of Plastic Surgery at UWO, a staff member at the Hand and Upper Limb Centre at St. Joseph's Health Centre, and co-Director of the Peripheral Nerve Clinic in London. He serves as Chief Examiner for The Royal College in Plastic Surgery and Director of Education for the Department of Surgery at the University of Western Ontario. His clinical interests include upper extremity surgery, reconstructive microsurgery and peripheral nerve surgery. He also has a strong interest in surgical education. We were honored that Dr. Ross accepted the invitation to visit Toronto and teach our Residents. He has maintained professional and personal contacts within our division and our residents have benefited from his wealth of clinical and educational experience.

8TH ANNUAL R.T. MANKTELOW HAND AND MICROSURGERY LECTURESHIP

This year's Ralph T. Manktelow Hand Surgery Day was held on October 16, 2009. This year's Visiting Professor was Dr. James Chang, Chief of Plastic and Reconstructive Surgery, Stanford University Medical Centre.

7TH ANNUAL LINDSAY-THOMSON SYMPOSIUM IN PAEDIATRIC PLASTIC SURGERY

The 7th Annual Lindsay-Thomson Symposium in Paediatric Plastic Surgery was held on Thursday, September 24th, 2009. Dr. Cindy Verchere from British Columbia was the Visiting Lecturer who spoke on The Acolyte Conundrum.

CONTINUING MEDICAL EDUCATION

The 10th Annual Toronto Breast Symposium was held on April 8, 2010 at the Sutton Place Hotel and welcomed Visiting Professors: Dr. William P. Adams Jr., Dallas, Texas; Dr. Bradley Bengtson, Grand Rapids, Michigan; and Dr. Elizabeth Hall-Findlay, Banff, Alberta. This was followed by the 40th Annual University of Toronto Symposium on Aesthetic Plastic Surgery held from April 9-10, 2010. Visiting Professors included: Dr. William P. Adams Jr. of Dallas, Texas as the University of Toronto Visiting Professor; Dr. Al Aly of Coralville, Iowa as the University of Toronto Aesthetic Visiting Professor and Dr. Jeffrey Kenkel of Dallas, Texas as the W.R.N. Lindsay Visiting Professor. Both symposia were well attended and the quality of the lectures was outstanding. This year marks Dr. Wally Peter's final year as Chair of the Aesthetic Symposium. Dr. Peters has committed an enormous amount of time to organizing this symposium since its inception. The entire Division owes Dr. Peters a large debt of gratitude for his efforts in growing this meeting into one of the best annual aesthetic surgery meetings in North America.

DIVISION FIRSTS - ACADEMIC EDUCATION RETREAT

One of the highlights for the past year was the Academic Education Retreat that was held and led by Dr. Mitch Brown on April 7, 2010. This represented a first for our Division. The teaching faculty retreated and worked on several important goals that included: establishment and development of an academic down day, review of our goals and objectives for each of the teaching hospitals, review of how we can better develop and integrate the CanMEDS roles into our curriculum, further expand and integrate our research goals within the curriculum and, finally, improve the way in which we evaluate our teaching effectiveness in each of the elements of the curriculum. This important retreat has brought about significant changes in our curriculum which will be of significant value to our trainees and also to faculty as we work towards maintaining excellence in breadth of training in plastic and reconstructive surgery.

ROYAL COLLEGE FELLOWSHIPS

The following residents have successfully passed their RCPSC fellowship examinations: **Glyka Martou, Vanessa Wong and Amir Mrad.**

The Division of Plastic and Reconstructive 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

Thomas Waddell

Acting Chair



The academic year 2009-2010 marked the culmination of years of effort by Dr. Keshavjee to build the Division of Thoracic Surgery into the pre-eminent Division in the world. It continues to have the largest clinical activity of any thoracic program in Canada. The three sites include Toronto General Hospital (TGH) and the community hospitals, St. Joseph's Hospital and Toronto East General Hospital (TEGH). Residents have long enjoyed the community surgery experience at St. Joseph's Hospital while this year marked the first year that the resident rotated through TEGH. The Toronto General site continues 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. This year marked the opening of the Menkes Family Interventional Thoracic Surgery Suite at TGH 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, autofluorescence and narrow band imaging as well as endoscopic surgery. Drs. Darling, de Perrot and Waddell were recognized for their accomplishments in the field with membership in the American Association for Thoracic Surgery. Dr. Keshavjee's leadership was recognized with election to the Council of the AATS. Dr. Waddell was promoted to Full Professor. Dr. Keshavjee was selected as the new Surgeon-in-Chief for the University Health Network.

EDUCATION

Drs. Christian Finley, Michael Ko, Salvatore Privitera and Shona Smith completed their training this year and have taken up clinical positions in Hamilton, Toronto, Newmarket and Sudbury. 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. Michael Ko. The RJ Ginsberg Award for Best Postgraduate Teacher was awarded to Dr. Shaf Keshavjee. The GE Darling Award for Excellence in Undergraduate Teaching was also awarded to Dr. Gail Darling. The 6th 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. Alec Patterson, Chief of Cardiothoracic Surgery, Washington University, St. Louis, Missouri.

RESEARCH

At Pearson Day, the award for Best Basic Science Paper was awarded to Dr. Masaaki Sato for his project entitled "Restrictive Allograft Syndrome (RAS): a novel entity of chronic graft dysfunction after lung transplantation" (supervisor, S. Keshavjee). The award for Best Clinical Research Paper was awarded to Dr. Michael Ko for his project entitled "MicroRNA in esophageal cancer samples pre and post-neoadjuvant chemo-radiotherapy" (supervisor, G. Darling). Overall, the clinical research activity of the Division remains very strong as the major Canadian contributor to multi-centre clinical trials and as developer of several innovative trials, including neo-adjuvant therapies for lung, mesothelial, and esophageal cancers, and CT screening for mesothelioma and recurrent lung cancer. The Latner Thoracic Research Laboratories continues to be very successful with grant capture and publications. Drs Keshavjee, Liu, Waddell, de Perrot, Hwang (Pathology) and Yasufuku work in areas of lung injury and repair, tissue regeneration, lung transplantation and thoracic oncology. Dr. Waddell has been renewed for a second term as R. Fraser Elliott Chair in Transplantation Research and was awarded the newly created Heather and Richard Thomson Chair in Translational Research.

DIVISION OF UROLOGY

S. Herschorn

Martin Barkin Chair in Urological Research



ACADEMIC PROMOTION

Dr. John Honey, Dr. Darius Bagli and Dr. Magdy Hassouna were promoted to Professor.

Dr. Kenneth Pace was promoted to Associate Professor.

HIGHLIGHTS

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 Saudi Arabia, Morocco, Brazil, Russia, United States, and Canada.

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 a new grant from the Society for Pediatric Urology (Role of sex steroids in perioperative management of hypospadias) in which he is supervising Dr. Ahmed Haddad. He was also invited to lecture in Bethesda, MD; Washington, DC; Ann Arbor, MI; Syria, and locally.

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 projects funded by the Ontario Research Fund and Canadian Foundation for Innovation (Disruptive technologies in pediatric and fetal intervention) and the Center for Computer-Assisted Intervention and Innovation.

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

He was an invited speaker in Jordan and Napa Valley, California.

Dr. Armando Lorenzo continued his work in Clinical Epidemiology and minimally invasive pediatric surgery.

He was an invited speaker in California, Florida, Puerto Rico and Canada. He was recognized by the Journal of Urology with an award as an Outstanding Reviewer.

MSH

Dr. Ethan Grober continued his work on male infertility at Mount Sinai and Women's College. His research includes his project entitled 'Intra-Operative Objective Structured Assessment of Technical Skill (OSATS): Correlation with Operative and Clinical Patient Outcomes.'

He received a new grant from the Association for Surgical Education - CESERT entitled 'Validation of Real-time, Intraoperative, Surgical Competence (RISC) assessments linked to patient outcomes.' He also received grants from PSI, Medical Council of Canada, RCPSC and CUA.

He was an invited speaker in Charlottetown.

Dr. Keith Jarvi, site chief at MSH, continued the Male Infertility Program and as Director of the Murray Koffler Urologic Wellness Centre (MKUWC). He was an invited speaker in Montreal and locally.

He continued work on infertility on projects funded by the Canadian Uro-Oncology Group (Identification of prostate cancer biomarkers in semen) and Physicians' Services Incorporated (Use of seminal fluid protein as biomarkers for diseases in the male reproductive tract).

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 also organized resident and fellow presentations for the Annual Robson Research Day.

He was an invited speaker in San Francisco and Montreal.

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

He was invited speaker and/or Visiting Professor in Spain, Switzerland, Greece, Venezuela, Hamilton, Quebec City and Halifax.

He continued his research with funding from the Ontario Institute for Cancer Research for a project entitled 'A proteomic and genetic biomarker panel for improving PSA performance,' from CIHR for 'Clinical significance of calcium ion transport in prostate cancer and genetic, epigenetic, and proteomic analysis of the kallikrein family in search for novel diagnostic, prognostic, and risk susceptibility algorithms for prostate cancer.' He was associated with the Top 3 Best Posters at the Society of Urologic Oncology Meeting in Bethesda, Maryland.

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 as well as research in overactive bladder. Dr. Carr was in charge of Journal Seminars for Urology residents.

She won the A.W. Bruce Faculty Undergraduate Teaching Award. She shared the Best Clinical Presentation Award at the International Continence Society Meeting in San Francisco.

Dr. Sender Herschorn continued as University Chair and Martin Barkin Chair in Urological Research. He continued his clinical research in urinary incontinence, neurogenic bladder overactivity, and erectile dysfunction. He was invited speaker and lecturer in San Francisco; St. Petersburg, Florida; Kingston, Ontario; Quebec City; United Kingdom, China and Japan. He also directed the 17th Annual U of T Urology Update.

He was elected President of the Canadian Urological Association. He won the Best Clinical Presentation Award at the International Continence Society Meeting in San Francisco. He was given the Lifetime Achievement Award from the Society for Urodynamics and Female Urology in St. Petersburg, Florida. He also won the Michael Jewett Award for postgraduate teaching.

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

He continued his many peer-reviewed research projects as well as initiated new work in prostate cancer with funding from NCIC, Ontario Cancer Research Network, CURC, CPCRF, CIHR. He was guest speaker and Visiting Professor in China; Japan; Australia; Cleveland, Ohio; Bethesda, Maryland; Washington, DC; and Montreal.

He was elected Past-President of the Canadian Urological Association.

Dr. Ron Kodama organized the 7th Annual Resident Basic Science Course in February. He also directed the annual Urology Fair 2010.

He was appointed the Chief of Urology at Sunnybrook Health Sciences Centre.

He won the Faculty of Medicine Aikins Award for Undergraduate Teaching.

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 won the Division of Urology Postgraduate Surgical Teaching Award.

Dr. Vasundara Venkateswaran continued her basic research in prostate cancer with funding from CIHR, CPCRF, and NCIC. She won the C2R Young Investigator Award from the Canadian Urology Research Consortium/Canadian Urologic Oncology Group and the Travel Award from the Prostate Cancer Canada/Australia-Canadian Prostate Cancer Research Alliance.

UHN - TGH AND PMH

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

He was invited speaker at meetings in San Francisco, Las Vegas, Bethesda, Greece and China. He was on the Scientific Committee of the 3rd World Congress on Controversies in Urology in Athens, Greece.

He continued as the 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. He continued work under a CUA/CUOG Bayer Kidney Cancer Fellowship Award for renal cell carcinoma. Other projects are funded by the Kidney Foundation, Science and Engineering Council, CIHR, and Ontario Institute for Cancer Research.

He continued as the Wyeth/CIHR Clinical Research Chair in Oncology.

He was an invited speaker and/or Visiting Professor in San Francisco, Seattle, Chicago, Cleveland, Bethesda, Scotland, Germany, Switzerland, and locally.

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

Dr. John Trachtenberg continued his active research into novel therapies for prostate cancer with grants from CIHR, CPCRF, PMH, Prostate Cancer Canada, NCIC, NIH, NCI/ SWOG, and industry. He was invited speaker and Visiting Professor in North America and China.

He co-chaired the 19th Annual Issues and Controversies in Las Vegas, Nevada.

Dr. Tony Finelli continued his funded research projects in renal cancer and in men with negative biopsies for prostate cancer. Funding is from CPCRF, CUA/CUOG, CIHR, and the Faculty of Medicine Continuing Education.

He was invited speaker in Montreal, Charlottetown, Las Vegas, Spain, China, and locally.

Dr. Andrew Matthew, clinical psychologist, continued his work in outcomes after prostate cancer therapy. His projects are funded by PMH Foundation, CIHR, and the Toronto Community Foundation.

UHN - TWH

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

He became Section Editor, 'Neuromodulation: Technology at the Neural Interface.'

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 shared the Best Clinical Presentation Award at the International Continence Society Meeting in San Francisco.

He continued as the Assessor of Educational Performance for the Department of Surgery.

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 San Francisco. He was a guest speaker in Indianapolis and Germany.

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 became part of the American Urological Association Leadership Program.

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.

He won the Division of Urology A.W. Bruce Undergraduate Teaching Award, the Department of Surgery Bruce Tovee Award for Undergraduate Education, and the St. Michael's Hospital William Horsey Award for Postgraduate Education.

ACADEMIC EVENTS & AWARDS

The **Annual Charles J. Robson Research Day** was held on March 25th. The Visiting Professor was Dr. Bernard Churchill, Chief of the Division of Pediatric Urology at the University of California, Los Angeles.

There were 33 presentations. Resident Clinical winners were **Melise Keays** and **Steven Kim**; Resident Basic/Translational **Raj Satkunasivam**; Honourable Mention for student was **Natalie Venier**; Fellow Clinical winner was **Robert Abouassaly**; Fellow Basis/Translational winner was **Bas van Rijn**.

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

The PGY-5s, **Drs. Robert Hamilton, Girish Kulkarni, Michael Ordon** and **Sunoj Punnen**, successfully completed their Royal College Examinations.

VISITING PROFESSORS

Guests this year were Herbert Lepor, MD from New York University; Eric Rovner, Medical University of South Carolina; J. Christian Winters, MD from Louisiana State University; J. Stuart Wolf, MD from University of Michigan; Eric Klein, MD from the Cleveland Clinic; Joseph Presti, MD from Stanford University; Dean Bajorin, MD from Memorial Sloan-Kettering Cancer Center; Harris Nagler, MD from Albert Einstein School of Medicine; James Talcott, MD from Harvard Medical School; and Laurent Boccon-Gibod, MD from University of Paris, France.

DIVISION OF VASCULAR SURGERY

Thomas Lindsay

Chair



INTRODUCTION

Academic productivity continues to evolve in the rapidly changing vascular surgery specialty at the University of Toronto. Dr. Graham Roche-Nagle was successfully recruited to the TGH/UHN site with a focus on surgical education, quality outcomes and interventional catheter based therapy. He is leading the UHN's membership in the Vascular Study Group of New England that has developed a vascular quality improvement registry with proven best practice benefits. Simultaneously the entire university Division is working with the Cardiac Care Network to develop a quality improvement registry and network for the entire Province of Ontario. Sunnybrook was awarded EVAR funding by the Ministry of Health and Long Term Care. At St. Michael's, recruitment is underway for a new Division Chief and for a junior staff position. Both SMH and UHN opened dedicated OR suites with fixed angiographic imaging to facilitate all types of EVAR cases. Sunnybrook has announced that the Maggisano Family Chair in Vascular Surgery was funded and approved by the University of Toronto. It is anticipated that the initial chair will be awarded in the 2010-11 academic year.

ADMINISTRATION

Dr. Oren Steinmetz of McGill University was the external reviewer of Dr. Lindsay's initial term as Division Chair in Spring 2010. Dr. Johnston continues as R. Fraser Elliott Chair in Vascular Surgery and with his co-editor, Dr Jack Cronenwitt, realized the publication of the 7th edition of Rutherford's Vascular Surgery. He continues as the Chair of the SVS Document Oversight Committee. Dr. Lindsay continues as a member of the SVS Document Oversight Committee. He began collaboration with Kori Kingsbury, the CEO of the Cardiac Care Network, to develop a business case to present MOHLTC for a program of quality improvement in Vascular Surgery for the Province of Ontario. A business case is being developed for presentation to MOHLTC. Dr. Rubin continues as the Chairman and CEO of the MSH/UHN Academic Medical Organization, and represents all AHSC AFP Governance Organizations in Ontario on the Academic Medicine Steering Committee. Dr. Rubin is now Program Medical Director of the Peter Munk Cardiac Center, and continues as Head of the Division of Vascular Surgery at UHN and as Chair of the SVS Audit Committee. Dr. Tanner completed his term as the Head of the Section of Vascular Surgery at the Ontario Medical

Association but remains a member of the OMA Board of Directors and Chair of the Surgical Assembly of the OMA. He was chosen to be the Lead Negotiator for the upcoming 2012 OMA/MOHLTC contract. Dr. Andrew Dueck has been appointed to the Canadian Society of Vascular Surgery as the Program Chair for the 2010 meeting in Vancouver. Dr. Dueck is the Vascular Surgery representative on the tariff committee at the OMA. Dr. Rubin remain a member of the Research and Education committee and Chair of the Audit Committee of the SVS. Dr. Lindsay continues as a member of the Editorial Board of the Annals of Vascular Surgery and as a key reviewer for the Journal of Vascular Surgery. Dr. Maggisano has successfully obtained funding for a Chair in Vascular Surgery at Sunnybrook through the University of Toronto and the initial recipient will be selected in the Fall 2010.

EDUCATION

Dr. Oreopoulos has successfully completed his second year of the Educational Scholars Program and continues as the coordinator of the Vascular Surgical resident seminar series. He is taking an additional year of training in Interventional Radiology at the University Health Network. Dr. Heather Cox completed her Royal College Vascular residency and is to complete an interventional fellowship prior to accepting a position at the University of Alberta in Edmonton. Dr. Kevin Molloy completed a one-year fellowship and returned to the UK to complete his vascular surgical certification. Dr. Tony Moloney completed a one-year fellowship in vascular surgery and will begin a Master's degree in eHealth at McMaster University in the Fall 2010.

RESEARCH

Dr. Rubin holds three independent basic science operating grants from CIHR. In addition, he is Chair of the Grant Review Panel for the Foundation for Accelerated Vascular Research in San Francisco, and is a member of the CIHR - Multiple Sclerosis Society Advisory Panel that is evaluating the role of venous stenosis in Multiple Sclerosis. Dr. Lindsay's PSI grant to study complement activation in ruptured abdominal aortic aneurysm in both humans and animals continues. Dr. Tse has completed his Master's Degree in the Institute of Biomedical Engineering under the supervision of Dr. Cristina Amon at University of Toronto. Dr. Papia was awarded the Patient Safety Scholar Award from Sunnybrook Hospital. Dr. Wooster is the recipient

of a Royal College of Physicians and Surgeons of Canada award for a personal practice audit tool to assess health advocacy competence in practice.

AWARDS

At the Canadian Society for Vascular Surgery meeting in September 2009, the Division took home the Provan, Cook, Gore and Sigvaris awards. The Provan award went to Drs. Lindsay and Molloy for an educational project on assessment of EVAR skills in trainees, Dr. Tse won the Cook Award for his project on EVAR and computational fluid dynamics, Dr. Dueck and Wooster took home the Gore Award for Aortic Aneurysm Screening in Canada and the Sigvaris Award for the Best Venous Presentation regarding an audit tool for venous duplex reports. Dr. Tse also won the Best Poster Award for Engineering in a Clinical Setting during the Institute for Biomaterials and Biomedical Engineering Scientific Day 2010.

EXTERNAL VISITS AND VISITORS

Drs. Johnston and Lindsay presented at the Winnipeg Vascular Surgery course in April 2010. Dr. Johnston was a guest at the University of Buffalo, Department of Surgery Faculty Development Retreat. In addition, he presented at the Saudi Society for Vascular Surgery in 2010. Dr. Lindsay gave two presentations related to his advocacy work on Aortic Aneurysm Screening at the Annual Meeting of the CSVS, and at the College of Family Physicians Annual Meeting in October 2009.

SURGICAL ALUMNI ASSOCIATION

Martin Barkin

President



This past academic year was an extremely active one for the SAA and the advisory committee met five times during the year. We set and were able to fulfil three important objectives.

The first was to augment and improve our data base of members. Over a six-month period, we increased the number of records by 1200. Data accuracy increased to 80% (the Faculty average is 75%) and merged our data into the central Faculty data base. Our tracing project has had a 85% success rate (85% of all "lost" alumni have been found.)

We agreed to join the Alumni Council, an assembly of representatives from the 11 Alumni Associations across the Faculty of Medicine. This is intended to be a forum to discuss alumni relations best practices, and is a means to advise the Dean's Office on Alumni affairs.

This year we significantly enhanced our support for the Department of Surgery's Academic Program. In addition to our record-yielding annual appeal, we put our efforts specifically behind the Surgeon Scientist Program (SSP) where we strongly supported, planned and presented "SHARP MINDS - SKILLED HANDS," the special 25th anniversary dinner celebrating the SSP and coinciding with the Department's Annual Gallie Day program. The evening was a resounding success. It produced a video to be used in future presentations of the SSP, sold 54 tables, was attended by 435 guests, and generated net profits of over \$60,000 for the SSP.

Your Surgical Alumni Association has now become a strong supportive part of the Department's activities, thanks to the strong encouragement from its Chairman, Dr. Richard Reznick.

SURGICAL ONCOLOGY UMBRELLA COMMITTEE

Ralph George

Chair



University of Toronto Surgical Oncologists continue to provide provincial and national leadership in cancer care, oncology research, and fellowship training.

This year saw a crowning achievement for Dr. Carol Swallow who has led the general surgical oncology training program for a decade and served as Chair of The Royal College Specialty Committee in General Surgical Oncology (GSO). The Royal College held its first ever quality exams in GSO. This achievement took many years of persistent work and leadership by Dr. Swallow and will benefit GSO trainees across our country. With The Royal College examination and certification in place, Dr. Swallow is passing on her Program Director role to Dr. Frances Wright (Sunnybrook) and the Specialty Chair role to Dr. Ralph George. Congratulations to Dr. Swallow who has served so well in these two positions, and best wishes as she takes on the presidency of the Canadian Society of Surgical Oncology.

On the provincial front, Dr. Jon Irish and Dr. Robin McLeod continue to lead the Cancer Care Ontario Surgical Oncology program. Under their guidance, major guidelines and directives have come in the areas of breast cancer, rectal cancer, thoracic oncology and hepatobiliary surgery. Many of these were led by other University of Toronto Surgical Oncologists. Two new provincial guideline initiatives are underway in melanoma and gastric cancer, with input from Dr. Frances Wright and Dr. Natalie Coburn.

Research is flourishing within Surgical Oncology. This year's report will emphasize that eleven surgical oncologists are supervisors within the Surgical Scientist Program. Areas of interest range from Dr. Nancy Baxter's focus on young adult cancer survivors, to Dr. Sean Cleary's interest in the genetic epidemiology of hepatobiliary and pancreatic malignancy, and the efforts of Dr. David Urbach and Dr. Alice Wei in the delivery of surgical cancer care and barriers to access.

Examples of innovative projects, within surgical oncology, include Dr. David McCready's work with rapid diagnosis, Dr. Claire Holloway's interest in 3D imaging applied to surgery, and Dr. Rebecca Gladdy's focus on sarcoma genomics and development of new therapeutics. These are just a few examples of the ongoing research activity.

Events in the past year have included the University of Toronto Update in Surgical Oncology 2009 with guest, Dr. Heidi Nelson, from the Mayo Clinic, the bi-annual Toronto Breast Care Symposium (co-organized by

Dr. Jaime Escallon), key presentation in the Update in General Surgery, and the 2nd annual Breast Care Symposium.

Finally, there have been a number of new recruits over the past couple of years. This year saw Dr. Jean-François Boileau join the surgical oncology group at Sunnybrook. Jean-François was recruited from Centre hospitalier de l'Université de Montréal (CHUM) and brings expertise in breast and melanoma surgery.

OFFICE OF INTERNATIONAL SURGERY

Andrew Howard

Director



OVERVIEW

The Office of International Surgery is founded on the belief that improving access to surgical care in low income countries has a great potential to reduce the global burden of disease. The role of a University department of surgery within the global health field should be a scholarly role, emphasizing education and research. Provision of clinical care supports these activities within some of our projects.

ONGOING PROJECTS

PTOLEMY LIBRARY PROJECT

Through a partnership with the University of Toronto Libraries, the Office of International Surgery provides free full text access to the University of Toronto Library to surgeons and surgical trainees in low income countries. The portal at www.ptolemy.ca provides an access point to the most clinically relevant resources to simplify use. Our librarians, Sandra Kendall at Sidney Liswood library, and Warren Holder and Sian Mickle at Robarts, are true 'librarians to the world.' Over 600 people use this service, and tens of thousands of full text articles have been downloaded by surgeons in low income countries since we started providing access in 2001.

SURGERY IN AFRICA REVIEWS

These online reviews are narrative reviews on a broad range of surgical topics focusing on clinically relevant aspects of surgery in resource constrained settings. Authors from Africa or from low income countries often partner with a Canadian colleague who has international experience to write a review. The review connects the evidence available in the surgical literature with the realities of practice in settings more challenging, in some ways, than many U of T surgeons are accustomed to working in. A generous grant from Johnson and Johnson allows us to support authors from low income countries, and we always welcome U of T or Canadian surgeons with ideas for a review. Contact andrew.howard@sickkids.ca or brian.ostrow@bookshelf.ca if you are interested in writing a review. Reviews dating back to 2005 are online at www.ptolemy.ca/members.

BETHUNE ROUND TABLE ON INTERNATIONAL SURGERY

This annual Canadian academic meeting is one of the first to focus on surgical aspects of global health. The 2009 Bethune Round Table was held in Toronto, with highlights including Mme. Adrienne Clarkson as a guest speaker on the life of Norman Bethune, and with clinical and scientific presentations from all specialties of surgery. The 2010 meeting was held in Calgary and the 2011 meeting will be held in Montreal, in partnership with the Canadian Network for International Surgery www.cnis.ca. Watch the CNIS website for dates and abstract deadlines for the spring 2011 meeting. CNIS and other partners contribute to a scholarship fund which allows presenters with accepted abstracts from low income countries to travel to Canada and present excellent papers which greatly enhance our understanding and engagement. Canadian surgeons and doctors from across the country attend the event to share what works in all the different avenues of Canadian involvement in global health and surgery.

TORONTO ADDIS ABABA ACADEMIC COLLABORATION

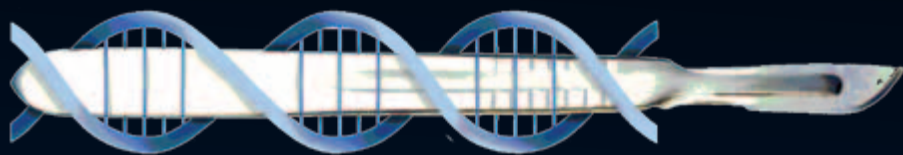
Dr. Ted Gerstle and Ms. Ann Roche from The Hospital for Sick Children lead an educational mission twice annually involving teaching operative paediatric surgery within the department of surgery at Black Lion Hospital in Addis Ababa, Ethiopia – the main teaching hospital for Addis Ababa University. General surgery, ENT, ophthalmology, orthopaedics, anaesthesia, and perioperative nursing are taught together according to the needs and plans of our Ethiopian counterparts. This project represents the beginnings, in the department of surgery, in fulfilling the potential of the Toronto Addis Ababa Academic Collaboration. Many departments at U of T are linking with AAU to strengthen the teaching and academic collaboration at both institutions.

GLOBAL HEALTH EDUCATION INSTITUTE

The department of surgery is participating, in conjunction with anaesthesia and obstetrics, in teaching residents from across U of T who are taking the Global Health Education Institute course directed by Dr. Barry Pakes, an emergentologist from Sunnybrook. There is demand for an expanded surgical component to this course next year, including skills lab sessions – so we will need faculty. Including you. Please contact andrew.howard@sickkids.ca if you are interested in teaching.

EVERYTHING ELSE - YOU

Global Health and Surgery have always belonged together at U of T and every hospital and division is in some way involved. Enabling, improving and acknowledging this scholarly work is the responsibility of OIS. We do want to hear from you. Our core committee includes Dr. Mark Bernstein, Dr. Brian Ostrow, Dr. Ted Gerstle, Dr. Allan Okrainec, Dr. Georges Azzie, and myself. Please do contact us so that we can continue to build the community of faculty and trainees involved in Global Health in our department.



SHARP MIND, SKILLED HANDS

Celebrating 25 Years of Excellence - Surgeon Scientist Program

The Department of Surgery celebrated its rich history of research and science under our Surgeon Scientist Program with a celebratory gala held at the Westin Harbour Castle on May 6, 2010. The event, called Sharp Minds: Skilled Hands, marked the 25th anniversary of the Surgeon Scientist Program which is made up of dedicated surgeons, scientists and surgical residents who work to advance science and medical care.

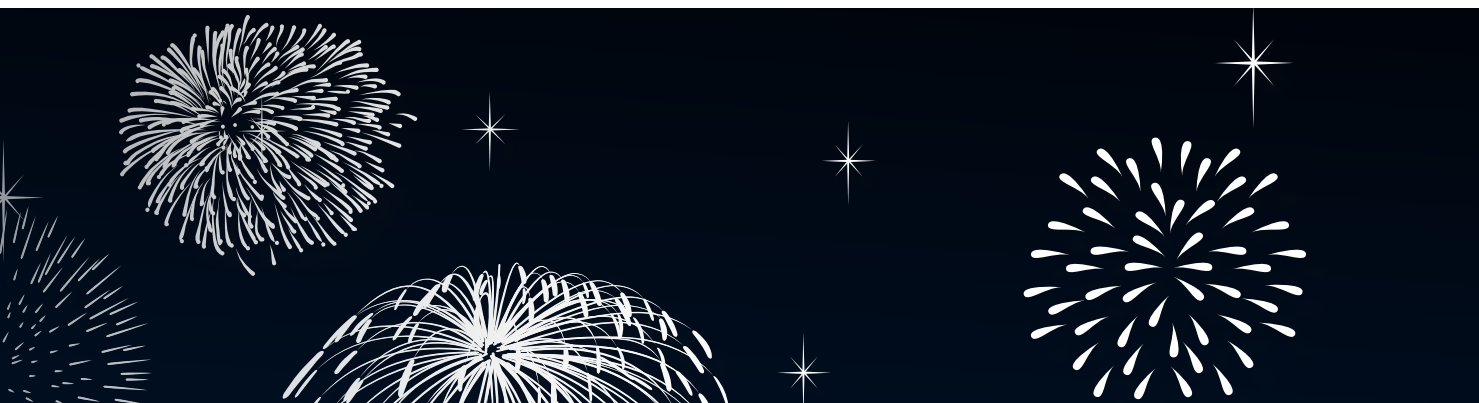
The Right Honourable Madame Adrienne Clarkson, the former Governor-General of Canada, attended and gave an informative address about Dr. Norman Bethune. Also present were: Susan Ormiston, the respected journalist from the Canadian Broadcasting Corporation who served as the emcee; Dr. Joseph Vacanti, our Gordon Murray Lecturer for 2010, current faculty members, residents, alumni, friends and supporters of the Department.



Bottom Left: L-R: The Right Honourable Adrienne Clarkson, former Governor-General of Canada; Dr. Richard K. Reznick, Department of Surgery Chair; Dr. Ben Alman, Vice-Chair of Research; Ms. Susan Ormiston, CBC broadcaster

Top Photo: The distinguished Dr. Donald Wilson, former Chair of the Department of Surgery (1972-1982)

Bottom Right: L-R: Dr. Paul Kongkham, Dr. Dini Kongkam (SSP neurosurgery trainees), Dr. Scellig Stone, Dr. Ange Stone - The future of medicine



Top Left: Dr. R. Reznick delivering his address

Bottom Photo: Warming up before dinner

Top Right: L-R: Dr. Bernard Goldman; Dr. Catherine Whiteside, Dean of the Faculty of Medicine; and Dr. Paul Walker, exchanging pleasantries

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 and Reconstructive Surgery
Dr. J. Pippi Salle	Urology

The Department of Surgery at The Hospital for Sick Children has had a productive year. Dr. James Wright continues to lead the Canadian Paediatric Surgical Wait Time Project. The project, funded by Health Canada, measures wait times for children's surgery in 11 surgical subspecialties. In June 2010, the project contributed high-level findings to the Wait Time Alliance 'Report Card on Wait Times,' garnering national media coverage for paediatric surgical wait times. From January-December 2009, of 64,095 completed paediatric surgeries in 15 Canadian pediatric academic hospitals, more than 17,000 children exceeded access targets. The project currently focuses on generating benchmark reports and supporting knowledge sharing for its participating hospitals, while moving towards a self-sustaining model.

Targeted funding from the Ministry of Health and Long Term Care continues to make a substantial impact on wait time for surgery at SickKids. While waits are still not ideal, the number of children waiting has dropped from over 3,000 to approximately 2,000. Great strides have been made in reducing wait times for cardiac surgery and children requiring dental treatment under anesthesia.

NEW STAFF

New recruits include Drs. Greg Borschel, Tessa Gordon and Joel Fish all of the Division of Plastic and Reconstructive Surgery, Dr. Lucas Murnaghan (joint recruit with Women's College Hospital) and Dr. Kellie Leitch (interim, locum assignment) of the Division of Orthopaedic Surgery.

DEPARTURES

Dr. Robert B. Salter passed away, having just completely retired from the Hospital in March 2010.

APPOINTMENTS & PROMOTIONS

Dr. David Fisher, of the Division of Plastic and Reconstructive Surgery was promoted to Associate Professor. Dr. Stephen Lewis, Division of Orthopaedic Surgery, was promoted to Associate Professor. Dr. Michael D. Taylor, Division of Neurosurgery, was promoted to Associate Professor.



DIVISION OF CARDIAC SURGERY

Sickkids' cardiovascular surgeons hold nine external peer-reviewed grants: five Heart and Stroke, two CIHR, and two from the Children's Heart Foundation. There were 27 peer-reviewed publications. The Heart Centre (in which

the division is a key participant) held a two-and-a-half day symposium attended by over 150 individuals, many from around the world. Division members were also key participants in American and overseas conferences including the American Heart Association annual meeting and the American Association for Thoracic Surgery annual meeting.

DIVISION OF GENERAL AND THORACIC SURGERY

The Centre for Image-Guided Innovation and Therapeutic Intervention (CIGITI) (www.cigiti.com), developed by a team headed by Dr. Peter Kim, was officially opened. Dr. Kim's team is developing new innovative technologies focused on paediatric and fetal applications in three areas: image-guided surgical intervention, simulation for educational applications and miniaturized robotic surgery. The CIGITI is funded by approximately \$20 million in grants, from a variety of governmental and industrial sources. Dr. Priscilla Chiu was co-principal investigator on a \$20 million CIRM-CSCC grant in support of novel treatments to target cancer stem cells. The amount allocated for her work is \$730,000 over four years.

Dr. Jack Langer was part of the team that established the SickKids Obesity Management Program (STOMP), which ultimately anticipates performing 10-15 bariatric surgical procedures per year. Dr. Langer is also Chair of the Research Committee of the newly formed University of Toronto Collaborative Bariatric Surgery Program, and sits on the provincial Bariatric Surgery Steering Committee. 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 and will soon be adopted by pediatric surgical training programs world-wide. Drs. Azzie and Gerstle, along with Doruk Ozgediz (pediatric general surgery fellow) are involved in a number of important initiatives in Africa developing training programs and surgical expertise, and measuring the burden of surgical disease on population health.

Dr. Azzie continues to develop an innovative tele-mentoring program teaching minimal access surgical skills to surgeons in Botswana. Dr. Gerstle is co-principal investigator on a grant from the Canadian International Development Agency (CIDA) which provides \$420,000 over three years for healthcare leadership development in Tanzania and Ethiopia. Dr. Gerstle is also co-principal investigator on a grant from the Children's Oncology Group to study the management of adrenal adenocarcinoma. Dr. Paul Wales continues to advance the treatment of intestinal failure through the Group for Improvement of Intestinal Failure and Treatment (GIFT), and is involved in translational studies using a porcine model of short bowel syndrome in order to develop novel medical and surgical approaches to this problem. Dr. Annie Fecteau served as Chair of the American Pediatric Surgical Association Ethics committee. Members of the Division published 41 papers and delivered numerous invited lectures around the world on a variety of topics.

DIVISION OF NEUROSURGERY

Dr. Rutka became President of the American Association of Neurological Surgeons and Honoured Guest at the Congress of Neurosurgery, two of the highest awards possible in Neurosurgery. Dr. Rutka is also President-elect of The American Academy of Neurological Surgery. Dr. Michael D. Taylor won The Royal College of Physicians and Surgeons of Canada Gold Medal Award in Surgery, 2010 and The Canadian Cancer Society Award for Excellence in Cancer Research-Young Investigator Award in Biomedical Science, June 2009. The division published 123 peer-reviewed papers or textbook chapters including those in *Nature*, *Nature Genetics*, *JAMA* and the *NEJM*. The division members held or were collaborators on 28 peer-reviewed grants totaling 14,847,000.

DIVISION OF ORTHOPAEDIC SURGERY

Dr. Lucas Murnaghan joined the Division of Orthopaedic Surgery in August 2009 to develop the sports medicine program in children and young adolescent in Toronto. Lucas was a joint recruit between The Hospital for Sick Children, Women's College Hospital and Mount Sinai Hospital.

Dr. Kellie Leitch joined the Division of Orthopaedic Surgery in July 2009 on an interim, locum assignment.

The Division of Orthopaedic Surgery lost a pioneer in paediatric orthopaedics, Dr. Robert Salter. Over the 55 years of his academic career, which was spent at SickKids, Dr. Salter focused his efforts on "transformational research" which is defined as work that transforms the way we care for patients resulting in major world-wide benefits. Dr. Salter's work not only helped the patients with the deformities and diseases he focused on, but his work inspired future scientists and health care practitioners by his unique approach to complex scientific questions. His research work made him the best-known orthopaedic surgeon in the world, and he was one of the most popular speakers and visiting professors of his generation. Despite his busy clinical practice, he found time to serve in various leadership positions in the hospital, the University of Toronto and the Canadian medical community.

In other divisional activities, Dr. Ben Alman successfully completed his first term as the Head of the Division of Orthopaedic Surgery. An extensive review of the division's accomplishments and future directions was conducted earlier this year. The review committee gave laudatory remarks to Dr. Alman for his exemplary leadership.

Members of the Division continue their successful clinical and research efforts. Dr. Reinhard Zeller, Division of Orthopaedic Surgery, was appointed as a member of the American Orthopaedic Association. Dr. Unni Narayanan was awarded a highly-competitive CIHR's randomized clinical trial grant. The Division now boasts four of their faculty who hold CIHR funding as Primary Investigator, making them the highest proportion of CIHR funded orthopaedic surgeons in any one division in the country.

DIVISION OF PLASTIC AND RECONSTRUCTIVE SURGERY

The Division of Plastic and Reconstructive Surgery has had a productive year in terms of recruitment. Dr. Greg Borschel completed his residency training at the University of Michigan and was recruited from Washington University, St. Louis. His clinical field of expertise is peripheral nerve, upper extremity and microsurgery. He is cross-appointed as surgeon-scientist with a research focus devoted to improved understanding and outcomes in peripheral nerve injury using growth factor delivery systems for motor nerve injury and the use of type I collagen conduits for the repair of peripheral nerve gaps. Dr. Borschel's recruitment has been instrumental in attracting, to the Division of Plastic and Reconstructive Surgery, Dr. Tessa Gordon who has an international reputation as a basic scientist in the field of peripheral nerve injury and repair. Tessa's work has attracted international attention for her studies of neurophysiology, nerve regeneration, electrical stimulation and novel surgical paradigms.

Dr. Joel Fish joined our division as the Medical Director of the Burn Program. Dr. Fish is a graduate of the University of Toronto surgeon-scientist program in Plastic Surgery and was on staff at the Ross Tilley Burn Unit for many years. He has a strong research interest in the application of infra-red spectroscopy in determination of burn wound depth.

Dr. Cho Y. Pang received the inaugural Award for Outstanding Achievement in Basic Science and Translational Research, Plastic Surgery Education Foundation, American Society of Plastic Surgeons. Divisional peer-reviewed funding was obtained from CIHR, PSI, PSEF and KomedPlast. Educational activities during the past year included the 6th Annual Lindsay-Thomson Symposium in Pediatric Plastic Surgery with Dr. Cindy Verchere from the University of British Columbia as the INCO-Vale Visiting Professor.

During the past academic year, divisional members published 8 peer-review papers, presented 34 scientific papers and participated in 19 invited lectures.

DIVISION OF UROLOGY

Dr. Joao Pippi-Salle continued his educational activities and successfully chaired the 3rd World Congress of the Society of Hypospadias and Disorders of Sex Development when he was elected president of this medical association. In addition, he finalized the video component of the Reconstructive Pediatric Urological Video-Atlas which now will be edited and placed online. He was an invited speaker, surgeon and Visiting Professor at many locations around the world. These included Qatar, Bosnia, the United Kingdom, Brazil, Egypt, USA, China, Japan and Canada.

Dr. Darius Bagli continued his basic research in bladder diseases with projects funded by the Research Institute at Sick Kids, CIHR, Kidney Foundation of Canada, Society For Pediatric Urology, American Foundation for Urological Disease and PSI Foundation. He was a Visiting Professor in the United States and Brazil. He continued as Associate

Chief of Surgery at Sick Kids and staff coordinator of Urology Resident Research.

Dr. Walid Farhat continued his work in tissue engineering. He participated in new projects funded by the Ontario Research Fund and the 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, USA, Kuwait and Lebanon. He became the associate editor of the pediatric section of the Journal of Urology.

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

EDUCATION

The Department Surgery continues to have an active education program training 64 fellows and 86 residents originating from 36 countries worldwide.

RESEARCH

Of 38 surgeons, 18 have funded research programs. The Department is engaged in a wide variety of clinical and basic research, supervises many research fellows, 16 Masters and 12 PhD students.

DIVISION OF CARDIAC SURGERY

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

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Walsh MA, Asoh K, Van Arsdell GS, Humpl T: Critical care outcomes in pulmonary atresia and intact ventricular septum undergoing single-ventricle palliation. *Cardiology in the Young*: June 2010: 20(3): pp 290-296. E-published March 22, 2010.

Walsh MA, McCrindle BW, Dipchand AI, Manlhiot C, Hickey E, Caldarone C, Van Arsdell G, Schwartz S: Left ventricular morphology influences mortality following the Norwood operation. *Heart*: August 2009: 95(15): pp 1238-1244. E-published May 19, 2009.

INVITED VISITS

Caldarone C: American Association for Thoracic Surgery, Congenital: New Technology in Congenital Heart Disease, Toronto, Ontario, Canada, May 2010. (1) Chair, (2) Presenter: Sutureless repair of pulmonary vein stenosis following repair of TAPVC, (3) Discussant: Precise evaluation of bilateral pulmonary artery banding for initial palliation for high-risk HLHS.

Caldarone C: 62nd Annual Scientific Meeting of the Japanese Association for Thoracic Surgery, Tokyo, Japan, October 2009. (1) Choosing between one-and two-ventricle palliation for neonates with critical left ventricular outflow tract obstruction, (2) Aortic level obstruction in neonates and children.

Coles J: American Heart Association, Orlando, Florida, USA, November 2009. Presenter/Moderator: Cardiac regeneration and cellular therapy.

Van Arsdell G: 20th Annual Congenital Heart Disease in the Adult, Portland, Oregon, USA, June 2010. Guest Speaker: (1) Surgical tips: What are the key things that need to be done in the OR for Fontan redos, repeat surgery for tetralogy of fallot, failing mustard, mitral regurgitation, (2) Presenter: What can surgeons do to minimize the risk of neurodevelopmental problems in post-op patients? (3) Chair: Surgery and catheter intervention.

Van Arsdell G: American Association for Thoracic Surgery, Toronto, Ontario, Canada, May 2010. (1) Chair: 13th Annual C.W. Lillehei Resident Forum, (2) Presenter: AVVR in single ventricle, (3) Lecturer: Norwood procedure interdigitating arch reconstruction.

Van Arsdell G: American College of Cardiology, Atlanta, Georgia, USA, March 2010. Panelist: Diagnosis and management of the systemic right ventricle.

Van Arsdell G: American Heart Association, Orlando, Florida, USA, November 2009. Moderator: (1) Ebstein's anomaly of the tricuspid valve: Medical management, (2) Percutaneous, surgical and medical management of hypertrophic obstructive cardiomyopathy.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

Preconditioning against peri-ventricular leukomalacia associated with neonatal cardiac surgery. *Van Arsdell G, Hickey E, Askalan R: The Children's Heart Foundation.* (\$82,502 / 41,251 prorated for 2009 - 2010)

The effect of remote ischemic preconditioning on clinical and genomic responses to open heart surgery. *Redington A, McCrindle BW, Caldarone CA, Holtby HM, Schwartz SM, Van Arsdell GS, Coles JG, Ly LG, Scherer SW: Heart and Stroke Foundation of Ontario.* (\$570,399 2009 - 2012)

DIVISION OF GENERAL SURGERY

Dr. G. Azzie	Assistant Professor
Dr. P.P.L. 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

Aggarwal A, Lucco K, Lacy J, Kives S, Gerstle JT, Allen L: Ovarian epithelial tumors of low malignant potential: A case series of 5 adolescent patients. *Journal of Pediatric Surgery*: October 2009; 44: pp 2023-2027.

Allen U, Barton M, Beyene J, Hu P, Khodai-Booran N, Hébert D, Dipchand A, Solomon M, Grant D, Fecteau A, Ngan B, Read S, Zielenska M, Weitzman S: Gene expression using microarrays in transplant recipients at risk of EBV lymphoproliferation after organ transplantation: Preliminary proof of concept. *Pediatric Transplantation*: December 2009; 13(8): pp 990-998. E-published September 7, 2009.

Barnett C, Langer JC, Hinek A, Bradley TJ, Chitayat D: Looking beyond the lump: Genetic aspects of inguinal hernia in children. *Journal of Pediatric Surgery*: July 2009; 44(7): pp 1423-1431.

Barton M, Wasfy S, Dipchand AI, Hébert D, Ng V, Solomon M, Fecteau A, Stephen D, Allen U: Seven-valent pneumococcal conjugate vaccine in pediatric solid organ transplant recipients: A prospective study. *The Pediatric Infectious Diseases Journal*: August 2009; 28(8): pp 688-692.

Bogue CO, Alzahrani AI, Wales PW, John PR, Amaral JG: Delayed, life-threatening lower gastrointestinal hemorrhage in an infant after serial transverse enteroplasty: Treatment with transcatheter n-butyl-2-cyanoacrylate embolization. *Pediatric Radiology*: October 2009; 39(10): pp 1098-1101. E-published July 7, 2009.

Chapman KP, Courtney-Martin G, Moore AM, Langer JC, Tomlinson C, Ball RO, Pencharz PB: Lysine requirement in parenterally fed postsurgical human neonates. *The American Journal of Clinical Nutrition*: February 2010; 91: pp 958-965.

Chiu PPL, Langer JC: Surgical conditions of the diaphragm: Posterior diaphragmatic hernias in infants. *Thoracic Surgery Clinics*: November 2009; 19(4): pp 451-461.

Chiu P, Struijs MC, Somme S, Lasko, D: Gastric emptying scans: Unnecessary pre-operative testing for funduplications? *Journal of Pediatric Surgery*: February 2010; 45(2): pp 350-354.

Chung J, Connolly B, Langer JC, Marcon M, Temple M, Amaral JG: Fluoroscopy-guided topical application of mitomycin-C in a case of refractory esophageal stricture. *Journal of Vascular and Interventional Radiology*: January 2010; 21(1): pp 152-155.

Dasgupta R, Langer JC: Complications of colon surgery. In: *Complications in Pediatric Surgery*, (Coty MG, ed.) Informa Healthcare, New York, 2009.

Davies DA, Fecteau AH, Himidan S, Mikrogianakis A, Wales PW: What's the incidence of delayed splenic bleeding in children after blunt trauma? An institutional experience and review of the literature. *Journal of Trauma*: September 2009; 67(3): pp 573-577.

Davies DA, Langer JC: Paediatric surgical emergencies. In: *Core Topics in General and Emergency Surgery* (Paterson-Brown S, ed.) Saunders-Elsevier, Philadelphia, 2009.

de la Torre L, Langer JC: Transanal endorectal pullthrough for Hirschsprung disease: Technique, controversies, pearls, pitfalls, and an organized approach to the management of postoperative obstructive symptoms. *Seminars in Pediatric Surgery*: May 2010; 19(2): pp 96-106.

Diamond IR, Gerstle JT, Kim PCW, Langer JC: Outcomes after laparoscopic surgery in children with inflammatory bowel disease. *Surgical Endoscopy*: E-published ahead of print April 16, 2010.

Diamond IR, Pencharz PB, Wales PW: Omega-3 lipids for intestinal failure associated liver disease. *Seminars in Pediatric Surgery*: November 2009; 18(4): pp 239-245.

Hendershot E, Chang A, Colapinto K, Gerstle JT, Malkin D, Sung L: Postoperative fevers in pediatric solid tumor patients - How should they be managed? *Journal of Pediatric Hematology and Oncology*: July 2009; 31(7): pp 485-488.

Langer JC, Chiu PPL: Mediastinal and thoracic masses, pneumothorax, and pneumomediastinum. In: *Pediatric Surgical Diseases, A Radiologic Surgical Case Study Approach* (Esposito C, Esposito G, eds.) Springer-Verlag, Heidelberg, Germany, 2009.

Lasko D, Langer JC: Chylothorax. In: *Pediatric Thoracic Surgery* (Parikh DH, Crabbe DCG, Auldist AW, Rothenberg SS, eds.) Springer-Verlag, London, United Kingdom, 2009.

Lemaire M, Diamond IR, Langer JC: Whole or parts – the fate of hemoperitoneum. *Surgery*: November 2009: 146(5): pp 947-949. E-published May 8, 2009.

Nasr A, Fecteau A: Foramen of morgagni hernia: Presentation and treatment. *Thoracic Surgery Clinics*: November 2009: 19(4): pp 463-468.

Nasr A, Fecteau A, Wales PW: Comparison of the Nuss and the Ravitch procedure for pectus excavatum repair: A meta-analysis. *Journal of Pediatric Surgery*: May 2010: 45(5): pp 880-886.

Nasr A, McNamara PJ, Mertens L, Levin D, James A, Holtby H, Langer JC: Is routine preoperative 2-D echocardiography necessary for infants with esophageal atresia, omphalocele, or anorectal malformations? *Journal of Pediatric Surgery*: May 2010: 45(5): pp 876-879.

Nasr A, Struijs M-C, Ein SH, Langer JC, Chiu P: Outcomes after muscle flap versus prosthetic patch repair for large congenital diaphragmatic hernias. *Journal of Pediatric Surgery*: January 2010: 45(1): pp 151-154.

Ooi CY, Brandão L, Zolphys L, De Angelis M, Drew W, Jones N, Ling S, Fecteau A, Ng VL: Thrombotic events after pediatric liver transplantation. *Pediatric Transplantation*: June 2010: 14(4): pp 476-482. E-published October 23 2009.

Okrainec A, Henao O, Azzie G: Telesimulation: An effective method for teaching the fundamentals of laparoscopic surgery in resource-restricted countries. *Surgical Endoscopy*: February 2010: 24(2): pp 417-422.

Okrainec AL, Smith L, Azzie G: Surgical simulation in Africa: The feasibility and impact of a 3-day fundamentals of laparoscopic surgery course. *Surgical Endoscopy*: November 2009: 23(11): pp 2493-2498.

Park J, Zhang JJ, Moro A, Kushida M, Wegner M, Kim PC: Regulation of sox9 by sonic hedgehog (Shh) is essential for patterning and formation of tracheal cartilage. *Developmental Dynamics*: February 2010: 239(2): pp 514-526.

Park J, Zhang JJ, Trinh I, Choi R, Kim PCW: A simple in vitro culture system for tracheal cartilage development. *In Vitro Cellular and Developmental Biology - Animal*: February 2010: 46(2): pp 92-96. E-published November 2009.

Pastor AC, Mills J, Marcon MA, Himidan S, Kim PC: A single center 26-year experience with treatment of esophageal achalasia: Is there an optimal method? *Journal of Pediatric Surgery*: July 2009: 44(7): pp 1349-1354.

Pieretti-Vanmarcke R, Velmahos GC, Nance ML, Islam S, Falcone RA Jr, Wales PW, Brown RL, Gaines BA, McKenna C, Moore FO, Goslar PW, Inaba K, Barmparas G, Scaife ER, Metzger RR, Brockmeyer DL, Upperman JS, Estrada J, Lanning DA, Rasmussen SK, Danielson PD, Hirsh MP, Consani HF, Stylianos S, Pineda C, Norwood SH, Bruch SW, Drongowski R, Barraco RD, Pasquale MD, Hussain F, Hirsch EF, McNeely PD, Fallat ME, Foley DS, Iocono JA, Bennett HM, Waxman K, Kam K, Bakhos L, Petrovick L, Chang Y, Masiakos P: Clinical clearance of the cervical spine in blunt trauma patients younger than 3 years: A multi-center study of the American Association for the Surgery of Trauma. *The Journal of Trauma*: September 2009: 67(3): pp 543-550.

Poenaru D, Borgstein E, Numanoglu A, Azzie G: Caring for children with colorectal disease in the context of limited resources. *Seminars in Pediatric Surgery*: May 2010: 19(2): pp 118-127.

Rimon A, Daneman A, Gerstle JT, Ratnapalan S: Omental infarction in children. *The Journal of Pediatrics*: September 2009: 155(3): pp 427-431.e1.

Riviello R, Ozgediz D, Hsia RY, Azzie G, Newton M, Tarpley J: Role of collaborative academic partnerships in surgical training, education, and provision. *World Journal Surgery*: March 2010: 34(3): pp 459-465.

Rottembourg D, O’Gorman CS, Urbach S, Garneau P, Langer JC, Van Vliet G, Hamilton J, Huot C: Outcome after bariatric surgery in two adolescents with hypothalamic obesity following treatment of craniopharyngioma. *Journal of Pediatric Endocrinology and Metabolism*: September 2009: 22(9): pp 867-872.

Savasi I, Gerstle JT, Allen L, Kives S, Lacy JA, Stephens D: Management of ovarian dermoid cysts in the pediatric and adolescent population. *Journal of Pediatric and Adolescent Gynecology*: December 2009: 22(6): pp 360-364. E-published July 8, 2009.

Smith CE, Fontana-Chow K, Boateng BA, Azzie G, Pietrolungo L, Cheng-Tsallis A, Golding F, Tallett S: Tele-education: Linking educators with learners via distance technology. *Pediatric Annals*: October 2009: 38(10): pp 550-556.

Struijs MC, Lasko D, Somme S, Chiu P: Gastric emptying scans: Unnecessary pre-operative testing for funduplications? *Journal of Pediatric Surgery*: February 2010: 45(2): pp 350-354; discussion p 354.

Wales PW, Christison-Lagay ER: Short bowel syndrome: Epidemiology and etiology. *Seminars in Pediatric Surgery*: February 2010: 19(1): pp 3-9.

Zamakhshary M, Langer JC: Lymphatic malformations. In: *Pediatric Surgery: Diagnosis and Management* (Puri P, Hollwarth M, eds.) Springer-Verlag, Heidelberg, Germany, 2009.

INVITED VISITS

Azzie G: University of Pennsylvania, Philadelphia, Pennsylvania, USA, February 2010. Invited Agnew Lecturer.

Ein SE: Massachusetts General Hospital, Surgical Grand Rounds, Boston, Massachusetts, USA, July 2009. (1) Operation for gastric tube, (2) Any operation that is successful wasn't indicated to begin with.

Fecteau A: 2010 American Transplant Congress, San Diego, California, USA, May 2010. Presenter (with Van Loenhout R): Hemophagocytic Lymphohistiocytosis (HLH): A common association with fulminant hepatic failure requiring liver transplant in children.

Fecteau A: Canadian Paediatric Resident and Subspecialty Fellow Competition, Winnipeg, Manitoba, Canada, May 2010. Presenter: Predicting native liver survival after kasai portoenterostomy for biliary atresia.

Fecteau A: International Pediatric Transplant Association (IPTA), Fellows Symposium, Hannover, Germany, May 2010. Presenter: Radiation exposure in the first year following pediatric live transplantation.

Himidan S: European Paediatric Surgeons' Association, Geneva, Switzerland, June 2010. Computer-assisted radiology and surgery.

Himidan S: Science Media Centre of Canada, Evening with Jay Ingram, Toronto, Ontario, Canada, April 2010.

Kim P: University of Sichuan, Western China Centre of Medical Science, Chengdu, Sichuan Province, China, April 2010. The Royal College of Physicians and Surgeons of Canada Kilborn Memorial Visiting Professor.

Kim P: Korean Surgical Society, 61st Annual Meeting, Seoul, Korea, November 2009. (1) Flies to humans: Lessons from hedgehog signalling and relevance for surgeons, (2) The evolving paradigm of minimally invasive surgery: A North American perspective.

Langer J: Cirugia Pediatrica del Cono Sur de America (CIPESUR), Vina del Mar, Chile, November 2009. Presenter: Hirschsprung's disease, minimal access surgery in children, necrotizing enterocolitis, abdominal wall defects, congenital lung lesions, abdominal masses.

Langer J: Fundacion Cardioinfantil, Bogota, Colombia, November 2009. (1) Visiting Surgeon: Transanal soave pullthrough for Hirschsprung's disease, (2) Presenter: New concepts in the management of children with Hirschsprung's disease.

Langer J: Canadian Association of Paediatric Surgeons, Halifax, Nova Scotia, Canada, October 2009. (1) Panel Moderator on bariatric surgery, (2) Presenter: Bariatric surgery in adolescents.

Langer J: Mexican Congress of Pediatric Surgery, Leon, Mexico, September 2009. (1) Panel member on gastroesophageal reflux; Hirschsprung's disease, anorectal malformation, (2) Presenter: Chronic intestinal pseudo-obstruction: An update.

Wales P: Intestinal Transplant Association, XI International Small bowel Transplant Symposium, Bologna, Italy, September 2009. Poster presentations: (1) Is the use of parenteral Omega-3 lipid emulsions justified in surgical neonates with mild parenteral nutrition associated liver dysfunction?, (2) Introducing novel neonatal piglet models of surgical short bowel, (3) Appendiceal biliary conduit for live transplantation in a child with short bowel syndrome: A case report, (4) Human growth hormone with or without glutamine for patients with short bowel syndrome: A meta-analysis.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

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

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

Centre for Image-Guided Innovation and Therapeutic Intervention (CIGITI). *Kim P, Wright J, Rossant J, Babyn P, Lymer J: Canadian Foundation for Innovation* (227,000,000 in Grants; *Research Hospital Fund:* \$12,500,000 2008 – 2012)

Notch inhibition as a therapeutic target in human T-ALL. *Chiu PPL: CIRM-CSCC Disease Team Grant.* (\$720,000 2010 – 2013)

Characterizing the role of intestinal glucagon-like peptide 2 in intestinal adaptation in neonates with short bowel syndrome: Using novel animal models. *Wales P, Pichardo D: Molly Towell Perinatal Research Foundation, Operating Grant.* (\$39,950 2009 – 2011 / \$13,317 prorated for 2009-10)

Disruptive technologies in pediatric and fetal intervention. *Kim P, Elgort D, Bocking A, Brisson B, Burns P, Fitzgerald P, Ryan G, Drake J, Wright J, Lymer J, Hynynen K, Babyn P, Windrim R, Farhat W, Milgram P, Rubin S, Blair G, Laberge J: Canadian Foundation for Innovation* (\$2,200,000 2009 - 2013)

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)

KidsArm Project. *Kim PCW, Looi T: FEDEV Ontario, Southern Ontario Development Program.* (\$10,000,000 2010 - 2014)

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

Research hospital fund: Centre for Image Guided Innovation and Therapeutic Intervention (CIGITI); award amount for this section \$12,500,000. *Kim P, 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 – New Investigator Grants Program, and the Canadian Institutes of Health Research-Institute of Human Development, Child and Youth Health (CIHR/IHDCYH).* (\$125,379 2008 - 2010)

The role of Crohn's disease genes in intestinal failure and allograft rejection. *Muise AM, Avinashii V, Wales PW, Avitzur Y, Wine E, Walters T, Griffiths A: The Hospital for Sick Children, Transplant Centre, Small Grant Competition.* (\$12,500 2010 – 2011 / \$3,125 prorated for 2009-10)

HONOURS RECEIVED

Langer J: Pediatric Surgery Resident Teaching Award (Postgraduate). 2009.

Wales P: Best Clinical Paper at the 41st Annual Meeting of the Canadian Association of Paediatric Surgeons, Halifax, Nova Scotia, Canada. 2009.

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	Associate Professor

PUBLICATIONS

Ahmed I, August K, Vachhrajani S, Dirks PB, Drake JM, Rutka JT: Neurosurgical management of intracranial epidermoid tumors in children. *Journal of Neurosurgery, Pediatrics*: August 2009; 4(2): pp 91-96.

Akaishi K, Nakayama J, Sakai K, Kobayashi T, Rutka JT: Antigen p57/Kip2 as a potential negative regulator of human astrocytoma growth. *Journal of Clinical Neuroscience*: December 2009; 16(12): pp 1615-1618. E-published October 12, 2009.

Alexander CM, Puchalski J, Klos KS, Badders N, Ailles L, Kim CF, Dirks P, Smalley MJ: Separating stem cells by flow cytometry: Reducing variability for solid tissues. *Cell Stem Cell*: December 2009; 5(6): pp 579-583.

Benifla M, Sala F Jr, Jane J, Otsubo H, Ochi A, Drake J, Weiss S, Donner E, Fujimoto A, Holowka S, Widjaja E, Snead OC 3rd, Smith ML, Tamber MS, Rutka JT: Neurosurgical management of intractable rolandic epilepsy in children: Role of resection in eloquent cortex. *Clinical Article. Journal of Neurosurgery, Pediatrics*: September 2009; 4(3): pp 199-216.

Berger MS, Couldwell WT, Rutka JT, Selden NR: Introduction: Neurogenomics and Neuroproteomics: *Neurosurgical Focus* 28: January 2010; 28(1): E1.

Bhardwaj RD, Auguste KI, Kulkarni AV, Dirks PB, Drake JM, Rutka JT: Management of pediatric brainstem cavernous malformations: Experience over 20 years at The Hospital for Sick Children. *Journal of Neurosurgery, Pediatrics*: November 2009; 4(5): pp 458-464.

Bhardwaj RD, Mahmoodabadi SZ, Otsubo H, Snead OC, Rutka JT, Widjaja E: Diffusion tensor tractography detection of functional pathway for the spread of epileptiform activity between temporal lobe and Rolandic region. *Child's Nervous System*: February 2010; 26(2): pp 185-190. E-published November 14, 2009.

Bhatia B, Northcott PA, Hambardzumyan D, Govindarajan B, Brat DJ, Arbiser JL, Holland EC, Taylor MD, Kenney AM: Tuberous sclerosis complex suppression in cerebellar development and medulloblastoma: Separate regulation of mammalian target of rapamycin activity and p27Kip1 localization. *Cancer Research*: September 2009; 69(18): pp 7224-7234.

Burn S, Ansorge O, Zeller R, Drake JM: Management of osteoblastoma and osteoid osteoma of the spine in childhood. *Journal of Neurosurgery, Pediatrics*: November 2009; 4(5): pp 434-438.

Busse JW, Ngo T, Rodine R, Torrance D, Jacobs C, Jim J, Kulkarni AV, Petrison B, Drew B, Bhandari M: Attitudes towards chiropractic: A survey of North American orthopedic surgeons. *Spine*: December 2009; 34(25): pp 2818-2825.

Caird J, Drake J: Technical aspects of image-guided neuroendoscopy. In: *Textbook of Stereotactic and Functional Neurosurgery* (Lozano AM, Gildenberg PL, Tasker RL, eds.) Springer, Berlin, 2009.

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

de Almeida JR, Ghotme K, Leong I, Drake J, James AL, Witterick IJ: A new porcine skull base model: Fibrin glue improves strength of cerebrospinal fluid leak repairs. *Otolaryngology - Head and Neck Surgery*: August 2009; 141(2): pp 184-189.

Dennis M: Language disorders in children with central nervous system injury. *Journal of Clinical and Experimental Neuropsychology*: April 2010; 32(4): pp 417-432.

Dennis M: Upper limb cerebellar motor function in children with spina bifida. *Child's Nervous System*: January 2010; 26(1): pp 67-73. E-published October 13, 2009.

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*: October 2009; 31(7): pp 837-847. E-published February 16, 2009.

Dennis M, Barnes MA: The cognitive phenotype of spina bifida meningocele. *Developmental Disabilities Research Reviews*: April 2010; 16(1): pp 31-39.

Dennis M, Hopyan T, Juranek J, Cirino PT, Hasan KM, Fletcher J: Strong-meter and weak-meter rhythm identification in spina bifida meningocele and volumetric parcellation of rhythm-relevant cerebellum regions. *Annals of the New York Academy of Sciences*: July 2009; 1169: pp 84-88.

Dennis M, Nelson R, Jewell D, Fletcher JM: Prospective memory in adults with spina bifida. *Child's Nervous System*. E-published ahead of print April 15, 2010.

Dennis M, Salman MS, Jewell D, Hetherington R, Spiegler BJ, MacGregor DL, Drake JM, Humphreys RP, Gentili F: Upper limb motor function in young adults with spina bifida and hydrocephalus. *Child's Nervous System*: November 2009; 25(1): pp 1447-1453. E-published August 12, 2009.

Dijkman BG, Abouali J, Kooistra BW, Conter H, Poolman R, Kulkarni AV, Tornetta P 3rd, Bhandari M: Twenty years of meta-analyses in orthopaedic surgery: Has quality kept up with quantity? *The Journal of Bone and Joint Surgery (American Volume)*: January 2010; 92: pp 48-57.

Drake J, Hoffman HJ: Indication and treatment of tethered spinal cord. In: *Tethered Cord Syndrome in Children and Adults* (Yamada S, ed.) Thieme, New York, 2009.

Drake J, Riva-Cambrin J, Jea A, Auguste K, Tamber M, Lamberti-Pasculli M: Prospective surveillance of complications in a pediatric neurosurgery unit. *Journal of Neurosurgery: Pediatrics*: June 2010; 5(6): pp 544-548.

Drake J, Zeller R, Burn S: Do baclofen pumps influence the development of scoliosis in children? *Journal of Neurosurgery, Pediatrics*: February 2010; 5(2): pp 195-199.

Drake J, Zeller R, Kulkarni AV, Strantzas S, Holmes L: Intraoperative neurophysiological monitoring during complex spinal deformity cases in pediatric patients: Methodology, utility, prognostication, and outcome. *Child's Nervous System*: April 2010; 26(4): pp 523-544. E-published March 7, 2010.

Dubuc AM, Northcott PA, Mack S, Witt H, Pfister S, Taylor MD: The genetics of pediatric brain tumors. *Current Neurology and Neuroscience Reports*: May 2010; 10(3): 215-223.

English L, Barnes MA, Fletcher JM, Dennis M, Raghubar KP: Effects of reading goals on reading comprehension, reading rate, and allocation of working memory in children and adolescents with spina bifida meningocele and typically developing peers. *Journal of the International Neuropsychological Society*: May 2010; 16(3): pp 517-525. E-published March 26, 2010.

Fernandez-L A, Northcott PA, Taylor MD, Kenney AM: Normal and oncogenic roles for microRNAs in the developing brain. *Cell Cycle*: December 2009; 8(24): pp 4049-4054. E-published December 5, 2009.

Hanten D, Li X, Newsome M, Swank P, Chapman SB, Dennis M, Barnes M, Ewing-Cobbs L, Levin HS: Oral reading and expressive language after childhood traumatic brain injury: Trajectory and correlates of change over time. *Topics in Language Disorders*: July-September 2009; 29(3): pp 236-248.

Hopyan-Misakyan T, Schellenberg G, Dennis M: Perception of strong-meter and weak-meter rhythms in children with spina bifida meningocele. *Journal of the International Neuropsychological Society*: July 2009; 15(4): pp 521-528.

Hudson TJ, Anderson W, Aretz A, Barker AD, Bell C, et al; Taylor MD et al, Spellman PT, Stunnenberg HG, Wainwright BJ, Wilson RK, Yang H (among 412 collaborators of the International Cancer Genome Consortium): International network of cancer genome projects. *Nature*: April 2010; 464(7291): pp 993-998.

Jeelani NO, Kulkarni AV, DeSilva P, Thompson DNP, Hayward RD: Postoperative cerebrospinal fluid wound leakage is a strong predictor of shunt infection – a prospective analysis of 205 cases. *Journal of Neurosurgery, Pediatrics*: August 2009; 4(2): pp 166-169.

Jewell D, Fletcher JM, Mahy CE, Hetherington R, MacGregor D, Drake JM, Salman MS, Dennis M: Upper limb cerebellar motor function in children with spina bifida. *Child's Nervous System*: January 2010; 26(1): pp 67-73. E-published October 13, 2009.

Juranek JJ, Cirino PT, El-Messidi L, Dennis M, Fletcher JM: The cerebellum in children with spina bifida and Chiari II malformation: Quantitative volumetrics by region. *The Cerebellum*: June 2010; 9(2): pp 240-248.

King J, Auguste KI, Drake JM, Halliday W, Kulkarni AV: Ventriculocystostomy and endoscopic third ventriculostomy/shunt placement in the management of hydrocephalus secondary to giant retrocerebellar cysts in infancy. *Journal of Neurosurgery, Pediatrics*: April 2010; 5(4): pp 403-407.

King JA, Vachhrajani S, Drake JM, Rutka JT: Neurosurgical implications of achondroplasia. *Journal Neurosurgery, Pediatrics*: October 2009; 4(4): pp 297-306.

King JAJ, Taylor MD: The future of molecular neuro-oncology. In: *Textbook of Stereotactic and Functional Neurosurgery*, Second Edition (Lozano, Gildenberg, Tasker, eds.) Springer, Berlin, Germany, 2009.

Kongkham PK, Northcott PA, Croul SE, Smith CA, Taylor MD, Rutka JT: The SFRP family of WNT inhibitors function as novel tumor suppressor genes epigenetically silenced in medulloblastoma. *Oncogene*: May 2010: 29(20): pp 3017-3024. E-published March 8, 2010.

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INVITED VISITS

Dennis M: Pacific Northwest Neuropsychological Society, 23rd Annual Meeting, Functions and Dysfunctions of the Cerebellum, Seattle, Washington, USA, March 2010. The immature cerebellum: How malformations and lesions change movement, cognition, and affect.

Dirks P: International Society for Stem Cell Research (ISSCR), San Francisco, California, USA, June 2010. Chemical and genetic modification of proliferation and lineage choice in neural stem cells and brain tumor stem cells.

Dirks P: Peking University - School of Life Sciences; Frontiers in Developmental, Stem Cell and Systems Biology Symposium, Beijing, China, May 2010. Guest Lecturer: Brain cancer stem cells: Models and mechanisms.

Dirks P: The Indian Society for Parental and Enteral Nutrition (ISPEN), Cancer Conference, Bariloche, Argentina, March 2010. Stem cells and cancer.

Dirks P: Lorne Cancer Conference, Lorne Victoria, Australia, February 2010. Brain cancer stem cells in human and mouse brain tumors.

Dirks P: Second Norwegian Cancer Symposium, Oslo, Norway, December 2009. Self-renewal and lineage commitment in brain tumour stem cells.

Dirks P: William Guy Forbeck Research Foundation, Annual Cancer Meeting, The Biology and Treatment of Primary Brain Tumors, Hilton Head, North Carolina, USA, November 2009. Brain tumor stem cells: Stochasticity versus hierarchy.

Dirks P: Brain Tumor Foundation of Canada, 2009 London Information Day Conference, London, Ontario, Canada, October 2009. Brain tumours: A stem cell disease.

Dirks P: International Society of Pediatric Neurosurgery, Pasadena, California, USA, October 2009. Current status of stem cell research in pediatric brain tumors.

Dirks P: Society for Neuro-Oncology and the American Association of Neurological Surgeons/Congress of Neurological Surgeons (AANS/CNS) Section on Tumors, Joint Meeting, New Orleans, Louisiana, USA, October 2009. Farber Award Lecture: Brain tumor stem cells.

Dirks P: Gordon Research Conference: Stem Cells and Cancer, Les Diablerets, Diablerets, Switzerland, September 2009. Cancer stem cells in human and mouse brain tumors.

Dirks P: Memorial Sloan Kettering Cancer Center, Molecular Pharmacology and Chemistry Research Seminar Series, New York, New York, USA, September 2009. Defining the stem cell character of human and mouse brain tumors.

Drake J: Congress of Neurological Surgeons, Annual Meeting, New Orleans, Louisiana, USA, October 2009. Speaker for the Scientific Program Committee Presentation: Treatment of hydrocephalus: shunts and endoscopy.

Drake J: World Federation of Neurological Surgeons (WFNS), Annual Meeting, XIV World Congress of Neurological Surgery, Boston, Massachusetts, USA, August 2009. Abstract reviewer for pediatrics at video symposium: Masters of Neuroendoscopy Presentation for complication avoidance in ventricular endoscopy.

Kulkarni A: European Society of Pediatric Neurosurgery, Berlin, Germany, May 2010. Invited Lecturer/Presenter: Craniopharyngiomas.

Kulkarni A: Dalhousie University and the Atlantic Clinical Neurosciences Society, Halifax, Nova Scotia, Canada, April 2010. Visiting Professor: Hydrocephalus in children: Update on current management and outcomes.

Kulkarni A: American Society of Pediatric Neurosurgeons, Grand Cayman, Cayman Islands, January 2010. Speaker: Endoscopic third ventriculostomy versus CSF shunt.

Kulkarni A: World Congress of Neurological Surgery, Boston, Massachusetts, USA, September 2009. Invited Speaker: Hydrocephalus in children.

Rutka J: Canadian Neurological Science Federation Congress, Penfield Lectures: Recent Advances in Pediatric Epilepsy Surgery: Penfield Would be Proud, Quebec City, Province of Quebec, Canada, June 2010. Invited Lecturer/Presenter.

Rutka J: American Association of Neurological Surgeons (AANS), Rolling Meadows, Illinois, USA, March 2010. Presenter: Genomics of medulloblastoma: From giemsa-banding to next-generation sequencing in 20 years.

Rutka J: European Association of Neurosurgical Societies (EANS) Conference, Groningen, Amsterdam, The Netherlands, March 2010. Invited Lecturer/Presenter: Surgery, simulation and science: A forecast for the future of neurosurgery.

Rutka J: Congress of Neurological Surgeons, New Orleans, Louisiana, USA, October 2009. Honoured Guest/Programs: (1) GSS 1: Excellence in Neurosurgical Research: The Neuro-Oncology Paradigm, (2) GSS II: Excellence in Clinical Neurosurgery: Practice and Judgement Make Perfect, (3) NSI: Excellence in Global Neurosurgery, (4) Section on Tumors - Achieving Excellence in Craniopharyngioma, (5) Update: Pediatric Neuro-Oncology.

Rutka J: International Society of CranioFacial Surgery (ISCFS), XIII Biennial Congress, Incorporating the Paris Distraction Symposium, Oxford, United Kingdom, September 2009. One of seven presenters: Surgical correction of metopic synostosis: CT-based morphometric and outcome analysis of 35 cases.

Rutka J: Wake Forest University, School of Medicine, BTCOE Retreat, Winston-Salem, North Carolina, USA, September 2009. Present and future management of malignant brain tumors.

