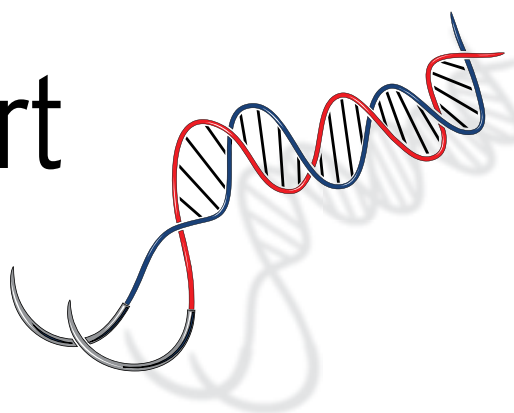


Department of Surgery Annual Report

JULY 1, 2010 - JUNE 30, 2011



R.S. McLaughlin Professor And Chair

Dr. J.T. Rutka (April 1, 2011)

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 Orthopaedics
Dr. A. Kapus	Associate Chair, Research

Surgeons In Chief

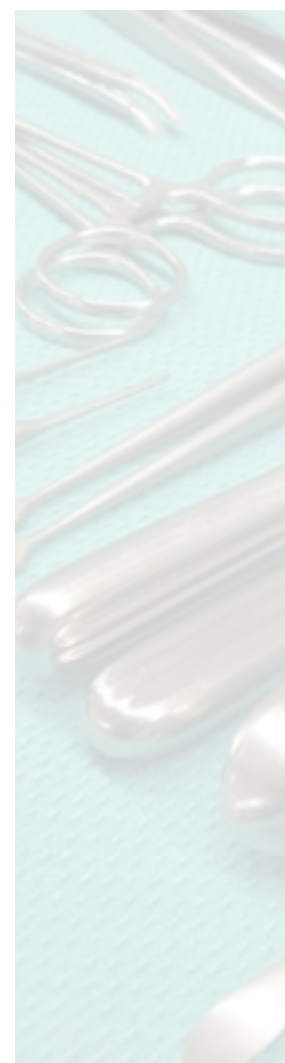
Dr. J.G. Wright	The Hospital for Sick Children/Robert B. Salter Chair in Surgical Research
Dr. J.S. Wunder	Mount Sinai Hospital/Rubinoff-Gross Chair in Orthopaedics
Dr. L.C. Smith	St. Joseph's Health Centre
Dr. O.D. Rotstein	St. Michael's Hospital
Dr. R.R. Richards	Sunnybrook Health Sciences Centre
Dr. 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

University Division Chairs

Dr. C. Morshead	Anatomy
Dr. C. Caldarone	Cardiac Surgery
Dr. A. Smith	General Surgery/Bernard and Ryna Langer Chair
Dr. A. Lozano	Leslie Dan Professor and Chair of Neurosurgery
Dr. B. Alman	A.J. Latner Professor and Chair of Orthopaedics
Dr. D. Anastakis	Plastic Surgery
Dr. T. Waddell	F.G. Pearson/R.J. Ginsberg Chair in Thoracic Surgery
Dr. S. Herschorn	Martin Barkin Chair in Urological Research
Dr. T. Lindsay	Vascular Surgery



Chair's Report	4
Research	6
Postgraduate Education	8
Undergraduate Education	10
Continuing Education and Professional Development.	11
Anatomy	12
Division Of Cardiac Surgery	13
Division Of General Surgery	15
Division Of Neurosurgery	18
Division Of Orthopaedics	22
Division Of Plastic And Reconstructive Surgery	24
Division Of Thoracic Surgery	29
Surgical Alumni Association.	36
Office of International Surgery.	37
The Hospital For Sick Children	38
Division Of Cardiac Surgery.	41
Division Of General Surgery	45
Division Of Neurosurgery.	49
Division Of Orthopaedics	56
Division Of Plastic And Reconstructive Surgery.	63
Division Of Urology	68
Mount Sinai Hospital	74
Division Of General Surgery.	75
Division Of Orthopaedics	79
Division Of Plastic And Reconstructive Surgery.	85
Division Of Urology	85
St. Joseph's Health Centre	89
Division Of General Surgery.	90
Division Of Orthopaedics	90
Division Of Plastic Surgery And Reconstructive Surgery.	90
Division Of Thoracic Surgery	91
Division Of Urology	91





St. Michael's Hospital	92
Division Of Cardiac Surgery.	93
Division Of General Surgery.	95
Division Of Neurosurgery.	106
Division Of Orthopaedics	110
Division Of Plastic And Reconstructive Surgery.	118
Division Of Urology	119
Division Of Vascular Surgery	121
Sunnybrook Health Sciences Centre	122
Division Of Cardiac And Vascular Surgery	124
Division Of General Surgery.	126
Division Of Neurosurgery.	134
Division Of Orthopaedics	135
Division Of Plastic And Reconstructive Surgery	145
Division Of Urology	149
Toronto East General Hospital	153
Division Of General Surgery.	155
Division Of Orthopaedics	155
Division Of Plastic And Reconstructive Surgery.	156
Division Of Urology	156
University Health Network	157
Division Of Cardiac Surgery.	162
Division Of General Surgery.	167
Division Of Neurosurgery.	180
Division Of Orthopaedics	202
Division Of Plastic And Reconstructive Surgery.	208
Division Of Thoracic Surgery	211
Division Of Urology	218
Division Of Vascular Surgery	225
Women's College Hospital	227
Division Of General Surgery.	228
Division Of Orthopaedics	228
Division Of Plastic And Reconstructive Surgery.	229
Division Of Urology	230
Division Of Anatomy	232
Research In Education	235
Cross Appointments	236



Chair's Report

James T. Rutka

On April 1, 2011, I was extremely honoured to be installed as the RS McLaughlin Professor and Chair of the Department of Surgery at the University of Toronto. We are truly indebted to David Latter who served admirably as Interim Chair over the past year. Not only did David conduct the full range of activities of the Chair, but he also added significantly to the well-being of the Department by ensuring that we move towards the web-based CV program, by establishing a system by which faculty in community affiliated hospitals could attain appointments in the Department of Surgery, by obtaining the equipment required for teleconferencing from the Banting Institute across all fully affiliated and community affiliated sites, and by reviewing all practice plans in the Department to ensure that they conform to University standards. Thankfully, David has agreed to stay on as the Vice Chair of Education in the Department of Surgery.

One of my first tasks was to re-structure the Executive Committee with the Department. I am pleased to report to you that Ori Rotstein, Surgeon-in-Chief at St Michael's Hospital, has agreed to serve as Associate Chair; Ben Alman, Chair of Orthopaedics, has agreed to remain as Vice-Chair of Research; Robin Richards, Surgeon-in-Chief at Sunnybrook will remain as Vice-Chair of Education; Robin McLeod has been recruited to lead a Best Practices portfolio as Vice Chair of Quality; and Avery Nathens has been placed in the position of Chair, Departmental Appointments Committee. With David Latter as Vice Chair of Education, this is a formidable team of executive members, and I truly look forward to forging new pathways with them in the leadership of the Department of Surgery. I also want to take this opportunity to thank Bryce Taylor who served over the past decade as Associate Chair and Chair of the Continuing Appointment Review Committee.

There have been some other important administrative changes in the Department. After serving indefatigably as Chair of the Promotions Committee for 10 years, Robin Richards has stepped down from this position. In his place, I am pleased to inform you that Sender Herschorn, Chair of Urology, has agreed to take over this important position. In the Surgical Skills Centre (SSC) at Mt Sinai Hospital, Helen MacRae has just stepped down as Director after serving in this capacity for the past 7 years. Following an extensive search process, I am delighted to announce that Oleg Safir from the Division of Orthopaedics will assume the position as Director of the SSC. One of our big challenges, and opportunities with the SSC will be to determine its relationship with several innovative skills and simulation centres that have been created at neighbouring affiliated hospitals such as the Li Ka Shing Institute at St Michael's Hospital, and the Hospital for Sick Children.

The Reports on Education in the Department of Surgery from David Latter and Ron Levine are found in the next sections for your information, but I do wish to draw attention to our current emphasis on Undergraduate Medical Education (UME). After having served capably in the position of Director of UME for 7 years, David Backstein has decided to step down, and pursue his new position as Head of the Division of Orthopaedics at Mt Sinai Hospital. In his place, I am delighted to report to you that following a department-wide search, George Christakis has been appointed as the new Director of UME. The Department is committing additional resources to UME to continue to improve the curriculum for medical students at the University of Toronto. Mr. Shibu Thomas has been hired as the new UME co-ordinator in the Department who has replaced Carmela Calorendi who served in this role for almost 22 years.

At the Post-graduate level, there have been some new appointments of Program Directors. Andrew Pierre has become the new Program Director of Thoracic Surgery having taken over from Gail Darling who served for the past 12 years in this capacity; George Oreopoulos has now become the new Program Director of Vascular Surgery having taken over from Tom Lindsay who served the past 8 years; and Abhaya Kulkarni has become the new Program Director in Neurosurgery, having taken over from Chris Wallace who has served over the past 12 years. As we gear up for the Royal College Review of our Residency Programs in 2013, all of the surgical subspecialty programs underwent formal internal reviews this past year. At the time of the writing of this report, all programs were considered to be in good shape heading into 2013. However, a problem which has reared its head is the scarcity of positions for subspecialty surgeons in the Province of Ontario and across Canada. The Department of Surgery will be working hard to correct this problem as we move into our Strategic Planning process for 2012. Finally, mention must be made of the innovative Competency Based Curriculum (CBC) in Orthopaedics which is in its 2nd year of activity. From all accounts, the CBC in Orthopaedics has been extremely successful, and will serve as a new paradigm for surgical education in the future.

The Surgical Spotlight is our vehicle for timely communications with our faculty and alumni around the world. We are truly fortunate that Martin McKneally has devoted himself to making the Spotlight as informative and newsworthy as possible. I know I look forward to seeing each and every issue with its myriad of surgical interest stories. In addition, we have added new electronic communications this year for our faculty and alumni with the production of our monthly newsletter, *Excelsior* and priority news vehicle, *e-Clips*. Watch for these in upcoming months and issues.

This year was another banner year for the Department of Surgery at the Decanal Promotions Committee. Georges Azzie, Anna Gagliardi, Lesley Carr, Teodor Grantcharov, Peter Ferguson, Tony Finelli, Mojgan Hodaie, Kirk Lo, Michael Reedijk, Unni Narayanan, Andrew Pierre, Vasundara Ventakeswaran, and Robert Zeldin were successful at being promoted to Associate Professor. And Dimitri Anastakis, Oleh Antonyshyn, James Eubanks, Ron Kodama, Andy Smith, and David Urbach were successful at being promoted to Full Professor.

New faculty hired in the Department of Surgery as of July 1st, 2010 include Abdollah Behzadi, Thoracics, Credit Valley Hospital; Sunit Das, Neurosurgery, St Michael's; Osami Honjo, Cardiac Surgery, Sick Kids; Neelash Jain, General Surgery, NYGH; Shiva Jayarama, General Surgery, St Joseph's; Philippe Garzon, General Surgery, Trillium; Richard Jenkinson, Orthopaedics, Sunnybrook; Rashid Jinnah, Orthopaedics, Trillium; Donald Jones, Thoracic Surgery, Credit Valley; Simon Kelley, Orthopaedics, Sick Kids; Atul Kesarwani, Plastics, TEGH; Glorianne Ropchan, Cardiac Surgery, UHN; Joan Lipa, Plastics, Sunnybrook; Christine Novak, Plastics (research), Toronto Rehab Institute; Simon Skeldon, Urology, Trillium; Michael Ko, Thoracics, St Joseph's; Hany Sawires, General Surgery, TEGH; Eric Marmor, Neurosurgery, Trillium; Laura Snell, Plastics, Sunnybrook; Hong-Shuo Sun, Anatomy; Ivica Vucemilo, Vascular Surgery, Trillium; Gilbert Yee, Orthopaedics, Scarborough General; Conor Turley, Plastics, Trillium; and Behzad Taromi, Orthopaedics, Trillium. In addition, 37 faculty were appointed on faculty from our community affiliate hospitals in the Toronto GTA.

Numerous awards were once again earned by many faculty in the Department of Surgery. While far too many to chronicle in exacting detail, highlights include: The Tovee Post-graduate Prize won by Bill Kraemer; the Tovee Undergraduate Prize won by Frances Wright; the DR Wilson Award for Resident Teaching won by Taiba Al-Rasheed; the Bernard Langer Surgeon-Scientist Award won by Tony Finelli; the George Armstrong-Peters Prize won by Michael Taylor; the Gallie Bateman Award won by Adrienne Weeks; the Shafie Fazel Award won by Mitesh Badiwala; the Charles Tator Mentoring Award won by Ben Alman; the Lister Prize by Tom Waddell; and the Zane Cohen Clinical Fellowship Achievement Award won by Ed Hickey.

Additional notable awards include the WT Aikins Faculty Teaching Award to Dee Ballyk; the Roscoe Reid Graham Scholarship in Surgical Science received to Osami Honjo; the Ross Fleming Surgical Educator Award to Tom Lindsay; the Herbie Doctor of the Year Award at Sick Kids to Joao Pippi Salle; and the DR Wilson Award from the Royal College of Physicians and Surgeons to John Murnaghan.

I am very pleased to announce that Marc Jeschke and the multi-disciplinary team in the Ross Tilley Burn Centre at Sunnybrook Health Sciences Centre received American Burn Association (ABA) verification this year. This makes the University of Toronto only the second centre outside of the United States to receive this honour.

Mark Bernstein was installed as the inaugural Wilkins Barrick Chairholder in International Surgery. This \$5 million chair was established at UHN in memory of Greg Wilkins, late CEO of Barrick Gold Corporation, and will enable Mark to continue his incredible international work in neurosurgery spanning numerous countries where he has instructed neurosurgeons how to perform craniotomies under local anesthesia, and has lectured the junior neurosurgeons and residents in these countries.

With assistance from our Senior Advancement Officer at the University of Toronto, Darina Landa, the Department of Surgery was on target to receive over \$2.1 million in generous donations to various funds and fellowships. These included donations from IAMGOLD Corporation in PRS, Astellas Pharmaceuticals in Urology, the Bobechko Foundation in Orthopaedics, the Miller Tavern and the Shane Baghai Group of Companies for the Surgical Oncology Fund.

The review of our research portfolio by Ben Alman, Vice-Chair Research, can be found on the accompanying pages. In brief, the Department of Surgery received more than \$32 million in research funding this past year – a staggering accomplishment given the difficult fiscal times. The Surgeon Scientist Program (SSP) continues to thrive with 6 new residents joining the program, and 19 continuing on with their research studies. More than 90% of those enrolled in the SSP have received external salary support. In an SSP Trainee Survey conducted by Ben for the years 1984-2011, it was shown that of 202 SSP graduates now in practice, more than two-thirds are working in Academic Institutions, and two-thirds of these are working in Toronto. I should like to thank Tom Waddell, Andrew Howard, and Steven Gallinger for producing a "white paper" on the future of the Surgeon Scientist in the Department of Surgery. Many of the recommendations from this document will be followed to ensure that surgeons interested in pursuing academic careers in surgery and science receive the necessary support required to be successful.

Fall 2011 was busy for us as we launched a strategic planning initiative which will carry over into 2012. Our last Strategic Plan, entitled "Breaking through the Boundaries", was conceived and written in 2004 by former RS McLaughlin Chair, Richard Reznick and Urology Professor Michael Jewett. We have identified five pillars of activity to support the Department of Surgery over the next 5 years: 1) Research; 2) Education; 3) Faculty Development; 4) Best Practices/Quality; and 5) Integration. Cutting across these 5 themes will be global impact, innovation, advancement, and social responsibility. I am grateful to my Executive Committee for the outstanding work they have done thus far on the Strategic Plan, and I look forward to reporting to you next year with the new directions in which this plan will be leading us.

Sincerely,

James T Rutka, MD, PhD
RS McLaughlin Professor and Chair



Research

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

Research endeavors by clinical faculty, non-clinician faculty, trainees, and students continues to move forward to high levels of research excellence.

Our high impact journal publications continue to grow by numbers. Our faculty has given research presentations throughout the globe and participated in over a hundred national and international research meetings. The increased competitiveness of research funding from the Canadian Institutes of Health Research (CIHR), the Canadian Cancer Society Research Institute (CCSRI), and other funding agencies continues. Despite this, our department members continue to receive increasing support from these agencies. Benjamin Alman, Nancy Baxter, Gregory Borschel, Sean Cleary, Michael Fehlings, Geoff Fernie, Anna Gagliardi, Steven Gallinger, Reg Gorczynski, Ab Guha, Sevan Hopyan, Keith Jarvi, Marc Jeschke, Shaf Keshavjee, Hans Kreder, Wolfgang Kuebler, Wey Liang Leong, Mingyao Liu, Andres Lozano, R. Loch Macdonald, Melinda A. Musgrave, Avery Nathens, Sandro Rizoli, Ori D. Rotstein, James Rutka, Emil Schemitsch, Hong-Shuo Sun, Michael D. Taylor, Michael Tymianski, Subodh Verma, Cari Whyne, Thomas Waddell and Thomas Willett, were among the great number of faculty who received new grants this year. Our total research funding continues to exceed that of even many of the Universities in Canada, this year topping \$32,000,000.

The Surgeon-Scientist Program continues to be strong, with over thirty residents participating this year. Over 92% of our Surgeon-Scientist Program trainees successfully received full or partial salary support from external granting agencies. Johnson & Johnson Medical Products funding support for the Surgeon-Scientist Program provided funding for 2010-2011 to four trainees namely: Maryse Bouchard, Ivan Diamond, Kim Tsoi and Jonathan Yeung.

The theme for Gallie Day this year was **"Computers and Robots in Surgery"**. The day included a symposium entitled *"Making Surgeons Obsolete: Computers and Robotics in Surgery."* The symposium Chair was Benjamin Alman (A.J. Latner Professor, Vice-Chair Research). Participants included James T. Rutka (Chair, Department of Surgery), whose talk was *"Discovery, Invention and Innovation in Surgery;"* Ian McKillop (J.W. Graham Research Chair in Health Information Systems, Public Health Program and Executive Director, University Health Research Office of Research, University of Waterloo), *"Fostering Innovation: Step One – Check the Water;"* Christian Veillette (Assistant Professor, Orthopaedic Surgery, U of T), and *"Forget EBM: The Emerging Science of Collective Intelligence."* They gave insightful talks into how to incorporate innovation into our academic surgical practices, and showed how using computer technology

can improve patient outcome. For instance, the use of computer-assisted collective intelligence can be used to identify the best treatments for patients.

Inderbir S. Gill (Director, USC Institute of Urology; Professor and Chair, Catherine and Joseph Aresty Department of Urology; Associate Dean (Clinical Innovation), Keck School of Medicine, University of Southern California, Los Angeles, California) gave an entrancing Gordon Murray Lecturer entitled, *"Minimally Invasive Surgery: Poster-child or Impostor?"*

The Gallie Bateman Award for Best Work by a Trainee in the Surgeon-Scientist Program went to **Adrienne Weeks** for her oral presentation on "ECT2 and RASAL2 mediate mesenchymal-amoeboid transition in human astrocytoma cells" (James T. Rutka, supervisor); 2nd prize to **Eisar Al-Sukhni** for "Diagnostic accuracy of MRI for assessment of T-category, nodal metastases, and circumferential resection margin involvement in patients with rectal cancer: A meta-analysis," Laurent Milot, Mark Fruitman, Joseph Beyene, Charles Victor, Selina Schmocker, Robin McLeod [supervisor], Erin Kennedy; 3rd prize three-way tie went to **Barbara Haas**: "Survival of the fittest: The hidden cost of undertriage of major trauma" (Avery B. Nathens, supervisor); **Gregory W.J. Hawryluk**: "Remyelination is the key mechanism underlying functional recovery from spinal cord injury following neural precursor cell transplantation" (Michael G. Fehlings, supervisor); **Siba Haykal**: "Evaluation of the extracellular matrix components following decellularization of tracheal allografts in airway transplantation" (Stefan O.P. Hofer, Thomas K. Waddell, supervisors.)

Amparo Wolf won the McMurrich Award, 1st prize, (for research by a trainee not in the surgeon-scientist program) for "Hexokinase 2 is a key mediator of aerobic glycolysis and promotes tumor growth in human glioblastoma multiforme" (Sameer Agnihotri, Johann Micallef, Joydeep Mukherjee, Nesrin Sabha, Rob Cairns, Cynthia Hawkins [Abhijit Guha, supervisor]). 2nd prize was a 5-way tie (this is the first time this has happened) and went to Sameer Agnihotri: "A GATA4 regulated tumour suppressor axis is disrupted in glioblastoma" (Supervisor: Abhijit Guha); Aaron Gajadhar: "In situ proximity ligation-based analysis reveals aberrant dimerization and activation of epidermal growth factor receptors prevalent in glioblastoma multiforme" (Abhijit Guha, supervisor); Vedant Arun: "A novel NF1-LRPPRC interaction reveals a role in RNA granules" (Joseph C. Wiley, Harpreet Kaur [Abhijit Guha, supervisor]); Crystal A. Ruff: "Stem cell-based transplantation strategies for sub-cortical remyelination" (Hui Ye, Liang Zhang [Michael G. Fehlings, supervisor]; and Nesrin Sabha: "The impact of *IDH* mutations on progression-free and overall survival in human low and intermediate

grade gliomas" (Christiane Knobbe, Soha Alomar, Rob Cairns, Benca Cako, Andreas von Deimling, Tak Mak, Sidney Croul [Abhijit Guha, supervisor]). 3rd prize 4-way tie went to Meghan Crookshank: "Can an atlas-based algorithm quantify femoral shaft fracture alignment based on a single, cone-beam ct image of the fractured leg?" (Emil Schemitsch, Maarten Beek, Michel Hardisty [Cari Whyne, supervisor]); Elaine Mau: "SAM9L – A novel gene mediating pathogenesis of human osteosarcoma in an in-vitro model" (Qingxia Wei [Benjamin A. Alman, Jay S. Wunder, supervisors]); Stephen C. Mack: "Delineation of two molecularly and clinically distinct groups of posterior fossa ependymoma" (Michael D. Taylor, supervisor); Sean C. Skeldon: "Investigating the risk of bladder cancer among hereditary non-polyposis colorectal cancer (HNPCC) patients with confirmed mismatch repair (MMR) gene mutations" (Peter Bostrom, Melyssa Aronson, Kara Semotiuk, Aaron Pollett, Bas van Rhijn, Steven Gallinger, Zane Cohen, Neil E. Fleshner, Michael A. Jewett, Sally Hanna, Cynthia Kuk, Theodorus H. Van Der Kwast, Andrew Evans, Bharati Bapat [Alexandre R. Zlotta, supervisor]).

Faculty research awards went to **Antonio (Tony) Finelli (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), **Michael D. Taylor (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), **Benjamin A. Alman (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 **Thomas Waddell (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). The first Shafie Fazel Award was presented to **Mitesh Badiwala** by Shafie's wife (widow) **Nathalie Fazel**, **Zane Cohen Clinical Fellowship** was awarded to **Ed Hickey**, cardiac surgery clinical fellow at Sick Kids Hospital. **William (Bill) Kraemer** received the **Tovee Postgraduate Prize**, and **Frances Wright** received the **Tovee Undergraduate Prize**. At the Gallie day dinner, we had an award accepted using Skype (another first) and had a wonderful display of our department member's artwork again. The scope and breadth of the creative artistic efforts from our departmental members was quite amazing. Thanks to Darrell Ogilvie Harris for organizing the art show.

Faculty accomplishments in the past year were extraordinary. Again 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. At the 2011 International Spinal Cord Medicine and Rehabilitation Conference, **Charles Tator** received the 2011 ASIA Lifetime Achievement Award for his significant contribution and dedication to the

field of spinal cord injury care. **Michael Jewett** was the recipient of two awards at the American Urological Association Annual Scientific Meeting 2011.

Dr. Jewett received the AUA Distinguished Contribution Award 2011 for his outstanding contributions to science and the treatment of urological malignancies and the Society of Urologic Oncology Medal provided to an individual for specific achievement and contributions in the field of urologic oncology. **Joao L. Pippi Salle** was honoured with the Herbie Doctor of the Year Award for 2010 recognizing all of his contributions to underprivileged children needing care at Sick Kids from all over the world. **Tom Waddell** and **Alison McGuigan** were awarded the NSERC-CIHR collaborative Health Research Program: Engineering Improved Tracheal Replacement Tissue. **Ralph Manktelow** was the recipient of the Canadian Society of Plastic Surgeons Lifetime Achievement Award. The list is endless and the recognitions are too many to mention. Our entire surgical research community deserves a share of congratulations.

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. In November 2011, there will be a second non-clinician scientist retreat organized by Andras Kapus and Val Cabral for November 2011. The Committee worked on a white paper to examine the best environment to maintain our high level of research excellence among our clinical faculty in the coming decades. This work will be used as a starting point in the upcoming departmental strategic planning sessions.

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

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



Postgraduate Education

Ron Levine, *Director*

The Department of Surgery at the Postgraduate level is the largest in Canada with 280 residents and 234 clinical fellows. There have been many accomplishments and successes in the 2010-2011 academic year.

There are 11 surgical programs: 6 CaRMS entry and 5 subspecialty programs after general surgery. 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. David Latter in Cardiac Surgery, Dr. Chris Wallace in Neurosurgery, Dr. Thomas Lindsay in Vascular Surgery and Dr. Bill Kraemer in Orthopaedic Surgery have finished their term as Program Directors. The new Program Directors are Dr. Gideon Cohen for Cardiac Surgery, Dr. Abhaya Kulkarni for Neurosurgery, Dr. George Oreopoulos for Vascular Surgery and Dr. Peter Ferguson for Orthopaedic Surgery. These new Program Directors will continue to maintain their respective programs at a very high level and will also bring new ideas to their respective specialties.

Dr. Richard Reznick stepped down as chairman after 8 years to become the Dean at Queen's University. Dr. David Latter was acting interim chairman for a one-year period and did a superb job and there was nearly a seamless transition to the new chairman. Dr. Jim Rutka began his position as chairman in April of 2011. Dr. Rutka is a world renowned neurosurgeon. He has many initiatives planned to take the Department of Surgery to an even higher level.

Our surgical positions for all of our CaRMS entry specialty programs are sought after by medical students from across Canada. This year all 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 IMG's (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 a 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. Lisa Satterthwaite is the Manager of this unique skills lab. Dr. Helen MacRae has been the Director of the Surgical Skills Lab for the last ten years. Dr. MacRae has made our Surgical Skills Lab at the University of Toronto one of the best and most productive Surgical Skills Labs in North America. Dr. MacRae has stepped down after ten years as Director.

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. This is run by Dr. John Bohnen and Dr. Ron Levine. 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 one of the surgical specialties is 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.

PGCoreEd is a series of interactive modules based on the CanMEDS Roles. Each module takes 4 to 5 hours to complete and there is an exam at the end of each module. The results of the exams are provided to the resident, Program Director and Director of Postgraduate Education. Successful completion of 5 modules was required for all residents finishing their PGY2 year.

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 Health Centre, Credit Valley Hospital, Trillium Health Centre and South Lake. The feedback from residents rotating through these community hospitals has been excellent.

The Competency Based Curriculum in Orthopaedic Surgery continued for the academic year 2010-2011. Three new residents were accepted into the program and thus far it seems to be extremely successful due to the hard work of the Division of Orthopaedic Surgery. Educators from around the world are awaiting the results of this program.

There was a retreat for new faculty in May that was coordinated by Dr. Ron Levine. It was highly successful and the plan is to continue this retreat. The Department of Surgery will be alternating it on a yearly basis with a faculty development day on how to be a better teacher.

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 234 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, objectives and uniformity of salaries for each fellowship. 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 that families can get to know each other.

The Women in Surgery group under the leadership of Dr. Melinda Musgrave 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. Bill Kraemer was awarded the 2011 Bruce Tovee Award for Postgraduate Teaching. The 2011 D.R. Wilson Award for Resident Teaching of medical students was won by Dr. Taiba Al-Rasheed.

The running of the Department of Surgery with 280 residents, 234 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, MD, Med, FRCSC
Director

The 2010-2011 year saw continued academic success of students enrolled in the Department of Surgery's undergraduate program. Our students excelled in comparison to international benchmarks on standardized examinations such as the National Board of Medical Examiners shelf examination. In addition, this year saw the incorporation and consolidation of the new eight-week surgical curriculum.

Despite these successes, many challenges clearly face our program. Students have expressed a desire for more direct exposure to surgical-faculty supervisors in order to gain higher quality clinical experiences, over a more prolonged period of time. They also wish for more direct responsibility in patient care and broader exposure to surgical issues relevant to primary care physicians. Despite the "Crash Course" which has provided fundamental technical skills, students continue to experience inadequate opportunities in the operating room.

While much of the past year was spent documenting and verifying our educational strengths in advance of the 2012 Faculty of Medicine accreditation process, it is clear that undergraduate surgical education at the University of Toronto needs to continue to evolve. To this end, many significant changes are planned for the way we teach and evaluate students in the coming years. Under the guidance of the new Director, Dr. George Christakis, I am sure we will modify and improve the surgical clerkship and remain among the strongest programs in North America.

As this is my final annual report I would like to thank the entire faculty and associated staff for making the past eight years highly fulfilling and always interesting. In particular, I would like to thank Carmela Calorendi for her ever present, highly effective administration of the program and for the guidance and support she provided me with through the years.



Continuing Education and Professional Development

Terry Axelrod

Director and Chair, Continuing Education and Professional Development Committee

OVERALL CEPD GOALS

- Promote best practices in continuing education and professional development (including Faculty Development, CHE Professional Development)
- Foster scholarship and research in continuing education
- Broaden the scope and inclusiveness of continuing education (including international, interprofessional)
- Reinforce infrastructure and funding base (including COI, industry relations)

2010-11 ACTIVITIES

- 25 CE events run through the CEPD office, either fully or partially with accreditation only
- 16 live meetings, 4 faculty development, 3 web-based and 2 research-based
- Superb success with enrollment in the hundreds for several courses, such as the Update in General Surgery, Urology Update 2010, etc.
- Many faculty members involved as Chair and faculty in CE events nationally and internationally outside of the CEPD jurisdiction

OBJECTIVES FOR 2011-12

- Establish a CE Working group for the Department consisting of representatives of each of the Surgical Divisions
- Encourage all Divisions to run or accredit courses through CEPD office.
- Catalogue the National and International CE that is done outside of the CEPD office



Anatomy

Cindi M. Morshead, *Chair*

FACULTY APPOINTMENTS

In January 2011, Michael Wiley completed his term as Chair of the Division of Anatomy. We are ever thankful for his outstanding leadership, commitment and energy over the past 10 years.

Dr. Hong-Shuo Sun joined the Division in July 2010 and holds a tenure-stream Assistant Professorship. Since his arrival Dr. Sun has successfully acquired funding from the Heart and Stroke Foundation, NSERC and CFI. This is quite an achievement in light of the bleak research funding climate that we currently face.

FACULTY GRANTS

Anne Agur: Catalyst Grant: Bone Health entitled "Biomechanical determinants of surgical outcomes in adolescents with a paediatric spinal deformity." with Zabek, K.F., Zeller, R., Biddis, E., Carnahan, H., Lewis, S., Mathur, S. and Meguid, S. Canadian Institutes of Health Research (\$87,752, 1 year).

The Canadian CAM Research Fund (Holistic Health Research Foundation of Canada) awarded \$4,858 for the study "Biomechanical and cellular changes within the rat gastrocnemius muscle and calcaneal tendon post tenotomy: Do traumeel injections make a difference?" (with K. Sauks)

"The effect of a three-dimensional scapular-humeral mobilization technique and protocol on the reduction of hemiplegic shoulder pain" with D. Richardson was awarded from the Ontario Stroke System. A \$35,160 two year grant.

Paulo Koeberle: A CFI Infrastructure Operating Grant for \$35,000 for support of the study "Mechanisms of central nervous system degeneration after injury".

The Canadian Institutes of Health Research (CIHR) awarded 3 years of funding for the project entitled "The role of matrix metalloproteinases in adult CNS neuroprotection" with M Fehlings. (\$257,217).

Cindi Morshead: A 3 year grant "Building a 3-D retina" with Shoichet M, Morshead C, MacDonald J, Boyd S from the National Sciences and Engineering Research Council/Canadian Institutes of Health Research, Collaborative Health Research Projects (NSERC/CIHR, CHRP) Program. (\$595,000).

The Heart and Stroke Foundation, Grant in Aid support for "The development of drug and cell delivery systems for use in stem cell based therapies to treat stroke." with M. Shoichet and D. Corbett for \$405,000 over 3 years.

Three years of support (\$658,000) for the project "Bioengineering cell delivery systems" with M Shoichet, C. Tator and D van der Kooy from the National Sciences and Engineering Research Council/Canadian Institutes of Health Research, Collaborative Health

Research Projects (NSERC/CIHR, CHRP) Program.

"Engineering stem cell delivery to the injured spinal cord" (with M. Shoichet and D. van der Kooy) from the Department of Defense (U.S.A) (\$100,000 for 1 year).

An Ontario based CFI "Ontario Initiative in personalized stem cell medicine" for > \$10,000,000 to develop stem cell based therapeutics for application to regenerative medicine.

The Canadian Institute of Health Research for the proposal "In vivo monitoring of neural recovery following stem-cell therapies in an animal model of stroke" (with G. Stanicz and N Lobaugh) for \$458,000 over 3 years.

Hong Sun: A 3 year Grant in Aid from the Heart and Stroke Foundation for his studies on the "Role of KATP channels in stroke" (\$128,200).

A Discovery Grant from Natural Sciences and Engineering Research Council of Canada (NSERC) "TRP channels in neuronal development." Awarded for 5 years.

FACULTY HONOURS AND AWARDS

The Division of Anatomy teaches over 2500 students each year across various Faculties and Departments, undergraduate, graduate and continuing education programs. We continue to celebrate the tremendous teaching achievements of our faculty.

Michael Wiley was awarded the *Ontario Council of University Faculty Associations Teaching Award*; the *Harry Whittaker Memorial Teaching Award*, Faculty of Medicine as well as the coveted *President's Teaching Award* at the University of Toronto.

Barbara Ballyk was awarded the *Aikens Award*, the Faculty of Medicine's most prestigious award for sustained commitment to and excellence in undergraduate teaching.

GRADUATE STUDENT ACHIEVEMENT, HONOURS AND AWARDS

Dave Piccin (Morshead, supervisor) was the recipient of an Alan Wu award at IMS Research Day.

Wenjun Xu (PhD candidate in Morshead lab) and **Kate Sauks** (PhD candidate in Agur lab) were awarded the James H. Research Fellowship in Anatomy.

Wenjun Xu was also awarded the Carlton and Marguerite Smith Medical Research Fellowship.

Shoeb Ahsan (Morshead, Supervisor) successfully defended his MSc. Thesis

"Investigation of adult retinal precursor cell behaviour in response to soluble factors and varying substrate stiffness in two and three dimensional scaffolds."



Division Of Cardiac Surgery

Christopher Caldarone, *Chair*

The Division of Cardiac Surgery enjoys a reputation for excellence in terms of clinical care and research, with one of the largest combined clinical volumes in North America. The Division has made strong advances in the development of new surgical strategies including complex hybrid aortic procedures, trans-catheter aortic valve replacement, and hybrid management for neonatal single ventricle palliation. Our basic science, translational, and clinical research publications remain strong with a large proportion of the staff maintaining peer-reviewed funding for their research agendas.

The cardiac surgery residency training program continues to attract top candidates from across Canada and passed its recent internal review under the guidance of our Program Director, **Dr. Gideon Cohen**. We also developed the post of Fellowship Director with **Dr. Stephanie Brister** to improve the quality of our clinical fellowships across our four constituent hospitals.

The year is also notable for evolution in leadership with the appointment of **Dr. David Latter** as the Chief of Cardiac Surgery at St. Michael's Hospital. A search was also recently initiated for the position of Chief of Cardiac Surgery at the Toronto General Hospital/University Health Network to find a successor for **Dr. Tirone David** who continues to have a well-deserved reputation as the premier cardiac surgeon in the world.

The 15th annual **Terence Donnelly Cardiac Residents Research Day** was held on June 11, 2011 and was attended by cardiac surgical residents from every program in Canada. This event is an annual highlight for aspiring surgeon-scientists among the Canadian residency programs and is generously supported by **Mr. Terence Donnelly** and organized by **Dr. Lee Errett**. The event was honored with two Visiting Professors: **Dr. Ivan Rebeyka**, Professor, University of Alberta and **Dr. Marc Ruel**, Professor, University of Ottawa Heart Institute (details below).

RECRUITMENT

Osami Honjo was recruited as a staff cardiac surgeon at The Hospital for Sick Children in July 2010 after completing his fellowship in cardiac surgery at The Hospital for Sick Children and St. Michael's Hospital. Dr. Honjo's clinical practice focuses on open heart surgery in neonates and infants, surgical palliation for single ventricle patients, mechanical cardiopulmonary support in pediatric population, and surgery for patients with adult congenital heart diseases.

Dr. Honjo's research focuses on seeking clinical predictors/factors that influences outcome, which improve the quality of surgeons' decision making.

Fuad Moussa was recruited as a staff cardiac surgeon at Sunnybrook Health Sciences Centre in July 2010. Dr. Moussa attended medical school at McGill,

completed general surgery training and cardiothoracic residency in Miami, Florida. He then became a fellow and subsequently a clinical associate at Sunnybrook Health Sciences Centre. Dr. Moussa's clinical practice focuses on off-pump coronary artery surgery with a special interest in minimally invasive coronary surgery. Dr. Moussa's academic focus is in teaching, particularly on the use of simulation for resident education. He is currently enrolled in at-distance Masters of Education.

PROMOTIONS/APPOINTMENTS

Christopher Caldarone was promoted to Senior Associate Scientist at The Hospital for Sick Children Research Institute.

Osami Honjo was appointed as an Associate Scientist in The Hospital for Sick Children Research Institute.

David Latter was appointed Chief of the Division of Cardiac Surgery at St. Michael's Hospital. He succeeded **Lee Errett** who was instrumental in building this division at St. Michael's into a powerful academic program with the strategic recruitments of **Subodh Verma** and **Mark Peterson**.

Vivek Rao was appointed Director of the Cardiac Business Unit at the Peter Munk Cardiac Center/UHN and Chair of the Physician Payment Review Board in MOHLTC.

Hugh Scully was appointed President of the UHN-MSH Health Practitioners' Funding Group and was appointed a member to the UHN-MSH, AMO Management Committee. Dr. Scully presented the 2010 Bigelow Lecture at the Canadian Cardiovascular Congress.

FACULTY HONOURS/AWARDS

Christopher Caldarone was appointed to the Board of Directors for the Society of Thoracic Surgeons as the Canadian Director and was appointed Managing Director of the CHSS Data Center by the Congenital Heart Surgeons Society.

Osami Honjo received the University of Toronto Roscoe Reid Graham Scholarship in Surgical Sciences

Hugh Scully received the Canadian Medical Association's Medal of Service, the Annual Lifetime Achievement Award from the Canadian Cardiovascular Society, and presented the Bigelow Lecture at the 2010 Canadian Cardiovascular Congress.

Subodh Verma received the Howard Morgan Scientist Award from the International Society of Heart Research and was co-recipient of the Dean A.L. Chute Award (The Silver Shovel). Dr. Verma was named Male Professional of the Year from the Indo-Canadian Chamber of Commerce. Under Dr. Verma's supervision, Dr. Praphulla Shukla is a Vivian Thomas Young Investigator Finalist for his work

entitled "MicroRNA-145 Targeted Therapy Reduces Atherosclerosis and Induces Features of Plaque Stability." Eight abstracts submitted from Dr. Verma's lab were accepted to the 2011 AHA program.

Richard Weisel was appointed Chairman of the Innovation Fund Provincial Oversight Committee and Member of CIHR Review Committee. Dr. Weisel maintains his membership with the Executive Committee of the RED-CABG Trial the Scientific Advisory Committee of the LeDucq Foundation.

FACULTY GRANTS

Stephanie Brister holds a grant from the Canadian Institutes of Health Research.

Christopher Caldarone holds a grant from the Heart and Stroke Foundation of Ontario and is a co-investigator on grants from the LeDucq Foundation and Children's Heart Foundation. Dr. Caldarone manages the finances of the CHSS Datacenter.

Gideon Cohen continues to hold two grants from the Cardiothoracic Surgery Network (NIH/CIHR).

John Coles continues to hold grants from the Heart and Stroke Foundation of Ontario and the Canadian Institutes of Health Research.

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

Stephen Fremes holds grants from the Canadian Institutes of Health Research, the Heart and Stroke Foundation, CANNeCTIN, the Schering-Plough Research Institute, Astra-Zeneca Research, and F. Hoffmann-la Roche Ltd.

Vivek Rao holds a grant from the Heart and Stroke Foundation of Canada.

Glen Van Arsdell holds two grants from the Heart and Stroke Foundation of Ontario.

Subodh Verma holds three grants from the Heart and Stroke Foundation of Ontario and two from the Canadian Institutes of Health Research.

Richard Weisel continues to hold grants from the Heart and Stroke Foundation of Ontario, the Canadian Institutes of Health Research and the Canadian Foundation for Innovation.

Terrence Yau holds grants from the Heart and Stroke Foundation of Canada and the Heart and Stroke Foundation of Ontario.

RESIDENTS AND FELLOWS HONOURS/ AWARDS

Mitesh Badiwala received the inaugural Shafie S. Fazel Outstanding Resident Surgeon and Investigator Award from University of Toronto.

Mitesh Badiwala and his mentor, **Vivek Rao** received the 2010 Vivien Thomas Young Investigator Award from the American Heart Association for their work entitled "Epidermal Growth Factor-Like Domain 7 is a Novel Inhibitor of Neutrophil Adhesion to Coronary Artery Endothelial Cells Injured by Calcineurin Inhibition."

Saswata Deb received the Sopman Humanitarian Award from the University Health Network and was accepted into the Surgeon Scientist Program.

Edward Hickey received the Zane Cohen Clinical Fellowship Achievement Award from University of Toronto.

Daniel Lodge received the Harrison Award from Sunnybrook Health Sciences Centre.

Bobby Yanagawa received the Heimbecker Award from the University of Toronto.

New Residents

The Division of Cardiac Surgery welcomes two new residents to the cardiac surgery training program:

Mohammed Al Jughiman and **Jordan Van Orman**.

VISITING PROFESSORS

Dr. Gregory Hirsch, Cardiovascular Surgery, Queen Elizabeth II Health Sciences Centre, Dalhousie University presented the Bigelow Lecture, "Continuous Quality Improvement: Lessons Learned in Pursuit of Kaizen" on October 1, 2010.

Dr. Ivan Rebyka, Professor, University of Alberta presented "The Making of a Pediatric Surgeon" and **Dr. Marc Ruel**, Professor, University of Ottawa Heart Institute presented "The Why and How of Being a Surgical Young Investigator: Tips from a Recent Victim" at 15th Annual **Terence Donnelly Cardiac Residents Research Day** on June 11, 2011.



Division Of General Surgery

Andy Smith, *Chair*

The Division of General Surgery continued to grow and become increasingly integrated over the course of the 2010-2011 academic year.

DIVISIONAL GROWTH AND DEVELOPMENT

It may be cogently argued that the most important thing that a university-wide division of general surgery can do is to connect the talent, productivity and potential of the individuals and individual units across the city. Viewed through this lens, there continues to be evidence that the Division of General Surgery at the University of Toronto is growing and developing. Across the city there are a number of very talented and productive individuals. When these groups get together, the effect is particularly positive. Examples abound but the recent focus on combining the trauma enterprise of St. Michael's Hospital and Sunnybrook Health Sciences Centre is a good example. Led by Drs. Avery Nathens and Homer Tien, there has been an increased focus on developing a combined approach to trauma care and trauma academics in Toronto. Importantly, the appointment of Mary Chen as University of Toronto Trauma Program Advisory Committee Research Manager has begun to catalyze an ongoing integration of the two units.

A further example is the connection that continues to evolve between minimally invasive surgery (MIS) experts across the city. Dr. Allan Okrainec has energetically led the MIS Fellowship as this program continues to become increasingly competitive and attracts superb applicants from around the world. Most importantly, the training program was recently assessed and received full accreditation by the Fellowship Council. Other U of T leaders such as Dr. John Hagen have worked in a steadfast manner to increase the profile of minimally invasive surgery through the development of citywide MIS and obesity rounds and, by extension, knitted together a citywide community.

The 2010-11 academic year also saw the realization of the Ontario Peritoneal-Based Malignancy Program (PBMP) which is a collaborative, inter-institutional, interdisciplinary program based at the Mt. Sinai Hospital. This program will allow Ontario residents to get state of the art treatment for this complex malignancy and it dovetails beautifully with the research programs of investigators such as Drs. Andrea McCart at the Mt. Sinai Hospital.

The General Surgery Residency program proudly graduated the following newly minted surgeons who have gone on to diverse "next steps" in their careers

Name	Where Are They Now?
Ali, Kaes	Breast Fellowship-U of T
Bhojani, Faizal	MIS Fellowship-U of T
Elgadi, Khaled	Clinical Associate-NYGH-Moving to Northern Ontario
Eskicioglu, Cagla	Colorectal Fellowship at Lahey Clinic, Boston July/12
Hariri, Farzad	Clinical Associate-Trillium
Ibrahim, Amir	Clinical Associate-Toronto Western Hospital
Kapila, Varun	Vascular fellowship - U of T
Nenshi, Rahima	MIS/Surgical Oncology Fellowship - U of T
Orzech, Neil	MIS fellowship - Cleveland Clinic
Shawyer, Anna	Pediatric Surgery Fellowship-McMaster University
Simpson, Jory	Breast fellowship - U of T

The new residents starting in the 2010-2011 class came from diverse medical schools as always. In a very competitive year, the University of Toronto was very lucky to attract its most highly ranked applicants. The new class includes the following:

Name of Resident	Medical School and Year of Graduation
Abramowitz, Daniel	Queens University, 2011
Byrne, James	Trinity University of Dublin, 2011
Cherniak, William	University of Calgary, 2011
Connor, Ashton	University of Toronto, 2009
Elmi, Maryam	University of Toronto, 2011
Ergun, Suzan	McGill University, 2011
Gomez Jaramillo, David	Javeriana University, Bogota 2007
Greenberg, Joshua	University of Toronto, 2011
Maggisano, Melinda	Trinity University of Dublin, 2011
Mutabdzic, Dorotea	University of Toronto, 2011
Pannell, Dylan	Queens University, 2007
Pooni, Amandeep	University of Toronto, 2011
Qureshi, Adnan	University of the Americas, 2011
Ramji, Karim	University of Alberta, 2009
Seemann, Natasha	University of Western Ontario, 2011
Strickland, Matt	Northern Ontario School of Medicine, 2010
Szasz, Peter	University of Toronto, 2011
Wong-Chong, Nathalie	University of Toronto, 2011
Yang, Teng-Chih Tony	University of Toronto, 2011
Simpson, Jory	Breast fellowship - U of T

Two new faculty were appointed to the "core" general surgery units. **Dr. Anand Govindarajan** returned to the University of Toronto after a two year surgical oncology fellowship at Memorial Sloan Kettering Cancer Centre. He will join the team at Mt. Sinai and contribute to the ongoing development of the PBMP and other GI surgical oncology at Mt. Sinai and Princess Margaret Hospital. Similarly, **Dr. Paul Karanicolas**, a graduate from the University of Western Ontario residency program and Memorial Sloan Kettering Cancer Centre Fellowship program, was recruited to the University of Toronto. He took on a position as a Hepatobiliary surgeon at Sunnybrook Health Sciences Centre and the Odette Cancer Program. His academic expertise is in clinical trials.

Promotion within the Faculty of Medicine is the ultimate measure of individual academic growth and contribution. In the Division of General Surgery, six were promoted to Associate or Full Professor:

Urbach, David	UHN	Promoted to Professor
Smith, Andy	SHSC	Promoted to Professor
Azzie, Georges	HSC	Promoted to Associate
Gagliardi, Anna	UHN	Promoted to Associate
Grantcharov, Teodor	SMH	Promoted to Associate
Reedijk, Michael	UHN	Promoted to Associate

TEACHING

In the teaching domain, it is noteworthy that Dr. Frances Wright won the 2011 Tovee Award for Undergraduate Teaching Excellence.

Additionally, Dr. Najma Ahmed and colleagues formally announced the plan to proceed with a modified competency-based curriculum starting in January 2012. This represents a bold innovation in residency training and takes advantage of the substantial body of educational research that has been done in this university department for the last many years by Dr. Teodor Grantcharov and others.

The teaching impact of the Division extends into continuing education. The 51st Update in General Surgery took place at the Fairmont Royal York Hotel and was a huge success, attracting of over 500 registrants.

The continuing education offerings of the division also extend to the Best Practices in General Surgery (BPiGS) program. This program championed by Dr. Robin McLeod continues to grow in stature across the city. Hospital administrators have invested in the BPiGS initiative and the program continues to expand its range of quality issues that it addresses. The expectation is that the BPiGS program will gradually disseminate and impact the quality of surgery throughout the province. Similarly, the Evidence-Based Reviews in Surgery (EBRS) which has been developed and championed through the efforts of Dr. McLeod and her team represent a major tangible teaching contribution from the Division.

RESEARCH

Research continues to flourish within the Division. There were 12 General Surgery residents in the Surgical Scientist training Program (SSP) during the 2010-11 academic year. Graduates from the program during that time included:

Resident	Supervisors
Elisa Greco, MEd (OISE)	Dr. Allan Okrainec Dr. Albert Matthieu
Bryan J. Wells, MSc (HPME)	Dr. David Urbach
Simon Yang, MSc (HPME)	Law, Calvin

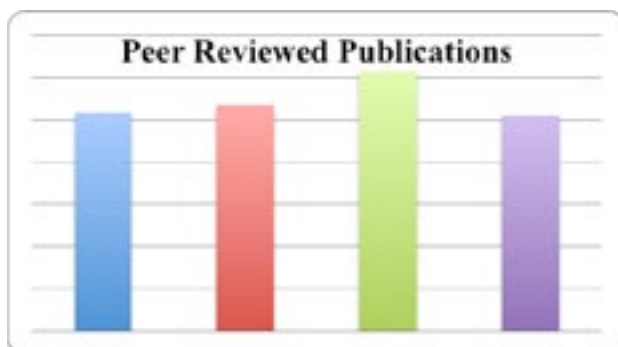
Importantly, two general surgery residents won Gallie-Bateman awards:

Eisar Al-Sukhni - 2nd Prize - *Diagnostic accuracy of MRI for assessment of T-category, nodal metastases and circumferential resection margin involvement in patients with rectal cancer: A meta-analysis* (Supervisor: Dr. Robin McLeod)

Barbara Haas - 3rd Prize - *Survival of the fittest: The hidden cost of under triage of major trauma* (Supervisor: Dr. Avery Nathens)

The 34th Annual Assembly of General Surgeons held on May 26th, 2011 at the Sutton Place Hotel was an extraordinary success. The Assembly highlights the scientific and academic achievements of the division as well as celebrating the graduating resident class. Professor Michael Solomon from the University of Sydney was the Bruce Tovee lecturer and highlighted a day that celebrated our University of Toronto Fellowships. Importantly, this was a homecoming for Professor Solomon who trained in the Colorectal Fellowship at the University of Toronto and has gone on to become a world leader in colorectal cancer.

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.





Division Of Neurosurgery

Andres Lozano, *Leslie Dan Professor and Chair of Neurosurgery*

The Division of Neurosurgery continued in its tradition of strong academic performance in its first year under the leadership of a new Chair and Residency Program Director. Our 66 faculty and residents published over 250 papers in top-tier journals including *Nature* and the *New England Journal of Medicine*. We established a Neurosurgical Education Cabinet to further enhance our world-class residency training program. Our residents captured three of four McKenzie Prizes, the most prestigious neurosurgical resident awards in the country. The year culminated with the establishment of the \$5.5M Greg-Wilkins Barrick Chair in International Surgery at UHN and the appointment of Mark Bernstein as the inaugural chairholder, representing the largest ever gift in the history of our Division.

RECRUITMENT

Sunit Das is an outstanding neurosurgeon who we recruited to the Department as a Surgeon-Scientist and to the surgical staff at St. Michael's Hospital. Dr. Das' clinical interest is in the surgical management of malignant brain tumours, with research interests in the biology of stem cells in the normal adult brain and in primary brain tumours. Past funding support from the Howard Hughes Medical Institute reflects the high level of excellence that he brings to our Division.

Nicholas Phan was appointed as a Surgeon-Investigator in the Department and to the surgical staff at Sunnybrook Health Sciences Centre. After his residency in Toronto, Dr. Phan completed a 2-year clinical fellowship in neurotrauma at the UCSF. He returns to us as arguably one of the best trained trauma neurosurgeons in the country. Dr. Phan's research is focused on the development of medical and surgical protocols for the treatment of severe traumatic brain injury.

PROMOTIONS

James Eubanks (affiliate scientist) has been promoted to Full Professor.

Moghan Hodaie now holds the rank of Associate Professor.

Gelareh Zadeh has been promoted to the rank of Assistant Professor.

FACULTY AND RESIDENT GRANTS

Karen Davis received a 5-year Canadian Institutes of Health Research Grant for her work on "Pain-Attention Interactions and the Descending Pain Modulation System."

Karen Davis received a 3-year grant from Workplace Safety and Insurance Board (WSIB) for her work on "Pre-existing patient factors associated with

sensorimotor recovery, chronic pain, and brain plasticity following surgical repair of peripheral nerve injuries."

Michael Ellis and **Peter Dirks** were awarded a grant from the Ontario Ministry of Health/Ontario Stroke System to support a pilot study of a prospective pediatric cerebrovascular disease database at The Hospital for Sick Children.

Michael Fehlings was awarded a 1-year CIHR Proof of Principle grant for his project entitled "Commercial development of bioengineered therapeutic strategy for spinal cord injury."

Michael Fehlings was awarded a 2-year McEwen Acceleration Award from the McEwen Centre for Molecular Medicine for his project, "iPS neural stem cells and bioengineered strategies to treat chronic spinal cord injury."

Michael Fehlings was awarded a Seed/Starter Research and Education Grant for his project entitled "Investigation of the neuroprotective effects of thioredoxin for the treatment of spinal cord injury" from the Cervical Spine Research Society.

Michael Fehlings was awarded a Hansjörg Wyss Foundation Award for his project "Intervertebral disc-derived multipotent stem cell rescue of the injured spinal cord."

Michael Fehlings was awarded a one-year, renewable grant from the Wings for Life Spinal Cord Research Foundation for his project entitled "Investigation of human piggyBac induced pluripotent stem cells for repair and regeneration of the injured cervical spinal cord."

Howard Ginsberg and **Cari Whyne** received a Commercialization grant from MaRS Innovation for their project entitled: Spinous Process Less INvasive Extendable fusion.

Ab Guha has received a 5-year CIHR grant for his work "Oncogene-containing microvesicles as mediators and messengers of tumor progression."

Ab Guha received a 2-year grant from the Cancer Research Society for his work on "Aberrations in EGFR in Human GBMs: Novel Diagnostic and Biomarker Strategies."

Ab Guha received a 2 year grant from B.R.A.I.N Child for his work on Receptor Tyrosine Kinase Expression, Activations and Inhibition in High Grade Pediatric Gliomas.

Ab Guha received a one-year grant from Brain Tumour Foundation of Canada for his work on the "Role of Peroxisomes in Gliomas."

Clement Hamani received a 4-year team grant from

the Canadian Institutes of Health Research (CIHR) and the ERA-NET project for his work describing the pathophysiology to promote focal therapy in the treatment of schizophrenia - an animal experimental study.

Clement Hamani received a 4-year CIHR operating grant for his work on "Antidepressant effects of deep brain stimulation and the serotonergic system."

The Stereotactic and Functional Neurosurgery Program at Toronto Western Hospital (**Andres Lozano**) was awarded a 1-year Fellowship Grant by the Neurosurgery Research and Education Foundation (NREF). The grant was made possible by funding from Codman & Shurtleff.

Loch Macdonald received a 2-year grant from the Heart and Stroke Foundation of Ontario, for his work entitled "Endothelial nitric oxide synthase after subarachnoid hemorrhage."

James Rutka received a research grant for his work entitled "The Role of Dysregulated HGF/c-Met pathway Signalling in Medulloblastoma Dissemination" from the Brain Tumour Foundation of Canada.

Charles Tator and **Karen Davis** received a 2-year grant from Services Incorporated Foundation for their work on post-concussion syndrome in professional athletes: A multidisciplinary study.

Jeff Wilson was selected for a Cervical Spine Research Society Resident/Fellow grant for his project entitled, "Determinants of outcomes from traumatic spinal cord injury: Development of a novel classification system to facilitate clinical trials and improved therapeutic strategies."

Victor Yang received a CIHR operating grant for his project on "Optical Coherence Tomography for Intraoperative Imaging During Skull Base Neurosurgical Procedures."

Gelareh Zadeh received a B.R.A.I.N.child grant for her work "Identifying non-invasive biomarkers of response to combinatorial antiangiogenic and radiation therapy."

Gelareh Zadeh received a grant from the Brain Tumor Foundation of Canada for her work on "Identifying genetic profile of bone invading meningiomas."

RESIDENTS AND FELLOWS HONOURS/ AWARDS/POSITIONS HELD

Soha Alomar won the ISRS Congress best poster award for "Electrophysiological assessment of tremor response after Gamma Knife thalamotomy in patients with medically intractable essential tremor" presented at the International Society of Radiosurgery, Paris, France, May 12, 2011.

David Cadotte was awarded the prestigious Starr Medal.

David Cadotte was the recipient of two UofT Postgraduate Awards, the Miriam Neveren Memorial Award and the Joseph M. West Family Memorial Fund.

Douglas Cook won the 2011 CNSS McKenzie first prize for Basic Science for his manuscript entitled "Extending the therapeutic window for reperfusion after stroke in nonhuman primates using a PSD-95 inhibitor."

Brian Drake was congratulated for the 2010 New York Academy of Medicine Lewis Rudin Glaucoma Award for his contribution, as a summer student, to the award winning article, (Y.H. Yücel, M.G. Johnston, T. Ly, M. Patel, B. Drake, E. Gümü, S.A. Fraenkl, S. Moore, D. Tobbia, D. Armstrong, E. Horvath, N. Gupta) Identification of lymphatics in the ciliary body of the human eye: a novel "uveolymphatic" outflow pathway. *Experimental Eye Research* 2009, 89: pp 810-819.

Mike Ellis received a Travelling Fellowship from the American Association of Neurological Surgeons/ Congress of Neurological Surgeons Section on Pediatric Neurological Surgery (Children's Hospital Boston, January-February 2011.)

Greg Hawryluk won the 2011 CNSS McKenzie second prize for Basic Science for his manuscript entitled "Understanding How a Cell Transplantation Paradigm Leads to Functional Recovery From Spinal Cord Injury: The Importance of Remyelination."

Greg Hawryluk received 3rd place for the Gallie-Bateman Prize for his work entitled "Remyelination is the key mechanism underlying functional recovery from spinal cord injury following neural precursor cell transplantation."

Gregory Hawryluk was "Top Gun" at the Brain Tumour Debunking, Top Gun Challenge, 2011 American Association of Neurosurgeons Annual Meeting, April 10-13, 2011 in Denver, Colorado.

Betty Kim was selected as this past year's Royal College Fellowship Winner.

Betty Kim was awarded by the EANS-CNS as one of five residents in North America to attend the EANS-CNS course on Brain Tumors held in Halkidiki, Greece in September, 2010.

Adrian Laxton won the 2011 Canadian Neurosurgical Society KG McKenzie Memorial Prize for Clinical Neuroscience Research. His manuscript submission was entitled "A Phase I Trial of Deep Brain Stimulation of Memory Circuits in Alzheimer Disease."

Scellig Stone was awarded the American Academy of Neurosurgery resident award for his PhD-related work on deep brain stimulation inducing neurogenesis. This international award is the most prestigious given to a resident by a neurosurgical body, and we are proud that it has been conferred once again to a resident from the University of Toronto.

Adrienne Weeks received 1st place for the Gallie-Bateman Prize in the competition for her work entitled "ECT2 and RASAL2 mediate mesenchymal-mesenchymal transition in human astrocytoma cells."

Jeff Wilson was awarded a 2-year fellowship from the Christopher Reeve Foundation for his project entitled, "Determinants of outcomes from traumatic spinal cord injury: Development of a novel classification system to facilitate clinical trials and improved therapeutic strategies."

FACULTY HONOURS/AWARDS/POSITIONS HELD

Michael Fehlings (1) Received the Hansjörg Wyss Foundation Award from AOSpine International for his project entitled, "A cellular and molecular strategy to unlock the regenerative reservoir of the notochordal cell: A novel approach to treat intervertebral disc degeneration," (2) Won 3rd Place with a Clinical Science Award from the Cervical Spine Research Society for his paper entitled, "Anterior vs. posterior surgical approaches to treat cervical spondylotic myelopathy: Outcomes of the prospective multicenter AOSpine North America CSM study in 280 patients," (3) Awarded for Best Clinical Paper presented at the Global Spine Congress 2011 in Barcelona, Spain.

Mojgan Hodaie was awarded the Wightman-Berris Award for postgraduate education.

Abhaya Kulkarni was named the new Residency Program Director after a rigorous search and selection process.

Andres Lozano was recipient of the 2010 Winn Prize Award from the Society of Neurological Surgeons. He also became the Chair of the Division of Neurosurgery.

James Rutka served as the President of the American Association of Neurological Surgeons. He was also appointed Chair of the Department of Surgery at UofT, the first Department of Surgery Chair from Neurosurgery; and was elected to Fellowship in the Canadian Academy of Health Sciences (CAHS).

Charles Tator was the recipient of the UHN 2011 Global Impact Award, given to UHN staff members who have been leaders in medicine and science, and whose past work have led to improvements in health care well beyond our borders.

Michael Taylor received the George Armstrong-Peters Prize for outstanding achievements in research by a surgical faculty at the early stages of their career. He also ranked #2 in the *Toronto Star's* list of the biggest scientific discoveries of 2010.

Michael Tymianski was awarded a Tier 1 Canada Research Chair in Translational Stroke Research. This prestigious appointment recognizes outstanding Canadian scientists. Michael joins the ranks of only a select few surgeons who have attained this level of achievement in their research careers. He also received an ORF grant from the Ministry of Research and Innovation for 5 years for TRPM7 Inhibitors for the treatment of stroke and myocardial ischemia.

Gelareh Zadeh received the Annual Clinician Scientist Award at the American Society for Therapeutic Radiation and Oncology (ASTRO) Annual Meeting.