Rutka J: XIV World Congress of Neurosurgery (WFNS), Epilepsy in Children, Boston, Massachusetts, USA, August-September 2009. (1) Moderator, (2) Genetic syndromes and pediatric brain tumors, (3) Pediatric neurosurgery: A world of change.

Rutka J: Neurosurgery Update 2009, Wine Country, San Francisco, California, USA, July -August 2009. (1) Pediatric neurosurgical oncology: What you need to know, (2) Epilepsy in children: Technical advances.

Taylor M: 18th Biennial Meeting on Brain Tumor Research and Therapy, Travemunde, Germany, May 2010. Medulloblastoma comprises four diseases.

Taylor M: Erasmus Medical Center, Cancer Symposium, Rotterdam, The Netherlands, May 2010. Molecular divergence and parallel evolution during leptomeningeal dissemination of human and murine medulloblastoma results in bicompartmental disease.

Taylor M: German Cancer Research Center (DFKZ), Distinguished Lecture Series, Heidelberg, Germany, May 2010. Clonal selection and parallel evolution during the dissemination of human and mouse medulloblastoma: Is it time to shift the focus of medulloblastoma research?

Taylor M: American Association for Cancer Research, Washington, District of Columbia, USA, April 2010. Invited Speaker: Recent advances in the genetics of medulloblastoma.

Taylor M: Keystone Symposium on Integration of Developmental Signaling Pathways, Victoria, British Columbia, Canada, March 2010. Invited Speaker: A role for histone lysine methylation in the pathogenesis of medulloblastoma?

Taylor M: Memorial Sloan-Kettering Cancer Center, Brain Tumor Center Seminar Series, New York, New York, USA, March 2010. Clonal selection and parallel evolution during leptomeningeal dissemination of medulloblastoma in humans and mice.

Taylor M: Richard Lende Neurosurgery Conference, Snowbird, Utah, USA, February 2010. Medulloblastoma comprises four diseases.

Taylor M: Sontag Foundation, Annual Scientific Retreat, Orlando, Florida, USA, February 2010. Role of histone lysine methylation in development of medulloblastoma.

Taylor M: Massachusetts General Hospital, 9th Annual Frye-Halloran Symposium on Brain Tumor Biology, Boston, Massachusetts, USA, October 2009. Talk: Role of epigenetics in the pathogenesis of pediatric brain tumors.

Taylor M: Pediatric Brain Tumor Foundation and the Society for Neuro-Oncology, Pediatric Neuro-Oncology Basic and Translational Research Conference/Research Review Meeting, Asheville, North Carolina, USA, October 2009. Talk: (1) Bicompartmental disease secondary to clonal selection and parallel evolution during leptomeningeal dissemination of human and mouse medulloblastoma, (2) Medulloblastoma comprises four diseases.

Taylor M: Society for Neuro-Oncology, Tumor Section Joint Meeting/Meet the Expert Breakfast Seminar: Genomics in Neuro-Oncology, New Orleans, Louisiana, USA, October 2009. Gave a talk.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear 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-Velazquez J: Ontario Neurotrauma Foundation.* (\$250,000 2007 - 2010)

Centre for the Investigation of Neuroplasticity in Developmental Disorders. *Snead C, Dennis M, et al: Canada Foundation for Innovation.* (\$7,364,597 2007 - 2011)

Chemical genomics of brain tumor stem cells. *Rottapel R, Dirks P, and many others. Ontario Institute for Cancer Research (OICR)/Terry Fox Selective Therapeutics.* (\$305,000 2009 – 2012)

Defining cancer stem cell and clonal heterogeneity in mouse brain tumours. *Dirks P: Canadian Cancer Society Grant.* (\$548,000 2009 – 2013)

Development of a tool to measure school performance in children following traumatic brain injury. *Kulkarni A (supervisor for recipient of this fellowship grant): Canadian Institutes of Health Research.* (\$275,000 2010 – 2015 / \$27,049 prorated 2009-10)

Hydrocephalus Clinical Research Network: A consortium for pediatric hydrocephalus. *Kestle J, Drake J: Hydrocephalus Clinical Research Network, National Institutes of Health.* (\$994,700 2009 – 2011.)

Medulloblastoma and metastases. *Taylor M: National Institutes of Health, USA.* (U.S.\$2,815,548 2010 – 2015)

Molecular targeting of the rho-GTPase pathway in human astrocytomas. *Rutka J, Hynynen K, Mainprize T: Canadian Institutes of Health Research.* (\$797,005 2010 – 2015)

Nonconvulsive seizures among critically ill children: A prospective study of prevalence, patient characteristics and outcomes. *Cecil H, Hutchison JS, Snead O'Carter, Dennis M, et al: The Physicians' Services Incorporated Foundation.* (\$167,000 2009 - 2011)

Ontario Institute of Cancer Research Genesis Project (cancer stem cells). *Dick J, Dirks P, and many others: Ontario Institute of Cancer Research (OICR).* (\$750,000 2008 – 2013 / \$150,000 prorated for 2009-10)

Quality of life in children with hydrocephalus. *Kulkarni A: The Hospital for Sickkids Research Institute.* (\$55,000 2009 – 2010 / \$27,000 prorated for Jul 2010)

Role of histone lysine methylation in medulloblastoma and cerebellar development. *Taylor M: Canadian Institutes of Health Research.* (\$540,219 2010 – 2013)

Social outcomes in pediatric traumatic brain injury. *Dennis M, Yeates K, Taylor HG: National Institutes of Health.* (\$1,000,000 2006 - 2011)

Spina bifida: Cognitive and neurobiological variability. *Dennis M, Fletcher J: National Institutes of Health.* (\$1,600,000 2005 - 2010)

SPINT2 mouse model of medulloblastoma BC 09-07. *Rutka JT: Brainchild.* (\$22,000,000 2009)

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 and Stroke Foundation.* (\$120,000 2007 - 2011)

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

The pediatric TBI CT scan tool. *Guerguerian AM, Dennis M: Ontario Neurotrauma Foundation.* (\$99,975 2010 - 2011)

The pediatric TBI CT scan tool. *Guerguerian AM, Hutchison J, Parshuram C, Kulkarni AV, Laughlin S, Widjaja E, Willan AR: Ontario Neurotrauma Foundation (ONF).* (\$99,975 2010 – 2012 / \$16,663 prorated for 2009-10)

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

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

Zebrafish as a novel, tractable model of metastatic medulloblastoma. *Taylor M: The Hospital for Sick Children, David Pitblado 'New Ideas' Cancer Research Fund.* (\$50,000 2010 – 2011)

HONOURS RECEIVED

Dirks P: Doctor of the Year, by the Annual Herbie Fund Mistletoe Ball. 2009.

Rutka J: Volunteer Service Award Certificate from the Ontario Ministry of Citizenship and Immigration, Canada, 2009.

Taylor M: Gold Medal Award in Surgery from The Royal College of Physicians and Surgeons of Canada. 2009.

DIVISION OF ORTHOPAEDIC SURGERY

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

PUBLICATIONS

Alman BA: Chapter 4: Overview and comparison of idiopathic, neuromuscular, and congenital forms of scoliosis. In: *The Genetics and Development of Scoliosis* (Kusumi K, Dunwoodie S, eds.) Springer, New York, New York, 2010.

Alman BA: Genetic diagnosis of skeletal dysplasias. Section 5: Parathyroid and Bone, Chapter 13. In: *Genetic Diagnosis of Endocrine Disorders* (Weiss R, Refetoff S, eds.) Elsevier, San Diego, California, 2010.

Alman BA: Multiple hereditary exostosis and hedgehog signaling: Implications for novel therapies. *The Journal of Bone and Joint Surgery (American)*: July 2009; 91(Suppl 4): pp 63-67.

Alman BA: Stem cell biology. In: *Orthopaedic Knowledge Update: Pediatrics 4*: (Song KM, ed.) American Academy of Orthopaedic Surgeons, Rosemont, Illinois, 2010.

Bederman SS, Mahomed NN, Kreder HJ, McIsaac WJ, Coyte PC, Wright JG: In the eye of the beholder: Preferences of patients, family physicians, and surgeons for lumbar spinal surgery. *Spine*: January 2010; 35(1): pp 108-115.

Bederman SS, McIsaac WJ, Coyte PC, Kreder HJ, Mahomed NN, Wright JG: Referral practices for spinal surgery are poorly predicted by clinical guidelines and opinions of primary care physicians. *Medical Care*: September 2010; 48(9): pp 852-858.

Burn S, Drake JM, Zeller R: Do baclofen pumps influence the development of scoliosis in children? *Journal of Neurosurgery: Pediatrics*: February 2010; 5(2): pp 195-199

Burn S, Ansoorge O, Drake J, Zeller R: Management of osteoblastoma and osteoid osteoma of the spine in childhood. *Journal of Neurosurgery, Pediatrics*: November 2009; 4(5): pp 434-438.

Bushby K, Finkel R, Bimkrant DJ, Case LE, Clemens PR, Cripe L, Kaul A, Kinnett K, McDonald C, Pandya S, Poysky J, Shapiro F, Tomezsko J, Constantin C; DMD Care Considerations Working Group – Alman BA, member: Diagnosis and management of Duchenne muscular dystrophy, part 1: Diagnosis, and pharmacological and psychosocial management. *Lancet Neurology*: January 2010; 9(1): pp 77-93.

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

Donaldson S, Khetani N, Maniatis G, Stephens D, Wright JG: Sharing clinical trial results with adolescent idiopathic scoliosis patients. *Journal of Pediatric Orthopaedics*: July-August 2009; 29(5): pp 467-475.

Dorman K, Satterthwaite L, Howard A, Woodrow S, Derbew M, Reznick R, Dubrowski A: Addressing the severe shortage of health care providers in Ethiopia: Bench model teaching of technical skills. *Medical Education*: July 2009; 43(7): pp 621-627.

Drake J, Zeller R, Kulkarni A, Strantzes S, Holmes L: Intraoperative neurophysiological monitoring during complex spinal deformity cases in pediatric patients: Methodology, utility, prognostication and outcome. *Child's Nervous System*: April 2010; 26(4): pp 523-524. E-published March 7, 2010.

Dunbar M, Howard A, Bogoch E, Parvizi J, Kreder H: Orthopaedics in 2020: Predictors of musculoskeletal need. *Journal of Bone and Joint Surgery (American)*: September 2009; 91: pp 2276-2286.

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Hawker GA, Badley EM, Croxford R, Coyte PC, Glazier RH, Guan J, Harvey BJ, Williams JI, Wright JG: A population-based nested case control study of the costs of hip and knee replacement surgery. *Medical Care*: July 2009; 47(7): pp 732-741.

Ho L, Alman BA: Protecting the hedgerow: p53 and hedgehog pathway. *Cell Cycle*: February 2010: 9(3): pp 506-511.

Ho L, Stojanovski A, Whetstone H, Wei Q, Mau E, Wunder JS, Alman BA: Gli2 and p53 cooperate to regulate IGFBP-3 mediated chondrocyte apoptosis in the progression from benign to malignant cartilage tumors. *Cancer Cell*: August 2009: 16(2): pp 126-136.

Howard AW, Macarthur C, Rothman L, Willan A, Macpherson AW: School playground surfacing and arm fractures in children: A cluster randomized trial comparing sand to wood chip surfaces. *PLOS Medicine*: December 2009: 6(12): e-1000195. E-published: December 15, 2009.

Khoshbin A, Lingard L, Wright JG: Evaluation of preoperative and perioperative briefings at The Hospital for Sick Children's operating rooms. *Canadian Journal of Surgery*: August 2009: 52(4): pp 309-315.

Lavoie JF, Biernaskie JA, Chen Y, Bagli D, Alman BA, Kaplan DR, Miller FD: Skin-derived precursors differentiate into skeletogenic cell types and contribute to bone repair. *Stem Cells Development*: July-August 2009: 18(6): pp 893-906.

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Lipa JE, Qiu W, Huang N, Alman BA, Pang CY: Pathogenesis of radiation-induced capsular contracture in tissue expander and implant breast reconstruction. *Plastic Reconstruction Surgery*: February 2010: 125(2): pp 437-445.

McLimont SC, Owen JL, Wright JG: Can children with spina bifida and muscular dystrophy participate in their own health status evaluation? *Journal of Children's Orthopaedics*: June 2010: 4(3): pp 253-258.

Montpetit K, Hamdy RC, Dahan-Oliel N, Zhang X, Narayanan UG: Measurement of health-related quality of life in children undergoing external fixator treatment for lower limb deformities. *Journal of Pediatric Orthopaedics*: December 2009: 29(8): pp 920-926.

Nhan C, Rothman L, Slater M, Howard AW: Back-over collisions in child pedestrians from the Canadian Hospitals Injury Reporting and Prevention Program. *Traffic Injury Prevention*: August 2009: 10(4): pp 350-353.

Noor A, Windpassinger C, Vitcu I, Orlic M, Rafiq MA, Khalid M, Malik MN, Ayub M, Alman BA, Vincent JB: Oligodontia is caused by mutation in *LTBP3*, the gene encoding latent TGF-beta binding protein 3. *American Journal of Human Genetics*: April 2009: 84(4): pp 519-523. E-published April 2, 2009.

Offiah A, Alman BA, Corneir AS, Giampietro PF, Tassy O, Wade A, Turnpenny PD, on behalf of the International Consortium for Vertebral Anomalies and Scoliosis (ICVAS): Pilot assessment of a radiologic classification system for segmentation defects of the vertebrae. *American Journal of Medical Genetics Part A*: June 2010: 152A(6): pp 1357-1371. E-published April 28, 2010.

Ramseier LE, Janicki JJ, Weir S, Narayanan UG: Femur fractures in adolescents: A comparison of four methods of fixation. *The Journal of Bone and Joint Surgery (American)*: May 2010: 92(5): pp 1122-1129.

Snowdon A, Rothman L, Slater M, Kolga C, Hussein A, Boase P, Howard A: A comparison of booster seat use in Canadian provinces with and without legislation. *Injury Prevention*: August 2009: 15(4): pp 230-233.

Spence S, Hocking R, Wedge JH, Roposch A: Effect of innominate and femoral varus derotation osteotomy on acetabular development in developmental dysplasia of the hip. *The Journal of Bone and Joint Surgery (American)*: November 2009: 91(11): pp 2622-2636.

Szauter KM, Ordas A, Laxer RM, Pope E, Wherrett D, Alman B, Mink M, Boyd CD, Csiszar K, Hinek A: A novel fibrotic disorder associated with increased dermal fibroblast proliferation and downregulation of genes of the microfibrillar network. *The British Journal of Dermatology*: E-published ahead of print June 18, 2010.

Warsh J, Rothman L, Slater M, Steverango C, Howard A: Are school zones effective? An examination of motor vehicle versus child pedestrian crashes near schools. *Injury Prevention*: August 2009: 15(4): pp 226-229.

Wright JG, Hawker GA, Hudak PL, Croxford R, Glazier RH, Mahomed NN, Kreder HJ, Coyte PC: Variability in physician opinions about the indications for total knee arthroplasty. *Journal of Arthroplasty*: E-published ahead of print June 24, 2010.

Wright JG, Roche A, Khoury AE, and the OR On-Time Start Task Force: Improving on-time surgical starts in an operating room. *Canadian Journal of Surgery*: June 2010: 53(3): pp 167-170.

Zeller R: Rencontre. *Maîtrise Orthopédique*: November 2009: 188.

Zeller R, Canavese F, Kulkarni AV, Drake J: Technique for drilling instrument monitoring electrical conductivity in pediatric cervical spine screw insertion: A preliminary report. *Journal of Pediatric Orthopaedics*: October-November 2009: 29(7): pp 760-764.

INVITED VISITS

Alman BA: Canadian Connective Tissue Conference, Toronto, Ontario, Canada, June 2010. What development teaches about arthritis: Hedgehog signaling in osteoarthritis.

Alman B: International Bone and Mineral Society (IBMS), Davos Workshop: Bone Biology and Therapeutics, Davos, Switzerland, March 2010. Keynote Speaker: Hedgehog signaling in cartilage pathology: A role in osteoarthritis and chondrosarcoma.

Alman B: Orthopaedic Research Society, Annual Meeting, "Spotlight Talk," New Orleans, Louisiana, USA, March 2010. From development to disease: Hedgehog in tumors and arthritis.

Alman B: International Pediatric Orthopaedic Symposium (IPOS), Orlando, Florida, USA, December 2009. (1) Essentials of pediatric orthopaedics II, (2) Benign and malignant tumors, (3) Syndromes and skeletal dysplasias.

Alman B: Canadian Institutes for Health Research, New Primary Investigator Meeting, Jackson's Point, Ontario, Canada, November 2009. What cancer teaches us about arthritis: Hedgehog signaling in chondrocytes.

Alman B: National Institutes of Health, First International Conference on Sarcoma Biology, Miami, Florida, USA, November 2009. Beta-catenin mechanisms in desmoid tumor.

Alman BA: International Pediatric Orthopaedic Think Tank, Hong Kong, People's Republic of China, October 2009. Focused, competency-based training: A new way to teach pediatric orthopaedics.

Alman B: University of Hong Kong, Mini Symposium on Developmental Biology, Hong Kong, PRC, October 2009. From tumors to arthritis: Hedgehog signaling in chondrocytes.

Alman BA: Canadian Orthopaedic Association, Annual Meeting, Whistler, British Columbia, Canada, July 2009. Role of signaling pathways in musculoskeletal pathologic and reparative processes.

Howard A: Canadian Broadcasting Corporation (CBC) News, Toronto, Ontario, Canada, December 2009. School playground surfacing and arm fractures in children: A cluster randomized trial comparing sand to wood chip surfaces.

Howard A: Globe and Mail, Toronto, Ontario, Canada, December 2009. School playground surfacing and arm fractures in children: A cluster randomized trial comparing sand to wood chip surfaces.

Howard A: LA Times, Los Angeles, California, USA, December 2009. School playground surfacing and arm fractures in children: A cluster randomized trial comparing sand to wood chip surfaces.

Howard A: Association of Bone and Joint Surgeons (ABJS), Carl T. Brighton Workshop, Tampa, Florida, USA, November 2009. Attendee.

Howard A: Canadian Broadcasting Corporation (CBC), Toronto, Ontario, Canada, October 2009. Luxury intersections' could save lives: Researcher.

Howard A: Globe and Mail, Toronto, Ontario, Canada, October 2009. Booster seat laws improve child safety: Study.

Narayanan U: Paediatric Orthopaedic Society of North American (POSNA), Hawaii, USA, May 2010.

Narayanan U: Shriner's Hospital and Montreal Children's Hospital, Sainte-Justine Paediatric Orthopaedic Review Course (SPORC), Montreal, Province of Quebec, Canada, March 2010.

Narayanan U: Cairo University, Cairo, Egypt, February 2010. Lecturer.

Narayanan U: HARMS Spine Study Group, Park City, Utah, USA, January 2010. (1) Preliminary outcomes of scoliosis surgery in children with severe cerebral palsy, (2) Responsiveness of the CPchild following surgery for scoliosis in children with cerebral palsy.

Narayanan U: 6th Annual International Pediatric Orthopaedic Symposium, Management of Bone Cysts, Orlando, Florida, USA, December 2009. Faculty Lectures: (1) Management of bone cysts, (2) Neuromuscular disorders: Essentials of pediatric orthopaedics, Part I and Part II, (3) Faculty Panel: Management of difficult fractures and fracture complications in children.

Narayanan U: Hip Health 2009: Current Perspectives, Mississauga, Ontario, November 2009. (1) The limping child, (2) Infections of the hip in children.

Narayanan U: Ontario Association of Children's Rehabilitation Services, Annual Conference, Toronto, Ontario, Canada, November 2009. An update on clubfeet in children.

Narayanan U: American Academy of Cerebral Palsy and Developmental Medicine, 63rd Annual Meeting/Family Forum, Scottsdale, Arizona, USA, September 2009. (1) Instructional course lecture on measuring health-related quality of life of children with cerebral palsy, (2) Invited Speaker: The role of orthopaedics in cerebral palsy.

Narayanan U: Scandinavian International Seminar on Fractures in Children, Saro-Gothenburg, Sweden, September 2009. Faculty Lectures: (1) Fracture remodeling, (2) Fractures and dislocation of the elbow, (3) Ankle fractures, (4) Open fractures and compartment syndrome.

Narayanan U: Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio, USA, August 2009. Visiting Professor: (1) Evidence-based medicine: A prescription for pediatric orthopaedic surgeons, (2) Cerebral palsy: The big picture, (3) Whose life is it anyway? Measuring what's meaningful for children with severe disabilities.

Wedge JH: Belgian Orthopaedic Association, Brussels, Belgium, May 2010. Current concepts in the management of deformity of the hip in adolescents and young adults, (2) Fifty years after Salter innominate osteotomy.

Wedge JH: Jishuitan Orthopaedics Forum, Beijing, China, April 2010. (1) Controversies in the management of DDH, (2) Current concepts in the management of deformity of the hip in adolescents and young adults.

Wedge JH: 6th Annual International Paediatric Orthopaedic Symposium, Orlando, Florida, USA, December 2009. Presenter: Pearls for reduction and casting, and imaging afterwards (MRI, etc.)

Wedge JH: Hip Health 2009: Current Perspectives, Mississauga, Ontario, Canada, November 2009. Keynote Lecture: Controversies in the management of deformities of the hip in adolescents and young adults.

Wedge JH: Iranian Orthopaedic Association, Tehran, Iran, October 2009. Presenter: (1) Late treatment of unilateral and bilateral DDH, (2) Controversies in the management of DDH, (3) Dislocation in the hyperlax child, (4) Protrusio acetabulum in children, (5) Redislocation after DDH surgery.

Wright J: Canadian Orthopaedic Association, 2010 Annual Meeting, Ian MacNab Lecture, Edmonton, Alberta, Canada, June 2010. Presenter: Evidence medicine on orthopaedics; are we there yet?

Wright J: Cleveland Clinic Department of Orthopaedic Surgery, 2010 Research and Basic Science Days, Cleveland, Ohio, USA, June 2010. Visiting Professor/Guest Speaker: (1) Area variation to disparity: A 20-year journey, (2) Evidence-based medicine: Beyond the tipping point.

Wright J: University of Calgary, Department of Surgeon's Day, Calgary, Alberta, Canada, June 2010. Adjudicator: (1) Evidence-based orthopaedics: Beyond the tipping point, (2) From area variation to disparity: A 20-year journey for orthopaedic grand rounds.

Wright J: Paediatric Orthopaedic Society of North America (POSNA), 2010 Annual Meeting: Mini Symposium on EBM and Clinical Trials, Waikoloa, Hawaii, USA, May 2010. Introductory talk: Levels of evidence and study design.

Wright J: Brigham & Women's Hospital, Boston, Massachusetts, USA, April 2010. Presenter/Grand Rounds Guest Speaker: Evidence-based medicine: Beyond the tipping point.

Wright J: The Canadian Orthopaedic Foot and Ankle Society (COFAS), 9th Biennial Foot and Ankle Symposium, Adolescent Foot Pathology, Toronto, Ontario, Canada, April 2010. Presenter: (1) Update in pediatric clubfoot management, (2) Pediatric pes planus non-operative versus operative treatments.

Wright J: American Academy of Orthopaedic Surgeons/Board of Specialty Societies (AAOS/BOS), 2010 Annual Meeting, New Orleans, Louisiana, USA, March 2010. Presenter: Deformities of the child's foot: Evaluation and principles-based management.

Wright J: Ontario Health Authority (OHA), Medical Staff Management Conference, Toronto, Ontario, Canada, February 2010. Speaker/Presenter (with Bill Carter and Dr. Kerry Bowman): Ethics and the media.

Wright J: University of California San Francisco, Grand Rounds Conference, San Antonio, Texas, USA, February 2010. Visiting Professor: Evidence-based medicine: Beyond the tipping point.

Wright J: Saudi Orthopaedic Association, 3rd Annual Meeting, Bahrain, Saudi Arabia, January 2010. Presenter/Guest Speaker on paediatric orthopaedic surgery: (1) Principals of spina bifida management, (2) The treatment of cavus foot, (3) Presidential Lecture: Trends in complex spine deformity, (4) Evidence-based orthopaedic surgery.

Wright J: National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), Roundtable on Enhancing Clinical Trials in Orthopaedics and Osteoarthritis, Bethesda, Maryland, USA, December 2009. Speaker.

Wright J: Scoliosis Research Society, 2009 Annual Meeting, San Antonio, USA, September 2009. Presenter at Lunchtime Symposia on Evidence-Based Outcomes: Evidence-based medicine in myelomeningocele.

Zeller R: American Academy of Orthopaedic Surgeons, New Orleans, USA, March 2010. Treatment by spin column surgery - osteotomy, resection (congenital and early-onset spinal deformity.)

Zeller R: Congenital Muscular Dystrophy Society, Brussels, Belgium, November 2009. International guidelines for treatment: Spinal deformities in CMD.

Zeller R: International Conference on Standard of Care for Congenital Muscular Dystrophies, Brussels, Belgium, November 2009. Literature Review: Orthopaedics/Rehabilitation - Discussion of key care issues related to surgery.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

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

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

Controlled Radiography for Ankle injury Cases in Kids in the Emergency Department (CRACKED) Study: Implementation of best evidence for imaging of paediatric ankle injuries. *Boutis K, Narayanan U, Anchala K, Babyn PS, Brison RJ, Goeree RA, Grimshaw JM, Grootendorst PV, Johnson DW, Plint AC, Sayal AK, Schuh S, Stephens D: Canadian Institutes of Health Research.* (\$100,000 2009 – 2010)

Functional outcomes following orthopaedic surgery based on gait laboratory versus observational gait analysis in ambulatory children with cerebral palsy: A multicentre pilot randomized controlled trial. *Narayanan U, Willan AR, Wedge J, Darcy L, Fehlings DL, Redekop S, Zabjek K: Canadian Institutes of Health Research.* (\$314,633 2009 – 2013)

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

Identifying novel drug therapies for desmoid tumors. *Alman B: Desmoid Tumor Research Foundation.* (U.S.\$195,000 2009 – 2010)

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

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

Murine model of adynamic bone disease. *Grynpas M, Alman B: Canadian Institutes of Health Research.* (\$484,962 2009 – 2014)

Novel picosecond infrared laser for minimally invasive surgery. *Miller D, Alman BA: Natural Sciences and Engineering Research Council (NSERC) / Canadian Institutes of Health Research (CIHR) : Collaborative Health Research Project (CHRP).* (\$386,000 2009 – 2012)

Proximal-distal positional identity in the mammalian limb bud. *Hopyan S: March of Dimes-Basil O'Connor Starter Scholar Research Award grant.* (\$150,000 2008 – 2010 / \$50,000 prorated for 2009-10)

HONOURS RECEIVED

Hopyan S: Angela Kuo Awards from the Pediatric Orthopaedic Society of North America (with monetary prize of \$29,614), 2009.

Narayanan U: 2009 External Faculty Teaching Award (Postgraduate) for Developmental Pediatrics Program, from the University of Toronto, Faculty of Medicine.

Narayanan U: 2010 Gayle Arnold Award for Best Paper 'Impact of Musculoskeletal Co-morbidities on the Health Related Quality of Life of Children with Severe CP' during the 63rd Annual Meeting of the American Academy of Cerebral Palsy and Developmental Medicine (AAPDM). September 2009.

Wedge J: Named one of the '100 Alumni of Influence' at the Centennial of the Faculty of Arts and Science, University of Saskatchewan. November 2009.

Wright J: Institute of Public Administration of Canada (IPAC)/Deloitte Public Sector (Canada) Leadership Award for *The Canadian Pediatric Surgical Wait Times Project.* 2009.

DIVISION OF PLASTIC AND RECONSTRUCTIVE SURGERY

Dr. G. Borschel	Assistant Professor
Dr. H.M. Clarke	Professor
Dr. D.M. Fisher	Assistant Professor
Dr. C.R. Forrest	Professor (Division Head)
Dr. T. Gordon	Professor
Dr. C.Y. Pang	Professor
Dr. J.H. Phillips	Associate Professor
Dr. R.M. Zuker	Professor

PUBLICATIONS

Addision P, Neligan PC, Pang CY: Drugs in microsurgery. In: Microsurgical Reconstruction of the Head and Neck (Neligan PC, Wei FC, eds.) Quality Medical Publishing, Inc., St. Louis, Missouri, 2010.

Borschel GH, Clarke HM: Obstetrical brachial plexus palsy. Plastic and Reconstructive Surgery: July 2009: 124 (1 Suppl): pp 144e-155e.

Cypel TKS, Somers GR, Pope E, Zuker RM: Predisposing factors and outcome of malignant skin tumors in children. Plastic and Reconstructive Surgery: E-published ahead of print April 1, 2010.

Forrest CR: Secondary management of post-traumatic craniofacial deformities. In: Plastic Surgery Secrets, Second Edition (Weinzweig J, ed.) Mosby, Elsevier, Philadelphia, 2010.

Forrest CR, Slywyska K: Chapter 33 - Plastic surgery. In: The Hospital for Sick Children, Handbook of Pediatrics, 11th Edition (Dipchand AI, Friedman JN, Bismilla Z, Gupta S, Lam C, eds.) Saunders Elsevier, Toronto, 2009.

Ho ES, Roy T, Stephens D, Clarke HM: Serial casting and splinting of elbow contractures in children with obstetric brachial plexus palsy. The Journal of Hand Surgery (American): January 2010: 35(1): pp 84-91. E-published December 3, 2009.

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.

Lipa JE, Qiu W, Huang N, Alman BA, Pang CY: Pathogenesis of radiation-induced capsular contracture in tissue expander and implant breast reconstruction. Plastic and Reconstructive Surgery: February 2010: 125(2): pp 437-445.

Magill CK, Tuffaha BA, Yee A, Luciano JP, Hunter DA, Mackinnon SE, Borschel GH: The use of carboxymethylcellulose hyaluronate (Septrafilm®) in the microsurgical repair of peripheral nerves. Journal of Reconstructive Microsurgery: July 2009: 25(6): pp 345-354.

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.

Mullick S, Borschel GH: A selective approach to treatment of ulnar polydactyly: Preventing painful neuroma and incomplete excision. Pediatric Dermatology: January 2010: 27(1): pp 39-42.

Sun HH, Oswald TM, Sachanandani NS, Mackinnon SE, Borschel GH: The 'Ten Test' application and limitations in assessing sensory function in the pediatric hand. Journal of Plastic, Reconstructive and Aesthetic Surgery: E-published ahead of print: January 25, 2010.

Zuker R, Perlyn C: Chapter 55 - Facial paralysis. In: Decision Making in Plastic Surgery (Marsh J, Perlyn C, eds.) Quality Medical Publishing, St. Louis, Missouri, April 2010.

INVITED VISITS

Borschel GH: American Association of Hand Surgery/American Society for Peripheral Nerve/American Society of Reconstructive Microsurgery (AAHS/ASPN/ASRM), Fort Lauderdale, Florida, USA, January 2010. Guest Speaker: Advances in brachial plexus paralyses reconstruction.

Borschel GH: European Plastic Surgery Research Council, 1st Annual Meeting, Hamburg, Germany, August 2009. Guest Speaker in recognition of the Clifford C. Snyder, MD – Past Chairman's Award for Best Resident Presentation to Dr. Amy M. Moore (as her faculty mentor).

Clarke HM: Cincinnati Children's Hospital, Brachial Plexus Conference 2010, Cincinnati, Ohio, USA, June 2010. (1) Surgical management of obstetrical brachial plexus palsy, (2) Keynote Address: Assessment and decision making in obstetrical brachial plexus palsy.

Clarke HM: National Guard Hospital, Residency Training Programme, Riyadh, Saudi Arabia, June 2010. The management of obstetrical brachial plexus palsy.

Clarke HM: King Saud University, College of Medicine/Department of Surgery, 10th Annual Research Conference, Riyadh, Saudi Arabia, May 2010. Visiting Professor: The management of obstetrical brachial plexus palsy.

Clarke HM: American Society for Peripheral Nerve. Boca Raton, Florida, USA, January 2010. (1) Presidential Lecture: The history of obstetrical brachial plexus palsy, (2) Abstract presentation: Suprascapular nerve reconstruction in obstetrical brachial plexus palsy revisited: Spinal accessory nerve transfer versus C5 nerve grafting.

Clarke HM: 15th World Congress of International Confederation for Plastic, Reconstructive and Aesthetic Surgery, New Delhi, India, December 2009. Obstetric brachial plexus palsy (Master Class).

Clarke HM: International Confederation for Plastic, Reconstructive and Aesthetic Surgery (IPRAS), 15th World Congress, New Delhi, India, November 2009. (1) Obstetric brachial plexus palsy (Master Class), (2) Intra-pelvic femoral nerve reconstruction in the pediatric population.

Clarke HM: Association of Plastic Surgeons of India, Mamallapuram, India, August 2009. (1) Surgical decision making in obstetrical brachial plexus palsy, (2) Video presentation: Nerve reconstruction using fibrin glue for obstetrical brachial plexus palsy.

Fisher D: Royal Australasian College of Surgeons, Annual Scientific Congress, Perth, Australia, May 2010. (1) Keynote Lecture (with Kasrai L): Microtia Reconstruction; (2) co-Chair with Williams A (Perth): (A) Aesthetic and Reconstructive Ear Surgery, (B) Ear Reconstruction, Post Skin Cancer Resection - (1) Cleft lip and palate (2) Anatomical subunit cleft lip repair, (3) Bilateral cleft lip and nose repair, (4) Management of cleft palate, (5) Unilateral cleft lip and nose repair, (6) Masterclass: Anatomical subunit cleft lip repair, (C) Rhinoplasty: Aesthetic and Reconstructive Challenges: (1) The difficult nose: lessons from cleft nose rhinoplasty, (2) Panel Discussion: Surgical procedures I no longer perform and why?, (D) Masterclass: Meet the Masters – Panel Discussion on Surgical Procedures I No Longer Perform and Why, (with with Drs. Claes Laurantzen, Wayne Perron and Jeroen Stevens), (E) Ear replantation, a multistage procedure, James Savundra (Perth); (F) Otoplasty, subunit analysis, Christopher Coombs (Melbourne); Wi Fi otoplasty, Andrew Greensmith (Melbourne).

Fisher D: 46th Brazilian Congress of Plastic Surgery, Sao Paulo, Brazil, November 2009. Guest Speaker: Cleft lip and ear reconstruction.

Fisher D: International Confederation for Plastic, Reconstructive and Aesthetic Surgery (IPRAS), New Delhi, India, November 2009. (1) Chairperson of cleft lip session, (2) Guest Speaker: Unilateral cleft lip repair (anatomic subunit approximation technique.)

Fisher D: American Society of Human Genetics, Honolulu, Hawaii, USA, October 2009. Poster Presentation Presenter: Developing a clinical genetics approach to cleft lip and/or palate.

Fisher D: Association of Plastic and Reconstructive Surgeons of South Africa (APRSSA), Pretoria, South Africa, October 2009. Guest Speaker/Instructional Course/Demonstration of Cleft Septorhinoplasty Surgery: (1) Bilateral cleft lip repair, (2) Cleft rhinoplasty, (3) Our cleft lip and palate protocol in Toronto, (4) Demonstration: Cleft septorhinoplasty surgery, (5) Treatment of microtia, (6) Unilateral cleft lip repair - anatomic subunit repair.

Fisher D: University of Sydney/Royal North Shore Hospital, 5th International Congress on Auricular Reconstruction, Sydney, Australia, September 2009. Invited Guest Speaker and International Committee Member – (UPDATE - as of April 2, 2009, due to current financial crisis, the meeting has been postponed until further notice - updated details to follow).

Fisher D: Operation Smile, Norfolk, Virginia, USA, August 2009. Guest Speaker/Expert Panel Reviewer of resident case presentations on unfavorable results in cleft lip and palate surgery.

Forrest C: Canadian Society of Plastic Surgery, 64th Annual Meeting, Halifax, Nova Scotia, Canada, June 2010. Presenter: (1) Posterior cranial vault distraction in the management of syndromic craniosynostosis, (2) CT scans and non-syndromic single suture craniosynostosis: Incidental findings and role in management, (3) Nicorandil induces late-phase ischemic preconditioning for perioperative protection of skeletal muscle from ischemia/reperfusion (I/R) injury, (4) In vitro assessment of osteoblast behaviour in craniosynostosis, (5) Skull base scoliosis in unicoronal synostosis, (6) Demographics of orofacial clefts in Canada from 2002 to 2008.

Forrest C: Great Ormond Street Hospital, Combined Department of Anaesthesia and Division of Plastic Surgery, London, United Kingdom, December 2009. Visiting Professor: (1) Protocols in pediatric craniofacial surgery - contrast and comparison, (2) Intra-operative emergencies and complication in pediatric craniofacial surgery, (3) The application of CAD-CAM technology in pediatric craniofacial surgery - Does the advantage of the toys justify the cost?

Forrest C: The Royal Society of Medicine, Plastic Surgery Section, London, United Kingdom, December 2009. Invited Lecturer: Pediatric craniofacial surgery at HSC Toronto - Lessons learned and the development of specialist plastic surgical training in the Toronto programme.

Forrest C: University of California Los Angeles, School of Medicine, Los Angeles, California, USA, October 2009. Visiting Professor.

Forrest C: International Society of CranioFacial Surgery (ISCFS), XIII Biennial International Congress Incorporating the Paris Distraction Symposium, Oxford, United Kingdom, September 2009. Surgical management of sagittal synostosis in infants: Outcomes, CT-based morphometric assessment and complications.

Forrest C: Case Western Reserve University, Cleveland, Ohio, USA, 2009. Visiting Professor.

Forrest C: Great Ormond Street Hospital, Combined Department of Anaesthesia and Division of Plastic Surgery Rounds, London, United Kingdom, December 2009. Visiting Professor: (1) Protocols in pediatric craniofacial surgery - contrast and comparison, (2) Intra-operative emergencies and complication in pediatric craniofacial surgery, (3) the application of CAD-CAM technology in pediatric craniofacial surgery - Does the advantage of the toys justify the cost?

Forrest C: The Royal Society of Medicine, Plastic Surgery Section, London, United Kingdom, December 2009. Paediatric craniofacial surgery at HSC Toronto - Lessons learned and the development of specialist plastic surgical training in the Toronto programme.

Forrest C: University of California Los Angeles, School of Medicine, Los Angeles, California, USA, October 2009. Visiting Professor.

Phillips JH: Christus Santa Rosa Children's Hospital (invited by Dr. Aaron Mason), San Antonio, Texas, USA, April 2010. Speaker: (1) Cephalometric long-term surgical outcomes in Treacher Collins patients.

Phillips JH: Arbeitsgemeinschaft für Osteosynthesefragen (AO) North America, Vail, Colorado, USA, February 2010. Speaker: (1) Distraction osteogenesis and cleft surgery, (2) Aesthetics and implants.

Zuker R: McGill University, Plastic Surgery Training Programme, Montreal, Quebec, Canada, June 2010. Lecturer: Facial paralysis reconstruction in children.

Zuker R: Montreal Children's Hospital, Montreal, Quebec, Canada, June 2010. Distinguished Speaker: The broad brush of reconstructive microsurgery.

Zuker R: Swiss Facial Paralysis Group, Lausanne, Switzerland, March 2010. (1) New alternatives in facial paralysis reconstruction, (2) Update on facial paralysis.

Zuker R: American Society for Reconstructive Microsurgery, Cutting Edge Solutions for Facial Paralysis, Boca Raton, Florida, USA, January 2010. Panelist.

Zuker R: International Society of Plastic, Reconstructive and Aesthetic Surgeons Congress, New Delhi, India, November - December 2009. Invited Lecturer: Facial reanimation (Master Class).

Zuker R: Karnataka Plastic Surgeons Meeting, Bangalore, India, December 2009. Invited Lecturer: Facial reanimation.

Zuker R: Round Table Discussions, Kochi, India, December 2009. (1) Palatal fistulae in India, (2) The role of the VAC in pediatric plastic surgery.

Zuker R: American Society of Plastic Surgeons (ASPS), Seattle, Washington, USA, October 2009. Instructor: The complete head and neck microsurgery course.

Zuker R: British Association of Plastic Reconstructive and Aesthetic Surgeons, Manchester, United Kingdom, October 2009. (1) Session co-Chairman, (2) The gracilis transfer: Keys to success, (3) Facial reanimation using the nerve to masseter in bilateral and unilateral cases.

HONOURS RECEIVED

Fisher DM: Honorary Member of the Association of Plastic and Reconstructive Surgeons of South Africa (APRSSA). October 2009.

Pang C: Award for Outstanding Achievement in Basic Science and Translational Research by the Plastic Surgery Education Foundation/American Society of Plastic Surgeons, Seattle, Washington. October 2009.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

A transgenic rat expressing GFP in peripheral nerves. *Borschel G, Moore AM, Mackinnon S: Plastic Surgery Educational Foundation, Pilot Research Grant.* (\$10,000 2009 – 2010)

A novel transgenic rat expressing green fluorescent protein (GFP) in peripheral nerve. *Borschel G, Moore AM, Sakiyama-Elbert SE, Mackinnon SE: American Society for the Peripheral Nerve, Research Grant Program.* (U.S.\$5,000 2009 – 2010)

Controlled growth factor delivery for motor nerve injury. *Borschel G, Sakiyama-Elbert S, Mackinnon SE: American College of Surgeons, C. James Carrico Faculty Research Fellowship for the Study of Trauma and Critical Care.* (U.S.\$80,000 2009 – 2011)

Decellularized nerve allografts and motor nerve regeneration. 137077. *Borschel G, Nicoson MC, Mackinnon S: Plastic Surgery Educational Foundation, Pilot Research Grant.* (\$10,000 2009 – 2010)

Hypoxic postconditioning of human skeletal muscle against reoxygenation injury: Efficacy, mechanism, and therapeutic potentials. *Pang C, Forrest C, Hofer S, Zhong I: Canadian Institutes of Health Research.* (\$326,763 2009 - 2012)

Radiologic predictors of functional outcome in newborn brachial plexus injury: *Borschel GH, Zaidman C: Barnes-Jewish Hospital Foundation/Washington University Institute of Clinical and Translational Sciences, Clinical and Translational Research Funding Program Planning Grant.* (U.S.\$25,000 2009 – 2010 / U.S.\$12,500 prorated for 2009-10)

The role of anti-osteogenic signalling in the pathophysiology of craniosynostosis in infants. *Forrest C: Komedylast.* (\$5,000 2009 / \$2,500 prorated for 2009-10)

The role of anti-osteogenic signalling in the pathophysiology of craniosynostosis in infants. *Forrest C: Plastic Surgery Educational Foundation.* (\$8,000 2009 / \$4,000 prorated for 2009-10)

The role of anti-osteogenic signalling in the pathophysiology of craniosynostosis in infants. *Forrest C: The Physicians' Services Incorporated Foundation (PSI).* (\$25,000 2009 / \$12,500 prorated for 2009-10)

Use of a tissue engineered nerve graft to improve nerve regeneration. *Borschel G, Gordon T: Comprehensive Research Experience for Medical Students (CREMS), Summer Program, 2010 Research Fellowships (Mr. Collin Nguyen, U of T medical student, will develop new methods of imaging regeneration following nerve injury)* (\$2,750 June – August 2010)

Use of microspheres to enhance regeneration following nerve injury in a rat hindlimb model. *Borschel GH, Gordon T: Comprehensive Research Experience for Medical Students (CREMS), Summer Program 2010, Research Fellowships.* (\$2,750 June 2010 – Aug 2010 / \$917 prorated – declined)

HONOURS RECEIVED

Clarke H: Senior Fellow, Massey College, University of Toronto, Canada. 2009

Fisher D: Honorary Member, Association of Plastic & Reconstructive Surgeons of South Africa (APRSSA). 2009.

Forrest C: ASMA Best Paper Award in the Best Research Category for 'Radiation-Induced Craniofacial Bone Growth Inhibition: In Vitro Cytoprotection in the Rabbit Orbitozygomatic Complex Periosteum-Derived Cell Culture.' 2009.

DIVISION OF UROLOGY

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

PUBLICATIONS

Aitken K, Bägli DJ: The bladder extracellular matrix. Part I: architecture, development and disease. *Nature Reviews Urology*: November 2009; 6(11): pp 596-611.

Aitken K, Bägli DJ: The bladder extracellular matrix. Part II: regenerative applications. *Nature Reviews Urology*: November 2009; 6(9): pp 612-621.

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INVITED VISITS

Bägli DJ: Syrian Urological Association, 2ND Syrian-French Congress, Damascus, Syria, Arab Republic, May 2010. Guest Speaker/Presenter: (1) Recent advances in pediatric urology, (2) What science can teach us about hypospadias.

Bägli DJ: International Society on Hypospadias and Intersex Disorders (ISHID), Toronto, Ontario, Canada, November 2009. (1) Responsible for major design of course, (2) Panel discussion involving interprofessional DSD teams.

Bägli DJ: National Institutes of Health/National Institute of Diabetes and Digestive Kidney Diseases (NIDDK), Research Workshop Advisory Planning for Urology Research 2.0, Washington, District of Columbia, USA, July 2009. Guest Speaker.

Bägli DJ: University of Michigan, Disorders of Sexual Differentiation, Research and Quality Improvement Symposium, Ann Arbor, Michigan, USA, April 2009. Guest Speaker.

Farhat WA: 6th Symposium on Biologic Scaffolds for Regenerative Medicine, Napa Valley, California, USA, April 2010. Presenter: (1) Defining rotator cuff healing, (2) Scaffold-mediated macrophage manipulation as a mechanism to modulate the matrix for healing and regeneration, (3) New breath: The clinical application of stem cells on biologic scaffolds to treat advance.

Farhat WA: The Jordanian Association of Urological Surgeons, 6th International Congress, Amman, Jordan, October 2009. (1) Workshop on UDT-laparoscopic approach, 27 cases; (2) Minimal invasive urological surgery in children: Current status, urinary tract infection.

Lorenzo A: Paediatric Urology Junior Organization, 4th Annual Meeting, San Francisco, California, USA, May 2010. Presenter: The tumour thrombus that didn't read the book.

Lorenzo A: Allergan, Pediatric Overactive Bladder Expert Panel Meeting, Miami, Florida, USA, December 2009. Panel Member.

Lorenzo A: International Society on Hypospadias and Intersex Disorders (ISHID), III International Congress, Hypospadias and Disorders of Sexual Development, Toronto, Ontario, Canada, November 2009. (1) Responsible for major design of course, (2) Pre-course case presentations, (3) Assessment Speaker.

Lorenzo A: Latin American Pediatric Association, XV Congress, San Juan, Puerto Rico, November 2009. (1) Panel review of clinical cases and interesting nephrological cases, (2) Podium Presentations: (a) Neurogenic bladder: Management and new tendencies in treatment, (b) Recurrent urinary tract infections: Controversies, (c) Voiding dysfunction and enuresis: Comprehensive management and the role of the clinical specialist.

Pippi Salle J: 22nd Saudi Urological Conference, Riyadh, Saudi Arabia, March 2010. (1) Guest Speaker: (a) Technical details to improve outcomes in bladder exstrophy and epispadias, (b) Technical details to improve outcomes in hypospadias surgery, (2) Panelist: (a) Posterior urethral valves, (b) Neuropathic bladder, (c) Dysfunctional elimination syndrome, (d) Complications of urethral surgery in adult and pediatric patients.

Pippi Salle J: University of British Columbia/Canadian Pediatric Endocrine Group, Calgary, Alberta, Canada, March 2010. Keynote Speaker: Initiatives to improve outcome in the management of DSD.

Pippi Salle J: Centre Hospitalier Universitaire Ibn Rochd Hôpital d'Enfants, Quoi de Neuf en Urologie Pédiatrique, Casablanca, Morocco, February 2010. Guest Lecturer: (1) Technical details in surgery for hypospadias. (2) What's new in paediatric urology?

Pippi Salle J: 3rd International Symposium on Exstrophy and Epispadias, Baltimore, Maryland, USA, October 2009. Total penile disassembly - Outcomes and complications.

Pippi Salle J: American Academy of Pediatrics, Washington, District of Columbia, USA, October 2009. Moderator (a) Session 6: Bladder exstrophy, (b) Session on: Posterior urethral valves: Divert or not to divert.

Pippi Salle J: Jesus Municipal Hospital, Rio de Janeiro, Brazil, July-August 2009. (1) Proximal hypospadias with severe chordee: Staged repair, (2) Surgery for neurogenic bladder with low urethral resistency: Should concurrent bladder augmentation be performed?, (3) Surgical management of virilized females.

Pippi Salle J: The European Congress of Paediatricians, Europaediatrics 2009, Moscow, Russian Federation, July 2009. Decisions and dilemmas in the treatment of disorders of sex development.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

CIHR team in the effects of brominated flame retardants on reproductive health: Animal, human, ethical, legal and social studies human development, child and youth health. *Goodyear C, Bägli DJ: Canadian Institutes of Health Research.* (\$499,000 2009 – 2013)

Center for Computer-Assisted Intervention and Innovation (CCAI), (RE-02-022). *Kim P, Farhat WA, Wright J: Ontario Research Fund (ORF).* (\$3,395,000 2008 – 2012 / \$679,000 prorated for 2009-10)

Disruptive technologies in pediatric and fetal intervention. *Kim P, Farhat WA, Wright J: Canadian Foundation of Innovation (CFI).* (\$3,200,000 2000 – 2012 / \$800,000 prorated for 2009-10)

Epigenetic responses to uropathogenic e.coli urinary tract infection. *Bägli DJ: American Urological Association Foundation, Laboratory Research Fellowship (B. Weber).* (\$37,000 2010 – 2011)

Molecular determinants of carcinogenesis in bladder augmentation in a novel animal model. *Bägli DJ: The Hospital for Sickkids Research Institute.* (\$3,000 2009)

Novel therapeutic approaches for obstructive bladder disease. *Bägli DJ: Canadian Institutes of Health Research.* (\$440,000 2009 – 2013)

Quantitative MRI of angiogenesis and cellularization in tissue regeneration. *Hai-Ling C, Farhat WA, Stanisz GJ: Sickkids Foundation (SKF), New Investigator Awards.* (\$129,223 2008 – 2010 / \$43,074 prorated for 2009-10)

Role of sex steroids in perioperative management of hypospadias: Initial human cell studies in vitro. *Haddad A, Bägli DJ: Society for Pediatric Urology.* (U.S.\$37,000 2010 – 2011).

Validation of Real-time, Intra-operative, Surgical Competence (RISC) assessments linked to patient outcomes. *Grober E, Lorenzo A, Jewett M: The Physicians' Services Incorporated Foundation.* (\$91,500 2009 – 2011)

Validation of Real-time, Intra-operative, Surgical Competence (RISC) assessments linked to patient outcomes. *Grober E, Lorenzo A, Jewett M: Medical Council of Canada.* (\$37,000 2009 – 2010)

HONOURS RECEIVED

Lorenzo A: 2009 Outstanding Reviewers/Best Reviewers, The Journal of Urology. June 2010.

MOUNT SINAI HOSPITAL

Jay S. Wunder

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



HEADS OF DIVISION

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

Renew Sinai is our hospital's multi-year capital redevelopment project to create, expand and modernize our space. Redevelopment of the perioperative program is next in line, and as a result a working group has been meeting regularly with a health care architecture team to draw up plans for our new space which will include new operating rooms and perioperative resources. The first phase of Renew Sinai has just built and shelled in 6 new floors on top of the Murray Street wing of the hospital to house the Women's and Infants' Health Program. As soon as this space is internally completed and the Women's and Infants' Health Program moves, we will begin our exciting surgical redevelopment. As a lead up to this major surgical undertaking, but also realizing that it will be at least a few years away, we constructed a Same Day Surgical Admission Unit adjacent to the Main Operating Rooms which has already made a major positive impact for patients and their families on the day of surgery. This was made possible by two generous donors.

Patient safety and access remain major focuses throughout the hospital and particularly within the Department of Surgery. At the Hospital's Quality and Patient Safety Retreat in June, there were two outstanding presentations representing the surgical program. Dr. Jay Wunder discussed implementation of the Mount Sinai Hospital Surgical Safety Checklist which was facilitated by holding educational patient safety rounds for the entire surgical program. Compliance with the surgical safety checklist is now another of the publicly reported safety indicators by the Ministry of Health. Dr. Robin McLeod leads the 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. Robin showed positive results of improvements in patient outcomes as a direct result of this initiative.

The surgical oncology program 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.



Many members from our hospital's Sarcoma Program were nominated to work on the Sarcoma Expert Panel which developed a working document for Cancer Care Ontario (CCO) and the Ministry of Health on how to improve sarcoma patient care throughout the province, as well as rectify deficiencies in case funding, especially for limb salvage surgical procedures and sarcoma chemotherapy, both of which are expensive and poorly remunerated.

We were awarded Ontario's first Peritoneal Malignancy Program under the joint partnership of Mount Sinai Hospital, University Health Network, Sunnybrook Health Sciences Centre and Cancer Care Ontario. It has taken a lot of institutional cooperation and backroom political intervention leading to the creation of this program. This will allow patients to receive cytoreductive surgery with intraperitoneal hyperthermic chemotherapy locally, without having to be sent abroad to the USA for treatment.

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

DIVISION OF GENERAL SURGERY

Andrea McCart was promoted to Associate Professor in the Department of Surgery at the University of Toronto, and is head of the new Ontario Peritoneal Malignancy Program. Rebecca Gladly was chosen as this year's recipient of the Bernard Langer Surgeon Scientist Award. Carol Swallow completed successful terms as President of

the Canadian Society of Surgical Oncology, and Chair of the Royal College Specialty Committee for General Surgical Oncology. Helen MacRae is Chair of the American College of Surgeons' Association of Program Directors Committee. Robin McLeod holds the Angelo and Alfredo De Gasperis Families Chair in Colorectal Cancer and IBD Research. Robin continues to do an outstanding job as Surgical Lead for Quality Improvement and Knowledge Transfer at Cancer Care Ontario. Robin was the Gallie Lecturer at the Annual Canadian Association of General Surgeons Meeting and discussed "Improving the Quality of Cancer Surgery - The Cancer Care Ontario Experience." Robin also won the Robert Beart Impact Paper of the Year Award from the American Society for Colon and Rectal Surgeons. Zane Cohen received the Longstanding Achievement Award in IBD Research from the Division of Gastroenterology at the University of Toronto. One of the general surgery final year residents, Faye Quereshey, received the Bernard Ghert Award for Excellence in patient focused care.

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. This year's Rosen-Daniels professor was Dr. Hans de Wilt, a surgical oncologist from the Netherlands. He presented on: Intraperitoneal chemotherapy for peritoneal-based malignancies: preclinical and clinical considerations; Complications of pelvic exenteration; and Isolated perfusion techniques for extremity and liver malignancy: from bench to bedside.

DIVISION OF ORTHOPAEDIC SURGERY

Peter Ferguson won the Aikens Award for the best medical student teacher at the University of Toronto. Peter also runs the Competency-Based Curriculum (CBC) stream of the Orthopaedic Residency Program as part of his role as the Associate Program Director. The first year of this program has been very successful and the second group of CBC trainees started in July. Oleg Safir completed his Masters of Education and was promoted to Assistant Professor. Oleg received an educational research grant from the Network of Excellence in Simulation for Clinical Teaching and Learning. Oleg is also the co-Director of the new University of Toronto Young Adult Hip Clinic. David Backstein won the Silver Shovel Chute Award which is voted on by the 4th year medical class for excellence in clinical teaching in the undergraduate medical program. David was a co-applicant on two successful educational grants from the Network of Excellence in Simulation for Clinical Teaching and Learning. David also remains the Director of Undergraduate Education and Director of the Surgical Clerkship for the Department of Surgery and has continued to make major improvements to the medical school's surgical curriculum. One of Jay Wunder, Peter Ferguson and Ben Deheshi's clinical fellows, Kurt Weiss, won the award for the best paper at the Inaugural Orthopaedic Fellowship Research Day. Jay Wunder, together with Carol Swallow from General Surgery, was awarded a Canadian Foundation for Innovation Grant (CFI) to support Sarcoma

Research Infrastructure at the Lunenfeld Research Institute at Mount Sinai Hospital. Ben Deheshi from the sarcoma group left Toronto at the end of June 2010 to pursue a more clinically-based practice at McMaster University in Hamilton, Ontario.

DIVISION OF UROLOGY

Ethan Grober received grants from the Medical Council of Canada, The Physicians' Services Incorporated Foundation (PSI), and The Association for Surgical Education (CESERT) to continue his investigations into the acquisition and evaluation of surgical skills, and particularly to determine the correlation between these findings and patient outcomes. Kirk Lo was co-applicant on a successful CIHR grant investigating meiotic defects in infertile men undergoing assisted reproductive technologies. Kirk was on the program committee for the Annual Meetings of the American Society of Reproductive Medicine (the largest fertility meeting in the world) and the American Society of Andrology. Keith Jarvi received a grant from the Canadian Cancer Society Research Institute to identify novel prostate cancer biomarkers by studying semen proteomics. Keith received a patent for his finding that specific semen proteins can be used as biomarkers for male infertility. As a direct result of this patent, he was awarded a grant from the MaRS Innovation Proof of Principle Program to develop a non-invasive test which could be commercialized for identifying sperm production in men with infertility. Keith is also on the editorial board of the Canadian Urological Association Journal (CUAJ) and is the secretary of the Society for the Studies in Male Reproduction. Alex Zlotta retained his high profile presence in urologic oncology, being an invited speaker at 11 meetings this year. His oncology research group was awarded a second and larger CIHR grant to study the role of kallikreins as prognostic factors in prostate cancer. Alex remains an Associate Editor for European Urology and is on the faculty of the European School of Urology.

DIVISION OF GENERAL SURGERY

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

PUBLICATIONS

Akinlolu O, Ottolino-Perry K, McCart JA, Reilly RM: Antiproliferative effects of 111In- or 177Lu-DOTATOC on cells exposed to low multiplicity-of-infection double-deleted vaccinia virus encoding somatostatin subtype-2 receptor. *Cancer Biotherapy and Radiopharmaceuticals*: June 2010: 25(3): pp 325-333.

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Brown C, Poritz L, Stephen W; Evidence Based Reviews in Surgery Group: Canadian Association of General Surgeons, the American College of Surgeons, the Canadian Society of Colorectal Surgeons, and the American Society of Colon and Rectal Surgeons: Evidence based reviews in surgery - colorectal surgery. *Diseases of the Colon and Rectum*: April 2010: 53(4): pp 483-485.

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Douplik A, Wilson B, Easson AM, Leong W, Done S, Natchev G: Feasibility study of autofluorescence mammary ductoscopy. *Journal of Biomedical Optics*: July-August 2009: 14(4): pp 044036.

Downar J, Seccarrecia D, Associated Medical Services Inc. Educational Fellows in Care at the End of Life: Palliating the pandemic: "All patients must be cared for." *The Journal of Pain and Symptom Management*: February 2010: 39(2): pp 291-295.

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Elliott KS, Zeggini E, McCarthy MI, Gudmundsson J, Sulem P, Stacey SN, Thorlacius S, Amundattoir L, Gronberg H, Xu J, Gaborieau V, Eeles RA, Neal DE, Donovan JL, Hamdy FC, Muir K, Hwang S-J, Spitz MR, Zanke B, Carvajal-Carmona L, Brown KM, Australian Melanoma Family Study Investigators, Hayward NK, Macgregor S, PanScan Consortium et al 79 collaborators: Evaluation of association of HNF1B variants with diverse cancers: Collaborative analysis of data from 19 genome-wide association studies. *PLoS One*: May 2010: 5(5): pp e10858.

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McLeod RS: Surgical considerations for the patient with Crohn's disease/perianal Crohn's disease. In: *Inflammatory Bowel Disease: Translating Basic Science into Clinical Practice* (Targan S, Shanahan F, Karp LC, eds.) Wiley-Blackwell, West Sussex, United Kingdom, 2010.

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Smith AJ, Driman DK, Spithoff K, Hunter A, McLeod RS, Simunovic M, Langer B; Expert Panel on Colon and Rectal Cancer Surgery and Pathology: Guideline for optimization of colorectal cancer surgery and pathology. Journal of Surgical Oncology: January 2010: 101(1): pp 5-12.

Wright FC, Lookhong N, Urbach D, Davis D, McLeod RS, Gagliardi AR: Multidisciplinary cancer conferences: Identifying opportunities to promote implementation. Annals of Surgical Oncology: October 2009: 16(10): pp 2731-2737.

INVITED VISITS

Cohen Z: American Gastroenterological Association Meeting, New Orleans, Louisiana, USA, May 2010. Expert panel on evidenced-based surgery.

Cohen Z: American Society of Colon and Rectal Surgeons, Annual Meeting, Minneapolis, Minnesota, USA, May 2010. Oncologic outcome in ulcerative colitis patients with dysplasia or cancer who underwent stapled or hand sewn ileal pouch anastomosis.

Cohen Z: 12th International Congress on Advances in Medicine, Guadalajara, Mexico, February 2010. Quality indicators in colon and rectal surgery.

Cohen Z: Hospital Del Carmine Los Angeles, Guadalajara, Mexico, February 2010. The World's Health Organization checklist - is it for real?

Cohen Z: Inflammatory Bowel Disease (IBD) Update, Toronto, Ontario, Canada, November 2009. Perianal Crohn's disease.

Cohen Z: American College of Surgeons, Annual Clinical Congress, Chicago, Illinois, USA, October 2009. Dysplasia DALMS and cancer risk in ulcerative colitis.

MacRae HM: International Conference on Surgical Education and Training, Dublin, Ireland, May 2010. Objective assessment of technical skills.

MacRae HM: Medical Technology, Training, and Treatment, MT3 Conference, Orlando, Florida, USA, May 2010. Advances in simulation-based surgical education for residents.

MacRae HM: American College of Surgeons, Division of Education-Postgraduate Course, Seattle, Washington, USA, September 2009. Residency education.

MacRae HM: Canadian Surgery Forum, Victoria, British Columbia, Canada, September 2009. Role of laparoscopic surgery for inflammatory bowel disease - emergency and elective.

McCart JA: Canadian Society of Surgical Oncology, Montreal, Quebec, Canada April 2010. Panelist: Symposium on Peritoneal Based Malignancy.

McLeod RS: Roswell Park Cancer Institute, Buffalo, New York, USA, March 2010. Improving quality of cancer surgery in Ontario.

McLeod RS: Ontario Institute for Cancer Research, Toronto, Ontario, Canada, February 2010. Moving evidence into practice through online discussion for physicians.

McLeod RS: University of Michigan, Ann Arbor, Michigan, USA, February 2010. Preventing recurrence of Crohn's disease: A surgical prospective.

McLeod RS: Turkish Surgical Association, Ankara, Turkey, December 2009. (1) Evidence-based practice in surgery, (2) Translational research: From the bench to the patient.

McLeod RS: UEGW/WCOG- GASTRO, joint landmark meeting of the United European Gastroenterology Federation (UEGF), the World Gastroenterology Organisation (WGO), the World Organisation of Digestive Endoscopy (OMED) and the British Society of Gastroenterology (BSG), London, England, November 2009. Place of surgery in inflammatory bowel disease (IBD).

McLeod RS: American College of Surgeons (ACS), Chicago, Illinois, USA, October 2009. What is the evidence for antibiotic prophylaxis in mesh inguinal hernia repair? Let's do journal club.

Swallow CJ: Adjuvant Colon Cancer Regional Consultant Meeting, Toronto, Ontario, Canada, May 2010. Current surgical management of stage II and III colon cancer.

Swallow CJ: Canadian Society of Surgical Oncology Symposium at the Canadian Surgery Forum, Victoria, British Columbia, Canada, September 2009. How far can we go? Combined modality treatment of retroperitoneal sarcoma.

Swallow CJ: International GIST Tour 2009, Local Expert Panel, Toronto, Ontario, Canada, September 2009. Case Presentation: Neoadjuvant imatinib for duodenal GIST.

Swallow CJ: Columbian Surgical Association, 35th National Congress of Surgery, Bogota, Columbia, August 2009. (1) Barriers to improving the quality of surgery for gastric cancer, (2) Meeting the challenge of locally recurrent rectal cancer, (3) Update on the combined management of retroperitoneal sarcoma.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

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

A provincial audit to assess the quality of MRI for the staging of rectal cancer in Ontario. *Al-Sukhni E, Kennedy ED, McLeod RS, Milot L, Fruitman M, Victor JC: American Society of Colon and Rectal Surgeons.* (\$20,000 2010 - 2011)

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)

Career development award. *Gladdy RA: American Surgical Association Foundation Fellowship.* (\$150,000 2008 - 2010)

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 a novel virotherapy strategy to detect and treat malignant peritoneal mesothelioma. *McCart JA, de Perrot M, da Costa RS: Mesothelioma Applied Research Foundation.* (\$100,000 2010 - 2011)

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

Evidence-based reviews in surgery. *McLeod RS: Ethicon and Ethicon Endosurgery, an unrestricted educational grant.* (\$275,000 1999 - 2011)

Evidence-based reviews in surgery. *McLeod RS: Ethicon Endosurgery.* (\$150,000 2005 - 2011)

Evidence-based reviews in surgery. *McLeod RS: Ethicon U.S.* (\$150,000 2005 - 2011)

Identifying opportunities to improve care and outcomes for patients undergoing colorectal surgery: Enhanced recovery program effectiveness and implementation. *Okrainec A, Aarts MA, Chung FFT, Siddiqui NT, Gagliardi A, Eskicioglu C, McLeod RS: Colon Cancer Canada.* (\$35,000 2009 - 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 quality through process change: A scoping review of process improvement tools in cancer surgery grant. *Wei A, Bathe O, McLeod RS, Taylor B, Baxter N, Gagliardi A, Kennedy E, Urbach D: Canadian Institutes of Health Research.* (\$49,815 2010 - 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: 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 (molecular epidemiological studies of patient outcome and response to treatment). *McLaughlin J, Gryfe R: Canadian Institutes of Health Research.* (\$3,627,210 2006 - 2010 / \$203,706 over 3 years)

Molecular assay of virotherapy for colon carcinomatosis. *McCart J, da Costa RS: Colon Cancer Canada.* (\$35,000 2009 - 2010)

Ontario Familial Colorectal Cancer Registry-Phase III. *Gallinger S, Cotterchio M, Bapat B, Esplen MJ, Gryfe RN, McKeown-Eyssen G, McLaughlin J, Pollett A, Woods M: National Institutes of Health Research, USA.* (\$4,400,000 2008 - 2012)

Ontario Regional BioTherapeutics Program (ORBiT). *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)

Scientist 1 (80% research, 20% clinical). *Gladdy RA: Ontario Institute for Cancer Research.* (\$350,000 2008 - 2013)

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: Long Standing Achievement in Inflammatory Bowel Disease (IBD) Research, from the University of Toronto, Division of Gastroenterology. November 2009.

Gladdy RA: Bernard Langer Surgeon Scientist Award, Department of Surgery, University of Toronto. May 2010.

McLeod RS: The Robert W. Beart, MD, 2009 Impact Paper of the Year Award. May 2010.

Swallow CJ: First Prize, McMurich Award. May 2010.

DIVISION OF ORTHOPAEDIC SURGERY

Dr. D. Backstein	Associate Professor
Dr. R.S. Bell	Professor
Dr. B.M. Dehesi	Lecturer
Dr. P.C. Ferguson	Assistant Professor
Dr. L. Murnaghan	Assistant Professor
Dr. A.E. Gross	Professor
Dr. O. Safir	Assistant Professor
Dr. J.S. Theodoropoulos	Lecturer
Dr. T. Willett	Lecturer
Dr. J.S. Wunder	Professor (Division Head)

PUBLICATIONS

Andreisek G, Theodoropoulos JS, Mak W, White LM: Musculoskeletal case 45. *Canadian Journal of Surgery*: October 2009: 52(5): pp E180-E181.

Andreisek G, White LM, Theodoropoulos JS, Naraghi A, Young N, Zhao CY, Mamisch TC, Sussman MS: Synthetic-echo time postprocessing technique for generating images with variable T2-weighted contrast: Diagnosis of meniscal and cartilage abnormalities of the knee. *Radiology*: January 2010: 254(1): pp 188-199.

Backstein D, Gross A, Safir O, Aderinto J: Tibial osteotomy. In: *Advanced Reconstruction: Knee*: (Lieberman JR, Berry DJ, Azar FM, eds.) American Academy of Orthopaedic Surgery, Rosemont, Illinois, 2010.

Bubbar V, Las Heras F, Amato D, Pritzker KPH, Gross AE: Total hip replacement in Gaucher's disease. *The Journal of Bone and Joint Surgery (British)*: December 2009: 91B(12): pp 1623-1627.

Chung PW, Dehesi BM, Ferguson PC, Wunder JS, Griffin AM, Catton CN, Bell RS, White LM, Kandel RA, O'Sullivan B: Radiosensitivity translates into excellent local control in extremity myxoid liposarcoma: A comparison with other soft tissue sarcomas. *Cancer*: July 2009: 115(14): pp 3254-3261.

D'Antonio JA, Pagnano MW, Naughton M, Lombardi AV Jr, Berend KR, Skeels MD, Franchi OJ, Backstein D: Controversies regarding bearing surfaces in total hip replacement. *The Journal of Bone and Joint Surgery (American)*: August 2009: 91(Suppl 5): pp 5-9.

Davidge K, Bell R, Ferguson P, Turcotte R, Wunder J, Davis A: Patient expectations for surgical outcome in extremity soft tissue sarcoma. *Journal of Surgical Oncology*: October 2009: 100(5): pp 375-381.

Davidge KM, Eskicioglu C, Lipa J, Ferguson P, Swallow CJ, Wright FC: Qualitative assessment of patient outcomes following sacrectomy. *Journal of Surgical Oncology*: May 2010: 101(6): pp 447-450.

Dickie CI, Parent AL, Chung PW, Catton CN, Craig T, Griffin AM, Panzarella T, Ferguson PC, Wunder JS, Bell RS, Sharpe MB, O'Sullivan B: Measuring interfractional and intrafractional motion with cone beam computed tomography and an optical localization system for lower extremity soft tissue sarcoma patients treated with preoperative intensity-modulated radiation therapy. *International Journal of Radiation Oncology, Biology, Physics*: E-published ahead of print March 27, 2010.

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*: November 2009: 75(4): pp 1119-1124. E-published April 11, 2009.

Garvin KL, Backstein D, Pellegrini VD Jr, Kim RH, Lewallen DG: Dealing with complications. *The Journal of Bone and Joint Surgery (American)*: August 2009: 91(Suppl 5): pp 18-21.

Gortzak Y, Lockwood GA, Mahendra A, Wang Y, Chung PW, Catton CN, O'Sullivan B, Dehesi BM, Wunder JS, Ferguson PC: Prediction of pathologic fracture risk of the femur after combined modality treatment of soft tissue sarcoma of the thigh. *Cancer*: March 2010: 116(6): pp 1553-1559.

Gross AE, Backstein D, Safir O, Aderinto J: Revision TKA: Bone loss management: Structural grafts. In: *Advanced Reconstruction: Knee* (Lieberman JR, Berry DJ, Azar FM, eds.) American Academy of Orthopaedic Surgeons, Rosemont, Illinois, 2010.

Ho L, Stojanovski A, Whetstone H, Wei QX, Mau E, Wunder JS, Alman B: Gli2 and p53 cooperate to regulate IGFBP-3-mediated chondrocyte apoptosis in the progression from benign to malignant cartilage tumors. *Cancer Cell*: August 2009: 16(2): pp 126-136.

Jones KB, Ferguson PC, Dehesi B, Riad S, Griffin A, Bell RS, Wunder JS: Complete femoral nerve resection with soft tissue sarcoma: Functional outcomes. *Annals of Surgical Oncology*: February 2010: 17(2): pp 401-406. E-published October 20, 2009.

Kellett CF, Gross AE, Backstein D, Safir O: Massive acetabular bone loss: The cup-cage solution: *Seminars in Arthroplasty*: March 2010: 21(1): pp 57-61.

Kelly MA, Dalury DF, Kim RH, Backstein D: The new arthritic patient and nonarthroplasty treatment options. *The Journal of Bone and Joint Surgery (American)*: August 2009: 91(Suppl 5): pp 40-42.

Kosashvili Y, Alvi M, Mayne IP, Safir O, Gross A, Backstein D: Immediate recovery room radiographs after primary total knee arthroplasty: Why do we keep doing them? *International Orthopaedics*: E-published ahead of print October 14, 2009.

Kosashvili Y, Backstein D, Gross AE: Salvage of failed acetabular cages by nonbuttressed trabecular metal cups. *Clinical Orthopaedics and Related Research*: February 2010: 468(2): pp 466-471.

Kosashvili Y, Backstein D, Safir O, Lakstein D, Gross AE: Acetabular revision using an anti-protrusion (ilio-ischial) cage and trabecular metal acetabular component for severe acetabular bone loss associated with pelvic discontinuity. *The Journal of Bone and Joint Surgery (British)*: July 2009: 91-B(7): pp 870-876.

Kosashvili Y, Taylor D, Backstein D, Safir O, Liberman B, Lakstein D, Gross A: Total hip arthroplasty in patients with down syndrome. *International Orthopaedics*: E-published ahead of print May 5, 2010.

Lakstein D, Backstein DJ, Safir O, Kosashvili Y, Gross AE: Modified trochanteric slide for complex hip arthroplasty: Clinical outcomes and complication rates. *Journal of Arthroplasty*: April 2010: 25(3): pp 363-368.

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*: May 2010: 468(5): pp 1310-1315.

Lakstein D, Backstein D, Safir O, Kosashvili Y, Gross AE: Trabecular metal cups for acetabular defects with 50% or less host bone contact. *Clinical Orthopaedics and Related Research*: September 2009: 467(9): pp 2318-2324. E-published March 10, 2009.

Lakstein D, Kosashvili Y, Backstein D, Safir O, Gross AE: Trochanteric slide osteotomy on previously osteotomized greater trochanters. *Clinical Orthopaedics and Related Research*: June 2010: 468(6): pp 1630-1634. E-published August 4, 2009.

Lakstein D, Kosashvili Y, Backstein D, Safir O, Lee P, Gross AE: The long modified extended sliding trochanteric osteotomy. *International Orthopaedics*: E-published ahead of print October 16, 2009.

Lakstein D, Zarrabian M, Kosashvili Y, Safir O, Gross A, Backstein D: Revision total knee arthroplasty for component malrotation is highly beneficial: A case control study. *The Journal of Arthroplasty*: E-published ahead of print January 18, 2010.

Nousiainen MT, Maury AC, Alhoulei A, Backstein DJ, Gross AE: Long-term outcome of shelf grafts in total hip arthroplasty for developmental hip dysplasia. *Orthopaedics*: September 2009: 32(9).

Sabri H, Cowan B, Kapralos B, Porte M, Backstein D, Dubrowski A: Serious games for knee replacement surgery procedure education and training. *Procedia Social and Behavioural Sciences*: March 2010: 2(2): pp 3483-3488.

Safir O, Dubrowski A, Hui Y, Backstein D, Carnahan H: Self-directed practice scheduling is equivalent to instructor guided practice when learning a complex surgical skill. *Procedia Social and Behavioral Sciences*: March 2010: 2(2): pp 792-796.

Taylor DW, Ahmed N, Gan L, Gross AE, Kandel RA: Proteoglycan and collagen accumulation by passaged chondrocytes can be enhanced through side-by-side culture with primary chondrocytes. *Tissue Engineering: Part A*: February 2010: 16(2): pp 643-651.

Taylor DW, Ahmed N, Santangelo SR, Amritha De Cross JN, Gross AE, Kandel RA: Cartilage bioengineering: What is the optimal cell source? *IBBME Proceedings*: February 2010: 1(1): pp 13-17.