VISITING PROFESSORS

E. Harry Botterell Professorship

We were pleased to receive Professor Matthew Howard III as the 28th Botterell Visiting Professor on Nov. 18-19, 2010. The visit included case presentations by the residents chaired by Taufik Valiante and the Horsey Prize competition for clinical research chaired by Mojgan Hodaie.

William S. Keith Professorship

On June 9-10, 2011, we welcomed Dr. Nelson Oyesiku to Toronto as our 36th Annual Keith Visiting Professor. Dr. Oyesiku delivered three lectures, including The Royal College of Physicians and Surgeons of Canada Lecture as well as an excellent talk on "What you should know about publishing in NEUROSURGERY," given in his capacity as the journal's Editor-in-Chief.

Marshall Lectureship

This past year's Marshall Lecture was held on April 27, 2011 at Toronto Western Hospital. Dr. Andres Maas, Professor and Chairman of the Dept. of Neurosurgery, University Hospital Antwerp, Belgium spoke on "Achievements, failures and future direction of clinical research in TBI."

Tator-Turnbull Lectureship

The 10th Annual Charles H. Tator-Barbara Turnbull Lectureship in Spinal Cord Injury took place on November 12, 2010. Our Visiting Lecturer was Dr. V. Reggie Edgerton, Professor and Vice-Chair of Integrative Biology and Physiology at the Brain Research Institute, UCLA.

Krembil Neuroscience Centre Grand Rounds

This year's Krembil Neuroscience Centre Grand Rounds were held in conjunction with the University of Toronto City-Wide Neurosurgery Rounds on February 17, 2011 at Toronto Western Hospital. Our speaker was Jack El-Hai, author of "The Lobotomist" and contributor to *The New Yorker* and *Scientific American*.

Sunnybrook Hospital City-Wide Rounds

Dr. Evandro de Oliveira was our Visiting Professor for City-Wide Rounds held at Sunnybrook Hospital on April 9, 2011. Dr. Oliveira is a master microneurosurgeon who for many years performed neuroanatomical work with Dr. Rhoton.

DIVISION FIRSTS

In the Fall of 2010, our Division created its first Neurosurgical Education Cabinet, in charge of maintaining and enhancing the standard of excellence that our residency program is recognized for around the world. Joining Residency Program Director **Abhaya Kulkarni** were **Eric Massicotte** as Director of Undergraduate Education for the Division of Neurosurgery, **Julian Spears** as Associate Residency Program Director, and **Todd Mainprize** as Fellowship Director for the Division of Neurosurgery, thereby providing balanced representation across our Division's hospitals.

In a new tradition for our Division, we combined the annual William S. Keith Professorship dinner with a graduation ceremony for our PGY6 residents. **Andres Lozano**, **Abhaya Kulkarni** and Keith Professor Nelson Oyesiku presented our graduating residents with mounted photographs taken with their mentors.

Two new endowed chairs were planned or established during this academic year:

(1) A fundraiser for an Endowed Chair for the Division Chief of Neurosurgery at Toronto Western Hospital,

and (2) Awarding the Greg Wilkins-Barrick Chair in International Surgery to **Mark Bernstein** as the inaugural Chair. The latter represents the largest ever gift to our Division and is a well-deserved recognition of his work in Neurosurgery at the University of Toronto.

ROYAL COLLEGE FELLOWSHIPS

The following residents successfully passed their 2011 FRCSC fellowship examinations: **Ryan DeMarchi, Zul Kaderali, Paul Kongkham** and **Adrian Laxton**.

The Division of Neurosurgery has passed the test of leadership change this past year. We continue to be a premiere program with special stature globally, one that the world looks to for leadership on clinical and academic fronts. Our research productivity as measured by papers, citations and impact is stellar. Our residents are consistently recognized with the top trainee awards in our discipline. I thank each of our faculty, residents and fellows for their outstanding contributions to our academic excellence.



Division Of Orthopaedics

Ben Alman, A.J. Latner Professor and Chair of Orthopaedic Surgery

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 develop 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.

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 on inventing the future of Toronto Orthopaedics.

RECRUITMENT

We welcomed two new recruits this academic year, Richard Jenkinson and Simon Kelley. Richard has a clinical practice focused on trauma and lower limb reconstruction and an academic focus on education. Simon's pediatric orthopaedic practice focuses on limb reconstruction and hip surgery with a research focus on stem cell technologies and how they may be used to enhance limb regeneration. We all welcome Richard and Simon to our faculty.

PROMOTIONS

Congratulations to our faculty who were successful at academic promotion this year at the university. Peter Ferguson and Unni Narayanan were promoted to Associate Professor. Thanks also to our division member, Robin Richards, who chaired the Departmental Promotions Committee.

RESEARCH GRANTS

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 maintain research funding at a high level, garnering a total of more than \$6 million dollars this year.

RESIDENT/FELLOWS HONOURS/AWARDS/ POSITIONS HELD

The Lawson Award for Best Academic Resident, as adjudicated by a committee, went to Om Sharma, and the Meisami Award for Most Compassionate Resident, as selected by the faculty, went to Syndie Singer. The R.I. Harris Award for the best presentation during Graduation Day went to Ali Zahrai. Recognized for best sports medicine talk was Bob Jackson. The award for Best Paediatric Paper went to Nick Yardley, Harsha Malempati and Om Sharma respectively. The James Waddell Award for the Best PGY 4 Resident went to Christopher Geddes. Tim Daniels received the Divisional Award for Best Teacher as selected by the residents.

Jas Chahal, an orthopaedic fellow who graduated from our program last year, got an Honorable Mention for his presentation: "The multi-ligament quality of life questionnaire (ML-QOL): Development and preliminary testing of measurement properties in patients with multi-ligament knee injuries" (supervisor Aileen Davis).

VISITING PROFESSORS

Leo Donnan (Melbourne), Jane Aubin (U of T), Mohit Bhandari (Hamilton), Herb Schwartz (Nashville, Tennessee), Peter Choong, (Melbourne), Stefan Lohmander (Lund, Sweden), Martin Boyer (Saint Louis) and Shafique Pirani (UBC) all visited Toronto this year and gave University wide grand rounds.

Our Graduation Day Visiting Professor was Richard Gelberman, the Fred C. Reynolds Professor and Chairman of the Department of Orthopaedic Surgery at Washington University Medical School in St. Louis, Missouri. He gave a fabulous and very insightful "Nerve Repair" talk as his Salter lecture. Graduating residents presented their research work during the main Graduation Day activities.

FACULTY HONOURS/AWARDS/POSITIONS HELD

Two of our faculty members each received university-wide education awards: David Backstein was recipient of the Dean A.L. Chute Award (The Silver Shovel) Award, for Excellence in Postgraduate Medical Education; and the Innovation in Postgraduate Education Award went to Albert Yee.

Bill Kraemer received the Tovee Postgraduate Prize for his educational achievements and Ben Alman earned the Charles Tator Award for his training of surgeon scientists at Gallie Day this year.

Our faculty received a large number of awards this past year and these are listed elsewhere in this annual report.

DIVISION'S FIRSTS

We completed the second 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. I want to take this opportunity to thank all of our faculty members who worked on this initiative. Markku Nousiainen, our newly appointed Associate Program Director, and Peter Ferguson, our newly appointed Residency Program Director, and Connie Johnson, the administrative coordinator for the program, have done a phenomenal job in running the day to day aspects. By all measures, this program has been a great 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 incorporated this into our training program for all residents this July. Our third cohort of trainees entered the program this year, and we are looking forward to reporting our results of this very innovative educational program. There is worldwide interest in this program, and I am delighted that the first peer-reviewed publications on the outcome of this novel training approach were published this past year. This is the first such curriculum, which will likely be a fundamental improvement over the current residency training model.

The Toronto Musculoskeletal Centre (a university-wide extra-departmental unit) was initiated this year. While the centre crosses all institutions and departments across the broad University of Toronto and its affiliated hospitals community, the centre has two nodes at Sunnybrook Hospital and Mount Sinai Hospital. The centre will focus on developing initiatives to help translating research from bench to bedside, to the backyard. It will develop a new graduate education program, provide seed funding for interdisciplinary research, and help with the recruitment of new MSK researchers to Toronto. Its ultimate goal is to develop new and improved methods of treating patients with orthopaedic and other musculoskeletal conditions. Our division members will be able to use the centre infrastructure to develop multi-centre research and to help develop new interdisciplinary work.

Sevan Hopyan and Cari Whyne, as co-Chairs of our research committee continue to do 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.

LEADERSHIP CHANGES/PROGRESSIONS

This past year, Bill Kraemer stepped down as our Residency Program Director. He did a stellar job over the past five years, maintaining a top-notch residency, recruiting stellar new residents, achieving a high pass rate at The Royal College examination, and instituting the competency-based curriculum. Our program, however, is in great hands with Peter Ferguson as our newly appointed Program Director. One of his initiatives will be to take the best aspects of the competency-based curriculum and the traditional curriculum to develop a new residency-wide comprehensive orthopaedic curriculum.

Our multi-site clinically-based programs continue to mature. Albert Yee (Sunnybrook) has been doing a great job (along with Michael Fehlings, Neurosurgery-TWH) as co-Director of the UofT Spine Program. This program is not only integrating spine care, education and research across orthopaedics but also between orthopaedics, neurosurgery and other disciplines treating the spine.

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

Darrel Ogilvie Harris (UHN and Women's) was selected as Interim Head of our Sports Program. This program united clinicians from several of our hospitals and developed shared clinical resources for outpatient care at Women's College Hospital towards the development of an innovative comprehensive sports clinical, education, and research program.

FURTHER DEVELOPMENTS

We worked to develop a renewed strategic plan for our division this past year, entitled "Innovation and Evolution: Inventing the future of Toronto Orthopaedics." Over the next five years we will focus on (1) establishing the best orthopaedic training program in the world; (2) leveraging the newly established Toronto Musculoskeletal Centre to develop world class innovations in patient care based on high quality research; (3) increasing clinical coordination of orthopaedic clinical care delivery among the Toronto hospitals; and building stronger relationships with alumni. I am delighted that our faculty has decided on such lofty goals, and am looking forward to the accomplishments we will achieve as we implement measures towards achieving these goals.



Division Of Plastic And Reconstructive Surgery

Dimitri Anastakis, *Chair*

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

RECRUITMENT

Linda Dvali was appointed as the new Division Head to the Toronto East General Hospital as of April, 2011. Dr. Dvali's teaching expertise and leadership skills will strengthen the residents' rotation experience at the Toronto East General Hospital and continue to build a strong relationship with the University of Toronto.

Atul Kesarwani was appointed as part-time Lecturer at the University of Toronto. Dr. Kesarwani trained in General Surgery in Ottawa and obtained his Plastic Surgery training at the University of Toronto. He has been on Active Staff at the Toronto East General Hospital since 1988 and Division Head from 1994-2005.

Laura Snell was recruited to the Sunnybrook Health Sciences Centre as an Assistant Professor on September 1, 2010. Dr. Snell's practice of surgery includes a special expertise and interest in oncology reconstruction with a major focus in breast reconstruction. Dr. Snell will take on the leadership role of Journal Club Coordinator for the Division as of July 1, 2011.

Joan Lipa was recruited to the Sunnybrook Health Sciences Centre as an Associate Professor on January 4, 2011. Dr. Lipa is partnering with Dr. Snell to develop the Breast Reconstruction and Oncologic Reconstructive Service and Research Group at Sunnybrook Health Sciences Centre. They are able to offer immediate reconstruction at Sunnybrook through a coordinated effort with Surgical Oncologists at the Odette Cancer Program. Dr. Lipa's practice of surgery includes a special expertise and interest in oncology reconstruction.

Christine Novak was recruited as an Associate Professor with the Division of Plastic and Reconstructive Surgery, Department of Surgery, as a Scientist at the Toronto Rehabilitation Institute and a Research Associate at the University Health Network in the Hand Program (Toronto Western Hospital) and the Wharton Head & Neck Centre. She has a Bachelor of Science (Honours Kinesiology) from the University of Waterloo, a Bachelor of Science in Physical Therapy and a Master of Science degree from the University of Toronto. In 2010, she completed her PhD at the Institute of Medical Science at the University of Toronto and the

title of her dissertation was Biomedical and Psychosocial Factors Associated with Pain and Disability after Peripheral Nerve Injury. Her research focus has been in the area of clinical outcomes and assessment of patients with musculoskeletal disorders, particularly nerve injury and nerve compression. As a physiotherapist, her clinical practice has focused on the management of patients with upper extremity nerve related pathologies.

PROMOTIONS

Oleh Antonyshyn and **Dimitri Anastakis** were promoted to Full Professor.

Toni Zhong was promoted to Assistant Professor.

FACULTY AND RESIDENT GRANTS

Stefan Hofer, **Thomas Waddell** and **Siba Haykal**: Research endeavour entitled, "Determining the Immunogenicity of Decellularized Tracheal Allografts," funded by Physicians Services Incorporated Foundation for \$155,000 from 2011-2013.

Toni Zhong, **Nancy Baxter**, **Stefan Hofer** and **Melinda Musgrave**: Research endeavour entitled, "Utilization and Timing of Breast Reconstruction in the Treatment of Breast Cancer in Ontario: A Population-Based Study," funded by Canadian Breast Cancer Foundation Research Project Grant Program for \$257,474 from 2011-2014.

Toni Zhong, **Coimbatore Srinivas**, **Stuart McCluskey**, **Stefan Hofer**: Research endeavour entitled, "The use of Transversus Abdominis Plane (TAP) Block in Autologous Breast Reconstruction Donor Site: A Randomized, Double-blind, Placebo-controlled Trial," funded by Educational Foundation - Canadian Society of Plastic Surgeons - Outcome/Clinical Study Research Grant for \$10,000 from 2010 - 2011.

Toni Zhong, **Coimbatore Srinivas**, **Stuart McCluskey**, **Stefan Hofer**: Research endeavour entitled, "The use of Transversus Abdominis Plane (TAP) Block in Autologous Breast Reconstruction Donor Site: A Randomized, Double-blind, Placebo-controlled Trial," funded by the Plastic Surgery Educational Foundation - American Society for Reconstructive Microsurgery - Combined Pilot Research Grant for \$10,000 from 2011 - 2012.

Melinda Musgrave, **A. Gagliardi**, **Nancy Baxter** and **R. Nisenbaum**: Research endeavour entitled, "Exploring Factors that Influence Breast Reconstruction Use and Outcomes: Phase I: How do Physician Attributes Influence Reconstruction Decision Making?" funded by Canadian Breast Cancer Foundation Research Project for \$188,100 from 2010-2012.

Kate Sauks, **Nancy McKee**, **Anne Agur** and **Paulo Koeberle**: Research endeavour entitled, "Biochemical

and Cellular Changes: Injections Make a Difference within the Rat Gastrocnemius Muscle and Calcaneal Tendon Post Tenotomy. Do Traumeel Injections Make a Difference?" funded by Canadian CAM Research Fund - Holoistic Research Foundation of Canada for \$4,858 in 2010.

Oleh Antonyshyn and James Mainprize: Research endeavour entitled, "A 3D Statistical Skull and Face Model: Development and Application in the Design and Outcome Analysis of Craniofacial Surgery," funded by AO Craniomaxillofacial Clinical Priorities Program Research Grant for \$125,000 from 2010-2012.

Jeff Fialkov and Cari Whyne: Research endeavour entitled, "Finite Element Modeling of the Human Craniofacial Skeleton," funded by Advanced Craniomaxillofacial Forum Research Grant for \$60,000 in 2010.

Paul Binhammer, Dimitri Anastakis, Linda Dvali and **Herb von Schroeder**: Research endeavour entitled, "Impact of Psychosocial Factors and Treatment Choice on Return to Work in Carpal Tunnel Syndrome," funded by American Foundation for Surgery of the Hand for \$16,000 from 2010-2012.

Cho Pang: Research endeavour entitled, "Pharmacological Preconditioning and Post-Conditioning of Human Skeletal Muscle Against Hypoxia (Ischemia)/ Reoxygenation (Reperfusion) Injury In Vitro." Received Miscellaneous/Industrial funding for \$105,000 from April 2010-March 31, 2011.

Greg Borschel and **Tessa Gordon**: Research endeavour entitled, "Nerve Research Centre at the Hospital for Sick Children in Toronto," funded by Canada Foundation for Innovation, Leaders Opportunity Fund 26497 for \$649,322 from July 2010-August 2015.

Greg Borschel, Alex Bilbily, Matthew Wood and **Tessa Gordon**: Research endeavour entitled, "Use of a Tissue Engineered Nerve Graft to Improve Nerve Regeneration." Received Comprehensive Research Experience for Medical Students (CREMS) funding for \$2,750 from 2010-2010.

Greg Borschel, Daniel Ennis, Matthew Wood and **Tessa Gordon**: Research endeavour entitled, "Use of Microspheres to Enhance Neuromuscular Junction Formation Following Nerve Injury." Received Comprehensive Research Experience for Medical Students (CREMS), Summer Program 2010 funding for \$2750 from 2010-2010.

Tessa Gordon and Kelvin Jones: Research endeavour entitled, "Exercise Using Neuromuscular Electrical Stimulation Slows the Progression of ALS in the SOD1 Mouse." Received an ALS Operating Bernice Ramsey Discovery Grant for \$50,000 from 2010-2011.

Kelvin Jones and **Tessa Gordon**: Research endeavour entitled, "Promoting Protection of Functionality Intact Motor Units in Amyotrophic Lateral Sclerosis (ALS)." Receiving funding for \$146,784 from 2010-2015.

Marc Jeschke: Research endeavour entitled, "Characterization of Hepatic Dysfunction Post-Burn." Received a CFI funded grant for \$1,000,000.

Marc Jeschke: Research endeavour entitled, "Glucose Control in Severely Burned Patients: Mechanisms and Therapeutic Potential," funded by the Physicians'

Services Inc. Foundation for \$165,000 in 2010.

John Semple, Kristen Davidge and **Mitchell Brown**: Research endeavour entitled, "Quality of Recovery in Women Undergoing Autogenous Breast Reconstruction in an Ambulatory Setting," funded by Women's College Hospital for \$13,500 in 2010.

John Semple, Mitchell Brown, Kristen Davidge and P. Morgan: Research endeavour entitled, "Implementation of 23 hr Length of Stay for Breast Reconstruction Surgery: Quality of Recovery Evaluation Following Discharge," received a Women's College Hospital AFP Innovation Grant for \$29,841 from 2011-2012.

Karen Davis, **Dimitri Anastakis**, and Jeff Katz: Research endeavour entitled, "Pre-existing Patient Factors Associated with Sensorimotor Recovery, Chronic Pain, and Brain Plasticity Following Surgical Repair of Peripheral Nerve Injuries," funded by the Workers Safety and Insurance Board, Research Advisory Counsel for \$348,273 from 2011 - 2014.

RESIDENTS HONOURS/AWARDS/ POSITIONS HELD

Siba Haykal: Enrolled in the PhD Program at the Institute of Medical Science. CIHR Training Program in Regenerative Medicine Scholarship.

Siba Haykal: Awarded the 2011 Vanier Canada Graduate Scholarship (Vanier CGS) which was created to attract and retain world-class doctoral students and to brand Canada as a global centre of excellence in research and higher learning. It is worth \$50,000 per year for three years.

Siba Haykal: Awarded the Postgraduate Research Award (PGME) for her project entitled, "Determining the Immunogenicity of Decellularized Tracheal Allografts." It is worth \$9,990.

Siba Haykal: Best Basic Science Paper Award 2010-2011 for "Evaluating the Extracellular Matrix Components of Decellularized Tracheal Allografts for Airway Transplantation."

Siba Haykal: Received third place at the Gallie-Bateman competition for 2010-2011 for "Evaluating the Extracellular Matrix Components of Decellularized Tracheal Allografts for Airway Transplantation."

Kristen Davidge: Best Clinical Paper Award for "Qualitative Assessment of Patient Experiences Following Sacrectomy and Reconstruction," 2010-2011.

Karen Cross: Recipient of the Dr. Leo Mahoney Resident Teaching Award 2010-2011.

Karen Cross: Mentor Canada, Johnson and Johnson Medical Companies Prize for Best Clinical Paper Award 2010-2011 for "Multiphoton Imaging of Acute Thermally injured Tissue: A Preliminary Assessment of an Emerging Technology."

Kunaal Jindal: Mentor Canada, Johnson and Johnson Medical Companies Prize for Best Clinical Paper Award 2010-2011 for "Results of Primary Orbital Fracture Repair: An Analysis of Morphological Outcomes."

Ryan Neinstein: Awarded Best Paper at the 2011 American Society of Reconstructive Microsurgery for abstract entitled, "The Role of Peri-operative Fluid

Infusion Rate on Postoperative Complications Following Microsurgical Breast Reconstruction," co-supervised by Drs Toni Zhong and Stefan Hofer. This work was accepted for publication in Plastic and Reconstructive Surgery.

Taiba Al-Rasheed: Recipient of the Dr. R. Wilson Award 2011. This award was presented to Dr. Al-Rasheed on May 6, 2011 at the Gallie Dinner and is given to surgical residents who are rated highly by undergraduate students as being outstanding teachers.

Taiba Al-Rasheed: Awarded The Educational Foundation of the CSPA 2011 funding towards the Operation Rainbow Mission to India from March 2 -12, 2011 (\$2,500).

FELLOWS HONOURS/AWARDS /POSITIONS HELD

Abdullah Kattan: Received the 2010 Lindsay Research Award presented at the 8th Annual Lindsay-Thomson Pediatric Plastic Surgery Symposium for "Does Active Range of Motion in Children with Obstetrical Brachial Plexus Palsy Diminish Over Time?"

Tatiana Cypel: Successfully defended her MSc thesis entitled, "In Vitro Assessment of Osteoblast Behaviour in Infants with Craniosynostosis."

FACULTY HONOURS/AWARDS /POSITIONS HELD

Kyle Wanzen: Arnis Freiberg Faculty Teaching Excellence Award 2011.

Toni Zhong: William K. Lindsay Faculty Research Mentor Award 2011.

Toni Zhong: Conferred an M.H.S. degree in Clinical Epidemiology by the School of Public Health, Harvard University during this academic period and awarded with one of two Outstanding Paper Presentations by the American Society for Reconstructive Microsurgery (ASRM) at the 2011 Annual Meeting in Cancun, Mexico for the project entitled, "Peri-operative Fluid Considerations to Minimize Early Postoperative Complications in Free Flap Breast Reconstruction." She will also take on the roles of Breast Reconstruction Fellowship Coordinator and Clinical Fellowship Coordinator in the Division as of July 1, 2011.

Dr. Melinda Musgrave: Donald J. Currie Undergraduate Teaching Award 2011 from St. Michael's Hospital.

Ralph Manktelow: In December 2011, Dr. Ralph Manktelow formally retired from his Associate position at St. Joseph's Hospital. Dr. Manktelow was honoured by the International Federation of Societies for Surgery of the Hand (IFSSH) at their International Congress in Seoul in November 2010. He was named a pioneer of Hand Surgery. This is the highest international recognition available to a hand surgeon.

James Mahoney: Received 2nd place in the Young Investigators Award at the Society for Advanced Wound Care for his team's work on lower extremity complications entitled, "A Needs Assessment of Intervention to Reduce the Risk of Wound Complications Following Saphenous Vein Harvesting." The team consisted of Jiayi Hu, Laura Teague, Rosanne Nisenbaum, Lisa Bunn and James Mahoney.

Ron Zuker: Host Chair for the May 22-27, 2011 IPRAS meeting in Vancouver.

John Semple: Along with Terri Stuart-McEwan and Victoria Noguera, received the Leading Practice Award entitled "Ambulatory Model of Care for Breast Reconstruction" by Accreditation Canada 2010-2011. In February 2011, Dr. Semple became a member of the Judicial Council for the Canadian Society of Plastic Surgery in February 2011.

Dimitri Anastakis: The Wightman-Berris Academy Award for Individual Teaching Excellence, 2010-2011, Faculty of Medicine, University of Toronto. Dr. Anastakis is also the Surgeons as Educators Course Chair for the American College of Surgeons, Division of Education for the period November 2010 to Present. He was the Vice-President of the Association for Surgical Education Executive Commission from Apr 23, 2010 - Mar 22, 2011 and is the incumbent President elect.

VISITING PROFESSORS

2011 Hoyle Campbell Visiting Professor

This year's Hoyle Campbell Visiting Professor was Dr. Joseph E. Losee. Dr. Losee is a Professor of Surgery and Pediatrics in the Division of Plastic and Reconstructive Surgery at the University of Pittsburgh Medical Center. He has been the Program Director for the Residency Training Program in Plastic Surgery for nearly a decade. He is the Chief of the Division of Pediatric Plastic Surgery at Children's Hospital of Pittsburgh of UPMC, where he is also the Director of the interdisciplinary Pittsburgh Cleft-Craniofacial Center. As well, he is the Program Director for the Pediatric Plastic and Craniofacial Surgery Fellowship. Dr. Losee serves on the Board of Directors of four national societies in Academic Plastic Surgery, including the American Society of Plastic Surgery and the Association of Academic Chairmen in Plastic Surgery. He edited, "*Comprehensive Cleft Care*," the authoritative text on Cleft Surgery, and authored over 70 peer-reviewed articles and 20 book chapters. His basic science research is focused on bone and suture regulation, as well as skull defects in infants.

Recently, Dr. Losee assembled a team and received University of Pittsburgh IRB approval for Face Transplantation. As well, he has become the PI of the Hand Transplantation Program at UPMC. Visiting Professor events were held on Thursday, February 17th, for the Visiting Professor and Senior Residents only. Friday, February 18th 2011 was dedicated to the Annual Division of Plastic and Reconstructive Surgery Research Day for all faculty, residents, fellows and alumni at the St. Andrew's Club and Conference Centre and was sponsored by our various corporate partners.

9th Annual R.T. Manktelow Hand and Microsurgery Lectureship

This year's Ralph T. Manktelow Hand Surgery Day was held on October 15, 2010. This year's Visiting Professor was Professor Steven Hovius, Chief of the Division of Plastic and Reconstructive Surgery, Erasmus MC, Rotterdam, the Netherlands. Dr. Hovius' keynote address was entitled, "Things I Used To Do (Reflections on Treatment of Hands)." Organizers were Dr. Linda Dvali and Dr. Stefan Hofer.

3rd Advanced Craniomaxillofacial Conference

The 3rd Advanced Craniomaxillofacial Conference was held on October 29th and 30, 2010 and was jointly chaired by Drs. Oleh Antonyshyn and Chris Forrest. This unique two-day event attracted over 100 registrants and featured live craniomaxillofacial surgery from Sunnybrook Health Science Centre and The Hospital for Sick Children performed by Plastic Surgery, Oral-Maxillofacial Surgery, Ophthalmology and Head and Neck Otolaryngologists. For the first time, live surgery was streamed over the internet and attracted the attention of over 400 additional registrants from all across the globe.

7th Annual Lindsay-Thomson Symposium in Paediatric Plastic Surgery

7th Annual Lindsay-Thomson Symposium in Paediatric Plastic Surgery was held on November 4, 2010. Dr. Bryan Sommerlad was the 2010 Vale Visiting Professor from Great Ormond Street Hospital in London and is world renowned for his cleft work. He was the invited guest speaker at the 2010 Lindsay Thomson Pediatric Plastic Surgery Symposium and spoke on "Clefts: A Universal Challenge".

Surgical Services Grand Rounds for Ethics Week

Surgical Services Grand Rounds for Ethics Week was held at the Hospital for Sick Children on November 12th, 2010. Dr. Maria Siemionow from the Cleveland Clinic was the visiting Guest Lecturer. She was able to share her extensive experience with composite tissue allotransplantation and present the first case of near-total facial transplant that she performed at the Cleveland Clinic in 2008.

Continuing Medical Education

11th Annual Toronto Breast Symposium

The 11th Annual Toronto Breast Symposium was held on April 14, 2011 at the Sutton Place Hotel and welcomed Visiting Professors: Dr. Fritz E. Barton, Jr. of Dallas, Texas, Dr. Steven Fagien of Boca Raton, Florida and Dr. Constantino G. Mendieta of Coconut Grove, Florida. This symposium was chaired by Dr. Mitch Brown and co-chaired by Drs. Brett Beber and Kyle Wanzel.

41st Annual Aesthetic Plastic Surgery Symposium

The 41st Annual Aesthetic Plastic Surgery Symposium was held from April 15th – 16, 2011. Visiting Professors included: Dr. Steven Fagien, Boca Raton, Florida as the University of Toronto Visiting Professor; Dr. Fritz E. Barton Jr., Dallas, Texas as the Walter J. Peters Lecturer; and Dr. Constantino G. Mendieta, Coconut Grove, Florida as the W.R.N. Lindsay Visiting Professor. Both symposia were well attended and the quality of the lectures was outstanding. This symposium was co-chaired by Dr. Frank Lista and Dr. Tom Bell.

2nd Annual Division of Plastic and Reconstructive Surgery Research Day

2nd Annual Division of Plastic and Reconstructive Surgery Research Day was held on February 18, 2011 at the St. Andrew's Club and Conference Centre. This mini-symposium was well attended with 80 attendees which included faculty, residents, fellows and alumni. For the first time this year, the annual Research Day was CEPD accredited. What was most notable this year during the Research Day was the evaluative process from supervisors of the projects, the compilation of feedback from the visiting professor and two judges, and the fact that 75% of the resident presenters received recognition awards for their high caliber research.

DIVISION FIRSTS

First Biannual Pediatric Upper Extremity Symposium

The first Biannual Pediatric Upper Extremity Symposium was held on October 14, 2010. Professor Steven Hovius, Chief of the Division of Plastic and Reconstructive Surgery, Erasmus MC, Rotterdam, The Netherlands, was the inaugural invited lecturer. The event was the first of its kind and was a true multidisciplinary meeting with 80 registrants from the field of plastic surgery, orthopedic surgery, occupational therapy, physiotherapy and interventional radiology from the academic centers in Ontario with an interest in the pediatric upper extremity. This event was held at the Arts and Letters Club on Elm Street in Toronto. The course co-ordinators were Dr. Christopher Forrest and Dr. Stefan Hofer.

Plastic Surgery School

Plastic Surgery School was implemented in September 2010 as the Division's first Academic Half Day for the Senior Residents. Academic sessions are considered mandatory protected time for the residents. Most of these sessions are designed for senior residents, however some of the sessions are designed for both senior and junior residents. Plastic Surgery school takes place on Mondays from 8:00-11:00 a.m. and includes Resident Seminars, Ethic sessions, Surgical Skills sessions, and CanMEDS seminars/workshops. Each of these sessions, as well as all academic activities, have been formally evaluated, with feedback sent directly to the facilitators to use to create change where necessary as it relates to improved teaching methods.

CanMEDS Workshop

Several faculty have assigned roles for implementing and incorporating the teaching of each of the seven CanMEDS roles. Seminars/lectures/assignments have been implemented into the training program for each of these roles. Dr. Melinda Musgrave organized and executed an exceptionally unique two-part workshop. The first part was an all day workshop held on November 8, 2010 which entailed completing an online survey entitled, "Insights Evaluator" prior to the start of this workshop. At the outset of this workshop, senior residents took on assigned projects and a dinner presentation followed during Part II of the workshop scheduled last April 6, 2011, with faculty in attendance. All papers presented were then submitted for publication.

Graduation Gala Event

The combined celebration of 90 Years of Plastic Surgery in Toronto was one of the highlights of the past year, and the Grand Banking Ballroom of One King West Hotel was the venue of this Division Graduation Gala Event held on June 18, 2011.

IAMGOLD & AMREF Project

The Division of Plastic and Reconstructive Surgery, with a major donation from IAMGOLD Corporation, began a project in East Africa to evaluate the need for reconstructive surgery in the region. The project is in direct partnership with the African Medical Research and Foundation (AMREF) based in Nairobi, Kenya. Dr. Leila Kasrai is leading the project in collaboration with Dr. Shahla Yekta, a global health researcher and co-founder of Mind the Health Gap.

Royal College Fellowships

Amer Al-Kudmani successfully passed his RCPSC fellowship examination.

Mary-Helen Mahoney successfully passed her RCPSC fellowship examination.

Karen Wong successfully passed her RCPSC fellowship examination.

The Division of Plastic and Reconstructive Surgery at the University of Toronto remains a powerhouse of accomplishment in research, education and clinical service. Thanks to past plastic surgery leadership and faculty, our division has been positioned favorably. With 47 faculty members, the Division of Plastic and Reconstructive Surgery is one of the largest academic plastic surgery centres in North America.



Division Of Thoracic Surgery

Thomas Waddell, *Chair*

The academic year 2010-2011 saw continued growth with numerous recruitments and transitions for our Division. It continues to have the largest clinical activity of any thoracic program in Canada. These sites include Toronto General Hospital (TGH) and the community hospitals, St. Joseph's Hospital, Toronto East General Hospital and, new in 2011, Trillium/Credit Valley Thoracic program in Mississauga (Drs. Jones and Behzadi). St. Joseph's Hospital in Toronto recruited Dr. Michael Ko who graduated last year from our training program. Dr. Ko has replaced Dr. Yaron Shargall who moved to St. Joseph's Hamilton. In Hamilton, the recruitment of Dr. Shargall will mark the beginning of an important collaboration between the University of Toronto, Division of Thoracic Surgery, and its counterpart at McMaster University. Dr. Shargall was joined by Dr. Christian Finley, who also graduated from our program last year. The Toronto East General Hospital recruited Dr. Najib Safieddine from SUNY at Syracuse to our faculty. Dr. Safieddine is a graduate of the University of Toronto program and completed a fellowship in Minimally Invasive Thoracic Surgery in Los Angeles with Rob McKenna. Finally, the Division of Thoracic Surgery at Toronto General Hospital (University Health Network) hired Dr. Marcelo Cypel after an international search for a Surgeon-Scientist with research and clinical interests in lung transplantation and extra-corporeal life support. Dr. Cypel completed general surgery and thoracic surgery training in Brazil before coming to Toronto, where he completed his MSc working on Ex Vivo Lung Perfusion under Dr. Shaf Keshavjee. He also finished further fellowship training at TGH in thoracic surgery and lung transplantation. The American Association for Thoracic Surgery awarded Dr. Cypel with the prestigious Michael DeBakey Research Scholarship as the most promising young faculty member in North America. Effective 2011-12, Drs. Robert Zeldin and Andrew Pierre will both assume their new academic rank of Associate Professor, a promotion acknowledging their contributions to education.

EDUCATION

Dr. Sameena Uddin completed her training successfully this year and has taken a clinical position in Mississauga. Fellows graduating from our program included Dr. Masaki Anraku, who is now Assistant Professor at Keio University in Japan; Dr. Masaaki Sato, who has joined the University of Kyoto, to extend our long-term collaboration with this important group. Both Dr. Anraku and Dr. Sato trained in Toronto for many years, gaining experience in advanced laboratory research, thoracic surgery, and lung transplantation. Dr. Eero Sihvo returned to his position as Deputy-Chief,

Thoracic Surgery, in Finland after training here in thoracic surgery and lung transplantation.

Dr. Isabelle Schmitt-Opitz returned to her faculty position at the University of Zurich in Switzerland following her specialization training in mesothelioma and surgery for chronic thromboembolic pulmonary hypertension. Dr. Gustavo Fortunato returned to his faculty position in Brasil after completing training in lung transplantation. Dr. Nona Zeitlin is back in her faculty position in Israel after spending time with us training in both lab research and clinical thoracic surgery.

After more than 10 years of stewardship, Dr. Gail Darling passed the reins of the Thoracic Surgery Residency Program Directorship to Dr. Andrew Pierre while Dr. Maurice Blitz has assumed the important role of Associate Director, Undergraduate Education for Integrated Medical Education. Dr. Sameena Uddin earned the FG Pearson Award for Best Resident/Fellow Teacher. On the other hand, Dr. Andrew Pierre received the RJ Ginsberg Award for Best Postgraduate Teacher. The GE Darling Award for Excellence in Under-graduate Teaching went also to Dr. Andrew Pierre. The 7th Annual Pearson Day, high-lighting the breadth of clinical and basic science research activity in the division, was a tremendous success with Dr. Valerie Rusch, Chief of Thoracic Surgery at Memorial-Sloan Kettering, New York as the Visiting Professor.

RESEARCH

During Pearson Day, Sarah Gilpin was recipient of an award for Best Basic Science Paper for *The role of bone marrow-derived progenitor populations in lung disease* (supervisor, Dr. Thomas Waddell) and Marcelo Cypel received an award for Best Clinical Research Paper for his project entitled *Results of ex-vivo perfusion* (supervisor, Dr. Shaf Keshavjee).

Overall, the clinical research activity of the Division stays strong as it continues to be a major Canadian contributor to multi-centre clinical trials and a 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 remains 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 trans-plantation and thoracic oncology, especially image-guided therapeutics and nanotechnology.

Major highlights for 2010-2011 include the Young Investigator Award, from the American College of Chest

Physicians going to Dr. Takahiro Nakajima for his work on molecular assessment of lung cancer (supervisor, Dr. K Yasufuku); the publication of our clinical trial of "Normothermic Ex vivo lung Perfusion in Clinical Lung Trans-plantation" in the New England Journal of Medicine [Cypel et al, NEJM, 364(15):1431-1440] and the presentation of our single center study comparing endobronchial ultrasound to cervical mediastinoscopy as the opening plenary paper at the 2011 American Association for Thoracic Surgery meeting (Yasufuku et al, JTCVS in press).



Division Of Urology

Sender Herschorn, *Martin Barkin Chair in Urological Research*

ACADEMIC PROMOTION

Dr. Ron Kodama was promoted to Professor and **Drs. Lesley Carr, Tony Finelli, Kirk Lo, and Vasu Venkateswaran** were 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 Germany, Bahrain, Israel, United States, and Canada.

Dr. Darius Bagli continued his basic research in bladder diseases with projects funded by the CIHR, PSI, Kidney Foundation, AUA Foundation, and the Society for Pediatric Urology. He is also supervising research fellowships with funding from the Society for Pediatric Urology and the AUA Foundation. He was also invited to lecture in Denmark, the USA, and Canada. 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 projects funded by The Sick Kids Foundation and the Dean's Fund. 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 Fifth Annual North American Pediatric Fellows Laparoscopy Course. He was an invited speaker to Denmark, Canada, and the U.S.

Dr. Armando Lorenzo continued his work in Clinical Epidemiology and minimally invasive pediatric surgery. He continued his research work in projects funded by the Hospital for Sick Children Inaugural Innovation Fund, PSI, and the Medical Council of Canada. He was an invited speaker in Denmark, Canada, and the U.S. He was selected to participate in the First European Association of Urology and Canadian Urological Association Academic Exchange with a tour of academic centres in Sweden, UK, Spain, Italy, and Austria.

Sick Kids fellow Dr. Bryce Weber with Drs. **Lorenzo, Bagli, and Farhat** won the Kelm Hjälmås Third Prize Clinical Poster at European Society of Pediatric Urology meeting in Denmark.

Mount Sinai Hospital

Dr. Ethan Grober continued his work on male infertility at Mount Sinai and Women's College.

His research includes his projects in infertility and education with grants from PSI Foundation, Royal College of Physicians and Surgeons of Canada, MARS Innovation, CIHR, Canadian uro-Oncology Group, and the Association for Surgical Association.

He was an invited speaker in the U.S. and Canada.

Dr. Keith Jarvi, site Chief at MSH, continued the Male Infertility Program and as Director of the The Murray Koffler Urologic Wellness Centre (MKUWC). He was an invited speaker in the U.S. and Canada.

He continued with his work and research in Infertility with projects funded by the NIH, Ontario Institute for Cancer Research, CIHR, Canadian Uro-Oncology Group, MaRS Innovation, Canadian Cancer Society Research Institute, Institut Merieux, Canadian Uro-oncology Group, PSI, and with non-peer review grants from GSK and Pierre Fabre Medicaments

Dr. Kirk Lo continued his basic research in infertility with a new multi-year grant funded by the National Institutes of Health and in projects funded by CIHR, MaRS Innovation, Canadian Cancer Society Research Institute, Canadian Uro-oncology Group, and PSI.

He organized the resident and fellow presentations for the Annual Robson Research Day. He was promoted to Associate Professor.

He was an invited speaker in the U.S. and Canada.

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

He was invited speaker and/or Visiting Professor to Spain, Greece, Belgium, Austria, Brazil, U.S., and Canada.

He continued his research with funding from Ontario Institute for Cancer Research, CIHR, Canadian Cancer Society Research Institute, Canadian Uro-oncology Group, and non-peer review funding from GSK and Pierre Fabre medicaments.

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 and interstitial cystitis with projects funded by Allergan, Astellas, and Pfizer. Dr. Carr was in charge of Journal Seminars for Urology residents.

She won the Michael Jewett Faculty Postgraduate Teaching Award.

She was promoted to Associate Professor.

Dr. Sender Herschorn continued as University Chair and Martin Barkin Chair in Urology.

He continued his clinical research in urinary incontinence, neurogenic bladder overactivity, and erectile dysfunction with projects funded by Allergan, Astellas, and Johnson and Johnson (Contura). He was an invited speaker and lecturer in Brazil, Morocco, U.S., and Canada.

He also directed the 18th annual U of T Urology Update.

He was elected Past-President of the Canadian Urological Association. He was the Scientific Chair and Co-Chair of the combined International Continence Society and International Urogynecologic Association Meeting held in Toronto in August 2010. He was Chair of the Committee on Prostatic Urethral Stenosis After Treatment for Prostate Cancer at the International Consultation on Urethral Stricture Disease in Morocco.

Dr. Laurence Klotz continued his research in Uro-oncology. He continued as Chair of the CURC and the World Uro-Oncology Federation, (WUOF), and the International Urologic Research Society.

He continued his many peer-reviewed research projects as well as initiated new work in prostate cancer with funding from NCIC, Prostate Cancer Canada, CIHR, Ferring, Astra-Zeneca. He was guest speaker and visiting professor in China, UK, Switzerland, Austria, the U.S., and Canada.

He was Honorary Professor at Peking University and Guest Editor of Urologic Oncology.

Dr. Ron Kodama, site Chief at Sunnybrook, organized the 8th Annual Resident Basic Science Course in February. He also directed the annual Urology Fair 2011.

He won the AW Bruce Faculty Undergraduate Teaching Award and was a committee member in the International Consultation on Urethral Stricture Disease in Morocco.

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

He was an invited speaker in Australia, and the U.S.

He was elected Vice-President of the medical staff at Sunnybrook.

Dr. Vasundara Venkateswaran was promoted Associate Professor. She continued her basic research in prostate cancer with funding from CIHR, Prostate Cancer Canada, Ferring, and AstraZeneca.

She won a Best Poster award at the Society for Urologic Oncology meeting in Washington, DC. Two of her graduate students, Avi Vandersluis and Natalie Venier won CIHR Masters Awards.

UHN - TGH and PMH

Dr. Neil Fleshner continued as site Chief at the UHN. He continued his clinical and basic research in prostate cancer with many major peer-reviewed grants from CIHR, OICR, CPRF, Canadian Cancer Society Research Institute, Prostate Cancer Canada Research Foundation, Prostate Cancer Research Foundation, NIH, and Pfizer, Merck-Frosst, and GSK.

He was an invited speaker at meetings in Canada and France. He was on the Scientific Committee of the 4th World Congress on Controversies in Urology in Paris, France.

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. The Funding is from CIHR, OICR, Princess Margaret Hospital Foundation, Kidney Foundation, NSERC, Pfizer, and Merck-Frosst.

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

He was an invited speaker and/or visiting professor in Germany, the U.S. and Canada.

He won the Faculty Postgraduate Teaching Award (Surgical) and major awards that included the **AUA Distinguished Contribution Award**, the **CUA Award**, and the **Society of Urologic Oncology Medal** for 2011.

Dr. Michael Robinette continued as the major individual contributing to the Multi-organ Transplant Program at the UHN, specifically in kidney transplants.

Dr. John Trachtenberg continued his active research into novel therapies for prostate cancer with grants from CIHR, PMH Foundation, Prostate Cancer Canada, NCIC, and Merck-Frosst. He was an invited speaker in Austria, the U.S., and Canada.

He co-chaired the 20th Annual Issues and Controversies in Whistler, BC.

Dr. Tony Finelli continued his funded research projects in renal cancer and in men with negative biopsies for prostate cancer. Funding is from CIHR, Canadian Cancer Society Research Institute, Merck-Frosst, and Pfizer.

He was an invited speaker in Russia, France, and Canada.

He was promoted to Associate Professor and won the Faculty Postgraduate Teaching Award (Clinical).

Dr. Andrew Matthew, clinical psychologist, continued his work in outcomes after prostate cancer therapy. The PMH Foundation funds his projects. He was an invited speaker in the region of Toronto.

UHN - TWH

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

He was an invited speaker in Brazil, Saudi Arabia, UK, U.S. and Canada.

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 incontinence, overactive bladder and erectile dysfunction. Grants funding is from Allergan

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. Grant funding was from Ontario AFP Innovations Fund, Sanofi-Aventis, and LMA Urology USA. He was course director at a hands-on course at the American Urological Association (AUA) Meeting in San Francisco. He was guest speaker in the U.S.

Dr. Kenneth Pace continued his work in clinical epidemiology, stone disease, and minimally invasive surgery. Grant funding is from Ontario AFP Innovations Fund, Sanofi-Aventis, and LMA Urology USA.

He continued as the Fellowship Coordinator for the Division of Urology.

He continued in the American Urological Association Leadership Program. He won Best Poster awards at the European Association of Urology Meeting in Vienna, the Northeast Section AUA Meeting in Pittsburgh, the CUA Meeting in Montreal, and University of Toronto Health Policy, Management and Evaluation Annual Research Day and best endourology presentation at the CUA in Montreal.

He won the Faculty Postgraduate Teaching Award (Clinical) and was promoted to Associate Professor.

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

He won the Faculty Postgraduate Teaching Award (Surgical).

ACADEMIC EVENTS & AWARDS

The **Annual Charles J. Robson Research Day** was held on April 7. The Visiting Professor was Dr. Larry Goldenberg, Chief of the Department of Urological Sciences at the University of British Columbia in Vancouver.

There were 42 presentations. Resident Clinical winner was **Dr. Raj Satkunasivam**; Resident Basic/Translational **Dr. Sean Skeldon**; Fellow Clinical winner was **Dr. Trustin Domes**; Fellow Basis/Translational winner was **Dr. Alexandra Colquhoun**. Honorable Mention **Dr. Andrei Drabovich**.

The **Patrick Harty Award for Excellence in Patient Care** was awarded to **Dr. Elias Wehbi**.

The Resident Undergraduate Teaching Award went to **Dr. Steve Kim** and the Fellowship teaching awards went to **Drs. Michael Ordon** and **Bryce Weber**.

The PGY-5s **Drs. Dean Elterman, James Wong, Paul Torén**, and **Elias Wehbi**, successfully completed their Royal College Examinations.

VISITING PROFESSORS

Guests this year were Drs. William Steers from the University of Virginia in Charlottesville VA; Gamal Ghoniem from the Cleveland Clinic, Florida; Manoj Monga from the University of Minnesota in Minneapolis MN; Jeffrey Cadeddu from the University of Texas Southwestern Medical School in Dallas TX; Gerald Andriole from Washington University in St. Louis MO; Misop Han from John Hopkins in Baltimore MD; Andrew Stephenson from the Cleveland Clinic, Cleveland OH; Marshall Scott Lucia from the University of Colorado in Denver CO; Wayne Hellstrom from Tulane University in New Orleans LA; and Gerald Brock from the University of Western Ontario in London ON.



Division Of Vascular Surgery

Tom Lindsay, *Chair*

INTRODUCTION

Dr. Lindsay was re-appointed for a second term as Chair of the Division of Vascular Surgery following an external review. Dr. Tanner was appointed as the Chair of the Negotiating committee for the OMA's next contract with the Ministry of Health and Long Term Care.

The Division is preparing for the start of the Royal College direct five year entry program with the first recruits due to begin in July 2012. A Divisional committee met to search for an new Program Director after Dr Lindsay completed a decade in this job. Dr. George Oreopoulos was appointed Program Director effective July 1, 2011.

Dr. Ameli the Division's most senior member began a retirement plan that saw the recruitment of Dr. Tony Moloney to the Division at St Michael's Hospital.

At Sunnybrook the first recipient of the Maggisano Chair was chosen to be Dr. Robert Maggisano.

At UHN Dr. Roche-Nagle coordinated membership in the Vascular Study Group of New England and the successful entry of data into what has become the Society of Vascular Surgery's Patient Safety Organization. UHN is the first site outside of the USA to join and participate in submission of data for analysis of quality improvement.

ADMINISTRATION

Dr. Johnston completed his term as R. Fraser Elliott Chair in Vascular Surgery and a new chair will be named after a search is conducted. Dr Johnston remains the co-editor of the 7th edition of Rutherford's Vascular Surgery. He is the Chair of the SVS Document Oversight Committee. Dr. Lindsay completed his term on the SVS Documents Oversight Committee. Dr. Rubin continues as the Chairman and CEO of the MSH /UHN Academic Medical Organization, and continues to represent all AHSC AFP Governance Chairs in Ontario on the Academic Medicine Steering Committee. Dr. Rubin in Program Medical Director of the Peter Munk Cardiac Centre and is Co-Chair of Ontario Expert Panel on Multiple Sclerosis. He completed a 4 year term as Chair of the SVS Audit Committee, a 5 year term as a member of the University of Toronto Department of Surgery Finance Committee and a 9 year term as Head of the Division of Vascular Surgery at UHN. Dr. Tanner was appointed as the Chair of the Negotiating Committee for the OMA's next contract with the Ministry of Health and Long Term Care. Dr. Andrew Dueck is Head of the Vascular Surgery Tariff Committee at the OMA and co-organized the VITO and Toronto EndoVascular Symposium with Dr. Wooster in 2011. Dr. Dueck was the Program Chair for the 2010 CSVS meeting in

Vancouver and continues on the Education Committee. Dr. Lossing was Appointed Director of Telemedicine at St. Michael's Hospital and is a member of the executive committee and the Secretary of the Medical Staff association at St Michael's. He also began the University Tele-EVAR Rounds.

Dr. Lindsay with colleagues from across the province and Kori Kingsbury, the CEO of the Cardiac Care Network, developed a business case for the Ontario Ministry of Health and Long Term Care for a provincial Vascular Surgery quality of care strategy. This was accepted and Drs. Dueck and Lindsay are members of the Cardiac Care Network's Vascular Surgery working group along with Dr. Johnston who is the co-chair of the committee with Kori Kingsbury. The aim is to develop a provincial strategy for Vascular Surgery. This initiative is to develop and implement improvements to the quality and accessibility of care for vascular conditions across the province with the ability to influence with adequate hospital funding to ensure best practice.

Dr. Papia continues his work in patient safety with multiple initiatives at Sunnybrook and beyond with presentations to multiple provincial sites of the Ontario Hospital Association across the province. He has taken on the position of National Faculty Lead - Surgical Safety Checklist Intervention, Safer Healthcare Now and the Canadian Patient Safety Institute.

EDUCATION

Dr. Oreopoulos has successfully completed an Interventional Radiology Fellowship within the UHN IR Division at University of Toronto and was formally cross appointed to the Division of Interventional Radiology at University Health Network and the Department of Medical Imaging at the University of Toronto. Drs. Cardella, Ben Musa and Huseynova all completed their Royal College fellowships in June 2011. Dr Cleanthis completed his fellowship in Vascular Surgery in September and accepted a Consultant post in London, England.

RESEARCH

Dr. Campbell with his co-investigators Drs. Donnelly and Muradali were awarded Innovation Funding for a project on fistula maturation. Dr. Rubin continues to hold three independent basic science operating grants from CIHR. In addition, he completed a 4 year term as Chair of the Grant Review Panel for the Foundation for Accelerated Vascular Research, San Francisco. Dr. Wooster and Dr. Dueck are recipients of a two year Royal College of Physicians and Surgeons of Canada Award assessing health competency in practice with Elizabeth Wooster. Dr. Tse was awarded Ontario Centers

of Excellence funding for a project of in situ fenestration of EVAR grafts using Radiofrequency.

AWARDS

Dr. Lindsay was awarded the Ross Fleming Surgical Educator Award at the University Health Network in May 2011.

Dr. Wooster was awarded best research paper at the Canadian Association of Continuing Health Education.

Dr. Roche Nagle was the recipient of the John L. Provan Educational Award.

EXTERNAL VISITS AND VISITORS

The Division was extremely active at the Canadian Society for Vascular Surgery meeting presenting eight papers (32%) at the September 2010 meeting. Drs Johnston and Lindsay were active in the 2011 Winnipeg Vascular and Endovascular symposium. Dr. Wooster presented at the 2011 Society for Vascular Surgery annual meeting and well as numerous other national and international meetings. Dr. Rubin presented at the European Cardiology Congress in Stockholm, and was a visiting Professor at Goethe University, Frankfurt. Dr. Papia gave invited Grand Rounds at the Cleveland Clinic on the use of Checklists and Bundles to improve healthcare.



Surgical Alumni Association

Martin Barkin, *President*

Highlighting the past academic year for the Surgical Alumni Association (SSA) was a major event entitled "SHARP MINDS – SKILLED HANDS," marking the 25th anniversary of the Surgeon Scientist Program (SSP) and celebrated with a special dinner. The event co-incided with the Department of Surgery's Gallie Day. The evening was a resounding success. It featured a video that will be used in future presentations of the SSP, sold 54 tables, attended by 435 guests, and generated net profits of over \$60,000 for the SSP. At this event, Dr. Richard Reznick, Chair of the Department, announced that he was leaving his post at UofT to become the Dean of the School of Medicine, Faculty of Health Sciences at Queen's University in Kingston. Then the period between his resignation, the Surgical Alumni Association entered into a quiet period as the search process began for his successor.

Spring of 2011 ushered in with the announcement of Dr. James T. Rutka as the next Department of Surgery Chair. Liaison with Dr. Rutka and staff resumed and an active year has evolved, centered around the emerging new strategic plan for the Department of Surgery.

The Association intends, once again, to support the Department Chairman in rolling out this plan and will be actively involved in planning and participating in an event, based on this, by early Spring 2012.

In the meantime, the Surgical Alumni Database has been integrated with the Alumni Data base of the Faculty of Medicine. Our mailing lists are ready and the first meeting of the SAA with the new Department Chair has been scheduled.

Your Surgical Alumni Association is, once again, prepared to provide strong support to the Department and its new Chair, Dr. James Rutka.



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 continues to provide free full text access to the University of Toronto Library to surgeons and surgical trainees in low income countries. Our librarians, Sandra Kendall at Sidney Liswood Library, and Warren Holder and Sian Mickle at Robarts, have trained clinicians and librarians in Ethiopia and the scope of the project will be expanded to cover the needs of the Toronto Addis Ababa Academic Collaboration (TAAAC). This collaboration is currently under review for a major CIDA grant.

Surgery in Africa Reviews

We continue to publish narrative reviews on a broad range of surgical topics focusing on clinically relevant aspects of surgery in resource constrained settings. Contact andrew.howard@sickkids.ca if you are interested in writing a review. Reviews, dating back to 2005, are online at www.ptolemy.ca/members. A plan for the coming year is to put on a series on surgical critical care and trauma. The College of Surgeons of East, Central, and Southern Africa now uses our reviews as a mandatory component of their residency curriculum.

Bethune Round Table on International Surgery

This annual Canadian academic meeting is one of the first to focus on surgical aspects of global health. Montreal, in partnership with the Canadian Network for International Surgery www.cnis.ca was the site of the 2011 meeting. In 2012, the University of Toronto will host the meeting on May 25 to 27th. Canadian surgeons and doctors from across the country attend the event to share information on what works in all the different avenues of Canadian involvement in global health and surgery.

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. CIDA is currently reviewing the

project for future substantial funding.

Global Health Education Institute

The department of surgery is a participant, 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, and emergentologist from Sunnybrook. A skills lab sessions has been added to the 2011 course, dates are October 20th through October 22, 2011.

Bethune Scholarship

Dr. Maryse Bouchard of orthopaedics received the inaugural Bethune Scholarship in International Surgery and has completed and defended a Master's thesis on access to orthopaedic implants in Uganda. This initiative, led by Mme. Adrienne Clarkson, aims to promote training opportunities for our residents interested in pursuing international surgery in a scholarly fashion throughout their careers.

Chair in International Surgery

Dr. Mark Bernstein is the inaugural Greg-Wilkins-Barrick Chair in International Surgery. This chair, stems from a gift to the Toronto General and Western Hospital Foundation in memory of Greg Wilkins, late CEO of Barrick Gold Corporation. Dr. Bernstein's international work has spanned many countries, with a particular focus on Africa and Indonesia. He has taught many novel and sustainable neurosurgical techniques including craniotomy under local anaesthesia and is responsible for the first ever such procedure in several countries. He has taken residents, nurses and other colleagues with him on these missions and brought back fellows and trainees in a spirit of bilateral exchange and cooperation. Dr. Bernstein will add to this work and expand to other geographical areas including Latin America



The Hospital For Sick Children

James Wright, *Surgeon-in-Chief / Robert B. Salter Chair in Surgical Research*

HEADS OF DIVISION

Dr. G. Van Arsdel	Cardiac Surgery
Dr. J. Langer	General Surgery
Dr. J.M. Drake	Neurosurgery
Dr. B. Alman	Orthopaedics
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 until March 31, 2011, measures wait times for children's surgery in 11 surgical subspecialties. In June 2011, the project contributed high-level findings to the Wait Time Alliance 'Report Card on Wait Times' for the second year and reported in the CMAJ their finding that 27% of children exceed nationally developed 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 percentage of children who exceed nationally developed access targets has dropped from a high of 47% in 2007 to 15% in 2011. None of the children waiting for cardiac surgery and children requiring dental treatment under anesthesia exceeded their access targets.

NEW STAFF

New recruits include Dr. Simon Kelley of the Division of Orthopaedics, Dr. Osami Honjo of the Division of Cardiac Surgery, and Dr. Martin Koyle, former Division Head at Seattle Children's, of the Division of Urology.

DEPARTURES

Dr. Peter Kim of the Division of General and Thoracic Surgery departed to become Vice-President of the Sheikh Zayed Institute for Pediatric Surgical Innovation at the Children's National Medical Center in Washington. Dr. Osman Al-Radi, Division of Cardiac Surgery, returned to his home country Saudi Arabia.



APPOINTMENTS & PROMOTIONS

Dr. Georges Azzie, Division of General and Thoracic Surgery, was promoted to Associate Professor. Dr. James Drake, Division of Neurosurgery, has been appointed as interim lead of the Centre for Image-Guided Innovation and Therapeutic Intervention (discussed more below).

Dr. James Rutka, Division of Neurosurgery, was appointed Chair of the Department of Surgery for a five-year term commencing April 1, 2011. Dr. Kulkarni, Division of Neurosurgery, was selected as the new Residency Program Director. Dr. Kellie Leitch, Division of Orthopaedics, was elected MP for Simcoe-Grey and appointed as the Parliamentary Secretary to the Minister of Human Resources and Skills Development and to the Minister of Labour. Dr. Unni Narayanan, of the Division of Orthopaedics, was promoted to Associate Professor. Dr. Christopher Caldarone, Division of Cardiac Surgery, was promoted to Senior Associate Scientist by The SickKids' Research Institute in July 2010. Dr. Osami Honjo, Division of Cardiac Surgery, was appointed Associate Scientist in the Physiology and Experimental Medicine Program by the SickKids' Research Institute in June 2011.

DIVISION OF CARDIAC SURGERY

The Heart Centre (in which the division is a key participant) held a three-day symposium attended by over 200 individuals, many from around the world. The division co-hosted, with Division of Cardiology, this International Symposium which focused on the treatment of Hypoplastic Left Heart Syndrome. 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. Sickkids' cardiovascular surgeons hold one US patent **US923218B2** (April 12, 2011) for: Modulation of the integrin-linked kinase pathway to promote cardiac stem cell proliferation and self-renewal and eight external peer reviewed grants: three Heart and Stroke; two CIHR; one Children's Heart Foundation; one Research Innovation Foundation and one Leducq Foundation. There were 28 peer reviewed publications.

DIVISION OF GENERAL AND THORACIC SURGERY

The Centre for Image-Guided Innovation and Therapeutic Intervention (CIGITI) (www.cigiti.com), originally established by a team headed by Dr. Peter Kim, continued to develop innovative technologies focused on paediatric and fetal applications in image-guided surgical intervention, simulation for educational applications, and miniaturized robotic surgery. With Dr. Kim leaving for the United States, CIGITI will be looking for a new director. In the meantime, Dr. Sharifa Himidan will continue in her role as Medical Director of the Centre. Dr. Priscilla Chiu continues her work as co-principle investigator on a \$20 million CIRM-CSCC grant in support of novel treatments to target cancer stem cells. Dr. Jack Langer has continued to develop the SickKids Obesity Management Program (STOMP), which ultimately anticipates performing 10-15 bariatric surgical procedures per year. Dr. Langer not only sits on the provincial Bariatric Surgery Steering Committee, he is also the Director of the Canadian Association of Paediatric Surgeons and has been nominated as the next President-elect of that organization. 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 are involved in a number of important initiatives in Africa, developing training programs and surgical expertise. 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 has also taken on the role of Surgical Director at the new Children's Hospital in Qatar as part of the partnership with SickKids International. 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 52 papers and hold eleven grants.

DIVISION OF NEUROSURGERY

It has been a very active year for the Division of Neurosurgery. The numerous accomplishments include appointments, promotions, visiting lecture invitations, 53 publications and much more.

Dr. James Drake, Head of Neurosurgery and Senior Associate Scientist, Neurosciences & Mental Health, has been appointed as interim lead of the Centre for Image-Guided Innovation and Therapeutic Intervention (CIGITI) based at SickKids. He continues as an Executive Member and PI with the Hydrocephalus Clinical Research Network. He travelled the world as an invited speaker on many occasions and has published articles on an ongoing basis as noted in this report.

Dr. James Rutka was appointed as Chair of the Department of Surgery for a five-year term commencing April 1, 2011. This is a tremendous and historical achievement for our Division. He will be the first Department of Surgery Chair from Neurosurgery.

One of the highlights of the year was the American Association and Neurological Surgeons (AANS) meeting in Denver where Toronto shone under the presidency of Dr. Jim Rutka. Dr. Rutka gave a spectacular presidential address on discovery in neurosurgery. Toronto featured prominently in the various invited workshops, plenary sessions and presentations. He has become Past President of the AANS; Member of the Finance Committee; Strategic Planning Committee; the Van Wagenen Fellowship Committee and Neurosurgery PAC; Chair of the Nominating Committee.