Taylor DW, Taylor JE, Raizman I, Gross AE: Total revision of the hip using allograft to correct particle disease induced osteolysis: A case study. *McGill Journal of Medicine*: December 2009: 12(1): pp 21-24.

Theodoropoulos JS, Wolin PM, Taylor DW: Arthroscopic release of flexor hallucis longus tendon using modified posteromedial and posterolateral portals in the supine position. *The Foot (Edinburgh)*: December 2009: 19(4): pp 218-221. E-published March 10, 2009.

Zywiell M, Kosashvili Y, Gross A, Safir O, Backstein D: Complete allograft reconstruction after extensor mechanism failure. *Seminars in Arthroplasty*: September 2009: 20(3): pp 194-199.

INVITED VISITS

Backstein D: Canadian Surgical Technologies and Advanced Robotics (CSTAR), Complex Primary and Revision Knee / Total Knee Solutions: Complex Primary & Revision Knee, London, Ontario, Canada, June 2010. (1) Revision TKA for periprosthetic fracture, (2) Total knee component malrotation - Avoiding and implications.

Backstein D: Colombian Society of Orthopaedics and Trauma, Cali, Colombia, April 2010. (1) Dealing with bone loss in revision THA, (2) Dealing with bone loss in Revision TKA, (3) Results of major and minor acetabular allografts of the acetabulum, (4) The effect of activity on TKA, (5) The significance of component malrotation in TKA.

Backstein D: International Congress for Joint Replacement, Park City, Utah, USA, January 2010. (1) Femoral osteotomy: Indications, techniques, outcomes, (2) Bilateral total knee replacement: Who are the best candidates?

Backstein D: Zimmer Orthopaedics: Primary and Revision Total Hip Solutions, Vancouver, British Columbia, Canada, September 2009. Diagnosis and treatment of THA infection.

Bell RS: Canadian College of Health Service Executives, GTA Chapter, Continuing Education Event, Toronto, Ontario, Canada, April 2010. What do physicians want?

Bell RS: Canadian Medical Association, CEO Panel at the 2010 Meeting of the Canadian Society of Physician Executives, Toronto, Ontario, Canada, April 2010. Personality split: Physician, leader and "the administration."

Bell RS: Information Technology Association of Canada, 8th Annual Healthcare Leaders Innovation and Policy Forum, Toronto, Ontario, Canada, April 2010. Wait times and access targets: How are we doing? What lessons have we learned?

Bell RS: Longwoods Publishing, Breakfast with the Chiefs, Toronto, Ontario, Canada, April 2010. Canada's research hospitals: Cures for today and jobs for tomorrow.

Bell RS: Canadian Health Services Research Foundation, Executive Training for Research Application Program, Toronto, Ontario, Canada, February 2010. Becoming a leader for the use of research-based evidence in healthcare organizations.

Bell RS: Canadian Hospitalist/Canadian Society of Hospital Medicine, Conference - Insight: The Hospitalist Model: Evolution and Emerging Issues, Challenges and Best Practices, Toronto, Ontario, Canada, February 2010. Topic - Funding hospitalist programs: What works, what doesn't, new initiatives.

Bell RS: Ontario Hospital Association, Hospitalist Programs Conference, Toronto, Ontario, Canada, January 2010. What lean means to patient care and the organization: The CEO's perspective.

Bell RS: Boehringer Ingelheim, Toronto, Ontario, Canada, December 2009. Understanding the healthcare landscape: Institution/LHIN perspective.

Bell RS: Cancer Quality Council of Ontario, Signature Event and Quality and Innovation Awards, Toronto, Ontario, Canada, December 2009. Innovative models of care.

Bell RS: Ontario Hospital Association, Annual Convention, Toronto, Ontario, Canada, November 2009. Hospital-physician relationships: What does the future hold?

Bell RS: Young Executive Lunch, Toronto, Ontario, Canada, October 2009. Leadership in the healthcare world.

Ferguson PC: Canadian Orthopaedic Association, Edmonton, Alberta, Canada, June 2010. Moderator/ Instructional Course Lecture: Educating trainees in orthopaedic oncology, (2) Rationale and design of a competency-based training module in orthopaedic oncology.

Ferguson PC: Queen's University, Division of Orthopaedic Surgery, Grand Rounds, Kingston, Ontario, Canada, May 2010. Building a better bone - The evolution of endoprosthetic design for primary bone tumours.

Ferguson PC: 12th International Course in Orthopaedics and Traumatology, Quito, Ecuador, April 2010. (1) Chondroblastoma, (2) Giant cell tumour, (3) Osteosarcoma, (4) Principles of the biopsy, (5) Radiographic assessment of bone tumours, (5) Sarcomas - Incidence and etiology, (6) Soft tissue sarcoma - Diagnosis and Management.

Ferguson PC: Canadian Orthopaedic Association, Whistler, British Columbia, Canada, July 2009. (1) Co-moderator of instructional course lecture on surgical management of spine tumours, (2) Co-moderator of scientific session on oncology.

Gross AE: Zimmer Institute, Knee and Hip Symposium, Toronto, Ontario, Canada, May 2010. Invited Faculty, Pre-TKA and primary and revision knee and hip solutions.

Gross AE: London Hip Meeting 2010, London, United Kingdom, April 2010. Guest Speaker: Total hip replacement for dysplasia, (2) Proximal femoral allograft for revision arthroplasty of the hip, (3) The cup-cage reconstruction for revision arthroplasty of the acetabulum with pelvic discontinuity.

Gross AE: Zimmer Institute, Bioskills Training, Parsippany, New Jersey, USA, January 2010. Revision hip arthroplasty solutions.

Gross AE: Zimmer Institute, Toronto, Ontario, Canada, November 2009. Revision scenario #3: Peri-prosthetic fracture, (2) Revision THA round table discussion.

Theodoropoulos JS: Smith and Nephew Canada, Toronto, Ontario, Canada, September 2009. Current advance in arthroscopic shoulder repair: (1) Arthroscopy basics, (2) Advanced rotator cuff repair.

Wunder JS: American Academy of Orthopaedic Surgeons (AAOS), MST'S Speciality Day, New Orleans, USA, March 2010. Lack of evidence for the role of chemotherapy in resectable soft tissue sarcoma.

Wunder JS: Asia Pacific Musculoskeletal Tumor Society (APMSTS), 8th Meeting, Cebu, Philippines, February 2010. (1) Improving morbidity for soft tissue sarcoma: The therapeutic ratio, (2) Unraveling the genetics of cartilage neoplasia leads to novel therapeutic opportunities for the management of chondrosarcoma.

Wunder JS: IGLOOS Orthopaedic Oncology Meeting, Morzine, France, USA, January 2010. Difficult clinical scenarios in orthopaedic oncology.

Wunder JS: Australian Orthopaedic Association, Annual Scientific Meeting, Cairns, North Queensland, Australia, October 2009. (1) Allografts for pelvic reconstruction: What works and what doesn't, (2) Limb salvage surgery – A triumph of technique over reason?, (3) The best reconstruction following type II pelvic resection: A debate, (4) The Toronto experience with limb salvage at the knee.

Wunder JS: Australasian Sarcoma Study Group, Annual Meeting, Brisbane, Australia, October 2009. (1) Improving radiation morbidity for soft tissue sarcoma, (2) Towards sarcoma care in 2020.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

A new approach to the assessment and evaluation of teaching skills. *Sonnadara R, MacRae H, Satterthwaite L, Safir O, Tremblay L: The Network of Excellence in Simulation for Clinical Teaching and Learning.* (\$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 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, networked learning instrument in simulation based training of clinical tasks. *Dubrowski A, Barry M, Carnahan H, Kapralos B, MacDonald-Jenkins J, Rose D, Safir O, Backstein D: The Network of Excellence in Simulation for Clinical Teaching and Learning.* (\$37,128 2009 - 2010)

Hedgehog signaling in cartilage neoplasia and development. *Wunder J, Alman B: 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 J, 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 - 2010)

Intraoperative assessment of combined anteversion in total hip replacement. *Gross AE, Safir O, Lee P, Kosashvili Y, Lakstein D, Backstein D: Canadian Orthopaedic Foundation, Community Investment Fund Research Grant.* (\$3,500 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.* (\$2,400,000 2007 - 2012 / \$400,000 per year)

Sarcoma infrastructure. *Andrulis IL, Swallow CJ, Wunder JS: Canadian Foundation for Innovation.* (\$390,188 2009 - 2010)

HONOURS RECEIVED

Backstein D: Dean A.L. Chute Award, The Silver Shovel, by the University of Toronto Medical Society (winner is selected by the fourth year class and presented to the undergraduate teacher who is deemed to have demonstrated excellence in overall clinical teaching in the undergraduate medical program). April 2010.

Backstein D: Nominee for the W.T. Aikens Award for course/program development and coordination category. April 2010.

Ferguson PC: W.T. Aikens Faculty Teaching Award for Outstanding Teaching in a Small Group Setting. May 2010.

Safir O: Outstanding Poster Presentation Award during Wilson Centre Research Day, University of Toronto. October 2009.

DIVISION OF PLASTIC AND RECONSTRUCTIVE SURGERY

Dr. N.H. McKee Professor

PUBLICATIONS

Kim S, Bleakney R, Boynton E, Ravichandiran K, Rindlisbacher T, McKee N, Agur A: Investigation of the static and dynamic musculotendinous architecture of supraspinatus. *Clinical Anatomy*: January 2010: 23(1): pp 48-55.

Ravichandiran K, Ravichandiran M, Oliver ML, Singh KD, McKee NH, Agur AM: Fiber bundle element method of determining physiological cross-sectional area from three-dimensional computer muscle models created from digitized fibre bundle data. *Computer Methods in Biomechanics and Biomedical Engineering*: June 2010: 3(1).

Ravichandiran K, Ravichandiran M, Oliver M, Singh K, McKee N, Agur A: Determining physiological cross-sectional area of extensor carpi radialis longus and brevis as a whole and by regions using 3D computer muscle models created from digitized fiber bundle data. *Computer Methods and Programs in Biomedicine*: September 2009: 95(3): pp 203-212.

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

Alkhateeb S, Alibhai S, Fleshner N, Finelli A, Jewett M, Zlotta A, Nesbitt M, Lockwood G, Trachtenberg J: Impact of positive surgical margins after radical prostatectomy differs by disease risk group. *Journal of Urology*: January 2010: 183(1): pp 145-150.

Alkhateeb SS, Van Rhijn BW, Finelli A, van der Kwast T, Evans A, Hanna S, Vajpeyi R, Fleshner NE, Jewett MA, Zlotta AR: Nonprimary pT1 nonmuscle invasive bladder cancer treated with bacillus calmette-guerin is associated with higher risk of progression compared to primary T1 tumors. *Journal of Urology*: May 2010: 184(1): pp 81-86.

Bostrom PJ, van Rhijn BWG, Fleshner N, Finelli A, Jewett M, Thoms J, Hanna S, Kuk C, Zlotta AR: Staging and staging errors in bladder cancer. *European Urology Supplements*: February 2010: 9: pp 2-9.

Fleshner NE, Evans A, Chadwick K, Lawrentschuk N, Zlotta A: Clinical significance of the positive surgical margin based upon location, grade, and stage. *Urological Oncology*: March 2010: 28(2): pp 197-204.

Grober ED, Roberts M, Shin EJ, Mahdi M, Bacal V: Intraoperative assessment of technical skills on live patients using economy of hand motion: Establishing learning curves of surgical competence. *American Journal of Surgery*: January 2010: 199(1): pp 81-85.

Grober ED, Shing EJ: Postoperative pulmonary edema secondary to rapid pressure fluid injection into the corporal bodies during surgical correction of penile curvature: A rare consequence of artificial erection. *Canadian Urological Association Journal*: April 2010: 4(2): pp E42-E44.

Honey RJ, Schuler TD, Ghiculete D, Pace KT, Lo K, Jarvi K, Kodama R, Radomski S, Robinette M, Carr L, Denstedt J, Razvi H, Pautler S, Evans H, Wollin T (Canadian Endourology Group): A randomized, double-blind trial to compare shock wave frequencies of 60 and 120 shocks per minute for upper ureteral stones. *Journal of Urology*: October 2009: 182(4): pp 1418-1423. E-published August 15, 2009.

Jarvi K, Lo K, Fischer A, Grantmyre J, Zini A, Chow V, Mak V: CUA guideline: The workup of azoospermic males. *Canadian Urological Association Journal*: June 2010: 4(3): pp 163-167.

Jhaveri K, Mazrani W, Fillobos R, Chawla T, Toi A, Jarvi K: The role of cross-sectional imaging in male infertility: A pictorial review. *Canadian Association of Radiologists Journal*: June 2010: 61(3): pp 144-145. E-published February 26, 2010.

Kassouf W, Kamat AM, Zlotta A, Bochner BH, Moore R, So A, Izawa J, Rendon RA, Lacombe L, Aprikian AG: Canadian guidelines for treatment of non-muscle invasive bladder cancer: A focus on intravesical therapy. *Canadian Urological Association Journal*: June 2010: 4(3): pp 168-173.

Kulkarni GS, Hakenberg OW, Gschwend JE, Thalmann G, Kassouf W, Kamat A, Zlotta A: An updated critical analysis of the treatment strategy for the newly diagnosed high-grade T1 (previously T1G3) bladder cancer. *European Urology*: January 2010: 57(1): pp 60-70. E-published September 1, 2009.

Kuzmin A, Jarvi K, Lo K, Spencer L, Chow GY, Macleod G, Wang Q, Varmuza S: Identification of potentially damaging amino acid substitutions leading to human male infertility. *Biology of Reproduction*: August 2009: 81(2): pp 319-326. E-published April 16, 2009.

Lawrentschuk N, Daljeet N, Ma C, Hersey K, Zlotta A, Fleshner N: Prostate-specific antigen test result interpretation when combined with risk factors for recommendation of biopsy: A survey of urologist's practice patterns. *International Urology and Nephrology*: E-published ahead of print June 12, 2010.

Lawrentschuk N, Haider MA, Daljeet N, Evans A, Toi A, Finelli A, Trachtenberg J, Zlotta A, Fleshner N: Prostatic evasive anterior tumours: The role of magnetic resonance imaging. *British Journal of Urology International*: August 2009: 105(9): pp 1231-1236.

Mohamed O, Freundlich RE, Dakik HK, Grober ED, Najari B, Lipshultz LI, Khera M: The quantitative ADAM questionnaire: A new tool in quantifying the severity of hypogonadism. *International Journal of Impotence Research*: January 2010: 22(1): pp 20-24. E-published August 6, 2009.

Moskovtsev SI, Jarvi K, Mullen BM, Cadesky KI, Hannam T, Lo KC: Frequency and severity of sperm DNA damage in patients with different etiology of male factor infertility. *Reproductive BioMedicine Online*: June 2010: 20(6): pp 759-763.

Moskovtsev SI, Jarvi K, Mullen BM, Cadesky KI, 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*: March 2010: 93(4): pp 1142-1146.

Ordon M, Boerner S, Zlotta AR, Jewett MA, Fleshner N: The fate of an unsatisfactory urine cytology test among patients with urothelial carcinoma. *British Journal of Urology International*: July 2009: 104(11): pp 1641-1645.

Patry G, Jarvi K, Grober E, Lo KC: Use of the aromatase inhibitor letrozole to treat male infertility. *Fertility and Sterility*: August 2009: 92(2): pp 829.e1-2. E-published June 12, 2009.

Roberts M, Jarvi K: Steps in the investigation and management of low semen volume in the infertile man. *Canadian Urological Association Journal (CUAJ)*: December 2009: 3(6): pp 479-485.

Toren PJ, Roberts M, Lecker I, Grober ED, Jarvi K, Lo KC: Small incidentally discovered testicular masses in infertile men--is active surveillance the new standard of care? *Journal of Urology*: April 2010: 183(4): pp 1373-1377. E-published February 19, 2010.

van Rhijn BW, Burger M, Lotan Y, Solsona E, Stief CG, Sylvester RJ, Witjes JA, Zlotta AR: Recurrence and progression of disease in non-muscle-invasive bladder cancer: From epidemiology to treatment strategy. *European Urology*: September 2009: 56(3): pp 430-442.

van Rhijn BW, van Leenders GJ, Ooms BC, Kirkels WJ, Zlotta AR, Boevé ER, Jöbsis AC, van der Kwast TH: The pathologist's bean grade is constant and individualizes the prognostic value of bladder cancer grading. *European Urology*: E-published ahead of print September 11, 2009.

Zlotta AR: Should urologists always perform a bladder cuff resection during nephroureterectomy, and which method should they use? *European Urology*: E-published ahead of print February 8, 2010.

Zlotta AR, Cohen SM, Dinney C, Droller M, van der Kwast TH, van Rhijn BW, Bochner B, Ameil G, Jewett MA: BCAN Think Tank session 1: Overview of risks for and causes of bladder cancer. *Urologic Oncology*: May-June 2010: 28(3): pp 329-333.

Zlotta AR, Fleshner NE, Jewett MA: The management of BCG failure in non-muscle-invasive bladder cancer: An update. *Canadian Urological Association Journal*: December 2009: 3(6Suppl4): pp S199-S205.

INVITED VISITS

Grober ED: Pfizer Pharma, Primary Care Physicians of the Greater Toronto Area, Toronto, Ontario, Canada, December 2009. Men's health and sexual function.

Grober ED: Paladin, Specialists Consultative Meeting, Toronto, Ontario, Canada, November 2009. (1) Testosterone replacement therapy, (2) Prostate safety.

Jarvi K: The Canadian Partnership Against Cancer and C17, Assisted Human Reproduction Canada, Toronto, Ontario, Canada, March 2010. Oncofertility in Canada: Building connections for the preservation of fertility for young cancer patients.

Jarvi K: Canadian Fertility and Andrology Society, Montreal, Quebec, Canada, November 2009. Lifestyle factors and male infertility.

Lo KC: Society for Study of Male Reproduction, American Urological Society, San Francisco, California, USA, June 2010. Stem cells - can we grow sperm?

Lo KC: Canadian Fertility and Andrology Society, Montreal, Quebec, Canada, November 2009. In vitro sperm maturation.

Zlotta AR: Asociacion Española De Urologia, Rising Stars in Urology, Granada, Spain, May 2010. Hormonal therapy for prostate cancer and beyond: Why, how to and when to intervene?

Zlotta AR: European Association of Urology/Confederacion Americana de Urologia (CAU), Joint Session (Sponsored by Pierre Fabre Medicament), EAU-Management of the Small Renal Mass, Barcelona, Spain, April 2010. (A) How to Write a Manuscript and Get It Published in European Urology, ESU Course 20: (1) Clinical research original article: How to write the results and discussion sections, (2) Review article: The critical interpretation of the summarised evidence: Why is the author's "touch of class" essential to write the perfect manuscript, (B) Prostate Cancer - Screening, Diagnosis and Staging, ESU Course 8, (C) Inflammation: A common target for BPH and PCA therapies: Inflammation and BPH: A clear link?

Zlotta AR: The 6th Engadin Prostate Cancer Winter Symposium, Zuoz, Switzerland, March 2010. Chairman: (1) PCA3 in diagnosis of PCA, (2) New prognostic and diagnostic markers of prostate cancer, (3) Clonal evolution of hormone-refractory prostate cancer, (4) Imaging techniques in diagnosis of prostate cancer, (4) Use of PSA in the year 2010.

Zlotta AR: Canadian Broadcasting Corporation, CBC News, Toronto, Ontario, Canada, March 2010. Prostate cancer.

Zlotta AR: Controversies in Urology, 3rd World Congress, Athens, Greece, February 2010. Chairperson: Locally-advanced bladder cancer: Case discussion, (2) Capsule: Can we adapt a solution to all patients with locally advanced disease?, (3) Looking at outcomes: Surgery for bladder and prostate. Open versus Laparoscopy versus Robotic, (4) Management of advanced prostate cancer: Challenges and controversies - Asymptomatic patients and senior adults.

Zlotta AR: IV Jornadas Nacionales de Urooncologia, Puerto La Cruz, Venezuela, November 2009. (1) Small renal masses, biopsy or surgery upfront?, (2) Lymph node dissection in testis cancer: American or European Approach, (3) Management of localized prostate cancer: Surveillance, HIFU, surgery.

Zlotta AR: McMaster University, Hamilton, Ontario, Canada, October 2009. Surgery for locally advanced prostate cancer - Management of high non muscle invasive bladder cancer.

Zlotta AR: University of Laval, Montreal, Quebec, Canada, October 2009. The management of non muscle invasive bladder cancer.

Zlotta AR: Uro-Oncology Meeting, Halifax, Canada, October 2009. Locally Advanced Prostate Cancer - High Risk Bladder Cancer: Case-based discussion.

Zlotta AR: Cases on bladder cancer and comparison of PLCO and ERSPC, Montreal, Quebec, Canada, September 2009. Tailoring urologic treatments to the spectrum of disease. Urologic disease: Screening, early diagnosis and treatment.

Zlotta AR: University of Montreal, Bromont, Quebec, Canada, August 2009. Prostate Cancer: Hormonal therapy: When and in which patients.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear 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, Fleshner N, Jarvi K, Lockwood G, Ozcelik H, van der Kwast T: Ontario Institute for Cancer Research (OICR). (\$485,563 2009 - 2012)*

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 de 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)*

A randomized double-blind study of combination vitamin E, selenium and lycopene versus placebo in men undergoing radical prostatectomy for prostate cancer. *Fleshner N, Zlotta A, Finelli A, Jewett M, Venkateswaran V, Klotz L, Evans A: Prostate Cancer Research Foundation of Canada (PCRFC). (\$59,996 2007 - 2010)*

Fertility preservation in adolescent males with cancer: Assessment of current practice and knowledge among health care professionals. *Gupta AA, Bartels U, Bouffett E, Lee-Chong A, Hendershot E, Mills D, Jarvi K, Lo C, Lorenzo A, Nathan P, Spencer L, Stuart M, Urbach S, Zlotnick-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 for novel diagnostic, prognostic and risk susceptibility algorithms for prostate cancer. *Diamandis E, Zlotta A, Bapat B, Ozcelik H, Briollais L, Fleshner N, Van der Kwast T: Canadian Institutes of Health Research.* (\$599,727 2009 - 2012)

Genetic, epigenetic and proteomic analysis of the kallikrein family in search for novel diagnostic, prognostic and risk susceptibility algorithms for prostate cancer. *Diamandis EP, Zlotta A, Bapat B, Briollais L, Fleshner N, Ozcelik H, Van der Kwast T, Jarvi K: Canadian Institutes of Health Research.* (\$100,000 2009 - 2010)

Intra-operative assessment of technical skill using economy of hand motion: Establishing learning curves of surgical competence. *Grober ED, Roberts M: The Physicians' Services Incorporated (PSI) Foundation.* (\$70,500 2009 - 2011)

Intra-operative assessment of technical skill using economy of hand motion: Establishing learning curves of surgical competence. *Grober ED, Roberts M: The Royal College of Physicians and Surgeons of Canada (RCPSC).* (\$59,900 2009 - 2011)

Investigation of meiotic defects in infertile men undergoing assisted reproductive technologies. *Ma S, Brown CJ, Lo KC: Canadian Institutes of Health Research.* (\$342,369 2009 - 2012)

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 - 2009)

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 - 2014)

Use of proteomics to identify new prostate cancer biomarkers from semen. *Jarvi K, Lo K, Grober E, Diamandis E, Fleshner N, Finelli A, Zlotta A: Canadian Urological Association (CUA)/Canadian Uro-Oncology Group (CUOG)/Abbott.* (\$15,000 2008 - 2010)

Use of seminal fluid protein pattern as biomarkers for diseases in the male reproductive tract: Prediction of spermatogenesis in men with azoospermia. *Jarvi K, Diamandis E, Lo K: The Physicians' Services Incorporated.* (\$145,500 2007 - 2010)

Validation of real-time, intra-operative, surgical competence (RISC) assessments linked to patient outcomes. *Grober ED, Jewett MAS, Lorenzo A: Medical Council of Canada.* (\$37,500 2009 - 2010)

Validation of a real-time, intra-operative, surgical competence (RISC) assessments. *Grober E, Jewett MAS: Canadian Urological Association Scholarship Foundation.* (\$40,000 2009 - 2010)

Validation of real-time, intra-operative, surgical competence (RISC) assessments linked to patient outcomes. *Grober ED, Jewett MAS, Lorenzo A: The Physicians' Services Incorporated (PSI) Foundation.* (\$91,500 2009 - 2011)

Validation of real-time, intra-operative, surgical competence (RISC) assessments linked to patient outcomes. *Grober ED, Jewett MAS, Lorenzo A: Association for Surgical Education - CESERT.* (\$25,000 2009 - 2011.)

HONOURS RECEIVED

Grober ED: Canadian Urological Association Scholarship. July 2009.

Zlotta AR: Associated with the Top 3 Best Poster, Society of Urologic Oncology (SUO) Meeting, Bethesda, Maryland, USA. December 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. Y. Shargall	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 officially became a Level I Thoracic Centre with the addition of Dr. Maurice Blitz, who became our third thoracic surgeon.

A strategic decision was made by the hospital along with Cancer Care Ontario, that St. Joseph's would comply with hepatobiliary standards and expand our existing Hepatobiliary Program. An international search was carried out for a new hepatobiliary surgeon and we hired Dr. Shiva Jayaraman to join Dr. Richard Hart in the hepatobiliary service. It is anticipated that this will allow us to receive funding for our incremental volumes in hepatobiliary surgery.

The University of Toronto Collaborative Bariatric Program began in the spring of 2009. Growth of the program throughout this year has been somewhat slow because of a shortage of patients from the Bariatric Assessment Centres. The program has been growing steadily and the integration of these bariatric procedures with the current MIS Program has been a good one. We have ramped up our volumes such that we are confident that we will meet our year-II funding targets.

The teaching program within the Department of Surgery continues to increase in both resident and student numbers. We are now receiving clinical clerks in the Surgical Program as part of their core rotations in surgery. This number is designated to increase year by year.

We have retrofitted two more operating rooms to become advanced MIS suites, which now gives us a total of 4 MIS suites out of ten operating rooms.

APPOINTMENTS AND PROMOTIONS

Dr. Chris Compeau was appointed Head, Division of General & Thoracic Surgery at St. Joseph's, effective June 1, 2010. He replaced Dr. Tom Harmantas who finished his term.



Dr. Maurice Blitz joined the Division of General & Thoracic Surgery at St. Joseph's in July of 2009 as our third thoracic surgeon.

AWARDS

Dr. Paul Sullivan won the Ernie Spratt Award for resident teaching in the Division of General and Thoracic 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. Leila Kasrai won the Award for Resident Teaching in the Division of Plastic Surgery, St. Joseph's Health Centre.

Dr. Ashis Chawla won the Award for Resident Teaching in the Division of Urology, St. Joseph's Health Centre.

CONCLUSION

Members of the Department of Surgery continue to work toward 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.

Looking to the future, we plan to continue to provide excellence in teaching and clinical surgery.

DIVISION OF GENERAL SURGERY

Dr. C. Compeau	Assistant Professor (Division Head from June 1, 2010)
Dr. T.A. Harmantas	Assistant Professor (Division Head to May 31, 2010)
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	Assistant Professor
Dr. G. Vincent	Assistant Professor (Division Head)
Dr. M. Wood	Lecturer

PUBLICATIONS

ElMaraghy A, Devereaux M: Variability in the surgical management of carpal tunnel syndrome: Implications for the effective use of healthcare resources. *Healthcare Quarterly*: November 2009: 12(4): pp 85-91.

ElMaraghy A, Devereaux M: Bone tunnel fixation for repair of tibialis anterior tendon rupture. *Foot and Ankle Surgery*: June 2010: 16(2): pp e47-e50. E-published November 27, 2009.

ElMaraghy A, Devereaux M, Ravichandran K, Agur A: Subacromial morphometric assessment of the clavicle hook plate. *Injury*: June 2010: 41(6): pp 613-619. E-published January 29, 2010.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

ElMaraghy A: Ontario Medical Association, Rehabilitation Medicine Section, 4th Annual Day in Occupational Medicine, Toronto, Ontario, Canada, April 2010. Why and how steroid injections are part of my orthopaedic practice?

Vincent G: Arbeitsgemeinschaft für Osteosynthesefragen (AO) North America, Toronto, Ontario, Canada, August 2009. Faculty member teaching principles course for operating room personnel: Management of hip fractures using sliding hip screw.

Vincent G: The Canadian Society of Orthopaedic Technologists (CSOT), Annual Conference: Orthopaedic Sense and Solutions, Toronto, Ontario, Canada, April 2010. What's new in fracture management.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

The efficacy of kinesiology taping versus NSAIDs in reducing shoulder pain during exercise. *ElMaraghy A, Devereaux M, Quan-Velanoski K: Nucap Medical Inc.* (\$26,400 2009 - 2010)

HONOURS RECEIVED

El Maraghy AW: Best Clinical Teaching Award, Orthopaedic Surgery; awarded by the Department of Surgery, St. Joseph's Health Centre. 2009.



■ DIVISION OF PLASTIC AND RECONSTRUCTIVE 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 TO OTHER HOSPITALS/UNIVERSITIES

Kasrai L: Royal Australasian College of Surgeons, Annual Scientific Congress, Perth, Australia, May 2010. Guest Speaker/Keynote Lecture: Microtia reconstruction.

■ DIVISION OF THORACIC SURGERY

Dr. M. Blitz	Assistant Professor
Dr. C. Compeau	Assistant Professor
Dr. Y. Shargall	Assistant Professor (Division Head)

PUBLICATIONS

Anraku M, Miyata R, Compeau C, Shargall Y: Video-assisted mediastinoscopy compared with conventional mediastinoscopy: Are we doing better? *The Annals of Thoracic Surgery*: May 2010: 89(5): pp 1577-1581.

Anraku M, Shargall Y: Surgical conditions of the diaphragm: Anatomy and physiology *Thoracic Surgery Clinics*: November 2009: 19(4): pp 419-429.

de Perrot M, Shargall Y: Images in clinical medicine. Vanishing mediastinal mass. *The New England Journal of Medicine*: December 2009: 361(27): pp 2653.

Compeau C, Tyrwhitt J, Shargall Y, Rotstein L: A retrospective review of general surgery training outcomes at the University of Toronto. *Canadian Journal of Surgery*: October 2009: 52(5): pp E131-E136.

White JA, Fine NM, Shargall Y: Images in cardiovascular medicine. Pectus excavatum with compression of the inferior vena cava: A rare cause of recurrent syncope. *Circulation*: October 2009: 120(17): pp 1722-1724.

■ DIVISION OF UROLOGY

Dr. A. Chawla	Lecturer
Dr. U. Jain	Lecturer
Dr. A. Marcuzzi	Lecturer (Division Head)
Dr. A. McLean	Lecturer

ST. MICHAEL'S HOSPITAL

Ori Rotstein

Surgeon-in-Chief



HEADS OF DIVISION

Dr. L. Errett	Cardiovascular and Thoracic Surgery
Dr. A. Nathens	General Surgery
Dr. L. Macdonald	Neurosurgery
Dr. E. Schemitsch	Orthopaedic Surgery
Dr. J. Mahoney	Plastic Surgery
Dr. J. Honey	Urology
Dr. O. Rotstein	Vascular Surgery (Acting)

The Department has experienced another year of success emanating from across our surgical programs. Reflecting upon 2009/2010, we embraced several notable accomplishments and changes throughout the academic year. In the clinical domain, the expansion of programs based on multidisciplinary approaches to patient care were pre-eminent. The Percutaneous Aortic Valve Program thrived under the leadership of Dr. Mark Peterson, as he coordinated the initiation of this program in collaboration with Cardiology, and Medical Imaging. Drs. Julian Spears and Loch Macdonald have continued to work in close collaboration with our radiologists, Dr. Marotta and Montenara, to expand the Neurovascular Intervention Program. The Division of Urology has continued its close collaborative efforts with Nephrology to expand the kidney transplant program, including live donor transplantation. These are a few examples of how the overlay of specialties enhances the care of our surgical patients.

In July, we welcomed Dr. Jeremy Hall to the Division of Orthopaedic Surgery. Dr. Hall is a Surgeon-Educator with a clinical interest in complex orthopaedic trauma reconstruction and research interests in simulation. We also gave Dr. Bill Tucker a wonderful retirement party as he retired from clinical practice to focus on his commitment to the Canadian Medical Protective Association.

At the St. Michael's Hospital Annual Physicians' Education Achievement Day, our Faculty have been recognized for their excellence in teaching by receiving a number of awards. Dr. Robert Stewart received the William Horsey Postgraduate Teaching award; Dr. John Bohnen was awarded the Donald J. Currie Teaching award for Undergraduate Teaching. The Jameel Ali Award in Continuing Education in Surgery was awarded to Dr. Emil Schemitsch for his sustained contribution to the success of the Annual Principles and Practice of Clinical Research Course. At the University level, Dr. Robert Stewart won the Bruce Tovee Award for Undergraduate Education, while Bob Mustard won the same award for postgraduate education. The Orthopaedic

Chair's Teaching Award for contributions to orthopedic education, as voted by residents, went to Dr. Daniel Whelan. Dr. Subodh Verma was awarded the Silver Shovel Chute award for his recognition as a superb educator selected by the fourth year class to the undergraduate teacher who is deemed to have demonstrated excellence in overall clinical teaching in the undergraduate medical program. Dr. Verma has also won the George Armstrong-Peters Prize and was also recognized as a "Top 40 under 40." On a national level, the Canadian Orthopaedic Association Presidential Award for Excellence went to Dr. James Waddell. On an international level, Dr. Ken Pace was honored for his contribution to the American Urological Association Leadership Program; Dr. Jameel Ali won the Diaspora Award for Excellence in Medicine from the Consulate General of Trinidad and Tobago.

Faculty members promoted to the level of Full Professor were Drs. William Tucker and John Honey, while Drs. Najma Ahmed and Ken Pace were promoted to Associate Professor.

Several faculty members have successfully achieved grants this year as described in the following pages. It is unremarkable to me that the level of commitment to improving patient care through the furthering of research is energetic. To briefly name a few of the faculty that were successful: Dr. Andras Kapus (CIHR, Operating Grant), Dr. Avery Nathens (CIHR Team Grant for Trauma System Development in Canada), Dr. Michael Cusimano (CIHR Team Grant for Traumatic Brain Injury and Violence), Dr. Wolfgang Keubler (German Research Foundation, Ontario Thoracic Society and the Heart & Stroke Foundation), Dr. Ori Rotstein (CIHR Operating Grant), Dr. John Marshall (CIHR, Therapeutic approaches for H1N1 complications in the ICU, PSI and Public Health Agency of Canada). Dr. Katalin Szaszi received an Early Researcher Award (Operating Grant) from the Ontario Ministry of Research & Innovation for her work on chronic kidney disease; Drs. Ahn and Ginsberg for their contribution to work on the



Spinal Cord Injury Network; Drs. Mahoney and Musgrave from the Ministry of Health and Long Term Care: Innovation Fund for their work on the development of a web-based tool for patient education.

We eagerly look forward to the occupancy of the Li-Ka Shing Knowledge Institute in November 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.

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

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RESEARCH AND INVESTIGATIONS

Investigators' Names Appear 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 and Stroke Foundation of Ontario.* (\$50,000 2008 - 2010)

A prospective study to compare the functionality of HDL-cholesterol to limit endothelial dysfunction in South Asian versus Caucasian patients with atherosclerosis. *Verma S, Teoh H: Heart and Stroke Foundation of Ontario.* (\$50,000 2008 - 2010)

ACE2: Novel regulator of endothelial function and atherosclerosis. *Verma S, Stewart DJ, Peninger J, Oudit G: Heart and Stroke Foundation.* (\$315,723 2007 - 2010)

ACE2 and atherosclerosis. *Levitt K, Verma S: The Physicians' Services Incorporated Foundation.* (\$20,000 2008 - 2009.)

Comparison of the inflammatory response to cardiopulmonary bypass between South Asians and Caucasians. *Trop S, Verma S: The Physicians' Services Incorporated Foundation.* (\$20,000 2009 - 2011)

DJ-1 in signalling in human cardiac ischemia reperfusion. *Yanagawa B, Verma S: The Physicians' Services Incorporated Foundation.* (\$20,000 2010 - 2012)

Elucidating the in vivo role of adiponectin in inflammation: A biochemical and pharmacological approach. *Verma S: Heart and Stroke Foundation.* (\$197,962 2009 - 2012)

Evaluation of BRCA1 as a novel therapeutic strategy for endothelial dysfunction and atherosclerosis. *Verma S: Canadian Institutes of Health Research.* (\$149,998 2009 - 2010)

Li Ka Shing collaborative program. *Verma S, Slutsky A, Mamdani M: Li Ka Shing Collaborative program.* (\$3,000,000 2009 - 2012)

Neuregulin and endothelial function. *Tang GHL, Verma S: The Physicians' Services Incorporated Foundation.* (\$20,000 2010 - 2012)

Neuregulin-1 as a novel treatment for endothelial dysfunction and atherosclerosis. *Verma S: Heart and Stroke Foundation.* (\$160,000 2009 - 2011)

Plasma renin activity and cardiovascular outcomes in the HOPE study. *Verma S, Gupta M, Lonn E, Salim Y: Novartis Pharmaceuticals Canada Inc.* (\$230,345 2008 - 2010)

Primary cArE AuDIt of Global risk Management (PARADIGM study). *Gupta M, Verma S: AstraZeneca Canada.* (\$4,200,000 2008 - 2010)

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 BRCA1 in adverse cardiac remodeling. *Verma S, Parker TG: Canadian Institutes of Health Research.* (\$330,367 2009 - 2012)

Role of the tumor suppressor gene BRCA1 in adverse cardiac remodeling: In vivo integrative studies in cardiac specific BRCA1 knockout mice. *Szmitko PE, Verma S: The Physicians' Services Incorporated Foundation.* (\$20,000 2008 - 2010)

Traineeship in atherosclerosis program. *Verma S: Canadian Rx&D companies.* (\$3,000,000 2006 - 2010)

HONOURS RECEIVED

Verma S: Canada's Top 40 Under 40. June 2010.

Verma S: George Armstrong-Peters Prize, University of Toronto, Department of Surgery. May 2010.

Verma S: Silver Shovel Chute Award, University of Toronto. April 2010.

Verma S: India Abroad Power List. September 2009.

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. S. Kitto	Assistant Professor
Dr. J. Koo	Associate Professor
Dr. W.M. 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

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Zhou B, Xu W, Nathens AB, Cushieri J, Gibran N, Klein M, O'Keefe G, et al: Analysis of factorial time-course microarrays with application to a clinical study of burn injury. *Proceedings of the National Academy of Science*: June 2010: 107(22): pp 9923-9928.

INVITED VISITS

Ahmed N: Trauma Association of Canada, Annual Scientific Meeting, Halifax, Nova Scotia, Canada, May 2010. Blunt cerebrovascular injury: Diagnosis and treatment.

Ali J: McMaster University, Hamilton, Ontario, Canada, April 2010. Taught: Advanced trauma life support course.

Ali J: American College of Surgeons, Las Vegas, Nevada, USA, March 2010. Committee on Trauma.

Ali J: Association for Academic Surgery (AAS) and the Society of University Surgeons (SUS), 5th Academic Surgical Congress, San Antonio, Texas, USA, February 2010. Comparing the standardized live trauma patient model and the mechanical simulator models in the ATLS initial assessment station.

Ali J: Queen Elizabeth Hospital, Emergency Department, Bridgetown, Barbados, December 2009. Gave 2 prehospital trauma life support provider courses and 1 prehospital trauma life support instructor course.

Ali J: American College of Surgeons, International Advance Trauma Life Support (ATLS) Meeting, Chicago, Illinois, USA, October 2009. Chair of International ATLS Educators.

Ali J: Argentina Association of Surgery, Annual Congress, Buenos Aires, Argentina, October 2009. Keynote Speaker: (1) The new acute care surgeon, (2) ATLS in the world, damage control resuscitation in trauma, (3) Emergency thoracotomy in trauma.

Ali J: Fujairah Hospital, United Arab Emirates, October 2009. Gave 2 ATLS provider courses and 1 instructor course for physicians from Lebanon and Nigeria.



Ali J: Newfoundland Trauma Program (organized by Dr. Boone, Medical Director), St. John's, Newfoundland, Canada, October 2009. Taught: Advanced trauma life support course.

Ali J: University of Manitoba, Trauma Program, Winnipeg, Manitoba, Canada August 2009. Taught: Advanced trauma life support course.

Baxter N: American College of Surgeons, Colon and Rectal Cancer Postgraduate Course, Chicago, Illinois, USA, October 2009. Optimal lymph node harvest, is there a number?

Baxter N: American College of Surgeons, Panel Session, Washington, District of Columbia, USA, October 2009. What is the evidence for antibiotic prophylaxis in mesh inguinal hernia repair: Let's do journal club.

Baxter N: Imedex, Perspectives in Colorectal Cancer, Chicago, Illinois, USA, August 2009. Advances in colorectal surgery.

Bohnen JMA: Hospital Nacional de Niños, San Jose, Costa Rica, December 2009. Surgical site infection surveillance and prevention.

Bohnen JMA: Canadian Surgical Chairs Group, Toronto, Ontario, Canada, November 2009. The Royal College - processes and plans for general surgery.

Bohnen JMA: Sixth National Seminar on Infection Control, Quality Improvement in Infection Control, Ambassador City, Jomtien, Chonburi, Thailand, July 2009. (1) Educating physicians on infection control, (2) Error in surgery: The system or the surgeon?, (3) How to convince hospital administration to invest in improving quality, (4) Surgical site infection: Epidemiology and prevention.

Burnstein MJ: Ontario Association of General Surgeons, Annual Meeting, Toronto, Ontario, Canada, November 2009. Anorectal disease: Problems, pitfalls, and polemics.

Burnstein MJ: American College of Surgeons, 95th Annual Clinical Congress, Chicago, Illinois, USA, October 2009. Proctocolectomy for rectal cancer: Optimal resectional techniques.

Burnstein MJ: McMaster University, General Surgery Research Day, Hamilton, Ontario, Canada, October 2009. Visiting Professor/Keynote Speaker: (1) Rectal cancer management: Has the R-0 resection been perfected?, (2) Guest adjudicator.

Burnstein MJ: Canadian Surgery Forum, Victoria, British Columbia, Canada, September 2009. Perfecting the perineal dissection.

George RL: Toronto Breast Cancer, Breast Care Symposium: Issues in Primary Care, Toronto, Ontario, Canada, June 2010. If it's not cancer, what is it?

Grantcharov T: University of Manitoba, East-West Alliance Annual Meeting, Winnipeg, Canada, June 2010. Competency-based curriculum in general surgery.

Grantcharov T: Canadian Surgical Technologies & Advanced Robotics (CSTAR), SAGES Endoscopy and Laparoscopy Surgery Workshop, London, Ontario, Canada, May 2010. (1) Laparoscopic anti-reflux surgery, (2) Laparoscopic bariatric surgery.

Grantcharov T: Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) and Canadian Association of General Surgeons (CAGS), 12th World Congress of Endoscopic Surgery, Washington, District of Columbia, USA, April 2010. Integrating comprehensive simulation-based curricula into clinical training.

Grantcharov T: The Association of Professors of Obstetrics and Gynaecology of Canada (APOG), 38th Annual Meeting, Toronto, Ontario, Canada, December 2009. Curriculum design in minimally invasive surgery.

Grantcharov T: The Minimal Access Therapy Training Unit (MATTU), Oesophago-Gastric Cancer Symposium, London, United Kingdom, December 2009. (1) Fast-track concept in gastric cancer surgery, (2) Morbidity and mortality after laparoscopic gastric surgery for cancer.

Grantcharov T: Malmo University Hospital, Medical Grand Rounds, Malmo, Sweden, October 2009. Implementation of a proficiency-based training curriculum in minimally invasive surgery (MIS).

Kapus A: University of Arizona, The Epithelial-Mesenchymal Transition (EMT) International Association Inc. (TEMTIA), 4th International Conference on EMT, Tucson, Arizona, USA, September 2009. Fate-determining steps in epithelial-mesenchymal transition.

Kuebler WM: University of Pennsylvania Medical Center, Philadelphia, Pennsylvania, USA, June 2010. Interplay between nitric oxide and TRP channels in lung vascular barrier regulation.

Kuebler WM: University of Tennessee Health Science Center, Memphis, Tennessee, USA, May 2010. Role of nitric oxide in lung edema.

Kuebler WM: Japanese Circulation Society, 74th Annual Scientific Meeting, Kyoto, Japan, March 2010. (1) Laboratories run B - The lung vascular research lab at the Li Ka Shing Knowledge Institute, (2) Molecular mechanism of development of pulmonary edema.

Kuebler WM: University of Duesseldorf, Research Seminar: Special Research Focus (SFB) 612, Duesseldorf, Germany, February 2010. Hypoxic pulmonary vasoconstriction requirement for intercellular communication.

Kuebler WM: University of Heidelberg, International Symposium - 35 Years Cardiology in Heidelberg, Heidelberg, Germany, October 2009. Lung and heart interaction.

Lawless B: Ontario Hospital Association, Toronto, Ontario, Canada, November 2009. Provincial Moderate Surge Capacity Planning: What hospital teams need to know.

Lawless B: Canadian Critical Care Forum, Annual Scientific Meeting, Toronto, Ontario, Canada, October 2009. (1) Session Moderator of Surge Capacity Planning: Real time data collection, coordination and management.

Marshall JC: Canadian Critical Care Trials Group, Resident Research Education Day, Georgetown Royalty, Prince Edward Island, Canada, June 2010. History of the Canadian Critical Care Trials Group.

Marshall JC: Canadian Institutes of Health Research-Institute of Circulatory and Respiratory Health (CIHR-ICRH), Young Investigator Symposium, Vancouver, British Columbia, Canada, May 2010. Keynote Address: InFACT: A global critical care response to severe H1N1 infection.

Marshall JC: The Critical Care Society of Southern Africa, 7th International Conference on Extracorporeal Blood Purification in Intensive Care Medicine, Moscow, Russia, May 2010. (1) Endotoxemia and sepsis: Pathophysiology and emerging therapies, (2) New perspectives on sepsis and the multiple organ dysfunction syndrome.

Marshall JC: International Pan Arab Critical Care Medicine Society (IPACCMS) and Emirates Intensive Care Society (EICS), in cooperation with Dubai Health Authority, Emirates Critical Care Conference, Dubai, United Arab Emirates, April 2010. (1) Sepsis trials: How can we move forward?, (2) Resuscitative thoracotomy, (3) Management of severe acute pancreatitis, (4) The role of endotoxin in sepsis.

Marshall JC: Erasme Hospital, Department of Intensive Care Emergency Medicine/Free University of Brussels, in association with the Belgian Society of Intensive Care and Emergency Medicine (SIZ), 30th International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 2010. (1) Critical illness is an iatrogenic disorder, (2) The InFACT initiative. H1N1 as a catalyst for collaborative research, (3) The role of leukocytes in sepsis, (4) Pre-B cell colony enhancing Factor/Nampt/Visfatin, (5) Pelvic fractures.

Marshall JC: German Society for Anesthesiology and Intensive Care Medicine, 8th World Congress on Trauma, Shock, Inflammation and Sepsis, Munich, Germany, March 2010. (1) Abdominal sepsis and organ failure, (2) Diagnostic assessment of endotoxin in diverse clinical states, (3) Albumin resuscitation in septic shock: Not yet, (4) Endotoxemia: A target for therapeutic intervention?

Marshall JC: International Symposium of Intensive Care and Emergency Medicine, Roundtable Conference, Brussels, Belgium, March 2010. Thinking outside the box.

Marshall JC: Society of Critical Care Medicine, 39th Annual Congress, Miami, Florida, USA, January 2010. (1) We should use biomarkers to guide sepsis care, (2) Should sepsis bundles be mandated?

Marshall JC: University of British Columbia, iCAPTURE Rounds, Vancouver, British Columbia, Canada, January 2010. Neutrophil survival in sepsis: The caspase-8 survivalosome.

Marshall JC: International Pan Arab Critical Care Medicine Society (IPACCMS), 4th Pan-Arab Critical Care Medicine Conference/3rd Mediterranean Conference of Critical Care and Emergency Medicine (MCCCEM), Sharm El Sheikh, Egypt, November 2009. (1) Severe H1N1 influenza in Canada, (2) Multiorgan failure in sepsis, (3) Management of severe pancreatitis, (4) PIRO: A critical illness stratification model.

Marshall JC: International Sepsis Forum Sepsis 2009, Amsterdam, Holland, November 2009. (1) InFACT and severe H1N1 influenza, (2) The PROWESS-Shock trial.

Marshall JC: Critical Care Canada Forum, Residents' Day, Toronto, Ontario, Canada, October 2009. (1) 30 years of sepsis trials, (2) InFACT: Collaborative, investigator-led research in critical care, (3) Coming online by 2039.

Marshall JC: European Society of Intensive Care Medicine, 22nd Annual Congress, Vienna, Austria, October 2009. From the Canadian Critical Care Trials Group (CCCTG) to International Forum of Acute Care Trialists (InFACT).

Marshall JC: Tuscany Critical Care Group, 12th Annual Meeting, Florence, Italy, October 2009. Endotoxemia: Diagnostic, prognostic and therapeutic role.

Marshall JC: World Health Organization (WHO), Consultation on H1N1 influenza, Washington, District of Columbia, USA, October 2009. International Forum of Acute Care Trialists (InFACT) H1N1 collaboration.

Marshall JC: Deutsche Sepsis-Gesellschaft, 4th International Congress Sepsis and Multiorgan Dysfunction Weimar, Germany, September 2009. (1) Theragnostics - a logical advance for sepsis clinical trials, (2) How I manage the patient with sepsis, (3) Use of the SIRS criteria contributed to the failure of sepsis trials: Pro.

Marshall JC: Wakefield Roundtable on Complexity and Variability, Wakefield, Quebec, Canada, August 2009. Complexity and the host response to injury and infection.



Marshall JC: World Federation of Societies of Intensive and Critical Care Medicine (WFSICCM), 10th Congress, Florence, Italy, August 2009. (1) Developing the guidelines: Using the GRADE system, (2) Sepsis: Old compounds in a new context, (3) ICU-acquired infection: Morbidity, mortality, and costs, (4) Predisposition to sepsis.

Nathens AB: AtlantiCare Regional Medical Center, 12th Annual Trauma Symposium, Atlantic City, New Jersey, USA, May 2010. Trauma Quality Improvement Program (TQIP).

Nathens AB: Merck Sharp and Dohme Corporation, Barcelona, Spain, May 2010. Optimizing antimicrobial treatment of surgical infections and prevention, and surgical management of infected pancreatic necrosis.

Nathens AB: London Health Sciences Centre, "Talk Trauma" Nursing Conference, London, Ontario, Canada, April 2010. Trauma system development in Ontario - getting the right person, to the right place at the right time.

Nathens AB: American Association for the Surgery of Trauma, Pittsburgh, Pennsylvania, USA, October 2009. Update on Trauma Quality Improvement Program (TQIP).

Nathens AB: Center for Excellence in Critical Care, Update in Critical Care 2009, Minneapolis, Minnesota, USA, September 2009. Trauma care regionalization: The journey from practice to policy.

Rotstein OD: Canadian Critical Care Trials Group, Resident Research Education Day, Charlottetown, Prince Edward Island, Canada, June 2010. Planning your academic career.

Rotstein OD: National Champions' Consultative Meeting, Toronto, Ontario, June 2010. SIAI Guidelines applied to practice in the Canadian surgical setting (Session Speaker/Moderator/co-Chair).

Rotstein OD: German Society for Anesthesiology and Intensive Care Medicine (DGAI), 8th World Congress on Trauma, Shock, Inflammation and Sepsis in conjunction with the 23rd SIS-European Congress on Surgical Infections and the 2nd Interdisciplinary Summit on Inflammation, Munich, Germany, March 2010. (1) Damage control in patients with severe abdominal sepsis, (2) Role of sphingolipids in regulation of LPS signaling.

Rotstein OD: King Khalid University Hospital, College of Medicine, 5th Annual General Surgery Conference Riyadh, Saudi Arabia, February 2010. (1) Management of intra-abdominal infection: Focus on antimicrobial use, (2) Management of acute pancreatitis.

Rotstein OD: International Society for Pathophysiology/Chinese Association of Pathophysiology, International Symposium for Pathophysiology Teaching, Shanghai, People's Republic of China, November 2009. Physiological bases of human diseases - A graduate course at the University of Toronto.

Rotstein OD: Peterborough General Hospital, Peterborough, Ontario, Canada, November 2009. Management of intra-abdominal infections.

Rotstein OD: Second Military Medical University, Shanghai, People's Republic of China, November 2009. Regulation of toll like receptor 4 during shock.

Rotstein OD: Merck Frosst, Sudbury, Ontario, Canada, October 2009. Management of intra-abdominal infections.

Szaszi K: University College Dublin, Department of Pharmacology, Dublin, Ireland, November 2009. Regulation of Rho during inflammation in the tubular epithelium: Filling Gaps and GEFs.

Szaszi K: Canadian Institutes of Health Research Matrix Dynamics Group, Fibrosis Minisymposium, Oakville, Ontario, Canada, October 2009. Regulation of Rho during inflammation in the tubular epithelium: New players and mechanisms.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

A long-term, randomized, comparative, survival, porcine model study evaluating effectiveness of adhesiolysis (adhesion re-formation): Transgastric NOTES versus laparoscopy. *Baker J, Grantcharov T, Dubcenco E: Natural Orifice Surgery Consortium for Assessment and Research (NOSCAR).* (\$42,000 2010 - 2011)

A prospective study comparing the inflammatory response to cardiopulmonary bypass in South Asians and Caucasians (CIRC Study): Design and protocol. *Trop S, Marshall J, Rotstein O, Slutsky A, Bourdeau A, Verma S: Physicians' Services Incorporated.* (\$20,000 2009 - 2010)

Access to trauma care in Canada: A national comparison. *Hill A, Nathens AB, Fowler RA: Canadian Institutes of Health Research, Frederick Banting and Charles Best Canada Graduate Scholarships - Doctoral Award.* (\$57,000 2008 - 2011)

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)

Assessing care of patients with major traumatic injuries. *Kirkpatrick AW, Nathens AB, Stelfox HT, Straus SE, Bashaw SM, Baillie FG, Flemmons WW, Ghallli 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.* (\$78,011 2008 - 2009)

Assessing the quality of colonoscopy: Validation of quality indicators. *Tinmouth J, Baxter NN, Rabeneck L, Paszat LF, Sutradhar R: Canadian Cancer Society Research Institute.* (\$165,863 2009 - 2012)

Assessing the uptake and effectiveness of laparoscopic surgery for colorectal cancer in Ontario. *Simunovic M, Baxter NN, Cadeddu M, Charles C, Guyatt G, Straus S, Sutradhar R, Thabane L: Canadian Institutes of Health Research.* (\$434,295 2008 - 2011)

Beta1-adrenergic antagonists impair murine and human resistance artery function. *Hare G, Cusimano M, Houston P, Voigtlaender Bolz J, Macdonald L, Baker A, Mazer DC, Kavanagh B, El-Beheiry M, Bolz SS, Mathews S, Rotstein OD: The Physicians' Services Incorporated Foundation.* (\$159,978 2010 - 2011)

Biofluid mechanics and cellular physiology in the alveolus and its capillaries. *Kuebler WM, Pries A, Affeld K, Kertzscher U: Deutsche Forschungsgemeinschaft (German Research Foundation).* (\$376,490 2009 - 2011)

Canada Research Chair in Trauma Systems Development. *Nathens AB: Canadian Institutes of Health Research.* (\$500,000 2006 - 2011)

Canadian Institutes of Health Research (CIHR) emerging team: Colorectal cancer screening. *Rabeneck L, Dobrow M, Paszat LF, Ritvo TA, Stukel RJ, Baxter NN: Canadian Institutes of Health Research.* (\$1,735,300 2008 - 2013)

Characterization of a novel, caspase-8 dependent survival pathway in inflammatory neutrophils. *Marshall JC: Canadian Institutes of Health Research.* (\$501,135 2009 - 2014)

Characterization of the cardiac phenotype and experimental therapeutic approaches in animal models. *Tschoep C, Kuebler WM, Riad A: Deutsche Forschungsgemeinschaft (German Research Foundation).* (\$360,000 2008 - 2012)

Clinical Research Consortium to improve resuscitation outcomes. *Morrison LJ, Slutsky AS, Dorian P, Rotstein OD: National Institutes of Health Research.* (\$2,454,201 2004 - 2010)

Comparing three different non-technical skills assessment tools in the postoperative setting. *Grantcharov, T, Sharma B: The Physicians' Services Incorporated Foundation.* (\$19,200 2010 - 2011)

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)

Crisis in the general surgery work force: Identifying barriers to career satisfaction and opportunities to manage attrition among residents and practicing general surgeons. *Ahmed N, Pandya A, Nathens A: Canadian Association of General Surgeons, Research Award.* (\$10,000 2008 - 2009)

Crosstalk between the EGF and TNF receptors in kidney tubular cells. *Szaszi K: Kidney Foundation of Canada, Biomedical Research Grant.* (\$100,000 2009 - 2011)

Determining factors associated with missed cancers after colonoscopy. *Baxter NN, Rabeneck L, Paszat L, Sutradhar R, Gallinger S, Hsieh E: Ontario Institute for Cancer Research.* (\$78,013 2009 - 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, Zakrison TL: Canadian Institutes of Health Research.* (\$16,419 2009)

Development of interfacility transfer criteria for major trauma. *Nathens AB: St. Michael's Hospital, Medical Services Association.* (\$33,750 2010 - 2011)

Embolism: Methodology, Epidemiology and Treatment In Critical care Study (PE-METRICS). *Cook DJ, Marshall JC: Heart and Stroke Foundation of Canada.* (\$41,653 2010 - 2011)

Epithelial-myofibroblast transition: An unexpected role for Smad3. *Kapus A: The Kidney Foundation of Canada.* (\$47,500 2009 - 2010)

Establishing stakeholder research priorities for measuring the quality of trauma care. *Stelfox HT, Nathens AB, Gruen S, Straus S: Canadian Institutes of Health Research.* (\$19,984 2010 - 2011)

Evaluation of health care policy intervention to change the organization and delivery of lung cancer surgery in Ontario. *Urbach D, Dobrow M, Baxter NN, Gagliardi A, Darling G, Keshavjee S, Irish J, McLeod R: Cancer Care Ontario/ Ontario Institute of Cancer Research (CCO/OICR), Health Services Research Network Grant.* (\$532,000 2009 - 2012)

Exploring mentorship as a strategy to build capacity for knowledge translation research and practice. *Gagliardi A, Bell M, Levinson W, Leslie K, Morrison L, Rotstein OD, Silver I, Straus S, Tourangeau AE: Canadian Institutes of Health Research.* (\$83,765 2009 - 2010)

From data to daily practice: An integrative approach to improving trauma centre access in rural regions. *Haas B, Nathens AB, Gagliardi A: Canadian Institutes of Health Research, Fellowship.* (\$100,000 2010 - 2012)



From National Surgical Quality Improvement Program (NSQIP) to Trauma Quality Improvement Program (TQIP) - Trauma Quality Improvement Project. *Shahid S, Nathens A: Agency for Healthcare Research and Quality. (\$887,489 2009 - 2012)*

Functional genomics of lung vascular remodeling in pulmonary venous hypertension. *Kuebler WM: European Union. (\$362,000 2006 - 2009)*

HL-10-006 Toronto Regional Coordinating Center, clinical research consortium to improve resuscitation outcomes. *Morrison L, Baker A, Brooks S, Cheskes S, Craig A, Dainty K, Dorian P, Feldman M, Foeree R, Hutchinson J, Ferguson N, Laupacis A, MacDonald R, Mamdani M, Moran P, Nathens A, Needham D, Redelmeier D, Rizoli S, Rotstein OD, Rubinfeld G, Scales D, Schull M, Schwartz B, Slutsky A, Spence J, Stuss D, Verbeek R, Wax R: National Institutes of Health/Heart and Stroke Foundation/Canadian Institutes of Health Research. (\$1,009,800 2010 - 2016)*

HL-10-006 Toronto Regional Coordinating Center, clinical research consortium to improve resuscitation outcomes. *Morrison LJ, Nathens AB, Dorian P, Cheskes S, Slutsky A: National Institutes of Health/Department of Health and Human Resources/Heart and Stroke Foundation/Canadian Institutes of Health Research. (\$1,110,780 2010 - 2016)*

Improving quality through process change: A scoping review of process improvement tools in cancer surgery. *Wei A, Baxter NN, Gagliardi A, Urbach D, Kennedy E, Bathe O, McLeod R, Taylor B: Canadian Institutes of Health Research. (\$49,815 2010 - 2011)*

Individual and neighbourhood level risk factors for recurrent intentional injury among youth. *Snider C, Nathens AB: The Physicians' Services Incorporated Foundation. (\$9,000 2008 - 2010)*

Influenza-and-H1N1 related critical illness - demand and capacity in the health care system: The Canadian Intensive Care Unit (ICU) Flu Study. *Fowler R, Juvet P, Cook DJ, Kumar A, McGeer AJ, Marshall JC: Canadian Institutes of Health Research. (\$597,681 2009 - 2010)*

Is GEF-H1 a central coordinator of proliferation and migration in tumor cells? *Szaszi K: Grant Miller, Cancer Research Grant (University of Toronto). (\$20,000 2009)*

Knowledge synthesis of implementation strategies for critically ill patients (the Kritical Study). *Simuff T, Garland A, Muscedere J, Rubinfeld G, Lawless B, Dodek P, Heyland D, Cook D, Stewart T: Canadian Institutes of Health Research. (\$96,672 2009 - 2011)*

Knowledge translation of surgical innovations: Exploring development, implementation and evaluation of robotic and simulation training programs. *Gagliardi A, Strauss S, Grantcharov T: Canadian Institutes of Health Research, Operating Grant. (\$60,000 2010 - 2011)*

Macrophage priming as a mechanism for organ injury after shock/resuscitation. *Cantos Mae SSP, Rotstein OD: The Physician's Services Incorporated Foundation. (\$10,897 2008 - 2009)*

Mechanism of TNF-1-induced tubular injury: Rho-dependent disruption of the intercellular junctions. *Szaszi K: Canadian Institutes of Health Research. (\$324,000 2009 - 2011)*

Mechanisms of macrophage priming for LPS signaling by oxidative stress. *Rotstein OD: Canadian Institutes of Health Research. (\$545,810 2005 - 2010)*

Myocardin-related transcription factor: A central regulator of epithelial-myofibroblast transition. *Kapus A: Canadian Institutes of Health Research. (\$617,500 2008 - 2013)*

New concept of hypoxic pulmonary vasoconstriction: Conducted response via connexin 40. *Kuebler WM, Bolz SS, Olschewski A, Isakson B: Canadian Institutes of Health Research. (\$380,316 2009 - 2012)*

New or missed colorectal cancer after colonoscopy. *Rabeneck L, Paszat L, Baxter NN, Hsieh E: American College of Gastroenterology. (\$147,400 2007 - 2011)*

Planning meeting for the PRECISE phase III resuscitation trial. *McIntyre L, Marshall JC: Canadian Institutes of Health Research, Program - Meetings, Planning and Dissemination Grant: International. (\$12,500 2010)*

PROphylaxis of thromboEmbolism in Critical Care Trial (PROTECT). *Cook DJ, Marshall JC: Canadian Institutes of Health Research. (\$4,800,000 2005 - 2009)*

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)*

Quantitative analysis of dead space ventilation in animal models of acute lung injury. *Kuebler WM, Puderbach M, Kauczor HU, Meinzer HP, Thiele F, Guttman J: Deutsche Forschungsgemeinschaft (German Research Foundation). (\$152,890 2009 - 2011)*

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 (\$120,000 2007 - 2010)*

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.* (\$180,000 2007 - 2010)

Regulation of vascular permeability by sphingolipids. *Kuebler WM, Uhlig S: Deutsche Forschungsgemeinschaft (German Research Foundation).* (\$144,000 2007 - 2010)

Resuscitation Outcomes Consortium (ROC), Regional Clinical Center-Toronto Regional. *Morrison LJ, Nathens AB, et al: National Institutes of Health/National Heart, Lung, and Blood Institute.* (\$108,000 2010)

Should all young women (<35) with breast cancer be treated with mastectomy? *Quan ML, Baxter NN, Paszat L, Hanna W, Rakovitch E, Saad RS, Sawka C, Warner E, Wright F: Canadian Breast Cancer Foundation (CBCF).* (\$287,575 2008 - 2010)

Structures and processes of care in colorectal cancer surgery (SPoCCS) study. *Urbach D, Baxter NN, Simunovic M, Gagliardi A: Canadian Institutes of Health Research.* (\$1,047,225 2008 - 2013)

Survival Using Glucose Algorithm Regulation (SUGAR). *Chittock DR, Marshall JC: Canadian Institutes of Health Research.* (\$40,000 2006 - 2009)

Team in training for trauma: Developing an interdisciplinary, simulation-based human factors training curriculum for general surgery residents. *Ahmed N, Hicks M: University of Toronto, Education Development Fund.* (\$6,825 2010 - 2011)

The Collaborative H1N1 Adjuvant Therapy (CHAT) Trial: Rosuvastatin versus placebo as adjuvant therapy for severe H1N1 infection. *Marshall JC, Burns KEA, Smith OM, Chant C, Rubenfeld G, Fowler RA: Canadian Institutes of Health Research, Program: Therapeutic approaches for H1N1 complications in the intensive care unit.* (\$200,000 2009 - 2010)

The Collaborative H1N1 Adjuvant Therapy (CHAT) Trial: Rosuvastatin versus placebo as adjuvant therapy for severe H1N1 infection. *Marshall JC, Burns KEA, Smith OM, Chant C, Rubenfeld G, Fowler RA: Public Health Agency of Canada.* (\$87,511 2009 - 2010)

The Collaborative H1N1 Adjuvant Therapy (CHAT) Trial: Rosuvastatin versus placebo as adjuvant therapy for severe H1N1 infection. *Marshall J, Burns K, Smith O, Clarence C, Rubenfeld G, Fowler R, Adhikari N, Cuthbertson B: The Physicians' Services Incorporated Foundation.* (\$85,000 2009 - 2010)

The Consent Study: A multicentre, prospective observational study of research recruitment practices in Canadian adult ICUs: A Canadian Critical Care Trials Group Project. *Burns KEA, Marshall JC: Canadian Institutes of Health Research, Program: Catalyst Grant - Ethics.* (\$67,234 2008 - 2010)

The effect of screening colonoscopy use by primary care physicians on colorectal cancer incidence and mortality. *Urbach D, Baxter NN, Moineddin R, Sutradhar R, Del Giudice L: Canadian Institutes of Health Research.* (\$84,598 2009 - 2010)

The RECOVER Program: Phase I Towards RECOVER - Outcomes and needs assessment in survivors of prolonged mechanical ventilation and their caregivers. *Herridge M, Cameron JI, Marshall JC: Canadian Institutes of Health Research.* (\$704,367 2009 - 2013)

The RECOVER Program: Phase I Towards RECOVER: Long-term outcomes and needs assessment in ICU survivors of prolonged mechanical ventilation and their caregivers. *Herridge MS, Marshall JC: Canadian Institutes of Health Research, Operating Grant: Priority Announcement (IHSPR).* (\$100,000 2009)

The young adult survivors of cancer study. *Baxter NN, Rabeneck L, Paszat L, Sutradhar R, Del Giudice L, Urbach D: Canadian Institutes of Health Research.* (\$351,000 2008 - 2011)

Therapeutic effect of sildenafil citrate on pulmonary hemodynamics and endothelial dysfunction in congestive heart failure. *Kuebler WM: Pfizer Inc. (USA).* (\$104,976 2008 - 2010)

Therapeutic potential of oral LF1166910 in 2 rodent models of pulmonary hypertension. *Kuebler WM: Solvey Pharmaceuticals.* (\$120,000 2009 - 2010)

Towards equity in access to trauma care: A mixed-methods approach to spatial analyses of existing trauma transfer networks. *Nathens AB, Gagliardi A, Gomez D, Haas B, Rubenfeld G, Gozdyra P: Canadian Institutes of Health Research.* (\$200,000 2010 - 2012)

Transition to community living and the impact of telehomecare on individuals with moderate to severe acquired brain injury and their family caregivers. *Canzian S, Nathens AB, Duff D, Mitchell L, Singh M, Topolovec-Branic J, Tymianski D, Yetman L: Ontario Neurotrauma Foundation.* (\$209,408 2009 - 2010)

Trauma system design: An evaluation of structure and process. *Nathens AB, Morrison LJ, Rubenfeld G: Canadian Institutes of Health Research, Operating Grant.* (\$139,287 2008 - 2009)

Trauma system development in Canada: Overcoming the challenges of geography through an evaluation of structure and process. *Nathens AB, Cusimano M, Gagliardi A, Gomez D, Haas B, Hameed M, Lawless B, Morrison L, Peters P, Pong R, Rubenfeld G, Schurmann N, Snider C, Tallon J: Canadian Institutes of Health Research.* (\$1,994,649 2010 - 2015)



Trauma system development in Canada: Overcoming the challenges of geography through an evaluation of structures and process. *Nathens A, Rubinfeld G, Morrison LM, Gagliardi A, Pong R, Schuurman N, Cusimano M, Hameed M, Lawless B, Peters P, Snider C, Tallon J, Schwartz B, Pandya A: Canadian Institutes of Health Research. (\$1,900,000 2010 - 2015)*

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)*

Vasodilatory effect of RO5024118 in the pulmonary circulation. *Kuebler WM: Hoffmann-LaRoche Inc. (\$80,000 2009 - 2010)*

Venous thromboembolism after endovascular cooling in patients with brain injury (VTECool study). *Charbonney E, Gray S, Honorato C, Nathens AB: St. Michael's Hospital, Trauma Neurosurgery Program. (\$2,000 2009 - 2010)*

HONOURS RECEIVED

Ahmed N: Nominee for The Royal College of Physicians and Surgeons' 2009 Best Program Director Award (to be awarded at the International Conference in Residency Education on September 2009.) July 2009.

Ali J: Diaspora Award for Excellence in Medicine, presented by the Consul General Office of Trinidad and Tobago, Toronto. September 2009.

Bohnen JMA: Donald J. Currie Undergraduate Teaching Award, St. Michael's Hospital. June 2010.

Burnstein MJ: Colorectal Cancer Champion, Cancer Care Ontario, Toronto Central LHIN. April 2010.

Mustard RA: A.W. Bruce Tovee Award for Undergraduate Teaching for 2002/2003. May 2010.

Rotstein OD: Certificate of Appreciation from the Canadian Association of General Surgery for service to the Society as Chair, Sponsorship Committee. August 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

Alahmadi H, Vachrajani S, Cusimano MD: The natural history of brain contusion: An analysis of radiological and clinical progression. *Journal of Neurosurgery*: May 2010; 112(5): pp 1139-1145.

Cinnamon J, Rinner C, Cusimano MD, Marshall S, Bekele T, Hernandez T, Glazier RH, Chipman ML: Evaluating web-based static, animated, and interactive maps for injury prevention. *Geospatial Health*: November 2009; 4(1): pp 3-16.

Citow JS, Macdonald RL, Refai D: Comprehensive Neurosurgery Board Review, 2nd edition: Thieme Medical Publishers, New York, 2009.

Cusimano MD, Kwok J: Skiers, snowboarders and safety helmets. *Journal of the American Medical Association*: February 2010; 303(7): pp 661-662.

Cusimano MD, Kwok J: The effectiveness of helmet wear in skiers and snowboarders: A systematic review. *British Journal of Sports Medicine*: E-published ahead of print May 29, 2010.

Cusimano MD, Marshall S, Rinner C, Jiang D, Chipman M: Patterns of urban violent injury: A spatio-temporal analysis. *PLoS ONE*: January 2010; 5(1): pp e8669.

Ferguson SD, Rosen DS, Bardo D, Macdonald RL: Arterial diameters on catheter and computed tomographic angiography. *World Neurosurgery*: March 2010; 72(3): pp 165-173.

Fischer C, Keeler A, Fornazzari L, Ringer L, Hansen T, Schweizer TA: A rare variant of Capgrass syndrome in Alzheimer's disease. *Canadian Journal of Neurological Sciences*: July 2009; 36(4): pp 509-511.

Fischer C, Verhoeff P, Churchill K, Schweizer TA: Functional outcome in delusional Alzheimer disease patients: A systematic review. *Dementia and Geriatric Cognitive Disorders*: October 2009; 27(2): pp 105-110.

Fischer C, Yeung E, Hansen T, Gibbons S, Fornazzari L, Ringer L, Schweizer TA: Impact of socioeconomic status on the prevalence of dementia in an inner city memory disorders clinic. *International Psychogeriatrics*: December 2009; 21(6): pp 1096-1004. E-published August 28, 2009.

Jang YG, Ilodigwe D, Macdonald RL: Meta-analysis of tirilazad mesylate in patients with aneurysmal subarachnoid hemorrhage. *Neurocritical Care*: November 2009; 10(1): pp 141-147. E-published September 23, 2008.

Jeon EH, Sabri M, Tariq A, Shang X, Chen G, Macdonald RL: Neurologic and neurobehavioral assessment of experimental subarachnoid hemorrhage. *BMC Neuroscience*: August 2009; 10: pp 103.

Kawashima A, Macdonald RL: Nonhuman primate blood-clot placement cerebral vasospasm model. In: *Anima Models of Acute Neurological Injuries* (Chen J, Xu ZC, Xu XM, Zhang JH, eds.) Humana Press, Totowa, New Jersey, 2009.

Kreiter KT, Mayer SA, Howard G, Knappertz V, Ilodigwe D, Sloan MA, Macdonald RL: Sample size estimates for clinical trials of vasospasm in subarachnoid hemorrhage. *Stroke*: July 2009; 40(7): pp 2362-2367. E-published May 21, 2009.

Lipsman N, Tolentino J, Macdonald RL: Effect of country or continent of treatment on outcome after aneurysmal subarachnoid hemorrhage. Clinical article. *Journal of Neurosurgery*: July 2009; 111(1): pp 67-74.

Mohammed S, Cusimano MD, Scheithauer BW, Rotonto F, Horvath E, Kovacs K: O-methylguanine-DNA methyltransferase immunoexpression in a double pituitary adenoma: Case report. *Neurosurgery*: February 2010; 66(2): pp E421-E422.

Mohammed S, Kovacs K, Munoz D, Cusimano MD: A short illustrated review of sellar region schwannomas. *Acta Neurochirurgica (Wien)*: May 2010; 152(5): pp 885-891. E-published February 4, 2010.

Mohammed S, Kovacs K, Mason W, Smyth H, Cusimano MD: Use of temozolomide in aggressive pituitary tumors. *Neurosurgery*: September 2009; 64(4): pp E773-E774.



Morrongiello BA, Cusimano MD, Barton BK, Orr E, Chipman M, Tyberg J, Kulkarni A, Khanlou N, Masi R, Bekele T: Development of the BACKIE questionnaire: A measure of children's behaviours, attitudes, cognitions, knowledge, and injury experiences. *Accident Analysis & Prevention*: January 2010; 42(1): pp 75-83.

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.

Pluta RM, Hansen-Schwartz J, Dreier J, Vajkoczy P, Macdonald RL, Nishizawa S, Kasuya H, Wellman G, Keller E, Zauner A, Dorsch N, Clark J, Ono S, Kiris T, Leroux P, Zhang JH: Cerebral vasospasm following subarachnoid hemorrhage: Time for a new world of thought. *Neurological Research*: March 2009; 31(2): pp 151-158.

Rinner C, Cinnamon J, Cusimano MD, Marshall S, Bekele T, Hernandez T, Glazier RH, Chipman ML: Online map design for public health decision makers. *Cartographica*: September 2009; 44(4): pp 291-302.