James Rutka was elected to Fellowship in the Canadian Academy of Health Sciences (CAHS)

He too has travelled the world as an invited speaker and continues to publish articles on an ongoing basis.

Drs. Peter Dirks and Mike Ellis were awarded a grant from the Ontario Ministry of Health/Ontario Stroke System to support a pilot study of a prospective pediatric cerebrovascular disease database at the Hospital for Sick Children, Toronto. Dr. Dirks, as Keynote Speaker at the World Cancer Stem Cell Summit, spoke about "A stem cell view of brain cancer: Implications for developing new therapies". Boston, MA, December 8, 2010. Invitations continue to pour in to present his work in various cities around the world. His work continues to be published and highlighted.

Dr. Abhaya Kulkarni was selected as the new Residency Program Director after a rigorous search.

He continues as Director of the Gamma Knife Program. He also has a large role as PI with the Hydrocephalus Clinical Research Network, working diligently to produce projects and reviews that will benefit patients throughout North America and the world. He continues to publish works in peer review publications.

Dr. Michael Taylor ranked #2 on the *Toronto Star's* list of the biggest scientific discoveries of 2010. He was

instrumental in the completion and publication of a landmark study on the subject of Medulloblastoma in the Journal of Clinical Oncology. He continues to circle the globe as a guest speaker.

DIVISION OF ORTHOPAEDICS

Dr. Simon Kelley joined the Division of Orthopaedics in July 2010. His medical training was in the United Kingdom. He was the inaugural Trans Canada Pediatric Orthopaedic Fellow, pending six months in Montreal, Toronto and Vancouver. His area of expertise is in limb deformity. Dr. Kelley will also be undertaking research on the molecular mechanisms of skeletal differentiation, and will be completing a PhD as part of this work.

Dr. Ben Alman has been named the Interim Director of the Toronto Musculoskeletal Centre of the University of Toronto. This is an extra departmental unit focusing on interdisciplinary translation research. The centre will be developing a collaborative graduate program, a new mechanism for research funding and will help recruit new MSK researchers to Toronto.

Dr. Kellie Leitch was awarded the Order of Ontario for providing a national voice on Children's Health.

Dr. James Wright was awarded the inaugural Sickkids' President's Award "for his outstanding leadership, commitment to high quality and performance, and dedication to improving access to surgical services for children across the country."

The Division of Orthopaedics is continuing to build the Bone Health Centre. This centre focuses on the care of children with musculoskeletal conditions requiring multidisciplinary care, and in the development of collaborative research. The centre is on the verge of beginning its first clinical trial, using a cell therapy approach to disorders.

Members of the division continue their successful research efforts. The division boasts four faculty members who hold CIHR funding as Primary Investigators, making them the highest proportion of CIHR funded orthopaedic surgeons in any one division in the country. The division members jointly have presented over 50 talks worldwide, published over 55 peer-reviewed papers and secured funding for 10 new grant proposals during the past academic year.

DIVISION OF PLASTIC AND RECONSTRUCTIVE SURGERY

Dr. Ron Zuker was the Chair of the Organizing Committee for the 16th Congress of the International Confederation of Plastic, Reconstructive and Aesthetic Surgery that was held in Vancouver last May. This was a highly successful meeting with over 1700 registrants from all around the world with significant participation from all division members. Dr. Greg Borschel was successful in obtaining a three-year CIHR funding in a highly competitive competition investigating opportunities to improve peripheral nerve recovery after injury. Dr. Borschel also received funding from NEPS and CFI during the past academic year. The division organized two educational exchanges via the Sickkids-Operation Smile program and had visits from two trainees from West Bengal and three

trainees from Assam in India. The division hosted four CME events in 2010 including the Advanced Craniomaxillofacial Surgery Symposium, Pediatric Upper Extremity Symposium, the Lindsay-Thomson Pediatric Plastic Surgery Symposium and the Composite Tissue Allotransplantation Symposium. During the past academic year, division members published 18 papers, presented 25 scientific papers and participated in 36 invited lectures.

DIVISION OF UROLOGY

Dr. Joao L. Pippi Salle was appointed Herbie Doctor of the Year. He was an invited speaker at many locations around the world including Israel, Germany and the United Arab Emirates. Dr. Darius Bagli was awarded a Physicians' Services Incorporated Foundation two-year grant in collaboration with Dr. Armando Lorenzo for \$140,000 – Ecoli-induced alterations in the uroepithelial epigenome as a marker for UTI risk. He was also supervisor to Dr. Haddad for his Society for Pediatric Urology grant \$37,000 on Role of Sex Steroids in Perioperative Management of Hypospadias initial human cell studies in Vitro. Karen Aitken defended and was awarded her PhD; Dr. Bagli was her supervisor through the Institute of Medical Sciences. In June 2010, Dr. Armando Lorenzo was granted outstanding reviewer for the Journal of Urology. In January 2011, Dr. Lorenzo was awarded a European Association of Urology Travel Scholarship which he participated in March 2011 for three weeks; countries visited were Italy, Sweden, England, Austria and Spain. In August 2010, Dr. Walid Farhat ran his 4th annual successful Pediatric Urology Laparoscopy course for Fellows at SickKids. In April 2011, Dr. Farhat was awarded third prize for a clinical poster at the European Society for Pediatric Urology on Impact of Biofeedback on Self-Esteem in Children with Voiding Dysfunction: A randomized controlled trial for which he was PI. Urology had 18 invited lectures nationally and internationally, over 15 published peer-reviewed papers and awarded three new grants from The Physicians' Services Incorporated Foundation, American Urological Association, and the Society for Pediatric Urology.

EDUCATION

The Department of Surgery continues to have an active education program training 50 fellows and 93 residents originating from 31 countries worldwide.

RESEARCH

Of 40 surgeons, 21 have funded research programs. The Department is engaged in a wide variety of clinical and basic research supervising 17 research fellows, 23 Masters and 12 PhD students.

■ Division Of Cardiac Surgery

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

PUBLICATIONS

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INVITED VISITS

Caldarone CA: Society of Thoracic Surgeons, Advances in Quality and Outcomes: Data Managers Meeting, Chicago, Illinois, USA, November 2010. Strategies to analyze data about outcomes: Kaplan Meier curves, hazard functions, competing risks analysis, bootstrap aggregating (bagging).

Caldarone CA: Children's Memorial Hospital, Chicago, Illinois, USA, November 2010. Farouk S. Idriss Lecture.

Caldarone CA: Congenital Cardiac Anesthesia Society, USA, March 2011. Invited Speaker: Ischemic Preconditioning: An interesting concept or a clinical reality?

Coles J: American Academy of Pediatrics, San Francisco, California, USA, October 2010. Invited Speaker: Recurrent pulmonary vein stenosis: Catheter intervention, surgery or transplant?

Coles J: International Society for Stem Cell Research, Toronto, Ontario, Canada, May 2011. One of 7 Presenter(s): ILK induces stress in mouse heart and promotes expansion of resident cardiac stem cells.

Honjo O: Hypoplastic Left Heart Syndrome and Other Functionally Univentricular Heart Disease Symposium. Toronto, Ontario, Canada, June 2011. When to attempt repair of the regurgitant tricuspid valve?

Honjo O: Hypoplastic Left Heart Syndrome: 20 Years of Successful Failure Symposium. Toronto, Ontario, Canada, October 2010. Testing ideas: animal and human data of primary 'in-series' palliation with biologic and mechanical cavopulmonary assist.

Van Arsdell GS: Congenital Heart Surgeons Society, Chicago, Illinois, USA, October 2010. One of 3 Presenter(s): (1) Mitral valve repair versus replacement in pediatric cardiac surgery, (2) Ten years of mortality: who, when and why. (3) Unbalanced AV canal defect: single or biventricular repair.

Van Arsdell GS: Congress on Pediatric Cardiac Surgery, Ancona, Italy, November 2010. Invited Speaker: (1) Long term results of the arterial switch operation: is it as bad as we thought?, (2) Borderline LV diagnostic assessment and surgical options.

Van Arsdell GS: The Saudi Heart Association, Riyadh, Saudi Arabia, February 2011. Invited Speaker: (1) Running a regionally coordinated pediatric cardiac surgery services, (2) The Left Ventricle: When is "too small" too small?, (3) AV Valve Repair in Single Ventricle.

Van Arsdell GS: American College of Cardiology, New Orleans, Louisiana, USA, April 2011. Presenter: Surgical valvuloplasty in congenital mitral stenosis: techniques, indications and outcomes.

Van Arsdell GS: Tsinghua International Symposium on Advancement of Cardiovascular Surgery and Cardiology, Beijing, China, April 2011. Invited Lecturer/Presenter: Single or biventricular repair.

Wittnich C: Canadian Veterinary Medical Association (CVMA), Annual Meeting, Calgary, Alberta, Canada, August 2010. A Canadian veterinarian's experience from hurricane Katrina.

Wittnich C: Canadian Veterinary Medical Association (CVMA), All Hazards Training CVR, Hull, Ontario, Canada, March 2011. Practical medical field facts for disaster response.

RESEARCH AND INVESTIGATIONS

A transatlantic network to define the mechanisms, mediators and clinical applications of remote ischemic preconditioning. *Redington AR, Caldarone CA: Leducq Foundation*. (\$6,523,095 July 2010-June 2011)

Age-dependent vulnerability of developing brain to cardiopulmonary bypass-associated hypoperfusion and ischemia in neonates and infants undergoing congenital heart surgery. *Honjo O: University of Toronto, Roscoe Reid Graham Scholarship in Surgical Science*. (75,000 2010-2013)

Apoptosis-related mitochondrial dysfunction in the neonate after cardioplegic arrest. *Caldarone C: Heart & Stroke Foundation of Ontario*. (\$233,655 July 2010-June 2011)

Assessment of heavy metal toxins in Canadian marine mammals. *Wittnich C: Oceanographic Environmental Research Society (OERS) Grant*. (\$5,000 2010-2011)

Cardiovascular biomarker discovery and validation. *Coles J (Co-Investigator): Ministry of Health of Ontario, GL2/Ministry of Research and Innovations*. (\$268,000 July 2010-July 2011)

Clinical Assessment of Thrombosis in Children after Heart Surgery: The CATCH study. *McCrindle BW, Manlhiot C, Gruenwald CE, Brandao LR, Chan AK, Mertens L, Mital S, Holtby HM, Ben Sivarajan V, Schwartz SM, Van Arsdell GS, Caldarone C: Canadian Institutes for Health Research.* (\$1,514,330 July 2010-June 2011)

Development and validation of a pediatric risk evaluative clinical index in the surgical environment (PRECISE) to predict adverse clinical outcomes after pediatric cardiac surgery. *Caldarone, C: Heart and Stroke Foundation. [Junior Personnel Award for Amusha Jegatheeswaran.]* (\$150,000 July 2011-June 2011)

Emerging team in pulmonary veins stenosis. *Coles J: HSC Labatt Family Heart Centre Innovation Fund. [LFHC Catalyst Award.]* (\$32,000 July 2010-July 2011)

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. *Gueguerian AM, Honjo O, Merklinger S, Taylor K, Van Arsdell, G: Heart and Stroke Foundation (HSFO).* (\$77,133 July 2010-June 2011)

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

Selective generation of cardiac progenitor cells and cardiomyocytes from mouse embryonic stem cells. *Van Arsdell GS, Riazi A: Heart and Stroke Foundation.* (\$140,000 July 2010-June 2011)

The influence of postoperative systemic oxygen transport on neurologic and functional outcomes in infants undergoing the Norwood vs the hybrid procedure. *Van Arsdell GS, Schwartz S, Chaturvedi R, Holtby H, Laughlin S, Dennis M, Gueguerian AM, McCrindle B, Jaeggi E, Sananes R, Caldarone C: Heart and Stroke Foundation of Ontario.* (\$91,000 2011-2013)

The influence of postoperative systemic oxygen transport on neurologic outcomes in infants undergoing the Norwood procedure with a modified blalock-taussig shunt or a right ventricle-to-pulmonary artery shunt. *Van Arsdell GS, Li J, Laughlin S, Christian AM: Heart and Stroke Foundation of Ontario.* (\$236,000 2009-2011)

■ Division Of General Surgery

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

PUBLICATIONS

- Alfaraj MA, Ryan G, Langer JC, Windrim R, Seaward PGR, Kingdom J:** Does gastric dilation predict adverse perinatal or surgical outcomes in fetuses with gastroschisis? *Ultrasound in Obstetrics and Gynecology*: February 2011: 37(2): pp 202-206. E-published December 14, 2010.
- Alfaraj MA, Shah PS, Bohn D, Pantazi S, O'Brien K, Chiu PPPL, Gaiteiro R, Ryan G:** Congenital diaphragmatic hernia: Lung-to-head ratio and lung volume for prediction of outcome. *American Journal of Obstetrics and Gynecology*: E-published ahead of print February 23, 2011.
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- Chiu PPL, Jiang H, Dick JE:** Leukemia-initiating cells in human T-lymphoblastic leukemia exhibit glucocorticoid resistance. *Blood*: December 2010: 116(24): pp 5268-5279. E-published September 1, 2010.
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- Langer JC:** Hirschsprung disease. In: *Principles of Pediatric Surgery*, 2nd edition (Mattei P, ed.) Springer, New York, pp 475-484, 2011.
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Wales PW: Trauma (Pediatric Trauma Essentials.) *Audio-Digest General Surgery*: August 2010: 57(15).

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

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INVITED VISITS

Azzie G: Bethune Round Table Conference on International Surgery, Montreal, Quebec, Canada, June 2011. One of 5 Presenters: Recommendations for a contextually appropriate surgical training program in Botswana.

Chiu PPL: British Association of Paediatric Surgeons (BAPS), 57th Annual Congress, Aberdeen, Scotland, July 2010. One of 6 Presenters: Transluminal stenting of the intestine as a method to preserve bowel length in neonates with short bowel syndrome: Case series and review of the literature.

Chiu PPL: Canadian Association of Pediatric Surgeons Annual Congress, Saskatoon, Saskatchewan, Canada, September 2010. One of 3 Presenters: Improved outcomes associated with delayed surgical repair for congenital tracheal stenosis infants less than one year of age.

Chiu PPL: International Pediatric Endosurgery Group, 18th Annual Congress for Endosurgery in Children (IPEG), Prague, Czech Republic, May 2011. One of 5 Poster Presenters: Thoracoscopic versus open repair of trachea-esophageal fistula: A matched comparison of morbidity and mortality.

Fecteau A: Canadian Society of Transplantation - Pediatric Ethics Symposium, Quebec City, Quebec, Canada, March 2011. Guest Speaker: When does Transplant Patient need a Parentectomy?

Fecteau A: Canadian Paediatric Anaesthesia Society/Canadian Association of Pediatric Surgeons (CPAS-CAPS) Combined Meeting 2010, Saskatoon, Saskatchewan, Canada, September 2010. One of 4 Presenters: Implications in missed anorectal malformations on patient's outcome.

Himidan S: Genomics and Health Initiative, 5th Advisory Committee Meeting, NRC Program - VR Systems for Surgical Oncology, Boucherville, Quebec, Canada, May 2011.

Langer J: Chris Evert Children's Hospital, Fort Lauderdale, Florida, USA, December 2010. Visiting Surgeon: Duhamel pullthrough for total colon aganglionosis.

Langer J: Colorado Children's Hospital, Pediatric Grand Rounds, Boulder, Colorado, USA, March 2011. Guest Lecturer: Hirschsprung Disease: Current concepts and controversies.

Langer, J: University of Colorado, Surgical Grand Rounds, Denver, Colorado, USA, March 2011. Invited Lecturer/Presenter: Surgical management of inflammatory bowel disease in children.

Langer J: CDH, Toronto, Ontario, Canada, June 2011. Guest Lecturer: Evolution of surgical approaches to CDH.

Wales P: British Association of Pediatric Surgeons, Aberdeen, Scotland, United Kingdom, July 2010. Abstracts: (1) Transluminal stenting of intestine as a method to preserve bowel length in neonates with short bowel syndrome: Case series and review of literature, (2) 5-year outcomes after serial transverse enteroplasty in children with short bowel syndrome.

Wales P: Dalhousie University, Department of Surgery, Division of Paediatric Surgery, Halifax, Nova Scotia, Canada, July 2010. Visiting Professor/Distinguished Speaker/Presenter: (1) Role of multidisciplinary teams for intestinal failure, (2) Role of omega-3 lipids in parenteral nutrition associated liver disease.

Wales P: Canadian Association of Paediatric Surgeons, Saskatoon, Saskatchewan, Canada, September 2010. Abstracts: (1) Ethanol lock therapy to reduce the incidence of catheter related bloodstream infections (crbsi) in home tpn patients with intestinal failure: Preliminary experience, (2) Implications in missed anorectal malformations on patient's outcome.

Wales P: North American Society of Pediatric Gastroenterology and Nutrition, New Orleans, Louisiana, USA, October 2010. Abstract: Endogenous glp-2 and adaptation in short bowel piglets: With and without ileum.

Wales P: Women's and Children's Health Research Institute, Edmonton, Alberta, Canada, November 2010. Poster Presentation: Bacterial profile changes in the gastrointestinal tract of short bowel neonatal piglets.

Wales P: Hopital Robert Debre, Division of General Surgery, Paris, France, December 2010. Distinguished Speaker/Presenter: Short bowel syndrome.

Wales P: American Society of Parenteral and Enteral Nutrition, Vancouver, British Columbia, Canada, January 2011. Abstract: (1) Benefit of facilitating Bayesian analyses of clinical trials of novel lipid based approaches to pediatric intestinal failure associated liver disease – an expert belief elicitation study, (2) Poster Presentation: Benefit of elemental formula in neonatal piglets with short bowel syndrome.

Wales P: 19th Western Perinatal Research Meeting, Banff, Alberta, Canada, February 2011. Abstract: Role of glucagon-like peptide-2 in short bowel syndrome using neonatal piglets as an animal model.

Wales P: The Montreal Children's Hospital, McGill University Health Centre, Montreal, Quebec, Canada, February 2011. Visiting Professor/Distinguished Speaker/Presenter: Short bowel syndrome – the future is bright.

Wales P: Experimental Biology 2011, Washington, District of Columbia, USA, April 2011. Abstract: Ileum-derived glucagon-like peptide-2 is necessary for adaptation in neonatal short bowel piglets.

Wales P: Trauma Association of Canada, Banff, Alberta, Canada, April 2011. Poster Presentation: Pediatric vascular trauma: Implications for resource utilization.

Wales P: Digestive Disease Week, Chicago, Illinois, USA, May 2011. Abstract/Other Paper: Pediatric intestinal failure in the intestinal transplant era: A retrospective review of 272 infants.

Wales P: Canadian Paediatric Society 88th Annual Conference, Quebec City, Quebec, Canada, June 2011. Abstract: Prevalence of intestinal and liver failure after necrotizing enterocolitis.

Wales P: International Pediatric Transplant Association, Montreal, Quebec, Canada, June 2011. Poster Presentations: (1) Ethanol locks to prevent catheter-related bloodstream infections in pediatric intestinal failure: Systematic review and meta-analysis, (2) 5-year outcomes after serial transverse enteroplasty in children with short bowel syndrome.

Wales P: Pediatric Academic Societies/Asian Society for Pediatric Research, Joint Meeting, Denver, Colorado, USA, June 2011. Poster Presentation: Prevalence of intestinal and liver failure after necrotizing enterocolitis.

RESEARCH AND INVESTIGATIONS

Can SMOFlipid, a composite parenteral nutrition lipid emulsion, prevent progression of parenteral nutrition associated liver disease in infants with short bowel syndrome? A pilot double-blind randomized trial. SMOF trial. *Wales P, Pencharz P, Ling S, Feldman B, Diamond IR, Clandinin MR, Van Aerde J.* (\$162,000 2008–2011)

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

Characterizing the role of intestinal glucagon-like peptide 2 in intestinal adaptation in neonates with short bowel syndrome: Using novel animal models. *Wales PW, Pencharz PB, Ball R, Sigalet D: Molly Towell Foundation for Perinatal Research.* (\$39,950 2009–2011)

Development of highly active anti-leukemia stem cell therapy (HALT). *Dick J, Wang J, Danska J, Guidos C, Hitzler J, Chiu P: (\$2,100,615 2010–2011)*

Disruptive technologies in pediatric and fetal intervention. *Kim, PCW, 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)

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

Fantastic voyage revisited: Innovative surgical technology based on Nano Biomaterials and Micro-electromechanical system (MEMS). *Kim P: Ontario Hospital Fund.* (\$2,338,000 2010–2014)

Functional outcomes after pediatric liver transplantation. *Fecteau A, Ng VL: National Institute of Health (NIH).* (\$125,000 2010–2011)

High-impact strategies toward overweight reduction in youth. *Langer, JC, McCrindle BW, Anderson G, Hamilton J, Parkin P, Pencharz PB, Birken CS, Dettmer EL, O'Connor DL, Tein I: Canadian Institute for Health Research.* (\$2,420,495 2008–2013)

Markers of parenteral nutrition (PN) associated metabolic bone disease in children on long-term PN for intestinal failure. *Courtney-Martin G, Wales PW, Avitzur Y: Rare Disease Foundation.* (\$3,500 2011–2012)

Models and mechanisms of accelerated ageing: p63 regulation of progenitor cells and cellular senescence in intestine. *Kim, P: Canadian Institutes of Health Research (CIHR).* (\$517,452 2008–2012)

Parenteral omega-3 fatty acids for treatment of intestinal failure associated liver disease: A translational research study. *Wales P, Turner J, Pencharz P, Ball R, Field C, Van Aerde J, Clandini, T: Canadian Institutes of Health Research.* (\$264,169 2011–2014)

Pediatric Acute Liver Failure (PALF) Registry with accompanying NAC Study - A double-blinded randomized control trial of N-acetylcysteine for pediatric acute liver failure not due to acetaminophen. *Fecteau A, Ng VL: National Institute of Health (NIH).* (\$54,000 2010–2011)

Short bowel syndrome: Neonatal piglet models. *Wales P, Turner J, Pencharz PB, Ball R: The Hospital for Sick Children and the Canadian Institutes of Health Research Institute of Human Development, Child and Youth Health (CIHR/IHDCYH). New Investigator Grants Program.* (\$125,379 2008–2011)

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)

Validation of the hippurate ratio: A novel research for the diagnosis of irreversible liver failure in children with short bowel syndrome. *Diamond IR, Wales P: Canadian Institutes of Health Research* (\$330,000 2006–2011)

HONOURS RECEIVED

Azzie G: POWER Teacher for Outstanding Contribution to Postgraduate Teaching, General Surgery, The Hospital for Sick Children, Faculty of Medicine, Department of Surgery. 2010

Langer J: Pediatric Surgery Resident Teaching Award, General Surgery, Department of Surgery, Faculty of Medicine, Sickkids. (Postgraduate MD, Clinical Fellow). Best teacher. January 2010.

Langer J: James C. Fallis Teaching Award, General Surgery (Multi-level Education), Department of Surgery, Faculty of Medicine, The Hospital for Sick Children. 2010.

Langer J: Jay L. Grosfeld Visiting Professorship, University of Indiana, January – July 2010.

Langer J: John R. Lilly Visiting Professor, General Surgery, University of Colorado, Faculty of Medicine, Department of Surgery, Multi-level Education – Specialty: Surgery. July 2010.

Wales P: POWER Teacher of the Year (Multi-level Education, Specialty: Department of Paediatrics), Paediatric Medicine, Department of Pediatrics, Faculty of Medicine, The Hospital for Sick Children. 2010.

Wales, P: Terry Fox Senior Secondary Wall of Fame, Terry Fox Senior Secondary School, Port Coquitlam, British Columbia, Canada. Awarded to a graduate of Terry Fox Senior Secondary who exemplifies the determination and commitment to change that Terry Fox did. 2011.

■ Division Of Neurosurgery

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

PUBLICATIONS

Agnihotri S, Wolf A, Munoz DM, Smith CJ, Gajadhar A, Restrepo A, Clarke ID, Fuller GN, Kesari S, Dirks PB, McGlade CJ, Stanford WL, Aldape K, Mischel PS, Hawkins C, Guha A: A GATA4-regulated tumor suppressor network represses formation of malignant human astrocytomas. *The Journal of Experimental Medicine*: April 2011: 208(4): pp 689-702. E-published April 4, 2011.

Akiyama T, Chan DW, Go C, Ochi A, Elliott IM, Donner E, Weiss SK, Snead OC, Rutka JT, Drake JM, Otsubo H: Topographic movie of intracranial ictal high-frequency oscillations with seizure semiology: epileptic network in Jacksonian Seizures. *Epilepsia*: January 2011: 52(1): pp 75-83. E-published November 10, 2010.

Akiyama T, Donner EJ, Go CY, Ochi A, Snead OC, Rutka JT, Otsubo H: Focal-onset myoclonic seizures and secondary bilateral synchrony. *Epilepsy Research*: June 2011: 95(1-2): pp 168-172. E-published March 5, 2011.

Beier AD, Cheshier SH, Chakraborty A, Dirks P: Suprasellar arachnoid cyst resulting in the syndrome of inappropriate antidiuretic hormone secretion. *Journal of Neurosurgery, Pediatrics*: November 2010: 6(5): pp 486-488.

Borcek AO, Rutka JA, Rutka JT: Meningiomas and Neurofibromatosis. In: *Meningiomas: A Comprehensive Text*: (Saunders Elsevier): Chapter 48, pp 593-600.

Castelo-Branco P, Zhang C, Lipman T, Fujitani M, Hansford L, Clarke I, Harley CB, Tressler R, Malkin D, Walker E, Kaplan DR, Dirks P, Tabori U: Neural tumor-initiating cells have distinct telomere maintenance and can be safely targeted for telomerase inhibition. *Clinical Cancer Research*: January 2011: 17(1): pp 111-121.

Chakraborty A, Rutka JT: Surgical approaches to epilepsy. *Future Medicine*: September 2010: 7(5): pp 467-479.

Chung S, Mikrogianakis A, Wales PW, Dirks P, Shroff M, Singhal A, Grant V, Hancock BJ, Creery D, Atkinson J, St-Vil D, Crevier L, Yanchar N, Hayashi A, Mehta V, Carey T, Dhanani S, Siemens R, Singh S, Price D: Trauma Association of Canada Pediatric Subcommittee National Pediatric Cervical Spine Evaluation Pathway: Consensus guide. *Journal of Trauma*: April 2011: 70(4): pp 873-884.

Dennis M, Nelson R, Jewell D, Fletcher JM: Prospective memory in adults with spina bifida. *Child's Nervous System*: November 2010: 26: pp 1749-1755.

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Dirks P: Cancer Stem Cells: Invitation to a Second Round. *Nature*: July 2010: 466(7302): pp 40-41.

Dirks PB: Brain tumor stem cells: the cancer stem cell hypothesis writ large. *Molecular Oncology*: October 2010: 4(5): pp 420-430. E-published August 2010.

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Drake J: Topographic movie of intracranial ictal high-frequency oscillations with seizure semiology: Epileptic network in Jacksonian seizures. *Epilepsia*: January 2011: 52(1): pp 75-83.

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Edwards RJ, Drake JM: Pediatrics. In: *Cerebrospinal Fluid Devices*, Section VII: Chapter 192. *Youmans Neurological Surgery*.

Ellis M.J, Kulkarni AV, Drake JM, Rutka JT, Armstrong D, Dirks PB: Intraoperative angiography during microsurgical removal of arteriovenous malformations in children. *Journal of Neurosurgery, Pediatrics*: November 2010: 6(5): pp 435-443.

Ellis MJ, Armstrong D, Dirks PB: Large vascular malformation in a child presenting with vascular steal phenomenon managed with pial synangiosis. *Journal of Neurosurgery, Pediatrics*: January 2011: 7(1): pp 15-21.

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- Fletcher JM, Northrup H, Cirino P, Dennis M:** Spina bifida and hydrocephalus: Modeling variability in outcome domains. In: *Pediatric Neuropsychology: Research, Theory and Practice Second Edition* (Yeates KO, Ris MD, Taylor HG, Pennington, BF, eds) Guilford Press, New York 2010: pp 3-25.
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- Fulkerson DH, Vachhrajani S, Brayton A, Kulkarni AV, Jea A:** The perception of complications in pediatric spine surgery: a comparative survey of surgeons, caregivers and patients. *Pediatric Neurosurgery*: November 2010: 46(3): pp 213-220.
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- Hopyan T, Laughlin S, Dennis M:** Emotions and their cognitive control in children with cerebellar tumors. *Journal of the International Neuropsychological Society*: November 2010: 16(6): pp 1027-1038.
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- Katkere B, Rosa S, Caballero A, Repasky EA, Drake JM.** Physiological-range temperature changes modulate cognate antigen processing and presentation mediated by lipid raft-restricted ubiquitinated B cell receptor molecules. *The Journal of Immunology*: November 2010: 185(9):5032-5039. E-published September 24, 2010.
- Kim BYS, Rutka JT, Chan WCW:** Nanomedicine. *The New England Journal of Medicine*: December 2010: 363(25): pp 2434-2443.
- Kongkham PN, Onvani S, Smith CA, Rutka JT:** Inhibition of the MET receptor tyrosine kinase as a novel therapeutic strategy in medulloblastoma. *Translational Oncology*: December 2010: 3(6): pp 336-343.
- Kulkarni AV, Drake JM, Kestle JR, Mallucci C, Sgouros S, Constantini S, and the Canadian Pediatric Neurosurgery Study Group:** Predicting who will benefit from endoscopic third ventriculostomy (ETV) compared to shunt in childhood hydrocephalus using the ETV Success Score. *Journal of Neurosurgery, Pediatrics*: October 2010: 6(4): pp 310-315.
- Kulkarni AV, Drake JM, Kestle JR, Mallucci CL, Sgouros S, Constantini S, and the Canadian Pediatric Neurosurgery Study Group.** Endoscopic third ventriculostomy vs cerebrospinal fluid shunt in the treatment of hydrocephalus in children: a propensity score-adjusted analysis. *Neurosurgery*: September 2010: 67(3): pp 588-593.
- Kulkarni AV, Riva-Cambrin J, Brown SR:** Use of the endoscopic third ventriculostomy success score to explain the variation in reported ETV success among published case series of childhood hydrocephalus. *Journal of Neurosurgery, Pediatrics*: February 2011: 7(2): pp 143-146.
- Kulkarni AV, Shams I, Cochrane DD, McNeely PD:** Quality of life after endoscopic third ventriculostomy and cerebrospinal fluid shunt: an adjusted multivariable analysis in a large cohort. Clinical article. *Journal of Neurosurgery, Pediatrics*: July 2010: 6(1): pp 11-16.
- Kulkarni AV, Warf BC, Drake JM, Mallucci CL, Sgouros S, Constantini S; Canadian Pediatric Neurosurgery Study Group:** Surgery for hydrocephalus in sub-Saharan Africa versus developed nations: a risk-adjusted comparison of outcome. *Child's Nervous System*: December 2010: 26(12): pp 1711-1717. E-published June 16, 2010.
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Rutka JT: Excellence in neurosurgical research the neuro-oncology paradigm. *Clinical Neurosurgery*: October 2010: 7: pp 38-48.

Rutka JT: Neurosurgeon of the Year. *Collegial Commentaries. World Neurosurgery*: 2010: 75(2): p 199.

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Sinopoli KJ, Schachar, RS, Dennis M: Traumatic brain injury and secondary attention-deficit/hyperactivity disorder in children and adolescents: The effect of reward on inhibitory control. *Journal of Clinical and Experimental Neuropsychology*. E-published May 23, 2011.

Smith SE, Kirkham FJ, Deveber G, Millman G, Dirks PB, Wirrell E, Telfeian AE, Sykes K, Barlow K, Ichord R: Outcome following decompressive craniectomy for malignant middle cerebral artery infarction in children. *Developmental medicine & Child Neurology*: January 2011: 53(1): pp 29-33.

Swartwout MD, Garnaat SL, Myszkka KA, Fletcher JM, Dennis M: Associations of ethnicity and SES with IQ and achievement in spina bifida meningomyelocele. *Journal of Pediatric Psychology*: October 2010: 35(9): pp 927-936.

Traenka C, Remke M, Korshunov A, Bender S, Hielscher T, Northcott PA, Witt H, Ryzhova M, Felsberg J, Benner A, Riestler S, Scheurlen W, Grunewald TGP, von Deimling A, Kulozik AE, Reifenberger G, Taylor MD, Lichter P, Butt E, Pfister SM: Role of LIM and SH3 protein 1 (LASP1) in the metastatic dissemination of medulloblastoma. *Cancer Research*: October 2010: 70(20): pp 8003-8014.

U-King-Im JM, Taylor MD, Raybaud C: Posterior fossa ependymomas: new radiological classification with surgical correlation. *Child's Nervous System*: December 2010: 26(12): pp 1765-1772. E-published August 3, 2010.

Vachhrajani S, Ellis M, Rutka JT: Pediatric Tumor Surgery. In: *Principles and Practice of Neuro-Oncology*. (Chang SM, Guha A, Newton HB, Vogelbaum MA, eds). Demos Medical, New York, New York. 2011: pp 518 - 533, 2011.

Wilson JR, Vachhrajani S, Li J, Sun M, Hawkins C, Rutka JT: Pediatric sinonasal undifferentiated carcinoma: case report and literature review. *The Canadian Journal Neurological Science*: November 2010: 37(6): pp: 873-877.

Zhou L, Picard D, Ra YS, Li M, Northcott PA, Hu Y, Stearns D, Hawkins C, Taylor MD, Rutka J, Der SD, Huang A: Silencing of thrombospondin-1 is critical for myc-induced metastatic phenotype in medulloblastoma. *Cancer Research*: October 2010: 70(20): pp 8199-8210. E-published September 28, 2010.

INVITED VISITS

Dennis M: First International workshop on Hemispherectomy, Utrecht, Netherlands, September 2010. Keynote Speaker: Cortical plasticity and hemispherectomy in the 1970s: What were we thinking?

Dennis M: Karolinska Institute, Stockholm, Sweden, November 2010. Guest Lecturer: Gene, brain, and behaviour in spina bifida.

Dennis M: Swedish Neuropsychological Society Annual Meeting, Stockholm, Sweden, November 2010. Keynote Speaker: Neural and behavioural plasticity in children with brain injury: Implications for rehabilitation.

Dennis M: University of Victoria, May 2011. Distinguished Women Scholar Lectureship.

Dennis M: 37th Annual Meeting of the Organization for Human Brain Mapping, Quebec City, Canada, June 2011. AMRI & DTI of deep gray matter structures in children with and without spina bifida meningomyelocele.

Dirks PB: Canadian Association of Neuropathologists- 50th Annual Meeting, Toronto, Ontario, Canada, October 2010. Guest Lecturer: Stem Cells in Brain Tumors.

Dirks PB: Institut National du Cancer, Paris, France, November 2010. Guest Lecturer: Brain Cancer: Stem Cell Foundation and New Therapeutic Opportunities.

Dirks PB: The Royal Melbourne Hospital and the University of Melbourne, Melbourne, Australia, November 2010. (1) A stem cell view of brain cancer: Implications for developing new therapies, (2) Stem cells in brain tumour. Are the real? What do they mean? (3) Pediatric Moya-moya disease.

Dirks PB: World Cancer Stem Cell Summit, Boston, Massachusetts, United States, December 2010. Keynote Presentation: A stem cell view of brain cancer: Implications for developing new therapies.

Dirks PB: Institut de Recherche En Immunologie et en Cancerologie (IRIC)/, Université de Montreal, Montreal, Quebec, Canada, January 2011. The aberrant self renewal and differentiation of brain tumor stem cells.

Dirks PB: Gordon Research Conference on Stem Cells & Cancer, Ventura, California, USA, February 2011.

Dirks PB: American Association for Cancer Research (AACR), Stem Cells Conference, Vancouver, British Columbia, Canada, March 2011.

Dirks PB : American Association for Cancer Research (AACR), Orlando, Florida, USA, April 2011.

Dirks PB: Milan, Italy, April 2011. New Molecular Insights into the Brain Tumor Stem Cell Phenotype.

Dirks PB: International Symposium on Clinical and Basic Investigation in Glioblastoma, Valencia, Spain, June 2011.

Drake JM: National Research Council (NRC) Program, Virtual Reality for Surgical Oncology, London, Ontario, Canada, September 2010. Computer Assisted Pediatric Neurosurgery.

Drake JM: Japanese Society of Neurosurgery, 69th Annual Meeting, Fukuoka, Japan, October 2010. Choosing the best CSF diversion strategy in pediatric patients.

Drake JM: International Congress on Early Onset Scoliosis, Toronto, Ontario, Canada, November 2010. Syrinx, chiari, tether - need for treatment.

Kulkarni AV: International Federation of Neuroendoscopy, Tokyo, Japan, December 2010. Outcome in hydrocephalus.

Rutka JT: Cornell Medical College, Elsberg Lecture, New York, New York, USA, September 2010. Rolandic epilepsy surgery: Choosing between seylla and charybdis.

Rutka JT: New Jersey Medical School, 2010 Harry Kaplan Sponsored Lecturship in Neurosurgery, New Jersey, USA, September 2010. Distinguished Speaker: Medulloblastoma: One disease, two or more?

Rutka JT: University of Wisconsin, Grand Rounds, Madison, Wisconsin, USA, September 2010. (1) Neurosurgical leadership, (2) Building a brain tumor center, (3) Medulloblastoma: Once disease, two or more?

Rutka JT: Congress of Neurological Surgeons, San Francisco, California, USA, October 2010. (1) Cases and Coffee with the Masters, (2) Pediatric brain Tumor treatment and strategies

Rutka JT: McMaaster University, Hamilton, Ontario, Canada, October 2010. (1) Effective surgical leadership: Why it matters, (2) Medulloblastoma: One Disease, two or more?

Rutka JT: The Society of Neurological Surgeons, Research Update in Neuroscience of Neurosurgery (RUNN) Course, Boston, Massachusetts, USA, October 2010. Medulloblastoma-from a difficult past to a promising future.

Rutka JT: 2010 Pediatric Section Meeting, Cleveland, Ohio, USA, December 2010. Neurosurgical leadership: A pediatric neurosurgeon's perspective.

Rutka JT: Hans-Dietrich Hermann Vorlesung fur Neuro-Onkologie, Hamburg, Germany, February 2011. Novel translational therapeutic strategies for human brain tumors: From small molecule inhibitors to nanomedicine.

Rutka JT: Texas Annual Neurosurgical Society Meeting 2011, Dallas, Texas, USA, February 2011. (1) Pediatric Neurosurgical Oncology: What You Need to Know, (2) Strategic Planning and the Future of the AANS, (3) Medulloblastoma: One disease Four or More.

Taylor MD: Children's Oncology Group Fall Meeting, Translational Medicine Committee, Dallas, Texas, USA, September 2010. (1) Intra and Intertumoral heterogeneity: Just how many medulloblastomas are there anyways? (2) Practical subgrouping of medulloblastoma.

Taylor MD: Duke University, Preston Robert Tisch Brain Tumour Center Seminar, Durham, North Carolina, USA, October 2010. Intra and intertumoral heterogeneity in pediatric medulloblastoma.

Taylor MD: American Academy of Neurological Surgery, Pebble Beach, California, USA, November 2010. Medulloblastoma Comprises Four Distinct Diseases.

Taylor MD: Institut de recherches cliniques de Montreal, Quebec, Canada, November 2010. Inter and Intratumoral Heterogeneity in childhood medulloblastoma.

Taylor MD: Massachusetts General Hospital, Tenth Annual Frye Halloran Brain Tumor Symposium, Boston, Massachusetts, USA, November 2010. Molecular subgrouping of medulloblastoma through transcriptional profiling and copy number determination.

Taylor MD: Society for Neuro-Oncology, 15th Annual Scientific Meeting, Montreal, Quebec, Canada, November 2010. Adolescent and adult medulloblastoma: evolving understanding of biology and changes in therapeutic approach: molecular genetics.

Taylor MD: Sonntag Foundation Annual Retreat, Yulee, Florida, USA, February 2011. The myth of medulloblastoma. Intra and intertumoral heterogeneity across space and time.

Taylor MD: European Organization for Research and Treatment of Cancer/European Association of Neuro-Oncology (EORTC-EANO), 2011 Conference: Trends in CNS Malignancies, Bucharest, Romania, March 2011. Towards the use of a molecular classification in the clinical management of medulloblastoma?

RESEARCH AND INVESTIGATIONS

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

- Cellular and genetic basis of anaplastic medulloblastoma. *Taylor M, Weiss W (UCSF), Wechsler-Reya (Sanford-Burnham Institute, San Diego): National Institutes of Health (NIH), USA.* (\$2,686,145 2011-2016)
- Centre for Computer-Assisted Intervention and Innovation (CCAI). *Burns P, Babyn P, Bocking A, Cyril X, Kim P, Laberge J-M, Lymer J, Milgram P, Reznick R, Van Vaals J, Alman B, Amaral J, Bass J, Bratu I, Chait P, Drake J, Farhat W, Fitzgerald P, Giacomantonio M, Hedden D, Hynynen K, Jones S, Langer J, Newhook P, Ryan G, Sigalet D, Skarsgard E, Yazbeck S: Ontario Research Fund Research Excellence.* (\$3,395,000 2008 - 2012)
- Chemical Genomics of Brain Tumor Stem Cells. *Dirks P, Many Other Collaborators: Ontario Institute for Cancer Research (OICR)/Terry Fox Selective Therapeutics.* (\$305,000 2009 - 2012)
- Clinician-Scientist Phase II Award (Renewal). *Taylor M: Canadian Institutes of Health Research (CIHR).* (\$150,000 2010 - 2013)
- CO2 Incubator. *Rutka J: Private Recipes Limited, b.r.a.i.n.child.* (\$18,748 2010 - 2011)
- Defining cancer stem cell and clonal heterogeneity in mouse brain tumours. *Dirks P: Canadian Cancer Society.* (\$548,000 2009 - 2013)
- Effects of dysregulated HGF/cMET signalling on cerebellar development and medulloblastoma formation. *Rutka J: Private, b.r.a.i.n.child.* (\$23,645 2010 - 2011)
- Funding for laboratory. *Taylor M: Ontario Institute for Cancer Research (OICR), Cancer Stem Cell Initiative.* (\$263,290 2008 - 2011)
- Hydrocephalus Clinical Research Network: a consortium for pediatric hydrocephalus. *Kestle J, Drake J: Hydrocephalus Clinical Research Network, NIH.* (\$994,700 2009 - 2011)
- Hydrocephalus Clinical Research Network. *Kestle J, Drake J, Kulkarni A, Walker M, Riva-Cambrin J, Whitehead W, Wellons J, Oakes J: Schwab Charitable Fund.* (\$1,000,000 2007 - 2012)
- Medulloblastoma and Metastases. *Taylor M, Weiss W (UCSF): National Institutes of Health (NIH).* (\$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 (CIHR).* (\$797,005 2010-2015)
- Genesis Project (Cancer Stem Cells). *Ontario Institute for Cancer Research (OICR), Dirks P, Many Other Collaborators.* (\$750,000 2008 - 2013)
- Optimized delivery of small molecules designed to prevent spreading in a mouse model of Astrocytoma. *Rutka J: Private Recipes Limited, b.r.a.i.n.child.* (\$23,000 2010 - 2011)
- Role of histone lysine methylation in medulloblastoma and cerebellar development. *Taylor M: Canadian Institutes of Health Research (CIHR).* (\$540,219 2010 - 2013)
- Studying the role of RNA granule in paediatric brain tumors BC 10-29. *Weeks A, Rutka J: Anonymous Private Individuals, b.r.a.i.n.child (Canadians).* (\$29,000 2010 - 2010)
- Targeting brain cancer with novel drug therapies. *Rutka J: Private Recipes Limited, b.r.a.i.n.child.* (\$25,000 2010 - 2012)
- The Canadian Pediatric Cancer Genome Consortium: Translating next-generation sequencing technologies into improved therapies for high-risk childhood cancer. *Taylor M, Sorenson P (UBC): Genome Canada/Canadian Institutes of Health Research.* (\$2,820,000 2011-2012)
- The pediatric TBI CT scan tool. *Guerguerian A, Hutchison J, Parshuram C, Kulkarni A, Laughlin S, Widjaja E, Willan A: Ontario Neurotrauma Foundation (ONF).* (\$99,975 2010 - 2012)
- The role of aberrant HGF/cMET signaling in medulloblastoma. *Rutka J: Canadian Cancer Society Research Institute.* (\$378,000 2008 - 2011)
- The role of aberrant HGF/cMET signaling in medulloblastoma. *Taylor M, Rutka J: National Cancer Institute of Canada (NCIC).* (\$378,000 2008 - 2011)
- The role of isochromosome 17q in medulloblastoma. *Rutka J, Dirks P, Taylor M, Tabori U: Pediatric Brain Tumor Foundation.* (\$1,198,800 2008-2011)
- Tumour bank expansion: *Rutka J: Brain Tumor Research Bank (BTRC).* (\$24,585.75 2009-2011)
- Vectors, epigenetics, and stem cell reprogramming. *Dirks P, Manger D, Dillworth J, Lorincz M: Canadian Institutes of Health Research (CIHR).* (\$497,495 2008-2013)
- Understanding the brain tumorigenic process: focus on cancer stem cells. *Dirks P: National Cancer Institute of Canada (NCIC).* (\$564,000 2007-2011)
- White matter brain injury in children with hydrocephalus. *Kulkarni A, Mabbot D, Widjaja E, Donnelly R: PSI Foundation.* (\$98,000 2008-2010)

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

HONOURS RECEIVED

Taylor M: Vanier Canada Graduate Scholarship, CIHR, Canada. A comprehensive analysis of epigenetic mediated silencing governing medulloblastoma metastasis and the identification of neuronal differentiation genes as targets of DNA Methylation. July 2010.

Taylor M: Vanier Canada Graduate Scholarship, CIHR, Canada. Identification of novel ependymoma tumour suppressor genes by genome-wide DNA methylation profiling. July 2010.

Taylor M: Gold Medal Award in Surgery, Royal College of Physicians and Surgeons of Canada. 2010.

Taylor M: Bristol-Myers Squibb Oncology Scholar-In-Training Award, American Association of Cancer Research, USA. Clonal selection and parallel evolution during leptomeningeal dissemination of human and mouse medulloblastoma result in bicompartamental disease. 2010.

■ Division Of Orthopaedics

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

PUBLICATIONS

- Ahn H, Kreder H, Mahomed N, Beaton D, Wright JG:** Empirically derived maximal acceptable wait time for surgery to treat adolescent idiopathic scoliosis. *Canadian Medical Association Journal*: June 2011: 183(9): pp E565-E570.
- Alman BA:** Genetic diagnosis of skeletal dysplasias. In: *Genetic Diagnosis of Endocrine Disorders* (Weiss R, Refetoff S, eds). Elsevier, San Diego, California 2010: pp 149-155.
- Alman BA:** Stem cells in pediatric orthopaedics. In: *Orthopaedic Knowledge Update: Pediatrics 4* (Song K, ed). American Academy of Orthopaedic Surgeons, Rosemont, Illinois. 2011: Chapter 5: pp 47-52.
- Alman BA, Kelley S, Nam D:** Heal thyself: Using endogenous regeneration to repair bone. *Tissue Engineering Part B Reviews*: E-published June 17, 2011.
- Alman BA, Morcuende J:** Skeletal dysplasias, connective tissue diseases and other genetic disorders. In: *Orthopaedic Knowledge Update 10* (Flynn J, ed). American Academy of Orthopaedic Surgeons (AAOS), Rosemont, Illinois. Chapter 62: pp 797-810.
- Alman BA, Wedge J:** Robert Bruce Salter, C.C., MD, FRCSC. Dec 15, 1924 - May 10, 2010. *Journal of Children's Orthopaedics*: August 2010: 4(4): pp 275-276.
- Amini-Nik S, Kraemer D, Cowan ML, Gunaratne K, Nadesan P, Alman BA, Miller JD:** Ultrafast mid-IR laser scalpel: Protein signals of the fundamental limits to minimally invasive surgery. *PLoS ONE*. September 2010: 5(9): pp E13053.
- Barnes J, Thomas S, Wedge JH:** Acetabular coverage following innominate osteotomy. *Journal of Bone and Joint Surgery*: August 2011: 31(5): pp 530-533.
- Bederman SS, Chundamala J, Wright JG:** Randomized clinical trials in orthopaedic surgery: The problems with quantity and quality. *Journal of the American Academy of Orthopaedic Surgeons*: August 2010: 18(8): 454-463.
- Bederman SS, Coyte PC, Kreder HJ, Mahomed NN, McIsaac WJ, Wright JG:** Who's in the driver's seat: The influence of patient and physician enthusiasm on regional variation in degenerative lumbar spinal surgery: a population-based study. *Spine*. (Phila Pa 1976): March 2011: 36(6): pp481-489.
- 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.
- Bollini G, Guillaume JM, Launay F, Zeller R, Jouve JL, Viehweger E, Katchburian M, Dubousset J:** Progressive anterior vertebral bars: A study of 16 cases. *Spine* (Phila Pa 1976): March 2011: 36(6): pp E423-E428.
- Boutis K, Constantine E, Schuh S, Pecaric M, Stephens D, Narayanan UG:** Pediatric emergency physician opinions on ankle radiograph clinical decision rules. *Academic Emergency Medicine*: July 2010: 17(7): pp 709-717.
- Boutis K, Narayanan UG, Dong FF, Mackenzie H, Yan H, Chew D, Babyn P:** Magnetic resonance imaging of clinically suspected Salter-Harris I fracture of the distal fibula. *Injury*: August 2010: 41(8): pp 852-856. E-published May 31, 2010.
- Boutis K, Willan A, Babyn P, Goeree R, Howard A:** Cast versus splint in children with minimally angulated fractures of the distal radius: A randomized controlled trial. *Canadian Medical Association Journal*: October 2010: 182(14): pp 1507-1512. E-published September 7, 2010.
- Bovée JVMG, Hogendoorn PC, Wunder JS, Alman BA:** Cartilage tumors and bone development: Molecular pathology and hints into therapeutic targets. *Nature Reviews Cancer*. July 2010: 10(7): pp 481-488.
- Canavese F, Wright JG, Cole WG, Hopyan S:** Unicameral bone cysts: Comparison of percutaneous curettage, steroid and autologous bone marrow injections. *Journal of Pediatric Orthopaedics*: January-February 2011: 31(1): pp 50-55.

- Donaldson S, Wright JG:** Recent developments in treatment for simple bone cysts. *Current Opinion in Pediatrics*: February 2011: 23(1): pp 73-77.
- Gupta AA, Pappo A, Saunders N, Hopyan S, Ferguson P, Wunder J, O'Sullivan B, Catton C, Greenberg M, Blackstein M:** Clinical outcome of children and adults with localized Ewing sarcoma: impact of chemotherapy dose and timing of local therapy. *Cancer*: July 2010: 116(13): pp 3189 – 3194.
- Hong H, Nadesan P, Poon R, Alman BA:** Testosterone regulates cell proliferation in aggressive fibromatosis (desmoid tumour). *British Journal of Cancer*: April 2011: 104(9): pp. 1452-1458.
- Howard AW, Wright JGW, Noordn S:** Relationship between declared funding support and level of evidence. *Journal of Bone and Joint Surgery (American)*: July 2010: 92(7): pp 1647-1651.
- Howard AW, Wilson M:** Easily missed? Septic arthritis in children. *British Medical Journal*: August 2010: 341: pp 4407.
- Janicki JA, Wright JG, Weir S, Narayanan UG:** A comparison of ankle foot orthoses with foot abduction orthoses to prevent recurrence following correction of idiopathic clubfoot by the Ponseti method. *The Journal of Bone and Joint Surgery (British)*: May 2011: 93(5): pp 700-704.
- Kamerlink JR, Engel I, Patwardhan A, Valdevit A, Lowery G, Brayda-Bruno M, Zeller R, Errico TJ:** The treatment of vertebral and chest wall deformities with expandable thoracoplasty and a prosthetic expandable implant. *Journal of Pediatric Orthopaedics*: January-February 2010: 30(1): pp 90-98.
- Katz JN, Wright JG, Losina E:** Clinical trials in orthopaedics research. Part II. Prioritization for randomized control clinical trials. *The Journal of Bone and Joint Surgery*: April 2011: 93(7): pp E30.
- Knight D, Wedge JH:** Marking the operative site: A lesson learned. *Canadian Medical Association Journal*: November 2010: 182(17): pp E799.
- Lee PP, Howard AW:** Five things to know about...child automobile restraints. *Canadian Medical Association Journal*: June 2011: 183(9): pp 1049. E-published March 7, 2011.
- Macpherson A, Jones J, Rothman L, Macarthur C, Howard A:** Safety standards and socioeconomic disparities in school playground injuries: a retrospective cohort study. *BMC Public Health*: September 2010: 10: pp 542.
- Murnaghan ML, Kelley SP:** Slipped capital femoral epiphysis - in-situ screw fixation. *COA Bulletin*: Winter 2010: pp 17-18.
- Murnaghan ML, Browne R, Sucato D, Birch J:** Femoral nerve palsy in Pavlik harness treatment for developmental dysplasia of the hip. *The Journal of Bone and Joint Surgery (American)*: March 2011: 93(5): pp. 493-499.
- Noordn S, Allana S, Wright JG:** Surgical management of neglected bilateral obligatory patella dislocation. *Journal of Pediatrics Orthopaedics, Part B*: July 2010: 19(4): pp 337-340.
- Noordn S, Wright JG, Howard A:** Relationship between declared funding support and level of evidence. *Journal of Bone and Joint Surgery (American)*: July 2010: 7(92): pp 1647-1651.
- Rockel JS, Alman BA:** Don't hedge your bets: Hedgehog signaling as a central mediator of enchondral bone development and cartilage diseases. *Journal of Orthopaedic Research*: June 2011: 29(6): pp 810-815.
- Roposch A, Odeh O, Doria AS, Wedge JH:** The presence of an ossific nucleus does not protect against osteonecrosis after treatment of developmental dysplasia of the hip. *Clinical Orthopaedics and Related Research*: 2011: 469: pp 2838-2845.
- Sansur CA, Reames DL, Smith JS, Hamilton DK, Berven SH, Broadstone PA, Choma TJ, Goytan MJ, Noordeen HH, Knapp DR, Hart RA, Zeller R, Donaldson WF, Polly DW, Perra JH, Boachie-Adjei O, Shaffey CI:** Morbidity and mortality in the surgical treatment of 10,242 adults with spondylolisthesis. *Journal of Neurosurgery, Spine*: November 2010: 13(5): pp 589-593.
- Santaguida PL, Young N, Hawker G, Schmitsch E, Owen J, Wright JG:** Patient preferences before and after total knee arthroplasty. *Journal of Clinical Epidemiology*: July 2010: 63(7): pp 774-782. E-published December 11, 2009.
- Smith JS, Sansur CA, Donaldson WF 3rd, Perra JH, Mudiya R, Choma TJ, Zeller R, Knapp DR Jr, Noordeen HH, Berven SH, Goytan MJ, Boachie-Adjei O, Shaffrey CI:** Short-term morbidity and mortality associated with correction of thoracolumbar fixed sagittal plane deformity: A report from the Scoliosis Research Society Morbidity and Mortality Committee. *Spine (Phila Pa 1976)*: May 2011: 36(12): pp 958-964.
- Snowdon A, Rothman L, Slater M, Kolga C, Hussein A, Boase P, Howard A:** Methodology of estimating restraint use in children: Roadside observation or parking lot interview survey. *Accident Analysis & Prevention*: November 2010: 42(6): pp 1545-1548. E-published April 18, 2010.

Sonnadara RR, Van Vliet A, Safir O, Alman BA, Ferguson P, Kraemer W, Reznick R: Orthopaedic boot camp: Examining the effectiveness of an intensive surgical skills course. *Surgery*: June 2011: 149(6): pp 745-749. E-published January 13, 2011.

Wang CH, Rutkowski A, Bellini J, Florence JM, Wahbi, K, Bash RO, Bertini E, Connolly AM, Desguerre I, Estournet-Mathiaud B, Fujak A, Iannaccone ST, Main M, Mueller-Felber W, Nelson LL, Quijano-Roy S, Storhaug K, Tseng B, Zeller R: Consensus statement on standard of care for congenital muscular dystrophies. *Journal of Child Neurology*: December 2010: 25(12): pp 1559-1581. E-published November 15, 2010.

Wedge JH: Obituary - Robert Bruce Salter, CC, MD, FRCSC (1924-2010). *Journal of Bone and Joint Surgery (American)*. September 2010: 92(11): pp 2139.

Williams BJ, Sansur CA, Smith JS, Berven SH, Broadstone PA, Choma TJ, Goytan MJ, Noordeen HH, Knapp DR Jr, Hart RA, Zeller R, Donaldson WF 3rd, Polly DW Jr, Perra JH, Boachie-Adjei O, Shaffrey CI: Incidence of unintended durotomy in spine surgery based on 108,478 cases. *Neurosurgery*: January 2011: 68(1): pp 117-124.

Wright JG: Editorial: Evidence-based medicine in orthopaedics: Are we there yet? *COA Bulletin AOC*: Fall 2010: 90: pp 36.

Wright JG: Hip and spine surgery is of questionable value in spina bifida: An evidence-based review. *Clinical Orthopaedics and Related Research*: E-published ahead of print September 2010.

Wright JG, Daneman D, Mainland J, Rossant J: Innovation as the core strategy for the future success of academic health care centers. *Canadian Journal of Surgery*: June 2011: 54(3): pp 150-151.

Wright JG, Katz JN, Losina E: Clinical trials in orthopaedics research. Part I. Cultural and practical barriers to randomized trials in orthopaedics. *Journal of Bone and Joint Surgery*: March 2011: 93(5): pp E15.

Wright JG, Li K, Seguin C, Booth M, Fitzgerald P, Jones S, Leitch KK, Willis B.(OCHN Surgical Wait Times Task Force): Development of paediatric wait times access targets. *Canadian Journal of Surgery*: April 2011: 54(2): pp 107-110.

Wright JG, Menaker RJ, Blair G, Chan JS, Corsten G, Crivianu-Gaita D, Fixler T, Hedden D, Jones S, Leclerc S, Leitch KK, Mainland J, Mayer SK, Ouimet A, McPherson JA, Seguin C, Willis B, Wong AL, Houle AM,: Waiting for children's surgery in Canada: The Canadian paediatric surgical wait times project. *Canadian Medical Association Journal*: June 2011: 183(9): pp E559-E564. E-published May 2, 2011.

Wu C, Amini Nik S, Nadesan P, Stanford WL, Alman BA: Aggressive fibromatosis (desmoid tumor) is derived from mesenchymal progenitor cells. *Cancer Research*: October 2010: 70(19): pp 7690-7698.

Wyngaarden LA, Vogeli KM, Ciruna BG, Wells M, Hadjantonakis A-K, Hopyan S: Oriented cell motility and division underlie early limb bud morphogenesis. *Development*: August 2010: 137 (15): pp 2551-2558.

INVITED VISITS

Alman B: Institute for Frontier Medical Sciences at the University of Kyoto, Kyoto, Japan, September 2010. From development to pathology; Hedgehog signaling in osteoarthritis and chondrosarcoma.

Alman B: American Society of Bone and Mineral Research (ASBMR) - Annual Meeting - "Meet the Professor Session", Toronto, Ontario, Canada, October 2010. From development to disease: Hedgehog in Tumors and Arthritis.

Alman B: Southern Illinois School of Medicine, Springfield, Illinois, USA, October 2010. (1) Cutting the roots: How we can cure sarcomas by understanding stem cells, (2) Teaching orthopaedics "upside-down": A competency based orthopaedic residence curriculum, (3) Building better bones: Developmental biology in orthopaedics, (4) Bigger is not better: Obesity in pediatric orthopaedics.

Alman B: University of Michigan, Regional 2010 OREF resident research conference, Ann Arbor, Michigan, USA, October 2010. Building better bones: What developmental biology teach about orthopaedics.

Alman B: Desmoid Tumour Research Foundation, Philadelphia, Pennsylvania, USA, November 2010. Desmoid tumor research: Treatments based on understanding the cause.

Alman B: McMaster University, Department of Surgery, Resident's Research Day, Hamilton, Ontario, Canada, November 2010. Why is research important and the role of SSP trainees.

Alman B: 2010 International Pediatric Orthopaedic Symposium (IPOS), Orlando, Florida, USA, December 2010. (1) Syndromes and dysplasias: A modern genetic perspective, (2) Fassier duval telescopic IM rod indications: Osteogenesis imperfecta and beyond, (3) A career in pediatric orthopaedics, (4) Essentials of syndromes, (5) Essentials of developmental biology.

Alman B: Shriners Hospital Portland, 2010 Beattie Lecture Series, Portland, Oregon, USA, December 2010. (1) Building better bones: Developmental Biology in Orthopaedics, (2) Steroids in muscular dystrophy: A case for basic science in orthopaedics, (3) Keeping track of syndromes: A classification of orthopaedic disorders based on genetics, (4) Is newer really better: Traction and the unit rod in scoliosis treatment, (5) Teaching orthopaedics "upside-down": A competency based orthopaedic residence curriculum.

Alman B: Tel-Aviv University, Sackler Faculty of Medicine, 2010 Herman Robbins Lecture, Tel-Aviv, Israel, December 2010. (1) Building better bones: Developmental biology in orthopaedics, (2) Bigger is not better: Obesity in orthopaedics, (3) Fractures remodel, don't they? When to operate on children's fractures.

Alman B: TERMIS Annual Meeting, Orlando, Florida, USA, December 2010. Endogenous regeneration. Bone tissue engineering and regeneration: From discovery to the clinic.

Alman B: Duke University School of Medicine, Raleigh, North Carolina, USA, January 2011. What development teaches about sarcoma: Hedgehog signaling in chondrocytes.

Alman B: Hong Kong University, Hong Kong, January 2011. (1) Modern concepts in syndromes and skeletal dysplasia, (2) Fibromatosis to cosmesis: Beta-catenin in mesenchymal cells.

Alman B: Massachusetts General Hospital, Boston, Massachusetts, USA, January 2011. Don't hedge your bets: Hedgehog signaling in development, osteoarthritis, and cartilage neoplasia.

Alman B: American Academy of Orthopaedic Surgeons, POSNA Speciality Day, San Diego, California, USA, February 2011. What's new in neurofibromatosis.

Alman B: Gordon Research Conference on Cartilage Biology & Pathology, Ventura, California, USA, March 2011. From development to pathology: Hedgehog signalling in cartilage neoplasia and osteoarthritis.

Alman B: Philadelphia Shriners Hospital, Philadelphia, Pennsylvania, USA, March 2011. Steroids in muscular dystrophy: A case for basic science in orthopaedics.

Alman B: Yale School of Medicine, Orthopaedic Grand Rounds, New Haven, Connecticut, USA, March 2011. Steroids in muscular dystrophy: A case for basic science in orthopaedics".

Alman B: University of British Columbia, Biomedical Research Center/ Orthopaedic Department, Vancouver, British Columbia, Canada, April 2011. (1) Beta-catenin: From tumours to cosmesis: Beta-catenin in mesenchymal cells, (2) Scoliosis in muscular dystrophy: Why basic science matters in orthopaedics.

Alman B: NCIC CTG, Annual Meeting, Toronto, Ontario, Canada, May 2011. Using developmental biology to identify therapeutic targets in MSK tumors: lessons learned from fibromatosis, chondrosarcoma and MFH.

Alman B: American Orthopaedic Association, Boston, Massachusetts, USA, June 2011. Competency-based curriculum: A new model for teaching orthopaedics.

Alman B: Children's Hospital Medical Center, Department of Orthopaedics, Cincinnati, Ohio, USA, June 2011. Duchenne's muscular dystrophy: A case for basic science in orthopaedics.

Alman B: University of Cincinnati, Orthopaedic Department, Grand Rounds, Cincinnati, Ohio, USA, June 2011. What's the evidence that the evidence is right.

Hopyan S: 11th International Conference on Limb Development and Regeneration, Williamsburg, Virginia, USA, July 2010. One of 6 Presenter(s): Oriented cell motility and division underlie early limb bud morphogenesis.

Hopyan S: Indian/Asian Brachial Plexus Conference, India, February 2011. Guest Lecturer: Novel approach to shoulder reconstruction for glenohumeral dysplasia secondary to brachial plexus birth palsy.

Hopyan S: Paediatric Orthopaedic Society of India, February 2011. Guest Lecturer: Novel approach to shoulder reconstruction for glenohumeral dysplasia secondary to brachial plexus birth palsy.

Howard A: 2010 World Conference, London, Westminster, United Kingdom, September 2010. One of 2 Presenters: The location of child cyclist versus motor vehicle collisions in an urban environment.

Howard A: COMOC, Edinburgh, United Kingdom, September 2010. Presenter: A randomized controlled trial of cast versus wrist splint in children with acceptably agulated disal fractures.

Safety 2010 World Conference, London, United Kingdom, September 2010. Presentations: (1) The introduction of booster seat legislation in Canada: Is it working?, (2) The influence of crossing controls and crossing location on severity of injury among urban pedestrians, (3) Cost effectiveness of arm fractures in a randomized playground surfacing trial, (4) Collision investigations of child pedestrians or cyclists struck by motor vehicles: A pilot study.

Howard A: American Academy of Orthopaedic Surgeons (AAOS), San Diego, California, USA, February 2011. The adolescent elbow.

Howard A: The Paediatric Orthopaedic Society of North American (POSNA), Montreal, Quebec, Canada, May 2011. Lateral condyle nonunions: Results of percutaneous screw fixation.

Howard A: Canadian Anaesthesiologists Society, Toronto, Ontario, Canada, June 2011. Guest Speaker: Paediatric trauma resuscitation: Whose specialty is it anyway?

Murnaghan L: Canadian Orthopaedic Association (COA) Basic Science Course, Montreal, Quebec, Canada, October 2010. Guest Speaker: Pediatric orthopaedics - fractures and infections.

Murnaghan L: Rocky Mountain Hospital for Children, Vail, Colorado, USA, January 2011. OCD MRI classification system & ROCK OCD journal club.

Murnaghan L: Dana Children's Hospital, Tel Aviv, Israel, April 2011. (1) Hip arthroscopy in the pediatric patient, (2) Ossicles around the foot, (3) Osteochondritis dissecans of the capitellum in adolescent athletes.

Wedge J: International Hip Dysplasia Institute, Mexico City, Mexico, August 2010. Presenter: (1) Technique of closed reduction for DDH, (2) The long-term results of Salter's approach to DDH after walking age, (3) The spectrum of pathology in DDH and the required surgical techniques to treat variations in abnormal anatomy.

Wedge J: International Paediatric Orthopaedic Think Tank, Stockholm, Sweden, September 2010. (1) Neonatal hip screening is not effective - A new approach is required, (2) Habitual hip dislocation in Trisomy 21, (3) Closed or open reduction in DDH from 6 to 18 months.

Wedge J: Salter Society, Toronto, Ontario, Canada, October 2010. Presenter: Screening for DDH is not effective - A new approach as advocated by Bob Salter is required.

Wedge J: Tel Aviv Medical Centre/Dana Children's Hospital, Tel Aviv, Israel, November 2010. (1) Universal screening DDH is not very effective - a new approach is required, (2) Closed versus open reduction in children with DDH from six to fifteen months of age, (3) The management of habitual dislocation of the hip in Trisomy 21, (4) Fifty years experience with Salter's innominate osteotomy, (5) Variations in pathological anatomy in DDH, (6) Current concepts in the management of symptomatic hip dysplasia in adolescents and young adults, (7) Controversies in the diagnosis and management of DDH, (8) The enigma of Legg Perthes Disease, (9) The technique of closed reduction.

Wright J: International Paediatric Orthopaedic Think Tank (IPOTT), Annual Meeting, Stockholm, Sweden, September 2010. (1) Changing surgeons' behaviour: The final challenge in evidence-based orthopaedics, (2) Enhancing perioperative services to improve access and reduce wait times for safe high quality care.

Wright J: Orthopedic Associations, Combined Meeting/Symposium, Glasgow, Scotland, United Kingdom, September 2010. Guest Speaker: What is currently going on in terms of quality in ABC countries (policy implications, pros and cons).

Wright J: International Pediatric Orthopaedic Symposium (IPOS), Lake Buena Vista, Florida, USA, December 2010. Poster Presentation: Determination of bone morphogenetic protein use in pediatric spine fusion surgery: Analysis of the 2006 kids' inpatient database.

Wright J: Orthopaedic Research Society, 57th Annual Meeting, Long Beach, California, USA, January 2011. Guest Speaker: Clinical Research Forum: Learning from the past, looking to the future.

Wright J: American Association of Orthopaedic Surgeons, 2011 Annual Meeting, San Diego, California, USA, February 2011. Presenter: Deformities of the child's foot: Evaluation and principles-based management.

Wright J: Taming of the Queue Conference, Ottawa, Ontario, Canada, March 2011.

Wright J: American Association of Orthopaedic Surgeons, 2011 Comparative Effectiveness Research Symposium (CER), Washington, District of Columbia, USA, May 2011.

Wright J: The Paediatric Orthopaedic Society of North America (POSNA), 2011 Annual Meeting and One-Day Course, Montreal, Quebec, Canada, May 2011. Guest Speaker: (1) What is EMB? What is Evidence? How do You Find Evidence? (2) Evidence Based Medicine (EBM) in pediatric orthopaedics: What is it? Why Does It Matter? And, How Should You Do It? (3) Presider of Session III - EBM I Practice - What is the Best Evidence.

Wright J: American Orthopaedic Association (AOA), 2011 Meeting, Boston, Massachusetts, USA, June 2011. Emerging Leaders Forum (ELF): How to Be a Leader within Your Institution - Part I: Multi-center Trials Training Aimed at identifying needs, working with other institutions, etc. to encourage young faculty to develop multi-institutional trials.

Zeller R: American Academy of Orthopaedic Surgeons, San Diego, California, USA, February 2011. Presenter: Bone based correction techniques in congenital and early onset scoliosis.

Zeller R: Sociedad Colombiana de Cirugía Ortopédica y Traumatología, Cartagena, Colombia, February 2011. Presenter: (1) Direct vertebral derotation: A new way to correct spinal torsion in scoliotic deformities, (2) Non fusion strategies in early onset scoliosis, (3) Less constraint leads to better results: The uniaxial screw fixation, (4) Surgical management of spinal deformities in spinal muscular atrophy.

Zeller R: Basel Symposium for Paediatric Orthopaedics, Basel, Switzerland, September 2010. Presenter: The artisan's prayer: Reflections about medical ethics.

Zeller R: International Paediatric Orthopaedic Think Tank, Stockholm, Sweden, September 2010. Presenter: Less constraint leads to a better results! The uniaxial screw fixation for scoliosis correction.

Zeller R: Quebec Orthopaedic Association, La Malbaie, Quebec, September 2010. Presenter: (1) Lumbar disk arthroplasty: The way of the future or a part of the past?, (2) Paediatric spondylolisthesis: Management.

RESEARCH AND INVESTIGATIONS

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

Articular chondrocyte differentiation and osteoarthritis. *Alman B, Stanford WL, Keller GM: Canadian Institutes of Health Research (CIHR).* (\$721,855 2010 - 2015)

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

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

Canada Research Chair, Canada. *Alman B: Research Award, Specialty: Musculoskeletal Research, Tier II. Renewal* (\$500,000 2006-2011)

Canadian injury indicators team: Child & Youth policy indicators. *Brussoni M, Macpherson A, Babul S, Barr R, Desapriya E, Groff P, Hameed S, Herman M, Hewitt A, Howard A, MacArthur C, Pike I, Raina P, Simons R, Stathokostas L, Swaine B, Warda L, Yanchar N, Young J: Canadian Institutes of Health Research (CIHR).* (\$107,292 2008 - 2010.)

Canadian Pediatric Surgical Wait Times Project-Stage II. *Blair G, Corsten G, Farmer J, Fitzgerald P, Hedden D, Houle A, Jones S, Leclerc S, Leitch K, Mayer S, McPherson J, Miller G, Ouimet A, Price D, Willis B, Wong A, Wilson K, Wright JG: Health Canada.* (\$9,800,000 2008 - 2011)

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

Child pedestrian injury in the City of Toronto: The role of the built environment and active school transportation. *Howard A: Canadian Institutes of Health Research, Doctoral Award-Frederick Banting and Charles Best Canada.* (\$105,000 2011-2014)

Collaborative Community-Based Complex Care Coordination. *Margolis I, Gordon M, Friedman J, Narayanan U, Nicholas D, Spalding K, Cohen E: Sickkids Foundation.* (\$47,451 2008 - 2010)

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 P, Brison R, Goeree R, Grimshaw J, Grootendorst P, Johnson D, Plint A, Sayal AK, Schuh S, Stephens D: Canadian Institutes of Health Research (CIHR).* (\$100,000 2009 - 2010)

Epigenetic determinants of limb bud positional identity by Ezh2. *Hopyan S: Transplant Centre, Hospital for Sick Children.* (\$80,000 2010 - 2011)

Evaluating outcomes of hip interventions in children with severe non-ambulatory cerebral palsy using the CPCHILD®: A prospective cohort study. *Narayana, U, Fehlings D: Ontario Federation for Cerebral Palsy.* (\$44,445 2010 - 2011)

Exploring trainee self-regulated learning activities: Faculty perceptions and evaluations. *Woods N, Brydges R, Hanson M, Murnaghan ML, Mylopoulos M: Royal College of Physicians and Surgeons Medical Education.* (\$11,273.75 2010 - 2012)

Fellow selection: A qualitative study. *Murnaghan L, Hanson M, Yee A, Nousianen M, Martimianakis M, Moulton C, Murnaghan M: Royal College of Physicians and Surgeons Medical Education Research Grant.* (\$11,280 2010 - 2012)

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 A, Wedge J, Fehlings D, Redekop S, Zabjek K: Canadian Institutes of Health Research (CIHR).* (\$314,633 2009 - 2013)

Globus pallidus deep brain stimulation in children with dystonia. *Lozano AM, Hodaie M, Westmacott RM, Gorman D, Narayanan UG, Teesta S, Elena M: The Hospital for Sick Children Foundation.* (\$118,617 2008 - 2011)

Hedgehog signalling in cartilage neoplasia and development. *Alman B: Canadian Institutes of Health Research (CIHR).* (\$807,945 2008-2013)

Identifying the desmoid initiating cell. *Alman B: Desmoid Tumor Research Foundation.* (\$65,000 2010-2011)

Implementation of low risk ankle rules. *Narayanan U, Grootendorst P, Goeree R, Schuh S, Johnson D, Plint A, Butler N, Sayal A, Boutis K: The Physicians' Services Incorporated Foundation (PSI).* (\$161,000 2008-2011)

Improving education and coping of scoliosis patients undergoing surgery and their families using e-health. *Nicholas D, Hetherington C, Lupea D, Nyhof-Young J, Wright JG: Canadian Institutes of Health Research (CIHR).* (\$240,363 2006 - 2011)

Long-term radiological and clinical effects of botulinum toxin-A on muscle in children undergoing limb lengthening. *Narayanan U, Montpetit K, Dahan-Oliel N: Pediatric Orthopaedic Society of North America (POSNA).* (\$30,000 2010 - 2011)

Low Milk Intake, Vitamin D Deficiency and Fracture Risk in Young Children. *Maguire J, Howard A, Adeli K, Sochetti E, Parkin P, Birken C, Thorpe K: Dairy Farmers of Canada.* (\$90,000 2010 - 2012)

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

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

Nefopam as an agent to prevent and treat hyperplastic scars. *Alman B: Canadian Institutes of Health Research (CIHR).* (\$159,975 2010-2011)

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

Pressures on surgeons to 'measure up' and their effects on surgical judgment. *Moulton C-A, Murnaghan ML, Martimianakis MA, Kitto S: The Physicians Services Incorporated Foundation (PSI).* (\$99,043 2011 - 2013)

Provincial data regarding booster seat legislation, use, and injuries. *Snowdon A, Howard A: Auto21 Knowledge Translation Grant.* (\$12,500 2009 - 2011)

Safer Surgery Obstetrics and Surgery in Africa. *Howard A, Lett R, Braun L: CIDA.* (\$2,100,000 2010 - 2013)

Safety and efficacy of botox injection in alleviating post-operative pain and improving quality of life in lower extremity limb lengthening and deformity correction: A multicenter, randomized, double-blinded, placebo-controlled study. *Hamdi R, Multiple collaborators: Clinical Outcomes Studies Advisory Board (COSAB) of Shriners Children's Hospitals.* (\$220,000 2007 - 2011)

Specification of anterior proximodistal limb progenitors. *Hopyan S: March of Dimes.* (\$338,606 2010 - 2013)

Topical nefopam efficacies studies. *Alman B: MaRS Innovation.* (\$14,139 2010 - 2011)

Traffic and Road Injury Prevention (TRIP) Program for Canadian Children. *Howard A, Snowdon A: Canadian Institutes of Health Research (CIHR), Transportation Safety Research Program for Canadians.* (\$1,600,000 2010 - 2015)

HONOURS RECEIVED

Alman B: Charles Tator Surgeon-Scientist Mentoring Award, University of Toronto, Department of Surgery, Annual Gallie Day. Awarded to the Faculty member within the department of surgery that has guided and mentored those in the Surgeon-Scientist program. 2011.

Alman B: Lodwick Award, Massachusetts General Hospital. For the best/most interesting paper published in the broad area of musculoskeletal medicine or biology during the calendar year. 2011

Wright J: President's Award, The Hospital for Sick Children, Toronto, Ontario, Canada. Inaugural President's Award for outstanding leadership, commitment to high quality and performance, and dedication to improving access to surgical services for children around the country. 2011

■ Division Of Plastic And Reconstructive Surgery

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

PUBLICATIONS

- Alqahtani SQ, Alsaaran R, Ho E, Borschel G, Zuker RM:** Epidemiology of hand fractures in children. *Canadian Journal of Plastic Surgery*: 2011: pp19(Suppl A).
- Alsubhi F, Zuker RM, Cole W:** The V.A.C. as a surgical assistant in life threatening necrotizing fasciitis in children. *The Canadian Journal of Plastic Surgery*: 2010: 18(4): pp 139-142.
- Boorer CJ, Cho DC, Vijayaskaran VS, Fisher DM:** Presurgical unilateral cleft lip anthropometrics: implications for the choice of repair technique. *Plastic and Reconstructive Surgery*: February 2011: 127(2): pp 774-383.
- Cahoon NJ, Ashrafpour H, Huang N, Hofer SOP, Lipa JE, Forrest CR, Pang CY:** Nicorandil induces late-phase ischemic preconditioning for perioperative protection of skeletal muscle from ischemia/reperfusion (I/R) injury. *Canadian Journal of Plastic Surgery*: Summer 2010: 18(2): p 62.
- Chung HY, Chu L, Forrest CR, Silver R, Toi A, Blaser S, Viero S, Taylor G, Chitayat D:** Fetal forehead hemangiopericytoma: Prenatal diagnosis and postnatal outcome. *Journal of Ultrasound Obstetrical Gynecology*: July 2010: 26(1): pp 121-124.
- Cypel TKS, Leong I, Pang CY, Dirks P, Forrest CR:** In vitro assessment of osteoblast behavior in craniosynostosis. *Canadian Journal of Plastic surgery*: 2011: 19: p 88A.
- Cypel TKS, Mrad A, Somers G, Zuker RM:** Ganglion cyst in children: Reviewing treatment and recurrence rates. *Canadian Journal of Plastic Surgery*: 2011: 19(2): pp 53-55.
- Cypel TKS, Somers GR, Pope E, Zuker RM:** Predisposing factors and outcome of malignant skin tumors in children. *Plastic and Reconstructive Surgery*: August 2010: 126(2): pp 508-514.
- Edgar DW, Fish JS, Gomez M, Wood FM:** Local and systemic treatments for acute edema after burn injury: A systemic review of the literature. *Journal of Burn Care Research*: March/April 2011: 32(2).
- Fattah A, Borschel G, Zuker RM:** Facial nerve injuries in children. *Canadian Journal of Plastic Surgery*: Summer 2011: p 19(A).
- Fisher DM:** Caudal septal repositioning as an adjunct to primary cleft lip repair. *The Canadian Journal of Plastic Surgery*: Summer 2010: 18(2): p 45.
- Fisher DM, Bezuhly M:** Single stage repair for management of the asymmetric bilateral cleft lip. *The Canadian Journal of Plastic Surgery*: 2011: 19(A): p 8A.
- Fisher DM, Mahoney MH:** An audit of primary palatoplasty; results from one surgeon and 485 cases over 10 years. *The Canadian Journal of Plastic Surgery*: Summer 2010: 18(2): p 41.
- Forrest CR:** Posterior cranial vault distraction in the management of syndromic craniosynostosis. *Canadian Journal of Plastic Surgery*: Summer 2010: 18(2): pp 42-43.
- Huang N, Ashrafpour H, Levine RH, Forrest CR, Neligan PC, Lipa JE, Pang CY:** Vasorelaxation effect and mechanism of action of vascular endothelial growth factor-165 in isolated perfused human skin flaps. *Journal of Surgical Research*: E-published ahead of print September 8, 2010.
- Lutfy J, Zuker RM, Ying Y:** Non-ossified iliac crest graft for the reconstruction of the pediatric thumb interphalangeal joint: A novel technique and literature review. *Canadian Journal of Plastic Surgery*: 2011: p 19:A.
- Magill CK, Moore AM, Borschel GH, Mackinnon SE:** A new model for facial nerve research: the novel transgenic Thy1-GFP rat. *Archives of Facial Plastic Surgery*: September/October 2010: 12(5): pp 315-320.
- Mahoney MH, Fisher DM:** The relationships between cleft length, cleft width and cleft type in cleft palate. *The Canadian Journal of Plastic Surgery* 2010: 18(20): p 51.
- McRae MC, Walsh C, Borschel GH:** Pediatric traumatic and obstetrical brachial plexus palsy: Triceps to axillary nerve transfers to restore shoulder abduction. Oral presentation at the American Society of Plastic Surgery Annual Meeting, Toronto, 2010. Abstract published in *Plastic & Reconstructive Surgery*: October 2010: 126(4S):91.

- Moore AM, Wood MD, Chenard K, Hunter DA, Mackinnon SE, Sakiyama-Elbert SE, Borschel GH:** Controlled delivery of glial cell line-derived neurotrophic factor enhances motor nerve regeneration. *The Journal of Hand Surgery*: December 2010: 35(12): pp 2008-2017.
- Murabit A, Anzarut A, Kasrai L, Fisher DM, Wilkes G:** Teaching ear reconstruction using an alopastic carving model. *Journal of Craniofacial Surgery*: 2010: 21(6): pp 1719-1721.
- Neinstein R, Forrest CR, Phillips JH:** Morphology of the inferior rectus muscle in pediatric orbital trap door fractures: Clinical correlations and outcome predictors. *Canadian Journal of Plastic surgery*: 2011: 19:65A.
- Palmero ML, Uziel Y, Laxer RM, Forrest CR, Pope E:** En coup de sabre scleroderma and parry-romberg syndrome in adolescents: surgical options and patient-related outcomes. *Journal of Rheumatology*: October 2010: 37(10): pp 2174- 2179.
- Pavri S, Forrest CR:** Demographics of orofacial clefts in Canada from 2002 to 2008. *Canadian Journal of Plastic Surgery*: 2010 18(2): p 63.
- Phillips JH, Burge J:** Pediatric facial fractures and potential long-term growth disturbances. *Craniofacial Trauma & Reconstruction*: 2011: 4(1).
- Samson T, Gjoska N, Ben David G, Rechner B, Forrest CR:** CT scans and non-syndromic single suture craniosynostosis: Incidental findings and role in management. *Canadian Journal of Plastic Surgery*: 2010: 18(2): p 59.
- Stubenitsky BM, Taylor HO, Peters D, Kelly C, Harkness M, Forrest C:** Predictive value of weight gain and airway obstruction in isolated robin sequence. *Cleft Palate Craniofacial Journal*. July 2010: 47(4): pp 378-381.
- Sun HH, Oswald TM, Sachanandani NS, Borschel GH:** The 'Ten Test': Application and limitations in assessing sensory function in the pediatric hand. *Journal of Plastic, Reconstructive and Aesthetic Surgery*: November 2010: 63(11): pp 1849-1852.
- Tse R, Marcus JR, Curtis CG, Dupuis A, Clarke HM:** Suprascapular nerve reconstruction in obstetrical brachial plexus palsy: Spinal accessory nerve transfer versus C5 root grafting. *Journal of Plastic and Reconstructive Surgery*: June 2011: 127(6): pp 2391-2396.
- Wheeler J, Samson T, Blaser S, Forrest CR:** A comparison of skull base asymmetry in unicoronal and lambdoid synostosis and positional plagiocephaly: CT based morphometric analysis. *Canadian Journal of Plastic Surgery*: 2011: 19: p 84A.
- Wheeler JS, Samson T, Blaser S, and Forrest CR:** Skull base scoliosis in unicoronal synostosis. *Canadian Journal of Plastic Surgery*: 2010: 18(2): p 64.
- Wood MD, MacEwen MR, Moore AM, Hunter DA, Mackinnon SE, Moran DW, Borschel GH, Sakiyama-Elbert SE:** Fibrin matrices with affinity-based delivery systems and neurotrophic factors promote functional nerve regeneration. *Biotechnology and Bioengineering*: August 2010: 106(6): pp 970-979.
- Wood MD, MacEwan MR, French AR, Moore AM, Hunter DA, Mackinnon SE, Moran DW, Sakiyama-Elbert SE, Borschel GH.** Controlled neurotrophic factor delivery to promote functional peripheral nerve regeneration. *Plastic & Reconstructive Surgery*: October 2010: 126: p 55.

INVITED VISITS

- Borschel G:** Tel Aviv Medical Center Division of Plastic and Reconstructive Surgery, Tel Aviv, Israel, August 2010. (1) Facial paralysis in children, (2) A novel transgenic rat expressing green fluorescent protein in neurons: a novel tool for peripheral nerve regeneration research.
- Borschel G:** 6th International Muscle Symposium, University of Vienna, Vienna, Austria, September 2010. A transgenic rat expressing green fluorescent protein (GFP) in peripheral nerves: A new model for the study of peripheral nerve injury and regeneration.
- Borschel G:** Tissue Engineering and Regenerative Medicine International Society North America, TERMIS-NA, Orlando, Florida, USA, December 2010. Neural tissue engineering.
- Borschel G:** American Society for Peripheral Nerve Annual Scientific Meeting, 2011, Cancun, Quintana Roo, Mexico, January 2011. (1) Nerve regeneration: "Importance of structure, and the limitations of conduits", (2) "Obstetrical brachial plexus palsy and nerve transfers" Instructional Course, (3) "The motor nerve to the masseter muscle: an anatomic and histomorphometric study to facilitate its use in facial reanimation".
- Clarke H:** Tratamento das lesões do Plexo Braquial Relacionadas ao Parto, Sao Paulo, Brazil, October 2010. (1) Aspectos históricos, (2) História natural, (3) Avaliação clínica e classificação, (4) Como eu faço: Posicionamento, incisão, osteotomia da clavícula, dissecação do nervo sural, coaptação dos nervos, (5) Estratégias de reconstrução na paralisia de Erb, (6) Estratégias de reconstrução nas lesões completas,

(7) Analise histologica intraoperatoria dos cotos de nervos, (8) Neurolise neuromas em continuidade condutores de potenciais de acao: e efetiva? (9) Complicacoes do tratamento cirurgico, (10) Resultados da reconstrucao microcirurgica do plexo braquial, (11) Perspectivas para o futuro.

Clarke H: American Society of Plastic Surgical Nurses, Toronto, Ontario, October 2010. The delivery of health care in Canada - Does it work?

Clarke H: The First Annual Pediatric Upper Extremity Symposium, Toronto, Ontario, October 2010. Does the active range of motion of patients with obstetrical brachial plexus palsy diminish over time?

Clarke H: 11th Triennial Congress of the International Federation of Societies for Surgery of the Hand, Seoul, Korea, November 2010. (1) Paediatric hand surgery, (2) Further indications for primary nerve surgery in obstetrical brachial plexus palsy patients with excellent elbow recovery, (3) Final analysis of suprascapular nerve reconstruction either anatomically or via accessory nerve transfer.

Clarke H: American Society for Peripheral Nerve, Cancun, Mexico, January 2011. (1) Pediatric peripheral nerve considerations (2) Presidential Panel: Back to the future - Current advances and the future of nerve surgery.

Clarke H: 17th Annual Conference of Paediatric Orthopaedic Society of India, Chandigarh, India, February 2011. (1) Natural history of obstetrical brachial plexus palsy, (2) Primary and secondary reconstruction options for the elbow, wrist and hand.

Clarke H: Brachialcon Bangalore 2011, Bangalore, India, February 2011. (1) Primary evaluation and decision making for nerve reconstruction in obstetrical brachial plexus injury, (2) How I do a complete obstetrical brachial plexus injury exploration, (3) Evaluation of results following nerve reconstruction in obstetrical brachial plexus injury - Overall, (4) Dealing with elbow flexion contracture.

Clarke H: 16th World Congress of the International Confederation for Plastic, Reconstructive and Aesthetic Surgery, Vancouver, British Columbia, May 2011. (1) Assessment of the child with obstetrical brachial plexus palsy, (2) Primary nerve surgery for obstetrical brachial plexus palsy.

Fish JS: American Congress of Rehabilitation Medicine and the American Society of Neuroradiology Joint Educational Conference, Montreal, Quebec, Canada, October 2010. The neuropsychological sequelae following electrical injury among patients treated in a rehabilitation hospital: A pilot study.

Fish J: National Academy of Neuropsychology, 30th Annual Conference, Vancouver, British Columbia, Canada, October 2010. Poster Presentation to Patients/Public (with Grigorovich A, on behalf of the research team at SJRH. Preliminary results of the initial phase of the longitudinal research study): Long term neuropsychological sequelae following electrical injury.

Fish J: Fleming College, 2nd Annual Safety Conference, Peterborough, Ontario, Canada, November 2010. Keynote Speaker: Electrical injury - the invisible injury.

Fish J: International Neuropsychological Society, 39th Annual Meeting, Boston, Massachusetts, USA, February 2011. Poster Presentation: Electrical injury and PTSD: An episodic memory deficit.

Fish J: American Burn Association - Canadian Special Interest Group, Chicago, Illinois, USA, April 2011. (1) Podium Presentations (with Cross K): (a) Quality care review of introducing aquacell AG in pediatric scald burn treatment, (b) Increased level of methemoglobin are a marker of tissue viability in a porcine burn model. (2) Poster Presentations: (a) A provincial, evidence-based rehab definitions framework, (b) Executive functioning in electrical injury: High versus low voltage, (3) Sunrise Symposia Presentation: What's new in the treatment of scald burns, (4) Podium Presentation (Con): Pressure garments are not necessary for healed burns/grfts.

Fish J: International Confederation for Plastic and Reconstructive Surgery (IPRAS), Vancouver, Canada, May 2011. Presenter (with Cross k): (1) Non-invasive measurement of edema in burn wounds over time utilizing near infrared spectroscopy (NIRS), (2) Increased levels of methemoglobin are a marker of tissue viability in a porcine burn model.

Fish J: Oatley Vigmond, Barristers and Solicitors, Toronto, Ontario, Canada, June 2011. Guest Speaker/ Presentation to the legal field on the challenges of burns as people age: Burns in the aged.

Fisher D: University of Pennsylvania Medical Center, Philadelphia, Pennsylvania, USA, September 2010. Visiting Professor: (1) Unilateral cleft lip repair - an anatomic subunit approximation technique, (2) Bilateral cleft lip repair, (3) Microtia reconstruction, (4) Palatoplasty, (5) Treatment of cleft lip nasal deformity: a rational stepwise approach.

Fisher D: American Society of Plastic Surgeons, Craniomaxillofacial Track, Toronto, Ontario, Canada, October 2010. One of 2 Presenters: (1) An audit of primary palatoplasty; results from one surgeon and 485 cases over 10 years, (2) The relationships between cleft length, cleft width and cleft type in cleft palate.

Fisher D: Janeway Children's Hospital, Saint John's, Newfoundland and Labrador, Canada, November 2010. Janeway Foundation Visiting Professorship in Surgical Paediatrics - Cleft lip rhinoplasty.

Fisher D: Smile Train and Interplast Foundations, USA, Lima, Peru, February 2011. Guest Speaker: (1) Management of the cleft lip nasal deformity, (2) Primary bilateral cleft lip repair, (3) Primary unilateral cleft lip repair, (4) VPI management.

Fisher D: American Cleft Palate – Craniofacial Association, San Juan, Puerto rico, April 2011. Presentations: (1) An audit of primary palatoplasty; results from one surgeon and 485 cases over 10 years, (2) Treatment of the cleft nasal deformity from birth through maturity.

Fisher D: Craniofacial Society of Great Britain & Ireland, Annual Conference, York, United Kingdom, April 2011. Principal Guest speaker/Keynote Lecture at the 22q11 Deletion Syndrome Symposium. (1) Surgery for VPI in 22q11 patients ‘The Toronto Experience:’ (2) Anatomic subunit repair techniques, (3) Management of cleft lip and palate, (4) Surgeon’s Special Interest Group Meeting - Cleft rhinoplasty.

Fisher D: Canadian Society of Plastic Surgeons, Vancouver, British Columbia, Canada, May 2011. Presentation: Single stage repair for management of the asymmetric bilateral cleft lip.

Fisher D: International Confederation for Plastic Reconstructive and Aesthetic Surgery (IPRAS), Vancouver, British Columbia, Canada, May 2011. Guest Speaker: (1) Master Class Session: Cleft lip, a personal approach, (2) One of 4 Presenters in the Master Class Session on Ear Reconstruction - Practical Carving Workshop.

Forrest C: British Association of Plastic, Reconstructive and Aesthetic Surgery (BAPRAS), Advanced Educational Courses in Plastic Surgery, Craniofacial Surgery and Facial Transplantation: New Paradigms, Manchester, United Kingdom, October 2010. Guest Lecturer: (1) Hemifacial microsomia and Treacher Collins Syndrome: An overview, (2) Craniofacial fibrous dysplasia.

Forrest C: Paediatric Oncology Group of Ontario POGO, 2010 Multi-Disciplinary Symposium on Childhood Cancer, Toronto, Ontario, Canada, November 2010. Guest Lecturer: Head and neck reconstruction in children.

Forrest C: International Confederation for Plastic, Reconstructive, and Aesthetic Surgery, 16th World Congress, Vancouver, British Columbia, Canada, May 2011. (1) One of 2 Presenters: Posterior cranial vault distraction in the management of syndromic craniosynostosis, (2) One of 4 Presenters: A comparison of skull base asymmetry in unicoronal and lambdoid synostosis and positional plagiocephaly: CT based morphometric analysis, (3) One of 5 Presenters: In vitro assessment of osteoblast behavior in craniosynostosis, (4) Major advances in craniofacial surgery, (5) Master class: Approaches to craniosynostosis, (6) Syndromic craniosynostosis, (7) Mono-bloc frontofacial advancement and LeFort III osteotomies in syndromic craniosynostosis, (8) Morphology of the inferior rectus muscle in the pediatric orbital trap door fractures: Clinical correlations and outcome predictors.

Forrest C: Seattle Children’s Hospital, Division of Plastic Surgery Grand Rounds, Seattle, Washington, USA, June 2011. The Hospital for Sick Children model of craniofacial care.

Forrest C: Washington Society of Plastic Surgeons 2011 Annual Meeting, Lake Chelan, Washington, USA, June 2011. Guest Lecturer: Pediatric facial fractures: Children are not small adults.

Phillips J: Montefiore Medical Center, New York, USA, November 2010. Guest Lecturer: (1) Clinical outcomes of orthognathic surgery in Treacher Collins patients, (2) Clinical outcomes of orthognathic surgery in unilateral cleft patients, (3) Pediatric facial fractures, (4) Clinical outcomes of orthognathic surgery in juvenile rheumatoid patients, (5) Bone healing and biomechanics, (6) Craniosynostosis repair, (7) The use of CAD-CAM reconstruction in skull defects and contour onlays, (8) Free fibula reconstruction of the mandible in the pediatric population, (9) Le fort III osteotomy.

Phillips J: International Conferation for Plastic, Reconstructive and Aesthetic Surgeons (IPRAS), Vancouver, British Columbia, Canada, May 2011. Presenter: Cephalometric long-term surgical outcomes in Treacher-Collins patient.

Phillips J: Computer Assisted Radiology and Surgery (CARS), Berlin, Germany, June 2011. One of 4 Presenters: Fabrication of bandeau templates for cranial vault reshaping in pediatric patients.

Zuker R: American Society for Maxillofacial Surgeons, Toronto, Ontario, Canada, September 2010. Distinguished Speaker: Facial reanimation: Current approach.

Zuker R: American Society of Plastic Surgeons, Toronto, Ontario, Canada, October 2010. Panel Member: Unilateral facial paralysis reconstruction with muscle transplantation innervated by the motor nerve to gracilis.

Zuker R: American Society of Plastic Surgical Nurses, Toronto, Ontario, Canada, October 2010. Facial paralysis reconstruction in children.

Zuker R: Cardiovascular and Interventional Radiological Society of Europe, Annual Meeting, Valencia, Spain, October 2010. One of 3 Presenters: Brachial pseudoaneurysm in the neonate, a case report.

Zuker R: American Society for Reconstructive Transplantation, Chicago, Illinois, USA, November 2010. Return of function after nerve injury and limb transplantation in children.

Zuker R: The Seventh Annual Lindsay-Thomson Symposium In Paediatric Plastic Surgery, Toronto, Ontario, Canada, November 2010. Functional recovery of the sciatic nerve after repair following trauma and after repair during lower limb transplantation.

Zuker R: American Society for Reconstructive Microsurgery, Cancun, Mexico, January 2011. Guest speaker: Motor nerve selection in free muscle flap facial reanimation and tips to maximize aesthetic outcomes.

Zuker R: International Hand and Composite Tissue Allotransplantation Society (IHCTAS) 2011, 10th Meeting, Atlanta, Georgia, USA, April 2011. Lower extremity transplantation in children.

Zuker R: The 16th World Congress of the International Confederation for Plastic, Reconstructive and Aesthetic Surgery, Vancouver, British Columbia, Canada, May 2011. Presenter: (1) Non-ossified ilia crest graft for the reconstruction of the pediatric thumb interphalangeal joint: A novel technique and literature review, (2) Epidemiology of handfractures in children, (3) Facial nerve injuries children, (4) Selective fascicular coaptation of free functioning gracilis transfer for restoration of independent thumb and finger flexion following Volkmann's ischemic contracture, (5) Brachial pseudoaneurysm in the neonate: A case report, (6) Keynote Speaker: Norman Bethune.

Zuker R: 5th International Conference on Moebius Syndrome, June 9 - 12, 2011, Gazzada, Varese, Italy, June 2011. Guest Speaker: Smile Surgery ("Chirurgia per un Sorriso").

RESEARCH AND INVESTIGATION

A novel transgenic rat expressing green fluorescent protein (GFP) in peripheral nerve. *Borschel G, Moore A, Sakiyama-Elbert SE, Mackinnon S: American Society for the Peripheral Nerve.* (\$5,000 2009-2011)

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

An optical imaging device for a rapid assessment of tissue viability and wound healing. *Fish J, Sowa M: CRTI, Research and Technology Initiative.* (\$2,750,000 2011 - 2012)

An optical imaging device for a rapid assessment of tissue viability and wound healing. *Fish J, Sowa M: Centre for Security Science.* (\$180,000 2011 - 2014)

Controlled growth factor delivery for motor nerve injury. *Borschel, G, Sakiyama-Elbert S, Mackinnon S: American College of Surgeons.* (\$80,000 2009 - 2011)

Decellularized nerve allografts and motor nerve regeneration. *Borschel G, Nicoson M, Mackinnon S: Plastic Surgery Educational Foundation.* (\$10,000 2009-2011)

GDNF microspheres for treatment of nerve injury in a rat model. *Borschel G, Wood M: RestraComp.* (\$36,750 2010-2011)

GDNF microspheres for treatment of nerve injury in a rat model. *Borschel G, Gordon T, Shoichet M: Canadian Institutes of Health Research (CIHR)/Natural Sciences and Engineering Research Council (NSERC).* (\$390,000 2010-2013)

How do side-to-side nerve grafts promote recovery after nerve injury? *Borschel G, Gordon T: Canadian Institutes of Health Research (CIHR).* (\$1,000,000 2010-2015)

IAMGold Fellowship in peripheral nerve regeneration research. *Borschel G, Gordon T: IAMGold, Inc.* (\$80,000 2011-2013)

Improving functional recovery after peripheral nerve injury. *Borschel G, Gordon T: Canadian Institutes of Health Research (CIHR).* (\$290,996 2011-2014)

Pediatric upper extremity function questionnaire. *Borschel G, Ho E: Canadian Institutes of Health Research (CIHR).* (\$34,925 2010-2011)

Radiologic predictors of functional outcome in newborn brachial plexus injury. *Zaidman C, Borschel G: Barnes-Jewish Hospital Foundation.* (\$25,000 2009 - 2011)

Side-to-side nerve grafting to enhance nerve regeneration. *Borschel G, Gordon T: The Physicians' Services Incorporated Foundation (PSI).* (\$180,000 2010-2012)

HONOURS RECEIVED

Borschel G: Exceptional Trainee Award, The Hospital for Sick Children Research Institute. Physiology and Experimental Medicine Program. 2010.

■ Division Of Urology

Dr. D.J. Bagli Professor
Dr. W.A. Farhat Associate Professor
Dr. M.A. Koyle Professor

Dr. A.J. Lorenzo Assistant Professor
Dr. J.L. Pippi Salle Professor (**Division Head**)

PUBLICATIONS

Aitken KJ, Tolg C, Panchal T, Sabha N, Yu J, Elkelini M, Tse D, Lorenzo AJ, Hassouna M, Leslie B, Bagli DJ: Mammalian target of rapamycin (mTOR) induces proliferation and differentiation responses to three coordinate pathophysiologic stimuli (mechanical strain, hypoxia, and extracellular matrix remodeling) in rat bladder smooth muscle. *The American Journal of Pathology*: January 2010: 176(1): pp 304-319.

Alexander A, Lorenzo AJ, Pippi Salle JL, Rode H: The ventral v-plasty: a simple procedure for the reconstruction of a congenital megaprepuce. *Journal of Pediatric Surgery*: August 2010: 45(8): pp 1741-1747.

Amsalem H, Fitzgerald B, Keating S, Ryan G, Keunen J, Pippi Salle JL, Berger H, Aiello H, Lucas O, Bernier F, Chitayat D: Congenital megalourethra: prenatal diagnosis and postnatal/autopsy findings in 10 cases. *Ultrasound Obstetrics and Gynecology*: June 2011: 37(6): pp 678-683.

Bagli DJ: Pediatric Urology. In: *The Hospital for Sick Children Handbook of Pediatrics*, 11th Edition, Saunders / Elsevier Canada (Dipchand AI, Freidman J et al, eds) 2010.

Braga L, Bagli DJ, Lorenzo AJ: Placebo-controlled trials in pediatric urology: A cautionary view from an ethical perspective. *Journal of Pediatric Urology*: October 2010: 6(5): pp 435-442.

Braga LH, Lorenzo AJ, Suoub M, Bagli DJ: Is statistical significance sufficient? Importance of interaction and confounding in hypospadias analysis. *The Journal of Urology*: December 2010: 184(6): pp 2510-2515. E-published October 18, 2010.

Braga LH, Whelan K, Demaria J, Pippi-Salle JL: Newborn with persistent cloaca presenting with accessory phallic urethra and ambiguous genitalia. *Urology*: E-published ahead of print February 17, 2011.

Calado AA, Araujo EM, Barroso E Jr, Netto JM, Macedo A Jr, Bagli DJ, Farhat WA: Cross-cultural adaptation of the dysfunctional voiding score symptom (DVSS) questionnaire for Brazilian children. *International Brazilian Journal of Urology*: July-August 2010: 36(4): pp 458-463.

El-Hout Y, El Naemma A, Farhat WA: Current status of retrograde intrarenal surgery for management of nephrolithiasis in c gvchildren. *Indian Journal of Urology*: October 2010: 26(4): pp 568-572.

Farhat WA: Are abdominal x-rays a reliable way to assess for constipation? *The Journal of Urology*: October 2010: 184(4 Suppl): p 1698.

Farhat WA: Determining compliance in clean intermittent catheterization for children with sensate urethra. *Canadian Urological Association*: December 2010: 4(6): p 406.

Farhat WA: Editorial Comment on: Validity of the international consultation on incontinence questionnaire-pediatric lower urinary tract symptoms: a screening questionnaire for children. *The Journal of Urology*: October 2010: 184(4 Suppl): p 1667.

Farhat WA: Editorial Comment on: One-port retroperitoneoscopic assisted pyeloplasty versus open dismembered pyeloplasty in young children: preliminary experience. *The Journal of Urology*: November 2010: 184(5): p 2115.

Farhat WA: Editorial comment on: Comparison of laparoscopic pyeloplasty for ureteropelvic junction obstruction in adults and children: lessons learned. *Journal of Urology*: April 2011: 185(4): p 1467.

Farhat WA: Editorial Comment on: Long-term experience and outcomes of robotic assisted laparoscopic pyeloplasty in children and young adults. *The Journal of Urology*: April 2011: 185(4): p 1460.

Farhat WA: Scrotal approach to both palpable and impalpable undescended testes: should it become our first choice? *Urology*: July 2010: 76(1): p 77.

Farhat WA, Loai Y, Beaumont M, Hai-Ling MC: The acellular matrix (ACM) for bladder tissue-engineering: A quantitative magnetic resonance imaging study. *Magnetic Resonance in Medicine*: August 2010: 64(2): pp 341-348.

Figueroa V, Bruno L, Jesus L, Moore K, Weber B, El-Hout Y, Farhat WA, Lorenzo AJ, Bagli DJ, Pippi Salle JL: Tubularized incised urethroplasty (TIP) vs dorsal inlay graft. Rabbit Model Functional and Histological Examination: June 2011: 5(3Suppl1).

Grady R, Koyle M: Vesico-ureteral reflux: an American pediatric urological perspective. In: Urogenital Infections. Ed. KG Naber, AJ Schaeffer, CF Heyns, T Matsumoto, DA Shoskes and TE Bjerkklund Johansen. European Association of Urology. Arnhem, The Netherlands. 2010.

Kaye JD, Srinivasan AK, Koyle MA, Smith EA, Kraft KH, Hanna MK, Kirsch AJ: Rotation of amputated fistula tract for the management of congenital urethral-enteric fistula with severe urethral stenosis: a novel technique with long term outcomes. Journal of Pediatric Urology: E-published April 18, 2011.

Keays M, Weber B, Alexander A, Lorenzo AJ, El-Ghazaly T, Bagli DJ, Pippi Salle J, Irwin M, Farhat WA: Hydronephrosis in children with abdominal and pelvic neoplasia: Outcome and survival analysis in a single center. Pediatric Oncology Series: June 2011: 5(3Suppl1).

Koyle MA: Continence surgery in children: impact and techniques. World Journal of Surgery: April 2011: 185: pp 1184-1185.

Leslie B, Lorenzo AJ, Figueroa V, Moore K, Farhat WA, Bagli DJ, Pippi Salle JL: Critical outcome analysis of staged buccal mucosa graft urethroplasty for prior failed hypospadias repair in children. Journal of Urology: March 2011: 185(3): pp 1077-1082.

Leslie B, Lorenzo AJ, Moore K, Farhat WA, Bagli DJ, Pippi Salle JL: Long-term followup and time to event outcome analysis of continent catheterizable channels. Journal of Urology: June 2011: 185(6): pp 2298-2302.

Leslie B, Moore K, Salle JL, Khoury AE, Cook A, Braga LH, Bagli DJ, Lorenzo AJ: Outcome of antibiotic prophylaxis discontinuation in patients with persistent vesicoureteral reflux initially presenting with febrile urinary tract infection: time to event analysis. Journal of Urology: September 2010: 184(3): pp 1093-1098.

Loai Y, Yeger H, Coz C, Antoon R, Moore K, Farhat WA: Bladder tissue engineering: Tissue regeneration and neovascularization of HAVEGF-incorporated bladder acellular constructs in mouse and porcine animal models. Journal of Biomedical Materials Research: September 2010: Part A: 94(4): pp 1205-1215.

Lorenzo AJ: Editorial Comment on: Risk factors for urinary tract infection after renal transplantation and its impact on graft function in children and young adults. Journal of Urology: October 2010: 184(4): pp 1467-1468.

Lorenzo, AJ: Medical versus surgical management for vesicoureteral reflux: The case for medical management. Canadian Urological Association Journal: 4(4): pp 276-278.

Moore K, Leslie B, Salle JL, Braga LH, Bagli DJ, Bolduc S, Lorenzo AJ: Can we spare removing the adrenal gland at radical nephrectomy in children with Wilms tumor? Journal of Urology: October 2010: 184(4 Suppl): pp 1638-1643.

Peters CA, Skoog SJ, Arant BS Jr, Copp HL, Elder JS, Hudson RG, Khoury AE, Lorenzo AJ, Pohl HG, Shapiro E, Snodgrass WT, Diaz M: Summary of the AUA guideline on management of primary vesicoureteral reflux in children. Journal of Urology: September 2010: 184(3): pp 1134-1144.

Roth M, Mingin G, Dharamsi N, Psooy K, Koyle MA: Endoscopic ablation of longitudinal vaginal septa in prepubertal girls: A minimally invasive alternative to open resection. Journal of Pediatric Urology: October 2010: 6(5): pp 464-468.

Skoog SJ, Peters CA, Arant BS Jr, Copp HL, Elder JS, Hudson RG, Khoury AE, Lorenzo AJ, Pohl HG, Shapiro E, Snodgrass WT, Diaz M: Pediatric vesicoureteral reflux guidelines panel summary report: Clinical practice guidelines for screening siblings of children with vesicoureteral reflux and neonates/infants with prenatal hydronephrosis. The Journal of Urology: September 2010: 184(3): pp 1145-1151.

Tolg C, Sabha N, Cortese R, Panchal T, Ahsan A, Soliman A, Aitken KJ, Petronis A, Bagli DJ: Uropathogenic E. coli infection provokes epigenetic downregulation of CDKN2A (p16INK4A) in uroepithelial cells. Laboratory Investigation: June 2011: 91(6): pp 825-836. E-published January 17, 2011.

Vo NJ, Hanevold CD, Edwards R, Hoffer FA, Koyle MA: Recurrent Page kidney in a child with a congenital solitary kidney requiring capsular artery embolization. Pediatric Radiology: November 2010: 40(11): pp 1837-1840.

Zamilpa I, Koyle MA, Grady RW, Joyner BD, Shnorhavorian M, Lendvay TS: Can we rely on the presence of dextranomer-hyaluronic acid copolymer mounds on ultrasound to predict vesicoureteral reflux resolution after injection therapy? Journal of Urology: June 2011: 185 (6 Suppl): pp 2536-2541.

INVITED VISITS

Bagli D: Canadian Society for Life Science Research, Montreal, Quebec, Canada, August 2010. Mechanotransduction in bladder fibroproliferative disease.

Bagli D: American Academy of Pediatrics, National Conference and Exhibition, San Francisco, California, USA, October 2010. Poster Presentations: (1) What are the predictive factors for the need of reintervention after endoscopic puncture of duplex systems pediatric ureterocele? A time to event analysis, (2) Comparative histological and functional analysis of tabularized incised urethroplasty (tip) with and without dorsal inlay graft: An experimental study in rabbits, (3) The fate of vesicoureteral reflux following endoscopic puncture or upper pole nephrectomy in pediatric duplex systems ureterocele, (4) Analysis of decisional conflict among parents that consent for their son's hypospadias repair: Single institution prospective cohort study of 100 couples, (5) Physiologic changes in transperitoneal versus retroperitoneal laparoscopy in children: A prospective analysis, (6) Incidence and outcomes of neoplasia induced hydronephrosis in the pediatric population.

Bagli D: American Urological Association Annual Meeting, Washington, USA, May 2011. (1) Video: Role of laparoscopy in urinary diversion in children: Description of different ureterostomy techniques, (2) Abstract: Responsiveness of the dysfunctional voiding system score in children undergoing biofeedback: Analysis of data from a randomized controlled trial, (3) The influence of biofeedback on self-esteem in children with dysfunctional voiding: A prospective randomized controlled trial, (4) Renal failure in children with posterior urethral valves (puv): Did additional interventions impact progression to end stage renal disease (esrd)?, (5) An alternative for ventral lengthening in children with severe penile curvature that allows graft coverage during staged hypospadias repair, (6) Should proximal hypospadias with bilaterally descended gonads be considered a disorder of sex development (dsd)?, (7) Incidence of urinary tract abnormalities in patients with recurrent urinary tract infections after hypospadias repair.

Bagli D: European Society for Pediatric Urology, 22nd Annual Congress 2011, Copenhagen, Denmark, May 2011. One of 9 Presenters: Impact of biofeedback on self-esteem in children with voiding dysfunction: A randomized controlled trial.

Bagli D: Canadian Urological Association, Annual Meeting, Montreal, Quebec, Canada, June 2011. Moderated Poster Presentations: (1) Dysfunctional voiding symptom score performance in pediatric patients with dysfunctional voiding enrolled in randomized trial investigating biofeedback, (2) Preputial grafts use during staged hypospadias repair in children with promimal hypospadias and severe ventral curvature, (3) Urinary tract findings in children with recurrent urinary tract infections and history of hypospadias surgery, (4) Podium Presentations: (a) Initial experience with laparoscopic nephrectomy for pediatric uro-oncology cases, (b) Patterns of presentation, diagnosis and gender assignment in a Canadian multidisciplinary clinic of disorders of sex development (dsd), (c) Outcome of a prospective randomized trial investigating effect of biofeedback on self esteem in pediatric patient with dysfunctional voiding.

Farhat W: 3rd International Congress of Paediatrics Specialties- CHILD 2010, Curitiba, Brazil, August 2010. (A) Presentations: (1) The endoscopic approach to the ureteral stones, (2) Endoscopic resection of posterior urethral valves- anterograde, retrograde, (3) Endourology for the urinary tract stones indications, surgical techniques and results, (4) Results and perspectives of the tissue culture in urology, (5) Technologic advancements in the execution and teaching of videolaparoscopic- urology, (B) Video: (1) Laparoscopic mitrofanoff- technique, indications and contra-indications, (2) Video on endolithotripsy.

Farhat W: American Academy of Pediatrics, 2010 National Conference and Exhibition, San Francisco, California, USA, October 2010. (A) Moderator: Laparoscopy, (B) Poster Presentations: (1) Pediatric laparoscopic orchidopexy: A novel mentorship-training model for basic laparoscopic surgical skills, (2) What are the predictive factors for the need of reintervention after endoscopic puncture of duplex systems pediatric ureterocele? A time to event analysis, (3) Analysis of decisional conflict among parents that consent for their son's hypospadias repair: Single institution prospective cohort study of 100 couples, (4) Physiologic changes in transperitoneal versus retroperitoneal laparoscopy in children: A prospective analysis, (5) Incidence and outcomes of neoplasia induced hydronephrosis in the pediatric population, (6) Comparative histological and functional analysis of tabularized incised urethroplasty (tip) with and without dorsal inlay graft: An experimental study in rabbits, (7) The fate of vesicoureteral reflux following endoscopic puncture or upper pole nephrectomy in pediatric duplex systems ureterocele.

Farhat W: European Society for Pediatric Urology, 22nd Annual Congress – 2011, Copenhagen, Denmark, April 2011. Impact of biofeedback on self-esteem in children with voiding dysfunction: A randomized controlled trial.

Farhat W: American Urological Association, Annual Meeting, Washington, USA, May 2011. (A) Video Presentations: (1) Single incision laparoscopic surgery (sils) in children: Initial experience, (2) Role of laparoscopy in urinary diversion in children: Description of different ureterostomy techniques, (3) "Lap dance" – Simultaneous intra and extraperitoneal laparoscopy for the treatment of post transplant

lymphocele, (B) Presentations: (1) Responsiveness of the dysfunctional voiding system score in children undergoing biofeedback: Analysis of data from a randomized controlled trial, (2) The influence of biofeedback on self-esteem in children with dysfunctional voiding: A prospective randomized controlled trial, (3) An alternative for ventral lengthening in children with severe penile curvature that allows graft coverage during staged hypospadias repair, (4) Incidence of urinary tract abnormalities in patients with recurrent urinary tract infections after hypospadias repair, (5) Should proximal hypospadias with bilaterally descended gonads be considered a disorder of sex development (dsd)? (6) Renal failure in children with posterior urethral valves (puv): Did additional interventions impact progression to end stage renal disease (esrd)?

Farhat W: Canadian Urological Association, Annual Meeting, Montreal, Quebec, Canada, June 2011. (A) Moderated Poster Presentations: (1) Dysfunctional voiding symptom score performance in pediatric patients with dysfunctional voiding enrolled in randomized trial investigating biofeedback, (2) Preputial grafts use during staged hypospadias repair in children with proximal hypospadias and severe ventral curvature, (3) Urinary tract findings in children with recurrent urinary tract infections and history of hypospadias surgery, (B) Podium Presentations: (1) Initial experience with laparoscopic nephrectomy for pediatric uro-oncology cases, (2) Patterns of presentation, diagnosis and gender assignment in a Canadian multidisciplinary clinic of disorders of sex development (dsd), (3) Outcome of a prospective randomized trial investigating effect of biofeedback on self-esteem in pediatric patients with dysfunctional voiding.

Koyle M: American Urological Association Annual Board Review Course, Dallas, Texas, USA, July 2010. Pediatric urological oncology and pediatric incontinence and voiding dysfunction.

Koyle M: Hernias, Hydroceles and More: An International Symposium on Controversies and Evolving Therapies, Cleveland, Ohio, USA, August 2010. Minimally invasive scrotal approach.

Koyle M: 3rd World Congress of Pediatric Surgery, New Delhi, India, October 2010. Hypospadias: an evolutionary and personal approach.

Koyle M: National Conference and Exhibition of the American Academy of Pediatrics, Section on Urology, San Francisco, California, USA, October 2010. What is that? Interlabial and common concerns of the external genitalia in girls.

Koyle M: Emory University School of medicine, Atlanta, Georgia, USA, December 2010. External genitalia: Interlabial anomalies in female children.

Koyle M: Case Western Reserve University School of Medicine, Cleveland, Ohio, USA, December 2010. An historical assessment of surgery in the DSD patient: Is criticism in order?

Koyle M: 5th Annual Course on Paediatric Nephrourology, Nottingham, United Kingdom, March 2011. A North American perspective: Ureteropelvic junction obstruction. Observation vs early pyeloplasty.

Koyle M: 4th Annual British Association of Genitourinary Reconstructive Surgeons (BAGURS), Leicester, United Kingdom, May 2011. Circumcision in the United States: A religious to puritanical transition.

Koyle M: Annual Meeting Society for Pediatric Urology, Washington, District of Columbia, May 2011. Transplantation and the pediatric lower urinary tract: Philosophical evolution.

Lorenzo A: International Continence Society and International Urogynecological Association, Toronto, Ontario, Canada, August 2010. Things we missed during routine evaluation of lower urinary tract symptoms in children.

Lorenzo A: American Academy of Pediatrics, 2010 National Conference and Exhibition, San Francisco, California, USA, October 2010. (1) Moderator: Testicular maldescent, (2) Poster Presentations: (1) What are the predictive factors for the need of reintervention after endoscopic puncture of duplex systems pediatric ureteroceles? A time to event analysis, (2) Comparative histological and functional analysis of tabularized incised urethroplasty (tip) with and without dorsal inlay graft: An experimental study in rabbits, (3) Anterior sagittal transrectal approach (astra): A useful and safe strategy for the surgical treatment of the high urogenital sinus, (4) The fate of vesicoureteral reflux following endoscopic puncture or upper pole nephrectomy in pediatric duplex systems ureteroceles, (5) Analysis of decisional conflict among parents that consent for their son's hypospadias repair: Single institution prospective cohort study of 100 couples, (6) Physiologic changes in transperitoneal versus retroperitoneal laparoscopy in children: A prospective analysis, (7) Incidence and outcomes of neoplasia induced hydronephrosis in the pediatric population.

Lorenzo A: European Association of Urology – Canadian Urological Association (EAU-CUA), International Academic Exchange Program, 2011 European Tour, Hospitale San Raffaele, Università Vita Salute, Research Grand Rounds, Milan, Italy, March 2011. Application of adult urological oncology principles to the treatment of pediatric malignancies.

Lorenzo A: European Society for Pediatric Urology, 22nd Annual Congress – 2011, Copenhagen, Denmark, April 2011. Impact of biofeedback on self-esteem in children with voiding dysfunction: A randomized controlled trial.

Lorenzo A: American Urological Association, Washington, USA, May 2011. (A) Video Presentation: Role of laparoscopy in urinary diversion in children: Description of different ureterostomy techniques, (B) Presentations: (1) Responsiveness of the dysfunctional voiding system score in children undergoing biofeedback: Analysis of data from a randomized controlled trial, (2) The influence of biofeedback on self-esteem in children with dysfunctional voiding: A prospective randomized controlled trial, (3) Renal failure in children with posterior urethral valves (puv): Did additional interventions impact progression to end stage renal disease (esrd)?, (4) An alternative for ventral lengthening in children with severe penile curvature that allows graft coverage during staged hypospadias repair, (5) Should proximal hypospadias with bilaterally descended gonads be considered a disorder of sex development (dsd)?, (6) Incidence of urinary tract abnormalities in patients with recurrent urinary tract infections after hypospadias repair.

Lorenzo A: Canadian Urological Association, Annual Meeting, Montreal, Quebec, Canada, June 2011. Moderated Poster Presentations: (1) Dysfunctional voiding symptom score performance in pediatric patients with dysfunctional voiding enrolled in randomized trial investigating biofeedback, (2) Preputial grafts use during staged hypospadias repair in children with proximal hypospadias and severe ventral curvature, (3) Urinary tract findings in children with recurrent urinary tract infections and history of hypospadias surgery, (4) Initial experience with laparoscopic nephrectomy for pediatric uro-oncology cases, (5) Patterns of presentation, diagnosis and gender assignment in a Canadian multidisciplinary clinic of disorders of sex development (dsd), (6) Outcome of a prospective randomized trial investigating effect of biofeedback on self-esteem in pediatric patients with dysfunctional voiding.

Pippi Salle J: Ludwig-Maximilians University Munich, 7th Pediatric Urology Workshop, Lindwurmstr, Munich, Germany, September 2010. Guest Speaker: (1) Management of antenatal hydronephrosis: Post-natal diagnostic and therapeutic controversies, (2) Live hypospadias repair (x3), (3) Historical challenges and attempts to achieve optimal results in hypospadias repair.

Pippi Salle J: American Academy of Pediatrics, 2010 National Conference and Exhibition, San Francisco, California, USA, October 2010. Poster Presentations: (1) Anterior sagittal transrectal approach (astra): A useful and safe strategy for the surgical treatment of the high urogenital sinus, (2) Comparative histological and functional analysis of tabularized incised urethroplasty (tip) with and without dorsal inlay graft: An experimental study in rabbits, (3) What are the predictive factors for the need of reintervention after endoscopic puncture of duplex systems pediatric ureterocele? A time to event analysis, (4) Analysis of decisional conflict among parents that consent for their son's hypospadias repair: Single institution prospective cohort study of 100 couples, (5) Physiologic changes in transperitoneal versus retroperitoneal laparoscopy in children: A prospective analysis, (6) Incidence and outcomes of neoplasia induced hydronephrosis in the pediatric population, (7) The fate of vesicoureteral reflux following endoscopic puncture or upper pole nephrectomy in pediatric duplex systems ureterocele.

Pippi Salle J: Kingdom of Bahrain/Ministry of Health, Salmaniya Medical Complex, Department of Surgery, Bahrain, United Arab Emirates, October 2010. (A) Guest Speaker: (1) Management of ambiguous genitalia, (2) Hypospadias surgery, (B) Demonstrated surgery on 10 complicated hypospadias, congenital adrenal hyperplasia with clitoromegaly and a complicated case of double urethra.

Pippi Salle J: Bnai Zion Medical Center, Haifa, Israel, December 2010. (1) Performed demonstrative live surgery for redo hypospadias repair, (2) Guest Lecturer: Post-natal management of antenatally diagnosed hydronephrosis.

Pippi Salle J: American Urological Association, Washington, USA, May 2011. (A) Video Presentation: (1) Role of laparoscopy in urinary diversion in children: Description of different ureterostomy techniques, (B) Other Presentations: (1) Responsiveness of the dysfunctional voiding system score in children undergoing biofeedback: Analysis of data from a randomized controlled trial, (2) The influence of biofeedback on self-esteem in children with dysfunctional voiding: A prospective randomized controlled trial, (3) Renal failure in children with posterior urethral valves (puv): Did additional interventions impact progression to end stage renal disease (esrd)?, (4) An alternative for ventral lengthening in children with severe penile curvature that allows graft coverage during staged hypospadias repair, (5) Should proximal hypospadias with bilaterally descended gonads be considered a disorder of sex development (dsd)?, (6) Incidence of urinary tract abnormalities in patients with recurrent urinary tract infections after hypospadias repair.