Sabri M, Jeon H, Ai J, Tariq A, Shang X, Chen G, Macdonald RL: Anterior circulation mouse model of subarachnoid hemorrhage. *Brain Research*: October 2009; 1295: pp 179-185. E-published August 15, 2009.

Sacher A, Wollmann R, Kalokhe U, Munoz D, Guiot MC, Macdonald RL: Long-term survival of a patient with glioblastoma. *Canadian Journal of Neurological Science*: March 2010; 37(2): pp 289-292.

Salehi F, Agur A, Scheithauer BW, Kovacs K, Lloyd RV, Cusimano MD: Ki-67 in pituitary neoplasms: A review - Part 1. *Neurosurgery*: September 2009; 63(3): pp 429-437.

Salehi F, Kovacs K, Scheithauer BW, Cantelmi D, Horvath E, Lloyd RV, Cusimano MD: Immuno-histochemical expression of pituitary tumor transforming gene (PTTG) in pituitary adenomas: A correlative study of tumor subtypes (IJS-09-0292). *International Journal of Surgical Pathology*: February 2010; 18(1): pp 5-13.

Tariq A, Chen G, Sabri M, Jeon H, Shang X, Macdonald RL: Loss of long-term potentiation in the hippocampus after experimental subarachnoid hemorrhage in rats. *Neuroscience*: January 2010; 165(2): pp 418-426.

Topolovec-Vranic J, Michalak A, Andrews M, Bhalerao S, Cullen N, Cusimano MD, Masanic C, Ouchterlony D: An internet-based intervention for depression in mild and moderate traumatic brain injury patients. *Brain Injury*: May 2010; 24(5): pp 762-772.

INVITED VISITS

Macdonald RL: Canadian Neurological Sciences Federation, 45th Annual Congress, Quebec City, Quebec, Canada, June 2010. (1) Chairs' select plenary presentations, (2) Endothelin antagonists for subarachnoid hemorrhage: CONSCIOUS 2 and 3 randomized trials, (3) General neurosurgery and neuroradiology, (4) Neurovascular surgery course, (5) Postcourse quiz: How would you treat this neurovascular patient?, (6) Neurosurgery resident review course on neurovascular disease: Subarachnoid hemorrhage, (7) Timing of recanalization may permit decreased surveillance after 1 year.

Macdonald RL: Actelion International, Clazosentan Publication Committee Meeting, Philadelphia, Pennsylvania, USA, May 2010. CONSCIOUS-2 and CONSCIOUS-3.

Macdonald RL: American Association of Neurological Surgeons, 78th Annual Meeting-Breakfast Seminar/Open Session, Philadelphia, Pennsylvania, USA, May 2010. (1) Cerebral vasospasm: Medical management, (2) Does method of aneurysm treatment affect clot clearance after subarachnoid hemorrhage, (3) Incidence and predictors of seizures in subarachnoid hemorrhage patients not receiving antiepileptic drugs, (4) Simvastatin prevents uncoupling of endothelial nitric oxide synthase after subarachnoid hemorrhage in mice.

Macdonald RL: Neurosurgical Society of America, 63rd Annual Meeting, Pebble Beach, California, USA, April 2010. Flow diversion: surgery, endovascular or molecular. Where will we be in 10 years?

Macdonald RL: Focused Ultrasound Surgery Foundation, Focused Ultrasound Workshop, Chantilly, Virginia, USA, March 2010. Brain Workshop II.

Macdonald RL: Loma Linda University School of Medicine, Department of Neurosurgery, 3rd International Conference on Intracerebral Hemorrhage, Palm Springs, California, USA, March 2010. A murine model of human chronic subdural hematoma.

Macdonald RL: American Heart Association/American Stroke Association, 35th International Stroke Conference, San Antonio, Texas, USA, February 2010. Impact of systemic inflammatory response syndrome on vasospasm, cerebral infarction and outcome after subarachnoid hemorrhage.

Macdonald RL: Edge Scientific Advisory Board Meeting, San Antonio, Texas, USA, February 2010. (1) Intracerebral/subdural hemorrhage, (2) Site-specific, sustained release drug delivery for vasospasm.

Macdonald RL: Review Course in Neurosurgery, Chicago, Illinois, USA, January 2010. Pathophysiology of subarachnoid hemorrhage and vasospasm.

Macdonald RL: Biotech 2009, Philadelphia, Pennsylvania, USA, November 2009. Traumatic brain injury: From the battlefield to the clinic.

Macdonald RL: Yale University, Vascular Biology and Therapy Program, New Haven, Connecticut, USA, November 2009. Pathogenesis of cerebral vasospasm.

Macdonald RL: The Southwest Hospital of the Third Military Medical University and The Changhai Hospital of the Second Military Medical University, organized by the International Cerebral Vasospasm Committee, 10th International Conference on Cerebral Vasospasm, Chongqing, China, October 2009. (1) Effects of clazosentan on microthrombosis following experimental subarachnoid hemorrhage, (2) Loss of long-term potentiation in the hippocampus after experimental subarachnoid hemorrhage in rats, (3) Uncoupling of endothelial nitric oxide synthase (eNOS) after subarachnoid hemorrhage.

Macdonald RL: Actelion, Investigators Meeting, Chicago, Illinois, USA, September 2009. CONSCIOUS-1 results and status of CONSCIOUS-2, CONSCIOUS-3.

Macdonald RL: Neurocritical Care Society, 1st Neurocritical Care Research Conference, Houston, Texas, September 2009. Attendee.

Macdonald RL: Macquarie University, Australian School of Advanced Medicine, Macquarie Neurosurgical Research and Clinical Symposium, Sydney, Australia, August 2009. (1) Molecular basis of vasospasm and its treatment, (2) Surgical management of intracranial aneurysms.

Macdonald RL: World Federation of Neurosurgical Societies, XIV World Congress of Neurological Surgery – Breakfast Seminar, Boston, Massachusetts, August 2009. Management of vasospasm following subarachnoid hemorrhage.

Macdonald RL: Actelion, CONSCIOUS 2 and 3 Steering Committee, Paris, France, July 2009. Sliding dichotomy and other statistical approaches to reducing sample sizes in trials of subarachnoid hemorrhage.

Macdonald RL: International Society for Cerebral Blood Flow & Metabolism (ISCBFM), The XXIVth International Symposium on Cerebral Blood Flow and Metabolism & The IXth International Conference on Quantification of Brain Function with PET, Functional Consequences of Injury-Induced Phenotypic Transformation in Cerebral Arteries Symposium, Chicago, Illinois, USA, July 2009. Contribution of the remodeling response to cerebral vasospasm.

Macdonald RL: University of Milan, Department of Anesthesia and Critical Care, Milan, Italy, July 2009. Managing intracranial aneurysms: Lessons from the CONSCIOUS-1 study.

Perrin RG: The Neurosurgical Society of America, Carmel, California, USA, April 2010. Presidential Address: Noblesse oblige.

Perrin RG: World Federation of Neurosurgical Societies (WFNS) and the Scientific Committee of the WFNS 2009 World Congress, Young Neurosurgeons Symposium: Progress and Diversity in Neurosurgery - The WFNS in the 21st Century, Boston, Massachusetts, USA, September 2009. Session 314: Controversies in lumbar disc surgery.

Spears JS: Canadian Neurological Sciences, 45th Annual Congress, Quebec City, Quebec, Canada, June 2010. (1) AVM lecture, (2) Carotid stenosis: Indications and management post-CREST.

Spears JS: Neurosurgical Society of America, Pebble Beach, California, USA, April 2010. Flow diversion: Surgery, endovascular or molecular. Where will we be in ten years?

Spears JS: The British Neurovascular Group, Liverpool, England, September 2009. The role of the neurosurgeon in an endovascular world.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

Analysis of CONSCIOUS-1 database. *Macdonald RL: Actelion Pharmaceuticals.* (\$65,000 2009 - 2010)

B1-adrenergic antagonists impair murine and human resistance artery function. *Hare G, Cusimano MD, Houston P, Voigtlaende J: The Physicians' Services Incorporated.* (\$159,800 2009 - 2011)

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, Wentworth 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: The 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)

CIHR team grant in traumatic brain injury and violence. *Cusimano M, Schweizer TA, Mann R, Tator C, et al: Canadian Institutes of Health Research, Team Grant.* (\$1,733,131 2010 - 2015)

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* (Undergraduate Student, University of Western Ontario): *University of Toronto, Institute of Medical Science, Summer Undergraduate Student Research Award*. (\$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 rehabilitation in a population of adults with mild cognitive impairment. *Schweitzer TA, Winocur G, Fischer C, Levine B, Rourke SB, Stuss DT*: *Canadian Institutes of Health Research*. (\$49,146 2008 - 2009)

Determination of the age of ruptured and unruptured intracranial aneurysms. *Macdonald RK, Etminan N*: *The Physicians' Services Incorporated Foundation*. (\$143,000 2009 - 2010)

Development of a prediction model for intracranial aneurysm recanalization risk after endovascular treatment. *Spears J*: *Heart and Stroke Foundation*. (\$64,000 2008 - 2009)

Development of a stroke model in non-human primates. *Macdonald RL*: *Canadian Stroke Network*. (\$334,000 2008 - 2010)

Effect of bilateral scalp nerve blocks on post-operative pain and discharge times in patients undergoing supratentorial craniotomy and general anesthesia. *Rigamonti A, Cusimano MD*: *The Physicians' Services Incorporated Foundation*. (\$120,000 2009 - 2011)

ENACT trial: Evaluating neuroprotection in aneurysm coiling therapy. *Macdonald RL*: *St. Michael's Hospital*. (\$3,900 2008 - 2010)

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)

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 RL, Montanera W, Marotta T*: *Microvention/Terumo, Heart and Stroke Foundation*. (\$200,000 2007 - 2009)

Maintaining autonomy as we age: A strategy training approach to ameliorating the effects of age-related executive dysfunction. *Dawson D, Binns M, Polatajko H, Schweitzer TA, Troyer A, Winocur G*: *Drummond Foundation*. (\$50,000 2009 - 2011)

Neurocognitive, neuroimaging and functional profile of patients after aneurysmal subarachnoid hemorrhage. *Macdonald RL, Schweitzer T, Sherwin CL* (Chair of Research): *Brain Aneurysm Foundation*. (\$15,000 2009 - 2010)

Neurocognitive, neuroimaging and functional profile of patients after aneurysmal subarachnoid hemorrhage: A pilot study. *Schweitzer TA*: *The Cynthia Lynn Sherwin Chair of Research: The Brain Aneurysm Foundation, USA*. (\$15,798 2009 - 2011)

Pituitary disorders centre for excellence. *Cusimano MD, Andrew M, Anderson J*: *Alternative Funding Program Innovation Fund*. (\$33,000 2010 - 2011)

Preventing recurrence of chronic subdural hematomas. *Macdonald RL, Tang E*: *St. Michael's Hospital*. (\$4,000 2009)

Research start-up grant. *Schweitzer TA*: *St. Michael's Hospital*. (\$18,000 2007 - 2010)

Strategic team grant in applied injury research: Traumatic brain injury and violence: Reducing the risks, improving the outcomes. *Cusimano M, Ackery A, Asbridge M, Bhalariao S, Clarke D, Colantonio A, Comper P, Cukier W, Cullen J, Delay D, Donnelly P, Graham S, Harris J, Hoch J, Hoshizaki T, Hutchison M, Hwang S, Kontos P, Man R, Morton T, Rinner C, Roy E, Schweitzer T, Shlonsky A, Snider C, Tator C, Tepperman L, Topolovec-Vranic J, Voaklander D, Wolfe D*: *Canadian Institutes of Health Research*. (\$1,750,000 2010 - 2016)

Subarachnoid nimodipine treatment for vasospasm. *Macdonald RL*: *New Jersey Commission on Science and Technology, Edison Innovation Research and Development Fund, and Edge Therapeutics, Inc.* (\$500,000 2009 - 2010)

The fractionation and localization of attentional and language processing in the cerebellum. *Stuss DT, Alexander MP, Schweitzer TA, Cusimano M*: *Canadian Institutes of Health Research, MOP-7949*. (\$270,444 2006 - 2010)

Trauma system development in Canada: Overcoming the challenges of geography through an evaluation of structure and process. *Nathens A, Gagliardi A, Pong R, Rubinfeld G, Schuurman N, Cusimano MD, Hameed S, Lawless B, Morrison L, Pandya A, Peters P, Schwart B, Snider C, Tallon J*: *Canadian Institutes of Health Research*. (\$1,990,000 2010 - 2015)

Treatment of subarachnoid hemorrhage with human albumin. *Macdonald RL*: *National Institutes of Health, RO1*. (\$60,000 2006 - 2010)

YSTOP youth outreach program. *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

Cusimano MD: Nominated for the Canadian Medical Association's Medal of Service by Judith Kwok, et al. November 2009.

Cusimano MD: Nominated for the PASHBY Safety Award. June 2010.

Cusimano MD: Nominated for the St. Michael's Hospital, Board of Director's Complete Physician Award. May 2010.



DIVISION OF ORTHOPAEDIC SURGERY

Dr. H. Ahn	Assistant Professor
Dr. E.R. Bogoch	Professor
Dr. T.R. Daniels	Associate Professor
Dr. J. Hall	Assistant 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, Craven C, Drew B, Fehlings M, Ford M, Jaglal S, Parsons D, Verrier M: Ontario spinal cord injury informatics. Informing practice research and innovations. In: Ontario Neurotrauma Foundation: November 2009.

Ahn H, Singh J, Nathens A, Macdonald RD, Travers A, Tallon J, Fehlings M, Yee A: Pre-hospital care management of a potential spinal cord injured patient: A systematic review of the literature and evidence-based guidelines. *Journal of Neurotrauma*: E-published ahead of print June 16, 2010.

Angelini M, McKee MD, Waddell JP, Haidukewych G, Schemitsch EH: Salvage of failed hip fracture fixation. *Journal of Orthopaedic Trauma*: July 2009; 23(6): pp 471-478.

Atesok K, Schemitsch EH: Computer-assisted trauma surgery. *The Journal of the American Academy of Orthopaedic Surgeons*: May 2010; 18(5): pp 247-258.

Bederman SS, Bhandari M, McKee MD, Schemitsch EH: Do corticosteroids reduce the risk of fat embolism syndrome in patients with long-bone fractures? A meta-analysis. *Canadian Journal of Surgery*: October 2009; 52(5): pp 386-393.

Beuerlein MJS, McKee MD: Calcium sulfates: What is the evidence? *Journal of Orthopaedic Trauma*: March 2010; 24(3): pp S46-S51.

Bhandari M, Schemitsch E, Jonsson A, Zlowodzki M, Haidukewych GJ: Gamma nails revisited: Gamma nails versus compression hip screws in the management of intertrochanteric fractures of the hip: A meta-analysis. *Journal of Orthopaedic Trauma*: July 2009; 23(6): pp 460-464.

Bhandari M, Schemitsch EH: Stimulation of fracture healing: Osteobiologic, bone stimulators, and beyond. *Journal of Orthopaedic Trauma*: March 2010; 24(Suppl 1): pp S1.

Bhandari M, Sprague S, Schemitsch EH: Resolving controversies in hip fracture care: The need for large collaborative trials in hip fractures. *Journal of Orthopaedic Trauma*: July 2009; 23(6): pp 479-484.

Blankstein M, Byrick RJ, Nakane M, Bang KW, Freedman J, Richards RR, Kajikawa O, Zdero R, Bell D, Schemitsch EH: Amplified inflammatory response to sequential hemorrhage, resuscitation, and pulmonary fat embolism: An animal study. *The Journal of Bone and Joint Surgery (American Volume)*: January 2010; 92(1): pp 149-161.

Bogoch ER, Feldman S: Getting it right: Early diagnosis, timely intervention. *The Medical Post*: November 2009; pp 1-4.

Bougherara H, Zdero R, Shah S, Miric M, Papini M, Zalzal P, Schemitsch EH: A biomechanical assessment of modular and monoblock revision hip implants using FE analysis and strain gage measurements. *Journal of Orthopaedic Surgery and Research*: May 2010; 5: pp 34.

Chahal J, Al-Taki M, Pearce D, Leibenberg A, Whelan DB: Injury patterns to the posteromedial corner of the knee in high-grade multiligament knee injuries: An MRI study. *Knee Surgery, Sports Traumatology, Arthroscopy*: January 2010; 18(8): pp 1098-1104.

Chahal J, Dhotar H, Zahrai A, Whelan DB: PCL reconstruction with the tibial inlay technique following IM nail fixation of an ipsilateral tibial shaft fracture – a case report and treatment algorithm. *Knee Surgery, Sports Traumatology, Arthroscopy*: September 2009; 18(6): pp 777-780.

Chahal J, Hesse D, Whelan DB, White L: Non-operative management of a dislocated posterior horn of the lateral meniscus with clinical and MRI correlation. *Clinical Journal of Sports Medicine*: July 2009; 19(4): pp 333-335.

Connolly S, McKee MD, Zdero R, Waddell JP, Schemitsch EH: Immediate plate osteosynthesis for open fractures of the humeral shaft. *The Journal of Trauma*: E-published ahead of print January 8, 2010.

Daniels TR, Bhandari M, Donsajh S, Schemitsch EH, Sprague S, Wu V: Prevalence of Abuse and Intimate partner violence Surgical Evaluation (P.R.A.I.S.E.): Rationale and design of a multi-center cross-sectional study. *BMC Musculoskeletal Disorders*: April 2010; 11: pp 77.

Daniels TR, Bhandari M, Schemitsch EH, Sprague S (International Hip Fracture Research Collaborative): Resolving controversies in hip fracture care: The need for large collaborative trials in hip fractures. *Journal of Orthopaedic Trauma*: July 2009; 23(6): pp 479-484.

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INVITED VISITS

Ahn H: Canadian Spine Society, Cervical Spine Symposium, Banff, Alberta, Canada, March 2010. Chair and Moderator.

Ahn H: International Society for Fracture Repair/International Osteoporosis Foundation, Monaco, Monte Carlo, December 2009. (2) It's not the size...but the number of events that counts, (2) Systematic review and critical analysis of the vertebroplasty randomized controlled trials.

Ahn H: Osteosynthesis and Trauma Care (OTC) Foundation, Canadian Orthopaedic Resident Trauma Courses on Cervical Spine Fracture Management and Thoracolumbar Spine Fracture Management, Toronto, Ontario, Canada, November 2009. Presenter/Spine Session Moderator.

Ahn H: Stryker Spine USA and Europe, Bourdeaux, France, October 2009. Minimally invasive approaches to spinal decompression and fusion.

Ahn H: Stryker Spine USA, North-South Spine Debate, Raleigh, North Carolina, USA, September 2009. (1) Debate Forums - CON: For a degenerative L4/5 spondylolisthesis with neurogenic claudication, only a decompression is needed, (2) Health care reform would be better with a single federally funded payer system.

Ahn H: Canadian Medical Education/Orthopaedic Trauma Care, Principles and Practise of Clinical Research Course, Mississauga, Ontario, Canada, September 2009. Guest Speaker: Grades of recommendation (GRADE Approach) to the clinical literature.

Bogoch ER: Institut du Nouveau Monde, Journées Annuelles de la santé publique, Sante Osseuse, Pour Vieillir Sans Fracture, Montréal Quebec, Canada, March 2010. Programme d'economie de couts pour prevenir la fracture de la hanche: le coordonnateur comme modele d'intervention post-fracture osteoporotique.

Bogoch ER: Ontario Orthopaedic Association, Annual General Meeting, Toronto, Ontario, Canada, October 2009. Fracture prevention that works.

Bogoch ER: American Society for Bone and Mineral Research, Working Group on Systems-Based Approaches to Fracture Secondary Prevention, 2nd Annual Meeting, Denver, Colorado, USA, September 2009. The Ontario model - and how a patient organization can take on responsibility for service delivery.

Bogoch ER: The Dewar Orthopaedic Society, 50th Anniversary Meeting, Ottawa, Ontario, Canada, September 2009. A systems approach for the prevention of fractures.

Daniels TR: Canadian Orthopaedic Association - Canadian Orthopaedic Foot and Ankle Society (COA-COFAS), Edmonton, Alberta, Canada, June 2010. Tips and tricks #6: Foot and ankle made easier.

Daniels TR: Integra European Headquarters, Hintegra from 10 Years and Beyond, Lyon, France, May 2010. (1) Day One (Users meeting): My worst case, (2) My most difficult case - valgus/varus/ligamentous instability/fixed equinus position/fixed supination deformity, (3) TAR together with knee replacement at the same time - would I do it?, (4) Day Two (all levels meeting): My results with hintegra TAR, (5) My personal experience on TAR - why did I change to Hintegra?, (5) My most satisfied patient.

Daniels TR: American Orthopaedic Foot and Ankle Society (AOFAS), Advanced Foot and Ankle Course: Reconstruction and salvage of complications, Philadelphia, USA, April 2010. (1) Posterior tibial tendon and acquired flat feet session: Ankle deformities, (2) Ankle arthroplasty session: The role of arthroplasty in valgus deformities, (3) Trauma II Session: Hindfoot malunions, (4) Case Studies: Forefoot complications, (5) Case Studies: Arthroplasty.

Daniels TR: American Orthopaedic Foot and Ankle Society (AOFAS), Specialty Day 2010, Current Controversies - What We Can Learn from Our Orthopaedic Colleagues, New Orleans, USA, March 2010. (1) Paper session 1 - A PRC, multi-center, pivotal human clinical trial to evaluate the safety and effectiveness of augment bone graft as a substitute for autologous bone, (2) Ankle arthritis (Symposium #4) - What does the evidence show?

Daniels TR: McMaster University, Department of Surgery, Division of Orthopaedics, Residents' Research Conference 2009, Hamilton, Ontario, Canada, October 2009. Visiting Professor/The 2009 Robert N. Lofthouse Memorial Lecture: (1) Varus deformity and total ankle arthroplasty: Classification and treatment algorithm (The 2009 Nigel R. Colterjohn Memorial Lecture), (2) Hallux valgus surgery: Plenty of opinions, plenty of techniques.

Daniels TR: The Dewar Orthopaedic Society, 50th Anniversary Annual Meeting, Ottawa, Ontario, Canada, September 2009. Varus deformity and total ankle replacement: Classification and treatment algorithm.



Daniels TR: Canadian Orthopaedic Association (COA), Whistler, British Columbia, Canada, July 2009. Opening-wedge versus proximal chevron osteotomy for hallux valgus with increased intermetatarsal angle.

Daniels TR: Canadian Orthopaedic Association – Canadian Orthopaedic Foot and Ankle Society (COA/COFAS), Instructional Course Lecturers (ICL): Foot and Ankle, Whistler, British Columbia, Canada, July 2009. Triple fusion - Tips and tricks with video highlights.

Hall JA: American Academy of Orthopaedic Surgeons (AAOS), Clavicle Fracture Symposium, New Orleans, USA, March 2010. Attendee.

Hall JA: Canadian Orthopaedic Association, Locked Plating of Distal Radius Fractures Symposium. Whistler, British Columbia, Canada, July 2009. Attendee.

McKee MD: University of Texas - Baylor College of Medicine/Houston Orthopaedic Society, Grand Rounds, Houston, Texas, USA, June 2010. Visiting Professor.

McKee MD: Mayo Clinic/Mayo Elbow Club, 12th Annual Mayo Clinic Advanced Elbow Course, Rochester, Minnesota, USA, May 2010. Guest Lecturer.

McKee MD: American Academy of Orthopaedic Surgeons (AAOS), Annual Meeting, New Orleans, Louisiana, USA, March 2010. Instructional Course Lectures: (1) Treatment of periprosthetic fractures, (2) Controversies in proximal humeral fracture management, (3) Acute elbow trauma - Evidence based approach, (4) Complex trauma to the shoulder girdle - current concepts in treatment, (5) OTA Specialty Day 2010 - Fractures of the clavicle, (6) POSNA Specialty Day 2010 - Fractures of the clavicle.

McKee MD: Arbeitsgemeinschaft für Osteosynthesefragen (AO) North America, Caribbean Trauma Update: Tips and Tricks, Cancun, Mexico, February 2010. (1) Fractures of the clavicle, (2) TEA for fracture, (3) Elbow fracture-dislocations.

McKee MD: New England Shoulder and Elbow Society, Annual Meeting, Stowe, Vermont, USA, February 2010. Guest Lecturer.

McKee MD: Arbeitsgemeinschaft für Osteosynthesefragen (AO) North America, Upper Extremity Thinktank, Park City, Utah, USA, February 2010. (1) Heterotopic Ossification: My approach to prophylaxis, (2) Total elbow arthroplasty, (3) My approach to forearm nonunion.

McKee MD: American Academy of Orthopaedic Surgeons/Orthopaedic Trauma Association (AAOS/OTA) Extremity War Injury Symposium V, Washington, District of Columbia, USA, January 2010. Participant, Breakout Groups.

McKee MD: University of Maryland - Shock-Trauma Unit, Grand Rounds, Baltimore, Maryland, USA, January 2010. Visiting Professor.

McKee MD: American Shoulder and Elbow Surgeons (ASES), Closed Meeting, New York, New York, USA, October 2009. Case-based symposium: Shoulder fractures.

Schemitsch EH: Canadian Orthopaedic Association, Edmonton, Alberta, Canada, June 2010. (1) Moderator of Tips and Tricks: Femoral neck nonunion: Osteotomy and plating.

Schemitsch EH: Osteosynthesis and Trauma Care Foundation, Fragility Fracture Leadership Forum, Amsterdam, Netherlands, June 2010. Meeting Organizer.

Schemitsch EH: University of Ottawa, Joint Preserving and Minimally Invasive Surgery of the Hip, Ottawa, Ontario, June 2010. (1) Mid head resection arthroplasty.

Schemitsch EH: British Trauma Society, May 2010. (1) Guest Lecturer, (2) Periprosthetic fractures around the knee, (3) Use of bone substitutes in orthopaedic trauma.

Schemitsch EH: 5th Annual San Francisco Trauma Course, San Francisco, California, April 2010. (1) Supracondylar humerus fractures, (2) Bone grafts and aspirates: Does it matter where I harvest?, (3) Indications for advanced radiographic studies.

Schemitsch EH: American Academy of Orthopaedic Surgeons, New Orleans, Louisiana, USA, March 2010. (1) ICL: (a) Femoral neck fractures: A comprehensive review, (b) Treatment of periprosthetic fractures, (2) Moderator, (3) Arthroplasty options, (4) Supracondylar fractures: Nails versus plate, (5) Burden of disease, (6) The role of cable plates and allografts.

Schemitsch EH: Orthopaedic Research Society, New Orleans, Louisiana, USA, March 2010. (1) Spotlight Session: Clinical trials, (2) Moderator.

Schemitsch EH: Osteosynthesis and Trauma Care (OTC) Canada, Canadian Orthopaedic Resident Trauma Review, Toronto, Ontario, Canada, November 2009. (1) Course co-chair, (2) Moderator, (3) Case presentations, (4) Distal humerus fractures, (5) Elbow fracture dislocations.

Schemitsch EH: Osteosynthesis and Trauma Care (OTC) Canada, Upper Extremity Trauma: Problems and Solutions, Vancouver, British Columbia, Canada, November 2009. (1) Course co-Chair, (2) Moderator, (3) Case presentations, (4) Comminuted distal humerus fracture, (5) Lab demonstrator, (6) Lab leader: Distal humerus ORIF.

Schemitsch EH: Osteosynthesis and Trauma Care (OTC) Canada, Case Controversies in Complex Fracture Care, Toronto, Ontario, Canada, October 2009. (1) Course co-Chair, (2) Case presentations: Humeral shaft/distal humerus, (3) Case presentations: Forearm.

Schemitsch EH: Orthopaedic Trauma Association (OTA), 25th Annual Meeting - Basic Science Focus Forum, San Diego, California, USA, October 2009. (1) Program Committee Member, (2) Moderator of Symposium on Growth Factors: Beyond BMP's, (3) Moderator of Paper Session on Growth factors, (4) SF-36, SMFA & EQ-5D: Do I use all, none or same, (5) Moderator of Symposium on Assessment of Fracture Healing, (6) Clinical Research Seminar: Randomized controlled trials, (3) Case presentations: Elbow trauma.

Schemitsch EH: McMaster University, 3rd Annual Principles and Practice of Clinical Research Course, Toronto, Ontario, Canada, September 2009. (1) Course co-Chair, (2) Moderator, (3) Study protocols - the bare bones, (4) Research proposals: The good, the bad, the ugly, (5) Getting your research paper published, (6) Writing your paper for publication: Do's and Don'ts.

Schemitsch EH: Rubin Institute for Advance Orthopaedics, 3rd Annual Hip Joint Preservation and Resurfacing Arthroplasty Course, Baltimore, Maryland, USA, September 2009. Computer-assisted solutions for hip resurfacing.

Schemitsch EH: Canadian Orthopaedic Association, Whistler, British Columbia, Canada, July 2009. (1) Designing a clinical study: What study designs can I use?, (2) Instructional Course Lecture: Why and how I use an IM nail for subtrochanteric fractures, (3) Symposium: Intimate Partner Violence. A call for action: The role of the orthopaedic surgeon.

Waddell JP: Canadian Orthopaedic Association, Instructional Course Lecture: Hip and Knee: Maximizing Efficiency in the OR, Edmonton, Alberta, Canada, June 2010. (1) Moderator of Hip Reconstruction, (2) The bone and joint decade toolkit.

Waddell JP: European Federation of National Associations of Orthopaedics and Traumatology, Madrid, Spain, June 2010. ARTOF Symposium diagnostic and conservative treatment of distal tibia and ankle.

Waddell JP: La Sociedad Ecuatoriana De Ortopedia Y Traumatologia, Quito, Ecuador, April 2010. (1) Femoral neck fractures, (2) Ankle fractures, (3) Controversies around surgical treatment of fractures of the calcaneus, (4) Surgical treatment of the humeral shaft, (5) Hip arthritis in the young adult, (6) Osteotomies about the knee, (7) Management of forefoot deformity.

Waddell JP: Societe Internationale de Chirurgie Orthopedique et de Traumatologie (SICOT), combined Session with the Association for the Rational Treatment of Fractures, Pattaya, Thailand, November 2009. Lisfranc dislocation and dislocation fractures.

Waddell JP: Orthopaedic Trauma Association, 2009 Comprehensive Fracture Course for Residents, San Diego, California, October 2009. (1) Polytrauma patients: Evaluation and assessment, (2) Panel Member of To Cut or Not to Cut.

Waddell JP: Societe Internationale de Chirurgie Orthopedique et de Traumatologie (SICOT), Annual International Conference, Pattaya, Thailand, October 2009. (1) Moderator: Arthroplasty Hip Session, (2) Moderator: Trauma-Foot Symposium (Combined SICOT/ARTOF session).

Waddell JP: McMaster University, 3rd Annual Principles and Practice of Clinical Research Course, Mississauga, Ontario, September 2009. Keynote Speaker: Clinical research: Could (should?) everybody be doing it?

Waddell JP: The Hip Society, Palo Alto, California, September 2009. (1) Moderator of Session I: Primary Total Hip Following Acetabular Fracture, (2) Moderator of Session II: Acetabular Component Position.

Waddell JP: Canadian Orthopaedic Association, Annual Meeting, Whistler, British Columbia, Canada, July 2009. Moderator of Innovative New Models of Orthopaedic Care.

Whelan DB: Canadian Orthopedic Association, Edmonton, Alberta, Canada, June 2010. (1) Symposiums: (a) Arthroscopic Stabilization of the Shoulder, (b) Evidence-Based Medicine and the Patellar Tendon, (c) Labral Repair of the Hip, (2) Tips and Tricks Video Session: Posterolateral Corner Reconstruction of the Knee.

Whelan DB: Conmed/Linvatec, Pan-Am Clinic Knee Arthroscopy Course, Winnipeg, Manitoba, Canada, April 2010. Multiligament knee injury - Assessment and results.

Whelan DB: American Academy of Orthopaedic Surgeons (AAOS), Annual Meeting, New Orleans, Louisiana, USA, March 2010. Multiligament knee injury.



Whelan DB: Conmed/Linvatec, Advanced Arthroscopy Meeting, Clearwater, Florida, USA, December 2009. (1) The first time shoulder dislocator: What we've done, what we do now, what will we do in future, (2) Second Talk: Single bundle anatomic ACL reconstruction using the accessory anteromedial portal: Pearls and pitfalls.

Whelan DB: McMaster University, 1st Annual Hip Health 2009, Mississauga, Ontario, Canada, November 2009. Faculty Member: Hip arthroscopy in the young adult.

Whelan DB: Ontario College of Family Physicians, Toronto, Ontario, Canada, November 2009. Orthopedic emergencies.

Whelan DB: National Institutes of Health (NIH) Clinical Center of Bethesda, Maryland, USA, 3rd Annual Principles and Practice of Clinical Research Course. (Course Faculty), Toronto, Ontario, Canada, September 2009. Speaker: (1) Is my trial feasible? Can I actually pull it off? (2) What is a prospective cohort study?, (3) Moderator of small group sessions on: (a) Critical Appraisal: Randomized Controlled Trial, (b) Preparing the Study Protocol.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

A randomized evaluation of immobilization in external rotation in the management of acute interior dislocations of the shoulder (ERAADS). *Whelan DB, Holtby R: American Shoulder and Elbow Surgeons.* (\$20,000 2010 - 2012)

A randomized evaluation of emergent immobilization in external rotation in the management of acute interior dislocations of the shoulder (EERAADS). *Whelan DB, Holtby R: American Orthopaedic Society for Sports Medicine.* (\$20,000 2010 - 2012)

A randomized trial of cannulated screws versus sliding hip screws for femoral neck fractures. *Bhandari M, Schemitsch EH, Faith Investigators: Canadian Institutes of Health Research.* (\$160,267 2008 - 2010)

A randomized trial of cannulated screws versus sliding hip screws for femoral neck fractures. *FAITH Investigators: The Physician's Services Incorporated (PSI).* (\$93,000 2008 - 2010)

A randomized trial of cannulated screws versus sliding hip screws for femoral neck fractures. *FAITH Investigators: 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: Canadian Institutes of Health Research.* (\$1,780,737 2010 - 2014)

A randomized trial of fluid lavage in open wounds. *Bhandari M, Petrisor B, Schemitsch EH, Flow Investigators: OTC Foundation.* (\$50,000 2008 - 2010)

A randomized trial of fluid lavage in open wounds. *FLOW Investigators: McMaster University, Department of Surgery.* (\$12,630 2008 - 2010)

A randomized trial of fluid lavage in open wounds. *FLOW Investigators: Orthopaedic Trauma Research Program.* (\$953,924 2008 - 2010)

A randomized trial of fluid lavage in open wounds. *FLOW Investigators: Canadian Institutes of Health Research.* (\$1,748,487 2009 - 2013)

A randomized trial of hemiarthroplasty versus total hip arthroplasty for femoral neck fractures. *HEALTH Investigators: National Institutes of Health (NIH).* (\$540,708 2008 - 2012)

A randomized trial of hemiarthroplasty versus total hip arthroplasty for femoral neck fractures. *HEALTH Investigators: 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: Orthopaedic Trauma Association.* (\$50,000 2007 - 2010)

A randomized trial of total hip arthroplasty versus hemi arthroplasty for femoral neck fractures. *Bhandari M, Schemitsch EH, Health Investigators: Canadian Institutes of Health Research.* (\$139,423 2008 - 2010)

Ankle arthroplasty and ankle arthrodesis - Prospective gait analysis compared to controls. *Daniels TR, Singer S, Kleijman S, Pinsker E, Khan R: Canadian Orthopaedic Association/The Canadian Orthopaedic Residents Association (COA/CORA): BioMimetic Therapeutics Foot and Ankle Travel Award.* (\$3,000 2009 - 2010)

Augment injectable pivotal trial. *Daniels TR: BioMimetics.* (\$150,000 2009 - 2010)

Biomechanical properties of hydroset with and without tobramycin in the augmentation of lateral tibial plateau fractures. *Ahn H, Schemitsch E: Stryker USA.* (\$20,000 2009 - 2010)

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)

Cartiva implant for hallux rigidus. *Daniels TR: Carticept Medical, Inc.* (\$150,000 2009)

Cell-based gene therapy in orthopaedic trauma. *Schemitsch EH, Nauth A, Li R: Canadian Institutes of Health Research.* (\$18,500 2009)

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 - 2010)

Effect of cell-based gene therapy with VEGF on fracture healing. *Schemitsch EH, Nauth A, Li R: The Physicians' Services Incorporated Fund.* (\$20,000 2008 - 2010)

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 - 2010)

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 - 2010)

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)

Endothelial progenitor cells for healing and angiogenesis in a segmental bone defect model: A comparison with mesenchymal stem cells. *Nauth A, Schemitsch EH, Li R: Osteosynthesis and Trauma Care Foundation.* (\$10,000 2009 - 2011)

Endothelial progenitor cells for healing and angiogenesis in a segmental bone defect model: A comparison with mesenchymal stem cells. *Schemitsch EH, Nauth A, Li R: Orthopaedic Trauma Association.* (\$25,000 2009 - 2011)

Gait analysis of total ankle replacement patients. *Daniels TR: Integra Life Sciences.* (\$60,000 2009)

Gait analysis of total ankle replacement patients. *Daniels TR: Integra Life Sciences.* (\$60,000 2010)

Health Canada Study: Safety and effectiveness study on the use of the spine jack intravertebral expandable implant in the treatment of vertebral compression fracture (ISCA) study, A randomized controlled trial. *Ahn H, Murphy K, Smith R: Vexim.* (\$200,000 2009 - 2011)

Implementation and evaluation of collaborations between SHSC, 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)

Ministry of Health and Long Term Care (MOHLTC), Osteoporosis Fracture Clinic Screening Evaluation - Year 4. *Bogoch ER, Beaton DE, Jaglal S, Hawker G, Mamdani M, Gignac M, Cadarette S, Laupacios A, Zwarenstein M, Straus S, Sale J, Jiang D: Ministry of Health and Long Term Care, Province of Ontario.* (\$350,000 2010 - 2011)

Osteoporosis exemplary care program. *Bogoch ER: Alliance for Better Bone Health.* (\$20,000 2010)

Outcome management: The importance of time. *Aileen A, Badley E, Beaton D, Cote P, Flannery J, Gignac M, Hogg-Johnson S, Mahomed N, Schemitsch EH, Streiner D: Canadian Institutes of Health Research.* (\$624,224 2005 - 2009)

Predictors of disability following revision knee arthroplasty. *Davis A, Garbuz D, Gignac M, Kiss A, Mahomed N, Gross A, Schemitsch EH: Canadian Institutes of Health Research.* (\$284,640 2005 - 2010)

Prevalence of abuse and intimate partner violence surgical evaluation. *PRAISE Investigators: Orthopaedic Trauma Association.* (\$35,000 2009 - 2011)

Prevalence of abuse and intimate partner violence surgical evaluation. *PRAISE Investigators: McMaster University Surgical Associates.* (\$14,000 2009 - 2011)

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)

Rick Hansen Spinal Cord Injury Registry. *Ahn H, Ginsberg H, Fehlings M, Ford M: Spinal Cord Injury Solutions Network.* (\$120,000 2009 - 2012)

Setting a new benchmark for collaborative trials in trauma: The rationale, design, and execution of the study to prospectively evaluate intramedullary nails in tibial shaft fractures. *SPRINT Investigator: Kappa Delta Award.* (\$20,000 2010 - 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)



Trial to re-evaluate ultrasound in the treatment of tibial fractures. *Guyatt G, Bhandari M, Busse J, Schemitsch EH, Sanders D, TRUST Investigator: Canadian Institutes of Health Research/Smith & Nephew.* (\$2,025,469 2007 - 2010)

Use of a novel scaffold to accelerate fracture healing. *Kuzyk P, Schemitsch EH, Davis J: Osteosynthesis and Trauma Care Foundation.* (\$10,000 2007 - 2010)

What is the fracture patient's role in receipt of osteoporosis investigation and treatment? *Sale J, Beaton DE, Bogoch ER, Gignac MA, Hawker GA, Jaglal SB, Meadows LM: Canadian Institutes of Health Research.* (\$60,000 2010 - 2011)

HONOURS RECEIVED

Daniels TR: Best Poster of Your Society for "Varus deformity and total ankle arthroplasty: Classification and treatment algorithm," at the 56th Annual Meeting of the American Orthopaedic Foot and Ankle Society /Orthopaedic Research Society. March 2010.

Daniels TR: BioMimetic Therapeutics Foot and Ankle Travel Award of \$50,000.00 established in honour of the COFAS (Dr. T. Daniels) to be presented to the Best Foot and Ankle Research Paper at annual COA/CORA meetings. July 2009.

Daniels TR: Director, Postgraduate Education, Department of Surgery, St. Michael's Hospital. July 2009.

Daniels TR: First Prize Poster for 'Varus deformity and total ankle arthroplasty: Classification and treatment algorithm' (with U.S.\$1,000) at the AOFAS Summer Meeting 2009 in Vancouver, British Columbia, Canada. July 2009.

Daniels TR: Inaugural Head of the new Foot and Ankle Program at UofT. July 2009.

Daniels TR: Semi-finalist, Goldner Award by The American Orthopedic Foot and Ankle Society (AOFAS) for Best Basic Science Paper accepted for presentation at the summer meeting. July 2009.

Schemitsch EH: Named Top Scoring Poster Finalist for "Tissue Engineering with Cell-Based Gene Transfer in Fracture Repair," by the Canadian Orthopaedic Research Society. July 2009.

Schemitsch EH: High Scoring Posting, by Canadian Orthopaedic Association. June 2010.

Schemitsch EH: J.A. Nutter Award with Ali Zahrai, by the Canadian Orthopaedic Residents Association. June 2010.

Schemitsch EH: Jameel Ali Award for Continuing Medical Education, St. Michael's Hospital. June 2010.

Schemitsch EH: Kappa Delta Award (\$20,000), Sprint Investigators 2009/10. January 2010.

Schemitsch EH: New Investigator Research Award finalist by the Orthopaedic Research Society. April 2010.

Waddell JP: Canadian Orthopaedic Association Presidential Award for Excellence. July 2009.

Whelan DB: Orthopaedic Chair's Teaching Award for contributions to orthopaedic education as voted by the residents. April 2010.

DIVISION OF PLASTIC AND RECONSTRUCTIVE SURGERY

Dr. J.L. Mahoney Professor (Division Head)
Dr. M. Musgrave Assistant Professor

PUBLICATIONS

Ahluwalia R, Martin D, Mahoney JL: The operative treatment of pressure wounds: A 10-year experience in flap selection. *International Wound Journal*: October 2009: 6(5): pp 355-358.

Mahoney J: Canadian Expert Series - Treatment of sternal infection: Continuing evolution. *The Canadian Journal of Plastic Surgery*: June 2010: 18(2): pp 42.

INVITED VISITS

Mahoney JL: Canadian Society of Plastic Surgeons, Halifax, Nova Scotia, Canada, June 2010. Canadian Expert Series - Treatment of sternal infection: Continuing evolution.

Musgrave M: Moynihan Chirurgical Club Meeting, Toronto, Ontario, Canada, May 2010. Component separation - what and when.

Musgrave M: Canadian Society of Plastic Surgeons, Halifax, Nova Scotia, Canada, June 2010. Judge for presentations.

Musgrave M: Arbeitsgemeinschaft für Osteosynthesefragen (AO) North America, Nursing Continuing Education: Principles of Craniomaxillofacial Trauma and Reconstruction for Operating Room Personnel, Toronto, Ontario, Canada, March 2010. Midface: Anatomy, management of LeFort fractures/surgical approaches.

Musgrave M: ArjoHuntleigh Canada, Thornhill, Ontario, Canada, November 2009. Targeting venous thromboembolism (VTE).

Musgrave M: ArjoHuntleigh Canada, Interior Health Authority, Kelowna, British Columbia, Canada, December 2009. The role of IPC in targeting venous thromboembolism.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

Development of guidelines for venous thromboembolism (VTE) in plastic surgery: The Canadian Experience. *Musgrave MA, Mutter E: Keenan Research Centre, Summer Student Scholarship.* (\$2,500 2010)

Effect of breast reduction surgery on indicators of insulin resistance: A pilot study. *Neinstein R, Ray JG, 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: Innovation Fund Ministry of Health.* (\$63,000 2009 - 2010)

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)

HONOURS RECEIVED

Musgrave M: Nominated for the FitzGerald Academy Award. June 2010.



DIVISION OF UROLOGY

Dr. R.J.D. Honey Associate Professor (Division Head)
Dr. K.T. Pace Associate Professor
Dr. R. Stewart Assistant Professor

PUBLICATIONS

Beiko D, Bryson P, Bell CD, Pace KT: Laparoscopic excision of a cystic retroperitoneal adenocarcinoma arising in a focus of extra-ovarian endometriosis. *Canadian Urological Association Journal*: June 2010: 4(3): pp 56-58.

Chow TF, Mankaruos M, Scorilas A, Youssef Y, Girgis A, Mossad A, Metias S, Rofael Y, Honey RJ, Stewart R, Pace KT, Yousef GM: The miR-17-92 cluster is over expressed and has an oncogenic effect on renal cell carcinoma. *The Journal of Urology*: February 2010: 183(2): pp 743-751.

Chow TF, Youssef YM, Lianidou E, Romaschin AD, Honey RJ, Stewart R, Pace KT, Yousef GM: Differential expression profiling of microRNAs and their potential involvement in renal cell carcinoma pathogenesis. *Clinical Biochemistry*: January 2010: 43(1-2): pp 150-158. E-published July 29, 2009.

Faragalla H, Al-Haddad S, Stewart R, Yousef GM: The significance of florid giant cell component in renal cell carcinoma: A case report and review of the literature. *The Canadian Journal of Urology*: June 2010: 17(3): pp 5219-5222.

Honey RJ, Ray AA, Ghiculete D, the University of Toronto Lithotripsy Associates, Pace KT: Shock wave lithotripsy: A randomized, double-blind trial to compare immediate versus delayed voltage escalation. *Urology*: January 2010: 75(1): pp 38-43.

Honey RJ, Schuler TD, Ghiculete D, Pace KT and the Canadian Endourology Group: A randomized, double-blind trial to compare shock wave frequencies of 60 and 120 shocks per minute for upper ureteral stones. *Journal of Urology*: October 2009: 182(4): pp 1418-1423. E-published August 15, 2009.

Pace KT: Robotic-assisted radical prostatectomy: Fact versus fiction. *Awareness Newsletter*: August 2009: 12: pp 1-6.

Rane A, Bradoo A, Rao P, Shivde S, Elhilali M, Anidjar M, Pace K, D'A Honey RJ: The use of a novel thermosensitive polymer to prevent ureteral stone retropulsion during intracorporeal lithotripsy: A randomized controlled trial. *Journal of Urology*: April 2010: 183(4): pp 1417-1421. E-published February 20, 2010.

Ray AA, Chung D, Honey RJ: Percutaneous nephrolithotomy in the prone and prone-flexed positions: Anatomic considerations. *Journal of Endourology*, October 2009: 23(10): pp 1607-1614.

Siu KW, DeSouza LV, Scorilas A, Romaschin AD, Honey RJ, Stewart R, Pace K, Youssef Y, Chow TF, Yousef GM: Differential protein expressions in renal cell carcinoma: New biomarker discovery by mass spectrometry. *Journal of Proteome Research*: August 2009: 8(8): pp 3797-3807.

White NM, Bui A, Mejia-Guerrero S, Chao J, Soosaipillai A, Youssef Y, Mankaruos M, Honey RJ, Stewart R, Pace KT, Sugar L, Diamandis EP, Doré J, Yousef GM: Dysregulation of kallikrein-related peptidases in renal cell carcinoma: potential targets of miRNAs. *Biological Chemistry*: April 2010: 391(4): pp 411-423.

INVITED VISITS

Honey RJD: American Urological Association, Annual Meeting, San Francisco, California, USA, May 2010. Course Director of Hands-on Course: Flexible Ureteroscopy for Renal Stones.

Honey RJD: International Kidney Stone Institute, 3rd International Urolithiasis Research Symposium, Indianapolis, Indiana, USA, December 2009. (1) Black and white, or shades of grey: The equivalency of treatment modalities for intermediate-sized stones, (2) Contemporary supra- versus infra-costal percutaneous nephrolithotomy in the prone-flexed position, (3) Factors influencing the successful shock wave lithotripsy (SWL) treatment of renal and ureteric stones: Towards a clinical nomogram, (4) Shock wave lithotripsy (SWL) in patients with horseshoe kidney (HSK): 15 years of experience with two lithotriptors.

Honey RJD: World Congress of Endourology and SWL, 27th WCE and 25th Basic Research Symposium, Munich, Germany, October 2009. (1) Moderator: (a) A randomized, double-blinded trial of ketorolac in addition to narcotic patient controlled analgesia (PCA) following laparoscopic donor nephrectomy, (b) Supra versus infra-costal PCNL in the modern era, (2) PCNL-Controversies: Prone and prone-flexed PCNL.

Pace KT: Canadian Urological Association, Educational Forum, Charlottetown, Prince Edward Island, Canada, June 2010. Shock wave lithotripsy: Optimizing outcomes in 2010.

Pace KT: Baxter Pharma, Toronto, Ontario, Canada, October 2009. (1) Maximizing hemostasis during laparoscopic and robotic-assisted partial nephrectomy, (2) Maximizing hemostasis during percutaneous nephrolithotomy.

Pace KT: Toronto Man-to-Man and Side-by-Side Prostate Cancer Support Group, Toronto, Ontario, Canada, July 2009. Robotic-assisted radical prostatectomy: Fact versus fiction.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

A randomized, double-blinded placebo-controlled trial of alfuzosin (Xatral) following shock wave lithotripsy for renal and ureteric calculi (investigator-initiated multi-centered randomized clinical trial. *Pace KT, Honey RJ: Sanofi-Aventis.* (\$100,000 2009 - 2011)

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: Sanofi-Aventis* (study cancelled, funds transferred to next study.) (\$100,000 2007 - 2009)

The Canadian StoneBreaker Trial: A randomized, multicentre trial comparing the LMA stonebreaker and the Swiss lithoClastR during percutaneous nephrolithotomy. *Chew B, Honey RJ, Pace KT: LMA Urology, USA.* (\$13,000 2009 - 2011)

HONOURS RECEIVED

Pace KT: American Urological Association Leadership Program. April 2010.

Stewart R: A.W. Bruce Award for Undergraduate Education, Division of Urology, University of Toronto. 2010.

Stewart R: Bruce Tovee Award for Undergraduate Education, Department of Surgery, University of Toronto. 2010.

Stewart R: William Horsey Award for Postgraduate Education, Department of Surgery, St. Michael's Hospital. 2010.



■ DIVISION OF VASCULAR SURGERY

Dr. F.M. Ameli	Associate Professor (Division Head)
Dr. V. Campbell	Assistant Professor
Dr. C. Cina	Professor
Dr. A.G. Lossing	Associate Professor
Dr. W. Tanner	Assistant Professor

INVITED VISITS

Ameli FM: Society of Vascular Surgery, Annual Meeting, Boston, Massachusetts, USA, June 2010. Attendee.

Ameli FM: Association of International Vascular Surgeons, 28th Annual Meeting, Ischgl, Austria, March 2010. Presented paper on: Multidisciplinary approach to trauma care in a large urban trauma centre: The role of the "hybrid" vascular team.

Ameli FM: Rocky Mountain Traumatologic Society, 52nd Annual Meeting, Snowmass Village, Colorado, USA, January 2010. Presented paper on: Urban vascular trauma.

Ameli FM: Vascular Society of Great Britain and Ireland, Annual Meeting, Liverpool, England, November 2009. Attendee.

Ameli FM: Canadian Society for Vascular Surgery, 31st Annual Meeting, Ottawa, Ontario, Canada, September 2009. Attendee.

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 2009 – 2010 Sunnybrook continued to experience significant growth physically with the M Wing expansion nearing completion. The Department continued to benefit from incremental wait time funding and remained well-aligned with the Institution's strategic focus. The Hospital grappled with the demand for in-patient beds by instituting the "Drive to 95 (percent occupancy)," a plan to optimize patient flow and increase utilization of outpatient resources. The surgical safety check-list was instituted for all surgical procedures in order to maximize patient safety.

NEW STAFF

Jean François Boileau joined the staff of the Division of General Surgery with a special interest in the treatment of breast cancer. Marc Jeschke was appointed Medical Director of the Ross Tilley Burn Unit in the Trauma, Emergency and Critical Care Program. Fiona Webster was appointed as a Scientist in the Division of Orthopaedic Surgery. Richard Jenkinson was appointed as a Surgeon-Teacher in the Division of Orthopaedic Surgery.

APPOINTMENTS AND PROMOTIONS

Barry McLellan, Sunnybrook CEO, was appointed to Full Professor for his creative professional activity in the fields of trauma care, forensic investigation, and hospital administration. Steve Fremes was appointed as the Inaugural Dr. Bernard S. Goldman Chair in Cardiovascular Surgery. Ron Kodama was appointed Head of the Division of Urology. Robert Nam was appointed as the leader of the genito urinary site group of the Cancer program and elected Vice-President of the Medical Dental Midwifery Staff Association. Homer Tien was appointed Medical Director of the Tory Regional Trauma Centre. Frances Wright was appointed Program Director for the Surgical Oncology Fellowship. Terry Axelrod was appointed Director of Continuing Education for the Department.

Natalie Coburn, Homer Tien and Veronica Wadey had successful Continuing Appointment Reviews.

EDUCATIONAL ACTIVITY AND AWARDS

Ron Kodama received a W.T. Aikins Award (his second!) for individual teaching performance (small group category). Richard Holtby received the Surgical Skills' Centre Distinguished Educator Award. Calvin Law received a Peters-Boyd Academy Teaching Award for Clinical Teaching/Supervision. Oleh Antonyshyn received the William K. Lindsay Faculty Research Mentor Award.

Rob Nam received the Postgraduate Urology Teaching Award for Surgical Training and was nominated for a PAIRO Excellence in Clinical Teaching Award. Robin Richards was nominated for a Colin Woolf Award for Long-Term Contributions to Continuing Medical Education. Neil Orzech (Division of General Surgery), Justyna Wolinksa (Division of General Surgery), Amir Ibrahim (Division of General Surgery) and Grace Ma (Division of General Surgery) won Harrison Awards. Robin Richards co-Chaired and Terry Axelrod, Paul Binhammer, Rob Cartotto, Diane Nam and Stewart Wright participated in the 26th Annual Upper Extremity Update. Sherif Hanna and Calvin Law contributed to the 5th Annual Surgical Oncology Education Day. Dave Stephen participated in the 11th Annual Chicago Trauma Symposium. Andy Smith directed and Fred Brenneman, Natalie Coburn, Andrew Dueck, Sender Herschorn, Claire Holloway, Calvin Law, Homer Tien and Frances Wright participated in the 50th Annual Update in General Surgery.

RESEARCH ACTIVITY AND AWARDS

Vasu Venkateswaran received new research funding from Prostate Cancer Canada and CIHR. Paul Binhammer received funding from the American Society for Surgery of the Hand to study the impact of psychosocial factors

and treatment choice on return to work in carpal tunnel syndrome. Diane Nam successfully competed for a Dean's Fund New Staff Grant. Michael Kreder, supervised by Cari Whyne, received the third award in the Best Poster competition of the Sunnybrook Research Institute. Albert Yee, co-Director of the Spine Program, co-Chaired the SpineFEST Visiting Professorship. Multiple staff members of the Division of Orthopaedic Surgery participated in the 1st Annual Holland Musculoskeletal Research Day. Avi Vandersluis received a McMurrich Prize (supervised by Laurence Klotz and Vasundara Venkateswaran) at Gallie Day. Ali Zahrai (supervised by Albert Yee and others) won third prize in the Gallie Bateman Award competition.

OTHER AWARDS AND ACTIVITIES

Bernie Goldman received the Order of Canada for his contributions to Cardiac Surgery. Sender Herschorn was awarded the 2010 Life Time Achievement Award in recognition of "significant contributions and leadership in the field of voiding dysfunction" by the Society of Urodynamics and Female Urology at their annual meeting in St. Petersburg, Florida. The Hanna Family Chair in Surgical Oncology Research at the Odette Cancer Centre was fully funded and a search was initiated for the Inaugural Chair. Michael Ford chaired the Communication Committee of the Canadian Spine Society. Robert Nam was appointed to the AFP Management Board. Richard Reznick and Hans Kreder received Marvin Tile Distinguished Service Awards. Robin Richards, Terry Axelrod and Gideon Cohen sat on the Board of ACMS. Albert Yee co-Chaired a Strategic Planning Retreat for the University of Toronto's Spine Program and co-ordinated the inaugural University Divisional Orthopaedic Fellowship Day. Marv Tile gave the keynote address at this event.

RETIREMENTS AND SABBATICALS

Fred Brenneman completed a ten-year term as Trauma Program Chief and was recognized for his successful leadership of the Program. Laurie Klotz was elected as an Honorary Member of the American Urological Association and completed a ten-year term as Head of the Division of Urology and a twelve-year term as leader of the cancer program's genitourinary site group. Bernie Goldman and Sherif Hanna were recognized for their 30 years of service to Sunnybrook. Glen Taylor, Head of the Division of General Surgery from 1980-1986, passed away.

CONCLUSION

Sunnybrook surgeons value the opportunity to contribute in a positive way to the fulfillment of the institutional vision to invent the future of healthcare when "it matters most," seeking to lead by discovery, innovation, teaching and learning. The Department remains thankful for the opportunity to play leadership roles 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-Nehemia	Associate Professor
Dr. A. Dueck	Assistant Professor
Dr. S.E. Froles	Professor (Division Head)
Dr. B.S. Goldman	Professor
Dr. D.S. Kucey	Assistant Professor
Dr. R. Maggisano	Associate Professor
Dr. F. Moussa	Lecturer
Dr. G. Papia	Assistant Professor

PUBLICATIONS

Cohen G, Zagorski B, Christakis GT, Joyner CD, Vincent J, Sever J, Harbi S, Feder-Elituv R, Moussa F, Goldman BS, Froles SE: Are stentless valves hemodynamically superior to stented valves? Long-term follow-up of a randomized trial comparing Carpentier-Edwards pericardial valve with the Toronto Stentless Porcine Valve. *The Journal of Thoracic and Cardiovascular Surgery*: April 2010; 139(4): pp 848-859. E-published January 18, 2010.

Fitchett D, Eikelboom J, Froles SE, Mazer D, Singh S, Bittira B, Brister S, Graham JJ, Gupta M, Karkouti K, Lee A, Love M, McArthur R, Peterson M, Verma S, Yau TM: Dual antiplatelet therapy in patients requiring urgent coronary artery bypass grafting surgery: A position statement of the Canadian Cardiovascular Society. *Canadian Journal of Cardiology*: December 2009; 25(12): pp 683-689.

Nesher N, Singh SK, Fawzy HF, Sever JY, Goldman BS, Cohen GN, Laflamme C, Froles SE: Impact of clopidogrel use on mortality and major bleeding in patients undergoing coronary artery bypass surgery. *Interactive CardioVascular and Thoracic Surgery*: May 2010; 10(5): pp 732-736.

Singh N, Moody AR, Gladstone D, Leung G, Radhakrishnan R, Zhan J, Maggisano R: Moderate carotid artery stenosis: MR Imaging-depicted intraplaque hemorrhage predicts risk of cerebrovascular ischemic events in asymptomatic men. *Radiology*: August 2009; 252: pp 502-508.

Singh SK, Desai ND, Chikazawa G, Tsuneyoshi H, Vincent J, Zagorski BM, Pen V, Moussa F, Cohen GN, Christakis GT, Froles SE: The graft imaging to improve patency (GRIIP) clinical trial results. *The Journal of Thoracic and Cardiovascular Surgery*: February 2010; 139(2): pp 294-301. E-published December 16, 2009.

INVITED VISITS

Cohen G: Canadian Society of Cardiac Surgeons, Edmonton, Alberta, Canada, October 2009. Read with the experts: Difficult cases.

Dueck A: Vascular Imaging Toronto (VITO 2010), Toronto, Ontario, Canada, March 2010. (1) Planning AAA interventions, (2) Planning PAD interventions, (3) Role of AAA in screening guidelines, (4) Surveillance of AAAs and PAD, (5) Venous interventions.

Froles SE: American Heart Association, Orlando, Florida, USA, November 2009. Organ injury and protection in cardiac surgery: Novel mechanisms and strategies.

Froles SE: Canadian Cardiovascular Congress, Edmonton, Alberta, Canada, October 2009. Dual antiplatelet therapy and cardiac surgery: The past, present, and future.

Goldman BS: Shaare Tzdek Hospital, Jerusalem, Israel, October 2009. Current issues in the CABG-PCA debate.

Goldman BS: Wolfson Medical Centre, International Board Meeting, Save a Child's Heart, Holon, Israel, October 2009. Triage solutions for heart surgery: Solving the problems of access in a public health care system.

Papia G: Safer Healthcare Now, Checklist Action Series, Canada, April 2010. National broadcast, internet WebEx presentation.

Papia G: Ontario Hospital Association (OHA), Kingston/London/Mississauga/Sudbury/Thunder Bay/Toronto/ Ottawa, Ontario, Canada, March 2010. Surgical safety checklist program - coaching and teaching.

Papia G: Ontario Hospital Association, Toronto, Ontario, Canada, February 2010. Surgical safety checklist - Provincial broadcast web presentation.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

Aortic aneurysm screening in Canada: A resource assessment and implementation strategy. *Wooster DL, Dueck A, Wooster EM, Cox H: Canadian Society for Vascular Surgery, Gore Award.* (\$5,000 2009 - 2010)

Assessment of venous duplex reports with a structured audit tool. *Wooster DL, Dueck A, Wooster EM: Canadian Society for Vascular Surgery, Sigvaris Award.* (\$5,000 2009 - 2010)

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)

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)

Development of a personal practice audit tool to assess health advocacy competence in practice. *Wooster DL, Dueck A, Wooster EM: The Royal College of Physicians and Surgeons of Canada/Associated Medical Services.* (\$25,000 2009 - 2011)

EVAR feasibility of treatment at Sunnybrook Hospital. *Maggisano R, Kucey D: Sunnybrook Foundation.* (\$7,550,000 2007 - 2009)

FREEDOM Trial - Future revascularization evaluation in patients with diabetes mellitus: Optimal management of multivessel disease. *Fuster V, Fremes SE, 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: CANNeCTIN/McMaster University Surgical Associates.* (\$7,500 2009 - 2014)

Podcasting and education in vascular surgery for medical students. *Wooster DL, Dueck A, Hunt K, Wooster EM: Canadian Society for Vascular Surgery, Student Research Award.* (\$3,000 2010 - 2011)

Prospective coronary artery bypass surgery study to evaluate clopidogrel in the clinical setting (PRACTICE). *Lamy A, Fremes SE, Teoh K, Tu J, Verma S, Whitlock R: McMaster University/Astra Zeneca.* (\$13,000 2009 - 2011)

Surgical and pharmacological novel interventions to improve overall results of saphenous vein graft patency in CABG (SUPERIOR). *Fremes SE, Novick R, Chu M, Singh SK: Canadian Institutes of Health Research/CANNeCTIN.* (\$100,000 2009 - 2011)

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)

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)

HONOURS RECEIVED

Dueck A: 2009 Sigvaris President's Award for Best Venous Presentation (with \$5,000) for 'Assessment of Venous Duplex Reports with a Structured Audit Tool' (Wooster D, Wooster E). September 2009.

Dueck A: Canadian Society for Vascular Surgery, Gore Award (with \$5,000) for 'Aortic Aneurysm Screening in Canada: A Resource Assessment and Implementation Strategy' (Wooster DL, Wooster EM, Cox H). September 2009.

Fremes SE: Goldman Chair. March 2010.

Goldman BS: The Order of Canada. December 2009.

Goldman BS: The Sunnybrook Rose Award for contributions to the hospital, foundation and medical community. July 2009.

Papia G: Patient Safety Scholar (\$20K), Sunnybrook Health Sciences Centre, University of Toronto. September 2009.

DIVISION OF GENERAL SURGERY

Dr. J.F. Boileau	Assistant Professor
Dr. E.D. Brenneman	Associate Professor
Dr. P.T.Y. Chu	Associate Professor
Dr. N. Coburn	Assistant Professor
Dr. D.S. Fenech	Assistant Professor
Dr. S.S. Hanna	Associate Professor
Dr. C.M.B. Holloway	Associate Professor
Dr. C.H.L. Law	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

Allard CB, Rhind SH, Baker AJ, Shek PN, Tien H, Tremblay L, Scarpelini S, Morrison LJ, Pinto R, Rizoli SB: Abnormal coagulation tests are associated with progression of traumatic intracranial hemorrhage. *Journal of Trauma*: November 2009; 67(5): pp 959-967.

Baker AJ, Rhind SB, Morrison LJ, Black S, Crnko NT, Shek PN, Rizoli SB: Resuscitation with hypertonic saline - Dextran reduces serum biomarker levels and correlates with outcome in severe traumatic brain injury patients. *Journal of Neurotrauma*: August 2009; 26(8): pp 1227-1240.

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Boffard K, Choong PIT, Kluger Y, Riou B, Rizoli SB, Rossaint R, Warren B: The treatment of bleeding is to stop bleeding! Treatment of trauma-related hemorrhage. *Transfusion*: December 2009; 49(Suppl 5): pp 240S-247S.

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Coburn NG, Mahar AL, Qureshi AP, Ottensmeyer CA, Chetty R, Pollett A, Wright FW: Improving the quality of processing gastric cancer specimens: The pathologist's perspective. *Journal of Surgical Oncology*: March 2010; 101(3): pp 195-199.

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Davidge KM, Eskicioglu C, Lipa J, Ferguson P, Swallow CJ, Wright FC: Qualitative assessment of patient experiences following sacrectomy. *Journal of Surgical Oncology*: May 2010; 101(6): pp 447-450.

Dellinger RP, Tomayko JF, Angus DC, Opal S, Cupo MA, McDermott S, Ducher A, Calandra T, Cohen J; Lipid Infusion and Patient Outcomes in Sepsis (LIPOS) Investigators: Efficacy and safety of a phospholipid emulsion (GR270773) in gram-negative severe sepsis: Results of a phase II multi-center, randomized, placebo-controlled, dose-finding clinical trial. *Critical Care Medicine*: November 2009; 37(11): pp 2929-2938.

Gagliardi AR, Wright FC: Exploratory evaluation of surgical skills mentorship program design and outcomes. *Journal of Continuing Education in the Health Professions*: Winter 2010; 30(1): pp 51-56.

Gagliardi AR, Wright FC, Victor JC, Brouwers MC, Silver IL: Self-directed learning needs, patterns and outcomes among general surgeons. *Journal of Continuing Education in the Health Professions*: Fall 2009; 29(4): pp 269-275.

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Mahar AL, Qureshi AP, Ottensmeyer A, Chetty R, Pollett A, Coburn NG, Wright FC: Improving the quality of processing gastric cancer specimens: The pathologist's perspective. *Journal of Surgical Oncology*: March 2010; 101(3): pp 195-199.

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Omeroglu G, Holloway CMB, Spayne J, Nofech-Mozes S: Histiocytoid variant of lobular carcinoma: A triple negative case. *The Breast Journal*: January 2010; 16(1): pp 84-86. E-published October 13, 2009.

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Qureshi A, Ottensmeyer CA, Mahar A, Chetty R, Pollett A, Wright FC, Coburn NG: Quality indicators for gastric cancer surgery- A survey of practicing gastrointestinal pathologists in Ontario. *Annals of Surgical Oncology*: July 2009; 16(7): pp 1883-1889. E-published May 7, 2009.

Rezende-Neto JB, Andrade MV, Cunha-Neto JR, Ribeiro DD, Lisboa TA, Camargo ER, Martins P, Rizoli SB: Permissive hypotension and desmopressin enhance clot formation. *Journal of Trauma*: January 2010; 68(1): pp 45-50.

Rezende-Neto JB, Hoffmann J, Al Mahroos M, Tien H, Hsee L, Spencer Neto F, Rizoli SB: Occult pneumomediastinum in blunt chest trauma: Clinical significance. *Injury*: January 2010; 41(1): pp 40-43.

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Scarpelini S, Rhind SG, Tien H, Peng H, Huang H, Nascimento B, Pinto R, Speers V, Reis M, Rizoli SB: Normal range values for thromboelastography (TEG) in healthy adult volunteers. *Brazilian Journal of Medical and Biological Research*: December 2009; 42(12): pp 1210-1217. E-published October 30, 2009.

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Talbot M, Tien HC: The use of recombinant VIIa in trauma patients. *The Journal of the American Academy of Orthopedics*: August 2009; 17(8): pp 477-481.

Tien HC: Causes of Death of Active Duty Personnel in the Canadian Forces. Lambert Academic Publishing, Koln, Germany, 2009.

Tien HC, Acharya SV, Pannell D: The cost of providing healthcare to soldiers in war. *The Journal of Trauma*: August 2009; 67(2): pp 376-380; discussion p 380.

Tien HC, Acharya SV, Redelmeier DA: Preventing deaths in the Canadian military. *American Journal of Preventive Medicine*: March 2010; 38(3): pp 331-339.

Tien HC, Jung V, Rizoli SB, Acharya SV, MacDonald JC: An evaluation of tactical combat casualty care interventions in a combat environment. *Journal of Special Operations Medicine*: Winter 2009; 9(1): pp 65-68.

Tien HC, Scarpellini S, Callum J, Tremblay L, Rizoli S: Assessing response to changing plasma/red cell ratios in a bleeding trauma patient. *The American Journal of Emergency Medicine*: January 2010; 28(1): pp 120.e1-5.

Wright FC, Chakraborty A, Helyer L, Moravan V, Selby D: Predictors of survival for patients with non-curative stage IV cancer and malignant bowel obstruction. *Journal of Surgical Oncology*: April 2010; 101(5): pp 425-429.

Wright FC, Lookhong N, Urbach D, Davis D, McLeod RS, Gagliardi AR: Multidisciplinary cancer conferences - Identifying opportunities to promote implementation. *Annals of Surgical Oncology*: October 2009; 16(10): pp 2731-2737. E-published August 7, 2009.

Wright FC, Spithoff K, Easson A, Murray C, Toye J, McCreedy D, Petrella T, and the Melanoma Disease Site Group of Cancer Care Ontario's Program in Evidence-Based Care: EBS#8-2: Primary excision margins and sentinel lymph node biopsy in clinically node-negative cutaneous melanoma of the trunk or extremities: Guideline Recommendations. Cancer Care Ontario website: May 2010.

Wright FC, Zubovits J, Gardner S, Fitzgerald B, Clemons M, Quan ML, Causer P: Optimal assessment of residual disease after neo-adjuvant therapy for locally advanced breast cancer - clinical examination, mammography or magnetic resonance imaging? *Journal of Surgical Oncology*: June 2010; 101(7): pp 604-610.

Yang S, Law CHL: Gallstone disease in the elderly. *Geriatrics and Aging*: July 2009; 12(6): pp 282-288.

INVITED VISITS

Boileau JF: Locally Advanced Breast Cancer (LABC 2010): The National Consensus 2010, Cambridge, Ontario, Canada, April 2010. Neoadjuvant systemic therapy in breast cancer: A surgeon's revolution.

Brenneman FD: Queen Elizabeth II (QEII) Health Sciences Centre, Trauma Rounds, Halifax, Nova Scotia, Canada, May 2010. Acute care surgery: Same knife - different approach.

Brenneman FD: Trauma Association of Canada, Annual Scientific Meeting, Halifax, Nova Scotia, Canada, May 2010. (1) Irrespective of mechanism or time of day, most severe trauma occurs close to home, (2) Concepts in damage control surgery, (3) Moderator of Session/Debates.

Brenneman FD: Credit Valley Hospital, General Surgery Rounds, Mississauga, Ontario, Canada, April 2010. Acute care surgery.

Brenneman FD: Canadian Association of General Surgeons, Canadian Surgery Forum Meeting, Victoria, British Columbia, Canada, September 2009. (1) Debate: Acute surgery services can improve patient care and provide a promising clinical and educational model for general surgery – CON, (2) Case Studies - 24: A general surgical thriller in real time, (3) Hernia - current practices and future trends, (4) Acute Surgery and Critical Care Committee Symposium: Improving ACCESS to acute surgical care, (5) Abdominal Wall Hernia Repair Symposium: Techniques to facilitate primary closure.

Coburn N: Cancer Care Ontario, Surgical Oncology Program Knowledge Transfer and Planning Day 2010, Toronto, Ontario, Canada, May 2010. Gastric research and international conference.

Coburn N: Chirurgia Oncologica Minivasiva, Rome, Italy, January 2010. Gastrectomia laparoscopica: Si puo, ma dovremmo.

Coburn N: Endocrine Tumour Society, Toronto, Ontario, Canada, October 2009. Liver metastases in neuroendocrine tumours.

Coburn N: Canadian Association of General Surgeons/Thoracic, Victoria, British Columbia, Canada, September 2009. Management of gastroesophageal junction tumours.

Gagliardi AR: Cancer Care Ontario Research Day, Toronto, Ontario, Canada, April 2010. Development of quality indicators for cancer systemic therapy.

Hanna SS: Canadian Neuroendocrine Tumour Society, Current Surgical Management of Neuroendocrine Tumours. Toronto, Ontario, Canada, October 2009. Session Chair.

Hanna SS: Soldiers' Memorial Hospital, Grand Rounds, Orillia, Ontario, Canada, September 2009. Resection of colorectal mets.

Holloway CMB: Ontario Institute for Cancer Research/Canadian Breast Cancer Foundation, Toronto, Ontario, Canada, October 2009. Quality initiatives in breast cancer screening.

Law CHL: British Columbia Cancer Agency, Vancouver, British Columbia, Canada, June 2010. (1) Go team! Foundations for multidisciplinary clinics, (2) Setting up a multidisciplinary clinic: Challenges and victories.

Law CHL: Canadian Oncology Services, Webinar, Ottawa, Ontario, Canada, June 2010. Treatment of the non-functional neuroendocrine tumour: A case-based presentation.

Law CHL: University of Manitoba, Winnipeg, Manitoba, Canada, June 2010. Visiting Professor: (1) Gastroenterohepatic neuroendocrine tumours: Conundrums and solutions, (2) Multidisciplinary strategies in gastrointestinal stromal tumours: A case-based approach.

Law CHL: Colorectal Cancer Association of Canada, Annual Cancer Coach Training Conference, Toronto, Ontario, Canada, May 2010. Assisting in the journey of surgery for metastatic colorectal cancer: Coaching the patient coaches.

Law CHL: North-West Toronto Oncology Group, Toronto, ON, May 2010. A multidisciplinary approach to neuroendocrine tumours (NETs): Pathology, medical oncology and surgical oncology.

Law CHL: University of Regina, Oncology Group, Regina, Saskatchewan, Canada, May 2010. Current multidisciplinary strategies in the treatment of gastrointestinal stromal tumour.

Law CHL: Colorectal Cancer Association of Canada, Montreal, Quebec, Canada, April 2010. (1) A consensus approach to peritoneal carcinomatosis from colorectal cancer, (2) Metastatic colorectal disease: Consensus management and current issues.

Law CHL: University of Western Ontario, Gastrointestinal Oncology Disease Site Group, London, Ontario, Canada, April 2010. Multidisciplinary care for colorectal cancer: The Sunnybrook Odette Cancer Centre approach.

Law CHL: Colorectal Cancer Association of Canada, Toronto, Ontario, Canada, March 2010. Surgery for colorectal liver metastases: An ongoing journey.

Law CHL: European Neuroendocrine Tumour Society, Berlin, Germany, March 2010. NET alliance: An update to research and clinical guideline activity.