Pippi Salle J: Canadian Urological Association, Annual Meeting, Montreal, Quebec, Canada, June 2011. (A) Moderated Poster Presentations: (1) Dysfunctional voiding symptom score performance in pediatric patients with dysfunctional voiding enrolled in randomized trial investigating biofeedback, (2) Preputial grafts use during staged hypospadias repair in children with proximal hypospadias and severe ventral curvature, (3) Urinary tract findings in children with recurrent urinary tract infections and history of hypospadias surgery, (B) Presentations: (1) Initial experience with laparoscopic nephrectomy for pediatric uro-oncology cases, (2) Patterns of presentation, diagnosis and gender assignment in a Canadian multidisciplinary clinic of disorders of sex development (dsd), (3) Outcome of a prospective randomized trial investigating effect of biofeedback on self-esteem in pediatric patients with dysfunctional voiding.

RESEARCH AND INVESTIGATIONS

- 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, Bagli D: Canadian Institutes of Health Research (CIHR).* (\$499,000 2009 - 2013)
- Center for computer-assisted intervention and innovation (CCAI) (RE-02-022). *Farhat WA, Wright J, Kim P: Ontario Research Fund (ORF).* (\$3,395,000 2008 - 2012)
- Disruptive technologies in pediatric and fetal intervention. *Farhat WA, Wright J, Kim P: Canadian Foundation of Innovation (CFI).* (\$3,200,000 2009 - 2012)
- E.coli-induced alterations in the uroepithelial epigenome as a marker for UTI risk. *Tölg C, Lorenzo A, Bagli D: The Physicians' Services Incorporated Foundation.* (\$140,000 2010 - 2012)
- Effect of sex steroids on wound healing in hypospadias. *Ahmad H, Bagli D: Society for Pediatric Urology, Research Fellowships.* (\$30,000 2010-2011)
- Epigenetic effects of uropathogenic e.coli in uroepithelial cells. *Weber B, Bagli D: American Urological Association Foundation, Research Fellowship.* (\$40,000 2010-2011)
- Epigenetic responses to uropathogenic e.coli urinary tract infection. *Weber B, Bagli D: American Urological Association Foundation, Research Fellowship.* (\$37,000 2010-2011)
- Epigenetic mechanisms in the development of hypospadias. *Aitken K, Bagli D: American Urological Association Foundation, Research/PhD Fellowship.* (\$40,000 2010-2011)
- Innovative project/clinical trials. *Lorenzo A: The Hospital for Sick Children, Inaugural Innovation Fund.* (\$100,000 2008-2011)
- Innovative therapies for bladder obstruction. *Bagli D: Kidney Foundation of Canada.* (\$100,000 2008 - 2011)
- Interactive multi-media CD-Rom for teaching operative pediatric urology. *Pippi Salle J, Khoury A: University of Toronto, Information Technology Courseware Development Fund.* (\$16,795 2004 - 2012)
- Novel therapeutic approaches for obstructive bladder disease. *Bagli D: Canadian Institutes of Health Research (CIHR).* (\$440,000 2009 - 2013)
- Quantitative MRI of angiogenesis and cellularization in tissue engineering. *Farhat WA, Stanis GJ, Cheng H-L: University of Toronto Dean's Fund.* (\$9,957 2007 - 2012)
- Quantitative MRI of angiogenesis and cellularization in tissue regeneration. *Farhat WA, Stanis GJ, Hai-Ling Cheng: Sick Kids Foundation (SKF).* (\$129,223 2008 - 2011)
- Role of sex steroids in perioperative management of hypospadias: Initial human cell studies in vitro. *Haddad A, Bagli D: Society for Pediatric Urology.* (\$37,000 2010 - 2011)
- Uropathogenic e.coli effects on the uroepithelial epigenome as a marker for UTI propensity and recurrence. *Tölg C, Bagli D: The Physicians Services Incorporated Foundation.* (\$180,000 2010 - 2012)
- Uropathogenic e. coli-induced alterations in the uroepithelial cell epigenome as a marker for urinary tract infection risk. *Lorenzo AJ, Tölg C: The Physicians' Services Incorporated Foundation.* (\$170,000 2010 - 2012)
- 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)
- Validation of real-time, intra-operative, surgical competence (RISC) assessments linked to patient outcomes. *The Physicians Services Incorporated Foundation.* (\$91,500 2009 - 2011)

HONOURS RECEIVED

- Bagli D:** Kelm Hjalmas Third Prize, European Society for Pediatric Urology, Poster. Impact of Biofeedback on Self-Esteem in Children with Voiding Dysfunction: A randomized controlled trial. 2011.
- Farhat W:** Kelm Hjalmas Third Prize: European Society for Pediatric Urology, Poster. Impact of Biofeedback on Self-Esteem in Children with Voiding Dysfunction: A randomized controlled trial. 2011.
- Lorenzo A:** Kelm Hjalmas Third Prize: European Society for Pediatric Urology, Poster. Impact of Biofeedback on Self-Esteem in Children with Voiding Dysfunction: A randomized controlled trial. 2011.



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	Orthopaedics
Dr. K. Jarvi	Urology

DIVISION OF GENERAL SURGERY

Andrea McCart was promoted to Associate Professor in the Department of Surgery at the University of Toronto. The division has been very productive this past year having published 31 articles along with speaking internationally. Research funding has come from the American Society of Colon and Rectal Surgeons; Canadian Institutes of Health Research; Public Health Agency of Canada; Canadian Institutes of Health Research, Mesothelioma Applied Research Foundation, Samuel Lunenfeld Research Institute; Ethicon and Ethicon Endosurgery; National Cancer Institute of Canada; Ontario Institute of Cancer Research.

DIVISION OF ORTHOPAEDICS

Dr. David Backstein won the Aikens Award in the Course/Program Development category. Forty-four articles were accepted and published in journals. Research funding was received from Canadian Institutes of Health Research; Ontario Institute for Cancer Research; Institute of Musculoskeletal Health and Arthritis; Canadian Arthritis Network; McLaughlin Centre for Molecular Medicine; The Royal College of Physicians and Surgeons; Canadian Foundation for Innovation; Canadian Orthopaedic Foundation; The Physicians Services Incorporated Foundation; and University of Toronto.

DIVISION OF UROLOGY

Eighteen papers were published for the year 2010-2011. Research funding was awarded from National Institutes of Health; Ontario Institute for Cancer Research; Canadian Urological Association Scholarship Foundation; Canadian Institutes of Health Research; The Physicians Services Incorporated Foundation; The Royal College of Physicians and Surgeons of Canada; MaRS Innovation; Glaxo Smith Kline; Pierre Fabre Medicament; Canadian Cancer Society research Institute; Institut Merieux, and Association for Surgical Education, CESERT.



■ Division Of General Surgery

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

PUBLICATIONS

Brasel KJ, Gottesman L, McLeod RS, Vasilevsky CA; Members of the Evidence-Based Reviews in Surgery Group: Meta-analysis comparing healing by primary closure and open healing after surgery for pilonidal sinus. *Journal of the American College of Surgeons*: September 2010: 211(3): pp 431-434.

Brun J, McManus D, Lefebvre C, Hu K, Falls T, Atkins H, Bell JC, McCart JA, Mahoney D, Stojdl DF: Identification of genetically modified maraba virus as an oncolytic rhabdovirus. *Molecular Therapy*: August 2010: 18(8): pp 1440-1449.

Chaudhury P, Marshall JC, McLeod RS, Solomkin JS; Members of the Evidence Based Reviews in Surgery Group: CAGS and ACS evidence based reviews in surgery. 35: Efficacy and safety of low-dose hydrocortisone therapy in the treatment of septic shock. *Canadian Journal of Surgery*: December 2010: 53(6): pp 415-417.

Cutter CS, Kelly SR, Marcello PW, Mahoney JE, Nicolle LE, McLeod RS: Is there a role for prophylactic antibiotics in the prevention of urinary tract infections following Foley catheter removal in patients having abdominal surgery? *Canadian Journal of Surgery*: June 2011: 54(3): pp 206-208.

Doyle JD, Sheth U, Huang H, Pearsall E, McLeod RS, Nathens AB: Management of complex intra-abdominal infections: a review of practice at 7 teaching hospitals: *Canadian Journal of Surgery*: August 2010: 53: p S73.

Eskicioglu C, Forbes SS, Fenech DS, McLeod RS; Best Practice in General Surgery Committee: Preoperative bowel preparation for patients undergoing elective colorectal surgery: a clinical practice guideline endorsed by the Canadian Society of Colon and Rectal Surgeons. *Canadian Journal of Surgery*: December 2010: 53(6): pp 385-395.

Fenech DS, Forbes S, Pearsall E, Chung J, Glickman A, Victor JC, Nathens A, McLeod RS: Knowledge transfer strategy is effective in improving surgical site infection prevention. *Canadian Journal of Surgery*: August 2010: 53(4): p S56.

Henteloff HJ, Barie PS, McLeod RS, Hamilton SM; Members of the Evidence-Based Reviews in Surgery Group: Universal screening for methicillin-resistant *Staphylococcus aureus* in surgical patients. *Journal of the American College of Surgeons*: December 2010: 211(6): pp 833-835.

Kassam Z, MacKay H, Buckley CA, Fung S, Pintile M, Oza A, Brierley J, Swallow C, Cummings B, Knox J, Kim J, Wong R, Siu L, Feld R, Ringash J: Adjuvant chemoradiation for gastric cancer with infusional 5-fluorouracil and cisplatin: a phase I study. *Current Oncology*: August 2010: 17(4): pp 34-41.

Kennedy ED, Schmocker S, Victor C, Baxter NN, Kim J, Brierley J, McLeod RS: Do patients consider preoperative chemoradiation for primary rectal cancer worthwhile? *Cancer*: E-published January 10, 2011.

Kirkpatrick AW, Papia G, McCloskey SA, Polk HC Jr, Akca O, McLeod RS, Qadan M; Evidence Based Reviews in Surgery Group: CAGS and ACS evidence based reviews in surgery. Effect of high perioperative oxygen fraction on surgical site infection. *Canadian Journal of Surgery*: February 2011: 54(1): pp 67-69.

Kohonen-Corish M, Weber TK, Lindblom A, Macrae F; Meeting Participants Collaborators (34): Report of the combined meeting of the International Society for Gastrointestinal Hereditary Tumours, the Human Variome Project and the National Cancer Institute Colon Cancer Family Registry, Duesseldorf, Germany, 24 June 2009. *Familial Cancer*: December 2010: 9(4): pp 705-711.

Kurahashi AM, Harvey A, MacRae HM, Moulton CA, Dubrowski A: Technical skill training improves the ability to learn. *Surgery*: January 2011: 149(1):1-6. E-published April 28, 2010.

Leon-Carlyle M, Schmocker S, O'Connor BI, Victor JC, Baxter NN, Smith AJ, McLeod RS, Kennedy ED: A comparison of instruments to assess male sexual function following treatment for rectal cancer. *Canadian Journal of Surgery*: August 2010: 53(4): pp S93.

MacTavish H, Diallo JS, Huang B, Stanford M, Le Boeuf F, De Silva N, Cox J, Graydon Simmons J, Guimond T, Falls T, McCart JA, Atkins H, Breitbach C, Kirn D, Thorne S, Bell JC: Enhancement of Vaccinia Virus Based Oncolysis with Histone Deacetylase Inhibitors. *PLoS One*: E-published December 30, 2010.

Mastracci TM, Aarts MA, Cassivi SD, Garcia SA, McLean RF, McFalls EO: Members of the Evidence Based Reviews in Surgery Group (McLeod RS): CAGS and ACS Evidence Based Reviews in Surgery. 34: effects of 'df-blockers in patients undergoing noncardiac surgery. Canadian Journal of Surgery: October 2010: 53(5): pp 342-344.

McLeod RS, MacRae HM, McKenzie ME, Victor JC, Brasel KJ: Evidence Based Reviews in Surgery Steering Committee: A moderated journal club is more effective than an Internet journal club in teaching critical appraisal skills: results of a multicenter randomized controlled trial. Journal of the American College of Surgeons: December 2010: 211(6): pp 769-776.

Messenger DE, Victor JC, O'Connor BI, MacRae HM, McLeod RS: Laparoscopic subtotal colectomy is safe in patients with active Crohn and ulcerative colitis. Canadian Journal of Surgery: August 2010: 53(4): pp S100.

Moulton CA, Regehr G, Lingard L, Merritt C, MacRae HM: Slowing down to stay out of trouble in the operating room: remaining attentive in automaticity. Academic Medicine: October 2010: 85(10): pp 1571-1577.

Najjar H, Easson AM: Age at diagnosis of breast cancer in Arab nations. International Journal of Surgery: August 2010: 8 (6): pp 448-452.

Nhan C, Driman DK, Raby M, Smith AJ, Hunter A, Srigley J, McLeod RS: Rectal cancer pathology reporting in Ontario: results of a 2007 audit of margin and lymph node reporting. Canadian Journal of Surgery: August 2010: 53: p S103.

O'Riordan JM, Kirsch R, Mohseni M, McLeod RS, Cohen Z: Long-term risk of adenocarcinoma post-ileal pouch-anal anastomosis for ulcerative colitis: report of two cases and review of the literature. International Journal of Colorectal Disease: E-published May 15, 2011.

Palter VN, HacRae HM, Grantcharov TP: Development of an objective evaluation tool to assess technical skill in laparoscopic colorectal surgery: a Delphi methodology. American Journal of Surgery: February 2011: 201(2): pp 251-259. E-published September 15, 2010.

Pearsall E, Sheth U, Fenech D, McKenzie M, Victor C, McLeod RS: Patients admitted with acute abdominal conditions are at high risk for development of symptomatic venous thromboembolism (VTE) but often fail to receive adequate prophylaxis. Canadian Journal of Surgery: August 2010: 53(4): p S59.

Pearsall E, Sheth U, Fenech D, McKenzie M, Victor C, McLeod RS: Patients admitted with acute abdominal conditions are at high risk for development of symptomatic venous thromboembolism (VTE) but often fail to receive adequate prophylaxis. Journal of Gastrointestinal Surgery: November 2010: 14(11): pp 1722-1731.

Raut CP, Swallow CJ: Are radical compartmental resections for retroperitoneal sarcomas justified? Annals of Surgical Oncology: June 2010: 17(6): pp 1481-1484.

Schwenter F, Ratjen F, Berk T, Gallinger S, Gryfe R, Grading AB, Durno CA: Juvenile polyposis syndrome, SMAD4 mutations, and hereditary hemorrhagic telangiectasia. Journal of Pediatric Gastroenterology and Nutrition: E-published May 12, 2011.

Simunovic M, Coates A, Goldsmith CH, Thabane L, Reeson D, Smith A, McLeod RS, DeNardi F, Whelan TJ, Levine MN: The cluster-randomized Quality Initiative in Rectal Cancer trial: evaluating a quality-improvement strategy in surgery. Canadian Medical Association Journal: September 2010: 182(12): pp 1301-1306.

Vergara-Fernandez O, Swallow C, Victor C, O'Connor B, Gryfe R, MacRae H, Cohen Z, McLeod RS: Assessing outcomes following surgery for colorectal cancer using quality of care indicators. Canadian Journal of Surgery: August 2010: 53(4): pp 232-240.

Walia JS, Neschadim A, Lopez-Perez O, Alayoubi A, Fan X, Carpentier S, Madden M, Lee CJ, Cheung F, Jaffray DA, Levade T, McCart JA, Medin JA: Autologous Transplantation of Lentivector/ Acid Ceramidase-Transduced Hematopoietic Cells in Non-Human Primates. Human Gene Therapy: June 2011: 22(6):679-687. E-published March 25, 2011.

Walters TD, Steinhart AH, Bernstein CN, Tremaine, McKenzie M, Wolff BG, McLeod RS: Validating Crohn's disease activity indices for use in assessing postoperative recurrence. Inflammatory Bowel Disease: E-published November 15, 2010.

INVITED VISITS

Cohen Z: BC DDW, Kelowna, British Columbia, Canada, April 2011. Acute ulcerative - Surgery or medical management.

Cohen Z: Annual Meeting of the American Society of Colon and Rectal Surgeons, Vancouver, British Columbia, Canada, May 2011. Journal club.

Cohen Z: 34th International Surgery Forum, Madrid, Spain, May 2011. (1) Controversies in pelvic pouch surgery; (2) Genetic and surgical consideration in FAP; (3) How are we training our resident surgeons? (4) Modern management of peri-anal Crohn's Disease.

Gladdy R: OICR Selective Therapies Program, Toronto, Ontario, Canada, October 2010. Genetic basis of sarcoma: Development of novel mouse models.

Gladdy R: New England Sarcoma Symposium, Providence, Rhode Island, United States, March 2011. Multidisciplinary management of retroperitoneal sarcoma.

MacRae HM: Ground Rounds, University of Manitoba, Winnipeg, Manitoba, November 2010. Technical Skills Training: "What is Learned in the Sim Centre?"

MacRae HM: International Symposium on Innovations in Surgery and Medical Practise, The Wellington Hospital GI Unit 2nd International GI Symposium, London, England, October 2010. Laparoscopic ileo-anal pouch for ulcerative colitis.

MacRae HM: Lahey Clinic - LB Sanders Lectureship, Boston, Massachusetts, United States, May 2011. Technical Skills - what is the role of the Simulation Centre?

McLeod RS: Canadian Health Services Research Foundation, Mont Tremblant, Quebec, August 2010. (1) Engaging physicians in quality improvement initiatives; (2) Improving Quality of Care-the Good, the Bad and the Ugly!

McLeod RS: Royal College Gallie Lecture, Canadian Association of General Surgeons, Quebec City, Quebec, September 2010. (1) Improving the quality of cancer surgery- The Cancer Care Ontario experience; (2) Best Practice in General Surgery; (3) Is appendectomy necessary? Let's do journal club.

Swallow CJ: McGill University and McGill University Health Centre, Department of Surgery Grand Rounds, Montreal, Quebec, October 2010. Update on surgery for gastrointestinal stromal tumour in the context of multimodality therapy.

Swallow CJ: Western Canada Sarcoma Conference, Vancouver, British Columbia, October 2010. Surgical management of intraabdominal sarcoma.

Swallow CJ: British Columbia Cancer Network Update in Upper GI Malignancy, Vancouver, British Columbia, October 2010. Surgery for gastric carcinoma and premalignant lesions.

Swallow, CJ: Ontario Association of General Surgeons Annual Meeting, Mississauga, Ontario, October 2010. Gastrointestinal Stromal Tumour (GIST): What the General Surgeon needs to know ... now.

RESEARCH AND INVESTIGATIONS

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)

Best practice in General Surgery multidisciplinary consensus workshop on perioperative care. *McLeod, RS, Aarts MA, Okrainec A, Pearsall E, Fenech D, Lindsay D, Nathens A, Rotstein L, Stotland P, Smith A: Canadian Institutes of Health Research.* (\$13,750 2010 - 2011)

Breast Implant Cohort Study (BICS): Follow-up of cancer incidence and mortality in Ontario. *Easson AM, Holowaty E, Brisson J, et al.: Public Health Agency of Canada.* (2009 - 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 (CIHR), Strategic Training Grant.* (\$1,787,630 2009 - 2015)

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 (CIHR).* (\$157,763 2008 - 2010)

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

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: Samuel Lunenfeld Research Institute.* (\$1,000,000 2008 - 2011)

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

Improving gastric cancer survival: Development and measurement of quality indicators using the RAND/UCLA appropriateness method and population-based data analysis. *Coburn NG, Gagliardi A, Law CHL, Helyer LK, Swallow CJ, McLeod RS, Pazzat L, Rabeneck L: National Cancer Institute of Canada (NCIC).* (\$552,466 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 (CIHR). (\$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. (\$186,582 2009 - 2011)*

Ontario Familial Colorectal Cancer Registry – Phase III. *Gallinger S, Cotterchio M, Bapat B, Esplen MJ, Gryfe RN, McKeowan-Eyssen G, McLaughlin J, Pollet A, Woods M: National Institutes of Health Research – USA. (\$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)*

Selected therapies and functional genomics in sarcoma. *Gladdy, R: Ontario Institute for Cancer Research. (\$350,000 2008 - 2013)*

■ Division Of Orthopaedics

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

PUBLICATIONS

Al-Hussaini H, Hogg D, Blackstein ME, O'Sullivan B, Catton CN, Chung PW, Griffin AM, Hodgson D, Hopyan S, Kandel R, Ferguson PC, Wunder JS, Gupta AA: Clinical features, treatment, and outcome in 102 adult and pediatric patients with localized high-grade synovial sarcoma. *Sarcoma*: E-published April 14, 2011.

Backstein D, Gross AE, Safir O, Aderinto JB: High tibial osteotomy. In: *Advanced Reconstruction Knee* (The Knee Society) (Lieberman JR, Berry DJ, Azar FM, eds). American Academy of Orthopaedic Surgeons, Rosemont, Illinois: 2011: pp 527-536.

Backstein D, Gross AE, Safir O, Aderinto JB: Revision total knee arthroplasty: Bone loss management using structural grafts. In: *Advanced Reconstruction Knee* (The Knee Society) (Lieberman JR, Berry DJ, Azar FM, eds). American Academy of Orthopaedic Surgeons, Rosemont, Illinois: 2011: pp 423-431.

Bhumbra RS, Khanna M, Dickson BC, Ferguson PC: Orthopaedic Case of the Month: Medial Knee pain in a 69-year-old man. *Clinical Orthopaedics and Related Research*: January 2011: 469(1): pp 312-316. E-published October 19, 2010.

Bushinsky DA, Willett TL, Asplin JR, Che SPY, Gryn timer MD: Chlorthalidone improves vertebral bone quality in genetic hypercalciuric stone forming rats. *Journal of Bone and Mineral Research*: E-published February 23, 2011.

Chachra D, Limeback H, Willett TL, Gryn timer MD: The long-term effects of water fluoridation on the human skeleton. *Journal of Dental Research*: November 2010: 89(11): pp 1219-1223. E-published September 21, 2010.

Dickie CI, Griffin AM, Parent AL, Chung PW, Catton CN, Svensson J, Ferguson PC, Wunder JS, Bell RS, Sharpe MB, O'Sullivan B: The relationship between local recurrence and radiotherapy treatment volume for soft tissue sarcomas treated with external beam radiotherapy and function preservation surgery. *International Journal of Radiation Oncology, Biology and Physics*: E-published June 1, 2011.

Dickie CI, Parent AL, Chung PWM, Catton CN, Craig T, Griffin AM, Panzarella T, Ferguson PC, Wunder JS, Bell RS, Sharpe MB, O'Sullivan B: Measuring interfraction and intrafraction 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*: December 2010: 78(5): pp 1437-1444.

Ferguson PC, Dehesi BM, Chung P, Catton CN, O'Sullivan B, Gupta A, Griffin AM, Wunder JS: Soft tissue sarcoma presenting with metastatic disease - Outcome with primary surgical resection. *Cancer*: January 2011: 117(2): pp 372-379. E-published September 9, 2010.

Ferguson PC, McLaughlin CE, Griffin AM, Bell RS, Dehesi BM, Wunder JS: Clinical and functional outcomes of patients with a pathologic fracture in high-grade osteosarcoma. *Journal of Surgical Oncology*: August 2010: 102(2): pp 120-124.

Ferguson PC, Zdero R, Schemitsch EH, Dehesi BM, Bell RS, Wunder JS: A biomechanical evaluation of press-fit stem constructs for tumor endoprosthetic reconstruction of the distal femur. *The Journal of Arthroplasty*: E-published February 4, 2011.

Fisher CG, Saravanja DD, Dvorak MF, Rampersaud YR, Clarkson PW, Hurlbert J, Fox R, Zhang H, Lewis S, Riaz S, Ferguson PC, Boyd MC: Surgical management of primary bone tumors of the spine: Validation of an approach to enhance cure and reduce local recurrence. *Spine*: May 2011: 36(10): pp 830-836.

Goda JS, Ferguson PC, O'Sullivan B, Catton CN, Griffin AM, Wunder JS, Bell RS, Kandel RA, Chung PW: High risk extracranial chondrosarcoma: Long-term results of surgery and radiation therapy. *Cancer*: E-published January 18, 2011.

Gortzak Y, Kandel R, Dehesi B, Werier J, Turcotte RE, Ferguson PC, Wunder JS: The efficacy of chemical adjuvants on giant-cell tumour of bone: An in vitro study. *The Journal of Bone and Joint Surgery, British Volume*: October 2010: 92(10)B: pp 1475-1479.

Grierson L, Melnyk M, Jowlett N, Backstein D, Dubrowski A: Bench model surgical skill training improves novice ability to multitask: A randomized controlled study. *Studies in Health Technology and Informatics*: 2011: 163: pp 192-198.

Gupta AA, Pappo A, Saunders N, Hopyan S, Ferguson P, Wunder J, O'Sullivan B, Catton C, Greenberg M, Blackstein M: Clinical outcome of children and adults with localized Ewing sarcoma: impact of chemotherapy dose and timing of local therapy. *Cancer*: July 2010: 116(13): pp 3189-3194.

Hoebbers F, Ferguson PC, O'Sullivan B: Bone. In: *Human Radiation Injury* (Dennis Shrieve, ed). Lippincott Williams & Wilkins, Philadelphia, Pennsylvania: 2010: pp 481-499.

Jones KB, Griffin AM, Chandrasekar CR, Biau D, Babinet A, Dehesi B, Bell RS, Grimer RJ, Wunder JS, Ferguson PC: Patient-oriented functional results of total femoral endoprosthetic reconstruction following oncologic resection. *Journal of Surgical Oncology*: E-published ahead of print June 21, 2011.

Kapralos B, Cristancho S, Porte M, Backstein D, Monclou A, Dubrowski A: Serious games in the classroom: Gauging student perceptions. *Studies in Health Technology and Informatics*: 2011: 163: pp 254-260.

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

Kosashvili Y, Alvi M, Mayne I, Safir O, Gross A, Backstein D: Immediate recovery room radiographs after primary total knee arthroplasty why do we keep doing them? *International Orthopaedic*: December 2010: 34(8): pp 1167-1173. E-published October 14, 2009.

Kosashvili Y, Lakstein D, Safir O, Backstein D, Gross A: Anti-protrusion (Iliioischial) cage and highly porous cementless cup constructs for acetabular revisions with massive bone loss and pelvic discontinuity. *Orthopaedic Knowledge Online*: June 2011: 9(7).

Kosashvili Y, Mayne I, Trajkovski, Lakstein D, Safir O, Backstein D: Influence of sex on surgical time in primary total knee arthroplasty. *Canadian Journal of Surgery*: August 2010: 53(4): pp 256-260.

Kosashvili Y, Taylor D, Backstein D, Safir O, Liberman B, Lakstein D, Gross A: Total hip arthroplasty in patients with Down's syndrome. *International Orthopaedics*: May 2011: 35(5): pp 661-666.

Kosashvili Y, Taylor D, Backstein D, Safir O, Liberman B, Lakstein D, Gross A: Total hip arthroplasty in patients with Down's syndrome. *Orthopaedics*: September 2010: 33(9): pp 629.

Kosashvili Y., Backstein D., Safir O., Lakstein D., Gross AE: Dislocation and infection after revision total hip arthroplasty comparison between the first and multiply revised total hip arthroplasty. *The Journal of Arthroplasty*: E-published ahead of print June 13, 2011.

Kyle KA, Willett TL, Baggio LL, Drucker DJ, Gryn timer MD: Differential effects of ppar- γ activation vs chemical or genetic reduction of dpp-4 activity on bone quality in mice. *Endocrinology*: February 2011: 152(2): pp 457-467. E-published December 22, 2010.

Lakstein D, Eliaz N, Levi O, Backstein D, Kosashvili Y, Safir O, Gross AE: Fracture of cementless femoral stems at the mid-stem junction in modular revision hip arthroplasty systems. *The Journal of Bone and Joint Surgery (American)*: January 2011: 93(1): pp 57-65.

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Magalhaes J, Gryn timer MD, Willett TL, Glogauer M: Deleting Rac1 improves vertebral bone quality and resistance to fracture in a murine osteoporosis model. *Osteoporosis International*: May 2011: 22(5): pp 1481-1492.

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Ramo BA, Griffin AM, Gill CS, McDonald DJ, Wunder JS, Ferguson P, Bell RS, Phillips SE, Schwartz HS, Holt GE: Incidence of symptomatic venous thromboembolism in oncologic patients undergoing lower-extremity endoprosthesis arthroplasty. *Journal of Bone and Joint Surgery (American)*: May 2011: 93(9): pp 847-854.

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Sonnadara RR, Van Vilet A, Safir O, Alman B, Ferguson P, Kraemer W, Reznick R: Orthopaedic boot Camp: examining the effectiveness of an intensive surgical skills course. *Surgery*: June 2011: 149(6): pp 745-749.

Sonnadara RR, Van Vliet A, Safir O, Alman B, Ferguson P, Kraemer W, Reznick R: Orthopaedic Boot Camp: Examining the effectiveness of an intensive surgical skills course. *Surgery*: January 2011: 149(6): pp 745-749. E-published January 14, 2011.

Studler U, White LM, Deslandes M, Geddes C, Sussman MS, Theodoropoulos J: Feasibility study of simultaneous physical examination and dynamic MR imaging of medial collateral ligament knee injuries in a 1.5-T large bore magnet. *Skeletal Radiology*: March 2011: 40(3): pp 335-343. E-published February 14, 2010.

Theodoropoulos JS, Decroos A, Park S, Pilliar R, Kandel R: Integration of tissue-engineered cartilage to native cartilage: An in vitro model. *Clinical Orthopaedics and Related Research*: E-published March 15, 2011.

Wasserstein D, White L, Theodoropoulos J: Traumatic brachialis muscle injury by elbow hyperextension in a professional hockey player. *Clinical Journal of Sports Medicine*: May 2010: 20(3): pp 211-212.

Wynnyckyj CA, Omelon S, Willett TL, Kyle K, Goldberg H, Grynpas MD: Mechanism of bone collagen degradation due to KOH treatment. *Biochimica et Biophysica Acta – General Subjects*: February 2011: 1810(2): pp 192-201. E-published October 21, 2010.

Wynnyckyj CA, Willett TL, Omelon S, Wang J, Wang Z, Grynpas MD: Changes in bone fatigue resistance due to collagen degradation. *Journal of Orthopaedic Research*: February 2011: 29(2): pp 197-203. E-published August 27, 2010.

INVITED VISITS

Backstein D: Surgical Advances in Revision Hip and Knee, Ottawa, Ontario, Canada, October 2010. (1) Periprosthetic fractures in TKA – fixate or revise, (2) Total hip replacement: Dealing with acetabular bone defects, (3) Total knee replacement: Dealing with defects – bone/metal/cement, (4) Video vignette: Extended trochanteric osteotomy lateral approach.

Backstein D: Current Concepts in Joint Replacement, Orlando, Florida, USA, December 2010. (1) Defining femoral/tibial component rotation: Twists in time, (2) Distal femoral varus osteotomy: Unloading the lateral compartment, (3) Wound healing problems in TKA: Sapere aude.

Backstein D: American Academy of Orthopaedic Surgeons, Annual Meeting, San Diego, California, USA, February 2011. (1) Correlation between a painful stimulus rated by the visual analogue scale to knee society scores, (2) Revision total knee arthroplasty for component malrotation is highly beneficial, (3) Poster Presentations: (a) Acetabular alignment and primary arc of motion in THA for 28mm, 32mm, 36mm and 40mm heads, (b) THA in Down Syndrome patients: An improvement in quality of life.

Backstein D: Cleveland Clinic Arthroplasty Course: The Cutting Edge, Cleveland, Ohio, USA, March 2011. (1) Complex revision TKA – Toronto experience, (2) Knee osteotomy: Where, when and how, (3) Management of ligament instability in revision TKA – device and technique options.

Backstein D: American Academy of Orthopaedic Surgeons/American Association of Hip and Knee Surgeons Challenges and Controversies in Total Joint Arthroplasty, Rosemont, Illinois, USA, April 2011. (1) Case Presentations: Complications and management, (2) Osteotomy of the knee, (3) Segmental defects of the acetabulum.

Backstein D: Canadian Conference on Medical Education, Scholarship in Medical Education, Toronto, Ontario, Canada, May 2011. Poster Presentations: (1) Peer-assisted learning: How does it compare with expert feedback? (2) Resident self-assessment of operative experience in primary total knee and hip arthroplasty: An important addition to the case log.

Backstein D: National Capital Knee Symposium, Ottawa, Ontario, Canada, May 2011.

(1) Patellofemoral arthroplasty: Overview, (2) Total knee replacement: Cementless components, (3) Varus osteotomy: Femur.

Backstein D: World Physical Therapy 2011, Amsterdam, Netherlands, June 2011. Evaluation of results utilizing advanced practice physiotherapist in rural Canadiana family practice for patients with hip and knee arthritis.

Backstein D: Zimmer Canada, Montreal, Quebec, Canada, June 2011. (1) Chair: Addressing the difficulties of revision knee arthroplasty, (2) Presenter: (a) Revision total knee replacement using a hinge, (b) Total knee replacement using distal femoral replacement.

Bell RS: McGill Academic Health Network Retreat, Montreal, Quebec, Canada, August 2010. Integration lessons from the Toronto Academic Health Science Network.

Bell RS: Power Summit, Toronto, Ontario, Canada, September 2010. Quality.

Bell RS: Ontario Association of General Surgeons, 16th Annual Meeting, Toronto, Ontario, Canada, October 2010. The surgeon and hospital leadership: Acrimony or alignment?

Bell RS: Ontario Hospital Association Programs Conference, Toronto, Ontario, Canada, January 2011. Updates from the Most Responsible Physician Expert Panel.

Bell RS: Candian Health Services Research Foundation, EXTRA Project and CEO Forum, Montreal, Quebec, Canada, February 2011. (1) Leadership and managing organizational politics, (2) Leadership in accountability in Canadian healthcare: Creating the momentum to improve quality.

Bell RS: Conference Board of Canada, Toronto, Ontario, Canada, April 2011. Lean methods and sustainability in Ontario hospitals.

Bell RS: C.D Howe Institute, Toronto, Ontario, Canada, June 2011. Outlook on health care policy: How Canada's research hospitals serve as innovation engines for improving patients outcomes.

Ferguson PC: 16th Uruguayan Orthopaedic & Traumatology Congress, Montivideo, Uruguay, September 2010. (1) Current approaches to management of bone metastases, (2) Evaluation and management of extremity soft tissue sarcomas - Staying out of trouble, (3) Rationale and design of a competency-based training curriculum in orthopaedics.

Ferguson PC: American College of Surgeons, Accredited Education Institutes Postgraduate Course, Toronto, Ontario, Canada, October 2010. Curriculum development for a competency-based program.

Ferguson PC: Ontario Orthopaedic Association, Toronto, Ontario, Canada, November 2010. Pitfalls of the biopsy.

Ferguson PC: Musculoskeletal Tumor Society Specialty Day, Session Moderator, San Diego, California, USA, February 2011. Complications of radiation in musculoskeletal oncology.

Gross AE: Israeli Clinical Fellows Reunion, Tel Aviv, Israel, July 2010. Invited Lecturer: (1) Articular defects of the knee, (2) Total hip replacement for dysplasia, (3) Revision hip arthroplasty, (4) Revision arthroplasty of the hip femoral side: The surgical technique and longterm results of proximal femoral allograft for massive proximal femoral bone loss, (5) Modified trochanteric slide.

Gross AE: Sociedad Antioquena de Ortopedia y Traumatologia (SAOT), First International Hip Course, Medellin, Colombia, October 2010.

Gross AE: Zimmer Institute, Montreal, Quebec, Canada, October 2010. Trabecular metal material in the hip and knee featuring the continuum acetabular system.

Gross AE: Zimmer Institute Bioskills Training, Parsippany, New Jersey, USA, November 2010. Zimmer revision hip arthroplasty solutions.

Gross AE: Case Western Reserve University School of Medicine and The Cleveland Orthopaedic Society, 46th Annual Mt. Sinai Reich Lectureship, Mt. Sinai Reich Lecturer, Cleveland, Ohio, USA, April 2011. Revision arthroplasty of the acetabulum with restoration of bone stock: Porous metals vs bone grafts.

Murnaghan L: 7th Annual Pediatric Emergency Medicine Conference (Continuing Education), Toronto, Ontario, Canada, October 2010. Acute knee and shoulder injuries in the growing athlete.

Murnaghan L: Canadian Orthopaedic Association (COA) Basic Science Course (Continuing Education), Montreal, Quebec, Canada, October 2010. Pediatric orthopaedics – fractures and infections.

Murnaghan L: Rocky Mountain Hospital for Children, Vail, Colorado, USA, January 2011. OCD MRI classification system and ROCK OCD journal club.

Murnaghan L: DANA Children's Hospital, Tel Aviv, Israel, April 2011. (1) Hip arthroscopy in the pediatric patient, (2) Ossicles around the foot, (3) Osteochondritis dissecans of the capitellum in adolescent athletes.

Safir O: Serbian Orthopaedic & Trauma Association (SOTA) Conference, Belgrade, Serbia, October 2010. Use of proximal femoral allograft in hip revisions.

Theodoropoulos J: International Cartilage Research Society (ICRS), Annual Meeting, Barcelona, Spain, September 2010. Poster Presentation: Integration of repair cartilage: An in vitro model.

Theodoropoulos J: International Skeletal Society, Athens, Greece, September-October 2010. (1) MRI and meniscal pathology, (2) Ankle arthroscopy.

Theodoropoulos J: Italian Society for Sports Medicine and Arthroscopy, Annual Meeting, Verona, Italy, October 2010. Poster Presentation: A meta-analysis of open versus arthroscopic bankart repair using suture anchors.

Theodoropoulos J: Tissue Engineering and Regenerative Medicine International Society, Annual Meeting, Orlando, Florida, USA, December 2010. Poster Presentation: Mechanical stimulation enhances integration in an in vitro model of cartilage repair.

Theodoropoulos J: Smith and Nephew National Meeting 2011, Toronto, Ontario, Canada, January 2011. Shoulder arthroscopy: Techniques in labral and rotator cuff repair.

Theodoropoulos J: American Academy of Orthopaedic Surgeons, Annual Meeting, San Diego, California, February 2011. Poster Presentation: The outcome of arthroscopic bankart repair with suture anchors in contact versus non-contact athletes.

Theodoropoulos J: Ontario Medical Association/Sport Medicine Annual Meeting 2011, Toronto, Ontario, Canada, February 2011. (1) A systematic review of the use of platelet rich plasma in sports medicine as a new treatment for tendon and ligament injuries, (2) A survey of Canadian orthopedic surgeon on the use of microfracture in the treatment of chondral injuries of the knee.

Theodoropoulos J: Arthroscopy Association of North America, San Francisco, California, USA, April 2011. Arthroscopic bankart repair with suture anchors in collision versus non-collision athletes.

Theodoropoulos J: Radiology Society of North America, Chicago, Illinois, USA, November 2011. Poster Presentation: MR imaging of the post-operative knee.

Willett T: American Society of Bone and Mineral Research, 32nd Annual Meeting, Toronto, Ontario, Canada, October 2010. Poster Presentations: (1) In vivo mechanical loading of the skeletally mature rabbit tibia model, (2) Chlorthalidone improves bone quality in genetic hypercalciuric stone forming rats.

Willett T: Canadian Arthritis Network, 10th Annual Scientific Conference, Gatineau, Quebec, Canada, October 2010. Poster Presentation: Do advanced glycation endproducts accelerate osteoarthritis? A novel model.

Wunder JS: French Orthopaedic Association, Paris, France, November 2010. Building a better bone: Recent development in uncemented bone tumor endoprostheses.

Wunder JS: Sun-Yat Sen University, National Multiple Disciplines Symposium in Sarcoma, Guangzhou, China, May 2011. Improving outcomes for soft tissue sarcoma.

Wunder JS: Infinity Pharmaceuticals Investigator Meeting, Santa Monica, California, USA, May 2011. Rationale for hedgehog blockade for chondrosarcoma.

Wunder JS: National Multiple Disciplines Symposium on Sarcoma, Guangzhou, China, May 2011. Unraveling the genetics of cartilage neoplasia: Novel therapeutic opportunities for chondrosarcoma.

RESEARCH AND INVESTIGATIONS

Senior investigator's name appears in italics

A murine model of adynamic bone disease. *Grynpas M, Alman B: Canadian Institutes of Health Research (CIHR). (\$480,000 2010-2014)*

Beyond bone mineral density: Assessment of bone health and fracture risk with the mechanical response tissue analyzer. *Willett T, Grynpas M: Canadian Institutes of Health Research (CIHR). (\$99,985 2010-2011)*

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

Development and validation of a preclinical model of radiation impaired fracture healing. *Willett T, Grynpas M, Ferguson P: Canadian Institute of Health Research (CIHR), Institute of Musculoskeletal Health and Arthritis (IMHA). (\$100,000 2010-2011)*

Do advanced glycation endproducts accelerate osteoarthritis? *Grynpas M, Kandel R, Dennis M, Willett T: Canadian Arthritis Network. (\$50,000 2009-2011)*

Enhancing undergraduate molecular medicine. *Woods N, Massicotte E, Backstein D: McLaughlin Centre for Molecular Medicine. (16,998 2007-2011)*

Exploring trainee self-regulated learning activities: Faculty perceptions and evaluations. Woods N, Brydges R, Hanson M, Murnaghan L, Mylopoulos M: *The Royal College of Physicians and Surgeons*. (\$11,273.75 2010-2012)

Fellow selection: A qualitative study. Murnaghan L, Hanson M, Yee A, Nousianen M, Martimianakis MA, Moulton C-A: *The Royal College of Physicians and Surgeons*. (\$11,280 2010-2011)

Hedgehog signaling in cartilage neoplasia and development. Wunder JS, 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. Theodoropoulos J, Marks P, Whelan D, White L, Buschmann M, Hoemann C, Stewart J, Kunz M, Hurtig A: *Canadian Arthritis Network*. (\$179,000 2009-2011)

Infrastructure for molecular genetics and therapeutics in sarcoma. Andrulis IL, Andrulis IL, Swallow CJ, Wunder JS: *Canadian Foundation for Innovation*. (\$390,188 2009-2010)

Intraoperative Assessment of Combined Anteversion in Total Hip Replacement. Gross A, Backstein D, Safir O, Lee P, Kosashvili Y, Lakstein D: *Canadian Orthopaedic Foundation*. (\$5,000 2009-2010)

Pressures on surgeons to 'measure up' and their effects on surgical judgment. Moulton C-A, Murnaghan L, Martimianakis MA, Kitto S: *The Physicians Services Incorporated Foundation (PSI)*. (\$99,043 2011-2013)

Repair of early joint damage - a tissue engineering approach. Kandel R, Grynepas 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 (CIHR)*. (\$2,400,000 2007-2012)

The sensitivity of bone fracture resistance to advanced glycation endproducts. Willett T: *University of Toronto*. (\$10,000 2010-2011)

HONOURS RECEIVED

Backstein D: W.T. Aikens Award, Course/Program Development Category, University of Toronto, Ontario, Canada. 2010.

Gross AE: Meir Hospital Israel Medal of Merit Award. 2011.

Gross AE: The Frank Stinchfield Award 2011 from The Hip Society in recognition of pre-eminent excellence in the exposition and presentation of 'Dislocation in Revision THA: Randomized Clinical Trial of 36/40mm vs 32mm Head.' 2011.

■ Division Of Plastic And Reconstructive Surgery

Dr. H.N. McKee Professor

PUBLICATIONS

Ravichandiran K, Ravichandiran M, Oliver ML, Singh KS, McKee NH, Agur AM: Fiber bundle element method of determining physiological cross-sectional area from three-dimensional computer muscle models created from digitised fibre bundle data. *Computer Methods in Biomechanics and Biomedical Engineering*: December 2010: 13(6): pp 741-748.

RESEARCH AND INVESTIGATIONS

Biochemical and cellular changes within the rat gastrocnemius muscle and calcaneal tendon post tenotomy. Do traumeel injections make a difference? *Agur A, Sauks K, McKee N, Koeberle P: Holistic Health Research Foundation of Canada, Canadian CAM Research Fund.* (\$4,858 2010-2011)

■ Division Of Urology

Dr. E.D. Grober Assistant Professor
Dr. K. Jarvi Professor (Division Head)

Dr. C.K. Lo Assistant Professor
Dr. A. Zlotta Professor

PUBLICATIONS

Alkhateeb SS, Alibhai SM, Finelli A, Fleshner NE, Jewett MA, Zlotta AR, Trachtenberg J: Does nerve-sparing radical prostatectomy increase the risk of positive surgical margins and biochemical progression? *Urology Annals*: May 2010: 2(2): pp 58-62.

Athanasopoulos P, Kuk C, Zlotta AR: What is new and proven in the treatment of upper tract urothelial carcinoma? *TTMed Urology International*: December 1, 2010.

Batruch I, Lecker I, Kagedan D, Smith C, Mullen B, Grober E, Lo K, Diamandis EP, Jarvi K: Proteomic analysis of seminal plasma from normal volunteers and post-vasectomy patients identifies over 2000 proteins and candidate biomarkers of the urogenital system. *Journal of Proteome Research*: March 2011: 10(3): pp 941-953.

Bombieri C, Claustres M, de Boeck K, Derichs N, Dodge J, Girodon E, Sermet I, Schwarz M, Tzetis M, Wilschanski M, Bareil C, Bilton D, Castellani C, Cuppens H, Cutting GR, Drevinek P, Durie P, Farrell P, Gonska T, Elborn JS, Jarvi K, Kerem B, Kerem E, Knowles M, Macek M Jr, Munck A, Radojkovic D, Seia M, Sheppard DN, Southern K, Stuhmann M, Tullis E, Zielenski J, Pignatti PF, Ferec C: Recommendations for the classification of diseases as CFTR-related. *Journal of Cystic Fibrosis*: June 2011: 10(Suppl2): pp S86-S102.

Bostrom PJ, Alkhateeb S, van Rhijn BW, Kuk C, Zlotta AR: What is new and proven in the treatment of upper tract urothelial carcinoma? *Expert Review of Anticancer Therapy*: December 2010: 10(12): pp 1891-1902.

Cook J, Collins J, Buckett W, Racowsky C, Hughes EG, Jarvi K: Assisted reproductive technology-related multiple births: Canada in an international context. *Journal of Obstetrics and Gynaecology Canada*: February 2011: 33(2): pp 159-167.

Finelli A, Trottier G, Lawrentschuk N, Sowerby R, Zlotta AR, Radomski L, Timilshina N, Evans A, van der Kwast TH, Toi A, Jewett MA, Trachtenberg J, Fleshner NE: Impact of 5a-reductase inhibitors on men followed by active surveillance for prostate cancer. *European Urology*: April 2011: 59(4): pp 509-514.

Grober E, Jarvi K, Lo K, Shin EJ: Mini-incision vasectomy reversal using no-scalpel vasectomy principles: Efficacy and post-operative pain compared to traditional approaches to vasectomy reversal. *Urology*: March 2011: 77(3): 602-606. E-published December 24, 2010.

Kakiashvili DM, Van Rhijn BW, Trottier G, Jewett MA, Fleshner NE, Finelli A, Azuero J, Bangma CH, Vajpeyi R, Alkhateeb S, Hanna S, Kostynsky A, Kuk C, Van Der Kwast TH, Zlotta AR: Long-term followup of T1 high-grade bladder cancer after intravesical bacilli Calmette-Guerin treatment. *British Journal of Urology International*: February 2011: 107(4): pp 540-546. E-published September 7, 2010.

Kassouf W, Hautmann RE, Bochner BH, Lerner SP, Colombo R, Zlotta A, Studer UE: A critical analysis of orthotopic bladder substitutes in adult patients with bladder cancer: Is there a perfect solution? *European Urology*: September 2010: 58(3): pp 374-383. E-published May 22, 2010.

Lawrentschuk N, Trottier G, Kuk C, Zlotta AR: Role of surgery in high-risk localized prostate cancer. *Current Oncology*: September 2010: 17(Suppl2): pp S25-S32.

Thoms J, Goda JS, Zlotta AR, Fleshner NE, van der Kwast TH, Supiot S, Warde P, Bristow RG: Neoadjuvant radiotherapy for locally advanced and high-risk prostate cancer. *Nature Reviews Clinical Oncology*: February 2011: 8(2): pp 107-113.

Trottier G, Roobol MJ, Lawrentschuk N, Bostrom PJ, Fernandes KA, Finelli A, Chadwick K, Evans A, van der Kwast TH, Toi A, Zlotta AR, Fleshner NE: Comparison of risk calculators from the Prostate Cancer Prevention Trial and the European Randomized Study of Screening for Prostate Cancer in a contemporary Canadian cohort. *British Journal of Urology International*: E-published April 20, 2011.

Yildiz C, Law N, Ottaviani P, Jarvi K, Mckerlie C: Comparison of sperm quality and DNA integrity in mouse sperm exposed to different cooling velocities and osmotic stress. *Theriogenology*: November 2010: 74(8): pp 1420-1430.

Van Rhijn BW, van der Kwast TH, Kakiashvili DM, Fleshner NE, van der Kwast TH, Alkhateeb S, Bangma CH, Jewett MA, Zlotta AR: Pathological stage review is indicated in primary pT1 bladder cancer. *British Journal of Urology International*: July 2010: 106(2): pp 206-211. E-published December 9, 2009.

Zlotta AR: Word of Wisdom. Re: A sequence variant at 4p16.3 confers susceptibility to urinary bladder cancer. *European Urology*: December 2010: 58(6): pp 943-944. E-published October 30, 2010.

Zlotta AR: What is the future of virtual cystoscopy in urology? *Canadian Urological Association Journal*: February 2011: 5(1): pp 38-39.

Zlotta AR, Roumeguere T, Kuk C, Alkhateeb S, Rorive S, Lemy A, van der Kwast TH, Fleshner NE, Jewett MA, Finelli A, Schulman C, Lotan Y, Shariat SF, Nortier J: Select screening a specific high-risk population of patients suggests a stage migration toward detection of non-muscle-invasive bladder cancer. *European Urology*: June 2011: 59(6): pp 1026-1031. E-published April 1, 2011.

INVITED VISITS

Grober E: Sexual Medicine Society of North America, Miami, Florida, USA, November 2010. Male sling-video sessions.

Grober E: Abbott/Primary Care Physicians of the Greater Toronto Area, Continuing Education, Toronto, Ontario, Canada, May 2011. The couch potato syndrome: Testosterone deficiency – diagnosis, treatment and impact on men's health.

Grober E: Paladin, Specialists Consultative Meeting, Continuing Education, Toronto, Ontario, Canada, June 2011. Testosterone replacement therapy and prostate safety.

Jarvi K: Smart ART XI, Las Vegas, Nevada, USA, August 2010. Update on male infertility: What's new in 2010.

Jarvi K: Centers for Disease Control and Prevention (CDC), USA, Atlanta, Georgia, USA, September 2010. Advancing men's reproductive health in the United States: Current status and future directions meeting.

Jarvi K: IVF Canada, Markham, Ontario, Canada, April 2011. Infertility Seminar.

Jarvi K: Society for the Study of Male Reproduction, Washington, District of Columbia, USA, May 2011. Mini-incision vasectomy reversal.

Jarvi K: Midwest Reproductive Symposium and Nurse Practicum, Chicago, Illinois, USA, June 2011. Infertile couples - males matter! Issues in male infertility.

Lo KC: 3rd Annual International Sarcoma Awareness Week Symposium, Toronto, Ontario, Canada, July 2010. Fertility preservation in male cancer patients.

Lo KC: Life Quest Fertility Center, Toronto, Ontario, Canada, September 2010. Sperm DNA damage - Clinically relevant or waste of time.

Lo KC: American Society of Reproductive Medicine, Denver, Colorado, USA, October 2010. Stem cells in reproduction.

Lo KC: American Society of Andrology, Montreal, Quebec, Canada, April 2011. Are testicular sperm better than ejaculated sperm?

Lo KC: National Institutes of Health, Bethesda, Maryland, USA, June 2011. Fertility preservation.

Zlotta A: American Urological Association, San Francisco, California, USA, 2010. (1) Comparison of molecular markers, sub-stage and the EORTC risk-score to predict clinical outcome of pT1 bladder cancer, (2) FGFR3 protein over-expression in the absence of a FGFR3 mutation is not associated with favorable disease characteristic in bladder cancer, (3) Is female gender a risk factor for absent detrusor muscle at transurethral resection of bladder tumor (TURBT)?, (4) Molecular markers show differences in biological potential per grade category for the WHO 1973 and 2004 classification systems. A large multi-center study with central pathology review in non-muscle invasive bladder cancer, (5) Patients with non primary pT1 nonmuscle invasive bladder cancer (NMI-BC) treated with bacillus calmette-guerin (BCG) are at higher risk of progression compared to primary T1 tumors, (6) Surgeon-volume and outcome relation in transurethral resection of bladder tumour (TURBT), (7) T1G3 bladder cancer treated conservatively with BCG or with no BCG: Long-term follow up in 249 patients.

Zlotta A: European Association of Urology, Barcelona, Spain, 2010. (1) Comparison of molecular markers, sub-stage and the EORTC risk-score to predict clinical outcome of pT1 bladder cancer, (2) Impact of sub-stage on the clinical outcome of pT1 bladder cancer, (3) Molecular markers show differences in biological potential per grade category for the WHO 1973 and 2004 classification systems: A large multi-center study with central pathology review in non-muscle invasive bladder cancer, (4) Nerve-sparing radical prostatectomy in selected high-risk and locally advanced prostate cancers is associated with low positive margin rates using a combination of preoperative MRRI, special instrumentation and intra-operative frozen sections, (5) Outcome of T1 non-muscle invasive bladder cancer (NMIBC) treated with Bacillus Calmette-Guerin (BCG): Differences between primary and non-primary tumours, (6) Radical cystectomy outcome and prognostic parameters – combined result from two large series.

Zlotta A: 10th Sul-Brasileiro Congress of Urology 2010, Curitiba, Sao Paulo, Brazil, July 2010. Keynote Speaker: (1) T1 de alto grau, (2) T1 nao semiminoma toso, (3) T1 bladder cancer.

Zlotta A: Greek Urological Association, 20th Panhellenic Urological Congress, Limasol, Cyprus, October 2010. (1) State of the Art: Development in prediction models to predict patient's outcome after radical cystectomy, (2) Case Discussion: Localized prostate cancer.

Zlotta A: McGill University, 10th Annual Canadian Senior Resident Urologic Oncology Course, Montreal, Quebec, Canada, October 2010. Use of intravesical therapy in non muscle invasive bladder cancer.

Zlotta A: CHIREC, Edith Cavell Interregional Hospital Group, Brussel, Belgium, November 2010. (1) Tumeurs de vessie, tumeurs non invasives (superficielles), (2) Tumeurs de vessie, tumeurs infiltrantes – place de la chirurgie et des traitements adjuvants.

Zlotta A: Quebec Urological Association, Montreal, Quebec, Canada, November 2010. (1) Comment decider d'un traitement conservateur vs agressif dans le cancer de vessie T1 de haut grade: Influence de la sous-stadification et de FGFR3, (2) Interet d'une Clinique multidisciplinaire dans le cancer de vessie, (3) Approche des cas complexes de cancers superficiels de la vessie.

Zlotta A: Spanish Oncology Genitourinary Group (SOGUG), Scientific Symposium, Madrid, Spain, November 2010. New targets in bladder cancer: The role of the FGFR receptor family.

Zlotta A: Universite Libre de Bruxelles/Hopital Erasme, Update in Bladder and Prostate Cancer, Brussels, Belgium, December 2010. (1) Prostate biopsy: An update, (2) Prostate cancer: What about new tissue biomarkers, (3) Round Table Discussion on New imaging of prostate cancer, (4) Workshop in the OR: Cystoprostatectomy open versus laparoscopic approach in parallel, (5) Round Table Discussion on Non muscle invasive bladder cancer: What should the urologist know and use in 2011?

Zlotta A: American Society of Clinical Oncology, Genitourinary Symposium, Orlando, Florida, USA, 2011. Multi-institutional quality of care initiative for non-metastatic muscle-invasive transitional cell carcinoma of the bladder: Phase 1.

Zlotta A: European Association of Urology (EAU), Vienna, Austria, 2011. (1) Could screening for bladder cancer produce a stage migration towards detection of non-muscle-invasive cancers?, (2) Investigating the risk of bladder cancer among hereditary non-polyposis colorectal cancer (HNPCC) patients with confirmed mismatch repair (MMR) gene mutations.

Zlotta A: Controversies in Urology, 4th World Congress, Paris, France, January 2011. (1) Chairperson for Case Discussion Panel on Non-muscle invasive bladder cancer (NMIBC): White light cystoscopy, blue light cystoscopy, narrow band imaging, virtual cystoscopy? What should the urologist use in 2011?, (2) Diagnosis and imaging of prostate cancer: psa, snp and other new markers, (3) Debate and Case Panel Discussion on A multidisciplinary team approach: Muscle invasive bladder cancer: Is there a place for conservative management?

Zlotta A: Asociacion Espanola De Urologia, Rising Stars in Urology II, Grenada, Spain, March 2011. Hormonal therapy for prostate cancer and beyond: Why, how to and when to intervene?

Zlotta A: European Association of Urology, Vienna, Austria. March 2011. (1) Chairman, Urothelia tumors – Basic research, (2) Instructor of ESU Course 1: Prostate cancer – screening, diagnosis and staging.

Zlotta A: American Urological Association (AUA), Washington, District of Columbia, USA, May 2011. Chairman of Podium Session on Prostate Cancer: Localised.

Zlotta A: Canadian Urological Association (CUA), Montreal, Quebec, Canada, June 2011. Moderator of Poster Session 1 on Oncology – Prostate.

RESEARCH AND INVESTIGATIONS

A novel testicular germ cell maturation model for fertility preservation in pre-pubertal cancer patients and studies of gonadotoxic agents. *Lo K, McKerlie C, Jarvi K, Mullen B: National Institutes of Health.* (\$723,516 2010 - 2013)

A proteomic and genetic biomarker panel for improving prostate specific antigen performance and identify individuals at risk of prostate cancer using a unique patient population accrued in the European Randomized Study for Prostate Cancer Screening. *Diamandis E, Ozcelik H, Briollais L, Fleshner N, van der Kwast T, Jarvi K, Lockwood G, Klotz L, Recker H, Kwiatkowski M, Van Rhijn B, Sardana G, Zlotta A: Ontario Institute for Cancer Research (OICR).* (\$631,232 2009 - 2012)

Canadian Urological Association Scholarship. *Grober E, Jewett MAS: Canadian Urological Association Scholarship Foundation.* (\$40,000 2009-2011)

Genetic, epigenetic and proteomic analysis of the kallikrein family in search for novel diagnostic, prognostic and risk susceptibility algorithms for prostate cancer. *Zlotta A, Bapat B, Ozcelik H, Briollais L, Fleshner N, Van der Kwast T, Diamandis EP. Canadian Institutes of Health Research (CIHR).* (\$599,272 2009-2012)

Intra-operative assessment of technical skill using economy of hand motion: Establishing learning curves of surgical competence. *Roberts M, Grober E: The Physicians' Services Incorporated Foundation (PSI).* (\$70,500 2009-2011)

Intra-operative assessment of technical skill using economy of hand motion: Establishing learning curves of surgical competence. *Roberts M, Grober E: The Royal College of Physicians and Surgeons of Canada.* (\$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 (CIHR).* (\$342,369 2009-2012).

Novel semen biomarkers to identify sperm production in men with infertility: A non-invasive method to characterize men with azoospermia or no sperm in the semen, into those with and without testicular sperm production. *Jarvi K, Diamandis E, Lo K, Grober E, Briollais L: MaRS Innovation.* (\$50,000 2010 - 2011)

Prevalence and age distribution of prostate carcinoma and its precursor lesions in Asian and Caucasian men in autopsy specimens: A prospective comparative international study with central pathology review. *van der Kwast TH, Fleshner NE, Jarvi K, Finelli A, Pushkar D, Montorsi F, Egawa S, Zlotta A: Glaxo Smith Kline.* (\$122,762 2008-2011)

Prevalence of inflammation among BPH and prostate carcinoma in Asian and Caucasian men in autopsy specimens: A prospective comparative international study with central pathology review. *van der Kwast T, Fleshner N, Jarvi K, Finelli A, Pushkar D, Egawa S, Alcaraz A, Musquera M, Ribal M, Zlotta A: Pierre Fabre Medicament.* (\$33,000 2010-2011)

Semen proteomics to identify novel prostate cancer biomarkers. *Grober E, Jarvi KA, Diamandis E, Finelli A, Fleshner N, Zlotta A, Briollais L, Ghai S, Lo K, Margolis M, Mullen B, O'Malley M, Tannenbaum D, Toi A, van der Kwast T: Canadian Cancer Society Research Institute.* (\$413,853 2010 - 2013)

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)

Towards non-invasive diagnosis of urogenital diseases by a novel multiparametric biomarker panel in seminal plasma. *Diamandis EP, Jarvi K: Institut Merieux.* (\$402,000 2010 - 2012)

Validation of real-time, intra-operative, surgical competence (RISC) assessments linked to patient outcomes. *Jewett MAS, Lorenzo A, Grober E: Association for Surgical Education, CESERT.* (\$25,000 2010-2012)

Validation of real-time, intra-operative, surgical competence (RISC) assessments linked to patient outcomes. *Jewett MAS, Lorenzo A, Grober E: The Physicians' Services Incorporated Foundation (PSI).* (\$91,500 2009-2011)



St. Joseph's Health Centre

Lloyd Smith, *Surgeon-in-Chief*

HEADS OF DIVISION

Dr. C. Campeau	General and Thoracic Surgery
Dr. G. Vincent	Orthopaedics
Dr. L. Kasrai	Plastic and Reconstructive Surgery
Dr. U. Jain	Urology

The past year has been a good one for the Department of Surgery at St. Joseph's Health Centre. Despite the fiscal challenges facing all hospitals, St. Joseph's Health Centre has been able to increase our volumes overall and the numbers of priority program cases.

The hospital became a centre of excellence in hepatobiliary surgery with the addition of Dr. Shiva Jayaraman in August 2009. Since that time, our HPB volumes have almost doubled and we have been recognized and given funding for this by Cancer Care Ontario.

In Thoracic surgery, Dr. Yaron Shargall left St. Joseph's Health Centre in October 2010 to become the Head of the Division of Thoracic Surgery at St. Joseph's Health Centre in Hamilton, Ontario. We were able to recruit Dr. Michael Ko, who joined us in November 2010. This allowed us to maintain our full complement of three thoracic surgeons and therefore our level one status with Cancer Care Ontario.

The Bariatric program has continued to grow and we were able to perform approximately 180 gastric bypasses in the past year. This program has been highly successfully and the plan is to grow it even further.

The teaching program within the department of surgery continues to increase in both resident and student numbers. The surgical faculty is very pleased with how this is going and would like to see more students coming to our institution as part of their core rotations in surgery.

APPOINTMENTS AND PROMOTIONS

Dr. Shiva Jayaraman joined the Division of General and Thoracic Surgery at St. Joseph's in August 2010.

Dr. Michael Ko joined the Division of General and Thoracic Surgery at St. Joseph's in November 2010.



AWARDS

Dr. Chris Campeau won the Ernie Spratt Award for teaching in the Division of General & Thoracic Surgery, St. Joseph's Health Centre.

Dr. Michael Kliman won the Award for Resident Teaching in the Division of Orthopaedic Surgery, St. Joseph's Health Centre.

Dr. Ron Levine won the Award for Resident Teaching in the Division of Plastic Surgery, St. Joseph's Health Centre.

Dr. Umesh Jain 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)	Dr. S. Jayaraman	Assistant Professor
Dr. T.A. Harmantas	Assistant Professor	Dr. D.R. Lindsay	Lecturer
Dr. R.S. Hart	Lecturer	Dr. L.C. Smith	Associate Professor
		Dr. P.A. Sullivan	Lecturer

■ Division Of Orthopaedics

Dr. W.A. ElMaraghy	Assistant Professor	Dr. G. Vincent	Assistant Professor
Dr. M. Kliman	Lecturer	Dr. M. Wood	(Division Head) Lecturer
Dr. M. Roscoe	Assistant Professor		

INVITED VISITS

ElMaraghy AW: Depuy Institute, Advanced Canadian Sport Medicine Leadership Forum, Raynham, Massachusetts, USA, November 2010. Distal clavicle excision in association with subacromial decompression.

HONOURS RECEIVED

ElMaraghy AW: Award for Resident Teaching, Service of Orthopaedic Surgery, November 2010.

■ Division Of Plastic Surgery And Reconstructive Surgery

Dr. C. Fielding	Lecturer	Dr. R.H. Levine	Professor
Dr. L. Kasrai	Assistant Professor (Division Head)	Dr. R.K. Wanzel	Assistant Professor

PUBLICATIONS

Murabit A, Anzarut A, Kasrai L, Fisher D, Wilkes G: Teaching ear reconstruction using an alloplastic carving model. Journal of Craniofacial Surgery: November 2010: 2(6): pp 1719-1721.

INVITED VISITS

Kasrai L: Craniofacial Society of Great Britain & Ireland Annual Conference, Guest Speaker, York, Great Britain, April 2011. Autogenous ear reconstruction.

Kasrai L: International Confederation for Plastic Reconstructive and Aesthetic Surgery (IPRAS), Vancouver, British Columbia, Canada, May 2011. Master Class Session - Ear reconstruction - Practical Carving Workshop.

■ Division Of Thoracic Surgery

Dr. M. Blitz Assistant Professor
Dr. C. Compeau Assistant Professor
(Division Head)

Dr. M. Ko Assistant Professor

PUBLICATIONS

Louie BE, Blitz M, Farivar AS, Orlina J, Aye RW: Repair of symptomatic giant paraesophageal hernias in elderly (> 70 years) patients results in improved quality of life. Journal of Gastrointestinal Surgery: March 2011; 15(3): pp 389-396. E-published ahead of print January 19, 2011.

■ 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/Robert B. Salter Chair in Surgical Research*

HEADS OF DIVISION

Dr. David Latter	Cardiac Surgery
Dr. Avery Nathens	General Surgery
Dr. R. Loch Macdonald	Neurosurgery
Dr. James Mahoney	Plastic and Reconstructive Surgery
Dr. Emil Schemitsch	Orthopaedics
Dr. John Honey	Urology
Dr. Ori Rotstein (interim)	Vascular Surgery

Academic year 2010-2011 was another exciting year for the Department of Surgery at St. Michael's Hospital. After several years of anticipation, the Li Ka Shing Knowledge Institute's completion and the move of Faculty into the building have been truly exhilarating. The Li Ka Shing Knowledge Institute is comprised of the Keenan Research Centre as well as the Li Ka Shing International Healthcare Education Centre. These two centres combined allows researchers, educators, and clinicians to work together to make new discoveries, generate novel therapies, develop innovative training programs, and helping translate knowledge into practice. Several of our researchers including Drs. Andras Kapus, John Marshall, Wolfgang Kuebler, Michael Cusimano, Tom Schweizer, Subodh Verma, Ori Rotstein, Avery Nathens and Katalin Szasz have made the Li Ka Shing Knowledge Institute their new home for their research groups. This includes new "state of the art" research equipment in the Keenan Research Centre as well as the new Allan Waters Family Simulation Centre which is under the Medical Direction of Dr. Teodor Grantcharov.

In the spring we welcomed Dr. James Rutka as the new R.S. McLaughlin Professor and Chair position. Dr. Rutka has been a faculty member at the University of Toronto, Division of Neurosurgery for many years and is also the co-Director of the Arthur and Sonia Labatt Brain Tumor Research Centre at the Hospital for Sick Children. Our thanks to Dr. David Latter for his contributions as interim Chair prior to Dr. Rutka taking on his role. Dr. Ori Rotstein was appointed Associate Chair for the Department of Surgery at the University of Toronto. Dr. Rotstein completed his 10 years as Director of the Institute of Medical Science at University of Toronto. He has been honoured by this with a lectureship in his name: The Ori Rotstein Lecturer in Translational Research.

There were two new recruits to the Department. Dr. Sunit Das joins the Division of Neurosurgery from the University of Northwestern in Chicago. Dr. Das

has a unique training background; he completed an undergraduate degree in literature and moved onto philosophy at Harvard where he decided to enter into neurosurgery. He completed his PhD at NIH, focusing his work on synaptic maturation and neural stem cell biology. Dr. Tony Moloney was recruited to the Division of Vascular Surgery. His expertise in endovascular surgery will add to the expertise of the division and the hospital. He is currently completing his Master's degree in eHealth at McMaster University. As we move forward, the Department will be adding new faculty members to the Divisions of Vascular Surgery, Neurosurgery and General Surgery including trauma over the coming year.

On the education side, the St. Michael's Hospital Physicians Teaching Awards were held in June; Dr. Melinda Musgrave won the Donald J. Currie Award for Undergraduate Education. Dr. Ralph George won the William Horsey Postgraduate Teaching Award. Dr. Tim Daniels won the Jameel Ali Continuing Education Award. At the University level, Dr. Subodh Verma was a co-recipient of the Dean A.L. Chute Award (The Silver Shovel) and Dr. Tim Daniels won the Orthopaedic Chairs teaching award. Dr. Subodh Verma was a co-recipient of the Dean A.L. Chute award for his teaching contributions to years 3 and 4 medical students. Drs Muller and Perrin both received teaching awards from the Squires-Hyland Trust. Over the past few years, we have initiated the popular 'Pizza with the Professor' sessions, these sessions give our 3rd year clerks the ability to chose and present a case they've seen while on rotation, gaining feedback from faculty members and experience in presentation skills. Many new exciting sessions are being implemented for the upcoming academic year. Thanks to Dr. Rob Stewart for his leadership in undergraduate education. At the Annual Faculty Development event, Dr. Tim Daniels welcomed Dr. Bryce Taylor to speak about "Issues in Medical Leadership". This annual program coordinated by Dr. Daniels has covered a range of faculty issues including communication, leadership, presentation styles and ethical issues in surgery. It is with pride of accomplishment to state that our faculty and residents have helped to move forward our education and research programs in a most exemplary manner and in addition have exhibited their ongoing commitment to providing compassionate care to our patients.



■ Division Of Cardiac Surgery

Dr. D. Bonneau Associate Professor
 Dr. LE. Errett Professor
 Dr. D.A. Latter Associate Professor (**Division Head**)

Dr. M.D. Peterson Assistant Professor
 Dr. S. Verma Associate Professor

PUBLICATIONS

Anderson TJ, Charbonneau F, Title LM, Buithieu J, Rose MS, Conradson H, Hildebrand K, Fung M, Verma S, Lonn EM: Microvascular function predicts cardiovascular events in primary prevention. Long-term results from the Firefighters And Endothelium (FATE) study. *Circulation*: January 2011; 123(2): pp 163-169. E-published January 3, 2011.

Booher AM, Isselbacher EM, Nienaber CA, Froehlich JB, Trimarchi S, Cooper JV, Demertzis S, Ramanath VS, Januzzi JL, Harris KM, O'Gara PT, Sundt TM 3rd, Pyeritz RE, Eagle KA, International Registry of Acute Aortic Dissection (IRAD) Investigators (including Peterson MD): Ascending thoracic aorta dimension and outcomes in acute type B dissection (from the International Registry of Acute Aorta Dissection [IRAD]). *American Journal of Cardiology*: January 2011; 107(2): pp 315-320.

Fam NP, Arab S, Bilia F, Han R, Proteau G, Latter D, Erret L, Bonneau D, Dunne R, Liu PP, Stewart DJ: Increased myocardial expression of angiopoietin-2 in patients undergoing urgent surgical revascularization for acute coronary syndromes. *The Canadian Journal of Cardiology*: September 2010; 26(7): pp 365-370.

Gupta M, Smitko PE, Tsigoulis M, Braga MFB, Kajil M, Herjikaka S, Quan A, Teoh H, Verma S: Effects of ezetimibe add-on to statin therapy on adipokine production in patients with metabolic syndrome and stable vascular disease. *Journal of Cardiovascular Pharmacology*: September 2010; 122(Suppl 1): pp S185-S192.

Lovren F, Pan Y, Quan A, Singh KK, Shukla PC, Gupta M, Al-Omran M, Teoh H, Verma S: Adropin is a novel regulator of endothelial function. *Circulation*: September 2010; 122(3): pp 241-245.

Lovren F, Pan Y, Quan A, Smitko PE, Singh KK, Shukla PC, Gupta M, Chan L, Al-Omran M, Teoh H, Verma S: Adiponectin primes human monocytes into alternative anti-inflammatory M2 macrophages. *American Journal of Physiology*: August 2010; 299(3): pp H656-H663. E-published July 2010.

Sinha S, Trimarchi S, Montgomery D, Woznicki E, Corteville D, Rogers A, Patel H, Booher A, Nienaber CA, Peterson M, Pyeritz R, Kline-Rogers E, Bossone E, Eagle KA for the IRAD Investigators: Non-Surgical management of type A acute aortic dissection: Insights from the International Registry of Acute Aortic Dissection (IRAD). *Journal of the American College of Cardiology*: E-published April 5, 2011; 57: e1418.

Wang C, Tao W, Wang Y, Bikow J, Lu B, Keating A, Verma S, Parker TG, Han R, Wen X: Rosuvastatin, identified from the zebrafish chemical genetic screen for the antiangiogenic compounds, suppresses the growth of prostate cancer. *European Urology*: September 2010; 58(3): pp 418-426. E-published May 22, 2010.

Yanagawa B, Amankwaa A, Chen RB, Verma S: Coronary artery bypass graft for anomalous right coronary artery. *Journal of Cardiac Surgery*: January 2011; 26(1): pp 44-46. E-Published October 6, 2010.

INVITED VISITS

Latter DA: Canadian Cardiovascular Congress, Montreal, Quebec, Canada, October 2010. (1) Asymptomatic severe mitral regurgitation: Observe or operate?, (2) Heart rate is associated with increased risk of major cardiovascular events, cardiovascular and all-cause death in patients with stable chronic cardiovascular disease - analysis of on-target/transcend, (3) Population characteristics and final disposition for patients referred to a focused transcatheter aortic valve implantation clinic.

Peterson M: Canadian Cardiovascular Congress, Montreal, Quebec, Canada, October 2010. Population characteristics and final disposition for patients referred to a focused transcatheter aortic valve implantation clinic.

Peterson M: American College of Cardiology Annual Meeting, New Orleans, Louisiana. April 2011. Non-surgical management of type A acute aortic dissection: Insights from the International Registry of Acute Aortic Dissection (IRAD)

Peterson M: Canadian Cardiovascular Research Network, State of the Heart Symposium, Toronto Ontario, Canada, May 2011. Percutaneous valve replacement – the future is now.



Peterson M: Canadian Society for Transfusion Medicine (CSTM), Joint Conference, Toronto, Ontario, Canada, May 2011. (1) Factors affecting platelet transfusion in cardiac surgery, (2) The rationale for platelet transfusion and cardiac surgery.

Peterson M: Western Thoracic Surgical Association, Annual Meeting, Colorado Springs, Colorado, USA, June 2011. Presenter: MicroRNA profiling identifies a novel role of mirna-145 regulation in bicuspid vs. tricuspid aortic valves.

RESEARCH AND INVESTIGATIONS

Comparison of the inflammatory response to cardiopulmonary bypass between South Asians and Caucasians. *Trop S, Verma S: Physicians' Services Incorporated Foundation.* (\$20,000 2009-2011)

DJ-1 in signaling in human cardiac ischemia reperfusion. *Yanagawa B, Verma S: Physicians' Services Incorporated Foundation.* (\$20,000 2010-2012)

Eliciting the in vivo role of Adiponectin in inflammation: A biochemical and pharmacological approach. *Verma S: Heart and Stroke Foundation.* (\$197,962 2009-2012)

Li Ka Shing collaborative program. *Verma S, Slutsky A, Mamdani M: Li Ka Shing Collaborative Program.* (\$3,000,000 2009-2012)

Neuregulin-1 as a novel treatment for endothelial dysfunction and atherosclerosis. *Verma S, Heart & Stroke Foundation.* (\$160,000 2009-2011)

Neuregulin and endothelial function. *Tang GHL, Verma S: Physicians' Services Incorporated Foundation.* (\$20,000 2010-2011)

Plasma rennin activity and cardiovascular outcomes in the HOPE study. *Verma S, Gupta M, Lonn E, Yusuf S: Novartis Pharmaceuticals Canada Inc.* (\$230,345 2008-2010)

Primary care audit of global risk management (PARADIGM Study). *Gupta M, Verma S: AstraZeneca Canada.* (\$4,200,000 2008-2010)

Role of the tumor suppressor gene BRCA 1 in adverse cardiac remodeling. *Verma S, Parker TG: Canadian Institute of Health Research.* (\$330,367 2009-2012)

Surgical and pharmacological novel interventions to improve overall results of saphenous vein graft patency in coronary artery bypass grafting surgery: An international multicentre randomized controlled clinical trial (SUPERIOR SVG PATENCY CABG Trial). *Fremes SE, Dashwood MR, Fedak PWM, Kachel E, Verma S: Heart and Stroke Foundation.* (\$497,540 2010-2015)

Traineeship in Atherosclerosis Program. *Verma S: Canadian Rx&D companies.* (\$3,000,000 2006-2010)

Zebrafish Centre for Advanced Drug Discovery: A high throughput screening platform targeting cardiovascular diseases. *Wen X-Y, Verma S, Marsden PA: Canada Foundation for Innovation.* (\$794,217 2010-2014)

HONOURS RECEIVED

Verma R: Canada Research Chair in Atherosclerosis (Tier 2). 2010.

Verma R: Howard Morgan Award from the International Academy of Cardiovascular Sciences. 2010.



■ Division Of General Surgery

Dr. N. Ahmed	Associate Professor	Dr. J. Koo	Associate Professor
Dr. J. Ali	Professor	Dr. W.M. Kuebler	Associate Professor
Dr. N. Baxter	Associate Professor	Dr. B. Lawless	Assistant Professor
Dr. J.M.A. Bohnen	Professor	Dr. J.C. Marshall	Professor
Dr. M.J. Burnstein	Associate Professor	Dr. R.A. Mustard	Associate Professor
Dr. R.L. George	Associate Professor	Dr. A.B. Nathens	Professor (Division Head)
Dr. T. Grantcharov	Associate Professor	Dr. O.D. Rotstein	Professor
Dr. A. Kapus	Professor	Dr. K. Szaszi	Assistant Professor
Dr. S. Kitto	Assistant Professor		

PUBLICATIONS

Akram A, Han B, Masoom H, Peng C, Lam E, Litvack ML, Bai X, Shan Y, Hai T, Batt J, Slutsky AS, Zhang H, Kuebler WM, Haitsma JJ, Liu M, Dos Santos CC: Activating transcription factor 3 confers protection against ventilator induced lung injury. *American Journal of Respiratory and Critical Care Medicine*: August 2010; 182(4): pp 489-500. E-published April 22, 2010.

Baxter NN, Sutradhar R, Forbes SS, Paszat LF, Saskin R, Rabeneck L: Analysis of administrative data finds endoscopist quality measures associated with postcolonoscopy colorectal cancer. *Gastroenterology*: January 2011; 140(1): pp 65-72.

Bihorac A, Delano MJ, Schold JD, Lopez MC, Nathens AB, Maier RV, Layon AJ, Baker HV, Moldawer LL: Incidence, clinical predictors, genomics, and outcome of acute kidney injury among trauma patients. *The Annals of Surgery*: July 2010; 252(1): pp 158-165.

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Bulger EM, May S, Kerby JD, Emerson S, Stiell IG, Schreiber MA, Brasel KJ, Tisherman SA, Coimbra R, Rizoli S, Minei JP, Hata JS, Sopko G, Evans DC, Hoyt DB, Rotstein OD, ROC investigators: Out-of-hospital hypertonic resuscitation after traumatic hypovolemic shock: a randomized, placebo controlled trial. *The Annals of Surgery*: March 2011; 253(3): pp 431-441.

Burns KEA, Chant C, Smith O, Cuthbertson B, Fowler R, Cook DJ, Kruger P, Webb S, Alhashemi J, Dominguez-Cherit G, Zala C, Rubinfeld GD, Marshall JC: A Canadian Critical Care Trials Group project in collaboration with the international forum for acute care trialists - Collaborative H1N1 Adjuvant Treatment pilot trial (CHAT): study protocol and design of a randomized controlled trial. *Trials*: March 2011; 12: p 70.

Chant C, Smith OM, Marshall JC, Friedrich JO: Relationship of catheter-associated urinary tract infection to mortality and length of stay in critically ill patients: A systematic review and meta-analysis of observational studies. *Critical Care Medicine*: May 2011; 39(5): pp 1167-1173.

Chaudhury P, Marshall JC, Solomkin JS; Members of the Evidence Based Reviews in Surgery Group: CAGS and ACS evidence based reviews in surgery. 35: Efficacy and safety of low-dose hydrocortisone therapy in the treatment of septic shock. *Canadian Journal of Surgery*: December 2010; 53(6): pp 415-417.

Chester J, Thistlethwaite J, Kitto S, Reeves S: "Introduction." In: *A Sociology of Interprofessional Healthcare Practice: Critical Reflections and Concrete Solutions* (Kitto S, Chester J, Reeves S, Thistlethwaite J, eds.) Nova Science Publishers, Huppauge, New York, 2010.

Chretien ML, Zhang M, Jackson MR, Kapus A, Langille BL: Mechanotransduction by endothelial cells is locally generated, direction-dependent, and ligand-specific. *Journal of Cellular Physiology*: August 2010; 224(2): pp 352-361.

Cuschieri J, Bulger E, Schaeffer V, Sakr S, Nathens AB, Hennessy L, Minei J, Moore EE, O'Keefe G, Sperry J, Remick D, Tompkins R, Maier RV: Early elevation in plasma IL-6 after severe injury is associated with development of organ failure. *Shock*: October 2010; 34(4): pp 346-351.

Czaplik M, Rossaint R, Koch E, Fahlenkamp A, Schroeder W, Pelosi P, Kuebler WM, Bickenbach J: Methods for quantitative evaluation of alveolar mechanics during in vivo microscopy. *Respiratory Physiology & Neurobiology*: May 2011; 176(3): pp 123-129. E-published February 18, 2011.

Dahal BK, Kosanovic D, Kaulen C, Cornitescu T, Savai R, Hoffmann J, Reiss I, Ghofrani HA, Weissmann N, Kuebler WM, Seeger W, Grimminger F, Schermuly RT: Involvement of mast cells in monocrotaline-induced pulmonary hypertension in rats. *Respiratory Research*: May 2011; 12: p 60.

Dubcenco E, Grantcharov T, Eng FC, Streutker CJ, Baxter NN, Rotstein OD, Baker JP: Video: "No scar" small bowel resection in a survival porcine model using transcolonic NOTES (R) and transabdominal approach. *Surgical Endoscopy*: March 2011: 25(3): pp 930-934.

Finfer S, Ranieri VM, Thompson BT, Barie PS, Dhainaut JF, Douglas IS, Gardlund B, Marshall JC, Rhodes A: Erratum for: Design, conduct, analysis and reporting of a multi-national placebo-controlled trial of activated protein C for persistent septic shock. *Intensive Care Medicine*: February 2011: 37(2): pp 372.

Forbes SS, Sutradhar R, Paszat LE, Rbeneck L, Urbach DR, Baxter NN: Long-term survival in young adults with colorectal cancer: A population-based study. *Diseases of the Colon and Rectum*: July 2010: 53(7): pp 973-978.

Fung YL, Kim M, Tabuchi A, Aslam R, Speck ER, Chow L, Kuebler WM, Freedman J, Semple JW: Recipient T lymphocytes modulate the severity of antibody-mediated transfusion-related acute lung injury. *Blood*: October 2010: 116(16): pp 3073-3079. E-published July 8, 2010.

Glavan BJ, Holden TD, Goss CH, Black RA, Neff MJ, Nathens AB, Martin TR, Wurfel MM, ARDSnet Investigators: Genetic variation in the FAS gene and associations with acute lung injury. *American Journal of Respiratory and Critical Care Medicine*: February 2011: 183(3): pp 356-363. E-published September 2, 2010.

Gomez D, Berube M, Xiong W, Ahmed N, Haas B, Schuurman N, Nathens AB: Identifying targets for potential interventions to reduce rural trauma deaths: A population-based analysis. *Journal of Trauma*: September 2010: 69(3) pp 633-639.

Gomez D, Haas B, Ahmed N, Tien H, Nathens A: Disaster preparedness of Canadian trauma centres: The perspective of medical directors of trauma. *Canadian Journal of Surgery*: February 2011: 54(1): pp 9-16.

Gomez D, Haas B, Al-Ali K, Nathens A, Ahmed N: Controversies in the management of splenic trauma. *Injury*: E-published October 2010.

Gomez D, Haas D, Hemmilla M, Pasquale M, Goble S, Neal M, Mann C, Meredith W, Cryer H, Shafi S, Nathens AB: Hips can lie: The impact of excluding isolated hip fractures on external benchmarking or trauma center performance. *The Journal of Trauma*: November 2010: 69(5): pp 1037-1041.

Gramoun A, Goto T, Nordstrom T, Rotstein OD, Grinstein S, Heersche J, Manolson M: Bone matrix proteins and extracellular acidification; potential co-regulators of osteoclast morphology. *Journal of Cellular Biochemistry*: October 2010: 111(2): pp 350-361.

Haas B, Gomez D, Hemmilla MR, Nathens AB: Prevention of complications and successful rescue of patients with serious complications: Characteristics of high performing trauma centers. *The Journal of Trauma*: March 2011: 70(3): pp 575-582.

Haas B, Gomez D, Neal M, Hoeft C, Ahmed N, Nathens AB: Good neighbours? The effect of a level 1 trauma centre on the performance of nearby level 2 trauma centers. *Annals of Surgery*: May 2011: 253(5): pp 992-995.

Haas B, Gomez D, Steel A, Nathens A: Ratio of units of red blood cells to fresh frozen plasma for severely injured patients undergoing massive transfusion (Protocol). *Cochrane Database of Systematic Reviews*: E-published March 16, 2010.

Haas B, Gomez D, Xiong W, Ahmed N, Nathens AB: External benchmarking of trauma centre performance: Have we forgotten our elders? *Annals of Surgery*: January 2011: 253: pp 144-150.

Haas B, Gomez D, Zagorski B, Stukel TA, Rubinfeld GD, Nathens AB: Survival of the fittest: The hidden cost of undertriage of major triage. *Journal of the American College of Surgeons*: December 2010: 211(6): pp 804-811. E-published October 30, 2010

Hameed M, Schuurman N, Razek T, Boone D, Van Heest R, Taulu T, Lakha N, Evans DC, Brown DR, Kirkpatrick AW, Stelfox HT, Van Winngaarden-Stephen M, Logsetty S, Nathens AB, Charyk-Stewart T, Rizoli S, Tremblay LN, Brennenman E, Ahmed N, Galbraith E, Parry N, Girotti MJ, Paglarello G, Tze N, Khwaja K, Yanchar N, Tallon JM, Trenholm JA, Tegard C, Amram O, Berube M, Hameed U, Simona SK, Research Committee of the Trauma Association of Canada: Access to trauma systems in Canada. *The Journal of Trauma*: December 2010: 69(6): pp 1350-1361.

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INVITED VISITS

Ahmed N: Trauma Association of Canada, Annual Scientific Meeting, Banff, Alberta, Canada, April 2011. Effective crisis resource management and team training for post-graduate trainees: An update, literature review and evidence-based best practice guideline.

Ahmed N: Society for Advancement of Violence and Injury Prevention Research (SAVIR), Iowa City, Indiana, USA, April 2011. Risk factor and characteristics of childhood filicide in Ontario.

Ali J: University of the West Indies, Kingston, Jamaica, August 2010. Provider Course: Advanced trauma life support.

Ali J: The American Association for the Surgery of Trauma, Boston, Massachusetts, USA, September 2010. Journal of Trauma editorial board meetings.

Ali J: American College of Surgeons, Committee on Trauma, Washington, District of Columbia, USA, October 2010. Presentation of revised TEAM program for medical students to international ATLS meeting.

Baxter N: Northwest Society of Colon and Rectal Surgeons, Annual Meeting, San Jose, California, USA, August 2010. Do we need a rectal cancer surgery checklist?

Bohnen J: Credit Valley Hospital Medical Advisory Committee, University appointments for community physicians, Mississauga, Ontario, Canada, February 2011.

Bohnen J: Trillium Health Centre Medical Advisory Committee, University appointments for community physicians, Mississauga, Ontario, Canada, February 2011.

Burnstein M: Colombian Surgical Association, Visiting Professor, Bogota, Colombia, July 2010. (1) Optimal proctectomy technique, (2) Local treatment of rectal cancer, (3) What's new in diverticulitis.

Burnstein M: Canadian Surgery Forum, Quebec City, Quebec, Canada, September 2010. (1) Prone abdominoperineal resection (Video Session), (2) Managing the malignant polyp, (3) Panic in the pelvis - Avoiding and managing circular stapler problems (CSCRS Symposium), (4) Technique of rectal cancer resection: Important and imperfect (CSCRS Philip H. Gordon Lecture).



Burnstein M: Georgian Bay Gut Club, Barrie, Ontario, Canada, September 2010. (1) What's new in diverticulitis, (2) Local treatment of rectal cancer.

Burnstein M: American College of Surgeons, 96th Annual Clinical Congress, Session on Benign Anorectal Disease, Washington, District of Columbia, USA, October 2010. Hemorrhoids.

Burnstein M: Ambulatory Endoscopy Clinic Day, Toronto, Ontario, Canada, April 2011. Management of Anal Disease in a Clinic Setting.

Burnstein M: Cancer Care Ontario, Rectal Cancer Conference, Toronto, Ontario, Canada, April 2011. Perineal phase of APR - prone technique.

Burnstein M: American Society for Colon and Rectal Surgeons, Vancouver, British Columbia, May 2011. (1) Anal fistula plug, (2) Anocutaneous flap for fissure.

Kitto S: American College of Surgeons, Division of Education, Accredited Education Institutes: Enhancing Patients Safety Through Simulation, Toronto, Ontario, Canada, October 2010. Presenter: Qualitative assessment, yikes!

Kitto S: Cancer Care Ontario, HPB Expert Panel and Community of Practice Meeting, Toronto, Ontario, Canada, October 2010. Presenter: Enhancing the HPB community of practice.

Kitto S: Nigata University of Health and Welfare, Japan, December 2010. Presenter (with Reeves S): Interprofessional education – Key developments in Canada.

Kitto S: Tokyo Metropolitan University, Japan, December 2010. Presenter (with Reeves S): (1) Interprofessional facilitation – key strategies, (2) Evaluating interprofessional education.

Kitto S: Karolinska Institutet, PhD Workshop, Stockholm, Sweden, March 2011. (1) Online education in health and medical sciences teaching environments: Cautionary tales of teaching, learning and assessment, (2) Triangulation of qualitative research methods in medical education research.

Kitto S: Maastricht University, 13th Annual Educational Congress, Amsterdam, March 2011. Presenter: (1) Triangulation of qualitative research methods in medical education research, (2) Rigour in qualitative research: Issues to consider in medical education research.

Kitto S: CACHE, 2011 Annual Conference "Evolving Competence for Health Professionals." Banff, Alberta, Canada, April 2011. Presenter (Continuing Education): Improving patient outcomes: Mapping practice boundaries and intersections between the domains of continuing education, knowledge translation, patient safety and quality improvement.

Kitto S: SACME Sprint Meeting, Positioning Continuing Education: Boundaries and intersections between the domains of Continuing Education, Knowledge Translation, Patient Safety and Quality Improvement, New York, USA, April 2011. Patient-centered CME: From a local to global perspective.

Kitto S: Faculty Development in the Health Professions, Toronto, Canada, May 2011. Investigating the perceptions, attitudes and beliefs of staff anaesthetists related to multi-source feedback used for their performance appraisal.

Kitto S: Social Science Perspective on Health Professions Education, An International Symposium, Toronto, Canada, May 2011. Towards a sociology of knowledge translation: The importance of being dis-interested in knowledge translation.

Kuebler W: European Society of Cardiology, Frontiers in Cardiovascular Biology, First Congress of the Council on Basic Cardiovascular Science. Berlin, Germany, July 2010. Cytoskeletal remodelling and impaired endothelial Ca²⁺ signaling in pulmonary hypertension.

Kuebler W: German Society for Microcirculation and Vascular Biology, Annual Conference, Berlin, Germany, July 2010. Hypoxic pulmonary vasoconstriction - is there a role for the endothelium?

Kuebler W: Novartis Horsham Research Centre, Horsham, United Kingdom, September 2010. Real-time lung microscopy in combination with functional read-outs for mechanistic studies in lung disease.

Kuebler W: Research Symposium on Peptide Systems in Cardiovascular Research, Fritzlar, Germany, September 2010. Role of angiotensin-(1-7) in lung vascular biology and disease.

Kuebler W: University of Giessen and Marburg Lung Center School, 1st Scientific Symposium "Watching the Lung Work", Staufenberg, Germany, September 2010. In vivo imaging of ventilation, perfusion and gas exchange at the alveolo-capillary unit of the murine lung.

Kuebler W: DFG Research Focus Protective Artificial Ventilation, 6th Annual Workshop, Dresden, Germany, December 2010. Biofluid mechanics and cell physiology in the alveolus and its capillaries.

Kuebler W: 26th Transatlantic Airway Conference, Lucerne, Switzerland, January 2011. Real time imaging assessment of pulmonary vascular responses.

Kuebler W: National Jewish Health, Denver, Distinguished Seminar Speaker Series, Colorado, USA, February 2011. Pulmonary hypertension with left heart disease - role of endothelial dysfunction and mast cells.



- Kuebler W:** University of Chicago, Committee on Cell Physiology Seminar Series, Chicago, Illinois, USA, February 2011. Lung vascular barrier regulation - interdependency of NO and TRP channels.
- Kuebler W:** University of Denver, Research Methods in Cardiopulmonary Disease Seminar Series, Denver, Colorado, USA, February 2011. Real time microscopy in the intact lung.
- Kuebler W:** Experimental Biology, Washington, District of Columbia, USA, March 2011. (1) Endothelial apoptosis promotes lung tissue remodeling via activation of matrix metalloprotease, (2) Interplay between NO and TRP channels in lung vascular barrier regulation.
- Lawless B:** Respiratory Therapy Society of Ontario, Toronto, Ontario, Canada, September 2010. The role of respiratory therapists in an integrated model of critical care.
- Lawless B:** Ministry of Health and Long-Term Care, Innovation Showcase, Toronto, Ontario, Canada, November 2010. Chair, Critical Care and Emergency Medicine Panel and Presentations.
- Lawless B:** London Health Sciences Corporation, London, Ontario, Canada, June 2011. Challenges in critical care.
- Marshall J:** 50th Interscience Conference on Antimicrobial Agents and Chemotherapeutics, Boston, Massachusetts, USA, September 2010. Risk stratification in sepsis: The PIRO concept.
- Marshall J:** Feinstein Institute, Merinoff Symposium/Global Sepsis Alliance Inaugural Meeting, Manhasset, New York, USA, September 2010. Sepsis as a complication of other illness.
- Marshall J:** International Sepsis Forum Sepsis 2010, Paris, France, September 2010. (1) Biomarkers in sepsis: Ready for prime time?, (2) The gut and nutrition in sepsis, (3) Lipopolysaccharide removal, (4) InFACT: What did we learn from H1N1?
- Marshall J:** Mexican Intensive Care Association, 37 Annual Meeting, Monterrey, Mexico, September 2010. (1) Principles of source control for the non-surgeon, (2) Where do we stand in the early management of sepsis?, (3) PBEF/Visfatin: A novel mediator of innate immunity.
- Marshall J:** Montebello Roundtable on Complexity and Variability at the Bedside, Chateau Montebello, Quebec, Canada, September 2010. Iatrogenesis in the ICU: The interface between complex patients and simple technologies.
- Marshall J:** Changhai Hospital, Department of Anesthesiology and Intensive Care, Shanghai, China, October 2010. Visiting Professor: (1) InFACT: A global collaboration for critical care research, (2) Sepsis research: How can it be improved?
- Marshall J:** European Society of Intensive Care Medicine, 23rd Annual Congress, Barcelona, Spain, October 2010. (1) Building a research team, (2) Successful grant writing, (3) The concept of the run-in trial, (4) Should sepsis bundle be mandated?, (5) Manipulation of the host response in sepsis is harmful: Con.
- Marshall J:** National Conference of Critical Care Medicine, Chinese Society of Critical Care Medicine, Beijing, China, October 2010. (1) Management of severe acute pancreatitis, (2) Cell biology for the clinician, (3) ICU-acquired infection: Epidemiology and treatment.
- Marshall JC:** Xijing Hospital/Fourth Military Medical University, Xi'an, China, October 2010. Visiting Professor: The multiple organ dysfunction syndrome: Complex biology and complicated patients.
- Marshall J:** Critical Care Canada Forum, Toronto, Ontario, Canada, November 2010. (1) Sepsis research: Seven lessons from oncology, (2) PIRO: What is the status of clinical staging of critical illness?, (3) InFACT: Promoting global collaboration in critical care research.
- Marshall J:** Society of Critical Care Medicine, 40th Annual Congress, San Diego, California, USA, January 2011. Toll-like receptors: Recognizing danger in the innate immune system.
- Marshall J:** 2011 Canadian Critical Care Conference, Whistler, British Columbia, BC, February 2011. (1) Empiric antibiotics for ICU-acquired infections: Balancing risks and benefits, (2) Source control for complex abdominal infections.
- Marshall J:** University of Pittsburgh School of Medicine, Department of Critical Care Medicine, Pittsburgh, Pennsylvania, USA, February 2011. Visiting Professor: (1) The caspase-8 survivalsome: Mechanisms of prolonged neutrophil survival in trauma and sepsis, (2) Catalyzing global collaboration in critical care research: The InFACT H1N1 initiative.
- Marshall J:** Wellcome Trust/International Severe Acute Respiratory Infection Consortium, The International Forum for Acute Care Trialists (InFACT), London, United Kingdom, February 2011.
- Marshall J:** 8th National Congress on Advances in Anesthesiology and Resuscitation, Shanghai, China, March 2011. Sepsis: From basic biology to clinical management.
- Marshall J:** 31st International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 2011. (1) The epidemiology of sepsis in 2011, (2) Outcome measures for clinical trials in critical care: More than mortality.



Marshall J: Korean Society of Critical Care Medicine (KSCCM), 31st Annual Conference/11th Joint Congress with JSCCM, Seoul, Korea, April 2011. (1) Severe H1N1 infection: An international perspective, (2) What have we learned from the H1N1 pandemic?, (3) Sepsis: Current therapy future prospects.

Marshall J: 9th International Symposium on Emergency Medicine and the Critically Ill Patient, Santiago, Chile, May 2011. (1) Critical illness is an iatrogenic state, (2) Damage control for the intensivist, (3) Management of severe pancreatitis.

Marshall J: Canadian Institutes of Health Research, Institute of Circulatory and Respiratory Health Pulmonary Network Meeting, Montreal, Quebec, Canada, May 2011. The Canadian Critical Care Trials Group.

Marshall J: Canadian Critical Care Trials Group, Resident Research Education Day, St-Alexis-des-Monts, Quebec, Canada, June 2011. (1) History of the Canadian Critical Care Trials Group, (2) Building an academic career.

Nathens A: Eastern Association for the Surgery of Trauma, 23rd Annual Scientific Assembly, Phoenix, Arizona, 2010. Presentation: Intimate Partner Homicide: The danger assessment scale – It's 50:50 for victims over the age of 50.

Nathens A: XXXVI National Congress in Surgery, Bogota, Colombia, July 2010. (1) What's new in the management of intra-abdominal infection?, (2) Out with the old and in with the new? Evolving concepts in surgical site infection, (3) The ACS Trauma quality improvement program.

Nathens A: American Association for the Surgery of Trauma, Boston, Massachusetts, September 2010. Presentations: (1) Successful rescue of patients with serious complications: A characteristic of high performing trauma centers, (2) Variations in practice patterns of duplex ultrasound screening for deep vein thrombosis (dvt) in asymptomatic trauma patients: A recipe for disaster in benchmarking hospital quality, (3) Posters: (a) Comparison of hospital performance in trauma versus emergency and elective general surgery: Implications for acute care surgery quality improvement, (b) Effect of Trauma center Status on 30-day Outcomes after Emergency General Surgery, (4) Make up your mind: Regional variations in recognizing the need to transfer severely injured patients, (5) Ranking the factors affecting longterm functional outcomes after trauma: An application of structural equation modeling, (6) Peer-Reviewed Papers: (a) Successful rescue of patients with serious complications: A characteristic of high performing trauma centers, (b) Variations in practice patterns of duplex ultrasound screening for deep vein thrombosis (DVT) in asymptomatic trauma patients: A recipe for disaster in benchmarking hospital quality.

Nathens A: CIHI, Data Users Conference 2010, Ottawa, Ontario, Canada, September 2010. (1) Poster Presentation: Undertriage of major trauma: A population based analysis, (2) Peer-Reviewed Paper Presentation: When minutes count: regional variations in transfer times of severely injured patients.

Rotstein OD: 4th Annual Principles and Practice of Clinical Research, Mississauga, Ontario, Canada, November 2010. Basic science: Experimental models and design.

Rotstein OD: MSD Surgical Infections Scientific Symposium, Prague, Czech Republic, June 2011. Failure of treatment of intraabdominal infections.

Rotstein OD: University of Manitoba, Faculty of Medicine, Resident and Fellow Research Day, Winnipeg, Manitoba, Canada, June 2011. A career as a clinician-scientist: On the verge of extinction or on the road to recovery?

RESEARCH AND INVESTIGATIONS

A feasibility study examining referral to community-based youth violence interventions for youth injured violence. *Nathens A: Canadian Institutes of Health Research (CIHR).* (\$99,838 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: Physician Services Incorporated.* (\$20,000 2009 - 2010)

Access to trauma care in Canada: A national comparison. *Fowler RA, Nathans A: Canadian Institutes of Health Research (CIHR).* (\$92,500 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)

Angiotensin(1-7) signaling via the Mas receptor constitutes an intrinsic protective pathway and a novel therapeutic strategy in acute lung injury. *Kuebler WM, Walther T: Ontario Thoracic Society.* (\$49,652 2010 - 2011)

Animals, humans, and the continuity of evidence: A study of clinical translation. *Fergusson DA, Kimmelman J, Grimshaw JA, Hackam DG, Knoll G, London AJ, Marshall JC, Moher D, Ramsay TO, Sampson M, Stewart DJ, Weijer CE: Canadian Institutes of Health Research.* (\$273,952 2011 - 2014)



Assessing care of patients with major traumatic injuries. *Bashaw SM, Baillie FG, Flemons WW, Ghalli WA, Hameed SM, Morrison LJ, Tallon JM, Travers AH, Turgeon AF, Avery N: Canadian Institutes of Health Research Grant. (\$125,234 2008-2011)*

Assessing the quality of colonoscopy: Validation of quality indicators. *Tinmouth J, Baxter NN, Rabeneck L, Paszat L, Sutradhar R: Canadian Cancer Society Research Institute. (\$165,863 2001-2012)*

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: Physician 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 A: Canadian Institutes of Health Research (CIHR). (\$500,000 2006-2011)*

Characterization of a novel, caspase-8 dependent survival pathway in inflammatory neutrophils. *Marshall, JC: Canadian Institutes of Health Research. (\$501,135 2009 - 2014)*

Characterization of the cardiac phenotype and experimental therapeutic approaches in animal models. *Tschoepe C, Kuebler WM, Riad A: Deutsche Forschungsgemeinschaft (German Research Foundation). (\$360,000 2008 - 2012)*

CIHR emerging team: Colorectal cancer screening. *Rabeneck L, Dobrow P, Ritvo S, Baxter N: Canadian Institutes of Health Research. (\$1,735,300 2008-2013)*

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)*

Crosstalk between the EGF and TNF receptors in kidney tubular cells. *Szaszi K: Kidney Foundation of Canada. (\$100,000 2009 - 2011)*

Determining factors associated with missed cancers after colonoscopy. *Baxter NN: Ontario Institute for Cancer Research. (\$78,013 2009-2011)*

Development of interfacility transfer criteria for major trauma. *Nathens A: St. Michael's Hospital Medical Services Association. (\$33,750 2010 - 2011)*

Early versus delayed cholecystectomy for acute calculous cholecystitis: Decision and cost-utility analysis. *Nathens A: The Canadian Association of General Surgery. (\$10,000 2010-2011)*

Early versus delayed laparoscopic cholecystectomy: A population-based analysis of safety, efficacy and cost-utility. *Nathens A: The Physicians' Services Incorporated Foundation. (\$19,000 2010-2011)*

Epidemiology of thrombo embolism in critical care. *Cook DJ, Crowther MA, Devereaux PA, Dodek PM, Fowler RA, Hall RI, Herridge MS, Jacka MJ, Lauzier F, Marshall JC, Meade MO, Mehta S, Muscedere J, Turgeon AF: Canadian Institutes of Health Research. (\$60,000 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. *Gruen S, Straus S, Nathens A: Canadian Institutes of Health Research (CIHR). (\$19,984 2010-2011)*

Evaluation of health care policy intervention to change the organization and delivery of lung cancer surgery in Ontario. *Urbach DR, Baxter NN: Ontario Institute for Cancer Research. (\$396,521 2010 - 2011)*

Fate-determining mechanisms in the epithelium during fibrogenesis: The role of cell contacts. *Kapus A, Heinz B: Canadian Institutes of Health Research. (\$646,490 2010 - 2015)*

From bench to bedside to curbside. *Slutsky AS, Dorian P, Morrison L, Spence J, Baker AJ, Levery J, Rotstein OD, Fowler R, Black S, Sibbald W, Redeimeier DA: Canadian Institutes of Health Research (CIHR). (\$1,057,000 2009 - 2016)*

From bench to bedside to curbside. *Slutsky AS, Dorian P, Morrison L, Spence J, Baker AJ, Levery J, Rotstein OD, Fowler R, Black S, Sibbald W, Redeimeier DA: Heart and Stroke Foundation of Canada. (\$1,500,000 2010 - 2016)*

From bench to bedside to curbside. *Slutsky AS, Dorian P, Morrison L, Spence J, Baker AJ, Levery J, Rotstein OD, Fowler R, Black S, Sibbald W, Redeimeier DA: National Institute of Health, Department of Health and Human Services. (\$648,000 2010 - 2016)*

From data to daily practice: An integrative approach to improving trauma centre access in rural regions. *Gagliardi A, Nathens A: Canadian Institutes of Health Research. (\$110,000 2010 - 2012)*

- HL-10-006 Toronto Regional Coordinating Center Clinical Research Consortium to Improve Resuscitation Outcomes. *Laurie Morrison, 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 Institute of Health Research. (\$1,009,800 2010 - 2016)*
- Improving quality through process change: A scoping review of process improvement tools in cancer surgery. *Wei A, Baxter NN: Canadian Institutes of Health Research. (\$49,815 2010 - 2011)*
- Influenza-and-H1N1 related critical illness - Demand and capacity in the health care system: The Canadian ICU flu study. *Fowler, Robert, Jouvett P, Cook DJ, Kumar A, McGeer AJ, Marshall JC: Canadian Institutes of Health Research. (\$597,681 2009 - 2010)*
- Knowledge synthesis of implementation strategies for critically ill patients (the Kritical Study). *Sinuff T, Garland A, Muscedere J, Rubinfeld G, Lawless B, Dodek P, Heyland D, Cook D, Stewart T: Canadian Institutes of Health Research (CHIR). (\$96,672 2009 - 2011)*
- Mast cells in vascular remodeling and pulmonary hypertension with left heart disease. *Kuebler WM, Semple JW, dos Santos CC, Jankowski H: Heart and Stroke Foundation of Ontario. (\$156,400 2010 - 2012)*
- Mechanisms of TNF- α -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. (\$713,605 2010 - 2015)*
- Molecular and cellular mechanisms underlying chronic kidney disease. *Szaszi K: Ontario Ministry of Research and Innovation. (\$140,000 2010 - 2015)*
- Myocardin-related transcription factor: a central regulator of epithelial-myofibroblast transition. *A. Kapus: Canadian Institute of Health Research. (\$617,500 2008 - 2013)*
- New concept of hypoxic pulmonary vasoconstriction: Conducted response via connexin 40. *Kuebler WM, Bolz S-S, 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)*
- Patient and physician preferences for the management of low rectal cancer. *McLeod R, Baxter NN: Eriican Society of Colon and Rectal Surgeons. (\$49,690 2010)*
- Physician sources of prescribing information. *Allen M, Langille D, Kitto S, Silver D, Campbell C, Marlow B, LeBlanc C, Iuman B, Lynn B, Luconi F, O'Dea C: Nova Scotia Health Research Foundation (NSHRF). (\$10,000 2010 - 2011)*
- Planning meeting for the PRECISE Phase III Resuscitation Trial. *McIntyre L, Marshall, JC: Canadian Institutes of Health Research. (\$12,500 2010)*
- Pulmonary embolism: Methodology, epidemiology & treatment in critical care study (PE-METRICS). *Cook DJ, Marshall JC: Heart and Stroke Foundation of Canada. (\$41,653 2010 - 2011)*
- Qualitative analysis of the hpb community of practice (commissioned research). *Kitto S, Gallinger S, Moulton CA: University of Toronto. (\$26,500 2010 - 2012)*
- Quantitative analysis of dead space ventilation in animal models of acute lung injury. *Kuebler WM, Puderbach M, Kauczor H-U, Meinzer H-P, Thiele F, Guttman J: Deutsche Forschungsgemeinschaft (German Research Foundation). (\$152,890 2009 - 2011)*
- Radiological radiation and secondary tumours after testicular cancer: The RADs and STATeC Study. *Cagiannos I, van Walraven C, Alibhai SMH, Baxter NN, Earle CC, Fergusson DA, Forster AJ, MacDonald DB: Canadian Institutes of Health Research. (\$157,225 2010 - 2011)*
- Regulation of epithelial paracellular permeability by apical transport processes. *Szaszi K: National Sciences and Engineering Research Council. (\$180,000 2006 - 2011)*
- Regulation of vascular permeability by sphingolipids. *Kuebler WM, Uhlig S: Deutsche Forschungsgemeinschaft (German Research Foundation). (\$145,000 2010 - 2013)*
- Should all young women (<35) with breast cancer be treated with mastectomy? *Quan ML, Baxter NN, Paszat L, Hanna W, Rakovitch E, Saad R, 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 DR, Baxter NN, Simunovic M, Gagliardi A: Canadian Institutes of Health Research. (\$1,084,151 2008 - 2013)*
- 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. (\$6,825 2010 - 2011)*



The Canadian Pandemic Research Preparedness Strategy: Steps towards a global ICU network to identify and characterize severe emerging respiratory infections, and build research capacity to rapidly respond to pandemic threats. *Marshall JC, Burns K: Public Health Agency of Canada.* (\$228,000 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, Rubinfeld G, Fowler RA: Canadian Institutes of Health Research.* (\$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, Rubinfeld 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, Rubinfeld G, Fowler R, Adhikari N, Cuthbertson B: The Physicians' Services Incorporated Foundation.* (\$85,000 2009 - 2010)

The effect of screening colonoscopy use by primary care physicians on colorectal cancer incidence and mortality. *Urbach DR, Baxter NN: Canadian Institutes of Health Research.* (\$89,000 2009 - 2011)

The efficacy, cost-effectiveness and ecological impact of selective decontamination of the digestive tract in critically ill patients treated in the Intensive Care Unit (The SuDDICU study) PHASE 2- An exploratory study of the perceived risks, benefits and barriers to the use of SDD in Canadian critical care units. *Cuthbertson BH, Burns KEA, Cook DJ, Dodek PM, Ferguson ND, Francis JJ, Grimshaw JM, Hall RI, Johnston BL, Kanji S, Marshall JC, McIntyre LLA, Muscedere J, Rose L, Webster F, Weijer CE: Canadian Institutes of Health Research.* (\$198,322 2010 - 2013)

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 young adult survivors of cancer study. *Baxter NN: Canadian Institutes of Health Research.* (\$351,000 2009 - 2011)

Towards equity in access to trauma care: A mixed-methods approach to spatial analyses of existing trauma transfer networks. *Gagliardi A, Gomez D, Haas B, Rubinfeld G, Gozdyra P, Nathens A: Canadian Institutes of Health Research.* (\$199,844 2010 - 2012)

Treatment and survivorship in young adults with cancer. *Baxter NN, Urbach DR, Rabeneck L: Ontario Ministry of Research.* (\$190,000 2007 - 2012)

Trauma system development in Canada: Overcoming the challenges of geography through an evaluation of structures and process. *Cusimano M, Gagliardi A, Gomez D, Haas B, Hameed M, Lawless B, Morrison L, Peters P, Pong R, Rubinfeld G, Schurmann N, Snider C, Tallon J, Schwartz B, Pandya A, Nathens A: Canadian Institutes of Health Research.* (\$2,264,139 2010 - 2015)

Vasodilatory effect of RO5024118 in the pulmonary circulation. *Kuebler WM: Hoffmann-LaRoche Inc.* (\$80,000 2009 - 2010)

Weaning and Variability Evaluation (WAVE) - a multicenter evaluation of altered heart rate and respiratory rate variability to predict extubation failure. *Seely AJE, Ferguson ND, Fergusson DA, Hooper J, Lellouche F, Marshall JC, Maziak DE, McIntyre LLA, Ramsay TO, Rubinfeld G, Scales DC, Wilkes P, Zarychanski R: Canadian Institutes of Health Research.* (\$299,320 2010 - 2013)

HONOURS RECEIVED

George RL: William Horsey Postgraduate Teaching Award. June 2011.

Lawless B: Innovation in Leadership Award, University of Toronto, Health Policy, Management and Evaluation. October 2010.

Marshall JC: Specialized Complex Care Award, Discovery of Innovation, St. Michael's Hospital. January 2011.



■ Division Of Neurosurgery

Dr. M.D. Cusimano	Professor	Dr. P.J. Muller	Professor
Dr. S. Das	Assistant Professor	Dr. R.G. Perrin	Associate Professor
Dr. H.J. Ginsberg	Assistant Professor	Dr. T.A. Schweizer	Assistant Professor
Dr. R.L. Macdonald	Professor (Division Head)	Dr. J.S. Spears	Assistant Professor

PUBLICATIONS

- Al-Khindi T, Macdonald RL, Schweizer TA:** Cognitive and functional outcome after aneurysmal subarachnoid hemorrhage. *Stroke*: August 2010: 41(8): pp e519-e536. E-published July 1, 2010.
- Alexander MP, Gillingham S, Schweizer TA, Stuss DT:** Cognitive impairment due to focal cerebellar injuries in adults. *Cortex*: E-published April 14, 2011.
- Arasanz CP, Staines WR, Roy EA, Schweizer TA:** The cerebellum and its role in word generation: A cTBS study. *Cortex*: E-published March 30, 2011.
- Bahrami P, Schweizer TA, Tam F, Grantcharov T, Cusimano M, Graham S:** Functional MRI-Compatible laparoscopic surgery training simulator. *Magnetic Resonance in Medicine*: March 2011: 65(3): pp 873-881. E-published November 4, 2010
- Cusimano MD, Kwok J:** The effectiveness of helmet wear skiers and snowboarders: A systemic review. *British Journal of Sports Medicine*: September 2010: 44(11): pp 781-786. E-published May 29, 2010.
- Cusimano MD, Nassiri F, Chang Y:** The effectiveness of interventions to reduce neurological injuries in rugby union: A systemic review. *Neurosurgery*: November 2010: 67(5): pp 1404-1418.
- Cusimano MD, Tator CH, Cantu RC:** AANS compendium of articles. *Neurosurgical Focus*: November 2010.
- Demarchi R, Abu-Abed S, Munoz D, Macdonald RL:** Malignant ganglioma: Case report and review of literature. *Journal of Neuro-Oncology*: January 2011: 101(2): pp 311-318. E-published June 4, 2010.
- Dumont A, Crowley RW, Monteith SJ, Ilodigwe D, Kassell NF, Mayer S, Ruefenacht D, Schmiedek P, Weidauer S, Pasqualin A, Macdonald RL:** Endovascular treatment or neurosurgical clipping of ruptured intracranial aneurysms: Effect on angiographic vasospasm, delayed ischemic neurological deficit, cerebral infarction and clinical outcome. *Stroke*: November 2010: 41(11): pp 2519-2524. E-published September 2, 2010.
- Echlin PS, Tator CH, Cusimano MD, Cantu RC, Taunton JE, Upshur REG, Hall CR, Johnson AM, Forwell LA, Skopelja EN:** A Prospective study of physician-observed concussions during junior ice-hockey: Implications for incidence rates. *Neurosurgical Focus*: November 2010: 29(5): p E4.
- El-Ashaal R, Corrin M, Cusimano MD:** Cerebrospinal fluid insertion: Techniques of peritoneal catheter placement separate from the abdominal fascial and peritoneal incisions. *Journal of Neurosurgery*: July 2010: 113 (1): pp 79-81.
- Fischer CE, Jiang J, Schweizer TA:** Determining the association of medical co-morbidity with subjective and objective cognitive performance in an inner city memory disorders clinic: A retrospective chart review. *BMC Geriatrics*: December 2010: 10: pp 89-94.
- Ismail Z, Nguyen MQ, Fischer CE, Schweizer TA, Mamo D:** Neurobiology of delusions in Alzheimer's disease. *Current Psychiatry Reports*: June 2011: 13(3): pp 211-218.
- Jeon EH, Sabri M, Tariq A, Shang X, Chen G, Macdonald RL:** Learning deficits after experimental subarachnoid hemorrhage in rats. *Neuroscience*: September 2010: 169(4): pp 1805-1814. E-published June 23, 2010.
- Levine B, Schweizer TA, O'Connor C, Turner G, Gillingham S, Stuss DT, Manly T, Robertson IH:** Rehabilitation of executive functioning in patients with frontal lobe brain damage with goal management training. *Frontiers in Human Neuroscience*: February 2011: 5(9): pp 1-9.
- Morgenstern LB, Hemphill JC 3rd, Anderson C, Becker K, Broderick JP, Connolly ES Jr., Greensberg S, Huang JN, Macdonald RL, Messe SR, Mitchell PH, Selim M, Tamargo RJ, on behalf of the American Heart Association Stroke Council and Council on Cardiovascular Nursing:** Guidelines for the management of spontaneous intracerebral hemorrhage: A guideline for healthcare professionals from the American Heart Association/American Stroke Association Council on Stroke. *Stroke*: July 2010: 41(9): pp 2108-2129. E-published July 22, 2010.

- Nikitina E, Kawashima A, Takahashi M, Zhang ZD, Shang X, Macdonald RL:** Alteration in voltage-dependent calcium channels in dog basilar artery after subarachnoid hemorrhage. *Laboratory investigation. Journal of Neurosurgery*: October 2010: 113(4): pp 870-880.
- Podolsky DJ, Martin AR, Whyne CM, Massicotte EM, Hardisty MR, Ginsberg HJ:** Exploring the role of 3D simulation in surgical training: Feedback from a pilot study. *Journal of Spinal Disorders and Techniques*: December 2010: 23(8): pp e70-e74.
- Rotondo F, Sharma S, Scheithauer W, Horvath E, Syro V, Cusimano MD, Nassiri F, Yousef GM, Kovacs K:** Endoglin and CD-34 immunoreactivity in the assessment of microvessel density in normal pituitary and adenoma subtypes. *Neoplasia*: September 2010: 57 (6): pp 590-593.
- Ryttlefors M, Enblad P, Ronne-Engstrom E, Persson L, Ilodigwe D, Macdonald RL:** Patient age and vasospasm after subarachnoid hemorrhage. *Neurosurgery*: October 2010: 67(4): pp 911-917.
- Sabri M, Ai J, Marsden PA, Macdonald RL:** Simvastatin recouples dysfunctional endothelial nitric oxide synthase in experimental subarachnoid hemorrhage. *PloS ONE*: February 2011: 6(2): pp e17062.
- Schweizer TA, Alexander MP, Gillingham S, Cusimano M, Graham S:** Lateralized cerebellar contributions to word generation: A phonemic and semantic fluency study. *Behavioural Neurology*: November 2010: 23(1-2): pp 31-37.
- Schweizer TA, Macdonald RL:** Brain hemorrhage: Assessing outcome after subarachnoid hemorrhage. *Nature Reviews, Neurology*: August 2010: 6(8): pp 427-428.
- Schweizer TA, Ware J, Fischer CE, Craik FIM, Bialystok E:** Bilingualism as a contributor to cognitive reserve: Evidence from brain atrophy in Alzheimer's disease. *Cortex*: E-published April 27, 2011.
- Takahashi M, Zhang ZD, Macdonald RL:** Sphenopalatine ganglion stimulation for vasospasm after experimental subarachnoid hemorrhage. *Journal of Neurosurgery*: April 2011: 114(4): pp 1104-1109. E-published July 2, 2010.
- Tam AKH, Ilodigwe D, Mocco J, Mayer S, Kassell NF, Ruefenacht D, Schmiedek P, Weidauer S, Pasqualin A, Macdonald RL:** Impact of systemic inflammatory response on vasospasm, cerebral infarction and outcome after subarachnoid hemorrhage: Explanatory analysis of CONSCIOUS-1 database. *Neurocritical Care*: October 2010: 13(2): pp 182-189.
- Topolovec-Vranic J, Michalak A, Andrews M, Bhalerao S, Cullen N, Cusimano MD, Masanic C, Ouchterlony D:** Evaluation of an online cognitive behavioural therapy program by patients with traumatic brain injury and depression. *Brain Injury*: October 2010: 24(5): pp 762-772.
- Vergouwen MDI, Vermeulen M, van Gijn J, Rinkel GJE, Wijdicks EF, Muizelaar JP, Mendelow AD, Juvela S, Martin NA, Yonas H, Terbrugge KG, Macdonald RL, Deringer MN, Broderick JP, Dreier JP, Roos YB:** Definition of delayed cerebral ischemia after aneurysmal subarachnoid hemorrhage as an outcome event in clinical trials and observational studies - Proposal of a multidisciplinary research group. *Stroke*: October 2010: 41(10): pp 2391-2395. E-published August 26, 2010.
- Zlotnick D, Kalkanis SN, Quinones-Hinojosa A, Chung K, Linskey M, Jensen RL, DeMonte F, Barker FG, Racine CA, Berger MS, Black PM, Cusimano MD, Sekhar LN, Parsa A, Aghi M, McDermott M:** FACT - MNG: Tumor site specific web-based outcome instrument for meningioma patients. *Journal of Neuro-Oncology*: September 2010: 99(3): pp 423-431. E-published September 18, 2010.

INVITED VISITS

- Macdonald RL:** German Society of Neurosurgery, 61st Annual Meeting, Mannheim, Germany, September 2010. Effect of medical treatment on the prevention of radiological vasospasm and delayed cerebral ischemia after aneurysmal subarachnoid hemorrhage - a systematic review and meta-analysis.
- Macdonald RL:** Actelion Steering Committee Meeting, Washington, District of Columbia, USA, October 2010. CONSCIOUS-2 and CONSCIOUS-3.
- Macdonald RL:** Congress of Neurological Surgeons, 60th Annual Meeting, Moderator, San Francisco, California, USA, October 2010. (1) Moderator: Surgical, interventional and medical management of subarachnoid hemorrhage and vasospasm, (2) Timing of aneurysm recanalization to guide future surveillance strategies.
- Macdonald RL:** Edge Therapeutics, Scientific Advisory Board Meeting, Toronto, Ontario, Canada, November 2010. Site-specific release nimodipine for delayed cerebral ischemia after subarachnoid hemorrhage.
- Macdonald RL:** Society of Critical Care Medicine, 40th Critical Care Congress, San Diego, California, USA, January 2011. New Therapies for Subarachnoid Hemorrhage.



Macdonald RL: American Heart Association/American Stroke Association, International Stroke Conference, Magnesium and Aneurysmal Subarachnoid Hemorrhage Session, Los Angeles, California, USA, February 2011. Vasospasm basic research: What have we learned in the past decade and why is magnesium of interest?

Macdonald RL: Chicago Review Course, Chicago, Illinois, USA, February 2011. Pathophysiology of subarachnoid hemorrhage and vasospasm.

Macdonald RL: American Psychiatric Publishing Inc., The Traumatic Brain Injury and Neurorehabilitation Conference: New Biopharmaceutical Development Approaches, Washington, District of Columbia, USA, March 2011. Site-specific, sustained release drug delivery for prevention of complications of traumatic brain injury.

Macdonald RL: American Association of Neurological Surgeons, 79th Annual Meeting, Denver, Colorado, USA, April 2011. (1) SAH induced changes in microglia and the impact on capillary function, (2) Diagnosis of delayed cerebral ischemia.

Perrin RG: Canadian Spine, Annual Meeting, Quebec City, Quebec, Canada, March 2011. Chair for Submitted Papers.

Schweizer T: Canadian Academy of Geriatric Psychiatry, Toronto, Ontario Canada, September 2010. Refereed conference poster presentation/trainee presentation: Psychotropic medication utilization in long term care patients referred for specialized psychogeriatric consultation.