Law CHL: Anesthesia and Peri-Operative Medicine Annual Conference, Mont Tremblant, Quebec, Canada, February 2010. Surgical issues in peri-operative management: A case-based panel discussion.

Law CHL: Cancer Care Ontario, Neuroendocrine Workshop, Toronto, Ontario, Canada, February 2010. The NETs clinic at the Odette Cancer Centre: Multidisciplinary referral centre.

Law CHL: Credit Valley Cancer Centre, Regional Oncology Rounds, Mississauga, Ontario, Canada, February 2010. Gastric Cancer: What is today's surgical perspective?

Law CHL: NET Alliance, Montreal, Quebec, Canada, December 2009. NET Alliance: A new national entity to promote research and guidelines development for neuroendocrine tumours in Canada.

Law CHL: McMaster University, Gastrointestinal Cancer Symposium, Hamilton, Ontario, Canada, November 2009. Current and emerging approaches in the management of liver metastases in colorectal cancer – A multidisciplinary approach.

Law CHL: Sanofi Aventis, Representative Training Session, Toronto, Ontario, Canada, November 2009. Multidisciplinary management of hepatic colorectal liver mets: A web presentation.

Law CHL: Canadian Surgery Forum, Satellite Symposium, Victoria, British Columbia, Canada, October 2009. Surgical management of colorectal liver mets: Emerging multidisciplinary approach.

Law CHL: Community Oncologists of Metropolitan Toronto (COMET), Regional Meeting, Toronto, Ontario, Canada, October 2009. Surgical advances in the treatment of neuroendocrine metastases: A multidisciplinary approach.

Law CHL: Canadian Surgery Forum, Satellite Symposium, Victoria, British Columbia, Canada, September 2009. Advances and a modern consensus in the surgical management of GIST.

Rizoli S: Brazilian Society for the Integral Care of Trauma, 3rd Trauma Congress of the Paraiba Valley, Sao Jose dos Campos, Brazil, May 2010. (A) Case Presentations: (1) Trauma, (2) Fluid use in trauma, (3) Future perspectives for the management of coagulopathy in trauma, (4) Trauma systems in Canada, (B) Lecture: When to indicate embolization for pelvic trauma.

Rizoli S: Brazilian Society for the Integral Care of Trauma, 2010 Minas Gerais Symposium, Belo Horizonte, Brazil, May 2010. (1) The use of pelvic embolization in trauma, (2) Lecture: Understanding coagulopathy in trauma.

Rizoli S: Faculdades de Ciencias Medicas de Minas Gerais - Hospital Joao XXIII, Belo Horizonte, Brazil, May 2010. Visiting Professorship.

Rizoli S: State University of Campinas (UNICAMP), V Symposium in Diseases of the Digestive Tract and Trauma - Intergastro and Trauma 2010, Campinas, Brazil, May 2010. Lecturer: Coagulopathy in trauma.

Rizoli S: Trauma Association of Canada, Annual Scientific Meeting, Halifax, Nova Scotia, Canada, May 2010. (1) Coagulopathic issues in trauma care, (2) Speaker: Early traumatic coagulopathy is associated with coagulation factor deficiency and may not be detected by prothrombin time measurement.

Rizoli S: Canadian Blood Services/Ontario Regional Blood Coordinating Network/Ontario Transfusion Coordinators (CBS/ORBCoN/ONTracC), 2010 Spring Symposium, Toronto, Ontario, Canada, April 2010. Life in the ER - massive transfusion in a civilian trauma centre. Lecturer.

Rizoli S: Danish Society of Anesthesiology and Intensive Care Medicine, Intensive Care Symposium, Middlefart, Denmark, January 2010. (1) ICU trauma care, (2) Lecture: Other issues in ICU trauma care.

Rizoli S: U.S. Army, Institute of Surgical Research, Prehospital Fluid Conference, Dallas, Texas, USA, January 2010. Lecture: Plasmalyte.

Rizoli S: Ontario Regional Blood Coordinating Network, Trauma Continuum Conference 2009, Toronto, Ontario, Canada, November 2009. Moderator of Pro/Con Debate: Does early component blood transfusion save lives in trauma?

Rizoli S: University of Sao Paulo (USP), Encontro Paulista de Cirurgia do Figado, Vias Biliares e Pancreas, Ribeirao Preto, Brazil, November 2009. Physiopathology of trauma associated coagulopathy. Lecturer.

Rizoli S: Astellas Pharma Canada, Critical Care Canada Forum, Resident's Day 2009, Toronto, Ontario, Canada, October 2009. Abdominal compartment syndrome and damage control surgery. Case-based discussion/Lecturer.

Rizoli S: Canadian Surgery Forum, Vancouver, British Columbia, Canada, September 2009. Committee on Trauma Resident Paper Competition. Chair.

Rizoli S: University of British Columbia/Vancouver General Hospital, General Surgery Grand Rounds, Vancouver, British Columbia, Canada, September 2009. Visiting Professor/Lectured on: Understanding trauma coagulopathy. Implications for management of massive bleeding.

Rizoli S: Congress of the Intensive Care of the Rio de Janeiro State, (SOTIERJ) 2009, Rio de Janeiro, Brazil, August 2009. (1) Coagulopathy of the poli trauma, (2) The rational use of hemo components in the poli traumatized patient. Lecturer.

Rizoli S: University of Sao Paulo, Ribeirao Preto, Brazil, August 2009. Visiting Professor.

Smith A J: Intestinal Health Institute, Ambulatory Endoscopy Clinic Day, Toronto, Ontario, Canada, May 2010. Colon cancer care in Ontario: Through the provincial and the individual lens.

Smith A J: Cancer Care Ontario, North Simcoe and Muskoka LHIN, Barrie, Ontario, Canada, May 2010. Colorectal cancer disease pathway management.

Smith A J: Cancer Care Ontario, Champlain LHIN, Ottawa, Ontario, Canada, April 2010. Colorectal cancer disease pathway management.

Smith A J: Cancer Care Ontario, Central West and Mississauga Halton LHIN, Mississauga, Ontario, Canada, March 2010. Colorectal cancer disease pathway management.

Smith A J: Cancer Care Ontario, North East LHIN (via teleconference from Toronto, Ontario, Canada, February 2010. Colorectal cancer disease pathway management.

Smith A J: Thunder Bay Regional Health, Thunder Bay, Ontario, Canada, February 2010. Colorectal communities of practice.

Smith A J: Queen Mary Hospital (as part of James IV Travelling Fellow), Hong Kong, December 2009. Colorectal cancer management in Ontario, Canada: Challenges and progress.

Smith A J: Georgian Bay Gut Club, Barrie, Ontario, Canada, November 2009. Multidisciplinary round table forum for colorectal cancer.

Smith A J: Markham-Stouffville Hospital Group, Markham, Ontario, Canada, July 2009. Quality improvement in colorectal cancer.

Tien HC: Trauma Association of Canada, Halifax, Nova Scotia, Canada, May 2010. (1) Radiation in trauma, (2) Trauma care in hostile environments.

Tien HC: Royal Military College, Kingston, Ontario, Canada, February 2010. Wound ballistics.

Tien HC: Canadian Surgery Forum, Victoria, British Columbia, Canada, September 2009. CAGS postgraduate course: Catastrophic surgery for victims of disaster, terrorism or war.

Tremblay L: Virginia Commonwealth University, Annual State Trauma Symposium, Richmond, Virginia, USA, April 2010. Trauma evaluation: Overuse of CT?

Tremblay L: American Thoracic Society, Miami, Florida, USA, February 2010. Attendee: (1) Meet the Professor Session on Surgical Emergencies in the ICU, (2) State of the Art Review of Abdominal Compartment Syndrome and Surgical Emergencies in the ICU.

Tremblay L: Eastern Association for the Surgery of Trauma, Phoenix, Arizona, USA, January 2010. Guest Speaker for Plenary Session on Health Care Reform: A single government payer for trauma and critical care.

Wright F: Canadian Society of Surgical Oncology, Montreal, Quebec, Canada, April 2010. Adoption of surgical innovations - Factors influencing use of sentinel lymph node biopsy for breast cancer in Ontario.

Wright F: Southlake Regional Cancer Centre, Multidisciplinary Cancer Conferences, Newmarket, Ontario, Canada, April 2010. Where are we and where are we going?

Wright F: Canadian Melanoma Conference, Lake Louise, Alberta, Canada, February 2010. Metastatic melanoma - If and when to operate.

Wright F: Canadian Association of General Practitioners in Oncology, Toronto, Ontario, Canada, October 2009. Surgical management of melanoma.

Wright F: Ontario Association of Pathologists, Annual Meeting, Collingwood, Ontario, Canada, October 2009. Sentinel lymph node biopsy for breast cancer.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

A phase I/II trial of 111in-DTPA-trastuzumab fab injection for radioimmunoguided surgery in women with HER2/neu-positive breast cancer. *Holloway CMB, Reilly R, Kahn K, Caldwell C, Ehrlich L, Pritchard K, Quan ML, Wright F: Ontario Cancer Research Network. (\$312,068 2007 - 2009)*

A SMART adverse events tracking system for physicians. *Coburn NG, Smith AJ, Taggar R, Etchells E, Seevaratnam R, Cardoso R: Provincial Academic Medicine Steering Committee. (\$99,760 2010 - 2011)*

Career Scientist Award. *Coburn NG: Ministry of Health and Long Term Care. (\$420,000 2008 - 2013)*

Clinical research consortium to improve resuscitation outcomes. *Slutsky A, Tremblay L: National Institutes of Health, Consortium Grant. (\$2,454,201 2004 - 2009)*

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)*

Damage control resuscitation: A randomized controlled trial. *Tien H, Callum J, Rizoli SB: Canadian Forces Health Services. (\$350,000 2009 - 2011)*

Does an acute care emergency surgical service (ACCESS) improve emergency room congestion, patient flow, outcomes and satisfaction? *Tien H, Smith A, Brenneman F, Wright F, Gagliardi A, Hawkins P, Cheng I: Ministry of Health and Long-Term Care (Ontario), 2008/2009 Alternative Funding Plan, Phase III Innovation Fund Project Fund.* (\$100,000 2009 - 2010)

Does an acute care emergency surgical service (ACCESS) improve emergency room congestion, patient flow, outcomes and satisfaction? *Tien H, Brenneman F, Smith A: Centre for Health Services Sciences (CHSS), Safety Scholar Program.* (\$20,000 2009 - 2010)

Does surveillance mammography after treatment of primary breast cancer reduce the odds of death from breast cancer? *Paszat L, Sutradhar R, Holloway C, Jong R, Rakovitch E: Canadian Institutes of Health Research.* (\$136,359 2009 - 2011)

Evaluation of a new method for 3-D histopathology. *Yaffe M, Holloway C, Clarke G, Zubovits Z: Canadian Breast Cancer Research Alliance.* (\$302,503 2009 - 2012)

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)

Factors influencing lymph node staging practice in colorectal cancer. *Gagliardi A, Wright FC, Smith AJS: University of Toronto, Faculty of Medicine, Dean's Fund.* (\$9,797 2006 - 2009)

General surgery quality improvement initiative. *Coburn NG, Smith AJ, Hanna S, Taggar R: Sunnybrook Health Sciences Centre.* (\$20,000 2009 - 2010)

Hepatic metastases from colorectal cancer in the elderly: Optimal treatment strategies. *Law CHL, Yang S: Canadian Institutes of Health Research - Frederick Banting and Charles Best Canada Graduate Scholarship - Masters Award* (\$17,786 2009 - 2010)

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)

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)

Improving interfacility transfers of trauma patients in Southern Ontario using weekly telephone conferencing. *Nathens A, Tien H, Tremblay L, Rizoli S, Brenneman V: Academic Health Sciences Centre (AHSC), AFP Innovation Fund.* (\$100,000 2010 - 2011)

K-ras and B-raf status in paired metastatic colorectal carcinoma samples. *Ko YJ, Law CHL, Rowsell C: Amgen Canada Inc.* (\$135,860 2009 - 2010)

Lumpectomy versus mastectomy or contralateral prophylactic mastectomy: An exploratory study to understand why women with early breast cancer are now choosing more extensive surgery? *Covelli A, Baxter N, Wright FC, Fitch F: Canadian Breast Cancer Foundation.* (\$71,500 2010 - 2011)

Optimal treatment of colorectal cancer metastases in the well but elderly patients. *Law CHL, Coburn NG: Colon Cancer Canada.* (\$50,000 2009 - 2010)

Population-based analysis of neuroendocrine tumours: Epidemiology, processes of care and outcomes in Ontario. *Singh S, Law CHL: University of Toronto, Dean's Fund.* (\$10,000 2009 - 2014)

Population-based assessment of lymphadenectomy during radical cystectomy for bladder cancer in Ontario. *Sharir S, Law CHL: University of Toronto, Faculty of Medicine, Dean's Fund.* (\$10,000 2006 - 2011)

Postoperative pneumonia. *Redelmeier D, Tien H: Canadian Forces.* (\$40,000 2009 - 2010)

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)

Sentinel node biopsy following neoadjuvant chemotherapy in biopsy proven node positive breast cancer: The SN FNAC Trial. *Boileau JF, Basik M, Gaboury L, Martin G, Meterissian S, Patocskai E, Poirier B, Sideris L, Robidoux A: Quebec Breast Cancer Foundation (QBCF) and the Cancer Research Society (CRS).* (\$424,500 2008 - 2011)

Should all young women (< 35) with breast cancer be treated with mastectomy? *Quan ML, Baxter N, Wright FC, Rakovitch E, Hanna W, Saad R, Paszat L, Sawka C: Canadian Breast Cancer Foundation.* (\$287,575 2008 - 2010)

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)

Treatment of metastatic colorectal cancer in the elderly. *Law CHL, Yang S: Colon Cancer Canada.* (\$60,000 2009 - 2011)

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

Coburn N: GIRT Levy/Thomson Award for Outstanding Poster Presentation 'Important aspects of the Esophagogastroduodenoscopy (EGD) Report for Preoperative Management of Gastric Cancer.' February 2010.

Law CHL: Peters Boyd Academy Clinical Teaching Award. May 2010.

Rizoli S: Best Paper Award at the 2009 American Congress of Rehabilitation Medicine for "Women's Health Outcomes After Traumatic Brain Injury." October 2009.

DIVISION OF NEUROSURGERY

Dr. L. da Costa	Assistant Professor
Dr. M. Fazl	Assistant Professor
Dr. D.A. Houlden	Assistant Professor
Dr. T. Mainprize	Assistant Professor
Dr. F. Pirouzmand	Assistant Professor
Dr. M.L. Schwartz	Professor (Division Head)

PUBLICATIONS

Dehdashti AR, Thines L, Willinsky RA, Terbrugge KG, Schwartz ML, Wallace MC: Multidisciplinary care of occipital arteriovenous malformations: Effect on nonhemorrhagic headache, vision, and outcome in a series of 135 patients. *Journal of Neurosurgery*: E-published ahead of print January 8, 2010.

Houlden DA, Taylor AB, Feinstein A, Midha R, Bethune AJ, Stewart CP, Schwartz ML: Early somatosensory evoked potential grades in comatose traumatic brain injury patients predict cognitive and functional outcome. *Critical Care Medicine*: January 2010; 38(1): pp 167-174.

Kalia LV, Lee L, Kalia SK, Pirouzmand F, Rapoport MJ, Aviv RI, Mozeg D, Symons SP: Thoracic myelopathy from coincident fluorosis and epidural lipomatosis. *Canadian Journal of Neurological Science*: March 2010; 37(2): pp 276-278.

Miropolsky V, da Costa LB, Marotta TR, Spears J: Endovascular therapy of hypoglossal canal AVFs representing orbital symptoms. *The Canadian Journal of Neurological Sciences*: November 2009; 36(6): pp 745-750.

Pirouzmand F: The epidemiological trends of spine and spinal cord injuries in the largest Canadian adult trauma center from 1986 to 2006. *Journal of Neurosurgery. Spine*: February 2010; 12(2): pp 131-140.

Ribeiro MQ, Howard P, Willinsky RA, ter Brugge KG, da Costa L: Subarachnoid hemorrhage in perivascular space mimicking brainstem hematoma. *The Canadian Journal of Neurological Sciences*: March 2010; 37(2): pp 286-288.

Sahgal A, Ma L, Chang E, Shiu A, Larson DA, Laperriere N, Yin FF, Tsao M, Menard C, Basran PS, Létourneau D, Heydarian M, Beachey D, Shukla V, Cusimano M, Hodaie M, Zadeh G, Bernstein M, Schwartz M: Advances in technology for intracranial stereotactic radiosurgery. *Technology in Cancer Research and Treatment*: August 2009; 8(4): pp 271-280.

Spence J, Krings T, ter Brugge KG, da Costa LB, Agid R: Percutaneous sclerotherapy for facial venous malformations: Subjective clinical and objective MR imaging follow-up results. *American Journal of Neuroradiology*: May 2010; 31(5): pp 955-960. E-published ahead of print December 31, 2009.

Thines L, Agid R, Dehdashti AR, da Costa L, Wallace MC, ter Brugge KG, Tymianski M: Assessment of extracranial-intracranial bypass patency with 64-slice multi-detector computerized tomography angiography. *Neuroradiology*: August 2009; 51(8): pp 505-515. E-published March 24, 2009.

INVITED VISITS

da Costa L: Trauma Association of Canada, Halifax, Nova Scotia, Canada, May 2010. Surgical management of intracranial hypertension.

Schwartz M: World Federation of Neurosurgical Societies, Boston, Massachusetts, USA, September 2009. Radiosurgery for AVMs: Predicting outcome.

Schwartz M: World Federation of Interventional and Therapeutic Neuroradiology, Montreal, Quebec, Canada, July 2009. Is embolization counterproductive before radiosurgery for AVMs?

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

Molecular targetting of the RHO-GTPase pathway in human astrocytomas. *Rutka J, Hynynen K, Mainprize T: Canadian Institutes of Health Research.* (\$790,000 2010 - 2015)

Symptomatic carotid stenosis revascularization - what's the hold up? *da Costa L: Canadian Stroke Network.* (\$7,000 2010)

DIVISION OF ORTHOPAEDIC SURGERY

Dr. M.K. Akens	Lecturer	Dr. P.H. Marks	Associate Professor
Dr. T.S. Axelrod	Professor	Dr. J.J. Murnaghan	Associate Professor
Dr. H. Cameron	Associate Professor	Dr. D. Nam	Assistant Professor
Dr. J.C. Cameron	Assistant Professor	Dr. M. Nousiainen	Assistant Professor
Dr. G. Fernie	Professor	Dr. R.R. Richards	Professor
Dr. J.A. Finkelstein	Associate Professor	Dr. J. Schatzker	Professor
Dr. M.H. Ford	Assistant Professor	Dr. D.G.S. Stephen	Associate Professor
Dr. J.D. Gollish	Assistant Professor	Dr. M. Tile	Professor
Dr. H. Hall	Professor	Dr. V. Wadey	Assistant Professor
Dr. R.M. Holtby	Assistant Professor	Dr. F. Webster	Assistant Professor
Dr. H.J. Kreder	Professor (Division Head)	Dr. I. Weiler	Assistant Professor
Dr. B.E. Maki	Professor	Dr. C. Whyne	Associate Professor
Dr. B.W. Malcolm	Assistant Professor	Dr. C.S. Wright	Assistant Professor
		Dr. A.J.M. Yee	Associate Professor

PUBLICATIONS

Akens MK, Lilje DL: Photodynamic therapy. In: *Translational Multimodality Optical Imaging* (Azar FS, Intes X, eds.) Artech House, Norwood, Massachusetts, 2009.

Alshaer H, Fernie GR, Sejdic E, Bradley TD: Adaptive segmentation and normalization of breathing acoustic data of subjects with obstructive sleep apnea. *Proceedings of the IEEE Toronto International Conference - Science and Technology for Humanity (TIC-STH):* 2009: pp 279-284.

Bederman SS, Mahomed NN, Kreder HJ, McIsaac WJ, Coyte PC, Wright JG: In the eye of the beholder: Preferences of patients, family physicians and surgeons for lumbar spine surgery. *Spine:* January 2010: 35(1): pp 108-15.

Bederman S, Yee A, Ford M, Finkelstein J, Weller I, Kreder H: The who, what and when of surgery for the degenerative lumbar spine. A population-based study of surgeon factors, surgical procedures, recent trends and reoperation rates. *Canadian Journal of Surgery:* August 2009: 52(4): pp 283-290.

Blankstein M, Byrick RJ, Nakane M, Bang A, Freedman J, Richards RR, Kajikawa O, Zdero R, Bell D, Schemitsch EH: Amplified inflammatory response to sequential hemorrhage, resuscitation, and pulmonary fat embolism: An animal study. *The Journal of Bone and Joint Surgery (American Volume):* January 2010: 92(1): pp 149-161.

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, Gorski S, Holliday PJ, Hufton G, Levchenko AL, Marquez-Chin C, McGilton K, Momen K, Tsang M, Fernie GR: Advanced technologies to curb healthcare-associated infections. *Healthcare Papers:* July 2009: 9(3): pp 51-55; discussion pp 60-62.

Douplik A, Chen D, Akens MK, Cirocco M, Bassett N, Marcon NE, Fengler J, Wilson BC: Assessment of photobleaching during endoscopic autofluorescence imaging of the lower GI tract. *Lasers in Surgery and Medicine:* March 2010: 42(3): pp 224-231.

Dunbar MJ, Howard A, Bogoch ER, Parvizi J, Kreder HJ: Orthopaedics in 2020: Predictors of musculoskeletal need. *The Journal of Bone and Joint Surgery (American Volume):* September 2009: 91(9): pp 2276-2286.

Finkelstein JA, Razmjou H, Schwartz CE: Response shift and outcome assessment in orthopaedic surgery: Is there a difference between complete and partial treatment? *Journal of Clinical Epidemiology:* November 2009: 62(11): pp 1189-1190. E-published August 13, 2009.

Hall H, McIntosh G, Boyle C: Effectiveness of a low back pain classification system. *The Spine Journal:* August 2009: 9(8): pp 648-657. E-published June 4, 2009.

Harris K, Chow E, Zhang L, Velikova G, Bezjak A, Wu J, Barton M, Sezer O, Eek R, Shafiq J, Yee A, Clemons M, Brundage M, Hoskin P, van der Linden Y, Johnson CD, Bottomley A, on behalf of the EORTC Quality of Life Group: Patients' and health care professionals' evaluation of health-related quality of life issues in bone metastases. *European Journal of Cardiovascular Prevention and Rehabilitation:* September 2009: 45(14): pp 2510-2518.

Hrabchak C, Rouleau J, Moss I, Woodhouse K, Akens M, Bellingham C, Keeley F, Dennis M, Yee A: Assessment of biocompatibility and initial evaluation of genipin cross-linked elastin-like polypeptides in treatment of an osteochondral knee defect in rabbits. *Acta Biomaterialia:* June 2010: 6(6): pp 2108-2115. E-published December 22, 2009.

Hurtig MB, Whiteside R, Marks P: The influence of microfracture hole spacing and depth on cartilage repair in chronic chondral defects: Preliminary results. In: ICRS Electronic Poster (Editorial Executive Office, ed.) Cartilage Executive Office GmbH, Wetzikon, Switzerland, 2010r?

Issack PS, Nousiainen M, Beksac B, Helfet DL, Sculco TP, Buly RL: Acetabular component revision in total hip arthroplasty: Part 1. Cementless shells. *American Journal of Orthopedics*: October 2009: 38(10): pp 509-514.

Issack PS, Nousiainen M, Beksac B, Helfet DL, Sculco TP, Buly RL: Acetabular component revision in total hip arthroplasty: Part 2. Management of major bone loss and pelvic discontinuity. *American Journal of Orthopedics*: November 2009: 38(11): pp 550-556.

Jenkinson R, Maathuis M, Kreder HJ, Stephen DJG: Chapter 56: Acetabular fractures: Does delay to surgery influence outcome? In: *Evidence Based Orthopaedics: The Best Answers to Clinical Questions*: (Wright JG, ed.) Elsevier, Philadelphia, 2009.

Karanicolas PJ, Bhandari M, Kreder HJ, Moroni A, Richardson M, Walter SD, Norman GR, Guyatt GH: 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 of Outcomes Assessment in Surgical Trials (COAST) Musculoskeletal Group (with Kreder H): 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.e1. E-published September 7, 2008.

King EC, McKay SM, Lee TA, Scovil CY, Peters AL, Maki BE: Gaze behavior of older adults in responding to unexpected loss of balance while walking in an unfamiliar environment: A pilot study. *Journal of Optometry*: July-September 2009: 2(3): pp 119-126.

Klein S, Whyne CM, Rush R, Ginsberg HJ: CT-based patient-specific simulation software for pedicle screw insertion. *Journal of Spinal Disorders and Techniques*: October 2009: 22(7): pp 502-506.

Knaut LA, Moser ADL, De Andrade Melo S, Richards RR: Translation and cultural adaptation to the Portuguese language of the American Shoulder and Elbow Surgeons Standardized assessment form (ASES) for evaluation of shoulder function. *Revista Brasileira de Reumatologia*: May-April 2010: 50(2): pp 176-189.

Kreder HJ: Chapter 46: What is the role of "splinting for comfort": Is it useful or a waste of time? In: *Evidence Based Orthopaedics: The Best Answers to Clinical Questions*: (Wright JG, ed.) Elsevier, Philadelphia, 2009.

Kreder HJ, Finkelstein JA: A commentary posted in December 2009, available at www.jbjs.org/commentary and as supplemental material to the online version of the following article: Older patients can accurately recall their preoperative health status six weeks following total hip arthroplasty. *The Journal of Bone and Joint Surgery (American)*: December 2009: 91: pp 2827-2837.

Kreder HJ, Weller I: Chapter 48: How does surgeon and hospital volume affect outcome after traumatic injury? In: *Evidence Based Orthopaedics: The Best Answers to Clinical Questions* (Wright JG, ed.) Elsevier, Philadelphia, 2009.

Kuzyk PR, Guy P, Kreder HJ, Zdero R, McKee MD, Schemitsch EH: Minimally invasive hip fracture surgery: Are outcomes better? *Journal of Orthopaedic Trauma*: July 2009: 23(6): pp 447-453.

Leung ASO, Gordon LM, Skriskas T, Szwedowski T, Whyne CM: Effects of bone density alterations on strain patterns in the pelvis: Application of a finite element model. *Proceedings of the Institution of Mechanical Engineers-Part H: Journal of Engineering in Medicine*: November 2009: 223(8): pp 965-979.

Levchenko AI, Boscart V, Ibbett JP, Fernie GR: Distributed IR based technology to monitor hand hygiene of healthcare staff. *Science and Technology for Humanity (TIC-STH)*, 2009 IEEE Toronto International Conference, Toronto, 2009.

Lotan R, Finkelstein J: Minimally invasive surgical approaches for spine metastases. In: *Bone and Brain Metastases: Advances in Research and Treatment* (Sahgal A, Chow E, Merrick J, eds.) Nova Science, New York, 2010.

Lowerison M, Allendorf S, Bell A, White LM, Whiteside R, Marks P, Hurtig MB: Subcondral bone plate characteristics in human and animal bone: Implications for cartilage repair. In: ICRS Electronic Poster (Editorial Executive Office, ed.) Cartilage Executive Office GmbH, Wetzikon, Switzerland, 2010.

Maloul A, Fialkov J, Whyne CM: A technique for the quantification of the 3D connectivity of thin articulations in bony sutures. *Journal of Biomechanics*: April 2010: 43(6): pp 1227-1230. E-published December 29, 2009.

Mansfield A, Peters AL, Liu BA, Maki BE: Effect of a perturbation-based balance training program on compensatory stepping and grasping reactions in older adults: A randomized controlled trial. *Physical Therapy*: April 2010: 90(4): pp 476-491.

McKay SM, Maki BE: Attitudes of older adults toward shooter video games: An initial study to select an acceptable game for training visual processing. *Gerontechnology*: Winter 2010: 9(1): pp 5-17.

Mulford J, Axelrod TS: Traumatic problems of the distal radioulnar joint. *Hand Clinics*: February 2010: 26(1): pp 155-163.

Nousiainen MT, Maury AC, Alhoulei A, Backstein D, Gross A: The long-term outcome of shelf grafts in total hip arthroplasty for developmental hip dysplasia. *Orthopaedics*: September 2009: 32(9).

Nousiainen MT, Sen MK, Mintz D, Lorich DL, Paul O, Buly RL, Helfet DH: The use of osteochondral allograft in the treatment of a severe femoral head fracture. *Journal of Orthopaedic Trauma*: February 2010: 24(2): pp 120-124.

Richards R: Arthrodesis of the osteoarthritic wrist. In: *Master Techniques in Orthopaedic Surgery. The Wrist*: (Gelberman RH, ed.) Walters Kluwer Lippincott Williams & Wilkins, Philadelphia, 2010.

Richards R: Injuries to the shoulder, arm and hand. In: *The Oatley-McLeish Guide to Anatomy and Impairment* (McLeish JA, Oatley RG, ed.) Lexis Nexis, Markham, Ontario, 2009.

Ristevski B, Jenkinson RJ, Stephen DJG, Finkelstein J, Schemitsch EH, McKee MD, Kreder HJ: Mortality and complications following stabilization of femoral metastatic lesions: A population-based study of regional variation and outcome. *Canadian Journal of Surgery*: August 2009: 52(4): pp 302-308.

Schemitsch E, McKee M, Kreder H, Kuzyk P, Zdero R: Minimally invasive hip fracture surgery: Are outcomes better? *Journal of Orthopaedic Trauma*: July 2009: 23(6): pp 447-453.

Schwartz CE, Finkelstein JA: Understanding inconsistencies in patient-reported outcomes after spine treatment: Response shift phenomena. *Spine Journal*: December 2009: 9(12): pp 1039-1045.

Sdezowski T, Whyne CM, Fialkov J: Towards characterization of craniofacial biomechanics. *The Journal of Craniofacial Surgery*: January 2010: 21(1): pp 202-207.

Sigal IA, Whyne CM: Mesh morphing and response surface analysis: Quantifying sensitivity of vertebral mechanical behaviour. *Annals of Biomedical Engineering*: January 2010: 38(1): pp 45-56. E-published October 27, 2009.

Wang RH, Holliday PJ, Fernie GR: Power mobility for a nursing home resident with dementia. *The American Journal of Occupational Therapy*: November-December 2009: 63(6): pp 765-771.

Waseem Z, Ford M, Syed K, Flannery J: Chronic nonunion in a patient with bilateral supercondylar distal femur fractures treated successfully with twice daily low-intensity pulsed ultrasound. *Physical Medicine and Rehabilitation*: February 2010: 2(2): pp 159-161.

Weller I, Kreder HJ: Chapter 47: Does the type of hospital in which a patient is treated affect outcome? In: *Evidence Based Orthopaedics: The Best Answers to Clinical Questions*: (Wright JG, ed.) Elsevier, Philadelphia, 2009.

Whelan DB, Bhandhari M, Stephen DJG, Kreder HJ, McKee MD, Zdero R, Schemitsch EH: Development of the radiographic union score for tibial fractures for the assessment of tibial fracture healing after intramedullary fixation. *The Journal of Trauma*: March 2010: 68(3): pp 629-632.

Won E, Aken M, Hardisty MR, Burch S, Bisland SK, Yee AJ, Wilson BC, Whyne CM: Effects of photodynamic therapy on the structural integrity of vertebral bone. *Spine*: February 2010: 35(3): pp 272-277.

Won E, Wise-Milestone L, Akens MK, Burch S, Yee AJ, Wilson BC, Whyne CM: Beyond bisphosphonates: Photodynamic therapy structurally augments metastatically involved vertebrae and destroys tumor tissue. *Breast Cancer Research and Treatment*: E-published ahead of print January 12, 2010.

INVITED VISITS

Axelrod TS: Synthes Upper Extremity Think Tank, Park City, Utah, USA, February 2010. (1) Complications of SLAC wrist procedures, (2) Case Presentation and Moderator: Forearm fractures, (3) Management of CMC fractures and dislocations, (4) Management of failed scaphoid non-unions.

Axelrod TS: Arbeitsgemeinschaft für Osteosynthesefragen (AO) Trauma, Davos, Switzerland, December 2009. AO Trauma Course: Management of fractures of the hand and wrist. (1) Lectures: (a) Extra-articular fractures of the distal radius, (b) Partial wrist fusions, (c) Non-unions of the scaphoid, (2) Lab: Use of mini-condylar plate for hand fractures.

Axelrod TS: Arbeitsgemeinschaft für Osteosynthesefragen (AO) North America, ORP Course, Toronto, Ontario, Canada, August 2009. (1) AO history, principles and indications for fracture treatment, (2) Treatment of distal radius fractures.

Cameron HU: Case Western Reserve University, Current Concepts Meeting, Orlando, Florida, USA, December 2009. (1) Hip fusion conversion: No clergy required, (2) The proximal modular neck in THA: A bridge too far, (3) The role of stems: The long and short of it.

Cameron JC: Rocky Mountain Traumatological Society, Colorado, USA, January 2010. Surgical management of congenital dislocation of the patella.

Fernie GR: British Society of Rehabilitation Medicine (BSRM), Posture & Mobility Group (PMG), and Scottish Posture and Mobility Network (SPMN), The 4th International Interdisciplinary Conference on Posture and Wheeled Mobility, Glasgow, United Kingdom, June 2010. Collaboration in Toronto.

Fernie GR: International Society of Gerontechnology, 7th World Conference, Vancouver, British Columbia, Canada, May 2010. Technologies for caregivers of frail elders.

Fernie GR: Ontario Gerontology Association/Regional Geriatric Programs of Ontario, GRCO Lecture – 29th Annual Conference, Toronto, Ontario, Canada, April 2010. The impact of innovation: Making small miracles.

Fernie GR: Canadian Institutes of Health Research-Institute of Ageing (CIHR-IA); British High Commission Toronto, Canadian High Commission London (Sponsors); KT-Equal; Hosted by The Cities Institute, OPENspace, The Canadian High Commission in London, The Science of Age-Supportive Built Environments Seminar, London, United Kingdom, March 2010. How to solve the every-day problems faced in later life.

Fernie GR: American Jewish Joint Distribution Committee, Israel Eshel Sub-Committee, New York, New York, USA, December 2009. From assistive devices to bringing health and support services to the homes of the elderly.

Fernie GR: Canadian Institutes of Health Research - Marketing & Communications/Institute of Musculoskeletal Health and Arthritis (CHIR-IMHA), Journalist Workshop, Toronto, Ontario, Canada, November 2009. How we can help people stay on their feet as they age.

Fernie GR: Ontario College of Art and Design, Toronto, Ontario, Canada, November 2009. Inclusive design for health and wellness - Cultural knowledge and the healthy society: A research and innovation summit.

Finkelstein JA: Ecuador Orthopaedic Society, Quito, Ecuador, April 2010. (1) Orthopaedic trauma, (2) Spine trauma, (3) Metastatic disease.

Finkelstein JA: University of Calgary/Stryker Spine, Calgary, Alberta, Canada, September 2009. Program Faculty and Guest Speaker: Techniques in less invasive spine surgery.

Hall H: The Back Institute (TBI), Wellington, New Zealand, April 2010. (1) A simple approach to back pain, (2) Managing the pain disorder patient.

Hall H: CBI Health Group, Charlottetown, Prince Edward Island; Moncton, New Brunswick; Halifax/Sydney, Nova Scotia; Ottawa, Ontario, Canada, May 2010. A simple approach to low back pain.

Hall H: University of Saskatchewan/Government of Saskatchewan-Ministry of Health, Regina, Saskatchewan, Canada, March 2010. Low back pain assessment and management.

Hall H: University of Utah, Compensable Disabilities Forum, Salt Lake City, Utah, USA, January 2010. A pattern approach to non-specific low back pain.

Hall H: Center for Neurosciences, Orthopaedics and Spine (CNOS), Chamberlain, South Dakota, USA, November 2009. Degenerative spondylolisthesis.

Hall H: Summit Health, Victoria, British Columbia, Canada, November 2009. Effectiveness of a low back pain classification system.

Hall H: Stryker Spine, New Orleans, Louisiana, USA, October 2009. The role of soft fusion.

Hall H: Huntsville General Hospital, Huntsville, Ontario, Canada, September 2009. The pain disorder patient.

Hall H: Stryker Spine, Miami Beach, Florida, USA, September 2009. Spine surgery and the pain disorder patient.

Hall H: Stryker Spine, Pinehurst, North Carolina, USA, September 2009. Health care reform would be better with a single federally-funded payor.

Hall H: Stryker Spine, Baltimore Maryland, USA, August 2009. Clinical presentation and patient selection.

Hall H: Orthohelix, Cleveland, Ohio, USA, July 2009. What surgeons want from their sales reps.

Kreder HJ: Canadian Orthopaedic Association, Edmonton, Alberta, Canada, June 2010. What to do with a femoral neck nonunion: Arthroplasty - total hip replacement versus hemiarthroplasty.

Kreder HJ: Arbeitsgemeinschaft für Osteosynthesefragen (AO) North America, Toronto, Ontario, Canada, May 2010. (1) Pelvic and acetabular fracture management, (2) Practice exercise, reduction and fixation of a T type acetabular fracture, (3) The acute pelvic injury; management issues, (4) The failed acetabular fracture; total hip replacement, (5) Transverse posterior wall reduction and fixation.

Kreder HJ: Arbeitsgemeinschaft für Osteosynthesefragen (AO) North America, Phoenix, Arizona, USA, January 2010. (1) Advanced principles and techniques of operative fracture management, (2) Femoral fractures: Indications and techniques for plating, (3) Open reduction and internal fixation of calcaneus and talar neck fractures, (4) Supracondylar femur fractures: Current techniques of operative treatment.

Kreder HJ: Ontario Orthopaedic Association, Annual General Meeting, Hip Fracture Symposium Workshop, Toronto, Ontario, Canada, October 2009. (1) Reverse obliquity hip fracture fixation tips and tricks, (2) Strategies of fixation for hip fractures in the elderly: The importance of immediate functional ambulation.

Kreder HJ: University of Saskatchewan, Division of Orthopaedic Surgery, Orthopaedic Resident's Research Day, Saskatoon, Saskatchewan, October 2009. Visiting Professor: (1) Geriatric fracture fixation: How to avoid disappointment, (2) Proximal femoral fractures: Surgical strategies to improve outcome.

Kreder HJ: Osteosynthesis and Trauma Care Foundation, Principles and Practice of Clinical Research Group, Mississauga, Ontario, Canada, September 2009. (1) Moderator: Practical Aspects of Randomized Clinical Trials: How To Do It Right, (2) Getting your research published: The well-constructed paper, (3) How to randomize in a clinical trial, (4) Non-randomized clinical study design.

Kreder HJ: Arbeitsgemeinschaft für Osteosynthesefragen (AO) North America, Toronto, Ontario, Canada, August 2009. (1) Choosing the right definitive fixation after damage control, (2) Fixation of acetabular fractures: Practical exercise, (3) Fixation of proximal tibia fractures: Practical exercise, (4) Plating of a symphyseal diastasis, (5) Treatment of acetabular fractures.

Kreder HJ: Canadian Orthopaedic Association, Trauma Specialty Day, Whistler, British Columbia, Canada, July 2009. Moderator: (1) COA Paper Session 7: Lower extremity trauma, (2) Trauma Subspecialty Session: Fractures about the hip in the elderly patient.

Maki BE: Canadian Institutes of Health Research-Institute of Aging, Mobility in Ageing Teams Meeting, Vancouver, British Columbia, Canada, March 2010. Participant.

Maki BE: British Columbia Injury Research and Prevention Unit, Canadian Falls Prevention Conference, Vancouver, British Columbia, Canada. CIHR team for optimizing gait and balance in seniors: Development, evaluation and knowledge-translation of new approaches.

Marks P: University of Basel, Basel, Switzerland, June 2010. Current concepts in cartilage repair, techniques, outcomes and biologic considerations.

Murnaghan JJ: Canadian Orthopaedic Nurses Association (CONA) – Toronto Chapter, Pat Jones Orthopaedic Nursing Conference, Toronto, Ontario, Canada, October 2009. Surgical goals of lower amputation and the amazing dance.

Nam D: Arbeitsgemeinschaft für Osteosynthesefragen (AO) North America, Toronto, Ontario, Canada, August 2009. Ankle and foot injuries: A review.

Nousiainen M: Canadian Orthopaedic Association, Annual Meeting, Edmonton, Alberta, Canada, June 2010. (1) Moderator for Paper Session No. 20: Education, (2) Podium Presentation: Help versus harm - The effect of training femoral neck screw insertion skills to surgical trainees with computer-assisted surgery: Comparison to conventional fluoroscopic technique.

Nousiainen M: International Society for Computer Aided Surgery, 14th Annual Conference, Geneva, Switzerland, June 2010. Podium Presentation: Help versus harm - The effect of training femoral neck screw insertion skills to surgical trainees with computer-assisted surgery: Comparison to conventional fluoroscopic technique.

Nousiainen M: Arbeitsgemeinschaft für Osteosynthesefragen (AO) North America, Toronto, Ontario, Canada, May 2010. Podium Presentation/ Fifteenth Toronto Pelvic and Acetabular Fracture Management Course: Radiology of posterior wall and column fractures.

Nousiainen M: Southern Illinois University, School of Medicine, Division of Orthopaedic Surgery Grand Rounds: An Approach to Revision Total Hip Arthroplasty, Springfield, Illinois, USA, August 2009. Attendee.

Richards RR: Ontario Medical Association, Section of Occupational Medicine, Toronto, Ontario, Canada, April 2010. Assessment of the patient with work related upper extremity disorder.

Richards RR: American Society for Surgery of the Hand, San Francisco, California, USA, September 2009. Faculty: Reconstruction of elbow flexion.

Richards RR: Canadian Orthopaedic Association, Annual General Meeting, R.I. Harris Lecture, Whistler, British Columbia, Canada. Orthopaedic Surgery: The journey of a lifetime. Lessons learned along the way. July 2009.

Stephen DGS: Arbeitsgemeinschaft für Osteosynthesefragen (AO) North America, PART II - Advanced Principles and Techniques of Operative Fracture Management, Marco Island, Florida, USA, June 2010. (1) Course Evaluator, 2) Complex ankle fractures: Current techniques.

Stephen DGS: Arbeitsgemeinschaft für Osteosynthesefragen (AO) North America, Pelvic and Acetabular Fracture Management Course, Toronto, Ontario, Canada, May 2010. (1) co-Chair, (2) Introduction to the audience: Interactive Response System (AIRS), (3) The role of embolization, (4) Final course summary and evaluation.

Stephen DGS: Community Surgeons from Kamloops, Kelowna, Vernon, Penticton, Kelowna, British Columbia, Canada, May 2010. Continuing Medical Education: (1) Pilon fracture update, (2) Minimally invasive plate osteosynthesis.

Stephen DGS: Arbeitsgemeinschaft für Osteosynthesefragen (AO) North America, Advanced Symposium: Solutions for Fracture Fixation Problems, San Francisco, California, USA, April 2010. (1) Course Evaluator, (2) Ankle fractures - salvage of common treatment errors, (3) Ankle arthrodesis for salvage of trauma sequelae, (4) Talar fractures.

Stephen DGS: American Association of Orthopaedic Surgeons (AAOS), Annual Meeting, New Orleans, Louisiana, USA, March 2010. Periprosthetic tibia fractures.

Stephen DGS: Arbeitsgemeinschaft für Osteosynthesefragen (AO), Basic Principles and Techniques of Operative Fracture for Residents, Denver, Colorado, USA, March 2010. (1) Principles of management - articular fractures, (2) Acute management of pelvic ring injuries, (3) Practical Exercise IX: External fixation.

Stephen DGS: Arbeitsgemeinschaft für Osteosynthesefragen (AO) North America, Advanced Principles and Techniques of Operative Fracture Management Course, Atlanta, Georgia, USA, November 2009. (1) Calcaneus fractures: Current techniques, (2) Practical Exercise VI: Open reduction internal fixation of calcaneus and talar neck.

Stephen DGS: Arbeitsgemeinschaft für Osteosynthesefragen (AO), ORP Course, Winnipeg, Manitoba, Canada, November 2009. (1) Visiting Professor, (2) Retrograde nail: Femur, (3) Practical Exercise I: Fixation of distal femur fracture, (4) Practical Exercise II: Application of knee bridging ex fix, (5) Practical Exercise III: Lag screw and plating technique.

Stephen DGS: Stryker Canada, 2009 Canadian Orthopaedic Resident Trauma Review, Toronto, Ontario, Canada, November 2009. (1) Hip dislocations, (2) Subtrochanteric fractures.

Stephen DGS: Arbeitsgemeinschaft für Osteosynthesefragen (AO), Advances in Operative Fracture Care, Warsaw, Poland, October 2009. (1) Fractures of pelvis, pathomechanics and classification, (2) The expected outcomes of acetabular fractures, (3) The pilon fracture, (4) Fractures of os calcis.

Stephen DGS: Orthopaedic Trauma Association, 2009 Comprehensive Fracture Course for Residents, San Diego, California, USA, October 2009. Hands-on-skill lab: Calcaneus fractures.

Stephen DGS: Arbeitsgemeinschaft für Osteosynthesefragen (AO) Latinoamerica, Pelvis and Acetabulum Course, Medellin, Colombia, September 2009. (1) Moderator of Driven Discussion on Emergency Management, (2) ORIF of posterior ring injuries, (3) Practical Exercise: Plate fixation of pubis symphysis, intramedullary pubis rami screw, anterior plating SIJ, (4) Acetabulum: Posterior wall, posterior column, (5) Kocher Langenbeck (discussed trochanteric flip osteotomy.)

Stephen DGS: Arbeitsgemeinschaft für Osteosynthesefragen (AO) North America, Toronto, Ontario, Canada, August 2009. Chairman: Advanced AO North America Nursing Continuing Education Course.

Stephen DGS: Advocate Health Care/Illinois Bone and Joint Foundation, 11th Annual Chicago Trauma Symposium, Chicago, Illinois, USA, July 2009. (1) Moderator: Hip and Femur, (2) Demineralized bone matrix - a useful adjunct?

Stephen DGS: Canadian Orthopaedic Association, Whistler, British Columbia, Canada, July 2009. (1) Moderator: Acute Compartment Syndrome of Leg, (2) Failed management of syndesmosis injuries, (3) Calcaneal fracture: Open reduction.

Yee AJM: Ontario Orthopaedic Association, Annual General Meeting, Toronto, Ontario, Canada, October 2009. Current management of cervical spine injuries.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear 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)

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)

Aging, spatial memory and the effectiveness of balance-recovery reactions. *Maki BE, Cheng K: Ontario Neurotrauma Foundation (Summer Internship Program).* (\$9,000 2010)

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)

A phase I trial on the use of PDT in the treatment of breast cancer vertebral metastasis. *Yee AJM, Margarete K, Akens MK, Bisland S, Burch S, Chow E, Clemons M, Sahgal A, Whyne C, Wilson B: Canadian Breast Cancer Foundation (CBCF), Ontario Chapter.* (\$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)

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)

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 AJM, Finkelstein JA: Canadian Institutes of Health Research.* (\$95,000 2009 - 2012)

Bone stability and tumor burden in the metastatic spine: Implications of variable disease patterns. *Whyne CM, Yee AJ, Finkelstein JA, Probyn L: Canadian Institutes of Health Research, Renewal Operating Grant (Primary Institution: Cancer Research; Other Institution: MSK Health and Arthritis.)* (\$379,862 2008 - 2012)

Bone stability and tumour burden in the metastatic spine: Implications of variable disease patterns. *Whyne CM, Finkelstein J, Yee A: Canadian Institutes of Health Research.* (\$94,966 2008 - 2012)

Centre for Research in Image-Guided Therapeutics. *Hynynen K, Multiple Collaborators including Whyne CM: Canada Foundation for Innovation, Research Hospital Fund for 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)

CIHR team for the development, testing and knowledge translation of innovative approaches to optimize gait and balance of older adults. *Maki BE, Fernie GR, Flint A, Liu B, McIlroy WE, et al: Canadian Institutes of Health Research.* (\$1,456,012 2008 - 2014)

Clinical outcomes following oral factor Xa inhibitor. *Murnaghan J, Gollish J, Kreder H, Geerts B: Bayer Health Care.* (\$425,000 2010 - 2012)

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 J: Canadian Institutes of Health Research.* (\$782,042 2004 - 2010)

Data processing and performance feedback software for an advanced hand hygiene compliance system. *Fernie GR, Marquez Chin C: Ministry of Research and Innovation, 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 Post-Doctoral Fellowship in Health Care, Technology, and Place.* (\$18,000 2008 - 2009)

Development of products to reduce burden of care at home. *Fernie GR, Lefebvre N, Mihailidis A: Ministry of Research and Innovation (Ontario).* (\$4,621,011 2010 - 2015)

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 (submitted to MERG 2009 of RCPSC on March 2, 2009.) *Wadey V, McDonald-Blumer H, Cividino A, Wessel J, Levy D, McIlroy J, Dauphine D: University of Toronto, Faculty of Medicine, Dean's Fund New Staff Grant Competition, Fall 2008* (\$25,000 2009 - 2012)

Does an interactive on-line learning program involving simulation improve medical residents' knowledge and skills to manage patients with inflammatory arthritis - A pilot study. *Wadey V: 2009 The Royal College of Physicians and Surgeons of Canada, Medical Education Research Grant.* (\$25,000 2009)

Does an interactive on-line learning program involving simulation improve medical residents' knowledge and skills to manage patients with inflammatory arthritis? A pilot study in French. *Wadey V: The Royal College of Physicians and Surgeons of Canada, Medical Education Research Grant 2010.* (Submitted February 28th, 2010 - decision pending.)

Economic impact analysis and process benchmarking appraisal of early surgical decompression for traumatic cervical spinal cord injury. *Furlan J, Fehlings M, Yee AJ: SCI Solutions Network, Rapid Response Application.* (\$97,517 2008 - 2009)

Effectiveness of winter footwear on various surface conditions for use by Canadian postal workers. *Fernie GR: Workplace Safety and Insurance Board.* (\$55,594 2010 - 2011)

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, Upshur R: Canadian Institutes of Health Research. (\$1,950,000 2009 - 2015)*

How to accurately identify patients with inflammatory arthritis: Translation of an on-line simulation. *Wadey V: Canadian Institutes of Health Research, Supplement Grant (submitted on February 28, 2010 - decision pending). February 2010.*

Identifying barriers to meeting the Ontario standards for time to treat hip fracture patients. *Kreder H: 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 (Ontario). (\$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 - 2011)*

Laboratories and workspaces for scientists and graduate students engaged in the iDAPT research program at the Toronto Rehabilitation Institute. *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 - 2011)*

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 C, Gofeld M, Akens MK, Shah K, Godara N: Ontario Centres of Excellence (OCE) - \$220,000; Baylis - \$335,000. (\$555,000 2009 - 2010)*

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)*

Photodynamic therapy treatment to enhance fracture healing. *Akens M, Whyne C, Yee A, Nam D, Wilson B: US Army, Department of Defense (DOD), Peer-Reviewed Orthopaedic Research Program, Research Program of the Congressionally Directed Medical Research Programs (CDMRP). (\$100,000 2010 - 2011)*

Portable sleep apnea diagnostic device for home use. *Bradley TD, Fernie GR, Alshaer H: Ministry of Innovation and Research, Ontario Research Commercialization Program (ORCP), Technology Transfer Toronto. (\$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)*

Rehabilitation Engineering Research Center on Universal Design and the Built Environment at Buffalo. *Steinfeld E, Fernie G: National Institute on Disability and Rehabilitation Research (NIDRR). (\$5,538,000 2005 - 2009)*

Role of spatial memory in the control of grasping reactions. *Maki BE, Cheng K: Vision Science Research Program, Toronto Western Research Institute, University Health Network, University of Toronto (Graduate Student Scholarship OSOTF Award). (\$18,900 2008 - 2009)*

Safe activities following elective total hip replacement (SafeT). *Weller I, Corey PN, Gignac MA, Gollish JD, Hawker GA, Kennedy DM, Kreder HJ, MacDonald SJ: Canadian Institutes of Health Research. (\$930,345 2007 - 2012)*

Spreader bar for patient lifting. *Fernie G: Ministry of Research and Innovation, Ontario Research and Commercialization Program (ORCP), Technology Transfer Toronto. (\$15,000 2009)*

Technology to improve hand hygiene compliance in health care workers. *Fernie GR, Muller MP, Thorpe KE, Levchenko A, McGeer AJ: Canadian Institutes of Health Research. (\$371,652 2010)*

The efficacy of new model of care for shoulder pathology: Role of advanced practice physical therapists in orthopaedics. *Razmjou H, Robarts S, Kennedy D, Palinkas V, Mcknight C, Holtby R: Sunnybrook Health Sciences Centre, Practice-Based Research Funds. (\$12,000 2009)*

The immune mediation of fracture repair. *Nam D, Whyne C, Anderson M, Alman B: University of Toronto, Dean's Fund, New Staff Grant. (\$10,000 2010 - 2012)*

The immune system and fracture repair. *Nam D: Sunnybrook Health Sciences Centre Research Institute, Start-up Operating Funds. (\$100,000 2009 - 2012)*

The impact of photodynamic therapy for the biomechanical stability of the metastatic spine: Characterization independent and combined treatment effects with bisphosphonates and radiation therapy. *Whyne CM, Yee AJ, Wilson BC, 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.* (\$265,155 2009 - 2012)

UT-SpineLINK: Creation of a collaborative program to enhance patient triage and access for emergent spinal care. Yee AJ, Fehlings M, Ahn H, Ginsberg H, Webster F, and the UT Spine Program: *Alternate Funding Plan, Phase III Innovation Funds (Ministry of Health and Long Term Care, Ontario Medical Association, Ontario Academic Health Sciences Centre Agreement).* (\$260,000 2009 - 2010)

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

Akens MK: Young Investigators Initiative Grant Mentoring Program, United States Bone and Joint Decade. April 2010.

Fernie GR: Fellow, Canadian Academy of Health Sciences. September 2009.

Holtby RM: Award for Outstanding Contributions to Surgical Skills Education, from the University of Toronto and the Surgical Skills Centre at Mount Sinai Hospital Education. May 2010.

Kreder HJ: Quality Team Award 2010 to the Holland MSK Program (with me as Chief), for the development of a new model of care in the management of chronic disease that improves patient access and care. June 2010.

Murnaghan JJ: 3M Health Care Quality Team Award, Canadian College of Health Service Executives. June 2010.

Nam D: Gordon Research Conference Abstract Travel Award 2009 for 'The Immune Mediation of Osteoblasts and Osteoclasts in Fracture Repair.' July 2009.

Nam D: Inaugural Award for Best Presentation during Orthopaedic Resident Research Day, for 'The Immune Mediation of Osteoclasts and Osteoblasts in Fracture Repair.' November 2009.

Richards RR: Nominated for the Colin Woolf Award for Long Term Contributions to Continuing Education. October 2009.

Yee AJM: Canadian Orthopaedic Research Society (CORS) Top Scoring Posters: (1) Repair of osteochondral defects using genepin-cross-linked elastin-like polypeptide hydrogels (Moss I, Hrabchak C, Rouleau J, Akens M, Keeley FW, Woodhouse KA, Yee AJM); (2) Thiol-modified hyaluronan and elastin-like polypeptide hydrogels for the treatment of early degenerative disc disease (Moss I, Whyne C, Yee AJM, Woodhouse KA). July 2009.

DIVISION OF PLASTIC AND RECONSTRUCTIVE SURGERY

Dr. O. Antonyshyn	Associate Professor
Dr. P. Binhammer	Assistant Professor (Division Head)
Dr. R.C. Cartotto	Associate Professor
Dr. J.A. Fialkov	Assistant Professor
Dr. J.S. Fish	Associate Professor
Dr. M. Jeschke	Associate Professor
Dr. S. Shahrokhi	Lecturer

PUBLICATIONS

Al-Mousawi AM, Mecott-Rivera GA, Jeschke MG, Herndon DN: Burn teams and burn centers: The importance of a comprehensive team approach to burn care. *Clinics in Plastic Surgery*: October 2009: 36(4): pp 547-554.

Al-Mousawi A, Williams FN, Mlcak RP, Jeschke MG, Herndon DN, Suman OE: Effects of exercise on resting energy expenditure and lean mass during pediatric burn rehabilitation. *Journal of Burn Care and Research*: May-June 2010: 31(3): pp 400-408.

Antonyshyn O: Book Review: Eyelid and periorbital surgery. *Journal of Plastic, Reconstructive and Aesthetic Surgery*: April 2010: 63: pp 1067.

Branski LK, Al-Mousawi A, Rivero H, Jeschke MG, Sanford AP, Herndon DN: Emerging infections in burns. *Surgical Infections (Larchmt)*: October 2009: 10(5): pp 389-397.

Branski LK, Herndon DN, Barrow RE, Kulp GA, Klein GL, Suman OE, Przkora R, Meyer W 3rd, Huang T, Lee JO, Chinkes DL, Mlcak RP, Jeschke MG: Randomized controlled trial to determine the efficacy of long-term growth hormone treatment in severely burned children. *Annals of Surgery*: E-published ahead of print September 2, 2009.

Branski LK, Masters OE, Herndon DN, Mittermayr R, Redl R, Traber DL, Cox RA, Kita K, Jeschke MG: Pre-clinical evaluation of liposomal gene transfer to improve dermal and epidermal regeneration. *Gene Therapy*: June 2010: 17(6): pp 770-778. E-published ahead of print April 8, 2010.

Branski LK, Norbury WB, Herndon DN, Chinkes DL, Cochran A, Suman OE, Benjamin D, Jeschke MG: Measurement of body composition in burned children: Is there a gold standard? *Journal of Parental and Enteral Nutrition*: January-February 2010: 34(1): pp 55-63. E-published November 2, 2009.

Cartotto RC: Fluid resuscitation of the thermally injured patient. In: *Clinics in Plastic Surgery*. (Cartotto RC, guest ed.) Elsevier, Philadelphia, 2009: pp 569-581.

Cross KM, Leonardi L, Gomez M, Freisen JR, Levasseur MA, Schattka BJ, Sowa MG, Fish JS: Noninvasive measurement of edema in partial thickness burn wounds. *Journal of Burn Care and Research*: September-October 2009: 30(5): pp 807-817.

Gauglitz GG, Toliver-Kinsky TE, Williams FN, Song J, Cui W, Herndon DN, Jeschke MG: Insulin increases resistance to burn wound infection-associated sepsis. *Critical Care Medicine*: January 2010: 38(1): pp 202-208.

Jeschke MG: The hepatic response to thermal injury: Is the liver important for postburn outcomes? *Molecular Medicine*: September-October 2009: 15(9-10): pp 337-351. E-published April 10, 2009.

Jeschke MG, Gauglitz GG, Song J, Barral J, Kulp GA, Finnerty CC, Cox RA, Herndon DN, Boehning D: Calcium and ER stress mediate hepatic apoptosis after burn injury. *Journal of Cellular and Molecular Medicine*: August 2009: 13(8B): pp 1857-1865.

Keck M, Herndon D, Kamolz LP, Frey M, Jeschke MG: Pathophysiology of burns. In: *WMW Wiener Medizinische Wochenschrift*, Volume 159. Springer-Verlag, Austria, 2009.

Kita K, Gauglitz GG, Phan TT, Herndon DN, Jeschke MG: Isolation and characterization of mesenchymal stem cells from the sub-amniotic human umbilical cord and characterization of mesenchymal stem cells from the sub-amniotic human umbilical cord lining membrane. *Stem Cells and Development*: April 2010: 19(4): pp 491-502.

Kulp GA, Herndon DN, Lee JO, Suman OE, Jeschke MG: Extent and magnitude of catecholamine surge in pediatric burned patients. *Shock*: April 2010: 33(4): pp 369-374.

Mecott GA, Al-Mousawi AM, Gauglitz GG, Herndon DN, Jeschke MG: The role of hyperglycemia in burned patients: Evidence-based studies. *Shock*: January 2010: 33(1): pp 5-13.

Norbury WB, Gallagher JJ, Herndon DN, Branski LK, Oehring PE, Jeschke MG: Neonate twin with staphylococcal scalded skin syndrome from a renal source. *Pediatric Critical Care Medicine*: March 2010; 11(2): e20-e23.

Papapetropoulos A, Pyriochou A, Altaany Z, Yang G, Marazioti A, Zhou Z, Jeschke MG, Branski LK, Herndon DN, Wang R, Szabó C: Hydrogen sulfide is an endogenous stimulator of angiogenesis. *Proceedings of the National Academy of Sciences of the United States of America*: December 2009; 105(51): 21972-21977. E-published December 2, 2009.

Rajicic N, Finkelstein DM, Schoenfeld DA; Inflammation and Host Response to Injury Research Program Investigators/50 Collaborators - Baker HV, Balis U, Bankey P, Billiar TR, Brownstein BH, Calvano SE, Camp DG 2nd, Casella G, Chaudry IH, Cobb JP, Cuschieri J, Davis RW, De AK, Finnerty CC, Freeman B, Gamelli RL, Gibran NS, Harbrecht BG, Hayden DL, Hennessy L, Herndon DN, Horton JW, Jeschke MG, Johnson J, Klein MB, Lederer JA, Lowry SE, Maier RV, Mannick JA, Mason PH, McDonald-Smith GP, Miller-Graziano CL, Mindrinos MN, Minei JP, Moldawer LL, Moore EE, Nathens AB, O'Keefe GE, Rahme LG, Remick DG Jr, Shapiro MB, Silver GM, Smith RD, Storey J, Tibshirani R, Tompkins RG, Toner M, Warren HS, West MA, Xiao W: Analysis of the relationship between longitudinal gene expressions and ordered categorical event data. *Statistical Medicine*: September 2009; 28(22): pp 2817-2832.

Shiga S, Cartotto R: What are the fluid requirements in toxic epidermal necrolysis? *Journal of Burn Care and Research*: January-February 2010; 31(1): pp 100-104.

Song J, Finnerty CC, Herndon DN, Boehning D, Jeschke MG: Severe burn-induced endoplasmic reticulum stress and hepatic damage in mice. *Molecular Medicine*: September-October 2009; 15(9-1): pp 316-310. E-published June 19, 2009.

Song J, Wolf SE, Wu XW, Finnerty CC, Gauglitz GG, Herndon DN, Jeschke MG: Starvation induced proximal gut mucosal atrophy diminished with aging. *Journal of Parental and Enteral Nutrition*: July-August 2009; 33(4): pp 411-416. E-published January 6, 2009.

Song J, Wolf SE, Wu XW, Finnerty CC, Herndon DN, Jeschke MG: Proximal gut mucosal epithelial homeostasis in aged IL-1 type I receptor knockout mice after starvation. *The Journal of Surgical Research*: E-published ahead of print: April 21, 2010.

Stein JD, Antonyshyn OM: Aesthetic eyelid reconstruction. *Clinics in Plastic Surgery*: July 2009; 36(3): pp 379-397.

Szwedowski TD, Whyne CM, Fialkov JA: Towards characterization of craniofacial biomechanics. *Journal of Craniofacial Surgery*: January 2010; 2(1): pp 202-207.

Warren HS, Elson C, Hayden D, Schoenfeld D, Cobb JP, Maier R, Moldawer L, Moore E, Harbrecht E, Pelak K, Cuschieri J, Herndon DN, Jeschke MG, Finnerty CC, Brownstein B, Hennessy L, Mason P, Tompkins R, and The Inflammation and the Host Response to Injury Large Scale Collaborative Research Program: A genomic score prognostic of outcome in trauma patients. *Molecular Medicine*: July-August 2009; 15(7-8): pp 200-227. E-published April 10, 2009.

Williams FN, Herndon DN, Hawkins HK, Lee JO, Finnerty CC, Kulp G, Chinkes DL, Jeschke MG: Leading causes of death after burn injury in a single pediatric burn center. *Critical Care*: November 2009; 13(6): R183. E-published ahead of print November 17, 2009.

Williams FN, Herndon DN, Jeschke MG: The hypermetabolic response to burn injury and interventions to modify this response. *Clinics in Plastic Surgery*: October 2009; 36(4): pp 583-596.

Yin Z, Qin Z, Xin W, Gomez M, Zhenjiang L: The characteristics of elderly burns in Shanghai. *Burns*: May 2010; 36(3): pp 430-435. E-published October 13, 2009.

Zhou B, Xu W, Herndon D, Tompkins R, Davis R, Xiao W, Wong WH; Inflammation and Host Response to Injury Program - Toner M, Warren HS, Schoenfeld DA, Rahme L, McDonald-Smith GP, Hayden D, Mason P, Fagan S, Yu YM, Remick DG, Mannick JA, Lederer JA, Gamelli RL, Silver GM, West MA, Shapiro MB, Smith R, Camp II DG, Qian W, Storey J, Mindrinos M, Tibshirani R, Lowry S, Calvano S, Chaudry I, Cohen M, Moore EE, Johnson J, Moldawer LL, Baker HV, Efron PA, Balis UGJ, Billiar TR, Ochoa JB, Sperry JL, Miller-Graziano CL, De AK, Bankey PE, Finnerty CC, Jeschke MG, Minei JP, Arnoldo BD, Hunt JL, Horton J, Cobb JP, Brownstein B, Freeman B, Maier RV, Nathens AB, Cuschieri J, Gibran N, Klein M, O'Keefe G: Analysis of factorial time-course microarrays with application to a clinical study of burn injury. *Proceedings of the National Academy of Sciences of the United States of America*: June 2010; 107(22): pp 9923-9928. E-published print May 17, 2010.

INVITED VISITS

Antonyshyn O: Advanced Orbital Surgery Symposium/Advanced Cranio-Maxillofacial Forum, Baltimore, Maryland, USA, May 2010. (1) Management of complex orbital fractures, (2) Managing and avoiding post-traumatic soft tissue deformities.

Antonyshyn O: Arbeitsgemeinschaft für Osteosynthesefragen (AO) North America, Challenges and Advances in the Management of Craniomaxillofacial Surgery - Focus: Computer Assisted Surgery/Navigation, Rosemont,

Illinois, USA, March 2010. (1) 3D facial surface imaging and presurgical planning, (2) Computer aided midface reconstruction, (3) Computer aided skull reconstruction, (4) Virtual surgery/haptics.

Antonyshyn O: Arbeitsgemeinschaft für Osteosynthesefragen (AO) CMF, Vail, Colorado, USA, February 2010. AO CMF CPP research grant reviews.

Antonyshyn O: Arbeitsgemeinschaft für Osteosynthesefragen (AO) Foundation, France, 3e Cours AO Avance Francophone CMF Pathologies Orbitaires Traumatiques et Tumorales, Saint-Etienne, France, October 2009. Computer assisted orbital and periorbital reconstruction.

Cartotto RC: Ontario Professional Firefighters Association, Niagara Falls, Ontario, Canada, April 2010. Burn care in Ontario.

Cartotto RC: American Burn Association, Annual Meeting, Boston, Massachusetts, USA, March 2010. Postgraduate Course A: Protocols in ICU/Pro-Con debate, (2) Postgraduate Course A: Tight glycemic control is very necessary in burn patients.

Fish J: Rotary Club of East York, Toronto, Ontario, Canada, December 2009. Guest Speaker: Burn program – SJRH.

Fish J: National Capital Association of Plastic Surgeons, Ottawa, Ontario, Canada, November 2009. VAC use in massive wounds.

Fish J: Peterborough Regional Hospital, Peterborough, Ontario, Canada, November 2009. Guest Speaker: Update on the treatment of emergency room burn care.

Fish J: Power Worker's Union, Update on Electrical Injury Research, Toronto, Ontario, Canada, November 2009. Presenter.

Fish J: Australia and New Zealand Burns Society, Wellington, New Zealand, September 2009. Keynote Address: (1) Experience with integra for complex wounds, (2) Management of electrical injury, (3) Team management in burn reconstruction, (4) Technology and the impact on burns.

Fish J: Australia and New Zealand Burns Association, Wellington, New Zealand, September 2009. VAC application for massive wounds.

Fish J: Australia and New Zealand Burns Association, Auckland, New Zealand, September 2009. Guest Speaker.

Fish J: Phoenix Society World Burn Congress, New York, New York, USA, August 2009. Aging in burn injury.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

A 3D statistical skull and face model: Development and application in the design and outcome analysis of craniofacial surgery. *Antonyshyn O, Mainprize J: AO Craniomaxillofacial- Clinical Priorities Program (CMF CPP.)* (\$125,000 2009 - 2011)

Development of a novel method for stabilizing traumatic craniofacial injuries. *Whyne C, Fialkov J: Department of Defense, Peer-Reviewed Orthopaedic Research Program (PRORP), Hypothesis Development Award.* (\$100,000 2009)

Finite element modeling of the human craniofacial skeleton. *Fialkov J, Whyne C: Advanced Cranio-Maxillofacial Forum Research Grant.* (\$60,000 2010)

Impact of psychosocial factors and treatment choice on return to work in carpal tunnel syndrome. *Binhammer P, Anastakis D, Dvali L, Von Schroeder H: American Foundation for Surgery of the Hand.* (\$16,000 2010 - 2012)

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)

Results of primary orbital fracture repair: An analysis of morphological and aesthetic outcomes. *Antonyshyn O, Fialkov J, Binhammer P, MacMillan C: Educational Foundation of the Canadian Society of Plastic Surgeons.* (\$10,000 2009 - 2010)

HONOURS RECEIVED

Antonyshyn O: W.K. Lindsay Research Supervisor Award. March 2010.

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

Abrams P, Andersson KE, Birder L, Brubaker L, Cardozo L, Chapple C, Cottenden A, Davila W, de Ridder D, Dmochowski R, Drake M, Dubeau C, Fry C, Hanno P, Smith JH, Herschorn S, Hosker G, Kelleher C, Koelbl H, Khoury S, Madoff R, Milsom I, Moore K, Newman D, Nitti V, Norton C, Nygaard I, Payne C, Smith A, Staskin D, Tekgul S, Thuroff J, Tubaro A, Vodusek D, Wein A, Wyndaele JJ; Members of Committees; Fourth International Consultation on Incontinence: Fourth International Consultation on Incontinence Recommendations of the International Scientific Committee: Evaluation and treatment of urinary incontinence, pelvic organ prolapse, and fecal incontinence. *Neurourology and Urodynamics*: January 2010: 29(1): pp 213-240.

Andriole GL, Bostwick DG, Brawley OW, Gomella LG, Marberger M, Montorsi F, Pettaway CA, Tammela TL, Teloken C, Tindall DJ, Somerville MC, Klotz LH, Wilson TH, Fowler IL, Rittmaster RS; REDUCE Study Group: Effect of dutasteride on the risk of prostate cancer. *New England Journal of Medicine*: April 2010: 362(13): pp 1192-1202.

Cervi D, Pak B, Venier NA, Sugar LM, Nam RK, Fleshner NE, Klotz LH, Venkateswaran V: Micronutrients attenuate progression of prostate cancer by elevating the endogenous inhibitor of angiogenesis, platelet factor-4. *BMC Cancer*: June 2010: 10: pp 258.

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*: September 2009: 56(3): pp 534-541. E-published November 24, 2008.

Chapple CR, Herschorn S, Abrams P, Wang JT, Brodsky M, Guan Z: Efficacy and safety of tolterodine extended-release in men with overactive bladder symptoms treated with an alpha-blocker: Effect of baseline prostate-specific antigen concentration. *BJU International*: E-published ahead of print May 24, 2010.

Ghoniem G, Corcos J, Comiter C, Westney OL, Herschorn S: Durability of urethral bulking agent injection for female stress urinary incontinence: 2-year multicenter study results. *The Journal of Urology*: April 2010: 183(4): pp 1444-1449. E-published February 20, 2010.

Herschorn S: Urodynamics. In: *Atlas of Bladder Disease*. (Staskin D, ed.) Current Medicine Group/Springer, New York, USA, 2010.

Herschorn S, Bruschini H, Comiter C, Grise P, Hanus T, Kirschner-Hermanns R, Abrams P; Committee of the International Consultation on Incontinence: Surgical treatment of stress incontinence in men. *Neurourology and Urodynamics*: January 2010: 29(1): pp 179-190.

Herschorn S, Gibbons E: Epidemiology of overactive bladder in North America. In: *Overactive Bladder - Practical Aspects*. (Truzzi JC, Dambros M, eds.) O Nome da Rosa, Sao Paulo, Brazil, 2009.

Herschorn S, Jones JS, Oelke M, MacDiarmid S, Wang JT, Guan Z: Efficacy and tolerability of fesoterodine in men with overactive bladder: A pooled analysis of 2 phase III studies. *Urology*: May 2010: 75(5): pp 1149-1155. E-published November 14, 2009.

Herschorn S, Stothers L, Carlson K, Egerdie B, Gajewski JB, Pommerville P, Schulz J, Radomski S, Drutz H, Barkin J, Paradiso-Hardy F: Tolerability of 5 mg solifenacin once daily versus 5 mg oxybutynin immediate release 3 times daily: Results of the VECTOR trial. *The Journal of Urology*: May 2010: 183(5): pp 1892-1898. E-published March 29, 2010.

Herschorn S, Swift S, Guan, Carlsson M, Morrow J, Brodsky M, Gong J: Comparison of fesoterodine and tolterodine extended release for the treatment of overactive bladder: A head-to-head placebo-controlled trial. *BJU International*: January 2010: 105(1) pp 58-66.

Herschorn S, Welk BK: Videourodynamics. In: *Textbook of Female Urology and Urogynecology*. (Cardozo L, Staskin D, eds.) Informa Healthcare, Colchester, United Kingdom, 2010.

Irwin DE, Milsom I, Kopp Z, Abrams P, Artibani W, Herschorn S: Prevalence, severity, and symptom bother of lower urinary tract symptoms among men in the EPIC study: Impact of overactive bladder. *European Urology*: July 2009; 56(1): pp 14-20. E-published March 3, 2009.

Klotz L: Active surveillance for favorable risk prostate cancer. *Journal of Urology*: October 2009; 182(6): pp 2565-2566.

Klotz L: Active surveillance for prostate cancer: A review. *Current Urology Reports*: May 2010; 11(3): pp 165-171.

Klotz L: Balancing potential quality of life benefits against the risk of lethal late recurrence with bladder-preserving surgery. *Current Oncology*: June 2010; 17(3): pp 100-101.

Klotz L: Degarelix acetate for the treatment of prostate cancer. *Drugs Today(Barc)*: October 2009; 45(10): pp 725-730.

Klotz L: EBM in Canadian urology. *Canadian Urological Association Journal*: April 2010; 4(2): pp 83.

Klotz L: Response to article by J.E. Montie, Screen detected, low volume prostate cancer: The case for active treatment. *Urologic Oncology*: July-August 2009; 27(4): pp 454.

Klotz L: Using consensus guidelines effectively. *Canadian Urological Association Journal*: February 2010; 4(1): pp 7-8.

Klotz L, Pienta K: Management of locally advanced and androgen dependent prostate cancer. *Czech Urological Journal (Urologické listy)*: October 2009; 7(3): pp 5-14.

Klotz L, Pinthus J: The case for prostate capsule-sparing radical cystectomy in selected patients. *Canadian Urological Association Journal*: December 2009; 3(6 Suppl 4): pp S215-S219.

Klotz L, Zhang L, Lam A, Nam R, Mamedov A, Loblaw A: Clinical results of long-term follow-up of a large, active surveillance cohort with localized prostate cancer. *Journal of Clinical Oncology*: January 2010; 28(1): pp 126-131. E-published November 16, 2009.

Loblaw DA, Pickles T, Cheung PC, Lukka H, Faria S, Klotz L: Hormone use after radiotherapy failure: A survey of Canadian uro-oncology specialists. *Canadian Urological Association Journal*: December 2009; 3(6): pp 460-464.