Schweizer T: The Royal College of Physicians and Surgeons of Canada, Simulation Summit, Toronto, Ontario, Canada, September 2010. Refereed conference poster presentation/trainee presentation: Neuroanatomical correlates of laparoscopic surgical performance.

Schweizer T: International Stroke Conference, Los Angeles, California, USA, February 2011. Refereed conference poster presentation: The impact of global atrophy on clinical outcome after subarachnoid hemorrhage.

Schweizer T: 26th International Conference of Alzheimer's Disease, Toronto, Ontario, Canada, March 2011. Refereed conference poster presentation: Delusions, behavioural symptoms, quality of life and caregiver burden in Alzheimer's.

Schweizer T: American Association of Geriatric Psychiatry, San Antonio, Texas, USA, March 2011. Refereed conference poster presentation: Delusions, frontal lobe and real-world functioning in Alzheimer's.

RESEARCH AND INVESTIGATIONS

Analysis of CONSCIOUS-1 Database. *Macdonald RL: Actelion Pharmaceuticals.* (\$65,000 2009 - 2010)

B1-andrenergic 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 (BICE) study. *Teschke K, Babul S, Chipman M, Crompton P, Cusimano MD, Harris A, Mulpuri K, Reynolds C, Wentwork B, Becker J, Brubacher J, Fenton B, Friedman S, Hay D, Hunte G, Stary P, Tomlinson D: University of British Columbia / Health Care and Epidemiology.* (\$250,000 2007 - 2008)

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)

Clinical and cognitive correlates of functional outcome in Alzheimer's disease patients with delusions. *Fischer C, Hermann N, Nisenbaum R, Dawson D, Rourke SB, Schweizer T: Alzheimer Society of Canada.* (\$122,013 2008 - 2010).

Design and Testing of a Novel Posterior Spinal Fusion Device Providing a Less-Invasive and Faster Alternative to Current Techniques. *Ginsberg H, Whyne C, Singh, D: Canadian Institutes of Health Research (CIHR).* (\$105,000 2009 - 2012)

Determination of the Age of Ruptured and Unruptured Intracranial Aneurysms. *Macdonald RL, Etminan N: Physicians Services Incorporated Foundation.* (\$143,000 2009 - 2011)

Driving after stroke. *Schweizer T: Heart and Stroke Foundation of Ontario, Centre for Stroke Recovery.* (\$25,000 2011 - 2013)

Effect of bilateral scalp nerve blocks on post-operative pain and discharge times in patients undergoing supratentorial craniotomy and general anesthesia. *Rigamoni A, Cusimano MD: The Physicians' Services Incorporated.* (\$120,000 2009 - 2011)

ENACT Trial: Evaluating neuroprotection in aneurysm coiling therapy. *Macdonald RL: St. Michael's Hospital.* (\$3,900 2008 - 2012)



Endothelial and vascular smooth muscle differential gene expression in microcirculatory vasospasm following subarachnoid hemorrhage. *Macdonald RL, Cook DJ: Brain Aneurysm Research Foundation.* (\$10,000 2008 - 2010)

ENOS uncoupling as a potential target for treatment of delayed cerebral ischemia after subarachnoid hemorrhage. *Macdonald RL, Sabri M: Brain Aneurysm Foundation.* (\$10,000 2010 - 2012)

Improving assessment and outcome after aneurysmal subarachnoid hemorrhage. *Schweizer TA: Ontario Ministry of Research.* (\$150,000 2011 - 2016)

Long-term potentiation after subarachnoid hemorrhage in rats. *Macdonald RL: Institute of Medical Sciences.* (\$4,000 2011)

Maintaining autonomy as we age: A strategy training approach to ameliorating the effects of age-related executive dysfunction. *Binns M, Polatajko H, Troyer A, Winocur G, Schweizer T, Dawson D: Drummond Foundation.* (\$50,000 2010 - 2011)

Neurocognitive, neuroimaging and functional profile of patients after aneurysmal subarachnoid hemorrhage. *Macdonald RL, Schweizer T, Sherwin CL: Brain Aneurysm Foundation.* (\$15,000 2009 - 2010)

Neurocognitive, neuroimaging and functional profile of patients after aneurysmal subarachnoid hemorrhage: A pilot study. *Schweizer TA: The Brain Aneurysm Foundation USA, The Cynthia Lynn Sherwin Chair of Research.* (\$15,798 2009 - 2011)

Pituitary disorders centre for excellence. *Cusimano MD, Andrews M, Anderson J: AFP Innovation Fund.* (\$33,000 2010 - 2011)

Platelet microthromboemboli, glutamate and brain injury after subarachnoid hemorrhage. *Macdonald RL: Canadian Stroke Network.* (\$7,000 2011)

Research start-up grant. *Schweizer TA: St. Michael's Hospital.* (\$18,000 2007 - 2010)

Spinous process less invasive extendable (SPLINE) fusion - A less invasive extendable device for posterior spinal fusion. *Ginsberg H, Whyne C, Singh D: MaRS Innovation - declined* (\$50,000 2010 - 2011)

Strategic team grant in applied injury research: Traumatic brain injury and violence: Reducing the risks, improving the outcomes. *Cusimano M, Ackery A, Asbridge M, Bhalerao S, Clarke D, Colantonio A, Comper P, Cukier W, Cullen J, Delay D, Donnelly P, Graham S, Harris J, Hoch J, Hoshizaki T, Hutchinson M, Hwang S, Kontos P, Man R, Morton T, Rinner C, Roy E, Schweizer 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, Co-Investigator, Chief Scientific Officer, Edge Therapeutics, Inc.* (\$500,000 2009 - 2012)

Team grant in traumatic brain injury and violence. *Cusimano MD, Schweizer TA, Mann R, Tator C: Canadian Institutes of Health Research (CIHR).* (\$1,733,131 2010 - 2015)

The fractionation and localization of attentional and language processing in the cerebellum. *Stuss DT, Alexander MP, Schweizer T, Cusimano M: Canadian Institutes of Health Research.* (\$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, Schwartz B, Snider C, Tallon J: Canadian Institutes of Health Research.* (\$1,990,000 2010 - 2015)

Traumatic brain injury and violence. *Schweizer T, Mann R, Tator C, Cusimano MD: Canadian Institutes of Health and Research.* (\$1,983,131 2010 - 2015)

Treatment of subarachnoid hemorrhage with human albumin. *Macdonald RL: National Institute of Health.* (\$60,000 2006 - 2010)

HONOURS RECEIVED

Muller PJ: Squires-Hyland Trust Teaching Award, November 2010.

Perrin RG: Squires-Hyland Trust Teaching Award, September 2010.

Schweizer TA: Ontario Ministry of Research and Innovation Early Researcher Award, June 2011.



■ Division Of Orthopaedics

Dr. H. Ahn	Assistant Professor	Dr. M.D. McKee	Professor
Dr. E.R. Bogoch	Professor	Dr. E.H. Schemitsch	Professor (Division Head)
Dr. T.R. Daniels	Associate Professor	Dr. J.P. Waddell	Professor
Dr. J. Hall	Assistant Professor	Dr. D.B. Whelan	Assistant Professor

PUBLICATIONS

- Ahn H:** Lumbosacral spine fractures. In: Operative Techniques: Orthopaedic Trauma Surgery (Schemitsch E, ed). Elsevier, Toronto, 2010.
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INVITED VISITS

- Ahn H:** Canada Medical Education, Canadian Orthopaedic Resident Trauma Review Course (CORR Trauma), Toronto, Ontario, Canada, November 2010. Podium Presentation: (1) Cervical spine trauma management, (2) Thoracolumbar trauma management.
- Bogoch ER:** American Society of Bone and Mineral Research (ASBMR), Working Group on Systems-Based Approaches to Fracture Secondary Prevention, 3rd Annual Meeting: Effective Strategies for Systematic Prevention of Secondary Fractures, Toronto, Canada, October 2010. A review of literature describing services for systematic delivery of post-fracture assessment and treatment for fracture secondary prevention.
- Bogoch ER:** National Institutes of Health, Best Practices in Systems-Based Interventions to Reduce the Burden of Fractures, Washington, DC, December 2010. The Ontario Osteoporosis Strategy (Panel Presentation).
- Bogoch ER:** Ajou University School of Medicine, Dr. Ye-Yeon Won, Seoul, Republic of Korea, April 2011. Fracture secondary prevention through fracture risk assessment in the orthopaedic clinic: Worldwide initiatives and considerations in Korea.
- Bogoch ER:** All India Institute of Medical Sciences, Dr. Rajesh Malhotra, New Delhi, India, April 2011. Fracture secondary prevention through fracture risk assessment in the orthopaedic environment.
- Bogoch ER:** Cho Ray Hospital (Dr. Van De Bay Tran), Orthopaedic Expert Meeting, Ho Chi Minh City, Vietnam, April 2011. Fracture secondary prevention through fracture risk assessment in the orthopaedic clinic: Worldwide initiatives and considerations in Vietnam.
- Bogoch ER:** Chung-Ang University College of Medicine, Dr. Yong-Chan Ha, Seoul, Republic of Korea, April 2011. Fracture secondary prevention through fracture risk assessment in the orthopaedic clinic: Worldwide initiatives and considerations in Korea.
- Bogoch ER:** Managing Osteoporotic Patients in an Orthopaedic Environment, Shanghai/Hangzhou/Nanjing/Guanzhou, China, April 2011. Fracture secondary prevention through fracture risk assessment in the orthopaedic clinic: Worldwide initiatives and considerations in China.



Bogoch ER: Meet the Expert Meeting, Manila, Philippines, April 2011. Fracture secondary prevention through fracture risk assessment in the orthopaedic clinic: Considerations for the Philippines.

Bogoch ER: Soonchunhyang University Hospital, Dr. Byung Jun Shin, Seoul, Republic of Korea, April 2011. Fracture secondary prevention through fracture risk assessment in the orthopaedic clinic: Worldwide initiatives and considerations in Korea.

Bogoch ER: Viet Duc Hospital (Dr. Van Thach Nguyen), Orthopaedic Expert Meeting, Ho Chi Minh City, Vietnam, April 2011. Fracture secondary prevention through fracture risk assessment in the orthopaedic clinic: Worldwide initiatives and considerations in Vietnam.

Bogoch ER: Yonsei University College of Medicine, Dr. Kyu Hyun Yang and Dr. Seung Hwan Moon, Seoul, Republic of Korea, April 2011. Fracture secondary prevention through fracture risk assessment in the orthopaedic clinic: Worldwide initiatives and considerations in Korea.

Daniels TR: American Orthopaedic Foot and Ankle Society (AOFAS), 26th Annual Summer Meeting/ Summer Course: Innovations in Foot and Ankle Surgery – The Future is Here, National Harbor, Maryland, USA, July 2010. Guest Faculty/Moderator: (1) Bone graft substitutes: Biology, science and clinical care, (2) Grafting for foot and ankle arthrodesis: substitutes are best!

Daniels TR: BioMimetic Therapeutics Satellite Symposium, National Harbor, Maryland, USA, July 2010. North American Foot and Ankle Pivotal Trial: An in-depth look at the study design, key endpoints and the implications for future work; e.g. CT as a new standard for evaluation fusion.

Daniels TR: Australian Shoulder and Elbow Society, 2010 Surgical Specialties: Controversies in Foot & Ankle Surgery, Gold Coast, Queensland, Australia, August 2010. (1) Prospective RCT comparing augment bone graft (rhPDGF-BB) with autologous bone graft in foot and ankle fusions, (2) Video on the double fusion (talonavicular + subtalar joints), (3) Outcomes of the pivotal biomimetics trial with practical applications, (4) TAR in valgus deformities, (5) Difficult TARs.

Daniels TR: Canadian Orthopaedic Foot and Ankle Society (COFAS), Biennial Symposium, Vancouver, British Columbia, Canada, January 2011. Moderator (1) Ankle arthritis: Ankle fusion and replacement - Biomechanics, (2) Flat foot: Triple arthrodesis.

Hall JA: Association Internationale pour L'Osteosynthese Dynamique (AIOD), Hip Health 2010 Current Perspectives, Mississauga, Ontario, Canada, September 2010. Perioperative complications of hip surgery.

McKee MD: The Technical Cooperation Program (TTCP), Combat Casualty Care, St. Petersburg, Florida, USA, August 2010. COTS; prospective research in the trauma environment.

McKee MD: Foundation for Orthopaedic Research and Education (FORE), Annual Current Solutions in Orthopaedic Trauma, Ft Lauderdale, Florida, USA, October 2010. (1) Clavicle nonunions, (2) Supracondylar fractures in the elderly, (3) Proximal humeral fractures: Fix or replace, (4) BMP's: What is the future?

McKee MD: Canadian Orthopaedic Resident Review (CORR) Course, Toronto, Ontario, Canada, November 2010. Case Review: Elbow fracture-dislocation, clavicle fractures.

McKee MD: AO North America, Caribbean Trauma Update, Cancun, Mexico, January 2011. (1) Clavicle fractures: When and why?, (2) Complex elbow trauma, (3) Wrist trauma.

McKee MD: American Academy of Orthopaedic Surgeons, 2011 Annual Meeting, San Diego, California, USA, February 2011. (1) ICL: Elbow arthroplasty - Lessons learned, (2) ICL: Complex trauma to the shoulder girdle, (3) ICL: Acute elbow trauma, (4) Symposium: Lessons Learned - How to minimize complications in shoulder surgery.

McKee MD: Orthopaedic Trauma Association (OTA), Annual Specialty Day Meeting, San Diego, California, USA, February 2011. Intra-articular fractures of the upper extremity

McKee MD: Thomas Jefferson University Grand Rounds, Philadelphia, Pennsylvania, USA, February 2011. Clavicle fractures.

McKee MD: Hospital for Special Surgery, Mosbacher Annual Trauma Lectureship, New York, New York, USA, March 2011. Fractures of the clavicle.

McKee MD: Canadian Orthopaedic Cast Technologists, Annual Meeting, Toronto, Ontario, Canada, April 2011. Orthopaedic care in Afghanistan.

McKee MD: XX Curso Internacional de Cirugia Reconstructiva Osteoarticular, Madrid, Spain, May 2011. Fractures of the clavicle. Fractures of the proximal humerus: nail or plate? Distal humeral nonunion.

Schemitsch E: Rubin Institute for Advanced Orthopaedics, Sinai Hospital of Baltimore, 4th Annual Hip Joint Course, Baltimore, Maryland, USA, August 2010. (1) Custom blocks for hip resurfacing, (2) Comparison studies of total hip arthroplasty and resurfacing.



Schemitsch E: Combined Orthopaedic Associations, 12th Meeting, Glasgow, Scotland, September 2010. (1) Moderator: Canadian Fracture Trials: Global vision and lectureship, (2) Clavicle: Challenging dogma with a multi-centre trial, (3) Symposium: Bone substitutes – The use of bone morphogenic proteins to encourage bone induction in diaphyseal fractures.

Schemitsch E: Asian Leadership Forum, Shanghai, China, October 2010. (1) How we practice orthopaedic trauma in Canada, (2) Principles of clinical research, (3) Conducting a research study, (4) Peri-prosthetic proximal femur fractures: The roles of allograft and cable plates, (5) Distal femur fractures: Should they be fixed or replaced.

Schemitsch E: Orthopaedic Trauma Association, 26th Annual Meeting, Basic Science Focus Forum, Baltimore, Maryland, USA, October 2010. Symposium Moderator: (1) Periprosthetic fractures: (a) Bone defect repair, (b) Bringing products to market, (2) Cable plates and bone graft peri-prosthetic femoral fractures, (3) Panelist: Elbow trauma case presentations, (4) Panelist: 2 minutes/2 slides: Technical tips and tricks.

Schemitsch E: Canada Medical Education, 3rd Annual Canadian Orthopaedic Trauma Resident Review Course, Mississauga, Ontario, Canada, November 2010. (1) Course Chair, (2) Distal humerus fractures.

Schemitsch E: Canada Medical Education, 4th Annual Principles of Clinical Research Course, Mississauga, Ontario, Canada, November 2010. (1) Course Chair, (2) Moderator, (3) Study protocols – The bare bones.

Schemitsch E: Mexican Association of Orthopaedics and Traumatology, 21st Meeting, Puerto Vallarta, November 2010. (1) IM Nailing for proximal femur fractures, (2) Current concepts in the management of open fractures, (3) Periprosthetic proximal femur fractures, (4) Periprosthetic distal femur fractures.

Schemitsch E: Mexican Orthopaedic Association, Precourse on Clinical Research, Puerto Vallarta, November 2010. (1) What is the language of EBM?, (2) What is a case control study?, (3) What is an CT?, (4) How to get your work published.

Schemitsch E: Trauma Care Controversies, Vancouver, British Columbia, Canada, November 2010. (1) Course Chair, (2) Humeral shaft/distal humerus, (3) Proximal femur, (4) Femur shaft.

Waddell JP: Bone and Joint Decade World Conference, Lund, Sweden, September 2010. co-Moderator: Musculoskeletal conditions - Moving forward.

Waddell JP: Combined Orthopaedic Associations, 12th Meeting, Glasgow, Scotland, September 2010. (1) Instructional Course Lecture on Relationship with Industry: Tender/vendor value adds - Legitimate support or legalized extortion, (2) VTE prophylaxis around the world: "Canada".

Waddell JP: Societe Internationale de Recherche en Orthopedie et Traumatologie/Societe Internationale de Chirurgie Orthopedique et de Traumatologie (SICOT/SIROT), 7th Annual International Conference, ARTOF Symposium, Gothenburg, Sweden, September 2010. Moderator of Foot and Ankle Session/Trauma - Proximal femoral fracture session: Prosthetic replacement after femoral neck fracture - Total or hemiarthroplasty?

Waddell JP: The Caribbean Association of Orthopaedic Surgeons, 6th Annual Conference, Montego Bay, Jamaica, October 2010. (1) What's new in hip fracture management, (2) Guest Lecturer: Picking the best hip or knee replacement for your patient in 2010.

Waddell JP: Orthopaedic Trauma Association, Comprehensive Fracture Course for Residents, Baltimore, Maryland, USA, October 2010. Polytrauma patients: Evaluation and assessment.

Waddell JP: Ontario Orthopaedic Association, 33rd Annual General Meeting, Toronto, Ontario, Canada, November 2010. Quality indicators in orthopaedic surgery: What are we doing?

Waddell JP: University of Saskatchewan, Department of Surgery, 4th Annual Faculty Research Day, Saskatoon, Saskatchewan, Canada, January 2011. (1) Clinical research: Could (should) everybody be doing it?, (2) Randomized clinical trial of three bearing surfaces in total hip arthroplasty.

Waddell JP: Japanese Society of Replacement Arthroplasty, Tokyo, Japan, February 2011. Oxinium in total hip replacement. Guest Lecturer.

Waddell JP: Bone and Joint Canada Forum, Toronto, Ontario, Canada, March 2011. (1) Welcome and Introduction, (2) Discussion: Phase IV - Implementation: Successes/failures/lessons learned, (3) Panel Discussion: (a) Improvement and sustainability: Current and future data, (b) Research tools to inform decision makers, (4) Speaker: Hip fracture initiative.

Waddell JP: Association for the Rational Treatment of Fractures (ARTOF), presented at the European Federation of National Associations of Orthopaedics and Traumatology, Copenhagen, Denmark, June 2011. Humerus: Surgical neck and shaft conservative treatment.

Waddell JP: Ontario Hospital Association, A Call to Action on ER/ALC: Promoting Effective Care Across the Health Continuum, Toronto, Ontario, Canada, June 2011. Improving orthopaedic care across Ontario.



Waddell JP: Smith and Nephew, 2011 Canadian Hip and Knee Symposium, Toronto, Ontario, Canada, June 2011. (1) What is the gold standard in hip replacement, (2) Moderator: Direct anterior and short stems, (3) When and how I manage osteolysis, (4) Pre-op work up and planning.

Whelan D: Second Annual Hip Health 2010, Faculty Member, Mississauga, Ontario, Canada, September 2010. Hip pain in the young adult.

Whelan D: McMaster University, 4th Annual Principles and Practice of Clinical Research Course, Mississauga, Ontario, Canada, November 2010. Speaker: (1) Is my trial feasible? Can I actually pull it off?, (2) What is a prospective cohort study?

RESEARCH AND INVESTIGATIONS

A multicentre, randomized trial of conservative treatment versus operative plate fixation for acute, displaced fractures of the distal clavicle. *Hall JA, McKee MD, Schemitsch EH: The Physicians Services Incorporated (PSI).* (\$110,000 2010 - 2012)

A multicentre, randomized trial of simple decompression vs anterior transposition of the ulnar nerve for acute displaced fractures of the distal humerus treated with plate fixation. *Schemitsch EH, McKee MD: Orthopaedic Trauma Association.* (\$78,630 2010 - 2012)

A prospective randomized non-inferiority study to evaluate the safety and effectiveness of Cartiva synthetic cartilage implant in the treatment of first metatarsophalangeal joint osteoarthritis as compared to a control (M.O.T.I.O.N. study). *Daniels TR: Carticept Medical.* (\$65,000 2010 - 2011)

A randomized Evaluation of Emergent immobilization in External Rotation in the management of Acute anterior Dislocations of the Shoulder (EERAADS). *Whelan DB, Holtby R: American Orthopaedic Society for Sports Medicine.* (\$20,000 2010 - 2012)

A randomized Evaluation of Emergent immobilization in External Rotation in the management of Acute anterior Dislocations of the Shoulder (EERAADS). *Whelan DB, Holtby R: American Shoulder and Elbow Surgeons.* (\$20,000 2010 - 2012)

A randomized trial of cannulated screws vs sliding hip screws for femoral neck fractures. *FAITH Investigators, Steering Committee, Schemitsch E: Canadian Institutes of Health Research (CIHR).* (\$1,780,737 2010 - 2014)

Ankle arthroplasty and ankle arthrodesis - Prospective gait analysis compared to controls. *Daniels TR, Singer S, Kleijman S, Pinsker E, Khan R: Canadian Orthopaedic Association/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, Aubin J, Li R, Nauth A: Canadian Institutes of Health Research.* (\$293,268 2011 - 2014)

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 spinejack intravertebral expandable implant in the treatment of vertebral compression fracture (ISCA) study, a randomized control trial. *Ahn H, Murphy K, Smith R: Vexim.* (\$200,000 2009 - 2011)

How can Canadian Osteoporosis Patient Network members inform post-fracture intervention research? *Sale JEM, Beaton D, Bogoch E, Gignac M, Hawker G, Jaglal S, Jain R, Funnell L: Canadian Institute of Health - Catalyst Grant: Bone Health* (\$65,958 2010 - 2011).

Implementation and evaluation of collaborations between SHSC, AHSCs, Critical 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).

Instrumental activities of daily living and social roles following hip and knee replacement: Understanding why people's engagement doesn't change. *Davis A, Webster F, Jaglal S, Jenkinson R, Perruccio A, Schemitsch EH: The Arthritis Society.* (\$360,000 2011 - 2014)

Microfracture technique and its effectiveness for osteopenic vs sclerotic bone. *Whelan DB, Marks P, Theodoropoulos J, Hurtig M: Canadian Arthritis Network.* (\$240,000 2009 - 2011)

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: Province of Ontario Ministry of Health and Long Term Care.* (\$350,000 2010 - 2011)

Osteoporosis Exemplary Care Program. *Bogoch ER: Alliance for Better Bone Health.* (\$20,000 2010)

Osteoporosis Exemplary Care Program Research Funding. *Bogoch ER: Amgen Canada* (\$10,000 2010 - 2011)



Patients' perspectives on total ankle arthroplasty: A qualitative study exploring pre- and post-operative experiences. *Daniels TR, Beaton D, Pinsker E, Sale J: The Physicians' Services Incorporated.* (\$48,156 2011 – 2012)

Prevalence of abuse and intimate partner violence surgical evaluation. *Praise Investigators, Steering Committee, Schemitsch E: Canadian Orthopaedic Foundation.* (\$20,000 2010 – 2011)

Rick Hansen Spinal Cord Injury Registry. *Ahn H, Ginsberg H: Rick Hansen Institute.* (\$30,000 2010)

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 Investigators, Steering Committee, Schemitsch E: Kappa Delta Award.* (\$20,000 2010 – 2011)

The effect of late type endothelial progenitor cells on augmentation of angiogenesis and osteogenesis in a segmental bone defect model. *Schemitsch EH, Li R: Orthopaedic Trauma Association.* (\$25,000 2010 – 2012)

Treatment of hallux rigidus: fusion or hemiarthroplasty - randomized trial. *Daniels TR, Khan R: Carticept Medical* (\$10,000 2011).

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 for Health Research (CIHR).* (\$60,000 2010 - 2011)

HONOURS RECEIVED

Daniels TR: Jameel Ali Continuing Education Award, June 2011.

Daniels TR: Orthopaedic Chair's Teaching Award - for contributions to orthopaedic education (selected by the residents for the Division of Orthopaedics, Department of Surgery, University of Toronto, April 2011.

Schemitsch E: Best Paper International Society of Fracture Repair. 2010.

Schemitsch E: Best Poster Orthopaedic Association. 2011.

Schemitsch E: President, Canadian Orthopaedic Association. 2011.

Whelan D: American Orthopaedic Society for Sports Medicine (AOSSM) Travelling Fellowship Program (3 orthopaedic sport medicine surgeons selected annually for scientific and cultural exchange to Europe, Asia-Pacific or Latin America.) 2010.



■ Division Of Plastic And Reconstructive Surgery

Dr. J.L. Mahoney Professor (Division Head)
Dr. M. Musgrave Assistant Professor

PUBLICATIONS

Fawzi H, Osei-Tutu K, Errett L, Latter D, Bonneau D, Musgrave M, Mahoney J: Sternal plate fixation for sternal wound reconstruction: Initial experience (Retrospective Study). *Journal of Cardiothoracic Surgery*: April 2011: p 63.

Jaksa PJ, Mahoney JL: Quality of life in patients with diabetic foot ulcers: Validation of the cardiff wound impact schedule in a canadian population. *International Wound Journal*: December 2010: 7(6): pp 502-507. E-published September 21, 2010.

McKay D, Hosam FF, McKay KM, Nitsch R, Mahoney JL: Are chest compressions safe for the patient reconstructed with sternal plates? Evaluating the safety of cardiopulmonary resuscitation using a human cadaveric model. *Journal of Cardiothoracic Surgery* August 2010: 5: p 64.

Rizis D, Mahoney JL: A rare presentation of flexor digitorum profundus type V avulsion injury with associated intra-articular fracture: A case report. *The Canadian Journal of Plastic Surgery*: June 2011: 19(2): pp 62-63.

INVITED VISITS

Musgrave MA: Ontario Association of General Surgeons, 16th Annual Meeting, Toronto, Ontario, Canada, October 2010. Wound care and wound care products.

Musgrave MA: Arjo- Huntley, Toronto, Ontario, January 2011. Targeting venous thromboembolism - webinar.

RESEARCH AND INVESTIGATIONS

Development of a diabetic foot website. *Mahoney J, Sargeant R: J.P. Bickell Foundation*. (\$20,000 2011)

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)

Exploring factors that influence breast reconstruction use and outcomes: Phase I: How do physician attributes influence reconstruction decision making. *Musgrave MA, Gagliardi A, Baxter N: Canadian Breast Cancer Foundation*. (\$188,180 2011 - 2013)

Innovation proposal: Chiropractic rapid response service. *Ray J, Sargeant R, Mahoney JL, Leiter L: Ministry of Health, Innovation Fund*. (\$63,000 2009 - 2010)

Utilization and timing of breast reconstruction in the treatment of breast cancer in Ontario: A population-based study. *Zhong T, Baxter N, Musgrave M, Hofer S, Urbach D, Sutradhar R: Canadian Breast Cancer Foundation*. (\$257,474 2011 - 2014)

Wounds and surgical site infections: Assessment of a web-based tool for patient education. *Mahoney JL, Musgrave M: Ministry of Health and Long Term Care Innovation Fund*. (\$4,871 2011 - 2012)

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*. (\$5,205 2010 - 2011)

HONOURS RECEIVED

Mahoney JL: 2nd place, Young Investigators Award at the Society of Advanced Wound Care for: A needs Assessment of Intervention to Reduce the Risk of Wound Complications Following Saphenous Vein Harvesting, April 2011.

Musgrave MA: Donald J. Currie Award for Undergraduate Education, June 2011.

Musgrave MA: Nominee, FitzGerald Academy Award Clerkship Teacher Award, May 2011.

Musgrave MA: Nominee, FitzGerald Academy Master Teacher Award, May 2011.

■ Division Of Urology

Dr. R.J.D. Honey Professor (Division Head)
Dr. K.T. Pace Associate Professor
Dr. R.J. Stewart Assistant Professor

PUBLICATIONS

Chew BH, Arsovska O, Lange D, Wright JE, Beiko DT, Ghiculete D, Honey JR, Pace KT, Paterson RF: The Canadian StoneBreaker Trial: A randomized, multicenter trial comparing the LMA stoneBreaker (TM) and the Swiss lithoclast (R) during percutaneous nephrolithotripsy. *Journal of Endourology*: E-published June 28, 2011.

Diamandis M, White NMA, Chow T, Youssef Y, Honey RJ, Stewart R, Pace KT, Gabril MY, Youssef GM: Exploring the pathogenesis of renal cell carcinoma through differential microRNA expression. *Clinical Chemistry* July 2010: 56(Suppl): pp A206-2010.

Honey RJ, Wiesenthal JD, Ghiculete D, Pace S, Ray AA, Pace KT: Comparison of supracostal versus infracostal percutaneous nephrolithotomy in the prone-flexed patient position. *Journal of Endourology*: June 2011: 26(6): pp 947-954. E-published May 20, 2011.

Ordon M, Ray AA, Honey RJ: Ureteritis cystica: A rare cause of ureteral obstruction. *Journal of Endourology*: September 2010: 24(9): pp 1391-1393.

Ray AA, Ghiculete D, D'A Honey RJ, Pace KT: Shock wave lithotripsy in patients with horseshoe kidney: Determinants of success. *Journal of Endourology*: March 2011: 25(3): pp 487-493. E-published March 11, 2011.

Ray AA, Ghiculete D, Honey RJ, Pace KT: Limitations to ultrasound in the detection and measurement of urinary calculi. *Urology*: August 2010: 76(2): pp 295-300. E-published March 5, 2011.

Wiesenthal JD, Fazio LM, Perks AE, Blew BD, Mazer D, Hare G, D'A Honey RJ, Pace KT: Effect of pneumoperitoneum on renal tissue oxygenation and blood flow in a rat model. *Urology*: June 2011: 77(6): p 1508. E-published April 19, 2011

Wiesenthal JD, Ghiculete D, D'A Honey RJ, Pace KT: A comparison of treatment modalities for renal calculi between 100 and 300 mm²: Are shockwave lithotripsy, ureteroscopy, and percutaneous nephrolithotomy equivalent? *Journal of Endourology*: March 2011: 25(3): pp 481-485.

Wiesenthal JD, Ghiculete D, Ray AA, Honey RJ, Pace KT: A Clinical Nomogram to predict the successful shock wave lithotripsy of renal and ureteral calculi. *The Journal of Urology*: E-published June 17, 2011.

Wiesenthal JD, Ray AA, Pace S, Honey RJ, Pace KT: Evaluating the importance of mean stone density and skin-to-stone distance in predicting successful shock wave lithotripsy of renal and ureteric calculi. *Urological Research*: August 2010: 38(4): pp 307-313.

Wiesenthal JD, Schuler RD, Honey RJ, Pace KT: Predictors of health-related quality of life recovery following laparoscopic simple, radical and donor nephrectomy. *British Journal of Urology International*: February 2011: 107(4): pp 636-641. E-published August 26, 2010.

INVITED VISITS

Honey RJD: 28th World Congress of Endourology & SWL, Chicago, Illinois, USA, September 2010. Percutaneous nephrolithotomy.

Honey RJD: American Urological Association, Northeastern Section Annual Meeting, Pittsburgh, Pennsylvania, USA, September 2010. (1) Intermediate-sized urolithiasis: The equivalency of treatment modalities, (2) Percutaneous nephrolithotomy in the prone-flexed position: Is there an optimal access?

Honey RJD: GlaxoSmithKline, Toronto, Ontario, Canada, April 2011. St. Mike's Urology Event - Update in Stones Management.

Honey RJD: American Urological Association, Washington, District of Columbia, USA, Course Director, May 2011. Hands-on Course: Flexible ureteroscopy for renal stones.

Pace KT: American Urological Association, Annual Meeting, Pittsburgh, Pennsylvania, USA, September 2010. Moderator for Scientific Poster Session.

Pace KT: Storz/Cook Hands-on flexible ureteroscopy, Chicago, Illinois, USA, September 2010. Practical tips in flexible intra-renal ureteroscopy.



Pace KT: World Congress on Endourology, Annual Meeting, Chicago, Illinois, USA, September 2010. Moderator for scientific video session.

Pace KT: Ontario First Lego League Provincial Championships, Oshawa, Ontario, Canada, January 2011. Robots in surgery: Fact not fiction!

Pace KT: American Urological Association, Washington, District of Columbia, USA, May 2011. Introduction to flexible ureteroscopy: Indications, preparation, anesthesia and access.

Pace KT: Canadian Urological Association, 4th Annual Course on Basic and Advanced Urology Laparoscopy Skills, Montreal, Quebec, Canada, June 2011. (1) Entering the hostile abdomen and dealing with intra-operative complications, (2) Robotic-assisted partial nephrectomy: Tips and tricks.

RESEARCH AND INVESTIGATIONS

A randomized, double-blinded placebo-controlled trial of alfuzosin (Xatral) following shock wave lithotripsy for renal and ureteric calculi (Investigator-initiated multi-centred randomized clinical trial). *Pace KT, Honey RJ: Sanofi-Aventis.* (\$100,000 2009 - 2011)

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)

Trends over time and regional variation in the management of kidney stone disease in the Province of Ontario. *Pace KT, Ordon M, Honey RJ: Ontario AFP Innovations Funds.* (\$7,932 2011 - 2012)

HONOURS RECEIVED

Pace KT: American Urological Association Leadership Program. July 2010.

Pace KT: Best Poster at the European Association of Urology (EAU) Annual Meeting, Vienna, Austria. March 2011.

Pace KT: Best Poster at the American Urological Association Annual Meeting, Northeast Section, in Session (MP2 and MP3). September 2010.

Pace KT: Best Poster Presentation, University of Toronto HPME, Annual Research Day. May 2011.

Pace KT: Best Endourology Presentation, Canadian Endourology Group, at the Canadian Urological Association Annual Meeting in Montreal, Quebec. June 2011.

Pace KT: Five Star Best Poster in session at the Canadian Urological Association Annual Meeting in Montreal, Quebec. June 2011.

Pace KT: Second Prize, Fellow Presentation (Clinical Category) at the Annual Charles Robson Research Day. April 2011.

Pace KT: University of Toronto, Urology Residents Clinical Teaching Award. June 2011.

Stewart RJ: Postgraduate Teaching Award, Division of Urology, University of Toronto. May 2011.



■ Division Of Vascular Surgery

Dr. F.M. Ameli	Associate Professor
Dr. V.M. Campbell	Assistant Professor
Dr. A.G. Lossing	Associate Professor
Dr. W. Tanner	Assistant Professor

INVITED VISITS

Ameli FM: Rocky Mountain Traumatologic Society, 53rd Annual Meeting, Snowmass, Colorado, USA, January 2011. Changing patterns in vascular practice: Implications for resident training and requirements for future vascular surgeons.

Ameli FM: Association of International Vascular Surgeons, 29th Annual Meeting, Andorra, Spain, March 2011. (1) Changing patterns in vascular practice: Implications for resident training and requirements for future vascular surgeons. (2) Moderator of Break Out Session: Ruptured aortic aneurysm, (3) Session Chairman: Vascular services and history.

Lossing AG: Gore, Endoluminol AAA Conference, San Francisco, California, USA, November 2010.

Lossing AG: European Vascular Access Study, Istanbul, Turkey, May 2011. Use of intraoperative blood flow as an added parameter to predict AV access maturation.

RESEARCH AND INVESTIGATIONS

Fistula maturation study. *Donnelly S, Muradali D, Campbell V: Innovation funds. (\$73,500 2010 - 2012)*



Sunnybrook Health Sciences Centre

Robin Richards, *Surgeon-in-Chief*

During 2010 – 2011 the M Wing expansion was completed and the Women and Babies Program was repatriated to the Bayview site. An updated Strategic Plan was adopted by the Board, and our Hospital benefited from an increment in its critical care capacity. The Department continued to benefit from incremental wait time funding and remained well-aligned with the Institution's strategic focus. The "Drive to 95 (percent occupancy)" began to reduce occupancy to acceptable levels allowing the more reliable provision of surgical care. The Department continued to benefit from recruitment in strategic areas in a challenging resource environment.

NEW STAFF

Nick Phan was appointed as a Surgeon-Investigator in the Division of Neurosurgery with special interest in neuro traumatology. Laura Snell was appointed as a Surgeon-Investigator with special interest in breast reconstruction, having received a Master's degree in Clinical Research Methods from Columbia University. Sunnybrook welcomed Joan

Lipa back from UCLA in the Division of Plastic Surgery as a Surgeon-Investigator to augment our breast reconstruction capability. Giuseppe Papia joined the Division of Cardiac and Vascular Surgery and the Department of Critical Care Medicine as a Surgeon-Teacher with special interest in minimally invasive vascular reconstruction, patient safety and quality assurance.

RETIREMENTS AND SABBATICALS

Robin Richards completed a ten-year term as Chair of the Departmental Promotions Committee. Richard Holtby stepped down as Chair of the Health Records committee. Andy Smith announced his intention to step down as Head of the Sunnybrook Division of General Surgery.

APPOINTMENTS AND PROMOTIONS

Lesley Carr was promoted to Associate Professor in recognition of her contributions to female urology. Vasu Venkateswaran was promoted to Associate Professor for her contributions to our understanding of the pathobiology of prostate cancer and its prevention. Oleh Antonyshyn was promoted to full professor in recognition of his pioneering contributions to craniofacial reconstruction. Ron Kodama was promoted to full professor for his contributions to education and expertise in urethral reconstruction. Andy Smith was promoted to full professor for his work in knowledge translation and the treatment of colo-rectal cancer

Markku Nousiainen, Andrew Dueck and Natalie Coburn had successful Continuing Appointment Reviews. Calvin Law was appointed leader of the Gastrointestinal Site Group of the Odette Cancer Centre. Andy Smith was appointed Chief of the Odette Cancer Centre and Regional Vice President of Cancer Care Ontario. Robert Maggisano was appointed as the Inaugural Maggisano Chair in Vascular Surgical Research. Homer Tien was promoted to the rank of Colonel in the Canadian Armed Forces.

Calvin Law was appointed as the inaugural recipient of the Hanna Family Research Chair in Surgical Oncology. Gideon Cohen was appointed Program Director in the University Division of Cardiac Surgery. Sender Herschorn was appointed Chair of the Departmental Promotion Committee. Markku Nousiainen was appointed Associate Program Director for the University Division of Orthopaedic Surgery with responsibility for the Division's competency-based curriculum.

DIVISION OF CARDIAC AND VASCULAR SURGERY

The Division focused its activities on long-term outcome studies following valve replacement and cardiac revascularization, minimally invasive interventions, educational research and patient safety. Bernie Goldman remains active as the Chair of the MOHLTC Working Group on Stand Alone Angioplasty and a CPSO Surgical Panel.

DIVISION OF GENERAL SURGERY

Division members work in the fields of surgical oncology or trauma care. All Division members contribute to the acute care service which provides a positive learning environment for trainees and excellent continuity of care for patients. The Division's academic interests include the determinants of outcome following surgical intervention for abdominal malignancy, innovative imaging techniques for the management of breast cancer, the role of transfusion in the management of trauma and the development of standardized protocols for surgical management. Natalie Coburn hosted an international study group of experts in gastric cancer in order to develop a consensus document. Homer Tien continued to lead the trauma program and Sandro Rizoli directed research in the Trauma, Emergency and Critical Care Program.

DIVISION OF NEUROSURGERY

The Division provides support for the trauma, cancer and brain science programs. A cooperative program with Imaging optimizes treatment for patients with intracerebral aneurysms.

DIVISION OF ORTHOPAEDICS

This large Division has interests in joint replacement, the management of orthopaedic trauma, the provision of spine care and soft tissue reconstruction. A surgical program funded by the WSIB was initiated at the Holland Centre for patients with shoulder, elbow, hip and knee problems. Albert Yee and Cari Whyne presented at University Rounds regarding their multidisciplinary research into the use of photodynamic therapy for the abatement of vertebral metastases. Paul Marks supervises a research program with peer review funding studying the factors contributing to the development of arthropathy following knee injury.

DIVISION OF PLASTIC AND RECONSTRUCTIVE SURGERY

Division members focus their activities in the areas of burn care, craniofacial deformity and trauma, and hand trauma. The Division looks forward to full staffing of the Ross Tilley Burn Centre and the outcome of the verification visit by the American Burn Association. The Division welcomed the enhanced ability to provide breast reconstruction afforded by the recruitment of Drs. Snell and Lipa.

DIVISION OF UROLOGY

The Division focuses its activities on urologic oncology, including survivorship issues, female urology and urethral reconstruction. Sender Herschorn continued as Chair of the University Division and Laurie Klotz was Chair of the World Uro Oncology Federation and Editor-in-Chief of the Canadian Urological Association Journal. The members of the Division travel extensively as visiting professors.

EDUCATIONAL ACTIVITY AND AWARDS

Andrew Dueck received a Peters Boyd Award for Clerkship teaching. Albert Yee received a Faculty Award for Excellence in Postgraduate Medical Education for Development and Innovation. Frances Wright received the Tovee Award for Undergraduate Education. Ben Pook (Division of Orthopaedics), Daniel Lodge (Division of Cardiac and Vascular Surgery) and Jennifer Muir (Division of General Surgery) won Harrison Awards. Veronica Wadey was nominated for a Peters Boyd Teaching Award. Robin Richards was nominated for the W.T. Aikins Award for individual teaching performance in the large group category.

Darlene Fenech was appointed co-Director of the MMD second year course for undergraduate medical students. John Murnaghan, Albert Yee, Terry Axelrod, Robin Richards, Ron Kodama and Frances Wright contributed to a retreat organized for New Faculty in the Department. Hans Kreder and David Stephen contributed to AO Courses on the management of pelvic and acetabular trauma.

RESEARCH ACTIVITY AND AWARDS

Marc Jeschke received new research funding from the Physicians' Services Incorporated (PSI) Foundation for a clinical trial investigating the effect of glucose modulation in severely burned patients. Marc Jeschke and Homer Tien received funding from the Canadian Armed Forces for the development of an artificial skin to treat burn patients. Rob Nam's collaborative research group received a CIHR Emerging Team Grant in Regenerative Medicine and Nanomedicine to study microchip-based devices for the analysis of circulating prostate cancer markers.

OTHER AWARDS AND ACTIVITIES

Reviewers from the American Burn Association visited the Ross Tilley Burn Unit as part of an application by Sunnybrook for verification. If successful Sunnybrook would become only the second Institution outside the United States to receive such recognition.

Homer Tien and David Stephen received Marvin Tile Distinguished Service Awards. Robin Richards, Terry Axelrod and Gideon Cohen sat on the Board of ACMS. Albert Yee co-ordinated the second University Divisional Orthopaedic Fellowship Day. Joseph Schatzker gave the keynote address at this event. Bob Maggisano and Marv Tile were recognized by the Board for their 30 and 45 years of service respectively to Sunnybrook.

Sunnybrook surgeons value the support of the Institution in creating a rich surgical environment for the provision of patient care, teaching and research. Department members also appreciate the opportunities to provide leadership roles in our University Department and our Faculty. The Department recognizes and relishes the opportunity it has to provide specialized surgical care to patients from 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. D.S. Kucey	Assistant Professor
Dr. G. Cohen	Associate Professor	Dr. R. Maggisano	Associate Professor
Dr. A. Dueck	Assistant Professor	Dr. F.M. Moussa	Lecturer
Dr. S.E. Fremes	Professor (Division Head)	Dr. G. Papia	Assistant Professor
Dr. B.S. Goldman	Professor		

PUBLICATIONS

Bucci C, Geerts WH, Sinclair A, Fremes SE: Comparison of the effectiveness and safety of low-molecular weight Heparin versus unfractionated Heparin anticoagulation after heart valve surgery. *American Journal of Cardiology*: February 2011: 107(4): pp 591-594.

Cairns JA, Yusuf S, Cook RJ, Cox J, Dagenais GR, Devereaux PJ, McAlister FA, Fremes SE, McCready T, CANNeCTIN: Canadian Network and Centre for Trials Internationally (CANNeCTIN): A national network for Canadian-led trials in cardiovascular disease and diabetes mellitus. *Canadian Journal of Cardiology*: July 2010: 26(7): pp 353-358.

Goldman S, Sethi GK, Holman W, Thai H, McFalls E, Ward HB, Kelly RF, Rhenman B, Tobler GH, Bakaeen FG, Huh J, Soltero E, Moursi M, Haime M, Crittenden M, Kasirajan V, Ratliff M, Pett S, Irmpen A, Gunnar W, Thomas D, Fremes S, Moritz T, Reda D, Harrison L, Wagner TH, Wang Y, Planting L, Miller M, Rodriguez Y, Juneman E, Morrison D, Pierce MK, Kreamer S, Shih MC, Lee K: Radial artery grafts vs saphenous vein grafts in coronary artery bypass surgery: A randomized trial. *Journal of the American Medical Association (JAMA)*: January 2011: 305(2): pp 167-174.

Kumar P, Yanagawa B, Tsuneyoshi H, Moussa F, Cohen G, Christakis G, Fremes SE: Technique of harvesting an internal thoracic artery densely adherent to the periosteum. *The Annals of Thoracic Surgery*: August 2010: 90(2): pp 681-682.

Papia G, Cina C: Postoperative Management. In: *Rutherford's Vascular Surgery*, 7th Edition (Cronenwett and Johnston, eds.) Saunders, Philadelphia, 2010: pp 15.

Thabane L, Wells G, Cook R, Platt R, Pogue J, Pullenayegum E, Matthews D, McCready T, Devereaux PJ, Cairns JA, Fremes SE, Yusuf S, CANadian Network and Centre for Trials Internationally (CANNeCTIN) Investigators: Canadian-led capacity-building in biostatistics and methodology in cardiovascular and diabetes trials: The CANNeCTIN Biostatistics and Methodological Innovation Working Group. *Trials*: February 2011: 12(48)

INVITED VISITS

Cohen G: Excellence in Interventional Cardiology XII, Whistler, British Columbia, Canada, December 2010. Percutaneous valve intervention: A surgeon's perspective.

Cohen G: Soutlake Regional Health Centre, Queensville Lecture Series, Newmarket, Ontario, February 2011. An Update on percutaneous valve intervention.

Cohen G: The ACS Exchange, Toronto Edition, Toronto, Ontario, Canada, May 2011. Plato CABG.

Dueck A: Bristol Myers, Toronto, Ontario, Canada, February 2011. Vascular care for primary care physicians – CME event.

Dueck A: Canadian Institutes of Health Research, Toronto, Ontario, Canada, June 2011. Systemic Review of CCSVI and Multiple Sclerosis: Presentation to the CIHR expert panel on CCSVI.

Fremes SE: Medtronic, Peak Performance XX11, Minneapolis, Minnesota, USA, March 2011. Basic wire skills - Team approach to new technologies and programs.

Fremes SE: Canadian Cardiovascular Congress, Montreal, Quebec, Canada, October 2010. How to start a TAVI program.

Fremes SE: American College of Cardiologists (ACC.11), New Orleans, Louisiana, USA, April 2011. Late-breaking clinical trials II - Radial artery and saphenous vein patency more than five years following coronary artery bypass surgery: Results from the randomized multicentre Radial Artery Patency Study (RAPS).

Moussa FM: Contemporary Cardiac Care Conference, Niagara-on-the-Lake, Ontario, Canada, October 2010. Update on minimally invasive coronary artery bypass surgery.

Papia G: Physicians Group – Thunder Bay, Thunder Bay, Ontario, Canada, December 2010. Endovascular aneurysm repair (EVAR).

RESEARCH AND INVESTIGATIONS

A multi-center, randomized, double-blind, placebo-controlled study evaluating the efficacy, safety and tolerability of 20 mg/kg dose of RO4905417 administered every four weeks for 32 weeks in patients undergoing coronary artery bypass graft surgery (CABG) (P-Selectin CABG - BP 25601). *Carrier M, Fries SE: La Roche.* (\$250,000 2011 - 2013)

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, Fries SE: Canadian Institutes of Health Research.* (\$6,580,411 2007 - 2014)

Canadian Network and Centre for Trials Internationally. *Yusuf S, Anand S, Dagenais G, Roberts R, Cairns J, Devereaux P, Connolly S, Dorian P, Cox J, Gerstein H, Fries 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)

FREEDOM Trial - Future revascularization evaluation in patients with diabetes mellitus: optimal management of multivessel disease. *Fuster V, Fries SE (Site PI) and the FREEDOM Study Investigators: National Heart, Lung and Blood Institute (NHLBI).* (\$162,000 2006 - 2011)

Left Atrial Appendage Occlusion Study II (LAAOS II). *Whitlock R, Carrier M, Connolly S, Eikelboom J, Fries 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, Fries SE, Teoh K, Tu J, Verma S, Whitlock R: McMaster University/Astra Zeneca.* (\$13,000 2009 - 2011)

Remote ischemic preconditioning in cardiac surgery trial (Remote Impact). *Devereaux P, Fries SE, Anderson T, Bagshaw S, Boden W, Chrolavicius S, Clase C, Coca S, Finegan B, Garg A, Guyatt G, Jacka M, Karthikeyan G, Lamy A, Lavi R, Legare J, Martin B, Parikh C, Pogue J, Pritzker M, Sessler D, Syed S, Teoh K, Thabane L, Thomas S, Thorlund K, Vanhelder T, Walsh M, Whitlock R, Zimmerman R: Heart & Stroke Foundation of Ontario.* (\$483,040 2011 - 2013)

Steroids in cardiac surgery trial (SIRS). *Whitlock R, Fries SE, Quantz M, Ross D, Singal R, Legare J, Brown C, Kieser T, Lamontagne F, Huang K: CANNeCTIN.* (\$200,000 2010 - 2012)

Surgical and pharmacological novel interventions to improve overall results of saphenous vein graft patency in CABG (SUPERIOR). *Fries SE, Novick R, Chu M, Singh SK: Canadian Institutes of Health Research/CANNeCTIN.* (\$100,000 2011 - 2013)

HONOURS RECEIVED

Dueck A: 2010-2011 Clerkship Teaching Award for Surgery, Peters-Boyd Academy. April 2011.

Fries SE: Dr. Bernard S. Goldman Chair in Cardiovascular Surgery. July 2010.

Maggisano R: Inaugural "Legend Award," Vaughan Health Campus of Care. September 2010.

Maggisano R: Nominated as Inaugural Chair of "The Sunnybrook Chair in Vascular Surgery." June 2011.

■ Division Of General Surgery

Dr. J.F. Boileau	Assistant Professor	Dr. S. Rizoli	Associate Professor
Dr. F.D. Brenneman	Associate Professor	Dr. T.M. Ross	Associate Professor
Dr. P.T.Y. Chu	Associate Professor	Dr. A.J. Smith	Associate Professor (Division Head)
Dr. N. Coburn	Assistant Professor	Dr. H.C. Tien	Assistant Professor
Dr. D.S. Fenech	Assistant Professor	Dr. L. Tremblay	Assistant Professor
Dr. S.S. Hanna	Associate Professor	Dr. F. Wright	Associate Professor
Dr. C.M.B. Holloway	Associate Professor		
Dr. C.H.L. Law	Associate Professor		

PUBLICATIONS

- Amemiya Y, Yang W, Benatar T, Nofech-Mozes S, Yee A, Kahn H, Holloway C, Seth A:** Insulin like growth factor binding protein-7 reduces growth of human breast cancer cells and xenografted tumors. *Breast Cancer Research and Treatment*: February 2011: 126(2): pp 373-384.
- Banfield J, Gomez M, Kiss A, Redelmeier DA, Brenneman F:** Effectiveness of the P.A.R.T.Y. (Prevent Alcohol and Risk-Related Trauma in Youth) program in preventing traumatic injuries: A 10-year analysis. *Journal of Trauma*: March 2011: 70(3): pp 732-735.
- Berry S, Law CHL:** Standards of care for curative surgery and management of metastatic colorectal cancer. *Oncology Exchange*: May 2011: 10(2): pp 15-20.
- Brackstone M, Robidoux A, Chia S, Mackey J, Dent R, Boileau JF, Clemons M:** Canadian initiative for locally advanced breast cancer research and treatment: Inaugural meeting of the Canadian Consortium for LABC (CoLAB): *Current Oncology*: June 2011: 18(3): pp 139-144.
- Bulger EM, May S, Brasel KJ, Schreiber M, Kerby J, Tisherman SA, Newgard C, Slutsky A, Coimbra R, Emerson S, Minei JP, Bardarson B, Kudenchuk P, Baker A, Christenson J, Idris A, Davis D, Fabian TC, Aufderheide TP, Callaway C, Williams C, Banek J, Vaillancourt C, van Heest R, Sopko G, Hata JS, Hoyt DB, ROC Investigators:** Out-of-hospital hypertonic resuscitation following severe traumatic brain injury: A randomized controlled trial. *Journal of the American Medical Association*: October 2010: 304(13): pp 1455-1464.
- Bulger EM, May S, Kerby J, Emerson S, Stiell IG, Schreiber MA, Brasel KJ, Tisherman SA, Coimbra R, Rizoli S, Minei JP, Hata JS, Sopko G, Evans DC, Hoyt DB, ROC:** Prehospital hypertonic resuscitation following traumatic hypovolemic shock: A randomized, placebo controlled trial. *The Annals of Surgery*: March 2011: 253(3): pp 431-441.
- Callum JL, Rizoli S, Pendergrast J:** Rapid laboratory testing for trauma patients: where a perfect result is not in the best interest of the patient. *Transfusion*: December 2010: 50(12): pp 2529-2532.
- Chakraborty AR, Selby D, Gardiner K, Myers JW, Moravan V, Wright FC:** Malignant Bowel Obstruction: Natural history of a heterogeneous patient population followed prospectively over two years. *Journal of Pain and Symptom Management*: February 2011: 41(2): pp 412-420.
- Eskicioglu C, Forbes SS, Fenech DS, McLeod RS, Best Practice in General Surgery Committee:** Preoperative bowel preparation for patients undergoing elective colorectal surgery: A clinical practice guideline endorsed by the Canadian Society of Colon and Rectal Surgeon. *Canadian Journal of Surgery*: December 2010: 53(6): pp 385-395.
- Gorey KM, Luginaah IN, Bartfay E, Fung KY, Holowaty EJ, Wright FC, Hamm C, Kanjeekal SM:** Effects of socioeconomic status on colon cancer treatment accessibility and survival in Toronto, Ontario and San Francisco, California, 1996-2006. *American Journal of Public Health*: January 2011: 101(1): pp 112-119.
- Gorey KM, Luginaah IN, Bartfay E, Fung KY, Holowaty EJ, Wright FC, Hamm C, Kanjeekal SM, Balagurusamy MK:** Association of physician supplies with colon cancer care in Ontario and California, 1996 to 2006. *Digestive Diseases and Sciences*: February 2011: 56(2): pp 523-531.
- Guinting N, Tremblay L, Kortbeek JB:** Surgisis (R) in the management of the complex abdominal wall in trauma: A case series and review of the literature. *Injury*: September 2010: 41(9): pp 970-973. E-published February 23, 2010.
- Hameed SM, Schuurman N, Razek T, Boone D, Van Heest R, Taulu T, Lakha N, Evans DC, Brown DR, Kirkpatrick AW, Stelfox HT, Dyer D, van Wijngaarden-Stephens M, Logsetty S, Nathens AB, Charyk-Stewart T, Rizoli S, Tremblay LN, Brenneman F, Ahmed N, Galbraith E, Parry N, Girotti MJ, Pagliarello G, Tze N, Khwaja K, Yanchar N, Tallon JM, Trenholm JA, Tegart C, Amram O, Berube M, Hameed U, Simons RK; Research Committee of the Trauma Association of Canada:** Access to trauma systems in Canada. *Journal of Trauma*: December 2010: 69(6): pp 1350-1361.

Holloway CH, Easson A, Escallon H, Leong W, Quan ML, Reekijk M, Wright FC, McCready DR: Technology as a force for improved diagnosis and treatment of breast disease. *Canadian Journal of Surgery*: August 2010: 53(4): pp 268-277.

Jansen JO, Inaba K, Rizoli S, Boffard KD, Demetriades D: Selective non-operative management of penetrating abdominal injury in Great Britain and Ireland: Survey of practice. *Injury*: E-published April 27, 2011.

Jung JJ, Bond M, Olsen M, Fenech D, Smith AJ: Level of interest in surgery and perception of surgical education among the 2009-2010 preclerkship medical students at the University of Toronto. *University of Toronto Medical Journal*: June 2011.

Kumar K, Rowsell C, Law CHL, Ko YJ: Coexistence of gastrointestinal stromal tumour and colorectal adenocarcinoma: Two case reports. *Journal of Gastrointestinal Oncology*: March 2011: 2(1): pp 50-54.

Look Hong N, Wright FC, Gagliardi AR, Paszat LF: Examining the potential relationship between multidisciplinary cancer care and patient survival: An international literature review. *Journal of Surgical Oncology*: August 2010: 102(2): pp 125-134.

Mahar A, Quereshi AP, Ottensmeyer CA, Pollett A, Wright FC, Coburn NG, Chetty R: A descriptive analysis of gastric cancer specimen processing techniques. *Journal of Surgical Oncology*: March 2011: 103(3): pp 248-256.

McMullin NR, Wade CE, Holcomb JB, Nielsen TG, Rossaint R, Riou B, Rizoli SB, Kluger Y, Choong PIT, Warren B, Tortella BJ, Boffard KD, NovoSeven Trauma Study Group: Prolonged prothrombin time following rFVIIa therapy in critically bleeding trauma patients is associated with adverse outcomes. *Journal of Trauma*: July 2010: 69(1): pp 60-69.

Nascimento B, Lin Y, Callum J, Reis M, Pinto R, Rizoli S: Recombinant Factor VIIa (rFVIIa) is associated with increased 24-hour survival without increased late survival in massively transfused civilian trauma patients. *Clinics (Sao Paulo)*: April 2011: 66(1): pp 101-106.

Nascimento B, Rizoli S, Callum J: The lost (to follow up) intervention. *Transfusion*: May 2011: 51(5): pp 1118-1119.

Rezende-Neto JB, Rizoli SB, Andrade MV, Lisboa TA, Cunha Melo JR: Rabbit model of uncontrolled hemorrhagic shock and hypotensive resuscitation. *Brazilian Journal of Medical and Biological Research* 2010: December 2010: 43(12): pp 1153-1159.

Rizoli S: Plasmalyte. *Journal of Trauma*: May 2011: 70(5): pp S17-S18.

Rowsell C, Coburn N, Chetty R: Gangliocytic paraganglioma: A rare case with metastases of all 3 elements to liver and lymph nodes. *Annals of Diagnostic Pathology*: October 2010. E-published October 30, 2010.

Scollard D, Chan C, Holloway CMB, Reilly R: A kit to prepare (111) In-DPTPA-trastuzumab (Herceptin) Fab fragments injection under GMP conditions for imaging or radioimmunoguided surgery of HER2 positive breast cancer. *Nuclear Medicine and Biology*: January 2011: 38(1): pp 129-136. E-published September 1, 2010.

Simunovic M, Coates A, Goldsmith CH, Thabane L, Reeson D, Smith AJ, McLeod RS, DeNardi F, Whelan TJ, Levine MN: The cluster-randomized Quality Initiative in Rectal Cancer (QIRC) trial: Evaluating a quality improvement strategy in surgery. *Canadian Medical Association Journal*: September 2010: 182(12): pp 1301-1306. E-published August 9, 2010.

Singh S, Law CHL: Multidisciplinary Reference Centers - The need in neuroendocrine tumors. *Journal of Oncology Practice*: November 2010: 6(6): pp e11-e16.

Tien HCN, Jung V, Pinto R, Mainprize T, Scales D, Rizoli SB: Reducing time-to-treatment decreases mortality of trauma patients with acute subdural hematoma. *The Annals of Surgery*: June 2011: 253(6): pp 1178-1183.

Tremblay LN: Radiation from diagnostic imaging in pediatric trauma - Friend or foe? *Journal of Trauma*: March 2011: 70(3): pp 730-731.

Tremblay LN, Scales D: Ultrasound-guided tracheostomy - not for the many, but perhaps the few.... or the one. *Critical Care*: April 2011: 15(2): p 147.

Tsoi D, Holloway C, Brezden C, Bordeleau L, Warner E: Willingness of breast cancer survivors to participate in a randomized controlled trial of digital mammography with or without MRI as breast cancer surveillance: A feasibility study. *Breast*: February 2011: 20(1): pp 96-98. E-published September 9, 2010.

VanderBeek L, Law CHL, Tandan VR: Chapter 22. Gallstone Disease. In: *Evidence Based Gastroenterology and Hepatology*, 3rd Edition (McDonald J, Burroughs A, Feagan B, eds.) Wiley-Blackwell/British Medical Journal Books: 2010.

Warner E, Causer PA, Wong JW, Wright FC, Jong RA, Kill KA, Messner SJ, Yaffe MJ, Narod SA, Plewes DB: Improvement in DCIS detection rates by MRI over time in a high risk breast screening study. *The Breast Journal*: January 2011: 17(1): pp 9-17.

Wells BJ, Najjar H, Wright FC, Holloway CMB, Fraser N, McCready D, Quan ML: Measuring the quality of sentinel lymph node biopsy in breast cancer using newly developed quality indicators: A feasibility study. *The Annals of Surgical Oncology*: January 2011: 18(1): pp 78-85. E-published July 13, 2010.

Wright FC, Fitch M, Coates AJ, Simunovic M: A qualitative assessment of a provincial knowledge translation strategy for pancreatic cancer surgery. *The Annals of Surgical Oncology*: March 2011: 18(3): pp 629-635.

Yang S, Honginda S, Hanna SS, Gallinger S, Wei A, Kiss A, Law C: Utility of preoperative imaging in evaluating colorectal liver metastases declines over time. *HPB Surgery (Oxford)*: November 2010: 12(9): pp 605-609. E-published September 2, 2010.

INVITED VISITS

Boileau JF: Stronach Regional Cancer Centre, Newmarket, Ontario, Canada, January 2011. The surgical management of locally advanced breast cancer (1hr).