Nam RK, Saskin R, Lee Y, Liu Y, Law C, Klotz LH, Loblaw DA, Trachtenberg J, Stanimirovic A, Simor AE, Seth A, Urbach DR, Narod SA: Increasing hospital admission rates for urological complications after transrectal ultrasound guided prostate biopsy. *Journal of Urology*: March 2010; 183(3): pp 963-968. E-published January 20, 2010.

Nickel JC, Tripp DA, Pontari M, Moldwin R, Mayer R, Carr LK, Doggweiler R, Yang CC, Mishra N, Nordling J: Psychosocial phenotyping in women with interstitial cystitis/painful bladder syndrome: A case control study. *Journal of Urology*: January 2010; 183(1): pp 167-172.

Ordon M, Kodama R, Honey RJ: Letter to the Editor re Best Practice Policy Statement on Urologic Surgery Antimicrobial Prophylaxis (Wolf Jr JS, Bennett CJ, Dmochowski RR, Hollenbeck BK, Pearle MS, Schaeffer AJ). *Journal of Urology*: August 2009; 182(2): pp 799-801.

Robinson K, Creed J, Reguly B, Powell C, Wittcock R, Klein D, Maggiah A, Klotz L, Parr RL, Dakubo GD: Accurate prediction of repeat prostate biopsy outcomes by a mitochondrial DNA deletion assay. *Prostate Cancer and Prostatic Diseases*: June 2010; 13(2): pp 126-131. E-published January 19, 2010.

Siddiqui K, Klotz LH: Emerging drugs for prostate cancer. *Expert Opinion on Emerging Drugs*: September 2009; 14(3): pp 455-470.

Smith MR, Egerdie B, Hernández Toriz N, Feldman R, Tammela TLJ, Saad F, Heracek J, Szwedowski M, Ke C, Kupic A, Leder BZ, Goessl C, for the Denosumab HALT Prostate Cancer Study Group: Denosumab in men receiving androgen-deprivation therapy for prostate cancer. *New England Journal of Medicine*: August 2009; 361(8): pp 745-755. E-published August 11, 2009.

INVITED VISITS

Herschorn S: American Urological Association, Annual Meeting, San Francisco, California, USA, June 2010. Workshop on Management of Neurogenic Bladder: (1) Early management of the spinal cord injured patient, (2) Pitfalls of urodynamics.

Herschorn S: British Association of Urological Surgeons, Satellite Symposium on Overactive Bladder, Manchester, United Kingdom, June 2010. Fesoterodine in the management of OAB.

Herschorn S: Queen's University, Division of Orthopaedic Surgery, Grand Rounds-Update on Surgical Treatment of Post-Prostatectomy Incontinence, Kingston, Ontario – and Skaneateles, New York, April 2010. (1) Visiting Professor at Queen's: Challenges in major urologic reconstruction, (2) Visiting Professor in Skaneateles, New York for Upstate New York Resident Research Day (Annual Meeting of universities around Lake Ontario – Buffalo, Syracuse, Rochester, Albany and Queen's).

Herschorn S: Le Centre hospitalier universitaire de Québec (CHUQ), Hôpital Saint-François d'Assise, Université Laval, Québec City, Canada, November 2009. (1) Visiting Professor, (2) Performed surgery - complex urethrovaginal fistula repair, (3) Presentation: Major urologic reconstructive surgery.

Herschorn S: Societe International d'Urologie Meeting, Shanghai, China, November 2009. (1) Moderator of Workshop on Surgical Treatment of Female Stress Urinary Incontinence: Is there still a role for bulking agents?, (2) Satellite Symposium: Counting the cost of OAB and its burden on society - providing the value.

Herschorn S: International Continence Society Meeting, San Francisco, California, USA, September-October 2009. (1) Complications of bulking agents, (2) Satellite symposium on OAB management. Fesoterodine clinical data.

Herschorn S: Japanese Urological Association, Eastern Section Meeting, Matsumoto, Japan, October 2009. (1) State-of-the-Art: Current status and future perspective for male lower urinary tract symptoms, (2) Current management of female stress incontinence.

Klotz LH: Japan Society of Urologic Oncology, Tokyo, Japan. January 2010. Guest Speaker.

Klotz LH: Juitsu University, Tokyo, Japan, January 2010. Invited Professor.

Klotz LH: Society of Urology Oncology, Winter Conference, Bethesda, Maryland, USA, December 2009. Co-Chairman.

Klotz LH: 4th World Uro Oncology Federation Conference, Shanghai, China, October-November 2009. Conference Chairman.

Klotz LH: Canadian Urology Research Consortium/CUOG Retreat (C2-R), Montreal, Québec, Canada, September 2009. Chairman.

Klotz LH: Urologic Research Society, Cairns, Australia, August 2009. Guest Speaker.

Klotz LH: Controversies in Urologic Oncology Conference, Washington, District of Columbia, USA, July 2009. Guest Speaker.

Klotz LH: Case Western University, Cleveland, Ohio, USA, July 2009. Visiting Professor.

Kodama R: Canadian Urological Association, Annual Meeting, June 2010. Poster Session Moderator.

Venkateswaran V: Prostate Cancer Research Foundation-UK, Yorkshire, England, June 2010. Hyperinsulinemia and prostate cancer. Presentation.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

A phase 2B, randomized, double-blind, placebo-controlled, dose ranging study evaluating the efficacy and safety of tanezumab for the treatment of moderate to severe pain associated with interstitial cystitis/painful bladder syndrome (IC/PBS). *Carr LK: Pfizer.* (\$18,000 2010)

A multicentre, double-blind, randomized, placebo-controlled, parallel-group study of the safety and efficacy of a single treatment of botox (botulinum toxin type A) purified neurotoxin complex followed by a repeat treatment with botox as applicable in patients with idiopathic overactive bladder with urinary urgency incontinence. *Carr LK: Allergan.* (\$18,000 2010)

A multicentre, long-term follow-up study of the safety 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. *Carr LK: Allergan.* (\$15,000 2010)

A multicentre, long-term follow-up study of the safety and efficacy of botox (botulinum toxin type A) purified neurotoxin complex in patients with idiopathic overactive bladder with urinary incontinence. *Carr LK: Allergan.* (\$20,000 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 (25mg qd and 50mg qd) in subjects with symptoms of overactive bladder. *Carr LK: Astellas.* (\$6,000 2010)

A prospective non-randomized study of autologous cell therapy for female stress urinary incontinence (SUI). *Carr LK: Cook Myosite.* (\$40,000 2010)

A randomized, double-blind, parallel group, active-controlled, multicentre long-term study to assess the efficacy and safety of the beta-3 agonist YM178 (50mg qd and 100mg qd) in subjects with symptoms of overactive bladder. *Carr LK: Astellas.* (\$5,000 2010.)

Dietary factors influencing IGF signaling in prostate cancer. *Pollak M, Venkateswaran V, 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 multicentre trial, initiated by L. Klotz, with funds provided to CURC by Glaxo Smith Kline-US. Funds include per patient reimbursement (\$500,000) and project management costs (\$300,000). *Klotz L: Canadian Urology Research Consortium (CURC).* (\$800,000 2006 - 2009)

Integrated development of epigenetic and expression-based biomarkers of prostate cancer progression. *Bharati B, Fleshner N, van der Kwast T, Laurent B, Ozcelik H, Pinthus J, Venkateswaran V: Canadian Prostate Cancer Research Initiative and Ontario Institute for Cancer Research (CPCRI/OICR).* (\$749,561 2007 - 2010)

Micronutrients and prostate cancer: Prevention to treatment. *Venkateswaran V, Klotz L, Fleshner N, Sugar L, Seamus T: Canadian Institutes of Health Research.* (\$247,413 2006 - 2009)

Phase 1 evaluation of the feasibility and safety of MRI guided transurethral ultrasound therapy for localized prostate cancer, Grant #019437. *Klotz L, Chopra R, Bronskill M, Sugar L: National Cancer Institute of Canada.* (\$154,000 2008 - 2010)

Prospective, observational, multicentre study oftvt secur in the surgical management of women with stress urinary incontinence. *Herschorn S, Steinhoff G, Andreou C, Carlson K, Gajewski J: Johnson and Johnson Women's Health.* (\$295,000 2009 - 2012)

Randomized trial of botulinum toxin A versus placebo in the management of overactive bladder. *Herschorn S, Carr L: Allergan.* (\$30,000 2010)

Randomized trial of polyacrilamide gel versus collagen for female SUI. *Herschorn S: Contura.* (\$25,000 2010 - 2011)

HONOURS RECEIVED

Carr LK: A.W. Bruce Faculty Undergraduate Teaching Award. September 2009.

Herschorn S: Best Clinical Presentation, awarded by the International Continence Society, for 'Efficacy of Botulinum Toxin A Injection for Neurogenic Detrusor Overactivity and Urinary Incontinence - A Randomized Double-Blind Trial.' 2009.

Herschorn S: Lifetime Achievement Award from the Society for Urodynamics and Female Urology. 2010.

Herschorn S: Michael Jewett Award from the University of Toronto, Division of Urology for significant contribution to the postgraduate teaching program. 2010.

Herschorn S: President of the Canadian Urological Association. 2010.

Klotz LH: Honorary Member, American Urological Association. March 2010.

Klotz LH: Honorary Professor 2009-2014, Central South China University, Changshaw, China. October 2009.

Klotz LH: President, Urologic Research Society (International URS). August 2009.

Kodama R: Postgraduate Resident Teaching Award – Clinical, University of Toronto, Department of Surgery, Division of Urology, June 2010.

Kodama R: W.T. Aikins Award – Small Group, University of Toronto, Faculty of Medicine, May 2010.

Venkateswaran V: C2R Young Investigator Award, from the Canadian Urology Research Consortium/Canadian Urologic Oncology Group (CURC/CUOG), in recognition of my research. September 2009.

Venkateswaran V: Prostate Cancer Canada/Australian-Canadian Prostate Cancer Research Alliance (PCC/AC-PCRA) Travel Award. May 2010.

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 and Reconstructive Surgery
Dr. R. Singal	Urology

INTRODUCTION

The Surgical Department of the Toronto East General Hospital has 20 surgeons including 3 Urologists, 6 Orthopedic Surgeons, 6 General Surgeons, 4 Thoracic Surgeons and 3 Plastic Surgeons

OVERVIEW

The Toronto East General continues to be the leading community teaching hospital in Toronto as our teaching days have increased again this year with excellence recognized in TES scores and Bill Kraemer's landmark work developing and implementing Competency Based Curriculum in the Division of Orthopedics as the Program Resident Director. The Surgical Safety Checklist has been a collaboration with Anesthesia and Nursing and fully in place. The Fractured Hip Initiative and Bariatrics are new successful initiatives this year. We have especially welcomed the integrated role with the University that the Bariatric Initiative has highlighted. This year we have been through a process aimed at developing a criteria and a model for planning and approving surgical human resources. We have had our second selection committee meeting for Plastic and Reconstructive Surgery and enjoyed the University leadership in building these bridges.

GENERAL/THORACIC SURGERY

The Bariatric Initiative has been successfully implemented this year with Jamie Cyriac and Mary-Anne Aarts heading our team. Mary-Anne is the provincial lead in outcome analysis. Hany Sawires will be leading our Time to Treat Initiative for Breast and building closer ties with the University model of Breast Cancer Diagnostics. Paul Bernick and Rob Zeldin have been awarded the Chief of Staff TEGH Excellence in Research Award 2010. TES Scores were outstanding for Dr. Bernick and excellent for Drs. Cyriac and Gilas. Dr. Cyriac is involved with ASCM II



teaching. There is one full time and two part-time General Surgery Fellows this year.

TEGH was successful in building a relationship with the Royal Victoria Hospital in Barrie. This relationship will continue to grow as Cancer Care Ontario funding grows. Dr. Zeldin and Simone had outstanding TES Scores. Dr. Carmine Simone won the John Fowler Family Practice Resident Teaching Award 2010. Rob Zeldin is an examiner for Thoracic Surgery at the Royal College of Physicians and Surgeons, Chair of the Section for Thoracic Surgery of the OMA and a Member of the Nucleus Committee for Thoracic Surgery for RCPS.

UROLOGY

Multidisciplinary Tumour Boards have been regularly in place this year. It is the 9th year of our Endo-urology Fellowship and PGY 4 Residents rotated electively. We are still in fundraising mode for the Da Vinci Robot. Peter Vlaovic has been teaching ASCM II for two years.

ORTHOPEDICS

We have been working collaboratively to implement the Fractured Hip Initiative successfully. Bill Kraemer was awarded the 2010 Award for Excellence in Postgraduate Medical Education in the category of Design/Innovation for his work in Building the Competency Based Curriculum. Bill Kraemer, Peter Weiler, Frank Mastrogiacomo, Gianni Mastrelli and Paul Wong received excellent TES scores. The Orthopedic TEGH Fellowship continues to rate as the highest fellowship program at U of T. Dr. Wong is a member of the University Postgraduate Resident Committee.

PLASTIC AND RECONSTRUCTIVE SURGERY

For the first time since 1984, TEGH has had PGY 3 residents rotate regularly through. This has been a big investment in teaching and Brett Beber has been our member of the University Postgraduate Resident Committee and Wellness Director. Brett has a clinic and OR time at Women's College Hospital for Breast Reconstruction and was involved in ASCM II teaching this year. We have been involved in a Selection Committee Search for a full time Community Plastic Surgeon. Dr. Tate completed the University of Toronto Patient Safety Certificate Course.

■ DIVISION OF GENERAL SURGERY

Dr. M.A. Aarts	Assistant Professor
Dr. P.E. Bernick	Assistant Professor (Division Head)
Dr. J. Cyriac	Lecturer
Dr. J. Dickie	Lecturer
Dr. T. Gilas	Assistant Professor
Dr. C. Simone	Lecturer
Dr. R. Zeldin	Assistant Professor

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Zeldin R: North Muskoka Regional Cancer Program, Update in Oncology 2010, Barrie, Ontario, Canada, May 2010. Time diagnosis of lung cancer.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

Cancer stem cell program. *Dickie J: Ontario Institute for Cancer Research.* (\$10,000,000 2007 – 2012)

HONOURS RECEIVED

Bernick PE: TEGH Chief of Staff Choice Award in Research Leadership. May 2010.

Zeldin R: Co-winnner of the Chief of Staff Excellence in Research Award, May 2010.

Zeldin R: Certificate of Appreciation from The Royal College of Physicians and Surgeons of Canada, for participation in the Specialty Committee in Thoracic Surgery 2006 – 2010. 2010.

■ DIVISION OF ORTHOPAEDIC SURGERY

Dr. M. Catre, Jr.	Lecturer
Dr. W.J. Kraemer	Assistant Professor
Dr. G. Maistrelli	Associate Professor
Dr. F. Mastrogiacomo	Lecturer
Dr. P. Weiler	Assistant Professor (Division Head)
Dr. P. Wong	Assistant Professor

PUBLICATIONS

Marchie A, Kumar, Catre M: A modified surgical technique for reconstruction of an acute acromioclavicular joint dislocation. *International Journal of Shoulder Surgery:* July-September 2009: 3(3): pp 66-68.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Kraemer WJ: The Royal College of Physicians and Surgeons of Canada, International Conference on Residency Education, Victoria, British Columbia, Canada, September 2009. Development and implementation of a competency-based curriculum in orthopaedic surgery.

Maistrelli G: University of Calgary, Surgical Skills Cadaveric Training on Primary, Uni and Revision Knee Arthroplasty, Calgary, Alberta, May 2010. Lecturer-Instructor: MIS UNI surgical technique.

Mastrogiamomo F: Bahrainian Defense Hospital (BDF), Manama, Bahrain, February 2010. The evolution of hip arthroplasty.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

It's more than competency-based education, it's radical curricular reform: A prescription for a new model of residency education. *Reznick R, Kraemer W, Ferguson P, Alman B, Safir O, Sonnadara R: Ministry of Health and Long Term Care.* (\$1,700,000 2009 - 2013)

HONOURS RECEIVED

Kraemer WJ: PGME Award of Excellence in Postgraduate Medical Education, Design/Innovation Category. May 2010.

Maistrelli G: College of Physicians and Surgeons of Ontario (CPSO) recognition for contribution to the college as Physician Supervisor of the Regulation of Profession Educational Program 2009-10.

DIVISION OF PLASTIC AND RECONSTRUCTIVE SURGERY

Dr. B. Beber Lecturer

Dr. L.J. Tate Assistant Professor (Division Head)

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Tate LJ: Canadian Society of Physician Executives/ Canadian Medical Association, Toronto, Ontario, Canada, April 2010. Credentialling - Managing physician resources in your hospital.

DIVISION OF UROLOGY

Dr. R.K. Singal Lecturer (Division Head)

Dr. P. Vlaovic Lecturer

INVITED VISITS

Singal RK: Society of Urological Surgeons of Ontario, Toronto, Ontario, Canada. November 2009. Family practice update in Urology Day.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

Cross-Canada assessment of a new nomogram prediction tool for prostate cancer screening. *Nam R, Narod S, Klotz L, Trachtenberg J, Jewett M, Izawa J, Chin J, Bell D, Aprikian A, So A, Toi A, Singal R: National Cancer Institute of Canada.* (\$462,084 2006 - 2009)

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 and Reconstructive Surgery
Dr. S. Keshavjee	Thoracic Surgery
Dr. N. Fleshner	Urology
Dr. B. Rubin	Vascular Surgery

The University Health Network embarked on a major organizational planning process in 2009/10 starting with a demographic assessment of projected patient care requirements in the year 2031. The planning process is expected to be completed with approval by the Board of Trustees by the end of the calendar year 2010, focusing on the 2011-16 time period. The UHN vision of "Achieving Global Impact" and the previously articulated purpose statement "We are a caring, creative and accountable academic hospital, transforming healthcare for our patients, our community and the world" were retained as guiding principles. During the year, Surgical Programs presented to Senior Management and to the Board of Trustees an update of our previous planning process entitled GATES (Growing Academically, Technologically, Efficiently and Safely). Emphasis was placed on the further development of information technology in surgical programs, technological advances in minimally invasive surgery and the guided therapeutics program, and on preparation for renovation of the Toronto Western Hospital operating rooms.

The important collaboration between UHN and the Ministries of Health and Finance resulted in the implementation of the Clinical Specialty Supply Chain initiative, which will hopefully be a model for the rest of the country in materials management.

The Multi-Purpose Operating Room (MPOR) at the TGH site was officially opened, and during the current academic year was the site of many collaborative endovascular and cardiac procedures with Vascular Surgery, Cardiac Surgery, Cardiology and, in complex cases, with Pediatric and Obstetrical Departments participating.

Markus Selzner was recruited to the Division of General Surgery and the Transplantation Program as a surgeon-scientist, adding significantly to the strong research foundation in transplantation. Leonard Tse was recruited to the Division of Vascular Surgery as a surgeon-scientist,

and completed a Master's degree in Mechanical Engineering at the University of Toronto. In the same division, Graham Roche-Nagle quickly became an important contributor to the ongoing integration between Vascular Surgery and Vascular Interventional Radiology, a unique program in vascular disease. A newly recruited scientist, Anna Gagliardi, will contribute to the outcomes program under the direction of David Urbach.

Tom Lindsay completed a very successful first term as Chair of the Division of Vascular Surgery, Shaf Keshavjee continued as Chair of Thoracic Surgery and Dimitri Anastakis as Chair of Plastic Surgery at the University. Chris Wallace also completed a successful term as Head of the Division of Neurosurgery at UHN, as did Neil Fleshner in Urology and Barry Rubin in Vascular Surgery. All underwent formal external reviews which were extremely favourable and reappointment recommended. Rod Davey and Stephanie Brister continued in their roles as Medical Director of the Operating Rooms at the Toronto Western and Toronto General sites, respectively, contributing significantly to the clinical and academic output of the department.

Magdy Hassouna, Nizar Mahomed, Vivek Rao, Tom Waddell and Terry Yau were all promoted to Full Professor, while Stephen Lewis, Eric Massicotte and Ian McGilvray were promoted to Associate Professor. Special thanks go to Chris Feindel, Gail Darling, Mark Cattral, Neil Fleshner, Paul Greig and Sid Radomski for their hard work on the Surgical Promotions Committee.

Surgeons at UHN have been productive in their research endeavours. Over the last four years, 1,556 surgical papers were published, with an average of 389 per year, 12.2 per investigator, and 3.0 per principal investigator per year. During that time, there were 11,984 cites to those papers, 7.7 per paper, 74% cited, and 18% highly cited. Eighty-three of the 1,556 papers were published in top journals with

a JIF of greater than 10, with an additional 267 (17%) in higher impact journals (JIF 5-10).

Gail Darling was named the Kress Family Chair in Esophageal Cancer bringing the UHN surgical endowed chair count to over 30.

The Cardiac Surgery Division continued its outstanding clinical work and unparalleled outcomes in especially the most complex patients in the province. Tirone David gave a variety of presentations all over the world, including the Denton Cooley Lectureship at Baylor University. Richard Weisel received a number of new and continuing grants, as well as the Scientific Achievement Award of the American Association of Thoracic Surgeons. Hugh Scully received the Canadian Medical Association's 2010 Medal of Service Award.

Wayne Johnston received the Lifetime Achievement Award from the Society for Vascular Surgery. At the same time he became Editor-in-Chief of the Rutherford Vascular Surgery text, the primary textbook in the field, which was published this year as a web comparable textbook for the first time. Barry Rubin, in addition to beginning a second term as the Head of Vascular Surgery, continued as the provincial representative for all Alternate Funding Plan Governance Organizations in the province on the Academic Medicine Steering Committee.

Richard Reznick was elected Vice-President of Education of The Royal College of Physicians and Surgeons of Canada for a three-year term and, at the end of the academic year, was appointed as Dean of the School of Medicine at Queen's University. Allan Okrainec pursued his unique telementoring and telesimulation of the Minimally Invasive Surgical Program in many centres around the world. He and two other general surgeons at UHN, David Urbach and Todd Penner, became integral parts of the new University of Toronto Bariatric Surgery Program.

Michael Fehlings received the prestigious Olivecrona Award from the Karolinska Institute in Stockholm for excellence and impact in the field of neurosurgery, related to his work in spinal cord injury. He also received the Leon Wiltse Award from the North American Spine Society for excellence in spine clinical research. Mark Bernstein led a neurosurgical delegation to Ghana and, along with Moji Hodaie, Eric Massicotte, a neurosurgery resident and an operating room team, spent two weeks in that country teaching and operating. Andres Lozano became a Fellow of the Royal Society of Canada, won the Winn Prize and the Donald Calne Award for Parkinson's Disease Research, and was appointed as the new Chair of Neurosurgery at the University of Toronto. All neurosurgeons collaborated with the Ministry to offer emergency services, contributing to more efficient and safer care of patients in the emergency situation.

Stefan Hofer was appointed as Editor of the Journal of Plastic, Reconstructive and Aesthetic Surgery (JPRAS), formerly the British Journal of Plastic Surgery. He is the first non-British plastic surgeon to hold this position. The UHN Breast Restoration website was launched in December 2009 as an information resource for patients and referring clinicians. At the same time, the division published the first edition of

the UHN Breast Reconstruction Patient Education booklet, with an electronic version available for downloading on the program's website.

Tony Finelli continued his work in minimally invasive uro-oncology, John Trachtenberg in focal prostate cancer therapy was recently featured on the cover of The Journal of Urology, and Mike Jewett in his interests in kidney and testicular cancer.

Nizar Mahomed won the CIHR CMAJ Award, recognizing his leadership at 35 hospitals that introduced new procedures for hip and knee surgery, and Rod Davey was appointed co-Chair of the Joint Health & Disease Management Steering Committee for the Toronto Central LHIN. In addition, Darryl Ogilvie-Harris was appointed Director of the University of Toronto Sports Medicine Program.

A new Interventional Thoracic Surgery Program was established under the direction of Dr. Kazu Yasufuku, highlighted by the completion of a state-of-the-art interventional thoracic surgery suite at the Toronto General site. This will be important for early diagnostic and therapeutic management of lung and esophageal cancer. The Division of Thoracic Surgery formed a unique partnership with McMaster University as a joint academic and clinical program in thoracic surgery.

Eric Massicotte won the Ross Fleming Teaching Award, and Alice Wei received the Frank Mills teaching award in General Surgery.

The academic year ended with Shaf Keshavjee's appointment as Surgeon-in-Chief, succeeding Bryce Taylor after an eleven year term.

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. Scully	Professor
Dr. R.D. Weisel	Professor
Dr. T.M. Yau	Associate Professor

PUBLICATIONS

Badiwala MV, Ramzy D, Tumiati LC, Tepperman ED, Sheshgiri R, Prodger JL, Feindel CM, Rao V: Donor pretreatment with hypertonic saline attenuates primary allograft dysfunction. A pilot study in a porcine model. *Circulation*: September 2009; 120(11 Suppl): pp S206-214.

Badiwala MV, Verma S, Rao V: Surgical management of ischemic mitral regurgitation. *Circulation*: September 2009; 120(13): pp 1287-1293.

Brister SJ, Buchanan MR: Aspirin "resistance" and its impact on cardiovascular morbidity and mortality: It is real, clinically relevant and should be measured. *Heart*: August 2009; 95(15): pp 1223-1224. E-published April 26, 2009.

David TE: Functional tricuspid regurgitation: A perplexing problem. *Journal of the American Society of Echocardiography*: August 2009; 22(8): pp 904-906.

David TE: Preoperative selection of patients for aortic valve repair. *Revista Espanola de Cardiologia*: May 2010; 63(5): pp 513-515.

David TE: Surgical treatment of ascending aorta and aortic root aneurysms. *Progressive Cardiovascular Disease*: March 2010; 52(5): pp 438-444.

David TE, Armstrong S: Aortic cusp repair with Gore-Tex sutures during aortic valve-sparing operations. *Journal of Thoracic and Cardiovascular Surgery*: July 2009; 139(5): pp 1340-1342.

David TE, Armstrong S, Maganti M, Colman J, Bradley TJ: Long-term results of aortic valve-sparing operations in patients with Marfan syndrome. *The Journal of Thoracic and Cardiovascular Surgery*: October 2009; 138(4): pp 859-864; discussion pp 863-864. E-published August 3, 2009.

David TE, Woo A, Armstrong S, Maganti M: When is the Ross operation a good option to treat aortic valve disease? *The Journal of Thoracic and Cardiovascular Surgery*: January 2010; 139(1): pp 68-73.

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Fujii H, Sun Z, Li SH, Wu J, Fazel S, Weisel RD, Rakowski H, Lindner J, Li RK: Ultrasound-targeted gene delivery induces angiogenesis after a myocardial infarction in mice. *Journal of the American College of Cardiology: Cardiovascular Imaging*: July 2009; 2(7): pp 869-879.

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Kinkaid HY, Huang XP, Li R-K, Weisel RD: What's new in cardiac cell therapy? *Journal of Cardiac Surgery*: May 2010; 25(3): pp 359-366. E-published February 8, 2010.

MacIver J, Ross HJ, Delgado DH, Cusimano RJ, Yau TM, Rodger M, Harwood S, Rao V: Community support of patients with a left ventricular assist device: The Toronto general experience. *The Canadian Journal of Cardiology*: November 2009; 25(11): pp e377-e381.

Maganti M, Badiwala M, Sheikh A, Scully H, Feindel C, David TE, Rao V: Predictors of low cardiac output syndrome after isolated mitral valve surgery. *The Journal of Thoracic and Cardiovascular Surgery*: E-published ahead of print February 10, 2010.

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Nazer RI, Elhenawy AM, Fazel SS, Garrido-Olivares LE, Armstrong S, David TE: The influence of operative techniques on the outcomes of bicuspid aortic valve disease and aortic dilatation. *The Annals of Thoracic Surgery*: June 2010; 89(6): pp 1918-1924.

Ong L, Li W, Oldigs JK, Kaminski A, Gerstmayer B, Piechaczek C, Wagner W, Li RK, Ma N, Steinhoff G: Hypoxic/normoxic preconditioning increases endothelial differentiation potential of human bone marrow CD 133+ cells. *Tissue Engineering*: E-published ahead of print April 6, 2010.

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Pang Q, Zu JW, Siu GM, Li RK: Design and development of a novel biostretch apparatus for tissue engineering. *Journal of Biomechanical Engineering*: January 2010; 132(1):014503.

Rodes-Cabau J, Webb JG, Cheung A, Ye J, Dumont E, Feindel CM, Osten M, Natarajan MK, et al: Transcatheter aortic valve implantation for the treatment of severe symptomatic aortic stenosis in patients at very high risk or prohibitive surgical risk: Acute and late outcomes of the multicenter Canadian experience. *Journal of the American College of Cardiologists*: March 2010; 55(11): pp 1080-1090. E-published January 22, 2010.

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Sheikh AM, Elhenawy AM, Maganti M, Armstrong S, David TE, Feindel CM: Outcomes of double valve surgery for active infective endocarditis. *The Journal of Thoracic and Cardiovascular Surgery*: July 2009; 138(1): pp 69-75.

Sheshgiri R, Gustaffson F, Sheedy J, Xiao R, Librach CL, Rao V, Ross HJ, Delgado DH: Everolimus but not mycophenolate mofetil therapy is associated with soluble HLA-G expression in heart transplant patients. *The Journal of Heart and Lung Transplantation*: November 2009; 28(11): pp 1193-1197.

Wang P, Wang Q, Sun J, Wu J, Li H, Zhang N, Huang Y, Su B, Li RK, Liu L, Zhang Y, Elsholtz HP, Hu J, Gaisano Hy, Jin T: POU homeodomain protein Oct-1 functions as a sensor for cyclic AMP. *The Journal of Biological Chemistry*: September 2009; 284(39): pp 26456-26465. E-published July 18, 2009.

Wiklund L, Setina M, Tsang K, Cusimano R, Yau T: A multicenter prospective randomized trial of a second-generation anastomosis device in coronary artery bypass surgery. *The Journal of Thoracic and Cardiovascular Surgery*: March 2010; 139(3): pp 741-747.

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Zhuo Y, Li SH, Chen MS, Wu J, Kinkaid HY, Fazel S, Weisel RD, Li R-K: Aging impairs the angiogenic response to ischemic injury and the activity of implanted cells: Combined consequences for cell therapy in older recipients. *The Journal of Thoracic and Cardiovascular Surgery*: November 2009; 139(5): pp 1286-94.

INVITED VISITS

Brister SJ: Canadian Institutes of Health Research, Institute for Gender and Health, Vancouver, British Columbia, Canada, March 2010. IGH Roundtable: Clinical interventions for cardiovascular disease: Enhancing effectiveness.

Cusimano RJ: Xinxiang University, 1st Medical College, Xinxiang, China, May 2010. (1) Post cardiac operative management of bleeding, (2) What's new in cardiac surgery, (3) When and how to change the aorta.

David TE: The Charlton Administration and Manulife Investments, Toronto, Ontario, Canada, June 2010. Guest Speaker: Innovations in medicine.

David TE: University of Pittsburgh, Eighth International Symposium on Redo Cardiac Surgery in Adults, Pittsburgh, Pennsylvania, USA, June 2010. Guest Speaker: Management of redo double and triple valve re-replacements and outcomes.

David TE: The 7th Annual Great Debate and Innovations in Cardiology Symposium, Toronto, Ontario, Canada, May 2010. (1) Debate: CABG is preferable to PCI in multi-vessel CAD involving LAD [Pro: David T, Con: Strauss B], (2) Lecture: Surgical innovations in the management of valvular disease.

David TE: American Association for Thoracic Surgery, Postgraduate Course, Toronto, Ontario, Canada, May 2010. Lecture: How I do it: Repair of Barlow's valve skin to skin.

David TE: XXXI Portuguese Congress of Cardiology, Lisbon, Portugal, April 2010. Guest Speaker: Are pericardial valves more durable than porcine valves?

David TE: American Association for Thoracic Surgery, Academy AATS 2010, Postgraduate Course, Toronto, Ontario, Canada, April 2010. Lecture: Developing philanthropy.

David TE: Aortic Symposium 2010, New York, New York, USA, April 2010. Guest Lecturer: Techniques of repair and late outcomes of aortic valve sparing operations.

David TE: Kerckhoff Klinik, Bad Neudheim, Germany, April 2010. Visiting Surgeon: Aortic valve sparing: Indications and outcomes.

David TE: Texas Heart Institute and Baylor University, Denton A. Cooley Lectureship, Houston, Texas, USA, April 2010. Lecture: Creativity in surgery.

David TE: University Hospital of Naples, Aula Magna, Naples, Italy, April 2010. Guest Lecturer: Seminario cardiologico cardiocirurgico sulla mitrale ischemica (Surgical management of ischemic mitral regurgitation.)

David TE: University of Texas, Grand Rounds, San Antonio, Texas, USA, April 2010. Functional anatomy of the aortic valve.

David TE: American Society of Echocardiography, Florida Valve 2010, Orlando, Florida, USA, March 2010. Guest Speaker: Valve-sparing root remodeling versus stentless root replacement.

David TE: Asian Society for Cardiovascular Surgery and Indian Association of Cardiovascular Thoracic Surgeons, New Delhi, India, February 2010. Guest Speaker: (1) Surgery for degenerative heart valve disease, (2) Aortic root surgery: Techniques and outcomes, (3) Postgraduate Course/Video Conference: Valve sparing aortic surgery.

David TE: Hyderabad University, Hyderabad, India, February 2010. Visiting Professor: Aortic valve sparing operations: Techniques and outcomes.

David TE: Narayana Hrudayalaya Hospital, Bangalore, India, February 2010. Visiting Surgeon: Surgical demonstration and lecture on aortic root surgery.

David TE: Ocean Reef Club, Key Largo, Florida, USA, January 2010. Guest Speaker: Brain and heart inter-actions.

David TE: Catholic University of Parana, Curitiba, Postgraduate Course and Live Teleconference, Parana, Brazil, November 2009. Guest Speaker: (1) Prosthesis-patient mismatch adversely affect outcomes of aortic valve replacement, (2) Surgery for functional mitral regurgitation, (3) Long term outcomes of mitral valve repair for prolapse, (4) Live surgery - mitral valve replacement and maze procedure for chronic atrial fibrillation.

David TE: University of Ancona (at the invitation of Dr. Lucia Corracca), Ancona, Italy, November 2009. (1) Live teleconference: Aortic valve sparing operations for bicuspid aortic valve, (2) Lecture: Aortic valve repair.

David TE: University of Florence, Postgraduate Course chaired by Dr. Pierluigi Stefano, Florence, Italy, November 2009. (1) Moderator: Live surgeries on aortic and mitral valve repair, (2) Guest Speaker: New frontiers on aortic and mitral valve repair.

David TE: University of Salerno (at the invitation of Professor Giuseppe Di Benedetto), Salerno, Italy, November 2009. (1) Live teleconference: Aortic valve repair, (2) Lecture: Aortic valve repair.

David TE: University of South Carolina, Surgical Grand Rounds - Creativity in Surgery, Charleston, South Carolina, USA, November 2009. (1) Horace G. Smithy Visiting Professor, (2) Moderator and discussant of research papers by 8 surgical trainees.

David TE: World Society of Cardio-Thoracic Surgeons, 19th World Congress, Buenos Aires, Argentina, November 2009. Guest Speaker: (1) Surgical treatment of bicuspid aortic valve in children, (2) Aortic valve sparing operations for aortic root aneurysm, (3) Prosthesis-patient mismatch adversely affect outcomes of aortic valve replacement.

David TE: Cheba University, Tel Aviv, Israel, October 2009. Visiting Professor/Lectures (1) Natural history of bicuspid aortic valve, (2) New techniques and long term results of aortic valve sparing, (3) Video Conference: Aortic valve preservation, (4) Is the Ross procedure worth pursuing?, (5) What is new in functional mitral regurgitation, (6) New techniques and long term results of mitral valve repair versus replacement, (7) Mitral valve repair compared to replacement: Is repair better than replacement?

David TE: European Association for Cardio-Thoracic Surgery, Vienna, Austria, October 2009. (1) Guest Speaker: Aortic valve repair, (2) Invited discussant: (i) Freestyle in young patients, (ii) Repair of calcified mitral annulus, (3) Moderator: Aortic valve surgery.

David TE: Ohio State University, Columbus, Ohio, USA, October 2009. Visiting Professor/Lectures: (1) Aortic valve repair and replacement, (2) Mitral regurgitation and heart failure.

David TE: Vanderbilt University, School of Medicine, Division of Continuing Medical Education, Vanderbilt Valve Symposium: 21st Century, Techniques for Complex Valve Surgery, Postgraduate Course, Nashville, Tennessee, USA, October 2009. Lecture: Atrio-ventricular and aorto-ventricular dehiscence: How to avoid and treat.

David TE: American Association for Thoracic Surgery and American College of Cardiology, 2009 Heart Valve Summit Postgraduate Course, Chicago, Illinois, USA, September 2009. (1) Lecture: Aortic valve sparing: History, techniques and outcomes, (2) Moderator: Anatomy, imaging and function.

David TE: The Aorta at Saint Malo, Palais du Grand Large, Saint-Malo, France, September 2009. Lecture: David operation - early and late dysfunction, indications and redos.

David TE: University of Bordeaux (at the invitation of Professor Xavier Roques), Bordeaux, France, September 2009. Visiting Professor: Lecture and operative demonstration of aortic valve repair.

David TE: St. Jude Medical, Lillehei Memorial Workshop for Japanese Cardiac Surgeons, Minneapolis, Minnesota, USA, August 2009. (1) Repair versus replacement of the aortic valve, (2) Aortic valve repair, (3) Redo valvular surgery in elderly patients, (4) Dinner Presentation: Creativity in surgery.

David TE: World Health Foundation, Hanoi, Ho Chi Minh City, Vietnam; Jakarta, Indonesia; Beijing, China; Dhaka, Bangladesh; Tokyo, Japan, July 2009. World Bank Live Telemedicine Series: (1) Aortic valve sparing operations for aortic root aneurysm, (2) Choice of prosthesis for aortic valve replacement.

Feindel CM: Perfusion International, 4th Annual The New Orleans Conference - Practices in Cardiac Surgery and Extracorporeal Therapies, New Orleans, Louisiana, USA, June 2010. (1) Are we undertreating valve dysfunction?, (2) Have the criteria for choosing tissue valves changed?

Feindel CM: American Heart Association, Orlando, Florida, USA, November 2009. Transapical aortic valve replacement (AVR).

Feindel CM: Canadian Cardiovascular Society, Edmonton, Alberta, Canada, October 2009. (1) Aortic valve sparing operation - a reproducible operation?, (2) Transcatheter aortic valve implantation.

Feindel CM: Canadian Society of Cardiac Surgeons / CCS, Edmonton, Alberta, Canada, October 2009. (1) The cardiac surgery workforce: A survey of recent graduates of Canadian training programs, (2) The future of cardiac surgery in Canada: A workforce model simulation.

Li R-K: Institute for Heart Research, Slovak Academy of Sciences, Advances in Cardiovascular Research: From Genes and Molecules to Clinical Applications, Smolenice, Slovakia, June 2010. Guest Speaker: Feasibility of allogeneic bone marrow stem cells for cell therapy to restore cardiac function after myocardial infarction.

Li R-K: Third Military Medical University, First Cardiovascular Tissue Engineering Meeting, Chongqing, China, May 2010. Guest Speaker: Optimal strategy to generate tissue for cardiac repair.

Li R-K: International Society for Adaptive Medicine, XI World Congress, Taipei, Taiwan, August 2009. Guest Speaker: Cell engineered cardiac grafts for cardiac repair.

Rao V: American Heart Association, 82nd Annual Scientific Session Orlando, Florida, USA, November 2009. Chordal cutting: Friend or foe?

Rao V: Canadian Cardiovascular Society, 62nd Annual Meeting Edmonton, Alberta, Canada, October 2009. Canadian experience with the heartmate 2 device.

Rao V: Canadian Transplant Fellows Symposium, Toronto, Ontario, Canada, October 2009. Left ventricular assist devices.

Rao V: Success with Heart Failure Symposium, New York, New York, USA, October 2009. Devices and their challenges.

Rao V: Society of Thoracic Surgeons, San Francisco, California, USA, September 2009. Mitral valve repair for ischemic mitral regurgitation.

Weisel RD: American Association for Thoracic Surgery (AATS), Toronto, Ontario, Canada, May 2010. Cell-based therapies for congenital heart disease.

Weisel RD: CANNectIN Cardiac Surgery Meeting, Hamilton, Ontario, Canada, April 2010. Presentation of the IMPACT Trial.

Weisel RD: Society of Thoracic Surgeons, Fort Lauderdale, Florida, USA, January 2010. Myocardial protection with acadesine - perspective from studies in the 1990s.

Weisel RD: American Heart Association, Orlando, Florida, USA, November 2009. (1) Cardiovascular Seminar, Translation of stem cell therapy, (2) Meet the Experts: Mentoring cardiovascular scientists.

Weisel RD: International Society for Adaptive Medicine, Taipei, Taiwan, August 2009. Cardiac regeneration by stem cell transplantation.

Weisel RD: Fuwai Hospital, Beijing, People's Republic of China, July 2009. Visiting Professor: Cardiac regeneration by cell transplantation.

Yau TM: Canadian Society of Cardiac Surgeons, Victoria, British Columbia, Canada, May 2010. Complex endocarditis of the aortic and mitral valves.

Yau TM: International Society for Heart and Lung Transplantation, Chicago, Illinois, USA, April 2010. Co-Chair of Concurrent Session 11- Stem Cells: Basic and Translational Approaches.

Yau TM: Canadian Cardiovascular Congress, Edmonton, Alberta, Canada, October 2009. Co-Chaired Scientific Session I - Applied Basic Science II and Session II - Replace, Regenerate and Renew - Stem Cell Therapies.

Yau TM: Heart Transplant Retreat, Toronto, Ontario, Canada, September 2009. Cell transplantation for myocardial repair.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

Acadesine to reduce perioperative ischemic injury. *Yau T, Weisel RD: Schering-Plough.* (\$100,000 2009 - 2010)

An angiogenic progenitor cell niche in the uterus: Potential implications for cell therapy. *Li RK: Canadian Institutes of Health Research.* (\$681,120 2008 - 2013)

An RCT of women's adherence to women-only, home-based and traditional cardiac rehabilitation. *Grace SL, Pilote L, Arthur HM, Stewart DE, Oh P, Melvin K, Sternberg L, Brister SJ: Heart and Stroke Foundation.* (\$376,691 2009 - 2012)

Anaconda trial. *Wasowicz M, Yau TM: UHN Innovations Fund.* (\$98,010 2009 - 2010)

Cardiac regeneration: Improving the response to injury. *Weisel RD, Fazel S: Heart and Stroke Foundation.* (\$231,726 2007 - 2010)

Electrophysiological implications of regenerative therapy. *Yau TM, Nanthakumar K, Backx P: Heart and Stroke Foundation of Ontario.* (\$89,365 2009 - 2012)

Facilitators and barriers to effective discharge following open heart surgery: Patients' and nurses' experiential accounts. *Lapum J, Fredericks S, Micevski V, Yau T: Ryerson New Faculty SRC Development Fund.* (\$10,000 2010 - 2012)

Facilitators and barriers to effective discharge following open heart surgery: Patients' and nurses' experiential accounts. *Lapum J, Fredericks S, Micevski V, Yau T: Faculty of Community Services Seed Grant.* (\$5,000 2010)

Harnessing the immune system to achieve cardiac restoration by allogeneic cell transplantation. *Li RK: Canadian Institutes of Health Research.* (\$698,984 2010 - 2015)

Inflammation, infection, trauma and repair cluster - Canada Research Chair in Cardiac Regeneration. *Li RK: Canadian Institutes of Health Research.* (\$1,400,000 2006 - 2014)

Modifying cardiac repair using molecular and cellular interventions. *Li RK: Heart and Stroke Foundation of Ontario.* (\$160,000 2009 - 2011)

NanoMed Fab: A nanofabrication centre for personalized medicine. *Zheng G, Allen C, Chan W, Garipey J, Jaffrey D, Li RK, Liu M, Rottapel R, Walker G, Wilson B: Canada Foundation for Innovation.* (\$2,486,515 2009 - 2014)

Peptide modified photocrosslinkable chitosan for cell therapy in myocardial infarction. *Radisic M, Li RK: Heart and Stroke Foundation of Ontario.* (\$152,922 2007 - 2010)

Restoration of cardiac function: Cellular regeneration and matrix reconstruction. *Li RK: Heart and 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). *Weisel RD, Li RK: Canadian Institutes of Health Research.* (\$2,182,550 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 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. *Yau TM: Schering-Plough Research Institute.* (\$250,000 2009 - 2011)

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: Canadian Foundation for Innovation and Ontario Research Fund.* (\$14,400,000 2006 - 2011)

The Regenerative Medicine (REMEDI) Project. *Weisel RD, Li RK, Jaffray, Wilson B, Kotra L, Keating A, Fehlings M, Radisic M, Medin J: Canada Foundation for Innovation.* (\$7,200,000 2007 - 2012)

Tissue engineering patches for the repair of cardiovascular congenital malformations. *Radisic M, Li RK, Stanford WL: Natural Sciences and Engineering Research Council of Canada (NSERC).* (\$444,765 2010 - 2013)

Variation in Revascularization Practice in Ontario (VRPO). *Feindel C (UHN Site Investigator), Cohen E (Medical Officer, CCN), Tu J (ICES): Ministry of Health Long Term Care.* (\$1,300,000 2008 - 2010)

HONOURS RECEIVED

Li RK: Mel Silverman Mentorship Award, Institute of Medical Science, University of Toronto. May 2010.

Weisel RD: Scientific Achievement Award of the American Association of Thoracic Surgeons. May 2010.

DIVISION OF GENERAL SURGERY

Dr. M.S. Cattral	Professor	Dr. I.D. McGilvray	Assistant Professor
Dr. T. Cil	Assistant Professor	Dr. C. Moulton	Assistant Professor
Dr. S. Cleary	Assistant Professor	Dr. C.A. O'Brien	Assistant Professor
Dr. J. Escallon	Associate Professor	Dr. A. Okrainec	Assistant Professor
Dr. A.R. Gagliardi	Assistant Professor	Dr. T.P. Penner	Lecturer
Dr. S. Gallinger	Professor	Dr. M. Reedijk	Assistant Professor
Dr. A. Ghanekar	Lecturer	Dr. R. Reznick	Professor
Dr. R.M. Gorczynski	Professor	Dr. L.E. Rotstein	Professor (Division Head)
Dr. D. Grant	Professor	Dr. M. Selzner	Assistant Professor
Dr. P.D. Greig	Professor	Dr. B.R. Taylor	Professor
Dr. T. Jackson	Assistant Professor	Dr. D.R. Urbach	Associate Professor
Dr. E.D. Kennedy	Assistant Professor	Dr. A.C. Wei	Assistant Professor
Dr. W.L. Leong	Assistant Professor	Dr. H. Weizel	Associate Professor
Dr. D.R. McCreedy	Professor	Ms. L. Wright	Assistant Professor

PUBLICATIONS

Adcock L, Macleod C, Dubay D, Greig PD, Cattral MS, McGilvray I, Lilly L, Girgrah N, Renner EL, Selzner M, Selzner N, Kashfi A, Smith R, Abbey S, Grant DR, Levy GA, Therapondos G: Adult living liver donors have excellent long-term medical outcomes: The University of Toronto liver transplant experience. *American Journal of Transplantation*: February 2010; 10(2): pp 364-371.

Allen U, Barton M, Beyene J, Hu P, Khodai-Booran N, Hébert D, Dipchand A, Ng V, Solomon M, Grant D, Fecteau A, Ngan B, Read S, Zielenska M, Weitzman S: Gene expression using microarrays in transplant recipients at risk of EBV lymphoproliferation after organ transplantation: Preliminary proof-of-concept. *Pediatric Transplantation*: December 2009; 13(8): pp 990-998. E-published September 7, 2009.

Amundadottir L, Kraft P, Stolzenberg-Solomon RZ, Fuchs CS, Petersen GM, Arsian AA, Bueno-de-Mesquita HB, Gross M, Helzlsouer K, Jacobs EJ, Lacroix A, Zheng W, Albanes D, Bamlet W, Berg CD, Berrino F, Bingham S, Buring JE, Bracci PM, Canzian F, Clavel-Chapelon F, Clipp S, Cotterchio M, de Andrade M, Duell EJ, Fox Jr JW, Gallinger S, Gaziano JM, Giovannucci EL, et al: Genome-wide association study identifies variants in the ABO locus associated with susceptibility to pancreatic cancer. *Nature Genetics*: August 2009; 41(9): pp 986-990.

Anderson LN, Cotterchio M, Gallinger S: Lifestyle, dietary, and medical history factors associated with pancreatic cancer risk in Ontario, Canada. *Cancer Causes Control*: August 2009; 20(6): pp 825-834.

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INVITED VISITS

Cleary S: Canadian Surgical Forum, Symposium of Management of Colorectal Liver Metastases, Victoria, British Columbia, Canada, September 2009. Guest Speaker on a Case Presentation: Downsizing with Y90 radioembolization.

Cleary S: Ethicon and Toronto MIS Group, Toronto Minimally Invasive Surgery Rounds, Toronto, Ontario, Canada, September 2009. Laparoscopic liver and pancreatic resection.

Escallon J: Colombian Surgical Society, Bogota, Colombia, March 2010. (1) Prophylactic mastectomy: Current indications, (2) Role of oncotype Dx in the current management of breast cancer, (3) Updating the curriculum in general surgery.

Escallon J: Newfoundland Surgical Society, Cornbroke, Newfoundland, Canada, March 2010. Role of oncotype Dx in the current management of breast cancer.

Escallon J: Colombian Surgical Society, Medellin, Colombia, August 2009. (1) Education in surgery in the XXI century: Lessons to learn from Colombia, (2) Error in medicine, human but preventable, (3) How are we teaching and learning minimally invasive surgery, (3) Necessary infrastructure for education using simulators in MIS, (4) Role of oncotype Dx in the current management of breast cancer,

Escallon J: Latin American Federation of Surgical Societies, Caracas, Venezuela, July 2009. (1) Indications for prophylactic mastectomy, (2) Locally advance breast cancer, (3) Why and how to assess the lymph nodes in breast cancer.

Gallinger S: International Hepato-Pancreato-Biliary Association (IHPBA), 9th World Congress, Buenos Aires, Argentina, April 2010. (1) Challenging liver cases with the Professors, (2) Liver resection with parenchymal perfusion techniques, (3) Commentator during Poster Session: Pancreas Cancer & Neuroendocrine Tumors, (4) Surveillance in familial pancreatic cancer.

Gallinger S: 21st International Congress on Anti-Cancer Treatment/4th International Seminar on Surgical Oncology, Paris, France, February 2010. (1) 37% 5-year survival after resection of gallbladder cancer, (2) Surgical techniques in gallbladder cancer, (3) Techniques and results of surgery of the gallbladder.

Gallinger S: Sanofi-Aventis, Thunder Bay, Ontario, Canada, November 2009. Do the ends justify the means? Pushing the envelope in liver surgery.

Gorczynski RM: European Congress of Immunology, Berlin, Germany, September 2009. Expression of a CD200 transgene is necessary for induction but not maintenance of tolerance to cardiac and skin allografts.

Gorczynski RM: European Immunology Association, Berlin, Germany, September 2009. Expression of a CD200 transgene is necessary for induction but not maintenance of tolerance to cardiac and skin allografts.

Grant D: University of Madison, Wisconsin, USA, April 2010. Invited Speaker: Living liver donation.

Grant D: University of Bologna, Intestine Transplant Symposium, Bologna, Italy, Bologna, Italy, September 2009. Intestine transplant registry report.

Greig PD: International Hepato-Pancreato-Biliary Association (IHPBA), Buenos Aires, Argentina, April 2010. (1) Evidence based medicine - resection for HCC, (2) Symposium 10 - Education and training in HPB surgery North American point of view.

Leong WL: Israel Society of Cancer Research, Tel Aviv, Israel, February 2010. (1) Long-term outcomes of patients with cutaneous melanoma managed with sentinel node biopsy performed after versus concurrent with wide local excision, (2) Management of atypical spitz tumor.

McCready DR: British Columbia Surgical Oncology Network, Breast Cancer Update, Vancouver, British Columbia, Canada, October 2009. Royal College Speaker: Management of axilla in breast cancer.

McGilvray ID: Canadian Treatment Action Committee, Toronto, Ontario, Canada, June 2010. HIV and liver transplantation.

McGilvray ID: Canadian Association for the Study of Liver Disease (CASLD), Toronto, Ontario, Canada, March 2010. HCV genomics: From bench to bedside.

McGilvray ID: Canadian Liver Transplant Forum, Toronto, Ontario, Canada, February 2010. HCV genomics: Predicting natural history and response to therapy.

Moulton CA: Eastern Ontario Education Researchers Group, Bayfield, Ontario, Canada, June 2010. Slowing down when you should: Remaining attentive in automacity...but where to from here?

O'Brien CA: City of Hope, Surgical Grand Rounds, Duarte, California, USA, May 2010. The role of self-renewal in colon cancer-initiating cells.

O'Brien CA: American Society of Clinical Oncology (ASCO) and European Organization for the Research and Treatment of Cancer (EORTC), Joint Meeting, Brussels, Belgium, October 2009. Can colon cancer-initiating cells be utilized as biomarkers?

O'Brien CA: National Cancer Institute, Cancer Therapy Evaluation Program, Bethesda, Maryland, USA, October 2009. Colon cancer stem cells and the Wnt pathway.

Okrainec A: Society of American Gastrointestinal and Endoscopic Surgeons, Washington, District of Columbia, USA, April 2010. (1) A trainer perspective: Peru experience, (2) Difficult fundus mobilization and bleeding short gastrics during foregut surgery, (3) Fundamentals of laparoscopic surgery hands-on skills course, (4) Learning Center Chair, (5) Trends and results of the first five years of fundamentals of laparoscopic surgery (FLS) certification testing.

Okrainec A: Department of Foreign Affairs and International Trade, Ottawa, Ontario, Canada, February 2010. Africa's new frontier: Innovation, technology, prosperity.

Okrainec A: American College of Surgeons, 95th Annual Clinical Congress, Chicago, Illinois, USA, October 2009. Fundamentals of laparoscopic surgery hands-on skills course.

Okrainec A: Canadian Surgical Forum, Victoria, British Columbia, Canada, September 2009. Laparoscopy in the Acute Setting: (1) Chair, CAGS Paper Session, (2) Chair, Instructional Video Symposium, (3) Minimally Invasive Surgery Postgraduate Course: The avoidance and management of bleeding complications in laparoscopic colorectal surgery.

Okrainec A: International Federation of Societies of Endoscopic Surgeons, International Surgical Week, Adelaide, Australia, September 2009. The implementation of a laparoscopic surgery program in Botswana, Africa.

Okrainec A: Colombian Surgical Society, Annual Meeting, Medellin, Colombia, August 2009. (1) Overcoming the learning curve in laparoscopy: What works, what doesn't, what lies ahead, (2) The laparoscopic management of abdominal emergencies.

Reznick RR: Society in Europe for Simulation Applied to Medicine (SESAM), Groningen, The Netherlands, June 2010. Keynote Speaker: Simulation as part of radical curricular reform.

Reznick RR: American Society of Colon and Rectal Surgeons, Annual Meeting, Masters in Colorectal Surgery, Minneapolis, Minnesota, May 2010. Lecture: Restless for change: An ode to Stan Goldberg.

Reznick RR: The Royal College of Surgeons of Ireland, 2nd International Conference on Surgical Education and Training, Dublin, Ireland, May 2010. (1) Delivered the State of the Art Lecture: The role of research in modern surgical training, (2) co-Chair of Session 5: Simulation on Surgical Training 2.

Reznick RR: University of Vermont, College of Medicine, Department of Surgery, The Mackay-Page Lectureship, Burlington, Vermont, USA, April 2010. It's a short story with a long prologue: The road to curricular change.

Reznick RR: University of Auckland, Auckland, New Zealand, March 2010. External Reviewer of the School of Medicine.

Reznick RR: Association of Professors of Obstetrics and Gynaecology of Canada, Toronto, Ontario, Canada, December 2009. Cannell Lecturer: It's not about the competencies, it's about curricular revolution.

Reznick RR: Department of Health, London, United Kingdom, December 2009. Health Innovation and Education Clusters (HIECs) National Award Panel Member.

Reznick RR: Canadian Pediatric Anaesthesia Society, Toronto, Ontario, Canada, November 2009. Threats to residency training: Minor reconstruction or radical surgery?

Reznick RK: American College of Surgeons, Clinical Congress, Chicago, Illinois, USA, October 2009. Panel Member: The Canadian Health Care System: What Is It All About?

Reznick RK: University of California, Department of Surgery, San Diego, California, USA, October 2009. Keynote Speaker: Education retreat.

Reznick RK: University of Montreal, Montreal, Quebec, Canada, October 2009. Keynote Speaker: (1) Journée pédagogique, (2) Structure of a Department of Surgery.

Reznick RK: The Royal College of Physicians and Surgeons of Canada, International Conference on Residency Education, Victoria, British Columbia, Canada, September 2009. Opening Plenary Speaker: Surgical training: At a precipice.

Reznick RK: University of Oxford, School of Surgery, Balliol Surgical Colloquium, Oxford, United Kingdom, September 2009. Keynote Speaker: What I would do to improve the training of surgeons in the UK, (2) The enriched surgical curriculum.

Reznick RK: International Association of Oral Oncology, Toronto, Ontario, Canada, July 2009. Keynote Address: Surgical training: At a precipice.

Urbach DR: Ontario Institute for Cancer Research, Health Services Research Program, Toronto, Ontario, Canada, February 2010. Evaluation of a healthcare policy intervention to change the organization and delivery of lung cancer surgery in Ontario.

Taylor B: University of Western Ontario, City-Wide Perioperative Grand Rounds, London, Ontario, Canada, January 2010. Implementation of the surgical checklist - why bother?

Taylor B: Windsor Regional Hospital, Grand Rounds, Windsor, Ontario, Canada, January 2010. The surgical checklist.

Taylor B: McGill University, Montreal, Quebec, Canada, December 2009. The Brock Lecture: The surgical checklist - would it make a difference in my hospital?

Taylor B: The International Society for Quality in Healthcare, 26th International ISQua Conference, Dublin, Ireland, October 2009. (1) Session Chair of WHO Implementation of the Surgical Safety Checklist: Barriers and solutions, (2) Plenary Session: Getting it done - implementing the surgical checklist.

Taylor B: Queen Elizabeth Hospital, Special Grand Rounds, Charlottetown, Prince Edward Island, Canada, October 2009. Prince Edward Island surgical community -- the surgical checklist.

Taylor B: Canadian Surgical Forum, Victoria, British Columbia, Canada, September 2009. Poster Judge.

Taylor B: Ontario Hospital Association, Patient Safety Indicators Conference, Toronto, Ontario, Canada, September 2009. The UHN experience.

Taylor B: University of Manitoba, Department of Surgery, Surgical Grand Rounds, Winnipeg, Manitoba, Canada, September 2009. Visiting Professor/Program on Interdisciplinary Trauma Rounds. Safe surgery saves lives initiative.

Taylor B: Colombian Surgery Association, 35th National Congress of Surgery, Medellin, Colombia, August 2009. (1) Impact of the checklist in mortality and morbidity in surgery, (2) Implementing the safe surgery checklist in Toronto, (3) Management of liver metastases: State of the art.

Wright L: L'agence de la biomedecine-France et L'Academie Nationale de Medecine-France, Les conceptions president e l'organisation du prelevement d'organes en France, au Canada et aux Etats-Unis, Paris, France, April 2010. Les donneurs vivants: La situation Canadienne actuelle.

Wright L: Donor Nephrectomy Outcomes Research (DONOR) Network, Toronto, Ontario, Canada, January 2010. Management of misattributed paternity in living donor kidney transplantation.

Wright L: Accreditation Canada, Ethics in Health Care: Not a matter of choice, Toronto, Ontario, Canada, October 2009. Review of ethical guidelines for the evaluation of living organ donors.

Wright L: Society for Transplant Social Workers, Annual Conference, Cleveland, Ohio, USA, October 2009. Transplantation ethics: Donation from living donors and ethical decision-making.

Wright L: l'Institut d'Ete en Ethique Clinique, Montreal, Quebec, Canada, August 2009. L'ethique clinique: Experiences concretes de terrain.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear 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)

A role for, and mechanism of action of, sCD200 in transplant graft survival. *Gorczyński R: The Physicians' Services Incorporated Foundation.* (\$169,000 2010 - 2012)

A shed soluble form of CD200 has prognostic and therapeutic implications in CLL. *Gorczyński R: The Cancer Research Society.* (\$120,000 2009 - 2011)

Age-related susceptibility to hepatic ischemia-reperfusion injury. *McGilvray I, Selzner M, Selzner N: Astellas Pharma Canada.* (\$150,000 2007 - 2009)

Assessing the uptake and effectiveness of laparoscopic surgery for colorectal cancer in Ontario. *Simunovic M, Urbach DR, Baxter N, Sutradhar R, Cadeddu M, Charles C, Guyatt G, Straus S, Thabane L: Canadian Institutes of Health Research.* (\$503,248 2008 - 2011)

Breast cancer risk assessment using optical transillumination spectroscopy. *Lilge L, Bordeleau L, Knight JA, Lewittes LR, Lickley HLA, McCready DR: Canadian Institutes of Health Research.* (\$600,000 2009 - 2014)

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)

Cancer Risk Evaluation (CaRE) Program. *Zanke B, Gallinger S, Hudson T, Kustra R: National Cancer Institute of Canada, Program Project.* (\$300,000 2007 - 2010)

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 team in interdisciplinary research on colorectal cancer. *McLaughlin JS, Gallinger S, and 25 others: Canadian Institutes of Health Research.* (\$3,627,210 2006 - 2011)

Circulating tumour cells in patients with colorectal cancer liver metastases. *Moulton C, Gallinger S, Zogopoulos G, Al-Sukhni E: Colon Cancer Canada.* (\$30,000 2009 - 2010)

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 JR, Ennis M, Escallon J: Susan G. Komen, The Cure Grants.* (\$600,000 2008 - 2011)

Clinical research in breast cancer. *McCready DR: Princess Margaret Hospital Foundation.* (\$100,000 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)

Developing a conceptual framework of patient mediated knowledge translation: Systematic review using a realist approach. *Gagliardi AR, Legare F, Brouwers MC, Webster F, Wiljer D, Badley E, Greenberg A, Legare J, Jusko Friedman A, Logan H, Condie K, Overton E, Straus SE: Canadian Institutes of Health Research.* (\$99,045 2010 - 2011)

Developing and validating a predictive micro-RNA signature of node-negative breast cancer area of focus. *Liu FF, Hui A, Wie S, Fyles A, McCready DR, Pintilie M, Miller N, Whelan T: Canadian Breast Cancer Foundation.* (\$393,105 2008 - 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 interprofessional knowledge exchange capacity for health services research. *Gagliardi AR, Paige CJ, Dobrow MJ: Canadian Institutes of Health Research.* (\$24,093 2010 - 2011)

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 for Health Information.* (\$49,223 2009 - 2010)

Development of a synoptic MRI report for primary rectal cancer. *Kennedy ED: Cancer Services Innovation Partnership.* (\$186,592 2009 - 2010)

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 - 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)

Effect of metformin on breast cancer. *Goodwin P, Escallon J, Leong W, Easson A: Canadian Institutes of Health Research.* (\$10 2009 - 2011)

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 compliance with enhanced recovery after surgery procedures at a network of teaching hospitals. *Okrainec A, Aarts MAW, Chung FT, Siddiqui NT, Gagliardi AR, McLeod RS: Colon Cancer Canada.* (\$35,000 2010 - 2011)

Evaluation of a health care policy intervention to change the organization and delivery of lung cancer surgery in Ontario. *Urbach DR, Dobrow M, Kennedy E, Darling G, Baxter N, Wei A, Gagliardi A, Simunovic M, Coburn N, Sutradhar R, Maziak D, Sundaresan S: Ontario Institute for Cancer Research and Cancer Care Ontario.* (\$253,320 2009 - 2010)

Evaluation of a health care policy intervention to change the organization and delivery of lung cancer surgery in Ontario. *Urbach D, Gagliardi AR, Darling G, Keshavjee S, Irish J, McLeod R: Ontario Institute for Cancer Research.* (\$532,000 2010 - 2013)

Evaluation of a health care policy intervention to change the organization and delivery of lung cancer surgery in Ontario: A CCO/OICR Health Services Research Network Project. *Urbach D, Gagliardi A, Darling G, Keshavjee S, Irish J, McLeod R: Cancer Care Ontario/Ontario Institute for Cancer Research.* (\$532,000 2009 - 2012)

Expansion of the Gattuso Rapid Clinic for Breast Cancer. *McCready DR: Slight and Gattuso Family Foundation and Princess Margaret Hospital Foundation.* (\$2,000,000 2009 - 2018)

Exploring barriers to access to care for colorectal cancer metastases. *Wei A, Sandhu L, Kennedy E, Baxter N, Gagliardi AR, Urbach D: Colon Cancer Canada.* (\$30,000 2009 - 2010)

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 Institute of Health Information.* (\$83,765 2009 - 2010)

Ex vivo human liver perfusion: Assessment and repair of marginal grafts for transplantation. *Selzner M, Grant D, Levy G, Keshavjee S: The Physicians' Services Incorporated Foundation.* (\$168,000 2010 - 2012)

fgl2/FGL2 and xenograft transplantation. *Levy G, Gorczynski R, Grant D: Stroke Foundation of Canada.* (\$265,800 2007 - 2011)

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

Formation and evaluation of a rapid diagnostic clinic for breast cancer. *McCready DR: Slaight and Gattuso Family Foundation.* (\$12,500,000 2008 - 2018)

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 and development of therapeutic agents targeting solid tumor stem cells. *Wainberg Z, Pan J, Neel B, O'Brien C, Dirks P, Kornblum H, Eaves C, Mak T, Slamon D* [This is a combined Canada-California grant, California Institute of Regenerative Medicine(CIRM); each group receives 20 million dollars over 4 years. Of the money coming to Canada, Dr. O'Brien will receive approximately 800,000-1,000,000 dollars per year. This grant involves a group of senior investigators in Toronto, San Francisco, and Los Angeles]: *Canadian Institutes of Health Research and Genome Canada.* (\$3,500,000 2010 - 2014)

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)

Identification of molecular pathways associated with notch activation in triple-negative breast cancer. *Reedijk M, Moffat J: Canadian Institutes of Health Research.* (\$346,950 2010 - 2012)

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 opportunities to improve care and outcomes for patients undergoing colorectal surgery: Enhanced recovery program effectiveness and implementation. *Okrainec A, Aarts MA, Gagliardi A, Chung F, Siddiqui N, Eskicioglu C, McLeod R: Colon Cancer Canada Foundation.* (\$35,000 2009 - 2010)

Impact of glucose/ischemic preconditioning donor pre-treatment on reperfusion injury in deceased-donor liver transplantation - a prospective, randomized trial. *Grant D, Selzner M: Astellas Academic Enrichment Fund.* (\$50,000 2008 - 2010)

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 quality through process change: A scoping review of process improvement tools in cancer surgery. *Wei A, McLeod R, Bathe O, Baxter N, Urbach D, Gagliardi A, Taylor B, Kennedy E: Canadian Institutes of Health Research.* (\$49,815 2010 - 2011)

Interpreting three-dimensional structures from two-dimensional images: A web-based interactive 3D teaching model of surgical liver anatomy. *Moulton C, Crossingham J, Jenkinson J, Woolridge N, Gallinger S, Tait G: Colon Cancer Canada.* (\$30,000 2009 - 2010)

Isolation of breast cancer stem cells and identification of pathways regulating their survival and development. *Mak T, Cheung A, Crump M, Done SJ, Leighl N, Leong WL, McCready DR, 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 the design of innovations? *Lehoux P, Denis J, Miller F, Urbach DR, Williams-Jones B: Canadian Institutes of Health Research.* (\$528,453 2010 - 2013)

Judgments and health innovation: How do upstream knowledge transfer and exchange among stakeholders contribute to the design of innovations? *Lehoux P, Urbach DR, Miller F, Battista R, Williams-Jones B: Canadian Institutes of Health Research.* (\$102,492 2008 - 2009)

Knowledge translation of surgical innovations: Exploring development, implementation and evaluation of robotic and simulation training programs. *Gagliardi AR, Williams D, Reznick R, Denstedt J, Grantcharov T, Okrainec A, Urbach D, Lingard L, Webster F, Straus SE: Canadian Institutes of Health Research.* (\$60,000 2010 - 2011)

Life sciences research in space simulation using a bed rest model. *Hughson R, Shoemaker K, Hart D, Rush J, Gorczynski R: Canadian Space Agency-Canadian Institutes of Health Research (CSA-CIHR), Joint Initiative.* (\$200,000 2007 - 2009)

Mechanism(s) for immunoregulation induced in aging by interactions of LPS and hemoglobin. *Gorczynski R: CLP Research.* (\$300,000 2005 - 2009)

Molecular pathogenesis of hepatitis C viral infection. *McGilvray I, Heathcote J: Canadian Institutes of Health Research.* (\$377,000 2009 - 2012)

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)

Normothermic ex vivo liver perfusion as a novel strategy to assess and repair marginal grafts. *Selzner M: Roche Organ Transplant Research Foundation (ROTRF).* (\$300,000 2010 - 2013)

Ontario Clinical Oncology Group, Ministry of Health and Long Term Care. *Gallinger S, Moulton CA: PETCAM - (\$1200/case).* (\$180,000 2005 - 2010)

Ontario laparoscopy telesimulation initiative. *Okrainec A: Ministry of Health and Long Term Care, Innovation Fund.* (\$185,674 2009 - 2011)

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, Quyni K, Reznick R, Rolando D, West M: National Research Council, Genomics and Health Initiative.* (\$4,800,000 2008 - 2011)

PETCAM Trial, The impact of Positron Emission Tomography (PET) imaging prior to liver resection for Colorectal Adenocarcinoma Metastases (CAM): A prospective multicenter randomized clinical trial. *Moulton C, Gallinger S: Ministry of Health and Long Term Care, Ontario.* (\$980,000 2005 - 2010.)

POP-CURE - Colon cancer research collaboration. *Wouters B, McPherson H, Shaw P, Gallinger S, O'Brien C, Dick J* (A group grant with individual PI's heading each section. Dr. O'Brien's main roles are heading the xenograft generation and characterization aim; and sharing a role in the functional genomics studies with Dr. Wouters); *Pfizer.* (\$6,000,000 2009 - 2010; Year 1- \$372,164 / Year 2 - approx: \$400,000; exact value to be determined.)

Quantifying the effect of notch inhibition on tumor-initiating cells in early phase clinical trials of gamma-secretase inhibitor (Roche R04929097) in advanced, triple negative breast cancer and other solid malignancies. *Reedijk M, Tsao M, Sui L, Ailles L, Oza A: Ontario Institute for Cancer Research.* (\$600,000 2010 - 2012)

Randomized clinical trials for breast cancer. *McCreedy DR (PMH Site Principal Investigator): National Adjuvant Breast and Bowel Project (NSABP).* (\$73,360 2009)

Role and regulation of cancer stem cells in 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 and Stroke Association.* (\$100,000 2007 - 2010)

Role of CD200:CD200R interactions in regulation of tumor growth. *Gorczynski R: Canadian Institutes of Health Research, Industry POPII grant.* (\$300,000 2008 - 2009)

Role of immediate DC precursors in allograft rejection and tolerance. *Cattral MS: Multiorgan Transplantation Academic Enrichment Fund Competition.* (\$100,000 2008 - 2010)

Role of immediate dendritic cell precursors in allograft rejection and tolerance. *Cattral MS: Heart and Stroke Foundation.* (\$230,082 2008 - 2011)

Role of immediate dendritic cell precursors in immunity and tolerance. *Cattral MS: Canadian Institutes of Health Research Astellas.* (\$850,000 2005 - 2010)

Shared decision making for rectal cancer: Can we improve the quality of treatment decisions? *Kennedy ED: Colon Cancer Canada.* (\$45,000 2008 - 2009)

Slowing down when you should: A new model of expert surgical judgment. *Moulton C, Regehr G, MacRae H: The Physicians' Services Incorporated.* (\$41,000 2007 - 2010)

Social, prognostic and therapeutic factors associated with breast cancer survival in Canada and the US: Healthcare access and effectiveness in diverse urban and rural areas, 1985-2010. *Gorey KM, McCreedy DR, Holowaty E: Canadian Institutes of Health Research.* (\$374,000 2004 - 2009)

Storage, assessment, and repair of liver grafts for transplantation using ex vivo liver perfusion. *Selzner M: Astellas Academic Enrichment Fund.* (\$100,000 2010 - 2012)

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)

Structures of care in colorectal cancer surgery in Ontario: Assessing hospital level variation and impact on short term patient outcomes. *Urbach D: Colon Cancer Canada.* (\$30,000 2009 - 2010)

Team Talk II: A multi-institutional evaluation of checklist intervention to structure communication and promote patient safety in the operating room. *Lingard L, Bohnen J, Regehr G, Baker R, Orser B, Doran D, Reznick RK, Rotstein LE, Tan J: Canadian Institutes of Health Research.* (\$311,734 2004 - 2009)

The Assessment of Risk for Colorectal Tumors in Canada (ARCTIC) Genome Project. *Zanke B, Hudson T, Gallinger S, Cotterchio M, Lemmens T: Genome Canada.* (\$9,600,000 2004 - 2010)

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 structured video-feedback to improve laparoscopic technical skill acquisition. *Palter V, Reznick RK, Grantcharov T: The Royal College of Physicians and Surgeons of Canada Educational Research and Development (ERD) Committee.* (\$22,145 2009 - 2010)

The prevalence and correlates of cancer-related fatigue in colorectal, breast and prostate cancer survivors. *Jones JM, Howell D, Catton P, Fleshner N, McCready DR, Olson K: Canadian Institutes of Health Research.* (\$100,000 2010 - 2011)

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)

Thyroid cancer surgery in Ontario. *Urbach D, Rotstein L, Goldstein D, Irish J: Cancer Care Ontario.* (\$45,000 2009 - 2010)

Transition to survivorship: Translating knowledge to action for testicular and endometrial cancer populations. *Jones J, Howell D, Buchman S, Ferguson S, Gospodarowicz M, Jusko Friedman A, Warde P, Catton P, Fitzgerald B, Harrison M, Sharpe M, Wiljer D, Earle C, Gagliardi AR, Jadad A, Urowitz S: Canadian Institutes of Health Research.* (\$350,000 2010 - 2013)

Trauma system development in Canada: Overcoming the challenges of geography through an evaluation of structure and process. *Nathens A, Morrison L, Gagliardi AR, Pong R, Schurmann N, Rubinfeld G, Cusimano M, Snider C, Hameed M, Simons R, Tallon J, Sawadsky B, Schwarz B, Stobbe K, Lawless B, Penney T: Canadian Institutes of Health Research.* (\$1,500,000 2010 - 2015)

UHN application to join the A2ALL consortium. *Grant D, Levy G, Clarke H, Abbey S, Holtzman S: National Institutes of Health.* (\$1,500,000 2009 - 2014 / U.S.\$250,000 prorated for 2009-10)

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)

Virtual Education for Laparoscopy in Ontario (VELO). *Okrainec A, Topps D, Diraddo R, Apkarian J, Leblanc V: Network of Excellence in Simulation for Clinical Teaching and Learning.* (\$81,000 2009 - 2010)

HONOURS RECEIVED

Moulton CA: Abstract of Distinction, International Hepato-Pancreato-Biliary Association. April 2010.

Moulton CA: Paper of Distinction, Association of Surgical Education. April 2010.

McGilvray ID: Glenn Hillson Award. December 2009.

Reznick RK: Charles Tator Surgeon Scientist Mentoring Award. May 2010.

Selzner M: American Society of Transplant Surgeons (ASTS) Faculty Development Award. May 2010.

DIVISION OF NEUROSURGERY

Dr. M. Bernstein	Professor	Dr. K.M. Johnston	Assistant Professor
Dr. K.D. Davis	Professor	Dr. S. Karimi-Abdolrezaee	Assistant Professor
Dr. J.H. Eubanks	Associate Professor	Dr. A.M. Lozano	Professor
Dr. M.G. Fehlings	Professor	Dr. E.M. Massicotte	Assistant Professor
Dr. F. Gentili	Professor	Dr. C.H. Tator	Professor
Dr. A. Guha	Professor	Dr. M. Tymianski	Professor
Dr. C. Hamani	Assistant Professor	Dr. T. Valiante	Assistant Professor
Dr. M. Hodaie	Assistant Professor	Dr. A.A. Velumian	Assistant Professor
Dr. A.R. Hudson	Professor	Dr. M.C. Wallace	Professor (Division Head)
Dr. W.D. Hutchison	Associate Professor	Dr. G. Zadeh	Lecturer

PUBLICATIONS

Agnihotri S, Munoz D, Guha A: Chapter 12: Brain tumour initiating cells: History, new advances, therapeutic promises and pitfalls. In: Practice and Principles of Neurooncology (Chang S, Guha A, Mehta M, Vogelbaum M, eds.) Demos Medical, New York, 2010.

Ahn H, Singh J, Nathens A, MacDonald RD, Travers A, Tallon J, Fehlings M, Yee A: Pre-hospital care management of a potential spinal cord injured patient: A systematic review of the literature and evidence-based guidelines. Journal of Neurotrauma: E-published June 16, 2010.

Andersson GB, Chapman JR, Dekutoski MB, Dettori J, Fehlings MG, Fourney DR, Norvell D, Weinstein JN: Do no harm: The balance of "beneficence" and "non-maleficence." Spine: April 2010; 35(9Suppl): pp S2-S8.

Andrade DM, Hamani C, Minassian BA: Treatment options for epileptic myoclonus and epilepsy syndromes associated with myoclonus. Expert Opinion in Pharmacotherapy: July 2009; 10(10): pp 1549-1560.

Andrade DM, McAndrews MP, Hamani C, Poubanc J, Wennberg R: Seizure recurrence 29 years after hemispherectomy for Sturge-Weber syndrome. The Canadian Journal of Neurological Science: January 2010; 37(1): pp 141-144.

Arvin B, Fehlings MG: Magnetic resonance imaging and outcome. Journal of Neurosurgery: Spine: January 2010; 12(1): pp 56-57. E-published December 15, 2009.

Arvin B, Fournier-Gosselin MP, Fehlings MG: Os odontoides: Etiology and surgical management. Neurosurgery: March 2010; 66(3Suppl): pp 22-31.

Awan NR, Lozano AM, Hamani C: Deep brain stimulation: Current and future perspectives. Neurosurgical Focus: July 2009; 27(1): pp E2.

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 nucleus stimulation in patients with advanced Parkinson's disease: A [(15)O] H₂O PET study. Human Brain Mapping: December 2009; 30(12): pp 3901-3909.

Ballanger B, van Eimeren T, Moro E, Lozano AM, Hamani C, Boulanguet P, Pellicchia G, Houle S, Poon YY, Lang AE, Strafella AP: Stimulation of the subthalamic nucleus and impulsivity: Release your horses. Annals of Neurology: December 2009; 66(6): pp 817-824.

Baptiste DC, Fehlings MG: Spinal cord injury and pathology. In: Cervical Spine Trauma (Vaccaro AR, Anderson P, eds.) Wolters Kluwer Pharma Solutions, Philadelphia, 2010.

Bartels RH, Verbeek AL, Benzel EC, Fehlings MG, Guiot BH: Validation of a translated version of the modified Japanese Orthopaedic Association score to assess outcomes in cervical spondylotic myelopathy: An approach to globalize outcomes assessment tools. Neurosurgery: May 2010; 66(5): pp 1013-1016.

Bernstein M: Olive. Canadian Journal of Neurological Sciences: May 2010; 37(3): pp 422.

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Zahir T, Chen YF, MacDonald JF, Leipzig N, Tator CH, Shoichet MS: Neural stem/progenitor cells differentiate in vitro to neurons by the combined action of dibutyryl cAMP and interferon-gamma. *Stem Cells and Development*: December 2009: 18(10): pp 1423-1432.

INVITED VISITS

Bernstein M: Ontario Provincial Stroke Network, Provincial Neurology Rounds, Toronto, Ontario, Canada, May 2010. Ethical issues in stroke management.

Bernstein M: Korle Bu Teaching Hospital, Grand Surgery Rounds, Accra, Ghana, April 2010. (1) Qualitative research for surgeons, (2) Awake surgery for brain tumour removal.

Bernstein M: Noguchi Memorial Institute for Medical Research, Ethics Seminar, Accra, Ghana, April 2010. Clinical research ethical framework.

Bernstein M: Brampton Civic Hospital, Grand Rounds, Brampton, Ontario, Canada, March 2010. What brain doctors can learn by talking with patients: A qualitative journey.

Bernstein M: Pelita Harapan University, Faculty of Medicine, Update on Glioma Management, Lippo Village, Tangerang, Banten, Indonesia, January 2010. Role of observation, surgery, radiation and chemotherapy.

Bernstein M: Society for Italian Neurosurgery, Annual Conference, Lecce, Italy, October 2009. Ethical issues in neurosurgery: Consent and error.

Bernstein M: American Association of Neurosurgical Surgeons, XIV World Congress of Neurological Surgery, August-September 2009. (1) Surgery for low-grade gliomas, (2) The other side of brain tumor care, (3) Ethical issues in clinical research.

Hamani C: Brazilian Society of Stereotactic and Functional Neurosurgery, Brazilian/Latin-American Meeting of Functional Neurosurgery, Porto de Galinhas, Brazil, November 2009. (1) GPi is a better target than the STN in Parkinson's disease, (2) Prefrontal cortex stimulation in an animal model of depression.

Hamani C: International Neuromodulation Society, Seoul, Korea, September 2009. Targeting brodmann area 25.

Hamani C: Simpósio Brasileiro e Encontro Internacional Sobre Dor, 9th SIMBIDOR, Sao Paulo, Brazil, September 2009. (1) DBS for the treatment of depression, (2) DBS for the treatment of dystonia, (3) PPN stimulation.

Davis KD: Canadian Pain Society, Annual Meeting/Plenary Session, Calgary, Alberta, Canada, May 2010. Talk: CNS abnormalities in patients with irritable bowel syndrome.

Davis KD: North American Neuromodulation Society, 13th Annual Meeting, Neuromodulation: 2010 and Beyond, Las Vegas, Nevada, USA, December 2009. Functional brain imaging of pain.

Davis KD: Canadian Arthritis Network, Annual Scientific Conference, Vancouver, British Columbia, Canada, November 2009. Pain is in the brain but depends on individual factors.

Davis KD: University of Western Ontario, Interdisciplinary Pain Rounds, London, Ontario, Canada, September 2009. Functional and structural MR imaging of pain in the brain.

Davis KD: Union of Physiological Sciences, 36th International Congress (IUPS 2009), Symposium: Comprehensive Approaches to Pain- From Molecule to Organism, Kyoto, Japan, August 2009. Cortical responses to pain.

Eubanks JH: European Working Group on Rett Syndrome (EWGRS), 2nd Annual Rett Meeting, Stresa, Italy, September 2009. Altered EEG and synaptic activity in a mouse model of Rett syndrome.

Fehlings MG: National Neurotrauma Society, Las Vegas, Nevada, USA, June 2010. Therapeutic advances in spinal cord injury: Update on clinical trials.

Fehlings MG: NeuroDevNet, Mini-Symposium: Experimental Models (cerebral palsy focus) - Regenerative Strategies for CNS White Matter Injury and Demyelination, Montreal, Quebec, Canada, June 2010. Attendee.

Fehlings MG: University of Kentucky, Spinal Cord and Brain Injury Research Center, Lexington, Kentucky, USA, June 2010. Repair and regeneration of the injured spinal cord: From molecules to man.

Fehlings MG: American Association of Neurological Surgeons, Philadelphia, Pennsylvania, USA, May 2010. Invited Faculty (1) Faculty for practical clinics: Cranio-cervical: Stabilization techniques, surgical approaches and indications, (2) Moderator: Management of acute spinal cord injury, (3) co-Moderator: AANS/CNS Section on Neurotrauma and Critical Care.

Fehlings MG: Congress of Neurological Surgeons, University Trauma Webinar Event - Web-Based Lecture Series, Toronto, Ontario, Canada, May 2010. The role and timing of surgical decompression for acute spinal cord injury.

Fehlings MG: Spine, Chicago, Illinois, USA, May 2010. Chair of Editors Workshop: Spine Focus on Trauma.

Fehlings MG: World Spine Column Society (WSCS), Santorini, Greece, May 2010. World Spine V and World Spine 2010 Hands-on Course (1) Defining the criteria for oncological spinal instability, (2) Spinal cord injury acute management, (3) What's new in treatment of spinal cord injury, (4) Moderator: General Session XV: Spinal Cord Injury, (5) Case presentation: Complete C5 spinal cord injury.

Fehlings MG: Arbeitsgemeinschaft für Osteosynthesefragen Spine North America, Banff, Alberta, Canada, April 2010. (1) Co-Chair, (2) AOSNA Clinical Trials Network - SpineNET: Clinical studies update.

Fehlings MG: University of Alberta, Banff, Alberta, Canada, April 2010. The challenge of chronic spinal cord injury: Can regenerative neuroscience deliver?

Fehlings MG: Cornell University/New York Presbyterian Hospital, Department of Neurology, Grand Rounds, New York, New York, USA, March 2010. Repair and regeneration of the injured spinal cord: From molecule to man.

Fehlings MG: Manitoba-Ontario Regional Research Training Centre - Multiple Sclerosis Network, Toronto, Ontario, Canada, March 2010. Regenerative medicine.

Fehlings MG: The Royal College of Surgeons, Spinal Tumour Meeting, London, United Kingdom, March 2010. Defining oncological instability - the evidence.

Fehlings MG: American Association of Neurological Surgeons/Congress of Neurological Surgeons (AANS/CNS), Section on Disorders of the Spine and Peripheral Nerves, 26th Annual Meeting, Orlando, Florida, USA, February 2010. (1) Looking ahead in spinal cord repair, (2) Complication avoidance and management with intraoperative spinal cord injury case, (3) Early versus late decompression for central cord injury.

Fehlings MG: Arbeitsgemeinschaft für Osteosynthesefragen Spine North America (AOSNA), Advanced Concepts in the Management of Spinal Disorders, Sun Valley, Idaho, USA, February 2010. (1) Motion Preservation: Cervical Spine Lecture: Cervical spine treatment options and outcomes: Is it really better than fusion?, (2) Session on Motion Preservation (a) Posterior-based lecture, (b) Case discussions with panel, (3) Session on TUMORS: (a) Lecture, (b) Case discussion with panel.

Fehlings MG: Christopher and Dana Reeve Foundation, Reeve-Irvine Clinical Lectureship, Newport Beach, California, USA, February 2010. Advances in the pathophysiology and treatment of acute spinal cord injury: From molecule to man.

Fehlings MG: University of California, Irvine Medical Center, Department of Surgery, Grand Rounds, Irvine, California, USA, February 2010. The role and timing of surgical intervention for acute spinal cord injury: Lessons from the STASCIS study.

Fehlings MG: International Symposium on Neural Regeneration, Pacific Grove, California, USA, December 2009. Debate Proposition (Affirmative Panel): Demyelination is a therapeutic target for SCI.

Fehlings MG: Karolinska University Hospital, Stockholm, Sweden, December 2009. The Herbert Olivecrona Lecture: Repair and regeneration of the injured spinal cord: From molecule to man.

Fehlings MG: Baxter-International Forum on Immunoglobulin Research, Fort Lauderdale, Florida, USA, November 2009. Immunoglobulin G: An exciting, potential therapeutic approach for neurotrauma.

Fehlings MG: Congress of Neurological Surgeons, New Orleans, Louisiana, USA, October 2009. (1) Course Director: Trauma Update - Spine Trauma PC28, (2) co-Moderator: Original Science - Section on Neurotrauma and Critical Care (a) Top ten abstracts, (b) Neurosurgical Forum, (3) Discussant: Integrated Medical Learning Clinical Science Session: Section on Disorders of the Spine and Peripheral Nerves - What is the best management strategy for single level medically refractory cervical radiculopathy?, (4) Faculty: Luncheon Seminar: Spine Trauma and Spinal Cord Injury.

Fehlings MG: The Society of Neurological Surgeons, Woods Hole, Massachusetts, USA, October 2009. Research Update in Neuroscience for Neurosurgeons (RUNN) Course: Repair and regeneration of the injured spinal cord: From molecule to man.

Fehlings MG: Alberta Motor Control, Jasper, Alberta, Canada, September 2009. Lecture: Treating spinal cord injury: Past, present, future.

Fehlings MG: American Spinal Injury Association, Dallas, Texas, USA, September 2009. Riluzole: (1) Pathophysiology of riluzole for treatment of neuronal injuries, (2) Beneficial results of drug intervention and present FDA status, (3) Discussion of potential adverse reactions, (4) Description of present status of therapy.

Fehlings MG: International Neurotrauma Society, Santa Barbara, California, USA, September 2009. (1) Speaker/Moderator: Clinical management of acute SCI - Whiplash to SCI, (2) New technologies in research and clinical care (neuroengineering and nanotechnology).

Fehlings MG: International Spinal Research Trust (ISRT), Glasgow, Scotland, September 2009. Keynote Address: Translational research in spinal cord injury: From molecule to man and back again.

Fehlings MG: Queen's University, Centre for Neuroscience Studies, Kingston, Ontario, Canada, September 2009. Visiting Professor: Repair and regeneration of the injured spinal cord: From molecule to man.

Fehlings MG: Arbeitsgemeinschaft für Osteosynthesefragen Spine North America, AOSNA Fellows Induction Program, Miami Beach, Florida, USA, August 2009. (1) co-Chair: (a) Advanced Concepts in the Management of Spinal Disorders, (b) Evidence-Based Medicine and Effective Teaching, (2) Lectures: (a) How to get papers published, (b) How to set up a research program.

Fehlings MG: World Federation of Neurosurgical Societies, Boston, Massachusetts, USA, August 2009. (1) Moderator: Session 217 - Rebuilding the injured brain and spinal cord after injury: Fantasy or the future?, (2) Faculty: Practical course on neurocritical care: Talk on spinal cord injury.

Fehlings MG: Arbeitsgemeinschaft für Osteosynthesefragen (AO) Spine, Buenos Aires, Argentina, July 2009. Advances in Trauma, AO Spine Course: (1) Central cord syndrome without mechanical instability: Conservative or surgery?, (2) Classification of traumatic injuries of the spine and spinal cord, (3) Ask the Experts: Panel 1, (4) Spinal Cord Injury: Timing for decompression, (5) Neurologic deficit after correction of a post-traumatic kyphosis, (6) Update on translational research in spinal cord injury-from basic science to clinical trials, (7) Case presentation 3 and discussion with participants: Associated fractures, (8) Ask the Experts Panel 5: Thoracolumbar trauma.

Fehlings MG: The Ohio State University, Center for Brain and Spinal Cord Repair, Columbus, Ohio, USA, July 2009. Repair and regeneration of the injured spinal cord: Opportunities for clinical translation of basic science discoveries.

Gentili F: Cambridge University, Lectures in Neurosurgical Anatomy, Cambridge, England, December 2009. Guest/ Presentations: (1) Evolution of skull base surgery: Lessons learned and quo vadis, (2) Tuberculum sella meningiomas: Open versus endoscopic techniques, (3) Endoscopic pituitary surgery: The standard of practice?, (4) Chordomas and chondrosarcomas: Open versus endoscopic techniques and proton versus photon radiotherapy, (5) The role of endoscopic skull base surgery: Does it complement, antagonize or replace traditional open surgery?

Gentili F: 9th Hands-On Cadaver Workshop: Endoscopic Transanal Approaches to the Skull Base, Trier, Germany, November 2009. (1) Presentations: (a) From endoscopic pituitary surgery to extended endoscopic skull base surgery, (b) Management of craniopharyngiomas, (c) Video Session: How I do it ?, (2) Moderator: Live surgery.

Gentili F: North American Skull Base Society, 20th Annual Meeting, New Orleans, Louisiana, USA, October 2009. (1) Moderator of Sessions on: (a) Getting Out of Trouble in Endoscopic and Open Skull Base Surgery, (b) Anterior Skull Base Surgery, (2) Presentation: IMRT for skull base chordomas and chondrosarcomas.

Gentili F: XIV World Congress of Neurological Surgery (WFNS), August-September 2009. (1) Delegate of the Canadian Society of Neurosurgeons, (2) Moderator for: (a) Role of Skull Base Endoscopy in Neurosurgery, (b) Free Paper Session, (3) Panelist: Breakfast Seminar on Management of Meningiomas Around the Optic Apparatus.

Gentili F: University of Milan, Department of Neurosurgery, Milan, Italy, July 2009. Visiting Professor -Presentation: The evolution of skull base surgery: From open to endoscopic approaches.

Guha A: American Association of Neurological Surgeons (AANS), Symposia - MPNST: Molecular Biology and Management, Philadelphia, May 2010. Attendee.

Guha A: Neurofibromatosis Society of Ontario, Toronto, Ontario, Canada, May 2010. Potential biological agent for vestibular schwannomas: Bench bedside.

Guha A: American Association for Cancer Research (AACR), Washington, District of Columbia, USA, April 2010. (1) Cooperative regulation between proliferative signals by activated Ras and inhibitors of apoptosis (IAPs) in gliomagenesis, (2) Interrogation of glioma ontogeny using mouse models, (3) Developmental profile and regulation of the glycolytic enzyme hexose kinase 2 and its association with aerobic glycolysis, (4) Identifying novel tumor modifier genes involved in gliomagenesis using retroviral gene-trapping mutagenesis screens, (5) Novel role of neurofibromin in transport of RNA granules.

Guha A: Indian Society of Neurooncology, Chennai, India, April 2010. Spinal manifestations of neurofibromatosis. Teleconference from Toronto.

Guha A: Human Proteome Organization (HUPO), 2009 World Congress, Cancer Proteomics Session, Toronto, Ontario, Canada, September 2009. (1) Chair of Cancer Proteomics Session, (2) Clinical Day-Plenary Lecture: Primary malignant brain tumors: Current and potential impact of proteomic-based analysis.

Guha A: World Federation of Neurological Surgeons, Boston, Massachusetts, September 2009. Management and molecular biology of MPNST.

Guha A: Schering-Plough Inc., Canadian Neurooncology Symposia, Montreal, Quebec, Canada, July 2009. Glioma metabolism and GATA transcription factors.

Hodaie M: American Society for Stereotactic and Functional Neurosurgery, New York, New York, USA, June 2010. Moderator of Epilepsy Session.

Hodaie M: Palliative Pain and Symptom Management Consultation Service, Durham Region Palliative Care Conference/Physicians Meeting, Whitby, Ontario, Canada, November 2009. Radiosurgical treatment of intractable cancer pain.

Lozano AM: VIth Brazilian Congress of Brain, Behavior and Emotions, Gramado, Brazil, June 2010. Guest Speaker: (1) Surgical treatment of refractory mental disorders: Profiting from advances in the functional neuroanatomy of behavior, (2) Deep brain stimulation in movement disorders.

Lozano AM: American Association of Neurological Surgeons (AANS), Philadelphia, USA, May 2010. Guest Speaker: Adjusting the activity of individual circuits in the brain to improve cerebral function.

Lozano AM: American Association of Stereotactic and Functional Neurosurgery (ASSFN), New York, New York, USA, June 2010. Moderator of Consciousness: Disorders and Surgical Treatment, (2) Radiosurgery, (3) Guest Speaker: DBS for dementia.

Lozano AM: Associazione dei Cavalieri Italiani/San Giovanni Battista Hospital, 3rd International Conference on the Neurosurgery of the Pedunculopontine Tegmental Nucleus, Rome, Italy, May 2010. Guest Speaker. PPTg surgery: From theoretical hypothesis to clinical application.

Lozano AM: Bordeaux University, International Symposium on New Therapeutic Avenues in Parkinson's Disease and Related Disorders, Bordeaux, France, May 2010. Guest Speaker: The potential of stereotactically-delivered treatments.

Lozano AM: First International Congress on Treatment of Dystonia, Hannover, Germany, May 2010. Guest Speaker: Towards surgery for mood and mind of man.

Lozano AM: National Congress of Neurosurgery, La Coruna, Spain, May 2010. Guest Speaker (1) La historia de la cirugía para trastornos psiquiátricos-el papel de la cirugía Española/Portuguesa, (2) Nuevas perspectivas sobre la cirugía funcional.

Lozano AM: Parkinson Society of Canada, Parkinson's Disease Alliance Meeting, Ottawa, Ontario, Canada, May 2010. (1) Awardee of 7th Donald Calne Lectureship: Surgery for Parkinson's disease and prospects for the future, (2) Guest Speaker: Advances in surgery for Parkinson's disease.

Lozano AM: The Johns Hopkins University, The First Michael M. Ossoff Visiting Lectureship in Memory Disorders and Alzheimer's Disease, Baltimore, Maryland, USA, May 2010. Guest Speaker: Adjusting mood and cognitive circuits with deep brain stimulation.

Lozano AM: American Academy of Neurology, 62nd Annual Meeting, 2010 Integrated Neuroscience Session, Toronto, Ontario, Canada, April 2010. (1) co-Chair of Session on Deep Brain Stimulation: Where Are We and What Do We Do from Here?, (2) Guest Speaker: Emergina indications for DBS.

Lozano AM: York University, Neuroscience Seminar Series, Toronto, Ontario, Canada, April 2010. Guest Speaker: Stimulating human brain circuit to improve function.

Lozano AM: Fundación Lilly, 17th Scientific Symposium: From Neurobiology to Nosology of Mental Disorders, Madrid, Spain, March 2010. Guest Speaker: Deep brain stimulation for depression.

Lozano AM: International Symposium on Movement Disorders in Psychiatry, Verona, Italy, March 2010. Guest Speaker: Deep brain stimulation in major depressive disorder.

Lozano AM: Lahey Clinic, Burlington, Massachusetts, March 2010. Guest Speaker/16th Annual Farger Lecturer.

Lozano AM: Southern Neurosurgical Society, 61st Annual Meeting, R. Eustace Semmes Lecture, Boca Raton, Florida, USA, February 2010. Guest Speaker.

Lozano AM: Taiwan Neurosurgical Society, Annual Meeting, Taipei, Taiwan, December 2009. Guest Keynote Speaker: (1) Advances in surgery for movement disorders, (2) Future applications of deep brain stimulation.

Lozano AM: World Federation of Neurology (WFN), XVIII World Congress on Parkinson's Disease, Miami, Florida, USA, December 2009. (1) Spanish Language Symposium 1: (a) Advances in the surgical treatment of Parkinson's Disease, (b) Treatment of Parkinson's disease, (2) Chair of Spanish Language Symposium II.

Lozano AM: Hospital Virgen del Rocío, Sevilla, Spain, November 2009. Neuvas perspectivas en la estimulación cerebral.

Lozano AM: l'Institut des Maladies Neurodégénératives, Université Victor Segalen Bordeaux 2, Bordeaux, France, November 2009. Meeting of Appraisal Committee for AERES (Reporting Agency for Research and Higher Education).

Lozano AM: International College of Geriatric Psychoneuropharmacology/The Johns Hopkins University School of Medicine, Department of Psychiatry and Behavioral Sciences, Annual Meeting, Baltimore, Massachusetts, USA, November 2009. The role of functional imaging and deep brain stimulating in understanding Parkinson's disease.

Lozano AM: Montreal Neurological Institute and Hospital, 75th Anniversary Scientific Symposium: Pathways of Discovery in Neuroscience, Montreal, Quebec, Canada, November 2009. Chair of Session on CNS Regeneration: Molecular Approaches to Identify Novel Therapeutic Strategies for Nerve Repair.

Lozano AM: Quebec Association of Neurosurgeons, Annual Meeting, Mont St-Hilaire, Quebec, Canada, November 2009. Latest development in behavioural surgery, including research on DBS for depressive disorder.

Lozano AM: Congress of Neurological Surgeons, Annual Meeting, New Orleans, Louisiana, USA, October 2009. Guest Lecturer: Measuring excellence in clinical translational research.

Lozano AM: Marine Biological Laboratory, Review and Update in Neuroscience for Neurosurgeons (RUNN) Course, Woods Hole, Massachusetts, USA, October 2009. Adjusting the activity in human brain circuits.

Lozano AM: Patient Symposium on Parkinson's Disease, Istanbul, Turkey, October 2009. Keynote Speaker: (1) Advances in Parkinson's disease, (2) Developments in functional neurosurgery.

Lozano AM: Turkish Parkinson's Disease Society, Marmaris, Turkey, October 2009. Keynote Speaker: (1) Advances in Parkinson's disease, (2) Emerging indications for DBS, (3) Future of functional surgery.

Lozano AM: CHDI Foundation Inc., New York, New York, USA, September 2009. Surgery for Huntington's disease.

Lozano AM: Centro Europeo per la Ricerca sul Cervello (CERC)/Fondazione Santa Lucia, Roma Dopamine 2009 Meeting, Rome, Italy, September 2009. DBS for pharmaco-resistant depression.

Lozano AM: Michael J. Fox Foundation, Scientific Roundtable, Toronto, Ontario, Canada, September 2009. Trophic factors in Parkinson's disease.

Lozano AM: World Congress of Neurological Surgery, Boston, Massachusetts, USA, August 2009. (1) Deep brain stimulation, (2) Moderator of Psychosurgery: Dreams and Realities.

Massicotte EM: Congress of the Canadian Neurological Sciences Federation, 45th Annual Congress, Quebec City, Quebec, Canada, June 2010. (1) Chairman: Spine Course - Controversies in Spinal Neurosurgery, (2) Topics - Metastatic Spine Cancer: Indications for decompression and stabilization, role of instrumented fusion for spondylolisthesis and indications for use of biological agents.

Massicotte EM: University of West Indies, Montego Bay, Jamaica, January 2010. (1) Caribbean Neuroscience Symposium: MASS for mets and day surgery for anterior cervical discectomy and fusion (ACDF), (2) Hands-on course.

Massicotte EM: Belgian Neurosurgical Spine Society, 2nd Annual Meeting, Brussels, Belgium, October 2009. The aging spine.

Tator CH: Merck, An Afternoon in Pediatrics Conference, Kitchener, Ontario, Canada, May 2010. Concussion-diagnosis and management including return to play.

Tator CH: University of Alberta, Faculty of Rehabilitation Medicine, Treatment Strategies for SCI: From Biology to Clinical Reality Conference, Banff, Alberta, Canada, April 2010. Intrathecal drug delivery with a polymer hydrogel provides neuroprotection after spinal cord injury.

Tator CH: Brain Injury Association of Canada, 6th Annual Hawaiian Oyster Odyssey, Toronto, Ontario, Canada, January 2010. Presenter.

Tator CH: Hockey Canada, Concussion Seminar, Regina, Saskatchewan, Canada, December 2009. Diagnosis and management of concussion in sports.

Tator CH: St. John's Minor Hockey Association, Concussion Education and Awareness Seminar (via videoconference), St. John's, New Foundland, Canada, December 2009. Diagnosis and management of concussion in sports.

Tator CH: Oakville Trafalgar Memorial Hospital (OTMH)/Sanofi-Aventis, 5th Annual Halton Healthcare Services Summit, Oakville, Ontario, Canada, October 2009. Sports related concussions and other head injuries: Diagnoses, management and prevention.

Tator CH: ThinkFirst Canada and Waterloo Minor Soccer Association, Waterloo, Ontario, Canada, October 2009. Concussions in sports: Definitions, mechanisms and current issues.

Tator CH: World Federation of Neurosurgical Societies, Boston, Massachusetts, October 2009. (1) Current clinical trials in spinal cord injury, (2) Neural stem/progenitor cells for spinal cord injury.

Tator CH: National Neurotrauma Society, Santa Barbara, California, USA, September 2009. Global demographics of SCI.

Valiante T: National Institutes of Health, Office of Rare Diseases/Alliance for Epilepsy Research, Nocturnal Frontal Lobe Epilepsy: An Interdisciplinary Approach, Sanibel, Florida, USA, February 2010. Frontal lobe anatomy: Structural and functional correlations.

Wallace MC: American Stroke Association/American Association of Neurological Surgeons/Congress of Neurological Surgeons (Cerebrovascular Section)/The Society of NeuroInterventional Surgery, San Antonio, Texas, USA, February 2010. Controversies in the management of cerebral arteriovenous malformations: Who to treat and when.

Wallace MC: University of Ottawa, Ottawa, Ontario, Canada, December 2009. Mike Richard Visiting Professor: (1) How long is ISAT (international subarachnoid aneurysm trial) good for?, (2) Treating brain arteriovenous malformations, lots to consider.

Wallace MC: The American Academy of Neurological Surgery, 71st Annual Meeting, West Palm Beach, Florida, USA, November 2009. Management of supratentorial cavernous malformations.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

(1) VEGF zinc finger transcription factor gene therapy for the treatment of stroke - US\$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 US\$593,600. *Fehlings MG, Koeberle PD* (on study #1 only): *Sangamo BioSciences, Inc.* (\$876,991 2007 - 2009)

A cellular and molecular strategy to unlock the regenerative reservoir of the notochordal cell: A novel approach to treat intervertebral disc degeneration. *Erwin WM, Fehlings MG, Inman R: Arbeitsgemeinschaft für Osteosynthesefragen (AO) Spine International.* (\$30,000 2010 - 2011)

A clinical evaluation for the management of patients with chronic or recurrent treatment resistant major depressive disorder with deep brain stimulation. *Kennedy S, Lozano AM: St. Jude Medical Inc.* (\$480,000 2009 - 2011)

A combinatorial strategy to optimize neural repair and plasticity after chronic spinal cord injury (KB1-0807-2). *Karimi S, Fehlings MG, Rossignol S: Christopher and Dana Reeve Foundation.* (\$149,495 2009 - 2010)

Access to clinical trials: Functional magnetic resonance imaging evaluation of the injured human spinal cord: An assessment of recovery and functional plasticity (participant expenses) (#2010-84). *Cadotte D, Fehlings MG: Rick Hansen Foundation.* (\$1,500 2009 - 2010)

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: Ontario Mental Health Foundation.* (\$150,000 2009 - 2011)

Arbeitsgemeinschaft für Osteosynthesefragen Spine North America (AOSNA) Fellowship Program, 2-year merit award. *Fehlings MG, Massicotte EM, Rampersaud YR, Lewis S: AOSpine North America.* (\$150,000 2009 - 2011)

Attenuated NMDA receptor development in MeCP2-deficient mice: Relevance to Rett syndrome. *Eubanks J, Zhang L, Brothie J: Canadian Institutes of Health Research.* (\$610,225 2006 - 2011)

Building the UHN advanced therapeutics research platform. *Paige C, Fehlings MG et al: Canada Foundation for Innovation.* (\$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: Canadian Institutes of Health Research.* (\$1,400,000 2005 - 2012)

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)

COSAT-hUTC delivery of HAMC carrier for spinal cord injury treatment. *Tator CH, Shoichet M: Johnson & Johnson, Pharmaceutical Research and Development, LLC.* (\$110,000 2010)

CRS Group Grant to UHN and HSC. *Dick J, Guha A: Ontario Institute of Cancer Research (OICR).* (\$80,000 2008 - 2012)
Culture of adult human spinal cord stem/progenitor cells and their transplantation into spinal cord injured rats. *Tator CH: The Physicians' Services Incorporated Foundation.* (\$158,000 2009 - 2011)

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)

Deep brain stimulation in an animal model of depression. *Hamani C, Nobrega J: National Alliance for Research in Schizophrenia and Depression (NARSAD), Young Investigator Award.* (\$60,000 2010 - 2012)

Development of a stroke model in non-human primates. *Tymianski M: Canadian Stroke Networks.* (\$589,106 2008 - 2010.)

Differential gene expression in the non-human primate and rat: Whole genome differential gene expression in the immediate-early phase following stroke. *Tymianski M, Cook DJ: The Physicians' Services Incorporated Foundation.* (\$20,000 2010 - 2011)

Diffusion based tractography and structural brain imaging in trigeminal neuralgia: Correlation with quantitative sensory testing and response to treatment. *Hodaie M, Davis KD: The Physicians' Services Incorporated Foundation.* (\$154,000 2009 - 2011)

Dopamine and synaptic plasticity in human substantia nigra pars reticulata. *Hutchison WD, Dostrovsky JO, Moro E, Hodaie M, Lozano AM: Canadian Institutes of Health Research.* (\$490,745 2009 - 2014)

Economic evaluation of early surgical decompression for traumatic cervical 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 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)

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: University of Toronto, Dean's Fund, New Staff Grant.* (\$9,800 2005 - 2010)

Examination of the neuroprotective role of IgG for spinal cord injury (CGM 98392). *Nguyen DH, Fehlings MG: Canadian Institutes of Health Research.* (\$17,500 2009 - 2010)

Examination of the therapeutic potential of self-assembling nanofibers in spinal cord injury. *Fehlings MG: Tyco Healthcare Group LP (d/b/a Covidien).* (\$123,200 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 magnetic resonance imaging evaluation of the injured human spinal cord: An assessment of recovery and functional plasticity. *Cadotte D, Fehlings MG: Cervical Spine Research Society.* (\$15,819 2009 - 2010)

Glioblastoma multiforme biomarkers. *Siu KWM, Guha A, Jorg Grigull A: Canadian Institutes of Health Research - 1 year bridge funding.* (\$100,000 2009)

Global blueprint for stem cell innovation, translation and commercialization. *Fehlings MG: SCI Solutions Network, Grant No. 2010-90S.* (\$276,000 2010)

Global blueprint for translation of stem cells into patients with spinal cord injury (2009-RHI-MTNI-767). *Fehlings MG, Baptiste D: Ontario Neurotrauma Foundation.* (\$55,000 2010)

Global Blueprint Stakeholders Conference for Stem Cell Translation (KWS-99421). *Fehlings MG, Daar AS, Bassett-Spiers K: Canadian Institutes of Health Research.* (\$15,000 2009 - 2010)

Global Blueprint Stakeholders Conference for Stem Cell Translation (KWS-99421). *Fehlings MG, Daar AS, Bassett-Spiers K: Ontario Neurotrauma Foundation.* (\$25,000 2009 - 2010)

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)

Human studies of pain perception. *Davis KD, Tenenbaum HC, Diamant NE: Canadian Institutes of Health Research.* (\$726,452 2007 - 2012)

Identifying biomarkers of response to anti-angiogenic therapy. *Zadeh G, Menard C: Razcer Grant.* (\$30,000 2009 - 2010)

Investigation and treatment of traumatic axonal dysfunction after spinal cord injury (MOP-82782). *Fehlings MG: Canadian Institutes of Health Research.* (\$634,713 2007 - 2012)

Investigation of induced pluripotent stem cells, derived by novel, non-viral transposition reprogramming, as a regenerative strategy for spinal cord remyelination (NHG-99090). *Fehlings MG, van der Kooy D, Nagy A: Canadian Institutes of Health Research.* (\$299,424 2009 - 2012)

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)

Microenvironment induced molecular heterogeneity in glioblastoma multiforme (GBM). *Guha A: Canadian Institutes of Health Research, Grant No. 171871.* (\$125,000 2008 - 2012)

Minimally-invasive drug delivery strategy for acute spinal cord injury repair. *Shoichet M, Tator CH: Canadian Institutes of Health Research.* (\$516,004 2008 - 2012)

Neural Development and Repair Network (NeuroDevNet). *Goldowitz D, Fehlings MG, et al: Networks of Centres of Excellence.* (\$19,572,000 2009 - 2014)

Neural stem/progenitor cells for remyelination and recovery in MS. *Tator CH: Multiple Sclerosis Society of Canada.* (\$93,702 2008 - 2010)

Neurophysiological studies of human subthalamic nucleus. *Dostrovsky JO, Hutchison WD, Lozano AM: Canadian Institutes of Health Research.* (\$475,265 2004 - 2009)

Neuroprotection of the injured spinal cord using an anti-apoptotic molecule delivered through a novel bioengineered drug delivery system (PSIt# 08-23). *Fehlings MG, Shoichet MS: The Physicians' Services Incorporated Foundation.* (\$147,000 2008 - 2010)

Neuroprotective and regenerative bioengineered approaches for the treatment of spinal cord injury (CGV-95673). *Austin JW, Fehlings MG: Canadian Institutes of Health Research, Vanier Canada Doctoral Research Scholarship to James W. Austin.* (\$150,000 2009 - 2012)

Neuroprotective approaches to enhance recovery in cervical spondylotic myelopathy. *Fehlings MG: North American Spine Society.* (\$53,818 2009 - 2010)

Neuroprotective approaches to enhance recovery in cervical spondylotic myelopathy (MOP-97852). *Fehlings MG: Canadian Institutes of Health Research.* (\$378,105 2009 - 2012)

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 (CTN5-2009 F-T). *Fehlings MG, Tator CH: Christopher Reeve Foundation.* (\$138,631 2009)

On-line international educational courses in neurosurgery. *Hodaie M: The Integra Foundation/Foundation for International Education in Neurological Surgery (FIENS).* (\$4,000 2010 - 2011)

Pathophysiology of Parkinson's disease. *Chen R, Hodaie M, Lozano AM, Moro E: Canadian Institutes of Health Research.* (\$949,900 2009 - 2014)

Phase I trial of riluzole in patients with acute spinal cord injury (SIR-P). *Fehlings MG: Arbeitsgemeinschaft für Osteosynthesefragen (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)

Psychometric testing of a new scale measuring medical outcomes of dysphagia (MOD) in adult patients with swallowing disorders secondary to head and neck cancer. *Martino R, Streiner D, Davis A, Fehlings M: Canadian Cancer Society Research Institute, Grant 020190.* (\$424,592 2009 - 2012)

Psychometric testing of a new scale measuring medical outcomes of dysphagia (MOD) in adult patients with swallowing disorders secondary to stroke, cervical spine abnormalities and head and neck cancer (MOP 93685). *Martino R, Streiner DL, Fehlings MG, Davis AM, Ringash J: Canadian Institutes of Health Research.* (\$396,289 2009 - 2012)

Regenerative approach to intervertebral disc research. *Fehlings MG: Synthes Spine Company, LP.* (\$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.* (\$1,500,000 2004 - 2009)

Regenerative medicine strategies of spinal cord repair. *Fehlings MG, Morshead C, Shoichet MS, Stanisz G, van der Kooy D, Tator CH: Krembil Neuroscience Centre.* (\$1,500,000 2006 - 2011)

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)

Role of inhibitor in apoptosis proteins (IAPs) in gliomas. *Guha A: Using transgenic glioma models to explore the role of IAPs in glioblastoma multiforme (GBMs): Brain Tumor Society.* (\$75,000 2007 - 2009)

Role of TRPM channels in ischemic brain damage. *Tymianski M: Canadian Institutes of Health Research, MOP-89720.* (\$900,000 2008 - 2013)

Spinal Cord Injury Solutions Network (SCISN), Translational Research Program (TRP) Research Management Team (RMT) - Lead Interim Operational Grant. *Fehlings MG: SCI Solutions Network, Grant 2010-97S.* (\$75,000 2009 - 2010)

Spatial and temporal characterization of hippocampal memory processes: Studies in the normal brain and individuals with medial temporal-lobe epilepsy and excisions. *Taufik V, McAndrews MP, Cohn M, Protzner A: Canadian Institutes of Health Research.* (\$240,000 2009 - 2012)

Spinal cord regeneration. *Tator CH: Canadian Paraplegic Association.* (\$41,116 2010)

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)

Subcallosal cingulate gyrus deep brain stimulation for treatment-resistant depression: Long term clinical follow-up and exploration of mechanisms of action through quantitative electroencephalography. *Giacobbe P, Hamani C, Kennedy S, Lozano A: University Health Network.* (\$15,000 2009 - 2011)

Subcallosal cingulate gyrus deep brain stimulation for treatment resistant depression: A field evaluation. *Krahn M, Lozano AM, Kennedy S: Ontario Ministry of Health and Long-Term Care Psychiatry.* (\$296,000 2009 - 2010)

Surgical versus conservative treatment of metastatic epidural spinal cord compression (MESCC). Quality of life and cost-effectiveness outcomes. *Fehlings MG: Arbeitsgemeinschaft für Osteosynthesefragen Spine North America (AOSpineNA).* (\$304,020 2007 - 2011)

Targeting postsynaptic density proteins in the treatment of CNS injury. *Tymianski M: National Institutes of Health of the United States of America.* (\$1,610,000 2004 - 2009)

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)

The impact of age on inflammation, neural apoptosis and axonal survival after spinal cord injury in man (#FA2-0802-2). *Furlan JC, Fehlings MG, Dietrich WD, Norenberg M, Croul S: Christopher and Dana Reeve Foundation.* (\$60,028 2009 - 2010)

The ischemic axon: Cross-talk with myelin in K⁺ channel terms (T 6328). *Fehlings MG, Velumian AA: Heart and 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 MG: Natural Sciences and Engineering Research Council of Canada.* (\$125,000 2008 - 2013)

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 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)

Toronto Western Hospital Spinal Program (Contract #226445). *Fehlings MG: DePuy Spine, Johnson & Johnson Medical Products, a Division of Johnson & Johnson, Inc.* (\$160,000 2009 - 2010)

Toronto Western Hospital Spine Program - Fellowship and Research Funding Agreement. *Fehlings MG: Synthes Spine Company, LP.* (\$640,000 2006 - 2009)

Towards the correction of Rett-like behaviour in MeCP2-deficient mice by exogenous gene transfer. *Eubanks J, McIntyre Burnham W, Carter Snead III O: Canadian Institutes of Health Research.* (\$585,685 2004 - 2009)

Transplantation of adult human spinal cord stem/progenitor cells for spinal cord repair. *Tator CH, Mothe A: AO Spine International.* (\$30,944 2010 - 2011)

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)

Unilateral pedunculo pontine deep brain stimulation in progressive supranuclear palsy. *Elena M, Hamani C, Lozano A, Strafella A, Chen R: CurePSP Foundation.* (\$192,600 2009 - 2011)

University of Toronto Spine Collaborative (UT-SpineLINK). *Fehlings MG: Ministry of Health and Long-Term Care.* (\$98,010 2009 - 2011)

HONOURS RECEIVED

Fehlings MG: First Place, American Association of Neurological Surgeons - 2010 Annual Meeting, for Poster Presentation in the category of Spine/Peripheral Nerve: 'An International Perspective on the Surgical Management of Cervical Spondylotic Myelopathy: Initial Outcomes of the AOSpine CSM-I Multi-Center Prospective Study.' May 2010.

Fehlings MG: 2009 Olivecrona Award from the Karolinska Institute in Stockholm for important contributions in spinal cord injury research. December 2009.

Fehlings MG: Recipient of the North American Spine Society's 2009 Leon Wiltse Award for Excellence in Leadership and/or Clinical Research in Spine Care. November 2009.

Fehlings MG: Shared Honour, Best Paper by an ASIA Member in 2008 (with Drs. Julio Furlan, et al) for 'Motor and Sensory Assessment of Patients in Clinical Trials for Pharmacological Therapy of Acute Spinal Cord Injury: Psychometric Properties of the ASIA Standards.' September 2009.

Guha A: Lister Prize in Surgery. August 2009.

Lozano AM: Winn Prize Award. June 2010.

Lozano AM: Donald Calne International Award for Parkinson's Disease Research and the 7th Annual Donald Calne Lectureship. May 2010.

Lozano AM: Elected Fellow of The Royal Society of Canada. October 2009.

Lozano AM: Elected Guest Member, Japanese Neurosurgical Society. September 2009.

Massicotte EM: Ross Fleming Surgical Educator Award (UHN). May 2010.

Tator CH: Ken Langford Lifetime Award, Canadian Paraplegic Association. June 2010.

Tator CH: Lifetime Achievement Award, Canadian Neurosurgery Society. June 2010.

DIVISION OF ORTHOPAEDIC SURGERY

Dr. J.R. Davey	Associate Professor	Dr. K.W. Marshall	Assistant Professor
Dr. W.M. Erwin	Assistant Professor	Dr. D.J. Ogilvie-Harris	Associate Professor
Dr. R. Gandhi	Assistant Professor	Dr. Y.R. Rampersaud	Associate Professor
Dr. B.A. Graham	Assistant Professor	Dr. K.A. Syed	Lecturer
Dr. J. Lau	Assistant Professor	Dr. C.J.H. Veillette	Assistant Professor
Dr. S.J. Lewis	Assistant Professor	Dr. H.P. von Schroeder	Associate Professor
Dr. N.N. Mahomed	Associate Professor (Division Head)		

PUBLICATIONS

Arnold PM, Brodke DS, Rampersaud YR, Harrop JS, Dailey AT, Shaffrey CI, Grauer JN, Dvorak MF, Bono CM, Wilsey JT, Lee JY, Nassr A, Vaccaro AR; Spine Trauma Study Group: Differences between neurosurgeons and orthopedic surgeons in classifying cervical dislocation injuries and making assessment and treatment decisions: A multicenter reliability study. *American Journal of Orthopedics*: October 2009; 38(10): pp E156-E161.

Bourne R, Chestworth B, Davis A, Mahomed NN, Charron K: Comparing patient outcomes after THR and TKR: Is there a difference? *Clinical Orthopaedics and Related Research*: February 2010; 468(2): pp 542-546.

Bourne RB, Chesworth BM, Davis AM, Mahomed NN, Charron KDJ: Patient satisfaction after total knee arthroplasty: Who is satisfied and who is not? *Clinical Orthopaedics and Related Research*: January 2010; 466(1): pp 57-63.

Carreon LY, Glassman SD, McDonough CM, Rampersaud R, Berven S, Shainline M: Predicting SF-6D utility scores from the Oswestry disability index and numeric rating scales for back and leg pain. *Spine*: September 2009; 34(19): pp 2085-2089.

Cil A, Veillette CJ, Sanchez-Sotelo J, Sperling JW, Schleck CD, Cofield RH: Survivorship of the humeral component in shoulder arthroplasty. *Journal of Shoulder and Elbow Surgery*: January 2010; 19(1): pp 143-150.

Daniels T, DiGiovanni CD, Lau J, Wing K, Younger A: Prospective clinical pilot trial in a single cohort group of rhPDGF in foot arthrodeses. *Foot and Ankle International*: June 2010; 31(6): pp 473-479.

David KS, Agarwala AO, Rampersaud YR: Charcot arthropathy of the lumbar spine treated using one-staged posterior three-column shortening and fusion. *Spine*: June 2010; 35(14): pp E657-E662.

Dickie CI, Parent AL, Chung PW, Catton CN, Craig T, Griffin AM, Panzarella T, Ferguson PC, Wunder JS, Bell RS, Sharpe MB, O'Sullivan B: Measuring interfractional and intrafractional motion with cone beam computed tomography (CBCT) and an optical localization system (OLS) for lower extremity soft tissue sarcoma patients treated with preoperative intensity-modulated radiation therapy (IMRT). *International Journal of Radiation Oncology, Biology, Physics*: E-published ahead of print March 27, 2010.

Dimar JR, Fisher C, Vaccaro AR, Okonkwo DO, Dvorak M, Fehlings M, Rampersaud R, Carreon LY: Predictors of complications after spinal stabilization of thoracolumbar spine injuries. *Journal of Trauma*: E-published ahead of print April 16, 2010.

Erwin WM: The enigma of the nucleus pulposus cell: The search goes on. *Arthritis Research and Therapy*: June 2010; 2010:12(3): pp 118. E-published May 24, 2010.

Fallah A, Massicotte EM, Fehlings MG, Lewis SJ, Rampersaud YR, Ebrahim S, Bernstein M: Admission and acute complication rate for outpatient lumbar microdiscectomy. *Canadian Journal of Neurological Science*: January 2010; 37(1): pp 49-53.

Gandhi R, Davey JR, Mahomed NN: Patient expectations predict greater pain relief with joint arthroplasty. *The Journal of Arthroplasty*: August 2009; 24(5): pp 716-721. E-published August 12, 2008.

Gandhi R, Dhotar H, deBeer J, Davey JR, Mahomed NN: Patient expectations of second primary joint replacement surgery. *Current Orthopaedic Practice*: January-February 2010; 21(1): pp 67-70.

Gandhi R, Dhotar H, Razak F, Tso P, Davey JR, Mahomed NN: Predicting longer term outcomes in total knee arthroplasty. *The Knee* 2010; July 2009; 17(1): pp 15-18. E-published July 8, 2009.

Gandhi R, Dhotar H, Tsvetkov D, Mahomed NN: The relationship between body mass index and waist-hip ratios in a knee osteoarthritis. *Canadian Journal of Surgery*: June 2010; 53(3): pp 151-154.

Gandhi R, Razak F, Davey JR, Rampersaud YR, Mahomed NN: Effect of sex and living arrangement on the timing and outcome of joint replacement surgery. *Canadian Journal of Surgery* 2010; February 2010; 53(1): pp 37-41.

Gandhi R, Razak F, Pathy R, Davey JR, Syed KA, Mahomed NN: Antibiotic bone cement and the incidence of deep infection after total knee arthroplasty. *The Journal of Arthroplasty*: October 2009; 24(7): pp 1015-1018. E-published September 26, 2008.

Gandhi R, Razak F, Tso P, Davey JR, Mahomed NN: Asian ethnicity and the prevalence of metabolic syndrome in the osteoarthritis total knee arthroplasty population. *The Journal of Arthroplasty*: April 2010; 25(3): pp 416-419. E-published March 10, 2009.

Gandhi R, Razak F, Tso P, Davey JR, Mahomed NN: Greater perceived helplessness with osteoarthritis predicts outcome of joint replacement surgery. *The Journal of Rheumatology*: July 2009; 36(7): pp 1507-1511. E-published June 1, 2009.

Gandhi R, Razak F, Tso P, Davey JR, Mahomed NN: Metabolic syndrome and the incidence of symptomatic deep vein thrombosis following total knee arthroplasty. *The Journal of Rheumatology*: October 2009; 36(10): pp 2298-2301. E-published August 14, 2009.

Gandhi R, Takahashi M, Syed K, Davey JR, Mahomed N: Relationship between body habitus and joint leptin levels in a knee osteoarthritis population. *Journal of Orthopedic Research*: March 2010; 28(3): pp 329-333.

Gandhi R, Tso P, Davis A, Mahomed NN: Outcomes of total joint arthroplasty in academic versus community hospitals. *Canadian Journal of Surgery*: October 2009; 52(5): pp 413-416.

Gandhi R, Tsvetkov D, Davey JR, Mahomed NN: Survival and clinical function of cemented and uncemented prostheses in total knee replacement: A meta-analysis. *The Journal of Bone and Joint Surgery (British)*: July 2009; 91-B(7): pp 889-895.

Gandhi R, Tsvetkov D, Davey JR, Syed K, Mahomed NN: Relationship between self-reported and performance-based tests in a hip and knee joint replacement population. *Clinical Rheumatology*: March 2009; 28(3): pp 253-257. E-published October 8, 2008.

Halpern EM, Bacon SA, Kitagawa T, Lewis SJ: Posterior transdiscal three-column shortening in the surgical treatment of vertebral discitis/osteomyelitis with collapse spine. *Spine*: June 2010; 35(3): pp 1366-1322.

Hedden D, Goytan M, Lewis S, Jarvis J, Carey T, Gurr K, Labelle H, Parent S, Abraham E, Manson N, El-Hawary R, Howard J: The barriers to performing spinal surgery for deformity in Canada; a cross-country perspective. *Canadian Journal of Surgery*: June 2010; 53(3): pp S42-S43.

Keith MW, Masear V, Chung KC, Amadio PC, Andary M, Barth RW, Maupin K, Graham B, Watters 3rd WC, Turkelson CM, Haralson 3rd RH, Wies JL, McGowan R: American Academy of Orthopaedic Surgeons clinical Practice guideline on the treatment of carpal tunnel syndrome. *The Journal of Bone and Joint Surgery (American)*: January 2010; 92(1): pp 218-219.

Kelleher MO, Timlin M, Persaud O, Rampersaud YR: Success and failure of minimally invasive decompression for focal lumbar stenosis in patients with and without deformity. *Spine*: E-published ahead of print April 9, 2010.

Krause FG, Di Silvestro M, Penner MJ, Wing KJ, Glazebrook MA, Daniels TR, Lau JT, Stothers K, Younger AS: Inter- and intraobserver reliability of the COFAS end-stage ankle arthritis classification system. *Foot and Ankle International*: February 2010; 31(2): pp 103-108.

Lefavre KA, Macadam SA, Davidson DJ, Gandhi R, Chan H, Broekhuyse HM: Length of stay, mortality, morbidity and delay to surgery in hip fractures. *The Journal of Bone and Joint Surgery (British)*: July 2009; 91-B(7): pp 922-927.

Lewis SJ: Case Report: Osteoporotic burst fracture. *Spine Universe*. <http://www.spineuniverse.com/professional/case-studies/lewis/osteoporotic-burst-fracture>, April 2010.

Lewis SJ: Review of Case: Grade II isthmic spondylolisthesis revision by Dr. Shaffrey. *Spine Universe SpineAdvisor eNewsletter*: March 2010.

Marshall KW, Mohr S, El Khettabi F, Nossova N, Chao S, Bao W, Ma J, Li XJ, Liew CC: A blood-based biomarker panel for stratifying current risk for colorectal cancer. *International Journal of Cancer*: March 2010; 126(5): pp 1177-1186.

Ogilvie-Harris DJ, Palmer W: Chapter 5: Arthroscopic resection of the olecranon bursa. In: *Advanced Arthroscopy of the Shoulder and Elbow (AANA)* (Savoie F, Field L, eds.) Saunders, Santa Barbara, California, 2010.

Rampersaud YR, Abraham E, Alexander D, Dvorak M, Finkelstein J, Fisher C, Lewis S, Oxner W, Wai E, Yee A: Health-related quality of life following decompression compared with decompression and fusion for degenerative spondylolisthesis: A Canadian multicentre study. *Canadian Journal of Surgery*: June 2010; 53(3): pp 34.

Rampersaud YR, Mahomed N, Hudek P, Veillette C, Syed K, Lewis S, Ogilvie-Harris D, Davey R, Gandhi R: Patient concerns about undergoing elective musculoskeletal surgery. *Canadian Journal of Surgery*: June 2010; 53(3): pp S35-S36.

Rampersaud YR, Neary MA, White K: Spine adverse events severity system: Content validation and interobserver reliability assessment. *Spine*: April 2010; 35(7): pp 790-795.

Rampersaud YR, Wai E, Abraham E, Alexander D, Davey R, Dvorak M, Finkelstein J, Fisher C, Gandhi R, Lewis S, Mahomed N, Oxner W, Yee A: Postoperative improvement in health-related quality of life: A national comparison of surgical treatment for focal (1-2 level) lumbar spinal stenosis compared with total joint replacement for osteoarthritis. *Canadian Journal of Surgery*: June 2010: 53(3): pp S32-S33.

Ravi B, Zahrai A, Rampersaud YR: Clinical accuracy of computer-assisted two-dimensional fluoroscopy for the percutaneous placement of lumbosacral pedicle screws. *Spine*: E-published June 30, 2010.

Walmsley D, Alzahrani K, Coke W, Gandhi R: Total knee arthroplasty in Crigler-Najjar syndrome. *The Knee*: June 2010: 17(3): pp 252-254. E-published September 13, 2009.

INVITED VISITS

Davey JR: Exatech Canada, Windsor, Ontario, Canada, May 2010. Infected total joint replacement: Tibial tubercle osteotomy.

Davey JR: Stryker Orthopaedics/University of Calgary, Surgical Skills Lab, Triathlon Family Cadaveric Training, Calgary, Alberta, Canada, May 2010. Triathlon trial cutting guides (TCG)/ Triathlon TS cadaver demo.

Davey JR: University of Calgary, Revision Hip Training and Primary and Revision Knee Training, Calgary, Alberta, Canada, October 2009. (1) co-Chair with Dr. J.R. Davey and Dr. Brian Burkart, (2) High flexion TKA: Are they all the same?, (3) Instructional video: Triathlon TS revision, (4) Principles of acetabular reconstruction, (5) Triathlon TS: Design rationale.

Davey JR: The Dewar Orthopaedic Society, 50th Anniversary, Ottawa, Ontario, Canada, September 2009. Exposures for total knee arthroplasty.

Erwin WM: American Association of Chiropractic Colleges, Las Vegas, Nevada, USA, March 2010. (1) Apoptotic signaling in intervertebral disc nucleus pulposus cells, (2) The regenerative capacity of the notochordal cell: Tissue constructs generated in vitro under hypoxia.

Gandhi R: Canadian Orthopedic Association, Whistler, British Columbia, Canada, July 2009. Instructional Course Lecture: Evidence-based orthopedics - limiting bias in clinical trials.

Graham B: American Association for Hand Surgery, Boca Raton, Florida, USA, January 2010. What is the evidence in managing CTS and ulnar neuropathy at the elbow, (2) Update on outcomes research in hand surgery.

Lau J: Canadian Academy of Sports Medicine-Ontario Medical Association (CASM-OMA), Sport Medicine Conference, Toronto, Ontario, Canada, June 2010. Workshop: Hindfoot pathology.

Lau J: Canadian Orthopaedic Association, 65th Annual Meeting, Edmonton, Alberta, Canada, June 2010. (1) Moderator: Participant case-based foot and ankle fractures, (2) Tips and tricks: Painful first MTPJ fusions, (3) Workshop - New Devices for the Care of Common Foot and Ankle Pathologies (proximal first metatarsal osteotomy).

Lau J: University of Calgary, Calgary Orthopaedic Residents Forum, Calgary, Alberta, Canada, April 2010. Foot and Ankle Session.

Lau J: Hindfoot Training Course (organized by Dr. B. Hintermann), Liestal, Switzerland, October 2009. (1) Medial displacement calcaneal osteotomy versus lateral column lengthening?, (2) Principles for revision triple fusions, (3) Triple fusion to correct complex hindfoot deformities.

Lau J: Ontario Orthopaedic Association, 32nd Annual Meeting, Toronto, Ontario, Canada, October 2009. Syndesmosis injuries.

Lau J: University of Michigan-Health System, 9th Annual Foot and Ankle Lectureship, Ann Arbor, Michigan, USA, October 2009. Role of biologics in hindfoot fusion.

Lau J: Canadian Orthopaedic Association, 64th Annual Meeting, Whistler, British Columbia, Canada, July 2009. (1) Moderator: Workshop - Distal Tibia Osteotomy, (2) Hallux rigidus: What's new?

Lewis SJ: Canadian Magen David Adom for Israel, Toronto, Ontario, Canada, March 2010. Back pain prevention and treatment.

Lewis SJ: Medtronic of Canada Ltd., Toronto, Ontario, Canada, January 2010. Sales representative presentation of spinal instrumentation.

Lewis SJ: Spine CME.Org, 19th Annual Dr. Tom Lowe Spine Symposium: The Surgical Management of Spinal Disorders Broad Water, Beaver Creek, Colorado, USA, January 2010. (1) Osteotomy Options: (a) cervico-thoracic and lumbar, (b) When, why and how?, (2) Surgical video: Thoracic VCR.

Lewis SJ: Medtronic, St. Louis, Missouri, USA, December 2009. The use of the CD horizon solera spinal instrumentation system.

Lewis SJ: Scoliosis Research Society, San Antonio, Texas, USA, September 2009. 2010 IMAST (International Meeting on Advanced Spine Techniques) Preview.

Lewis SJ: Ludwig Boltzmann Institute, Wetlab - State of the Art Animal Facility, Vienna, Austria, July 2009. Baxter: Bleeding control with floseal in spinal and cranial surgery.

Marshall KW: Ministry of Health/Selayang Hospital, Kuala Lumpur, Malaysia, October 2009. Blood-based RNA profiling for colorectal cancer: The future is now.

Marshall KW: Mount Miriam Cancer Hospital, Penang, Malaysia, October 2009. Blood-based RNA profiling for colorectal cancer: The future is now.

Marshall KW: Nankai University, Tianjin, China, October 2009. Blood-based RNA profiling for colorectal cancer: The future is now.

Marshall KW: Genzyme Biosurgery, Annual Meeting, Muskoka, Ontario, Canada, September 2009. Non-arthroplasty management of knee OA.

Marshall KW: Novartis, Boston, Massachusetts, USA, September 2009. Blood-based RNA biomarkers and companion diagnostics.

Rampersaud YR: Medical Education Resources (MER)/ONE SPINE, 4th Annual Controversies in Spine Surgery, Nassau, Bahamas, June 2010. (1) Moderator of The Aging Spine, (2) Grade I degenerative spondylolisthesis at L4-5 with spinal stenosis and bilateral neurogenic claudication: The best treatment is decompression alone, (3) TL fracture, unilateral facet fracture, traumatic cervical central cord syndrome.

Rampersaud YR: Motion Sparing Technologies, Focus Group Meeting, Kelowna, British Columbia, Canada, April 2010. (1) Moderator of Lumbar Degenerative Spondylolisthesis, (2) Adjacent segment degeneration - complication of lumbar spine fusion, (3) Decompression and fusion, (4) Indications for lumbar ADR in Canada (best case scenario), (4) Summary of study protocol DIAM versus fusion for degenerative spondylolisthesis.

Rampersaud YR: Medtronic, Memphis, Tennessee, USA, February 2010. (1) Course Chairman: Advances in Spine Surgery-Current Techniques in Minimal Access, (2) Clinical results of minimal access surgery versus open surgery techniques, (3) Direct lateral, (4) Historical evolution of minimal access technologies, (5) Minimal access TLIF with percutaneous pedicle screw fixation, (6) NEJM vertebralplasty RCTs.

Rampersaud YR: Medtronic, Advances in Spine: Trauma and Tumor, Memphis, Tennessee, USA, January 2010. (1) Acute compression fracture, (2) Flexion distraction injuries, (3) Hangman's fracture, (4) Unstable upper thoracic met with myelopathy, (5) Work up and staging the spinal lesion: Avoiding the pitfalls.

Rampersaud YR: Society for Minimally Invasive Spine Surgery, 2009 Annual Meeting, Las Vegas, Nevada, USA, October 2009. (1) Moderator of Revision Case Discussions, (2) TLIF: Factors influencing clinical outcomes.

Rampersaud YR: Canadian Orthopaedic Association (COA)-64th Meeting and The Canadian Operational Research Society (CORS)-43rd Annual Meeting, Westmount, Quebec, Canada, July 2009. (1) Session Moderator of Paper Session 20: Spine 2, (2) Combined spine and oncology - surgical management of spine tumours.

Syed KA: Canadian Orthopaedic Association, Whistler, British Columbia, Canada, July 2009. (1) Antibiotic bone cement and the incidence of deep infection following total knee arthroplasty, (2) The relationship between body habitus and leptin in a knee osteoarthritis population.

Veillette CJH: American Academy of Orthopaedic Surgery, Electronic Skills Pavilion, New Orleans, Louisiana, USA, March 2010. (1) Managing your internet reputation for orthopaedic surgeons, (2) Orthopaedia: A wiki-based collaborative knowledgebase, (3) Search engine optimization and marketing for office websites.

Veillette CJH: Jamaica Orthopaedic Association, Jamaica, February 2010. (1) Current concepts in management of the terrible triad of the elbow, (2) Hemiarthroplasty for proximal humeral fractures.

Veillette CJH: Association of Bone and Joint Surgeons, Carl T. Brighton Workshop on Health Informatics in Orthopaedic Surgery, Tampa Bay, Florida, USA, November 2009. Wiki publishing, community equity and orthopaedic surgery.

Veillette CJH: Canadian Orthopaedic Association, Basic Science Course, Winnipeg, Manitoba, Canada, October 2009. Web 2.0 and the orthopaedic surgeon.

Veillette CJH: Ontario Orthopaedic Association, Toronto, Ontario, Canada, October 2009. Current advances in management of elbow osteoarthritis.

von Schroeder HP: European Plastic Surgery Research Council, Inaugural Meeting, Hamburg, Germany, August 2009. Bioreactor controlled shear stress environment promotes osteogenic differentiation of adipose stem cells - a way for bone reconstruction.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

A multicenter randomized clinical trial of non-operative versus operative treatment of acute acromioclavicular joint dislocation (AC JOINT). *Veillette C, Syed K: Orthopedic Trauma Society.* (\$10,000 2009 - 2010)

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)

Assessment of informatics competency and information management strategies in surgical trainees. *Veillette CJH, Kanampuzha J: University of Toronto.* (\$10,000 2009)

Biological effects of DRS upon intervertebral disc nucleus pulposus cells. *Erwin WM: Skoll Foundation.* (\$120,000 2009 - 2010)

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: Workers Safety and Insurance Board of Ontario (funds matched by the University Health Network and 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, Andersen J, Loisel P, Wells R: Workplace Safety and Insurance Board (WSIB), Centres for Research Expertise Program.* (\$400,000 2007 - 2012)

Detection, evaluation and treatment of carpal tunnel syndrome. *Graham B, Surgery of the Hand Outcomes Workgroup: American Society for Surgery of the Hand.* (\$20,000 2009 - 2011)

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 Foundation.* (\$116,500 2007 - 2009)

Evaluation of rivaroxaban following hip and knee arthroplasty: Phase IV evaluation. *Gandhi R, Mahomed NN, Davey JR, Syed KA: Bayer Canada.* (\$154,000 2010)

Fixation using alternative implants for the treatment of hip fractures: A multi-center randomized trial comparing sliding hip screws and cancellous screws on revision surgery rates and quality of life in the treatment of femoral neck fractures. *Bhandari M, Syed K, Guyatt G: Canadian Institutes of Health Research.* (\$37,500 2009 - 2010)

Harnessing collective intelligence for the management of subcapital hip fractures. *Veillette C, Syed K: Orthopedic Trauma Society.* (\$10,000 2009 - 2010)

Harnessing collective intelligence for the management of subcapital hip fractures. *Ahn J, Veillette CJH, Bernstein J: Orthopaedic Trauma Association.* (\$10,000 2009)

Impact of psychosocial and treatment choice on return to work in carpal tunnel syndrome. *Binhammer P, Dvali L, von Schroeder H, Anastakis D: American Foundation for Surgery of the Hand.* (\$16,000 2009 - 2010)

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)

Predictive value of helical computed tomography in the diagnosis of pulmonary embolus following total joint replacement. *Gandhi R, Syed K, Mahomed N, Davey R: Pfizer Inc.* (\$30,000 2009 - 2010)

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)

HONOURS RECEIVED

Erwin WM: Member, Orthopaedic Expert Advisory Panel Spine Triage. 2009.

Erwin WM: Homewood Research Professorship. 2009.

Gandhi R: Top 20 Poster Award from the Canadian Orthopaedic Association for 'Predicting Patient Dissatisfaction Following Joint Replacement Surgery. July 2009.

Rampersaud YR: Best Paper Award at the 2009 Annual Meeting of the Society for Minimally Invasive Spine Surgery. October 2009.

von Schroeder HP: CORS Top Scoring Posters, at the 64th Annual Meeting of the Canadian Orthopaedic Association, for 'Tissues Engineering with Cell-Based Gene Transfer in Fracture Repair' (co-authored by Li R, Stewart D, von Schroeder HP, Li C) July 2009.

DIVISION OF PLASTIC AND RECONSTRUCTIVE SURGERY

Dr. D.J. Anastakis	Associate Professor
Dr. P. Bray	Assistant Professor
Dr. L.T. Dvali	Assistant Professor
Dr. B. Graham	Assistant Professor
Dr. S.O.P. Hofer	Associate Professor (Division Head)
Dr. H.P. von Schroeder	Associate Professor
Dr. T. Zhong	Lecturer

PUBLICATIONS

Antony AK, Mehrara BM, McCarthy CM, Zhong T, Kropf N, Disa JJ, Pusic A, Cordeiro PG: Salvage of tissue expander in the setting of mastectomy flap necrosis: A 13-year experience using timed excision with continued expansion. *Plastic and Reconstructive Surgery*: August 2009; 124(2): pp 356-363.

Payne CE, Hofer SOP: Chapter 31: Principles of nasal reconstruction. In: *Principles and Practice of Head and Neck Surgery and Oncology, Second Edition* (Montgomery PQ, Rhys Evans PH, Gullane PJ, eds.) Informa Healthcare, London, United Kingdom, 2009: pp 577-597.

Damen THC, Timman R, Kunst EH, Gopie JP, Bresser PJC, Seynaeve C, Menke-Pluijmers MB, Mureau MAM, Hofer SOP, Tibben A: High satisfaction rates in women after DIEP flap breast reconstruction. *Journal of Plastic, Reconstructive and Aesthetic Surgery*: January 2010; 93(1): pp 93-100.

Hofer SOP: Section 6: Reconstructive head and neck surgery: Questions 167-184; Answers 185-201. In: *Multiple Choice Questions in Plastic Surgery* (Shokrollahi K, Whitaker IS, Laing H, eds.) tfm Publishing Ltd., Harley, Shrewsbury, United Kingdom, 2009.

Hofer SOP, Mureau MAM: Chapter 12: Local flaps. In: *Microsurgical Reconstruction of the Head and Neck* (Neligan PC, Wei FC, eds.) Quality Medical Publishing, Inc., St. Louis, Missouri, 2010.

Hofer SOP, Mureau MA: Improving outcomes in aesthetic facial reconstruction. *Clinics in Plastic Surgery*: July 2009; 36(3): pp 345-354.

Moolenburgh SE, Mureau MA, Versnel SL, Duivenvoorden HJ, Hofer SO: The impact of nasal reconstruction following tumour resection on psychosocial functioning, a clinical-empirical exploration. *Psychooncology*: July 2009; 18(7): pp 747-752.

Mureau MA, Hofer SOP: Maximizing results in reconstruction of cheek defects. *Clinics in Plastic Surgery*: July 2009; 36(7): pp 461-476.

Ni Z, Anastakis DJ, Gunraj C, Chen R: Reversal of cortical reorganization in human primary motor cortex following thumb reconstruction. *Journal of Neurophysiology*: January 2010; 103(1): pp 65-73. E-published November 1, 2009.

Novak CB, Anastakis DJ, Beaton DE, Katz J: Evaluation of pain measurement practices and opinions of peripheral nerve surgeons. *Hand*: December 2009; 4(4): pp 344-349. E-published February 25, 2009.

Verseijden F, Posthumus-van Sluijs SJ, Pavljasevic P, Hofer SO, van Osch GJ, Farrell E: Adult human bone marrow- and adipose tissue-derived stromal cells support the formation of prevascular-like structures from endothelial cells in vitro. *Tissue Engineering. Part A*: January 2010; 16(1): pp 101-114.

Zhong T, Pusic A, Disa J: Chapter 8: Muscle sparing and free TRAM flap breast reconstruction. In: *Aesthetic and Reconstructive Surgery of the Breast* (Hall-Findlay EJ, Evans GRD, eds.) Elsevier Publishing Ltd, London, United Kingdom, 2010.

INVITED VISITS

Anastakis DJ: Association for Surgical Education, 2010 Surgical Education Week, San Antonio, Texas, USA, April 2010. Facilitator of Strategic Planning Session

Anastakis DJ: Association for Surgical Education, 2009 Surgical Education Week, Indianapolis, Indiana, USA, September 2009. Course Instructor: (1) Educational administration and management, (2) Leadership competencies, (3) Microteaching, (4) Program and facility evaluation, (5) Teaching technical skills.

Hofer SOP: Mayo Clinic, Symposium on Reconstructive Microsurgery, Rochester, Minnesota, USA, June 2010. (1) Moderator for Session X: Head and Neck, (2) Basic microsurgery 101. How to keep things simple and achieve reproducible results, (3) Microsurgical scalp reconstruction. An algorithm of treatment, (4) Outcomes in extremity reconstruction following multimodality sarcoma treatment, (5) Principles of nasal reconstruction with the 3-stage paramedian forehead flap. Lining, structural support and cover.

Hofer SOP: American Society of Plastic Surgeons, Aesthetic Facial Reconstruction in Adults and Children Symposium, Tucson, Arizona, USA, February 2010. (1) Aesthetic and oncologic outcome after microsurgical reconstruction of complex scalp and forehead defects, (2) Columellar reconstruction, (3) How to be successful with microvascular reconstruction in the head and neck, (4) Nasal reconstruction: An algorithm based on 800 cases over 7 years.

Hofer SOP: American Society for Reconstructive Microsurgery, 2010 Annual General Meeting, Boca Raton, Florida, USA, January 2010. Panel Member on Concurrent Break Out: 409 Advances in Perforator Flap Head and Neck Reconstruction.

Hofer SOP: Erasmus University Medical Center, Department of Plastic, Reconstructive and Hand Surgery, 2009 Esser Course: Aesthetic and Functional Reconstruction of the Nose, Rotterdam, The Netherlands, November 2009. The evolution and current practice of inner-lining for nasal reconstruction.

Hofer SOP: International Association of Plastic Surgeons / The Royal College of Surgeons of Ireland, Winter Meeting 2009, Educational Symposium on Oncological Reconstructive Challenges, Dublin, Ireland, November 2009. (1) Session 2: Sarcoma, (2) Keynote Address: Current reconstructive challenges.

Hofer SOP: International Confederation for Plastic, Reconstructive and Aesthetic Surgery, 15th World Congress, New Delhi, India, November 2009. (1) Head and Neck Chairperson, (2) Guest Lecturer: (a) Functional and aesthetic outcome enhancement of head and neck reconstruction through secondary procedures, (b) Reconstruction of the mandible with osteoradionecrosis, (3) Master Class: Nose reconstruction.

Hofer SOP: International Academy of Oral Oncology (IAOO), Second World Congress, Toronto, Ontario, Canada, July 2009. Instructional Course 1: Mandibular reconstruction: How I do it.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear 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)

Development of an injury severity score for hand trauma. *Dvali LT, Graham B: The Physicians' Services Incorporated.* (\$33,000 2007 - 2009)

Hypoxic postconditioning of human skeletal muscle against reoxygenation injury: Efficacy, mechanism and therapeutic potentials. *Pang C, Forrest C, Hofer S, Zhong T: Canadian Institutes of Health Research.* (\$326,763 2009 - 2012)

Impact of psychosocial and treatment choice on return to work in carpal tunnel syndrome. *Binhammer P, Dvali L, von Schroeder H, Anastakis D: American Foundation for Surgery of the Hand.* (\$16,000 2009 - 2010)

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 Physician's Services Incorporated Foundation.* (\$142,500 2007 - 2009)

The validity of patient self-report for assessment of cold sensitivity. *Anastakis DJ, Novak C, Dvali L, Katz J: Educational Foundation, The Canadian Society of Plastic Surgeons.* (\$10,000 2010)

DIVISION OF THORACIC SURGERY

Dr. G.E. Darling	Professor
Dr. M. de Perrot	Associate Professor
Dr. S. Keshavjee	Professor (Division Head)
Dr. M.Y. Liu	Professor
Dr. M.F. McKneally	Professor
Dr. A.F. Pierre	Assistant Professor
Dr. T.K. Waddell	Associate Professor
Dr. K. Yasufuku	Assistant Professor

PUBLICATIONS

Albain KS, Swann RS, Rusch VW, Turrisi 3rd AT, Shepherd FA, Smith C, Chen Y, Livingston RB, Feins RH, Gandara DR, Fry WA, Darling G, Johnson DH, Green MR, Miller RC, Ley J, Sause WT, Cox JD: Radiotherapy plus chemotherapy with or without surgical resection for stage III non-small cell lung cancer: A phase III randomized controlled trial. *Lancet*: August 2009: 374(9687): pp 379-386. E-published July 24, 2009.

Chung J, de Perrot M: Pleural effusion and empyema thoracis. In: *Conn's Current Therapy*. (Bope ET, Rakel RE, Kellerman R, eds.) Saunders Elsevier, Philadelphia, 2010.

Cypel M, Liu M, Rubacha M, Yeung JC, Hirayama S, Anraku M, Sato M, Medin J, Davidson BL, de Perrot M, Waddell TK, Slutsky AS, Keshavjee S: Functional repair of human donor lungs by IL-10 gene therapy. *Science Translational Medicine*: October 2009: 1(4): pp 4ra9.

Cypel M, Rubacha M, Yeung J, Hirayama S, Torbicki K, Madonik M, Fischer S, Hwang D, Pierre A, Waddell TK, de Perrot M, Liu M, Keshavjee S: Normothermic ex vivo perfusion prevents lung injury compared to extended cold preservation for transplantation. *American Journal of Transplantation*: October 2009: 9(10): pp 2262-2269. E-published August 6, 2009.

Cypel M, Sato M, Yildirim E, Karolak W, Chen F, Yeung J, Boasquevisque C, Leist V, Singer LG, Yasufuku K, de Perrot M, Waddell TK, Keshavjee S, Pierre A: Initial experience with lung donation after cardiocirculatory death in Canada. *The Journal of Heart and Lung Transplantation*: August 2009: 28(8): pp 753-758. E-published June 28, 2009.

de Almeida JR, Pagedar NA, Keshavjee S, Gilbert R: Chondrosarcoma of the trachea in a patient with Maffucci syndrome. *Journal of Otolaryngology, Head and Neck Surgery*: April 2010: 39(2): pp E12-E15.

He X, Han B, Bai X, Zhang Y, Cypel M, Mura M, Keshavjee S, Liu M: PTX3 as a potential biomarker of acute lung injury: Supporting evidence from animal experimentation. *Intensive Care Medicine*: February 2010: 36(2): pp 356-364. E-published November 18, 2009.

Hirayama S, Cypel M, Sato M, Anraku M, Liaw PC, Liu M, Waddell TK, Keshavjee S: Activated protein C in ischemia-reperfusion injury after experimental lung transplantation. *The Journal of Heart and Lung Transplantation*: November 2009: 2(11): pp 1180-1184. E-published September 26, 2009.

Karolak W, Cypel M, Chen F, Daniel L, Chaparro C, Keshavjee S: Constructive pericarditis after lung transplantation: An under-recognized complication. *The Journal of Heart and Lung Transplantation*: May 2010: 29(5): p 578-581. E-published March 5, 2010.

Kasai T, Motoori K, Horikoshi T, Uchiyama K, Yasufuku K, Takiguchi Y, Takahashi F, Kuniyasu Y, Ito H: Dual-time point scanning of integrated FDG PET/CT for the evaluation of mediastinal and hilar lymph nodes in non-small cell lung cancer diagnosed as operable by contrast-enhanced CT. *European Journal of Radiology*: August 2010: 75(2): pp 143-146. E-published May 15, 2009.

Koga S, Furuya M, Takahashi Y, Tanaka R, Yamaguchi A, Yasufuku K, Hiroshima K, Kurihara M, Yoshino I, Aoki I, Nakatani Y: Lung cysts in Birt-Hogg-Dubé syndrome: Histopathological characteristics and aberrant sequence repeats. *Pathology International*: October 2009: 59(10): pp 720-728.

Lara-Guerra H, Waddell TK, Salvarrey MA, Joshua AM, Chung CT, Paul N, Boerner S, Sakurada A, Ludkovski O, Ma C, Squire J, Liu G, Shepherd FA, Tsao MS, Leighl NB: Phase II study of preoperative gefitinib in clinical stage I non-small cell lung cancer. *Journal of Clinical Oncology*: December 2009: 27(36): pp 6229-6236. E-published November 2, 2009.

Lee JC, Christie JD, Keshavjee S: Primary graft dysfunction: Definition, risk factors, short and long term outcomes. *Seminars in Respiratory and Critical Care Medicine*: April 2010: 31(2): pp 161-171. E-published March 30, 2010.

Madill J, Aghdassi E, Arendt BM, Gutierrez C, Singer L, Chow CW, Keshavjee S, Allard JP: Oxidative stress and nutritional intakes in lung patients with bronchiolitis obliterans syndrome. *Transplant Proceedings*: November 2009: pp 3939-3844.

Maimon N, Lee P, Paul N, Hwang D, Marras T, Theodore K, Keshavjee S, Chan CK: Tracheobronchial involvement as a sole manifestation of relapsing polychondritis. *Journal of Bronchology and Interventional Pulmonology*: January 2010: 17(1): pp 5-10.

Mura M, Binnie M, Han B, Li C, Andrade CF, Shiozaki A, Zhang Y, Ferrara N, Hwang D, Waddell TK, Keshavjee S, Liu M: Functions of type II pneumocyte-derived vascular endothelial growth factor in alveolar structure, acute inflammation, and vascular permeability. *The American Journal of Pathology*: April 2010: 176(4): pp 1725-1734. E-published February 18, 2010.

Nakajima T, Sekine Y, Yamada Y, Suzuki H, Yasufuku K, Yoshida S, Suzuki M, Shibuya K, Fujisawa T, Yoshino I: Long-term surgical outcome in patients with lung cancer and coexisting severe COPD. *The Thoracic and Cardiovascular Surgeon*: September 2009: 57(6): pp 349-342. E-published August 25, 2009.

Nakajima T, Shingyouji M, Nishimura H, Iizasa T, Kaji S, Yasufuku K, Kimura H: New endobronchial ultrasound imaging for differentiating metastatic site within a mediastinal lymph node. *Journal of Thoracic Oncology*: October 2009: 4(10): pp 1289-1290.

Nakajima T, Yasufuku K, Nakajima M, Baba M, Yoshikawa K, Kamada T, Hiroshima K, Nakatani Y, Fujisawa T, Yoshino I: Endobronchial ultrasound-guided transbronchial needle aspiration for lymph node staging in patients with non-small cell cancer in nonoperable patients pursuing radiotherapy as a primary treatment. *Journal of Thoracic Oncology*: May 2010: 5(5): pp 606-611.

Oliver JR, Kushwah R, Wu J, Cutz E, Yeger H, Waddell TK, Hu J: Gender differences in pulmonary regenerative response to naphthalen-induced bronchiolar epithelial cell injury. *Cell Proliferation*: October 2009: 42(5): pp 672-687. E-published July 9, 2009.

Patel A, Anraku M, Darling GE, Shepherd FA, Pierre AF, Waddell TK, Keshavjee S, de Perrot M: Venous thromboembolism in patients receiving multimodality therapy for thoracic malignancies. *The Journal of Thoracic and Cardiovascular Surgery*: October 2009: 138(4): pp 843-848. E-published April 10, 2009.

Pierre AF, Cypel M: Left lower lobe sleeve resection for carcinoid tumor. *CTSNet Website*: CTSnet.org/sections/clinicalresources/videos/index.html: July 2009.

Roche-Nagle G, Waddell TK, de Perrot M, Rubin B, Oreopoulos G: Neo-adjuvant aortic endografting. *Annals of Vascular Surgery*: November-December 2009: 23(6): pp 787.e1-5. E-published September 12, 2009.

Sakairi Y, Shiba M, Kakizawa K, Iida T, Katsumata M, Nakajima T, Yasufuku K: Changes in diagnostic strategies for hilar-type Castleman's disease: Report of two cases. *Surgery Today*: December 2009: 39(12): pp 1060-1063. E-published December 8, 2009.

Sato M, Keshavjee S, Liu M: Translational research: Animal models of obliterative bronchiolitis after lung transplantation. *American Journal of Transplantation*: September 2009: 9(9): pp 1981-1987. E-published August 6, 2009.

Shargall Y, de Perrot M: Vanishing mediastinal mass. *The New England Journal of Medicine*: December 2009: 361(27): pp 2653.

Shehata N, Palda VA, Meyer RM, Blydt-Hansen TD, Campbell P, Cardella C, Martin S, Nickerson P, Peltekian K, Ross H, Waddell TK, West L, Anderson D, Freedman J, Hume H: The use of immunoglobulin therapy for patients undergoing solid organ transplantation: An evidence-based practice guideline. *Transfusion Medicine Reviews*: January 2010: 24Suppl 1: pp S7-S27.

Solomon M, Grasemann H, Keshavjee S: Pediatric lung transplantation. *Pediatric Clinics of North America*: April 2010: 57(2): pp 375-391.

Voglis S, Quinn K, Tullis E, Liu M, Henriques M, Zubrinich C, Penuelas O, Chan H, Zhang H: Human neutrophil peptides and phagocytic deficiency in bronchiectatic lungs. *American Journal of Respiratory and Critical Care Medicine*: July 2009: 180(2): pp 159-166.

Yamada Y, Sekine Y, Yoshida S, Yasufuku K, Petrache I, Benson HL, Brand DD, Yoshino I, Wilkes DS: Type V collagen-induced oral tolerance plus low-dose cyclosporine prevents rejection of MHC class I and II incompatible lung allografts. *Journal of Immunology*: July 2009: 183(1): pp 237-245.

Yasufuku K: Early diagnosis of lung cancer. *Clinical Chest Medicine*: March 2010: 3(1): pp 39-47.

Yasufuku K: EBUS-TBNA bronchoscopy. In: *Endobronchial Ultrasound: An Atlas and Practical Guide* (Ernst A, Herth F, eds.) Springer, New York, 2009.

Yasufuku K: Endoscopic staging of lung cancer. In: *Interventional Pulmonary Medicine, 2nd Edition, Series: Lung Biology in Health and Disease, Volume 230* (Beamis JF, Mathur P, Mehta AC, eds.) Informa Healthcare, New York, 2010.

Yasufuku K, Nakajima T: Convex probe endobronchial ultrasound. In: *Clinical Chest Ultrasound: From the ICU to the Bronchoscopy Suite* (Bolliger CT, Herth FJF, Mayo PH, Miyazawa T, Beamis JF, eds.), Karger, Switzerland, August 2009.

Yasufuku K, Nakajima T: Endobronchial Ultrasound-Guided Transbronchial Needle Aspiration Manual. (Yasufuku K, ed.) Kanehara Suppan, Tokyo, 2009.

INVITED VISITS

de Perrot: Canadian Pulmonary Hypertension Forum, Montreal, Quebec, Canada, September 2009. Improving access to lung transplantation.

Keshavjee S: American Association for Thoracic Surgery, 90th Annual Meeting, Toronto, Ontario, Canada, May 2010. (1) Expanding options in extracorporeal lung support, (2) Extracorporeal lung support in children.

Keshavjee S: Japanese Association for Chest Surgery, 27th Annual Meeting, Sendai, Japan, May 2010. Novel concepts in lung preservation and repair.

Keshavjee S: Queen's University/McMaster University Health Sciences, 5th Annual Ontario Thoracic Cancer Conference, Niagara-on-the Lake, Ontario, Canada, April 2010. Local treatment of thymoma: Surgery for all?

Keshavjee S: National Congress of Pneumology and Thoracic Surgery, LXIX National Congress of Pneumology and Thoracic Surgery, Guadalajara, Mexico, April 2010. (1) Lung transplantation 2010, (2) Applications of ultrasound in thoracic surgery, (3) Videothoroscopic transcervical thymectomy.

Keshavjee S: International Society of Heart and Lung Transplantation, Chicago, Illinois, USA, April 2010. (1) Organ resuscitation of the heart, lung, and liver, (2) State of the art ex vivo lung perfusion.

Keshavjee S: The International Society of Heart and Lung Transplantation, 5th International Meeting in Lung Transplantation and Cystic Fibrosis, Paris, France, March 2010. (1) Ex-vivo repair of lungs for transplantation, (2) Lung transplantation for cystic fibrosis-the Toronto experience, (3) Novalung and extracorporeal lung support.

Keshavjee S: Royal Brompton and Harefield Hospital Imperial College, Initiatives in Lung Transplantation, London, England, February 2010. (1) Extracorporeal lung support in transplantation, (2) Ex-vivo repair of donor lungs for transplantation, (3) Ex-vivo lung perfusion workshop.

Keshavjee S: Alberta Transplant Lecture, Edmonton, Alberta, Canada, November 2009. Ex-vivo diagnosis and repair of organs for transplantation.

Keshavjee S: Washington University, Contemporary General Thoracic Surgery, St. Louis, Missouri, USA, November 2009. (1) Endoscopic alternatives to esophageal surgery: What is on the horizon?, (2) Current state of screening for lung cancer, (3) Multi-modality management of mesothelioma at Toronto General Hospital, (4) Ex-vivo lung perfusion, (5) Clinical application of the novalung.

Keshavjee S: Extracorporeal Life Support Organization, 20th Annual ELSO Conference, University of Michigan, Ann Arbor, Michigan, USA, September 2009. Extracorporeal life support pre-lung transplantation.

Keshavjee S: University of Manitoba Health Sciences Centre, Winnipeg, Manitoba, Canada, September 2009. (1) Incorporation of HLA testing into decision making in lung transplantation, (2) Ex vivo repair of organs for transplantation.

Keshavjee S: International Association for the Study of Lung Cancer, 13th World Conference on Lung Cancer, San Francisco, California, USA, August 2009. Vascular sleeve resections for lung cancer.

Liu MY: Second Military Medical University, Department of Pathophysiology, Shanghai, China, December 2009. XB130 in cell signaling and tumorigenesis.

Liu MY: Shandong University, Faculty of Medicine, Jianan, Shandong, China, December 2009. Graduate education and management in University of Toronto, PTX3 and acute lung injury.

Liu MY: Soochow University, Medical College, Suzhou, Jiangsu, China, December 2009. Graduate education and management in University of Toronto.

Liu MY: International Society for Pathophysiology/Chinese Association of Physiology (ISP-CAP), 1st International Symposium for Pathophysiology Teaching, Shanghai, China, November 2009. Teaching human biology.

Liu MY: Guangzhou Institute of Respiratory Diseases, Guangzhou, China, October 2009. Acute lung injury and lung transplantation: From cellular mechanisms to molecular therapies.

Liu MY: International Symposium of Industrial Pharmaceuticals and Clinical Pharmacology, Guangzhou, China, October 2009. Self-assembly peptide based nano-drug delivery.

Waddell TK: Massachusetts General Hospital, Thoracic Surgery Postgraduate Course, Boston, Massachusetts, USA, May 2010. (1) Lung stem cells and cystic fibrosis, (2) Mediastinoscopy or EBUS for mediastinal staging, (3) Primary chest wall tumours, (4) Pulmonary metastectomy, (5) T4 NSCLC invading the spine, (6) Update on lung transplantation.

Yasufuku K: Centre Hospitalier Del Universite de Montreal, Montreal, Quebec, Canada, June 2010. Visiting Professor - Diagnostic and Therapeutic Thoracic Endoscopy: (1) Endobronchial ultrasound anatomy, equipment and technique, (2) Radial EBUS in evaluation of endobronchial pathology, (3) EBUS/EUS in lung cancer staging - live case.

Yasufuku K: 16th World Congress for Bronchology and 16th World Congress for Bonchoesophagology, Meet the Professor - EBUS 2010 International Symposium/EBUS-TBNA Publications, Budapest, Hungary, June 2010. (1) Session Chair, (2) Guest Speaker: Endosonography: Mediastinal anatomy and diagnostic capabilities regarding tumor genetics.

Yasufuku K: The Japan Society for Respiratory Endoscopy, Annual Meeting, Symposium: Building an Interventional Thoracic Surgery Program in Canada, Yokohama, Japan, June 2010. (1) Session Chair: Interventional Pulmonary Seminar, (2) Guest Speaker: EBUS Seminar. Difficulties and complications of EBUS-TBNA.

Yasufuku K: American Association of Thoracic Surgery (AATS), 90th Annual Meeting, Toronto, Ontario, Canada, May 2010. (1) Director for Endobronchial Ultrasound Training Course, (2) Guest Speaker: (1) Building the hybrid OR of the future. Toronto General Hospital: Lessons learned, (b) Controversies in the utilization of new technology: Mediastinal staging. Role of EBUS.

Yasufuku K: American Thoracic Society, International Conference 2010, New Orleans, Louisiana, USA, May 2010. Guest Speaker for the Sunrise Seminar on EBUS-TBNA: How to improve the yield.

Yasufuku K: Lahey Clinic, Interventional Pulmonology, The 27th Year, Burlington, Massachusetts, USA, March 2010. (1) EBUS case studies, (2) Hands-on workshop (EBUS-TBNA).

Yasufuku K: The Saudi Thoracic Society/The Emirates Allergy and Respiratory Society/American College of Chest Physicians, Gulf Thoracic Abu Dhabi 2010, Abu Dhabi, United Arab Emirates, March 2010. Endobronchial Ultrasound Workshop Faculty: (1) EBUS-TBNA Practical Tips: Equipment, Technique and Videos, (2) Hands-on Session: Step-by-step demonstration of techniques in EBUS-TBNA models, (3) Guest Speaker. Endobronchial ultrasonography as early diagnosis tool in lung cancer.

Yasufuku K: University of Texas, M.D. Anderson Cancer Center, Houston, Texas, USA, February 2010. Interventional pulmonology in cancer patients: An intensive hands-on workshop.

Yasufuku K: Chinese Society of Respiratory Diseases/Chinese Academy of Engineering/Guangdong Medical Association/First Affiliated Hospital of Guangzhou Medical College/Guangzhou Institute of Respiratory Diseases, under auspices of the Association of Asian Pacific Association of Bronchology and Interventional Pulmonology, 3rd Asia-Pacific Congress of Bronchology and Interventional Pulmonology, Guangzhou, China, November 2009. (1) Congress Workshop: Hands-on Training in EBUS-TBNA, (2) Endobronchial ultrasonography: Current status and future directions, (3) Live demonstration of bronchoscopy and EBUS-TBNA.

Yasufuku K: Hôpital Sainte Marguerite – Thoracic Endoscopy Unit, Interventional Bronchoscopy Course 2009, Marseilles, France, November 2009. (1) Visiting Faculty, (2) Gave a few talks, (3) Hands-on training.

Yasufuku K: The American College of Chest Physicians International Conference 2009, San Diego, California, USA, November 2009. (1) Panel Discussion on Early Stage Lung Cancer: Moving Beyond TNM Staging in the Era of Molecular Prognosis and Prediction - A Thoracic Surgeon's Perspective: Squeezing More Information from the Regional Lymph Nodes - Molecular Staining from Bronchoscopic TBNA and Resection Specimens, (2) Plenary Presentation: The Society of Thoracic Surgeons: State of the art in lung cancer management. Integrating EBUS in the staging paradigm for NSCLC.

Yasufuku K: Harvard University Medical School, Boston, Massachusetts, USA, October 2009. Endobronchial ultrasound: Seventh annual interdisciplinary training course.

Yasufuku K: Canadian Association of Thoracic Surgeons, 12th Annual Meeting, Victoria, British Columbia, Canada, September 2009. Controversies in thoracic surgery - EBUS is the gold standard to assess the mediastinum in NSCLC (Pro).

Yasufuku K: International Association for the Study of Lung Cancer, 12th World Conference on Lung Cancer - Mini Symposium Session: Endoscopic Ultrasound (EBUS-EUS) for Staging and Follow-Up of Lung Cancer, San Francisco, California, USA, July-August 2009. Guest Lecturer.

Zeldin R: Royal Victoria Hospital, Regional Cancer Program LHIN 12, Updates in Oncology 2010, Barrie, Ontario, Canada, May 2010. Timely diagnosis of lung cancer: Time to treat.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

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)

Cell replacement therapy for cystic fibrosis. *Waddell T: Canadian Cystic Fibrosis Foundation.* (\$245,000 2010 - 2012)

Cell replacement therapy for cystic fibrosis. *Waddell TK: Canadian Cystic Fibrosis Foundation.* (\$189,716 2007 - 2010)

CF transplant centre grant. *Keshavjee S, Singer L: Canadian Cystic Fibrosis Foundation.* (\$55,598 2009 - 2010)

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)

Increasing the sensitivity and specificity of lung cancer detection and resection - development of a relevant animal model. *Yasufuku K, Keshavjee S, Jaffray D: Ontario Institute of Cancer Research Grant, Imaging Pipeline Platform and One Millimeter Cancer Challenge, Internal Competition.* (\$115,800 2010 - 2011)

Molecular and genomic diagnostic to improve outcomes in lung transplantation (GL2-01-019) *Keshavjee S: Ministry of Health.* (\$1,750,000 2010 - 2015)

Molecular diagnostic strategies for the selection of donor lungs for transplantation. *Keshavjee S: Roche Organ Transplantation Research Foundation (ROTRF).* (\$300,000 2009 - 2012)

Molecular therapeutics strategies for ex-vivo repair of lungs for transplantation. *Keshavjee S: Canadian Institutes of Health Research.* (\$774,345 2009 - 2010)

Nano-technology based delivery of Src PTK inhibitor to prevent ischemia reperfusion injury during lung transplantation. *Liu M: Multi-Organ Transplant Academic Enrichment Fund.* (\$100,000 2008 - 2010)

NanoMed fab: A nanofabrication centre for personalized medicine. *Zheng G, Gielipy J, Wilson B, Li RK, Liu M: Canadian Foundation of Innovation.* (\$3,232,470 2009 - 2010)

Signal cross-talk in acute lung injury. *Liu M: Canadian Institutes of Health Research, Operating Grant, MOP-42546.* (\$659,750 2003 - 2013)

The Ontario Regional Center for Cell and Vector Production. *Keshavjee S, Keating A: Canadian Foundation of Innovation.* (\$7,377,525 2009 - 2010)

The role of bone marrow progenitors in lung regeneration. *Waddell TK: Canadian Institutes of Health Research.* (\$685,000 2007 - 2012)

The role of galectin-3 in xenograft rejection. *Waddell TK: Heart and 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)

Ventilator-induced acute lung injury: From mechanotransduction to molecular therapies. *Liu M, Chen P, Han B: Canadian Institutes of Health Research.* (\$789,240 2006 - 2011)

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

Abouassaly R, Alibhai SM, Tomlinson G, Timilshina N, Finelli A: Unintended consequences of laparoscopic surgery on partial nephrectomy for kidney cancer. *Journal of Urology*: February 2010; 182(2): pp 467-472. E-published December 14, 2009.

Alibhai SM, Duong-Hua M, Sutradhar R, Fleshner NE, Warde P, Cheung AM, Paszat LF: Impact of androgen deprivation therapy on cardiovascular disease and diabetes. *Journal of Clinical Oncology*: July 2009; 27(21): pp 3452-3458. E-published June 8, 2009.

Alkhateeb S, Alibhai S, Fleshner NE, Finelli A, Jewett M, Zlotta A, Nesbitt M, Lockwood G, Trachtenberg J: Impact of positive surgical margins after radical prostatectomy differs by disease risk group. *Journal of Urology*: January 2010; 183(1): pp 145-150.

Alkhateeb SS, Van Rhijn BW, Finelli A, van der Kwast T, Evans A, Hanna S, Vajpeyi R, Fleshner NE, Jewett MA, Zlotta AR: Nonprimary pT1 nonmuscle invasive bladder cancer treated with bacillus Calmette-Guerin is associated with higher risk of progression compared to primary T1 tumors. *Journal of Urology*: July 2010; 184(1): pp 81-86. E-published May 15, 2010.

Andriole GL, Bostwick DG, Brawley OW, Gomella LG, Marberger M, Montorsi F, Pettaway CA, Tammela TL, Teloken C, Tindall DJ, Somerville MC, Wilson TH, Fowler IL, Rittmaster RS; REDUCE Study Group (with Fleshner N): Effect of dutasteride on the risk of prostate cancer. *The New England Journal of Medicine*: April 2010; 362(13): pp 1192-1202.

Cervi D, Pak B, Venier NA, Sugar LM, Nam RK, Fleshner NE, Klotz LH, Venkateswaran V: Micronutrients attenuate progression of prostate cancer by elevating the endogenous inhibitor of angiogenesis, platelet factor -4. *BMC Cancer*: June 2010; 10: pp 258.

Chin JL, Srigley J, Mayhew LA, Rumble RB, Crossley C, Hunter A, Fleshner N, Bora B, McLeod R, McNair S, Langer B, Evans A: Guideline for optimization of surgical and pathological quality performance for radical prostatectomy in prostate cancer management: Evidentiary base. *Canadian Urological Association Journal*: February 2010; 4(1): pp 13-25.

Elterman D, Lawrentschuk N, Guns E, Hersey K, Adomat H, Wood CA, Fleshner N: Investigating contamination of phytotherapy products for benign prostatic hyperplasia with alpha-blockers and 5alpha-reductase inhibitors. *Journal of Urology*: May 2010; 183(5): pp 2085-2089. E-published March 19, 2010.

Finelli A, Punnen S, Rosewall T, Catton C, Fleshner N, Jewett M, Trachtenberg J, Menard C: Transperitoneal laparoscopic prostatectomy does not increase small bowel within the target volume for postoperative radiotherapy. *Journal of Urology*: November 2009; 182(5): pp 2280-2284. E-published September 16, 2009.

Fleshner NE, Evans A, Chadwick K, Lawrentschuk N, Zlotta A: Clinical significance of the positive surgical margin based upon location, grade and stage. *Urologic Oncology*: March 2010; 28(2): pp 197-204.

Gill IS, Aron M, Gervais DA, Jewett MAS: Small renal mass. *The New England Journal of Medicine*: February 2010; 362: pp 624-634.

Goldenberg A, Trachtenberg J, Saad F: The importance of quality indicators: A call to action. *Canadian Urological Association Journal*: December 2009; 3(6): pp 435-436.

Gómez-Iturrriaga Piña A, Crook J, Borg J, Lockwood G, Fleshner N: Median 5 year follow-up of 125iodine brachytherapy as monotherapy in men aged ≤ 55 years with favorable prostate cancer. *Urology*: June 2010; 75(6): pp 1412-1416. E-published December 29, 2009.

Halachmi S, Finelli A, Mottrie A, Nativ O: Parenchymal-sparing surgery for renal lesions: Open versus laparoscopic/robotic surgery. *European Urology Supplements*: September 2009; 8(9): pp 753-757.

Hassouna MM, Almousa R: The role of deep brain stimulation on voiding dysfunction. In: Textbook of Stereotactic and Functional Neurosurgery, 2nd Edition (Lozano AD, Gildenberg PL, Tasker RR, eds.) Springer-Verlag, Berlin, 2009.

Herschorn S, Stothers L, Carlson K, Egerdie B, Gajewski JB, Pommerville P, Schulz J, Radomski S, Drutz H, Barkin J, Paradiso-Hardy F: Tolerability of 5 mg solifenacin daily versus 5 mg oxybutynin immediate release three times daily: Results of the VECTOR trial. The Journal of Urology: May 2010: 183(5): pp 1892-1898.

Hotte SJ, Mayhew LA, Jewett M, Chin J, Winquist E on behalf of the Genitourinary Cancer Disease Site Group of the Cancer Care Ontario Program in Evidence-based Care: Management of stage I non-seminomatous testicular cancer: A systematic review and meta-analysis. Clinical Oncology: February 2010: 22(1): pp 17-26.

Kakiashvili DM, Zuniga A, Jewett MA: High risk NSGCT: Case for surveillance. World Journal of Urology: August 2009: 27(4): pp 441-447. E-published July 16, 2009.

Kron KJ, Liu L, Pethe VV, Demetrashvili N, Nesbitt ME, Trachtenberg J, Ozcelik H, Fleshner NE, Briollais L, van der Kwast TH, Bapat B: DNA methylation of HOXD3 as a marker of prostate cancer progression. Laboratory Investigation: July 2010: 90(7): pp 1060-1067. E-published March 8, 2010.

Ku J, Krahn M, Trachtenberg J, Nesbitt M, Kalnin R, Lockwood G, Alibhai SM: Changes in health utilities and health-related quality of life over 12 months following radical prostatectomy. Canadian Urological Association Journal: December 2009: 3(6): pp 445-452.

Kulkarni GS, Alibhai SM, Finelli A, Fleshner NE, Jewett MA, Lopushinsky SR, Bayouni AM: Cost-effectiveness analysis of immediate radical cystectomy versus intravesical bacillus Calmette-Guerin therapy for high-risk, high-grade (T1G3) bladder cancer. Cancer: December 2009: 115(23): pp 5450-5459.

Kulkarni GS, Urbach DR, Austin PC, Fleshner NE, Laupacis A: Longer wait times increase overall mortality in patients with bladder cancer. The Journal of Urology: October 2009: 182(4): pp 1318-1324. E-published August 14, 2009.

Langer DL, van der Kwast TH, Evans AJ, Plotkin A, Trachtenberg J, Wilson BC, Haider MA: Prostate tissue composition and MR measurements: Investigating the relationships between ADC, T2, K(trans), v(e) and corresponding histology features. Radiology: May 2010: 255(2): pp 485-494.

Langer DL, van der Kwast TH, Evans AJ, Trachtenberg J, Wilson BC, Haider MA: Prostate cancer detection with multi-parametric MRI: Logistic regression analysis of quantitative T2 diffusion-weighted imaging and dynamic contrast-enhanced MRI. Journal of Magnetic Resonance Imaging: August 2009: 30(2): pp 327-334.

Lawrentschuk N, Abouassaly R, Hackett N, Groll R, Fleshner N: Health information quality on the internet in urological oncology: A multilingual longitudinal evaluation. Urology: November 2009: 74(5): pp 1058-1063. E-published September 16, 2009.

Lawrentschuk N, Fleshner N: An interactive multimedia approach to urological anatomy. BJU International: April 2010: 105(7): pp 904-906. E-published December 18, 2009.

Lawrentschuk N, Fleshner NE: Therapeutic options following orchiectomy for stage I seminoma. Oncology: August 2009: 23(9): pp 749-753.

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Lawrentschuk N, Haider MA, Daljeet N, Evans A, Toi A, Finelli A, Trachtenberg J, Zlotta A, Fleshner N: 'Prostatic evasive anterior tumours': The role of magnetic resonance imaging. BJU International: May 2010: 105(9): pp 1231-1236. E-published October 8, 2009.

Lawrentschuk N, Toi A, Lockwood GA, Evans A, Finelli A, O'Malley M, Margolis M, Ghai S, Fleshner NE: Operator is an independent predictor of detecting prostate cancer at transrectal ultrasound guided prostate biopsy. The Journal of Urology: December 2009: 182(6): pp 2659-2663.

Leveridge MJ, Bostrom PJ, Koulouris G, Finelli A, Lawrentschuk N; Medscape: Imaging renal cell carcinoma with ultrasonography, CT and MRI. Nature Reviews. Urology: June 2010: 7(6): pp 311-325. E-published May 18, 2010.

Leveridge M, Matar K, Kachura J, Jewett MA: Assessing outcomes in probe ablative therapies for small renal masses. Journal of Endourology: May 2010: 24(5): pp 759-764.

Lindner U, Lawrentschuk N, Abouassaly R, Fleshner NE, Trachtenberg J: Radical prostatectomy in obese patients: Improved surgical outcomes in recent years. International Journal of Urology: August 2010: 17(8): pp 727-732. E-published June 9, 2010.

Linder U, Lawrentschuk N, Trachtenberg J: Focal laser ablation for localized prostate cancer. Journal of Endourology: May 2010: 24(5): pp 791-797.

Lindner U, Lawrentschuk N, Weersink RA, Davidson SR, Raz O, Hlasny E, Langer DL, Gertner MR, van der Kwast T, Masoom HA, Trachtenberg J: Focal laser ablation for prostate cancer followed by radical prostatectomy: Validation of focal therapy and imaging accuracy. European Urology: E-published ahead of print March 12, 2010.

Lindner U, Lawrentschuk N, Weersink RA, Raz O, Hlasny E, Sussman MS, Davidson SR, Gertner MR, Trachtenberg J: Construction and evaluation of an anatomically correct multi-image modality compatible phantom for prostate cancer focal ablation. *The Journal of Urology*: July 2010: 184(1): pp 352-357. E-published May 20, 2001.

Lindner U, Trachtenberg J: Focal therapy for localized prostate cancer - choosing the middle ground. *Canadian Urological Association Journal*: August 2009: 3(4): pp 333-335.

Lindner U, Weersink RA, Haider MA, Gertner MR, Davidson SR, Atri M, Wilson BC, Fenster A, Trachtenberg J: Image-guided photothermal focal therapy for localized prostate cancer: Phase I trial. *Journal of Urology*: October 2009: 182(4): pp 1371-1377. E-published August 14, 2009.

Lotan Y, Kamat AM, Porter MP, Robinson VL, Shore N, Jewett M, Schelhammer PF, deVere White R, Quale D, Lee CT; Bladder Cancer Think Tank; Bladder Cancer Advocacy Network; Society of Urologic Oncology: Key concerns about the current state of bladder cancer: A position paper from the Bladder Cancer Think Tank, the Bladder Cancer Advocacy Network, and the Society of Urologic Oncology. *Cancer*: September 2009: 115(18): pp 4096-4103.

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Roobol MJ, Schroder FH, Crawford ED, Freedland SJ, Sartor AO, Fleshner N, Andriole GL: A framework for the identification of men at increased risk for prostate cancer. *The Journal of Urology*: November 2009: 182(5): pp 2112-2120. E-published September 6, 2009.

Santa Mina D, Matthew AG, Trachtenberg J, Tomlinson G, Guglietti CL, Alibhai SMH, Ritvo P: Physical activity and quality of life after radical prostatectomy. *Canadian Urological Association Journal*: June 2010: 4(3): pp 180-186.

Schmoll HJ, Jordan K, Huddart R, Pes MP, Horwich A, Fizazi K, Kataja V; ESMO Guidelines Working Group of 63 Collaborators (including Jewett M): Testicular non-seminoma: ESMO clinical practice guidelines for diagnosis, treatment and follow-up. *Annals of Oncology*: May 2010: 21 Suppl 5: pp v147-v154.

Sridhar SS, Hotte SJ, Chin JL, Hudes GR, Gregg R, Trachtenberg J, Wang L, Tran-Thanh D, Pham NA, Tsao MS, Hedley D, Dancey JE, Moore MJ: A multicenter phase II clinical trial of lapatinib (GW572016) in hormonally untreated advanced prostate cancer. *American Journal of Clinical Oncology*: E-published ahead of print December 30, 2009.

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Toren P, Ladak S, Ma C, McCluskey S, Fleshner N: Comparison of epidural and intravenous patient controlled analgesia in patients undergoing radical cystectomy. *Canadian Journal of Urology*: August 2009: 16(4): pp 4716-4720.

Toren P, Razik R, Trachtenberg J: Catastrophic sepsis and hemorrhage following transrectal ultrasound guided prostate biopsies. *Canadian Urological Association Journal*: February 2010: 4(1): pp E12-E14.

Trottier G, Boström PJ, Lawrentschuk N, Fleshner NE: Nutraceuticals and prostate cancer prevention: A current view. *Nature Reviews Urology*: January 2010: 7: pp 21-30.

Trottier G, Fleshner N: Words of wisdom. Re: XMRV is present in malignant prostate epithelium and is associated with prostate cancer, especially high-grade tumors. *European Urology*: February 2010: 57(2): pp 358.

van der Kwast TH, Evans A, Lockwood G, Tkachuk D, Bostwick DG, Epstein JI, Humphrey PA, Montironi R, van Leenders GJ, Pihl CG, Neetens I, Jujala PM, Laurila M, Mazerolles C, Bubendorf L, Finelli A, Watson K, Srigley J: Variability in diagnostic opinion among pathologists for single small atypical foci in prostate biopsies. *The American Journal of Surgical Pathology*: February 2010; 34(2): pp 169-177.

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Zlotta AR, Cohen SM, Dinney C, Droller M, van der Kwast TH, van Rhijn BW, Bochner B, Ameal G, Jewett MA: BCAN Think Tank session 1: Overview of risks for and causes of bladder cancer. *Urologic Oncology*: May-June 2010; 28(3): pp 329-333.

Zuniga A, Kakiashvili D, Jewett MA: Surveillance in stage I nonseminomatous germ cell tumours of the testis. *BJU International*: November 2009; 104(9 Pt B): pp 1351-1356.

INVITED VISITS

Finelli A: Canadian Urological Association, Charlottetown, Prince Edward Island, Canada, June 2010. Preoperative administration of sorafenib in patients with metastatic renal cell carcinoma undergoing cytoreductive nephrectomy.

Finelli A: Simcoe-Muskoka Regional Cancer Program, Updates in Oncology 2010, Barrie, Ontario, Canada, May 2010. Debate: Radical prostatectomy should be the standard of care for intermediate risk localized prostate cancer.

Finelli A: European Association of Urology, Annual Congress, Barcelona, Spain, April 2010. Pre-operative administration of sorafenib in patients with metastatic renal cell carcinoma undergoing cytoreductive nephrectomy.

Finelli A: University of British Columbia, Issues and Controversies in Prostate Care, Las Vegas, Nevada, USA, February 2010. (1) Techniques of laparoscopic surgery for RCC-Workshop, (2) Variations in the surgical care of patients with renal cell carcinoma: A cause for concern?, (3) Robotic surgery—the standard of care for radical prostatectomy.

Finelli A: Société Internationale d'Urologie, 30th Congress, Shanghai, China, November 2009. (1) Visiting Professor, (2) Minimally invasive surgery for prostate cancer, (3) Performed laparoscopic adrenalectomy.

Finelli A: Canadian Urology Research Consortium and Canadian Urologic Oncology Group, Quality Issues in Urologic Oncology, Montreal, Quebec, Canada, September 2009. (1) Quality indicators for kidney cancer, (2) Robotic technology.

Fleshner NE: American Urology Association, Annual Meeting, San Francisco, California, USA, June 2010. Chemoprevention of prostate cancer.

Fleshner NE: World Congress on Controversies in Urology, Athens, Greece, February 2010. (1) Minimal and localized prostate cancer, (2) Prostate cancer prevention, screening and early detection.

Fleshner NE: Society of Urologic Oncology, Bethesda, Maryland, USA, December 2009. (1) Can future risk of prostate cancer be predicted?, (2) Who is a candidate for chemoprevention of prostate cancer?

Fleshner NE: Société Internationale d'Urologie, Shanghai, China, November 2009. Nutritional management of prostate cancer.

Hassouna MM: Us Too Brampton, Support Group for Cancer Patients, Brampton, Ontario, Canada, March 2010. bladder and penile rehabilitation after radical prostatectomy for prostate cancer.

Hassouna MM: Pan Arab Continence Society, in collaboration with the International Continence Society, 6th Annual Meeting, Sharm El Sheik, Egypt, February 2010. (1) 25 years experience in sacral neuromodulation, (2) Presided a session.

Hassouna MM: Society for Urodynamics and Female Urology/International Society for Pediatric Neurosurgery (SUUFU/ISPN), Annual Meeting, St Petersburg, Florida, USA, February 2010. Chairman of Session on Stimulation Parameters, (2) Case presentation.

Jewett MAS: Kidney Cancer Canada, Patient Education Conference, Toronto, Ontario, Canada, April 2010. (1) Moderator: Treatment of Metastatic Kidney Cancer, (2) Follow-up guidelines for kidney cancer.

Jewett MAS: Olympus International, 4th Urology Forum, Interlaken, Switzerland, March 2010. (1) Plenary Moderator, (2) Focal therapy in urology: Kidney cancer.

Jewett MAS: American Society of Clinical Oncology, 2010 Genitourinary Cancer Symposium, San Francisco, California, USA, March 2010. Renal Cancer - Localized Tumors Plenary Session: Rationale and potential pitfalls of active surveillance for small kidney tumors.

Jewett MAS: Scottish Urology Society, Annual Meeting, Aberdeen, Scotland, March 2010. Management of localized kidney cancer: The small renal mass (SRM) frontier.

Jewett MAS: University of Washington, Virginia Mason Medical Center, 6th Shelby Webster Testis Cancer Symposium/Grand Rounds Lecture, Seattle, Washington, USA. February 2010. Striving for excellence: Surviving and thriving with less.

Jewett MAS: National Cancer Research Institute (NCRI), Clinical Studies Group, January 2010. External reviewer.

Jewett MAS: Society of UroOncology, Annual Meeting, Bethesda, Maryland, USA, December 2009. Guest Speaker: Kidney cancer: Management of localized disease.

Jewett MAS: World Congress in Endourology, Munich, Germany, October 2009. (1) Plenary Debate: The role of laparoscopic RPLND in NSGCT contra, (2) Invited Faculty: Small renal mass.

Jewett MAS: Kidney Cancer Association/Cleveland Clinic, 8th International Kidney Cancer Symposium, Chicago, Illinois, September 2009. Guest Speaker: Management of small renal masses and localized renal cell carcinoma.

Matthew AG: International Psycho-Oncology Society/Canadian Association of Psychosocial Oncology, Quebec City, Quebec, Canada, May 2010. Anxiety and depression in patients with testicular cancer: Surveillance versus radiation treatment.

Matthew AG: Eli Lilly Canada Inc., Toronto, Ontario, Canada, October 2009. Sexuality after cancer.

Radomski SB: Canadian Diabetes Association, Toronto, Ontario, Canada, April 2010. Black Diabetes Expo - Health Expert Panel: Be Your Own Best Health Care Advocate.

Trachtenberg J: Toronto Man-to-Man and Side-by-Side Prostate Cancer Support Groups, Toronto, Ontario, Canada, November 2009. Treatments of the future.....where we are headed.

Trachtenberg J: Société Internationale d'Urologie, Shanghai, China, October 2009. Focal therapy of prostate cancer.

Trachtenberg J: Florida Urological Society, Naples, Florida, USA, September 2009. Scientific rationale for focal therapy for prostate cancer.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear 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 of Health Research.* (\$339,000 2007 - 2010)

3D ultrasound-guided trans-perineal focal prostate therapy platform. *Fenster A, Chin J, Haider MA, Trachtenberg J: Canadian Institutes of Health Research.* (\$631,830 2009 - 2014)

Genomic characterization of clinically distinct pathways of prostate carcinogenesis. *van der Kwast T, Trachtenberg J: Prostate Cancer Research Foundation of Canada.* (\$650,000 2008 - 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 II, single arm, prospective study of neoadjuvant sunitinib 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, Radomski SB, Toi A, Trachtenberg J, Zlotta A: Merck Canada.* (\$150,000 2008 - 2010)

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 Screening Study for Prostate Cancer. *Zlotta A, Fleshner N: Ontario Institute for Cancer Research.* (\$631,223 2009 - 2012)

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 MAS, Klotz L: Prostate Cancer Research Foundation of Canada.* (\$50,000 2008 - 2009)

A randomized, double-blind, parallel group active-controlled, multicentre long-term phase III study to assess the safety and efficacy of the beta-3 agonist YM178 (50 mg qd and 100 mg qd) after treatment in subjects with symptoms of overactive bladder. *Radomski SB: Astellas Canada.* (\$112,000 2008 - 2009)

Adjusting treatment to meet patient preferences: A molecular and psychosocial approach. *Squire J, Ritvo P, Sherar M, Bristow R, Trachtenberg J: Princess Margaret Hospital Foundation.* (\$1,000,000 2000 - 2010)

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 and 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)

Canadian BRCA1/2 Prostate Cancer Network. *Bristow R, Trachtenberg J, Sridhar S, Narod S: Prostate Cancer Canada.* (\$20,000 2009 - 2010)

Developing, implementing and evaluating self-audit as a knowledge translation strategy for practice-based learning and practice guideline implementation: A scoping review. *Gagliardi A, Straus S, Brouwers M, Victor J, Grunfeld E, Finelli A, Campbell CM, Marlow BA, Silver IL: Canadian Institutes of Health Research.* (\$49,223 2009 - 2010)

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.)

DNA repair inhibition in prostate cancer cells as a means of individualizing cancer therapy. *Bristow R, Trachtenberg J, Matthew AG: The Princess Margaret Hospital Foundation.* (\$1,000,000 2000 - 2010)

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: University of Toronto, Faculty of Medicine, Continuing Education and Professional Development.* (\$5,000 2008 - 2009)

Downstream biomarkers in prostate cancer. *Evan A, Fleshner N: Ontario Institute for Cancer Research.* (\$221,323 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 of 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: The Princess Margaret Hospital Foundation.* (\$31,000 2007 - 2010)

Genetic, epigenetic and proteomic analysis of the Kallikrein family in search of novel diagnostic prognostic and risk susceptibility algorithms for prostate cancer. *Diamandis E, Fleshner N, Zlotta A: Canadian Institutes of Health Research.* (\$649,727 2009 - 2012)

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 for obstructive bladder diseases. *Bagli D, Hassouna M, Rosalyn A: Kidney Foundation of Canada.* (\$100,000 2008 - 2010)

In bore robotic-assisted image-guided focal ablation of prostate cancer. *Trachtenberg J, Haider M, Goldenberg A, Kucharczyk W: The Princess Margaret Hospital Foundation, Barry Rose Foundation.* (\$1,000,000 2008 - 2010)

Investigation of DNA methylation markers for improved prediction of aggressive disease in prostate cancer patients. *Bapat B, Fleshner N, Kron K: Prostate Cancer Research Foundation.* (\$120,000 2010 - 2012)

Krescent postdoctoral fellowship. *Jewett MAS, Kurban G: Kidney Foundation of Canada.* (\$155,000 2009 - 2012)

Krescent postdoctoral fellowship. *Jewett MAS, Gallie BL: Kidney Foundation of Canada.* (\$165,000 2009 - 2012)

Mentoring and strength in young females in the Jane-Finch community of Toronto. *Ritvo P, Katz J, Matthew A, Cappelli M, James C, Diplo D, Flicker S, Baker J, Brown P, Willms D: Toronto Community Foundation - Growing Active Kids.* (\$100,000 2008 - 2009)

Microelectromechanical studies of urinary cytology in bladder cancer. *Jewett MAS, Sun Y: National Sciences and Engineering Research Council.* (\$100,000 2009 - 2010)

Micronutrients and prostate cancer: Prevention to treatment. *Venkateswaran V, Fleshner N, Klotz L, Sugar L, Teahan S: Canadian Institutes of Health Research.* (\$315,176 2006 - 2009)

MRI-guided and tumor-targeted HDR brachytherapy for recurrent prostate cancer. *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)

NIR imaging and photodynamic therapy of prostate cancer using aptamer-directed lipoprotein nanoplatfrom. *Zheng G, Wilson B, Trachtenberg J: Canadian Institutes of Health Research.* (\$360,000 2007 - 2010)

Novel radiofrequency ablation technology for treatment of solid tumours. *Sherar M, Jewett M, McCann C: Ontario Institute for Cancer Research-IPDC 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 beacon triggered by prostate cancer-specific mRNA. *Zheng G, Wilson B, Trachtenberg J: National Cancer Institute of Canada.* (\$650,000 2007 - 2012)

Population-based estimates and quality of life in prostate cancer survivors. *Krahn M, Trachtenberg J: Canadian Institutes of Health Research.* (\$520,474 2006 - 2009)

Prostate cancer prevention clinic. *Trachtenberg J, Matthew AG, Horsburgh S: The Princess Margaret Hospital Foundation.* (\$1,000,000 2005 - 2011)

Randomized trial of the effects of cholecalciferol on prostate cancer associated lesions and on cholecalciferol metabolites in prostate cancer. *Veith R, van der Kwast T, Fleshner N, Klotz L: National Cancer Institute of Canada.* (\$131,365 2006 - 2010)

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)

Response monitoring and control of prostate focal laser thermal therapy with hybrid trans-rectal NIR optical tomography and 3D ultrasound. *Wilson B, Weersink R, Fenster A, Trachtenberg J: Canadian Institutes of Health Research.* (\$500,000 2010 - 2012)

Stromal factors promoting prostate cancer progression. *Sweet J, Fleshner N, Weingarden N, Done S, Hersey K: Prostate Cancer Canada.* (\$60,000 2009 - 2010)

The development of a prostate cancer prevention clinic (Phase II). *Trachtenberg J, Horsburgh S, Matthew A, Ritvo P, Squire J: The Princess Margaret Hospital Foundation.* (\$1,000,000 2005 - 2011)

The prevalence and correlates of cancer-related fatigue in colorectal, breast and prostate cancer survivors. *Jones J, Fleshner N: Canadian Institutes of Health Research.* (\$100,000 2010 - 2011)

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: Section Editor, Neuromodulation: Technology at the Neural Interface. July 2009.

Radomski SB: Best Clinical Abstract Presentation Award at the ICS 2009 Meeting in San Francisco, California for 'Efficacy of Botulinum Toxin A Injection for Neurogenic Detrusor Overactivity and Urinary Incontinence: A Randomized Double-Blind Trial' (*Herschorn S, Gajewski J, Ethans K, et al*). October 2009.

DIVISION OF VASCULAR SURGERY

Dr. K.W. Johnston	Professor
Dr. T.F. Lindsay	Professor
Dr. G.D. Oreopoulos	Assistant Professor
Dr. G. Roche-Nagle	Assistant Professor
Dr. B.B. Rubin	Professor (Division Head)
Dr. L.W.H. Tse	Assistant Professor
Dr. D.L. Wooster	Professor

PUBLICATIONS

Bent CL, Jaskolka JD, Lindsay TF, Tan K: The use of dynamic volumetric CT angiography (DV-CTA) for the characterization of endoleaks following fenestrated endovascular aortic aneurysm repair (f-EVAR). *Journal of Vascular Surgery*: January 2010: 51(1): pp 203-206.

Cronenwett JL, Johnston KW: *Rutherford's Vascular Surgery*, 7th Edition (Cronenwett JL, Johnston KW, eds.) Elsevier, Philadelphia, 2010.

Katznelson R, Djaiani G, Mitsakakis N, Lindsay TF, Tait G, Friedman Z, Wasowicz M, Beattie WS: Delirium following vascular surgery: Increased incidence with preoperative beta-blocker administration. *Canadian Journal of Anaesthesia*: August 2009: 56(11): pp 793-801. E-published August 27, 2009.

Mahdendra A, Gortzak Y, Ferguson PC, Dehesi BM, Lindsay TF, Wunder JS: Management of vascular involvement in extremity soft tissue sarcoma. In: *Treatment of Bone and Soft Tissue Sarcomas (Recent Results in Cancer Research)*, Volume 179 (Tuna P, ed.) Springer-Verlag Berlin Heidelberg, 2009.

Roche-Nagle GM, Barry MC: Images in vascular medicine. Endograft limb collapse. *Vascular Medicine*: November 2009: 14(4): pp 403-404.

Roche-Nagle G, de Perrot M, Waddell TK, Oreopoulos G, Rubin BB: Neoadjuvant aortic endografting. *Annals of Vascular Surgery*: November-December 2009: 23(6): pp 787.e1. E-published September 12, 2009.

Roche-Nagle G, Lindsay TF: Endovascular ruptured abdominal aortic aneurysm repair--setting up your hospital for an endovascular approach. *Surgeon*: February 2010: 8(1): pp 39-43.

Roche-Nagle G, Ward F, Barry M: Current prescribing patterns of elastic compression stockings post-deep venous thrombosis. *Phlebology*: April 2010: 25(2): pp 72-78.

Roche-Nagle G, Wong KT, Oreopoulos G: Case Report. Vascular claudication in a young patient: Popliteal entrapment syndrome. *Hong Kong Medical Journal*: October 2009: 15(5): pp 388-390.

Roche-Nagle G, Wooster D, Oreopoulos G: Popliteal vein aneurysm. *The American Journal of Surgery*: January 2010: 199(1): pp e5-e6.

Roche-Nagle G, Wooster D, Oreopoulos G: Symptomatic thoracic aorta mural thrombus. *Vascular Surgery*: January-February 2010: 18(1): pp 41-44.

Tse LWH, Lerouge S, Bui BT, Therasse E, Héon H, Soulez G: Radiofrequency perforation system for in vivo antegrade fenestration of aortic stent-grafts. *Journal of Endovascular Therapy*: April 2010: 17(2): pp 192-198.

Werneck CC, Lindsay TF: Tibial angioplasty for limb salvage in high-risk patients and cost analysis. *Annals of Vascular Surgery*: September-October 2009: 23(5): pp 554-559. E-published July 24, 2009.

INVITED VISITS

Johnston KW: University of Buffalo, Department of Surgery Faculty Development Retreat, Buffalo, New York, USA, March 2010. (1) Academic advantages of joining a society, (2) How to write a paper.

Johnston KW: Winnipeg Vascular and Endovascular Symposium, Winnipeg, Manitoba, Canada, April 2010. How to write a paper for a major journal.

Johnston KW: Saudi Society for Vascular Surgery/King Saud University, College of Medicine, Riyadh, Saudi Arabia, January 2010. (1) Diabetic vascular disease, (2) Why has EVAR replaced open AAA repair?

Lindsay TF: Ontario Renal Network, 2010 Annual Town Hall Meeting, Toronto, Ontario, Canada, June 2010. Panel Member: Improving Vascular Access in Ontario.

Lindsay TF: Winnipeg Vascular and Endovascular Symposium, Winnipeg, Manitoba, Canada, April 2010. (1) Thoracic and Upper Extremity Symposium Moderator, (2) Two case presentations.

Lindsay TF: The College of Family Physicians of Canada; Alberta College of Family Physicians / Section of Teachers / Section of Researches, combined Annual Scientific Assembly/Annual Workshops, Family Medicine Forum 2009, Calgary, Alberta, Canada, October 2009. Changes in abdominal aortic aneurysm care and prognosis.

Lindsay TF: Canadian Society for Vascular Surgery, Annual Meeting, Ottawa, Ontario, Canada, September 2009. AAA screening in Canada. Where are we?

Oreopoulos GD: Vascular Disease Symposium, Whitby, Ontario, October 2009. Incidence, natural history and non-operative management of lower extremity ischemia. Speaker.

Tse LWH: Medtronic, CardioVascular Innovations Seminar Series, Santa Rosa, California, USA, May 2010. In vivo fenestration in endovascular aneurysm repair.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

Assessment of venous duplex reports with a structured audit tool. *Wooster DL, Dueck AD, Wooster EM: Canadian Society for Vascular Surgery.* (\$5,000 2009 - 2010)

Aortic aneurysm screening in Canada: A resource assessment and implementation strategy. *Wooster DL, Wooster EM, Cox H, Dueck AD: Canadian Society for Vascular Surgery.* (\$5,000 2009 - 2010)

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)

Complement mediated organ injury following ruptured abdominal aortic aneurysm: Human and animal investigations leading to pilot intervention studies. *Lindsay TF: The Physicians' Services Incorporated.* (\$84,000 2009 - 2010)

Development of a personal practice audit tool to assess health advocacy competence in practice. *Wooster DL, Wooster EM, Dueck AD: The Royal College of Physicians and Surgeons of Canada/Associated Medical Services.* (\$25,000 2009 - 2011)

Role of microsomal prostaglandin E2 synthase in ventricular remodeling after myocardial infarction. *Rubin BB: Canadian Institutes of Health Research.* (\$384 2007 - 2011)

Role of Group V and Group X secretory phospholipases A2 in myocardial infarction. *Rubin BB: Canadian Institutes of Health Research.* (\$269,349 2009 - 2012)

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)

HONOURS RECEIVED

Lindsay TF: John L. Provan Education Award from the Canadian Society for Vascular Surgery. September 2009.

Tse LWH: 2009 Cook Research Award, from the Canadian Society for Vascular Surgery, with \$5,000. September 2009.

Tse LWH: Best Poster Award for 'Engineering in a Clinical Setting,' during Scientific Day 2010, Institute of Biomaterials and Biomedical Engineering, University of Toronto. May 2010.

Wooster DL: Gore Research Award and the Vascular Surgery Sigvaris President's Award, from the Canadian Society for Vascular Surgery. September 2009.

WOMEN'S COLLEGE HOSPITAL

John Semple

Surgeon-in-Chief



Dr. M.H. Brown	Associate Professor
Dr. T. Cil	Assistant Professor
Dr. E.D. Grober	Assistant Professor
Dr. G.Y. Hiraki	Assistant Professor
Dr. L. Lickley	Professor
Dr. L. Murnaghan	Assistant Professor
Dr. J. Theodoropoulos	Lecturer

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 as well as developing a focus in orthopaedic sports medicine and building surgical strength in Urology, Orthopedics, Plastic Surgery and General Surgery.

NEW STAFF:

Dr. Lucas Murnaghan, an Orthopedic surgeon, came on staff in August of 2009 with a focus in Orthopaedic Sports Medicine, specifically in treating young athletes. Dr. Murnaghan will spend half of his time at The Hospital for Sick Children and half at Women's College Hospital. Women's College will continue to actively recruit in surgical areas that are central to key programs.

APPOINTMENTS AND ACTIVITIES

Dr. John Semple was awarded the Chair in Surgical Breast Cancer Research by the Canadian Breast Cancer Foundation, Ontario Region. The Chair is not only the first surgical research Chair awarded by the Canadian Breast Cancer Society but also the first endowed Chair based in the Department of Surgery at Women's College Hospital. Overall, for a new Department of Surgery (4 years old) of which the majority of members still qualify as new recruits, we have had an excellent output in academic activity: grant

capture (13), manuscripts published (17) and invited lectures (26). Other activity highlights include Dr. Mitchell Brown and Dr. Brett Beber hosting the 10th Annual Toronto Breast Symposium on April 8, 2010 at the Sutton Place Hotel and welcoming visiting professors: Dr. William P. Adams Jr. of Dallas, Texas; Dr. Bradley Bengtson of Grand Rapids, Michigan and Dr. Elizabeth Hall-Findlay of Banff, Alberta. Women's College Hospital continues to host international candidates under the new Allergan Breast Reconstruction clinical fellowship.

In the summer of 2010, the construction of the new WCH will start (see photo.) Phase I, which will house 8 operating rooms and clinical space, will be completed in 2013; and Phase II, which will house education, research and administrative offices, will be completed by 2015. This new space will accommodate the core surgical activities and programs of the Department of Ambulatory Surgery. The WCH Department of Surgery looks forward to further exciting developments in recruitment and development in ambulatory surgical programs, and will 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

Cil T, Fishell, E, Hanna W, Sun P, Rawlinson E, Narod S, McCready DR: Mammographic density and the risk of breast cancer recurrence following breast-conserving surgery. *Cancer*: December 2009: 115(24): pp 5780-5787.

DIVISION OF ORTHOPAEDIC SURGERY

Dr. L. Murnaghan	Assistant Professor
Dr. J. Theodoropoulos	Lecturer

PUBLICATIONS

Andreisek G, Theodoropoulos JS, Mak W, White LM: Musculoskeletal case 45. *Canadian Journal of Surgery*: October 2009: 52(5): pp E180-181.

Andreisek G, White LM, Theodoropoulos JS, Naraghi A, Young N, Zhao CY, Mamisch TC, Sussman MS: Synthetic-echo time postprocessing technique for generating images with variable T2-weighted contrast: Diagnosis of meniscal and cartilage abnormalities of the knee. *Radiology*: January 2010: 254(1): pp 188-199.

Theodoropoulos JS, Wolin PM, Taylor DW: Arthroscopic release of flexor hallucis longus tendon using modified posteromedial and posterolateral portals in the supine position. *The Foot (Edinburgh)* December 2009: 19(4): pp 218-221. E-published March 10, 2009.

INVITED VISITS

Theodoropoulos JS: Smith and Nephew Canada, Toronto, Ontario, Canada, September 2009. Current advance in arthroscopic shoulder repair: (1) Arthroscopy basics, (2) Advanced rotator cuff repair.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

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

DIVISION OF PLASTIC AND RECONSTRUCTIVE SURGERY

Dr. M.H. Brown Associate Professor
Dr. J.L. Semple Professor

PUBLICATIONS

Martin DC, Semple JL, Sefton MV: Poly(methacrylic acid-co-methyl methacrylate) beads promote vascularization and wound repair in diabetic mice. *Journal of Biomedical Materials Research*: May 2010: 93(2): pp 484-492.

Moore GWK, Abernathy S, Semple JL: Spatial and temporal variability in surface ozone at a high elevation remote site in Nepal. *Atmospheric Chemistry and Physics*: July 2009: 9(4): pp 16233-16266.

Moore GWK, Semple JL: The impact of global warming on Mount Everest. *High Altitude Medicine and Biology*: Winter 2009: 10(4): pp 383-385.

Tobbia D, Semple J, Baker A, Dumont D, Johnston M: Experimental assessment of autologous lymph node transplantation as treatment of postsurgical lymphedema. *Plastic and Reconstructive Surgery*: September 2009: 124(3): pp 777-786.

INVITED VISITS

Brown MH: LifeCell, Newmarket, Ontario, Canada, May 2010. The use of alloderm in breast surgery.

Brown MH: LifeCell, Ottawa, Ontario, Canada, March 2010. The use of alloderm in breast surgery.

Brown MH: Canadian Senior Resident Review Course, Ottawa, Ontario, Canada, February 2010. Aesthetic breast surgery and body contouring.

Brown MH: LifeCell Corporation, Toronto, Ontario, Canada, February 2010. The use of alloderm in breast surgery.

Brown MH: Southeastern Society of Plastic and Reconstructive Surgery, Atlanta, Georgia, USA, January 2010. (1) Alloderm assisted breast surgery, (2) Live surgery demonstration on mastopexy/augmentation, (3) Secondary breast implant surgery: Classification and treatment.

Brown MH: Willow, Toronto, Ontario, Canada, November 2009. New developments in breast reconstruction.

Brown MH: Allergan, Tokyo, Japan, October 2009. Maximizing outcomes in breast reconstruction.

Brown MH: Allergan Asia Pacific, Seoul, Korea, October 2009. Breast reconstruction with shaped implants.

Brown MH: Allergan Asia Pacific, Taipei, Taiwan, October 2009. Saline to silicone implant conversion.

Brown MH: Allergan Medical, Seattle, Washington, USA, October 2009. Clinical decision making in breast implant selection - Allergan Academy.

Brown MH: International Society of Aesthetic Plastic Surgery, Asia Pacific Conference, Tokyo, Japan, October 2009. (1) Moderator - Breast Augmentation Panel, (2) Implant selection in primary breast augmentation.

Brown MH: American Society of Plastic Surgeons, Breast Surgery and Body Contouring Symposium, Santa Fe, New Mexico, USA, August 2009. (1) Implant devices with surface texture, (2) Shaped implants in challenging breast situations.

Semple JL: Canadian Breast Cancer Foundation Seminar Series, Barrie, Ontario, Canada, May 2010. (1) Update in Breast Reconstruction, (2) The lymph node: New therapeutic approaches to treat post surgical lymphedema.

Semple JL: Thunder Bay Regional Cancer Centre, Canadian Breast Cancer Foundation Seminar Series, Thunder Bay, Ontario, Canada, May 2010. (1) Update in breast reconstruction, (2) The lymph node: New therapeutic approaches to treat post surgical lymphedema.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

Acellular dermal matrix in one-stage breast reconstruction: A randomized controlled trial. *Brown MH, Zhong T: American Society of Plastic Surgeons (ASPS) / Plastic Surgery Educational Foundation (PSEF, National Endowment Fund. (\$50,000 2009 - 2010)*

Acellular dermal matrix in one-stage breast reconstruction: A randomized controlled trial. *Zhong T, Brown M, Beber B, Hofer S, Semple JL: National Endowment for Plastic Surgery, Plastic Surgery Educational Foundation Program. (\$55,000 2009 - 2010)*

Creating a coordinated and integrated approach to thyroid cancer assessment. *Semple JL, Kelly C, Stuart-McEwan T: Women's College Hospital, Alternate Funding Plan, Innovation Funding Competition. (\$30,000 2009 - 2010)*

Improving breast cancer care with a rapid diagnostic clinic. *Heisey R, Semple JL, Cil T, Lord B, McCready D: Women's College Hospital, Alternate Funding Plan, Innovation Funding Competition. (\$30,000 2009 - 2010)*

Investigation of lymph node transplantation as therapy for breast cancer related lymphedema. *Johnston M, Dumont M, Shoichet M, Semple JL: Canadian Breast Cancer Foundation. (\$440,996 2007 - 2010)*

HONOURS RECEIVED

Semple JL: 25 Year Service Award, from The University of Toronto, Division of Plastic Surgery. April 2010.

Semple JL: Chair in Surgical Breast Cancer Research, Canadian Breast Cancer Foundation - Ontario Region. May 2010.

DIVISION OF UROLOGY

Dr. E.D. Grober Assistant Professor

PUBLICATIONS

Grober ED, Roberts M, Shin EJ, Mahdi M, Bacal V: Intraoperative assessment of technical skills on live patients using economy of hand motion: Establishing learning curves of surgical competence. *American Journal of Surgery:* January 2010: 199(1): pp 81-85.

Grober ED, Shing EJ: Postoperative pulmonary edema secondary to rapid pressure fluid injection into the corporal bodies during surgical correction of penile curvature: A rare consequence of artificial erection. *Canadian Urological Association Journal:* April 2010: 4(2): pp E42-E44.

Mohamed O, Freundlich RE, Dakik HK, Grober ED, Najari B, Lipshultz LI, Khera M: The quantitative ADAM questionnaire: A new tool in quantifying the severity of hypogonadism. *International Journal of Impotence Research:* January 2010: 22(1): pp 20-24. E-published August 6, 2009.

Patry G, Jarvi KA, Grober ED, Lo K: Use of the aromatase inhibitor letrozole to treat male infertility. *Fertility and Sterility:* August 2009: 92(2): pp 829.

Toren PJ, Roberts M, Lecker I, Grober ED, Jarvi K, Lo KC: Small incidentally discovered testicular masses in infertile men--is active surveillance the new standard of care? *The Journal of Urology:* April 2010: 183(4): pp 1373-1377. E-published February 19, 2010.

INVITED VISITS

Grober ED: Pfizer Pharma, Primary Care Physicians of the Greater Toronto Area, Toronto, Ontario, Canada, December 2009. Men's health and sexual function.

Grober ED: Paladin, Specialists Consultative Meeting, Toronto, Ontario, Canada, November 2009. (1) Testosterone replacement therapy, (2) Prostate safety.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

Intra-operative assessment of technical skill using economy of hand motion: Establishing learning curves of surgical competence. *Grober ED, Roberts M: The Physicians' Services Incorporated (PSI) Foundation.* (\$70,500 2009 - 2011)

Intra-operative assessment of technical skill using economy of hand motion: Establishing learning curves of surgical competence. *Grober ED, Roberts M: The Royal College of Physicians and Surgeons of Canada (RCPSC).* (\$59,900 2009 - 2011)

Validation of real-time, intra-operative, surgical competence (RISC) assessments linked to patient outcomes. *Grober ED, Jewett MAS, Lorenzo A: Medical Council of Canada.* (\$37,500 2009 - 2010)

Validation of a real-time, intra-operative, surgical competence (RISC) assessments. *Grober E, Jewett MAS: Canadian Urological Association Scholarship Foundation.* (\$40,000 2009 - 2010)

Validation of real-time, intra-operative, surgical competence (RISC) assessments linked to patient outcomes. *Grober ED, Jewett MAS, Lorenzo A: The Physicians' Services Incorporated (PSI) Foundation.* (\$91,500 2009 - 2011)

Validation of real-time, intra-operative, surgical competence (RISC) assessments linked to patient outcomes. *Grober ED, Jewett MAS, Lorenzo A: Association for Surgical Education - CESERT.* (\$25,000 2009 - 2011.)

HONOURS RECEIVED

Grober ED: Canadian Urological Association Scholarship. July 2009.

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. J. Laprade	Lecturer
Dr. C.M. Morshead	Associate Professor
Dr. I.M. Taylor	Professor
Dr. M.J. Wiley	Professor (Division Head)

PUBLICATIONS

ElMaraghy AW, Devereaux MW, Ravichandiran K, Agur AM: Subacromial morphometric assessment of the clavicle hook plate. *Injury*: June 2010: 41(6): pp 613-619.

Hunt J, Cheng A, Hoyles A, Jervis E, Morshead C: Cyclosporin A has direct effects on adult neural precursor cells. *Journal of Neuroscience*: February 2010: 30(8): pp 2888-2896.

Kim S, Bleakney R, Boynton E, Ravichandiran K, Rindlisbacher T, McKee N, Agur A: Investigation of the static and dynamic musculotendinous architecture of supraspinatus. *Clinical Anatomy*: January 2010: 23(1): pp 48-55.

Koeberle P, Wang Y, Schlichter L: Kv1.1 and Kv1.3 channels contribute to the degeneration of retinal ganglion cells after optic nerve transaction in vivo. *Cell Death and Differentiation*: January 2010: 17(1): pp 134-144.

McClatchie L, Laprade J, Martin S, Jaglal S, Richardson D, Agur A: Mobilizations of the asymptomatic cervical spine can reduce signs of shoulder dysfunction in adults. *Manual Therapy*: August 2009: 14(4): pp 369-374.

Nonoyama M, Brooks D, Ponikvar A, Jassal S, Kontos P, Devins G, Spanjevic L, Heck C, Laprade J, Naglie G: Exercise program to enhance physical performance and quality of life of older hemodialysis patients: A feasibility study. *International Urology and Nephrology*: E-published ahead of print March 7, 2010.

Peng P, Wiley M, Liang J, Bellingham G: Ultrasound-guided suprascapular nerve block: A correlation with fluoroscopic and cadaveric findings. *Canadian Journal of Anaesthesia*: February 2010: 57(2): pp 143-148. E-published ahead of print January 6, 2010.

Salehi F, Agur A, Scheithauer B, Kovacs K, Lloyd R, Cusimano M: Ki-67 in pituitary neoplasms: A review (part I). *Neurosurgery*: September 2009: 65(3): pp 429-437.

Scanga V, Goraltchuk A, Nussbair N, Shoichet M, Morshead C: Chitosan supports the survival, migration and differentiation of adult-derived neural stem and progenitor cells. *Canadian Journal of Chemistry*: March 2010: 88(3): pp 277-287.

INVITED VISITS

Laprade J: Ontario Physiotherapist Association, Durham Region. Oshawa, Ontario, Canada, June 2010. Osteoporosis update.

Laprade J: Ontario Osteoporosis Strategy Break Through Training, Toronto, Ontario, Canada, March 2010. Exercise in osteoporosis: How to safely guide and adapt.

Laprade J: Ontario Osteoporosis Strategy Break Through Training, St. Jacobs, Ontario, Canada, February 2010. Exercise in osteoporosis: How to safely guide and adapt.

Morshead C: NeuroDevNet Meeting, Montreal, Quebec, Canada, June 2010. Approaches for enhancing endogenous repair mechanisms.

Morshead C: Paediatric Neuroscience Conference, St. Paul, Minnesota, USA, May 2010. Neural stem cells: From basic biology to tissue repair.

Morshead C: 3rd Annual Spinal Cord Injury Repair Conference, Banff, Alberta, Canada, April 2010. Activating endogenous spinal cord precursors to enhance repair.

Morshead C: Memorial University, St. John's Newfoundland, Canada, November 2009. Guest Speaker: Activating neural self-repair mechanisms following injury.

Morshead C: Charles H. Tator-Barbara Turnbull Lectureship, Toronto, Ontario, Canada, October 2009. Activating neural stem cells for spinal cord injury repair.

Morshead C: Parkinson's Research Roundtable, Toronto, Ontario, Canada, September 2009.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear 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)

Biomechanical and cellular changes within the rat gastrocnemius muscle and calcaneal tendon post tenotomy: Do traumeel injections make a difference? *Sauks K, Agur A: Canadian CAM Research Fund (Holistic Health Research Foundation of Canada).* (\$4,858 2010 - 2011)

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.* (\$450,000 2007 - 2010)

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 following traumatic injury and stroke. *Koeberle P: Canadian Foundation for Innovation, Infrastructure Operating Fund.* (\$35,000 2009 - 2014)

Mechanisms of neuronal degeneration following traumatic injury and stroke. 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)

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)

The development of drug and cell delivery systems for use in stem cell based therapies to treat stroke. *Morshead C, Shoichet M, Corbett D: Heart and Stroke Foundation.* (\$405,000 2008 - 2011)

The effect of a three-dimensional scapular-humeral mobilization technique and protocol on the reduction of hemiplegic shoulder pain. *Richardson D, Agur A: Ontario Stroke System.* (\$35,160 2009 - 2011)

The role of extracellular matrix interactions in adult CNS neuroprotection. *Koeberle P: Dean's Fund, University of Toronto.* (\$10,000 2007 - 2010)

The role of extracellular matrix interactions in adult CNS neuroprotection. *Koeberle P: Connaught New Staff Matching Grant.* (\$30,000 2007 - 2009)

The role of matrix metalloproteinases in adult CNS neuroprotection. *Koeberle P, Fehlings M: Canadian Institutes of Health Research.* (\$257,217 2008 - 2011)

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 RECEIVED

Taylor I: Dr. E. Mary Hollington Award, Faculty of Medicine. May 2010.

Wiley M: Harry Whittaker Memorial Award, Faculty of Medicine. May 2010.

Wiley M: Aikins Award for Large Group Teaching, Faculty of Medicine. May 2010.

Wiley M: President's Teaching Award, University of Toronto. April 2010.

RESEARCH IN EDUCATION

Dr. R. Sonnadara Assistant Professor
Dr. N. Woods Assistant Professor

PUBLICATIONS

Munshi A, Woods NN, Hodges B: Psychiatry, war and the learning needs of residents. *Academic Psychiatry*: May-June 2010; 34(3): pp 208-210.

Sonnadara RR, Gonzalez DA, Hansen S, Elliott D, Lyons JL: Spatial properties of perceived pitch: Influence on reaching movements. *Annals of the New York Academy of Sciences*: July 2009; 1169: pp 503-507.

RESEARCH AND INVESTIGATIONS

Investigators' Names Appear in Italics

Auditory interaction and communication in complex environments: Neural, developmental and applied aspects. *Trainor LJ, Balasubramaniam R, Becker S, Bruce I, Earn D, Hall G, Pfordresher P, Roberts L, Schmidt L, Segalowitz S, Shore D, Sonnadara RR: Canada Fund for Innovation.* (\$2,346,412 2009 - 2010)

Auditory interaction and communication in complex environments: Neural, developmental and applied aspects. *Trainor LJ, Balasubramaniam R, Becker S, Bruce I, Earn D, Hall G, Pfordresher P, Roberts L, Schmidt L, Segalowitz S, Shore D, Sonnadara RR: Ontario Ministry of Research and Innovation.* (\$2,346,412 2009 - 2010)

Development and evaluation of a procedure-based assessment for endovascular aortic aneurysm repair. *Lindsay T, Molloy K, Reznick R, Gaines P, Sonnadara RR, Beard J: John L. Provan Educational Award.* (\$5,000 2009 - 2010)

Measures of diagnostic pattern recognition: Relation to individual differences and expertise. *Young M, Woods NN, Watter S, Dore K, Sherbino J, Norman G: Medical Council of Canada.* (\$33,126 2010 - 2011)

The effectiveness of structured video-feedback to improve laparoscopic technical skills acquisition. *Palter V, Woods NN, Grancharov T: The Royal College of Physicians and Surgeons of Canada.* (\$19,515 2010 - 2011)

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. B. Hinz	(Dentistry)
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. G.A. Levy	(Medicine)
Dr. C. Lumsden	(Medicine)
Dr. A. Macdonald	(Medicine)
Dr. J. McGlade	(Medical Biophysics)
Dr. D.A.G. Mickle	(Laboratory Medicine and Pathobiology)
Dr. M. Milner	(Rehabilitation Science)
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. Sahgal	(Radiation Oncology)
Dr. G. Sandor	(Dentistry)
Dr. A. Slutsky	(Medicine)
Dr. D. Stewart	(Psychiatry)
Dr. G. Tait	(Anaesthesia)
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	(Biomedical Communications)
Dr. I. Witterick	(Otolaryngology)