Boileau JF: London Regional Cancer Program Multidisciplinary Retreat and Guidelines Meeting 2011, Annual Breast Retreat, Grand Bend, Ontario, Canada, June 2011. Management of the axilla in breast cancer: Impact of the practice changing ACOSOG Z0011 and MA.20 trials.

Brenneman FD: Canadian Association of General Surgeons (CAGS), Breakfast with the Professor/ Acute Care Symposium, Quebec City, Quebec, Canada, September 2010. (1) Challenging trauma cases, (2) Hernia emergencies and closure of difficult abdomen.

Brenneman FD: Hernia Surgeons Forum, Toronto, Ontario, Canada, September 2010. Abdominal Wall Reconstruction.

Brenneman FD: Ontario Association of General Surgeons (OAGS), Annual Meeting, Toronto, Ontario, Canada, October 2010. Acute care surgery - same surgery - different knife.

Brenneman FD: Queens University, General Surgery Rounds, Kingston, Ontario, Canada, November 2010. Abdominal wall reconstruction.

Brenneman FD: Queensway Carlton, General Surgery Seminar, Ottawa, Ontario, Canada, November 2010. Abdominal wall reconstruction.

Brenneman FD: Trauma Association of Canada, Calgary, Alberta, Canada, November 2010. TAC accreditation site visit.

Brenneman FD: Quinte Health Care General Surgeon Seminar, Belleville, Ontario, Canada, January 2011. Abdominal wall reconstruction.

Brenneman FD: McMaster University, General Surgeon Seminar, Hamilton, Ontario, Canada, February 2011. Abdominal wall reconstruction.

Brenneman FD: LifeCell Corporation, Miami, Florida, USA, March 2011. Advanced hernia bioskills lab - AWR.

Brenneman FD: Ross Memorial Hospital, Lindsay, Ontario, Canada, March 2011. OR teaching (preceptorship) - abdominal wall reconstruction.

Brenneman FD: Halifax General Surgery Seminar, Halifax, Nova Scotia, Canada, April 2011. Abdominal wall reconstruction.

Brenneman FD: LifeCell Corporation, Abdominal Wall Reconstruction Symposium/AWR Bioskills Lab, Miami, Florida, April 2011.

Brenneman FD: Moncton General Surgery Seminar, Moncton, New Brunswick, Canada, April 2011. Abdominal wall reconstruction.

Brenneman FD: Saint John Regional Hospital, General Surgery Grand Rounds, Saint John, New Brunswick, April 2011. Abdominal wall reconstruction.

Brenneman FD: Quinte HealthCare, Belleville, Ontario, Canada, May 2011. OR teaching (preceptorship) - abdominal wall reconstruction.

Brenneman FD: Northumberland Hills Hospital, Cobourg, Ontario, Canada, May 2011. OR teaching (preceptorship) - abdominal wall reconstruction

Brenneman FD: Dartmouth General Hospital, Dartmouth, Nova Scotia, Canada, June 2011. OR teaching (preceptorship) - abdominal wall reconstruction.

Brenneman FD: Trauma Association of Canada, Vancouver, British Columbia, Canada, June 2011. TAC accreditation of Vancouver Coastal Health Authority Regional Trauma System.

Coburn N: Institution for Clinical Evaluative Sciences (ICES), Research Rounds, Toronto, Ontario, Canada, October 2010. RAND/UCLA appropriateness methodology.

Coburn N: 11th Annual Mont Tremblant Anesthesia & Perioperative Medicine Conference, Mont Tremblant, Quebec, Canada, February 2011. (1) Panel Discussion: Should I cancel this case?, (2) Two papers that changed my care of the perioperative patient.

Coburn N: European Hepatopancreaticobiliary Association, Cape Town, South Africa, April 2011. Laparoscopic resection of segments 1, 2 and 3 of the liver.

Coburn N: International Gastric Cancer Association, 9th International Gastric Cancer Congress, Seoul, Korea, April 2011. North American Clinical Trials in Gastric Cancer.

Fenech DS: Canadian Association of General Surgeons, CSF Meeting, Quebec City, Quebec, Canada, September 2010. Best Practices in General Surgery - SSI prevention a before and after study.

Fenech DS: Canadian Society of Colon and rectal Surgeons and Candian Society of Surgical Oncologists, Postgraduate Course, Quebec City, Quebec, Canada, September 2010. Transanal excision for rectal cancer.

Fenech DS: Canadian Surgery Forum, Meet the Professor Breakfast, Quebec City, Quebec, Canada, September 2010. Complex problems in colorectal cancer.

Hanna SS: Dongtai Hospital, Dongtai, China, May 2011. Management of cholangiocarcinoma.

Hanna SS: Nanjing First Hospital, Nanjing, China, May 2011. Management of gallbladder cancer.

Hanna SS: Garvan Medical Research Institute, Sydney, Australia, June 2011. Neoadjuvant approach in the treatment of locally advanced cancer of the pancreas.

Hanna SS: Liverpool Cancer Centre, Sydney, Australia, June 2011. Neoadjuvant treatment of cancer of the pancreas.

Law CHL: Bristol Meyers Squibb, Multidisciplinary Advisory Board Meeting, Toronto, Ontario, Canada, July 2010. Unresectable metastases - can this ever change?

Law CHL: Canadian HIPEC Collaborative, Montreal, Quebec, Canada, September 2010. Hyperthermic intraperitoneal chemotherapy - Multicentre collaboration and registry.

Law CHL: L'Universite de Montreal, Annual Colorectal Cancer Symposium 2010 - La Personnalisation du Traitement Du l'Approche Du Cancer Colorectal par l'Approche Multidisciplinaire, Montreal, Quebec, Canada, September 2010. Multidisciplinary management of colorectal hepatic metastases - A new era.

Law CHL: Memorial University, St. John's, Newfoundland, Canada, September 2010. (1) Neoadjuvant treatment options in pancreatic adenocarcinoma, (2) Multidisciplinary integrated care: Making it work for patients and for practitioners.

Law CHL: Oshawa-Scarborough Oncology Meeting, Pickering, Ontario, Canada, September 2010. Multidisciplinary management of neuroendocrine tumours (NETs).

Law CHL: University of Sherbrooke, Oncology Meeting, Sherbrooke, Quebec, Canada, September 2010. Navigating options in the treatment of metastatic colorectal cancer - using a multidisciplinary approach.

Law CHL: British Columbia Cancer Agency Surgical Oncology Network, Vancouver, British Columbia, Canada, October 2010. The Royal College Invited Speaker: Conundrums in pancreatic masses.

Law CHL: Canadian Association of General Practioners of Oncology, Halifax, Nova Scotia, Canada, October 2010. New advances in hepatobiliary surgical oncology: Colorectal liver metastases and pancreatic adenocarcinoma.

Law CHL: Hong Kong College of Radiologists, 18th Annual Scientific Meeting, Aberdeen, Hong Kong, October 2010. Surgical treatment and multidisciplinary approaches to NETs management.

Law CHL: NET Alliance, Milan, Italy, October 2010. An update on national collaborations for NETs research.

Law CHL: Taiwan NET Academy of Sciences, Third Annual Conference, Taipei, Taiwan, October 2010. Management of advanced disease in pancreatic NET - A post ESMO 2010 update.

Law CHL: Chennai Oncology Board, Chennai, India, November 2010. Advances in the surgical management of NETs.

Law CHL: Mumbai Oncology Board, Mumbai, India, November 2010. Advances in the surgical management of nETs.

Law CHL: New Delhi Oncology Board, New Dehli, India, November 2010. Advances in the surgical management of NETs.

Law CHL: Northern Ontario School of Medicine and the ThunderBay Oncology Group, Thunderbay, Ontario, Canada, November 2010. How to manage GISTs in the modern evolution of neoadjuvant, adjuvant and new molecular biomarkers?

Law CHL: Ontario Gastrointestinal Oncology Consultant Meeting, Toronto, Ontario, Canada, November 2010. Evidence-based initiatives on the management of advanced colorectal liver metastases.

Law CHL: National Board on the Enhancement of Outcomes in Metastatic Colorectal Cancer, Toronto, Ontario, Canada, December 2010. Reviewing the fundamental evidence for liver resection for metastatic colorectal cancer.

Law CHL: Community Oncologists of Metropolitan Toronto, Toronto, Ontario, Canada, January 2011. Conundrums in the management of metastatic colorectal cancer.

Law CHL: Samsung Cancer Centre, Korea NET Symposium, Seoul, Korea, February 2011. Advances in surgery for gastroenteric-pancreatic neuroendocrine tumours.

Law CHL: European Neuroendocrine Tumour Society Meeting (ENETs), Lisbon, Portugal, March 2011. Organizing priorities for 2011 for the Canadian NET Alliance.

Law CHL: WellSpring and the Colorectal Cancer Association of Canada, Toronto, Ontario, Canada, March 2011. Understanding and supporting a patient with metastatic colorectal cancer.

Law CHL: McMaster University, Regional Oncology Rounds, Hamilton, Ontario, Canada, April 2011. Surgical state of the art for advanced neuroendocrine tumours.

Law CHL: NET Alliance National Collaborative, Toronto, Ontario, Canada, April 2011. Coming to a consensus on the RADIANT study data: Regional and national implications for Canada.

Law CHL: Swiss Society of Surgery (SGC), 11th Swiss Course on Cancer Surgery, Lucerne, Switzerland, April 2011. Carcinoids of the gastrointestinal tract: A comprehensive review of the state of the surgical art.

Law CHL: The Scarborough Rouge Valley Regional Oncology Rounds, Scarborough, Ontario, Canada, April 2011. Colorectal cancer liver mets: Evolution of care and emerging standards.

Law CHL: Community Multidisciplinary Oncology Professional Education Symposium, Thunderbay, Ontario, Canada, May 2011. A surgeon, a team and four stories of why I still believe (The changing world of GI surgical oncology).

Law CHL: Sanofi-Aventis, Canadian National Advisory Board Meeting, Toronto, Ontario, Canada, May 2011. HiPEC guidelines for colorectal peritoneal carcinomatosis.

Law CHL: Wisconsin Surgical Club, Toronto, Ontario, Canada, May 2011. Neuroendocrine tumours: The state and the art.

Law CHL: Colorectal Cancer Association of Canada, National Cancer Coach Training Conference, Toronto, Ontario, Canada, June 2011. Colorectal cancer liver metastases: Understanding hope - A guide for the cancer coach.

Law CHL: University of Ottawa, Champlain LHIN Regional Colorectal Cancer Surgery Workshop, Ottawa, Ontario, Canada, June 2011. The role of HiPEC in the management of colorectal peritoneal carcinomatosis.

Law CHL: York Central Hospital, Annual Multidisciplinary Oncology Meeting, Richmond Hill, Ontario, Canada, June 2011. Guidelines for the surgical management of hepatic metastatic colorectal cancer.

Rizoli S: Medical School of Funchal, Visiting Professor, Madeira Island, Portugal, September 2010.

Rizoli S: Ontario Regional Blood Coordinating Network (ORBCON), Transfusion Committee Forum, Toronto, Canada, September 2010. (1) Opening Remarks, (2) Chairperson for the Forum, (3) Lecturer.

Rizoli S: The Royal College of Physicians and Surgeons of Canada, Canadian Surgery Forum, Quebec City, Quebec, Canada, September 2010. Lecturer: Whole blood is the key to survival in massive hemorrhage.

Rizoli S: Combat Casualty Resuscitation - Diagnosis and Intervention Symposium, Toronto, Ontario, Canada, October 2010. Thromboelastography in trauma.

Rizoli S: American Heart Association, Resuscitation Science Symposium, Chicago, Illinois, USA, November 2010. Lecturer: Trauma formula-driven versus laboratory-guided study: Challenges and lessons in designing a massive transfusion randomized control trial in trauma.

Rizoli S: Brazilian College of Surgeons, II International Update Symposium on Surgery and Trauma, Rio de Janeiro, Brazil, March 2011. Visiting Professor and Lecturer: Coagulopathy in trauma.

Rizoli S: Brazilian National Academy of Sciences, II International Seminar on New Perspectives for Trauma Care in Major Disaster, Rio de Janeiro, Brazil, March 2011. Visiting Professor/Lecturer: Advances in the management of massive hemorrhage in trauma.

Rizoli S: Trauma Association of Canada, Annual Scientific Meeting, Banff, Alberta, Canada, April 2011. Chair of the Oral Paper Session.

Rizoli S: I Simposio Internacional de Trauma do Nordeste, Maceio, Brazil, May 2011. Lecturer: (1) Hemotherapy of the traumatized patient: when?, (2) Trauma and Technology

Rizoli S: The Wisconsin Surgical Club, Toronto, Ontario, Canada, May 2011. What is new in surgical bleeding?

Rizoli S: National Advisory Committee on Blood and Blood Products, 2011 Massive Transfusion Consensus Conference, Toronto, Ontario, Canada, June 2011. (1) Chair and Sessions 1 and 2 Moderator, (2) Opening remarks and introductions, (3) Overview and final comments, (4) Lecturer.

Smith AJ: Canadian Surgery Forum, Quebec City, Quebec, Canada, September 2010. Tackling locally-advanced lesions.

Smith AJ: Cancer Care Ontario, South West LHIN, Grand Bend, Ontario, Canada, September 2010. Colorectal cancer disease pathway management.

Smith AJ: Cancer Care Ontario, Erie St. Clair LHIN, Windsor, Ontario, Canada, October 2010. Colorectal cancer disease pathway management.

Smith AJ: Cancer Care Ontario, Waterloo Wellington LHIN, Kitchener, Ontario, Canada, October 2010. Colorectal cancer disease pathway management.

Smith AJ: Colon Cancer Canada/Wellspring, Toronto, Ontario, Canada, November 2010. What's new and innovative in the treatment of colorectal cancer?

Tremblay L: Medical Radiation Technologists of Central Ontario Education Day, November 2010. Trauma and pregnancy and you.

Tremblay L: Wayne State University, Detroit Trauma Symposium, Detroit, Michigan, USA, November 2010. (1) Radiation from diagnostic imaging - What is the risk?, (2) Ventilator induced lung injury.

Tremblay L: American Thoracic Society, Meet the Professor Session/State of the Art Course, San Diego, California, USA, March 2011. Managing surgical urgencies in the ICU.

Tremblay L: Trauma Association of Canada, Banff, Alberta, Canada, April 2011. (1) Challenging trauma cases, (2) Management options for complex open abdomens.

Wright F: Canadian Association of General Surgeons, Executive Committee, Quebec City, Quebec, Canada, September 2010. Multidisciplinary Cancer Conferences - Adoption of a standards document.

Wright F: Cancer Care Ontario, Colorectal Cancer Meeting, Toronto, Ontario, Canada, April 2011. Provincial MCC update.

Wright F: Canadian Society of Surgical Oncology, Toronto, Ontario, Canada, April 2011. Outcomes for deep melanoma >4mm: An analysis of 1731 cases.

Wright F: Waterloo Wellington Regional Cancer Program, Cambridge, Ontario, Canada, May 2011. Update on Sentinel Node Trials for Breast Cancer - B-32, Z0010, Z0011.

RESEARCH AND INVESTIGATIONS

A randomized phase III trial of neoadjuvant therapy for patients with palpable and operable HER2-positive breast cancer comparing the combination of trastuzumab plus lapatinib to trastuzumab and to lapatinib administered with weekly paclitaxel following AC accompanied by correlative science studies to identify predictors of pathologic complete response. *Boileau J-F, NSABP Collaborative Group: National Surgical Adjuvant Breast and Bowel Project.* (\$15,369 2010)

A randomized phase III trial of neoadjuvant therapy in patients with palpable and operable breast cancer evaluating the effect on pathologic complete response (pCR) of adding capecitabine or gemcitabine to docetaxel when administered before AC with or without bevacizumab and correlative science studies attempting to identify predictors of high likelihood for pCR with each of the regimens. *Boileau JF, NSABP Collaborative Group: National Surgical Adjuvant Breast and Bowel Project.* (\$29,904 2010)

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 with the Ministry of Health and Long Term Care. *Coburn NG: Ministry of Health and Long Term Care.* (\$420,000 2008 - 2013)

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)

General Surgery Quality Improvement Initiative. *Coburn NG, Smith AJ, Hanna S, Taggar R: Sunnybrook Health Sciences Centre.* (\$20,000 2009 - 2010)

Implementation and assessment of a novel multidisciplinary e-discharge summary to improve efficiency, satisfaction, and safety of transfer of care for complex patients. *Tremblay LN, Etchells E, Engels P, Chan K, Farquharson L: Academy Health Science Centres (AHSC) Alternative Funding Plan, Innovation Fund 2010-2011.* (\$71,342 2011 - 2013)

Improving gastric cancer survival: Development and measurement of quality indicators using the RAND/UCLA appropriateness method and population-based data analysis. *Coburn NG, Gagliardi A, Law CHL, Helyer LK, Swallow CJ, McLeod R, Paszat L, Singh S, Rabeneck L, Quan ML: National Cancer Institute of Canada.* (\$552,466 2008 - 2012)

Improving interfacility transfers of trauma patients in southern Ontario using weekly telephone conferencing. *Nathens A, Tien H, Tremblay L (Sunnybrook Physician Lead), Rizoli S, Brenneman F: Academic Health Science Centres (AHSC) /Alternative Funding Plan, Innovation Fund.* (\$100,000 2010 - 2011)

Lumpectomy vs. mastectomy or contralateral prophylactic mastectomy: An exploratory study to understand why women with early breast cancer are now choosing more extensive surgery? *Wright F, Covelli A, Baxter N, 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)

Outcomes in rare diseases: Advanced outcome analysis - A pooled data analysis. *Law CHL, Singh SS, Coburn N: Novartis Oncology Inc.* (\$20,000 2010 - 2011)

Patient and physician preferences for the management of low rectal cancer. *McLeod R, Smith AJ, Schmocker S, Baxter N, Brierley J, Kim J, Victor C: American Society of Colon and Rectal Surgeons.* (\$49,690 2010 - 2011)

Population based analysis of neuroendocrine tumours: Epidemiology, Processes of Care and Outcomes in Ontario. *Singh S, Law CHL: The Dean's Fund, University of Toronto.* (\$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, Deans Fund.* (\$10,000 2006 - 2011)

Predictors of Local Recurrence in Ductal Carcinoma in Situ: A Population-based Outcomes Analysis. *Rakovitch E, Paszat L, Hanna W, Pignol J-P, 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)

Quality initiative of the patient journey in colorectal cancer. *Smith AJ, Gillis AE, Coburn NC: Colon Cancer Canada.* (\$25,000 2010 - 2011)

Screen-Net Ontario: The Ontario cancer screening research network. *Paszat L, Rakovitch E, Seth A, Hanna W, Holloway C, Murphy J, Kupets R, Baxter N, Timmouth J, Hsieh E, Fleshner N, Chiarelli A, Aubera A, vanBallegooijen M, Lansdorp-Vogelaar I, Andrulis I, Knight J: Cancer Care Ontario.* (\$1,180,000 2011 - 2016)

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)

The ability of routine renal imaging to prevent the morbidity and mortality of urinary stone disease in a spinal cord injury patient. *Welk B, Welk B, Law CHL, Herschorn S: Physician Services Incorporated (PSI).* (\$14,000 2011 - 2012)

The Canadian Neuroendocrine Tumour (NET) Registry. *Singh SS, Law CHL: Novartis Oncology Inc.* (\$25,000 2010 - 2011).

The use of extended perioperative low molecular weight heparin to improve cancer specific survival following surgical resection of colon cancer: A randomized controlled trial. *Auer R, Carrier M, Smith AJ, Allan D, Jonker D, Mamazza J, Tagalakakis V, Wells P: Canadian Institutes of Health Research.* (\$800,000 2010 - 2014)

Training Program in Transdisciplinary Cancer Research. *Johnson A, Mahar A, Johnson A, Coburn NG: Queens University Terry Fox Foundation Training Program in Transdisciplinary Cancer Research in Partnership with CIHR.* (\$11,500 2011)

Treatment of Metastatic Colorectal Cancer in the Elderly. *Law CHL, Yang S: Colon Cancer Canada.* (\$60,000 2009 - 2011)

HONOURS RECEIVED

Coburn G: Best Poster Award for "The Costs of Treating Gastric Cancer - A Systematic Review of the Evidence" (Mahar A, Coburn NG, Viola R, Johnson A), during the 9th International Gastric Cancer Association Meeting. April 2011.

Coburn G: Young Investigator Award - Supervisor (Korea) for " A Systematic Review of Preoperative Staging Techniques for Gastric Cancer (Cardoso R, Seevaratnam R, Leake P, Helyer L, Paszat L, Coburn NG). April 2011.

Holloway CMB: Best Paper in the Scientific Session "Whole-Specimen Histopathology Imaging for More Accurate Tumour Measurements" during the Pathology Informatics Meeting, Boston Massachusetts. September 2010.

Law CHL: European Society for Medical Oncology (ESMO) Best Poster Award for "Utility of Progression-free survival (PFS) as a Primary Endpoint in Clinical Studies of Advanced Neuroendocrine tumors (NET)." October 2010.

Rizoli S: Best Manuscript at the Eastern Association for the Surgery of Trauma 2011, 24th Annual Scientific Assembly, for "Permissive hypotension does not reduce regional organ perfusion compared to normotensive resuscitation: Animal study with fluorescent microspheres." January 2011.

Tremblay L: Invitation to join Editorial Board for the Journal of Trauma and Acute Care Surgery. June 2011.

Wright F: Best Paper at the General Surgery Oncology Fellowship Research Day for "Patient Outcomes with Deep Melanoma." February 2011.

Wright F: Best Paper for "Patient Experiences of Sacrectomy," on Plastic Surgery Research Day. February 2011.

Wright F: Bruce Tovee Teaching Award for Undergraduate Teaching, awarded by Department of Surgery, University of Toronto. May 2011.

■ Division Of Neurosurgery

Dr. L. da Costa Jr. 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

Cadotte D, Pirouzmand F: The epidemiological trends of head injury in the largest Canadian adult trauma center from 1986 to 2007. *Journal of Neurosurgery*: June 2011: 114(6): pp 1502-1509. E-published January 28, 2011.

Gunita M, Bjarnason G, Pirouzmand F, Bilbao J, Danjoux C, Sahgal A: Pre-operative stereotactic body radiotherapy to a skull renal cell metastasis: An alternative to pre-operative embolization? *Journal of Palliative Medicine*: February 2011: 14(2): pp 157-160. E-published January 12, 2011.

Tien HC, Jung V, Pinto R, Mainprize T, Scales DC, Rizoli SB: Reducing time-to-treatment decreases mortality of trauma patients with acute subdural hematoma. *Annals of Surgery*: June 2011: 253(6): pp 1178-1183.

INVITED VISITS

Houlden DA: Canadian Association of Neurophysiological Monitoring, 3rd Annual Meeting, Banff, Alberta, Canada, September 2010. Some of what I learned on my trip from the ICU to the OR and back.

Houlden DA: Canadian Pediatric Spine Study Group, Annual Meeting, Ottawa, Ontario, Canada, December 2010. Intraoperative monitoring update.

Houlden DA: Charles E. Henry Society, Geneva, New York, USA, April 2011. Intraoperative neurophysiological monitoring during resection of spinal tumours.

Mainprize TG: Focused Ultrasound Surgery Foundation, Charlottesville, Virginia, USA, March 2011. Role of MRI guided focused ultrasound in brain tumors.

Pirouzmand F: American Association of Neurological Surgeons, Denver, Colorado, USA, April 2011. The epidemiological trends of head injury in the largest Canadian adult trauma center from 1986 to 2007.

RESEARCH AND INVESTIGATIONS

A study to evaluate the safety and feasibility of transcranial MRI-guided focused ultrasound surgery in the treatment of brain tumors. *Mainprize T, Hynynen K, Sahgal A, Perry J, Symons S: Focused Ultrasound Surgery Foundation*. (\$170,000 2011 - 2013)

Catecholamines as outcome markers in traumatic brain injury study COMA in TBI study. *Rizoli S, Capone A, Rubinfeld G, da Costa L, Topolovec-Vranic J, Chapman M, Shawn R: Physicians' Services Incorporated*. (\$162,500 2011 - 2013)

Molecular targetting of the RHO-GTPase pathway in human astrocytomas. *Rutka J, Hynynen K, Mainprize T: Canadian Institutes of Health Research (CIHR)*. (\$790,000 2010 - 2015)

Optical coherence tomography for intraoperative imaging during skull base neurosurgical procedures. *Yang V, Cusimano M, da Costa L, Standish B: Canadian Institutes of Health Research*. (\$134,200 2011 - 2014)

Symptomatic carotid stenosis revascularization - what's the hold up? *da Costa L: Canadian Stroke Network*. (\$7,000 2010)

■ Division Of Orthopaedics

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. R. Jenkinson	Lecturer	Dr. I. Weiler	Assistant Professor
Dr. H.J. Kreder	Professor (Division Head)	Dr. C. Whyne	Associate Professor
Dr. B.E. Maki	Professor	Dr. C.S. Wright	Assistant Professor
Dr. B.W. Malcolm	Assistant Professor	Dr. A.J.M. Yee	Associate Professor

PUBLICATIONS

Ahn H, Kreder H, Mahomed N, Beaton D, Wright JG: Empirically derived maximal acceptable wait time for surgery to treat. Canadian Medical Association Journal: June 2011: 183(9): pp E565-E570. E-published May 2, 2011.

Akens MA, Burch S, Yee AJ: Pre-clinical evaluation of photodynamic therapy as treatment for spinal metastases. In: Bone and Brain Metastases: Advances in Research and Treatment (Sahgal A, Chow E, Merrick J, eds.) Nova Science Publishers Inc, New York 2010: pp 113-124.

Akens MK, Burch S, Yee AJM: Evaluation of photodynamic therapy as treatment for spinal metastases. Journal of Pain Management: January 2011: 4(1): pp 83-90.

Bederman S, Coyte PC, Kreder HJ, Mahomed NN, McIsaac WJ, Wright JG: Who's in the Driver's Seat? The influence of patient and physician enthusiasm on regional variation in degenerative lumbar spinal surgery: A population-based study. Spine: March 2011: 36(6): pp 481-489.

Bederman SS, McIsaac WJ, Coyte PC, Kreder HJ, Mahomed NN and 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.

Bederman SS, Murnaghan O, Malempati H, Lansang E, Wilkinson M, Johnston E, Bronstein Y, Finkelstein JA, Yee AJM: In-hospital mortality and surgical utilization in severely polytraumatized patients with and without spinal injury. Journal of Trauma: E-published March 10, 2011.

Blankstein M, Byrick RJ, Richards RR, Mullen JB, Zdero R, Schemitsch EH: Pathophysiology of fat embolism: A rabbit model. Journal of Orthopaedic Trauma: E-published June 10, 2011.

Boscart, VM, Levchenko AI, Fernie GR: Defining the configuration of a hand hygiene monitoring system. American Journal of Infection Control: September 2010: 38(7): pp 518-522.

Cameron HU: The proximal modular neck in THA: A bridge too far: Opposes. Orthopaedics: September 2010: 33(9): p 641.

Esses SI, McGuire R, Jenkins J, Finkelstein J, Woodard E, Watters WC 3rd, Goldberg MJ, Keith M, Turkelson CM, Wies JL, Sluka P, Boyer KM, Hitchcock K: The treatment of symptomatic osteoporotic spinal compression fractures. Journal of the American Academy of Orthopaedic Surgery: March 2011: 19(3): pp 176-182.

Gagliardi AR, Legare F, Brouwers MC, Webster F, Wiljer D, Badley E, Straus S: Protocol: developing a conceptual framework of patient mediated knowledge translation, systematic review using a realist approach. Journal of Implementation Science: March 2011: 6(1): p 25.

Hardisty MR, Akens MK, Yee A, Whyne C: Image registration demonstrates a variable effect of the growth plate on vertebral strain. Annals of Biomedical Engineering: September 2010: 38(9): pp 2948-2955. E-published May 5, 2010.

Hojjat SP, Hardisty MR, Whyne CM: Micro-computed tomography-based highly automated 3D segmentation of the rat spine for quantitative analysis of metastatic disease. Journal of Neurosurgery: Spine: September 2010: 13(3): pp 367-370.

Hojjat SP, Whyne CM: Automated quantitative microstructural analysis of metastatically involved vertebrae: Effects of stereologic model and spatial resolution. Medical Engineering and Physics: October 2010: 33(2): pp 188-194.

- Jenkinson RJ, Kreder HJ:** Proximal tibia. In: Evidence Based Orthopaedics, First Edition (Mohit Bhandari, ed.). Blackwell Publishing Ltd, Boston, Massachusetts: 2011: pp 534-540.
- Jenkinson R, Maathuis MA, Ristevski B, Omoto D, Stephen DJG, Kreder H:** Effect of delay to surgery on functional outcomes for displaced acetabular fractures. *The Journal of Bone and Joint Surgery, British Volume*: June 2011: 93B(Suppl3): p 264.
- Kampa R, Al-Beer A, Axelrod T:** Madelung's deformity: Correction using opening wedge osteotomy of the radius, with Darrach procedure using the ulnar head as trapezoidal bone graft. *Journal of Hand Surgery (European Volume)*: July 2010: 35: p 708. E-published July 9, 2010.
- King EC, Lee TA, McKay SM, Scovil CY, Peters AL, Pratt J, Maki BE:** Does the 'eyes lead the hand' principle apply to reach-to-grasp movements evoked by unexpected balance perturbation? *Human Movement Science*: April 2011: 30(2): pp 368-383. E-published October 28, 2010.
- Kreder HJ:** Proximal femoral fractures: Best surgical practice. In: *Fractures of the Proximal Femur: Improving Outcomes* (Waddell JP, ed.) Elsevier, Philadelphia, Pennsylvania: 2010: pp 265-283.
- Kreder HJ, Hawker GA:** Physical examination of the knee. In: *Fam's Musculoskeletal Examination and Joint Injection Techniques*, 2nd edition (Lawry GV, Kreder HJ, Hawker GA, Jerome D, eds.) Mosby, Elsevier, Philadelphia: 2010: pp 65-88.
- Kreder HJ, Jerome D:** Physical examination of the hip. In: *Fam's Musculoskeletal Examination and Joint Injection Techniques*, 2nd Edition (Lawry GV, Kreder HJ, Hawker GA, Jerome D, eds.) Mosby Elsevier, Philadelphia 2010: pp 45-64.
- Lawry GV, Hall H, Ammendolia C, Fam A:** The Spine. In: *Fam's Musculoskeletal Examination and Joint Injection Techniques: Second Edition* (Lawry GV, Kreder HJ, Hawker GA, Jerome D, eds.) Mosby Elsevier, Philadelphia: 2010: pp 103 - 118.
- Lawry GV, Kreder HJ, Hawker GA, Jerome D:** *Fam's Musculoskeletal Examination and Joint Injection Techniques*, 2nd Edition (Lawry GV, Kreder HJ, Hawker GA, Jerome D, eds.) Mosby Elsevier, Philadelphia 2011.
- Levchenko AI, Hufton GC, Boscart VM, Fernie GR:** Embedded system for hygiene compliance monitoring. *IEEE Transactions on Automation Science and Engineering*: July 2010: 7(3): pp 695-698.
- Lever JP, Zdero R, Nousiainen MT, Waddell JP, Schemitsch EH:** The biomechanical analysis of three plating fixation systems for periprosthetic femoral fracture near the tip of a total hip arthroplasty. *Journal of Orthopaedic Surgical Research*: July 2010: 5: p 45.
- Liu T, Akens MK, Chen J, Wise-Milestone L, Wilson BC, Zhang G:** Photodynamic molecular beacons in breast cancer vertebral metastases: Imaging validation of beacon specificity. *Bioconjugate Chemistry*: June 2011: 22(6): pp 1021-1030. E-published May 24, 2011.
- Lotan R, Al-Rashdi A, Yee A, Finkelstein J:** Clinical features of conjoined lumbosacral nerve roots versus lumbar intervertebral disc herniations. *European Spine Journal*: September 2010: 19(7): pp 1094-1098.
- Lubovsky O, Hardisty MR, Wright D, Kreder HJ, Whyne C:** CT based analysis of weight bearing areas in the native acetabulum. *The Journal of Bone and Joint Surgery, British Volume*: June 2011: 93B: pp 248-249.
- Lubovsky O, Wright D, Hardisty M, Kiss A, Whyne C, Kreder H:** Importance of the dome and posterior wall as evidenced by bone density mapping in the acetabulum. *Clinical Biomechanics*: March 2011: 26(3): pp 262-266.
- McIntosh G, Hall H:** Low back pain (Acute) - updated. *Clinical Evidence (Online)*: May 2011: pii 1102.
- Mitera G, Probyn L, Ford M, Donovan A, Rubenstein J, Finkelstein J, Christakis M, Zhang L, Campos S, Culleton S, Nguyen J, Sahgal A, Barnes E, Tsao M, Danjoux C, Holden L, Yee A, Khan L, Chow E:** Correlation of computed tomography imaging features with pain response in patients with spine metastases after radiation therapy. *International Journal of Radiation Oncology, Biology, Physics*: October 2010: E-published October 1, 2011.
- Moss IL, Woodhouse KA, Whyne CM, Yee AJM:** A novel thiol-modified-hyaluronan and elastin-like polypeptide composite material for tissue engineering of the nucleus pulposus of the intervertebral disc. *Spine*: June 2011: 36(13): pp 1022-1029.
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- Pang J, Jenkinson RJ, Mitera G, Donovan A, Pugash R, Trudeau M, Quinton C, Sinclair E, Nguyen J, Preutti R, Chow E:** Cemented Hemiarthroplasty, percutaneous acetabular cementoplasty and post-operative radiation for a high risk lesion of the hip. In: *Advanced Cancer, Pain and Quality of Life* (Chow E, Merrick J, eds.) Nova Science Publishers, Hauppauge, New York: 2010: pp 320.

- Peeling L, Hentschel S, Fox R, Hall H, Forney D:** Intraoperative spinal cord and nerve root monitoring: A survey of Canadian spine surgeons. *Canadian Journal of Surgery*: October 2010: 53(5): pp 324-328.
- Peleg E, Beek M, Joskowicz L, Liebergall M, Mosheiff R, Whyne CM:** Patient specific quantitative analysis of fracture fixation in the proximal femur implementing principal strain ratios. Method and experimental validation. *Journal of Biomechanics*: August 2010: 43(14): pp 2684-2688.
- Podolsky D, Martin A, Whyne CM, Massicote E, Hardisty MR, Ginsberg H:** Exploring the role of 3-dimensional simulation in surgical training: Feedback from a pilot study. *Journal of Spinal Disorders & Techniques*: December 2010: 23(8): pp e70-e74.
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- Razmjou H, Davis A, Jaglal S, Holtby R, Richards RR:** Disability and satisfaction after rotator cuff decompression or repair: A sex and gender analysis. *BMC Musculoskeletal Disorders*: April 2011: 12: p 66.
- Shadgan B, Menon M, Sanders D, Berry G, Martin Jr. C, Duffy P, Stephen D, O'Brien PJ:** Current thinking about acute compartment syndrome of the lower extremity. *Canadian Journal of Surgery*: October 2010: 53(5): pp 329-334.
- Sibley KM, Straus S, Webster F, Jaglal Susan B:** Moving balance and mobility evidence into action: A primer in knowledge translation. *Gait and Posture*: April 2011: 33(4): pp 527-531. E-published April 1, 2011.
- Thind AS, Strauss BH, Teitelbaum AA, Karshaffian R, Ladouceur M, Whyne CM, Goertz DE, Foster S:** A novel method for the measurement of proximal fibrous cap puncture force in chronic total occlusions: The effect of increasing age. *EuroIntervention*: March 2011: 6(8): pp 997-1002.
- Tung J, Gage WH, Zabjek KF, Maki BE, McIlroy WE:** Frontal plane standing balance with an ambulation aid: Upper limb biomechanics. *Journal of Biomechanics*: May 2011: 44(8): pp 1466-1470. E-published April 1, 2011.
- Wai E, Sebastian R, Dagenais S, Hall H:** Physical activity, smoking cessation and weight loss. In: *Evidence Based Management of Low Back Pain* (Dagenais S, Haldeman S, eds.) Elsevier Mosby, St. Louis: 2011: pp 39-54.
- Whyne CM, Hardisty M:** Quantification of metastatic burden in the spine and its structural implications. In: *Bone and Brain Metastases: Advances in Research and Treatment* (Sahgal A, Chow E, Merrick J, eds.) Nova Publisher: 2010.
- Whyne CM, Haridsty MR:** Quantification of metastatic burden in the spine and its structural implications. *Journal of Pain Management*: April 2011: 4(2): pp 169-182.
- Wiesel BB, Richards RR:** Glenohumeral arthrodesis. In: *Operative Techniques in Orthopaedic Surgery, Volume Three* (Wiesel SW, ed.) Lippincott Williams & Wilkins: 2011: pp 3256-3260.
- Winter JD, Akens MK, Cheng HL:** Quantitative MRI assessment of VX2 tumour oxygenation changes in response to hyperoxia and hypercapnia. *Physics, Medicine, Biology*: March 2011: 56(5): pp 1225-1242. E-published February 1, 2011.
- Wright, JG, Hawker GA, Hudak PL, Croxford R, Glazier RH, Mahomed NN, Kreder HJ, Coyte PC (Toronto Arthroplasty Research Group Writing Committee):** Variability in physician opinions about the indications for knee arthroplasty. *The Journal of Arthroplasty*: June 2011: 26(4): pp 569-575.

INVITED VISITS

- Axelrod TS:** American Society for Surgery of the Hand, 65th Annual Meeting, Boston, Massachusetts, USA, October 2010. The Essex-Lopresti Lesion Precourse 2: Disorders in forearm rotation: An international perspective.
- Axelrod TS:** AO North America, AO Basic Principles of Fracture Management, Toronto, Ontario, Canada, November 2010. (1) Course Chairman/Opening Remarks, Chair of Panel Sessions, Summary and Evaluation, (2) Lecture: Pre-operative planning.
- Axelrod TS:** AO Trauma, Technical Commission Think Tank, Boca Raton, Florida, USA, January 2011. (1) Failures of saphoid reconstruction, (2) Is there a role for dorsal wrist fracture plate fixation?, (3) Wrist salvage procedures.
- Axelrod TS:** AO India, Hand Wrist Trauma Course with Cadavers, New Delhi, India, February 2011. (1) Mal-unions of the distal radius, (2) The role of LCP in the hand, (3) Wrist salvage procedures.
- Axelrod TS:** University of South Florida (USF) – Health, Third Annual Current Concepts in Upper Extremity Restoration, Atlanta, Georgia, USA, April 2011. (1) Keynote Speaker: Evolution of plate

techniques: Have we reached the end of development?, (2) Case-based discussion groups, (3) Forearm and galeazzi fractures: What do I need to know?, (4) Surgical approaches to the distal radius.

Axelrod TS: AO North America, AO Basic Principles of Fractures Management, Halifax, Nova Scotia, Canada, May 2011. (1) Chair of Group B: Case-Based Discussion Groups, (2) Chair: Intra-articular fracture lectures, (3) Lecturer: Pre-operative planning.

Axelrod TS: AO North America, Hand and Wrist Trauma Course with Cadaver Dissection, Miami, Florida, USA, May 2011. (1) Lab Director: Exposures of PIP, scaphoid and hemi-hamate reconstruction, (2) Acute scaphoid fractures, volar exposure, (3) Perilunate injuries.

Cameron HU: Current Concepts Meeting, Orlando, Florida, USA, December 2010. (1) Hip fusion concession, (2) Proximal femoral fixation.

Cameron HU: 12th Annual Current Concepts Meeting, Las Vegas, Nevada, USA, May 2011. (1) Hip fusion conversion, (2) Proximal femoral fixation.

Cameron JC: Advanced Course on Osteotomies Around The Knee, Utrecht, The Netherlands, November 2010. (1) Distal femoral osteotomy - long term results, (2) Transverse plane deformities and rotational HTO, (3) Total knee arthroplasty with rotational correction.

Cameron JC: Rocky Mountain Traumatological Society, Snowmass Village, Colorado, USA, January 2011. Combined rotational tibial osteotomy and total knee replacement for congenital dislocation of the patella.

Fernie GR: 4th National Spinal Cord Injury Conference, Niagara Falls, Ontario, Canada, October 2010. Preventing back injury in caregivers - Understanding the use of patient lift devices.

Fernie GR: IBM, 2010 Research & Innovation Summit, Markham, Ontario, Canada, October 2010. Innovations in Rehab.

Fernie GR: Zoomer Show, Toronto, Ontario, October 2010. Aging in place gracefully.

Fernie GR: OHA, Health Achieve 2010 Rehabilitation Session, Toronto, Ontario, Canada, November 2010. Emerging rehabilitation sciences: Linking rehabilitation professionals and technology for provision of quality care.

Fernie GR: Canadian Association on Gerontology, 39th Annual Scientific and Educational Meeting, Montreal, Quebec, Canada, December 2010. Optimal design of the built environment for older adults: Empirical evidence from a new state-of-the art research facility.

Fernie GR: Stair and Railing Association of Canada AGM, Toronto, Ontario, Canada, December 2010. Stair usability and safety research.

Fernie GR: The Regional Geriatric Program of Eastern Ontario, 2nd Annual Geriatric Refresher Day, Ottawa, Ontario, Canada, March 2011. (1) The development of technology to support positive aging, (2) The need for technology to support people with physical and cognitive impairments, and their family caregivers, living at home.

Fernie GR: Geriatric Medicine Refresher Day, 25th Anniversary, Back to the Future: 25 Years of Geriatric Care, London, Ontario, Canada, May 2011. (1) Innovations in Geriatric Care: Making Small Miracles, (2) Preparing to welcome an elderly relative home from hospital.

Fernie GR: Ontario Centre for Engineering and Public Policy, 2011 Conference: Engineering a Better Ontario, Ottawa, Ontario, Canada, May 2011. Improving health-care delivery and patient safety.

Fernie GR: Queen's University, 13th Rehabilitation Research Colloquium, Kingston, Ontario, Canada, May 2011. Recent research being conducted at Toronto Rehab.

Fernie GR: Haifa University, Haifa, Israel, June 2011. The development of technology to help people age successfully, technology for ageing.

Fernie GR: Ministry of Health and Long-Term Care (Ontario), Toronto, Ontario, Canada, June 2011. Recent developments in solving important problems of hand hygiene, sleep apnea, falls and technology to support family caregivers.

Finkelstein JA: Response Shift Think Tank, Boston, Massachusetts, USA, September 2010. Spine Surgery.

Ford MH: Dewar Orthopaedic Society, Predator Ridge, British Columbia, Canada, September 2010. Dislocations - spinopelvic and occipito-cervical.

Gollish JD: Manitoba Orthopaedic Society, Annual Meeting, Winnipeg, Manitoba, Canada, October 2010. Implementing new thromboprophylaxis management - experience with a new oral agent.

Gollish JD: Ontario College of Family Practice 48th Annual Scientific Assembly, Toronto, Ontario, November 2010. Accessing Care for Patients with Hip and Knee Arthritis.

Gollish JD: Dalhousie University, Orthopaedic Grand Rounds, Halifax, Nova Scotia, Canada, November 2010. Gluteal dysfunction following total hip replacement.

Gollish JD: Queen Elizabeth II Hospital, Orthopaedic Rounds, Halifax, Nova Scotia, Canada, November 2010. Implementing change in clinical practice - introduction of a new oral agent for VTE prophylaxis for hip and knee replacement surgery.

Hall H: Styker Spine, Techniques in Occipito-Cervical-Thoracic Reconstruction, Baltimore MD, August 2010. Guidelines; What Guidelines?

Hall H: University of Saskatchewan College of Medicine, Saskatoon SK, September 2010. Assessing back pain in family practice.

Hall H: Family Medicine Forum 2010, Vancouver BC, October 2010. Practical management of low back pain.

Hall H: CBI Health, Kitchener and London, Ontario, Canada, November 2010. Managing back pain in a family practice.

Hall H: CBI Health, Abbotsford, British Columbia, Canada, January 2011. A practical understanding of low back pain.

Hall H: CBI Health, Barrie, Ontario, Canada, January 2011. A pattern approach to low back pain.

Hall H: Prince George Hospital, Prince George, British Columbia, Canada, January 2011. A practical understanding of low back pain.

Hall H: CBI Health, Belleville, Ontario, Canada, February 2011. A pattern approach to low back pain.

Hall H: Hamilton Academy of Medicine, Hamilton, Ontario, Canada, February 2011. Back pain: Making it work.

Hall H: CBI Health, Fort McMurray, Alberta, Canada, March 2011. Managing back pain in family practice.

Hall H: CBI Health, Toronto, Ontario, Canada, April 2011. A sensible approach to low back pain.

Hall H: University of Saskatchewan, Saskatoon/Prince Albert/Regina/Swift Current, Saskatchewan, Canada, March 2011. Low Back pain assessment and management.

Hall H: CBI Health, Scarborough, Ontario, Canada, May 2011. Managing low back pain in family practice.

Hall H: The New Zealand Back Institute, Palmerston North and Lower Hutt, New Zealand, May 2011. Managing Low Back Pain in Family Medicine.

Hall H: Orthopaedic Conference 2011, Victoria, British Columbia, June 2011. (1) The pain disorder patient: What the clinician needs to know, (2) The pattern approach to identifying back pain.

Hall H: WorkSafe BC, Vancouver, British Columbia, June 2011. (1) Pain disorder: Recognition and management, (2) A logical approach to back pain.

Jenkinson RJ: Orthopaedic Trauma Association, 26th Annual meeting, Baltimore, Maryland, USA, October 2010. Periprosthetic Fractures Current Concepts: (1) Periprosthetic fractures of the tibia, (2) The role of revision arthroplasty.

Jenkinson RJ: AO North America, Advanced Principles and Techniques of Operative Fracture Management, Knee Dislocation, Toronto, Ontario, Canada, November 2010. (1) ORIF distal intra-articular femur fractures: Update on techniques and complications, (2) Principles of emergency management.

Jenkinson RJ: Canadian Orthopaedic Resident Review in Trauma, Toronto, Ontario, Canada, November 2010. Pelvic fractures: Top ten things that you need to know.

Jenkinson RJ: AO North America, Basic Principles and Techniques of Operative Fracture Management: Practical Exercise IX, Halifax, Nova Scotia, Canada, May 2011. (1) External Fixation A. Pelvic Fracture B. Spanning external fixation – femur/tibia, (2) Relative stability: Intramedullary techniques.

Kreder HJ: AO North America, Toronto, ON, November 2010. (1) Moderator for General Concepts of Advanced Principles of Fracture Management, (2) Difficult fracture problems: (a) Bone graft substitute update 2010, (b) Periprosthetic femur fractures, (3) Orthopaedic advanced principles of fracture management.

Kreder HJ: Principles and Practice of Clinical Research, Mississauga, Ontario, Canada, November 2010. (1) Non-randomized studies: When to consider and how to design them, (2) Randomized techniques and issues in clinical research.

Kreder HJ: Orthopaedic OR Personnel Course, Winnipeg, Manitoba, Canada, January 2011. (1) Femoral neck and intertrochanteric fracture fixation: Plate, (2) Antegrade and retrograde femoral nailing.

Kreder HJ: Surgeon Fracture Symposium, Winnipeg, Manitoba, Canada, January 2011. (1) Moderator: Tibia, (a) Tibial plateau fractures, (b) Talus fractures, (c) Tibial pilon fractures.

Kreder HJ: AO North America, Pelvic and Acetabular Fracture Management, Miami, Florida, USA, May 2011. (1) Radiology of T-type fractures, (2) Cadaveric dissection approach to the posterior pelvis; Sacrum and sacroiliac joint, (3) Pelvic and acetabular fracture management course.

Maki BE: Public Health Agency of Canada/Canadian Longitudinal Study on Aging, Consumer-Product-Related Senior Injury Risk Assessment Consultative Meeting, Toronto, Ontario, Canada, November 2010. Participant.

Maki BE: Canadian Institutes of Health Research, Institute of Aging, Mobility in Aging Teams Meeting, Toronto, Ontario, Canada, May 2011. Participant.

Marks PH: International Cartilage Repair Society (ICRS), Barcelona, Spain, September 2010. (1) A randomized, multicenter clinical trial comparing BST-CarGel to microfracture in repair of focal articular cartilage lesions on the femoral condyle: Interim results from 41 patients, (2) Correlation of tissue histomorphometry with ICRS histology scores in biopsies obtained from a randomized controlled clinical trial comparing BST-CarGel versus microfracture, (3) ICRS histology scores of biopsies from an interim analysis of randomized controlled clinical trial show significant improvement in tissue quality at 13 months for BST-CarGel versus microfracture, (4) BST-CarGel treatment shows trend of improved collagen architecture and stratified hyaline structure compared to microfracture in 13 month biopsies from an interim analysis of a randomized controlled clinical trial, (5) Subcondral bone plate characteristics in human and animal bone: Implications for cartilage repair, (6) The influence of microfracture hole spacing and depth cartilage repair in chondral defects: Preliminary results.

Marks PH: University of British Columbia, Vancouver, British Columbia, Canada, September 2010. Articular cartilage repair, principals, techniques and future consideration.

Marks PH: Spital Bruderholz, Basel, Switzerland, June 2011. Research in orthopaedic sports medicine: Outcomes.

Nam D: Schatzker Trauma Course, Kelowna, British Columbia, Canada, May 2011. Distal radius fractures and clavicle fractures.

Nam D: 2nd Annual Orthopaedic Acute Care and Beyond, Toronto, Ontario, Canada, June 2011. Shoulder Arthroplasty.

Nousiainen M: Dewar Orthopaedic Society/University of British Columbia - Okanagan campus, Kelowna, British Columbia, Canada, October 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: Orthopaedic Trauma Association, 26th Annual Meeting, Mini-Symposium on Periprosthetic Fractures: Current Concepts, Baltimore, Maryland, MD, October 2010. Podium presentations: (1) Introduction to periprosthetic fracture problem, (2) Supracondylar femur fractures: Nail versus plate.

Nousiainen M: AO North America, Basic Principles and Technique of Operative Fracture Management Course, Toronto, Ontario, Canada, November 2010. Moderator of Practical Exercise: Absolute Stability, (2) Podium Presentation: Distal femur fractures.

Nousiainen M: AO North America, Basic Principles and Techniques of Operative Fracture Management Course, Halifax, Nova Scotia, Canada, November 2010. Podium Presentation: Distal femur fractures.

Nousiainen M: Registered Practical Nurses Association of Ontario, RPN Operating Room Specialty Interest Group, Toronto, Ontario, Canada, April 2011. Podium presentation: Pelvic fractures: The good, the bad, and the ugly.

Richards RR: American Orthopaedic Association, Resident Leadership Forum, Boston, Massachusetts, USA, June 2011. Considerations for setting up a practice: Academic, private, hospital-based, Canadian.

Stephen DGS: Manitoba Orthopaedic Society, 50th Annual Meeting, Winnipeg, Manitoba, Canada, October 2010. (1) Minimally invasive osteosynthesis, (2) Update on pilon fractures, (3) Update on femur fractures.

Stephen DGS: Orthopaedic Trauma Association (OTA), Annual Meeting, Baltimore, Maryland, USA, October 2010. (1) Faculty, (2) Moderator for Lab on Comprehensive Fracture Course for Residents: Hands-on skills lab-calcaneus fractures, (3) Mini Symposium on Periprosthetic Fractures: Current Concepts.

Stephen DGS: AO North America, Part II: Advanced Principles and Techniques of Operative Fracture Management, Toronto, Ontario, Canada, November 2010. (1) Chair, (2) Introduction/Welcome: How to maximize your experience/Audience Interactive Response System (AIRS), (3) Closing Comments: End of Course AIRS Questions.

Stephen DGS: Course Chairmen and Directors Symposium Program, Phoenix, Arizona, USA, November 2010. (1) Chairman responsibilities leading to course opening, (2) Daily practical exercise pre-course.

Stephen DGS: AO North America, Part II: Advanced Principles and Techniques of Operative Fracture Management, Sun Valley, Idaho, USA, March 2011. (1) Faculty, (2) Complex ankle fracture: current techniques.

Whyne C: University of Leeds, Guest, Leeds, United Kingdom, November 2010. Oncological Engineering Workshop.

Yee AJM: Canada and the United States Bone and Joint Decade, Young Investigators Initiative, Toronto, Ontario, Canada, October 2010. (1) Keynote Speaker: Integration of research with clinical practice -- Perspectives from mid career, (2) Faculty Participant/Mentor for Fall 2010 Workshop.

Yee AJM: Canadian Spine Society, 11th Annual Meeting, Symposia, Quebec City, Quebec, Canada, March 2011. Neurmonitoring and perioperative complications in spine surgical oncology.

Yee AJM: Cancer Hospital Chinese Academy of Medical Sciences, Beijing, China, June 2011. Visiting Professor: Translational research opportunities for the treatment of vertebral metastases.

RESEARCH AND INVESTIGATIONS

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 head to head comparison of two self-reported measures in patients with knee arthritis. *Kennedy D, Denis S, Dickson P, Andron J, Flynn J, Stratford P, Gollish J: Sunnybrook Research Institute, PBR Award.* (\$7,000 2010 – 2011)

A phase I trial on the use of PDT in the treatment of breast cancer vertebral metastasis. *Yee AJ, Wilson BC, Whyne CM, Clemons M, Chow E, Sahgal A, Akens MA, Bisland SK, Burch S: Canadian Breast Cancer Foundation, Ontario Chapter.* (\$300,850 2009 – 2012)

A randomized controlled trial of 1st MTP joint fusion compared to 1st MTP joint hemiarthroplasty in severe hallux rigidus. *Lau J, Stephen DJG: The Physicians' Services Incorporated Foundation.* (\$73,000 2004 – 2010)

Advanced prototyping and testing of an intelligent patient lifting and handling device. *Fernie GR, Dongyun G, Hart A, Gilbert P, Wei Ming Jun, Kerong Dai, 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)

Bone stability and tumor burden in mixed osteolytic/osteoblastic spinal metastases (funding declined). *Whyne CM, Yee A, Finkelstein JA, Akens MK, Morris A, Probyn L: Canadian Breast Cancer Foundation.* (\$389,200 2008 – 2011)

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 Inst: Cancer research; Other inst: MSK Health and Arthritis).* (\$379,862 2008 – 2012)

Can patient decision aids improve SDM and reduce gender disparity in the utilization of total knee arthroplasty? A pilot study. *Hawker G, Tugwell P, Borkhoff C, Dervin G, Kreder H, Dawn S: Women's College Hospital.* (\$58,822 2010 – 2013)

Can patient decision aids improve shared decision making and reduce gender disparity in the utilization of total knee arthroplasty? A pilot study. *Tugwell PSL, Hawker G, Borkhoff C, Dervin G, Kreder H, Dawn S: Canadian Institutes of Health Research.* (\$110,416 2011 – 2013)

Centre for Research in Image-Guided Therapeutics. *Hynynen K, multiple collaborators including Whyne CM: Canada Foundation for Innovation, Research Hospital Fund Large Scale Institutional Endeavors.* (\$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: Canadian Institutes of Health Research.* (\$1,499,982 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: Natural Sciences*

- and Engineering Research Council, Collaborative Research and Training Experience (CREATE) Program. (\$1,650,000 2009 - 2015)
- Development of a model to evaluate annular repair in vivo. Yee A, Whyne CM: Ontario Center of Excellence. (\$22,605 2011).
- Development of a novel method for stabilizing traumatic craniofacial injuries. Whyne CM, Fialkov J, Regev E, Santerre P: Congressionally Directed medical Research Program. (\$100,000 2010 - 2012)
- Development of products to reduce burden of care at home. Fernie GR, Lefebvre N, Mihailidis A: Ministry of Research and Innovation. (\$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? - A Pilot Study. Wadey V, McDonald-Blumer H, Cividino A, Wessel J, Levy D, McIlroy J, Dauphine: University of Toronto, Dean's Fund. (\$25,000 2009 - 2012)
- 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)
- Efficacy of a handrail cueing system designed to prevent falls by facilitating effective grasping. Maki BE, Middleton S: Ontario Neurotrauma Foundation. (\$7,000 2011)
- Finite element modelling of the human craniofacial skeleton. Fialkov J, Whyne CM: Advanced Cranio-Maxillofacial Forum. (\$60,000 2009 - 2011)
- 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 for Health Research. (\$1,950,000 2009 - 2015)
- Identifying and removing barriers to the use of regional anesthesia for total hip arthroplasty in Ontario. Webster F, McCartney CJ, Jenkinson R, Kiss A, Zwarenstein M, Kreder H: AHSC AFP Innovation Fund. (\$75,000 2011 - 2012)
- Identifying barriers to meeting the Ontario standards for time to treat hip fracture patients. Kreder HJ: Sunnybrook Medical Services Alternative Funding Plan Association. (\$75,000 2009 - 2011)
- Improvement in the methods of handling human waste to reduce the probability of cross-infection in healthcare institutions: problem analysis and concept development phase. Fernie GR, McGeer A: Ministry of Health and Long-Term Care. (\$300,000 2009 - 2011)
- Improving emergent care for bone health in vertebral disease - knowledge translation through ethnographic study of access, triage, and care delivery. Webster F, Yee AJ, Fehlings MG, Kreder HK, Gagliardi A: Canadian Institutes of Health Research. (\$67,500 2010 - 2011)
- Improving quality of care for Canadians at high-risk for fractures: A knowledge to action approach. Jaglal S: Canadian Institutes of Health Research. (\$10,000 2011 - 2012)
- Improving the quality of colonoscopy: Development and pilot testing of an endoscopist audit and feedback report derived from health administrative data. Tinmouth J, Baxter N, MacKinnon M, Paszat L, Rabeneck L, Sutradhar R, Webster F: Canadian Cancer Society Research Institute. (\$186,758 2011 - 2013)
- Incidence of post-operative chronic pain after total hip and knee replacement - pilot study. Boljanovic-Susic D, Rachevitz M, Gollish JD, Woodhouse L: Sunnybrook Health Sciences Centre - PBR Award. (\$10,000 2009 - 2010)
- Instrumental activities of daily living and social roles following hip and knee replacement: Understanding why people's engagement doesn't change. Davis A, Webster F, Jaglal A, Jenkinson R, Perruccio A, Schemitsch E, Waddell J: The Arthritis Society. (\$360,000 2011 - 2014)
- Intelligent Design for Adaptation, Participation and Technology (IDAPT): Innovative rehabilitation for people in challenging environments. Fernie GR, Colangelo A, Cott C, Davis A, De Nil L, Maki BE, McIlroy WE, Naglie G, Naumann S, Patla A: Canadian Foundation for Innovation. (\$18,398,069 2004 - 2011)
- Knowledge translation through ethnographic study of access, triage, and care delivery for emergent spine care. Webster F, Yee A, Fehlings M, Gagliardi A, Kreder H, Macdonald R, Chapman M: Canadian Institutes of Health Research. (\$80,500 2010 - 2011)
- Laboratories and workspaces for scientists and graduate students engaged in the iDAPT research program at 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. (\$17,631,726 2004 - 2011)
- Modeling thin bone structures of the human skeleton. Whyne C: Natural Sciences and Engineering Research Council (NSERC). (\$165,000 2006 - 2011)

Moving from knowledge to action: The University of Toronto Spine Collaborative (UT-SpineLINK) - Phase II proposal in the implementation of knowledge translation strategies. *Yee A, Webster F, Fehlings MG, Rose K, Bohn Des, Ahn H, DaCosta D, Ginsberg H, Singh A, McDonald R, Furlan J, Neary M: AHSC AFP Innovation Fund. (\$100,000 2011 - 2012)*

Multi-resolution modeling of thin bone structure. *Whyne C: Natural Sciences and Engineering Research Council of Canada (NSERC). (\$245,000 2011 - 2015)*

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). (\$555,000 2009 - 2010; OCE Funds \$220,000; Baylis \$335,000)*

Ontario FAITH pilot study. *Bhandari M, Kreder H, Schemitsch E, Sanders D, Adili A, Feibel R, Stephen D: The Physicians' Services Incorporated Foundation. (\$93,000 2008 - 2010)*

Photodynamic therapy to enhance fracture healing. *Akens M, Whyne C, Yee A, Nam D: Department of Defense (USA). (\$144,300 2010 - 2011)*

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 - 2012)*

Photodynamic therapy treatment to enhance fracture healing. *Akens MK, Whyne CM, Nam D, Wilson BC, Yee AJM: Congressionally Directed Medical Research Programs (CDMRP) (\$144,300 2010 - 2011)*

Prospective randomized clinical pilot study to evaluate the effects of the medial distal locking plate for high energy intra articular fractures of the distal tibia. *Stephen DJG, Kreder H, Schemitsch E, McKee M, Bulmer B: American Orthopaedic Foot and Ankle Society (AOFAS). (\$10,000 2005 - 2010)*

Restoration of joint function through subchondral delivery of therapeutics. *Marks P, Stanish W, Marks P, El-Gabalawy H, Shive MS: Natural Sciences and Engineering Research Council of Canada. (\$752,310 2008 - 2013)*

RF Ablation for cancer cells pre-commercialization phase. *Yee AJ, Whyne CM, Aken M: Ontario Centres of Excellence Grant. (\$104,000 2010 - 2011)*

Safe activities following elective total hip replacement (SafeT). *Weller I, Corey PN, Gignac MA, Gollish JD, Hawker GA, Kennedy DM, Kreder HJ, MacDonald SJ: The Canadian Institutes of Health Research (CIHR). (\$930,345 2007 - 2012)*

Skills for the job of recovery: Testing the feasibility of an online program for developing self efficacy and the skills needed for the job of returning to optimal work. *Beaton D, Smith PM, Van Eerd E, Kennedy C, Tang K, Steenstra I, Amick B, MacDermid J, MacEachen E, Gnam W, Lorig K, Richards R: Workers Safety and Insurance Board, Research Advisory Council. (\$58,169 2010 - 2011)*

The benefit of early identification of anemia preoperatively in patients going for hip and knee joint replacement surgery at the Holland Centre. *Bentley D, Lin Y, Callum J, Gollish J, Reis JM, Flynn J, Belo S: Sunnybrook Research Institute - PBR Award. (\$7,500 2010 - 2011)*

The immune mediation of fracture repair. *Nam D, Whyne C, Anderson M, Alman B: University of Toronto. (\$10,000 2010 - 2012)*

The immune system and fracture repair. *Nam D: Sunnybrook Health Sciences Centre Research Institute. (\$100,000 2009 - 2012)*

The impact of photodynamic therapy on the biomechanical stability of the metastatic spine: Characterization independent and combined treatment effects with bisphosphonates and radiation therapy. *Whyne CM, Yee A, Wilson, B, Burch S, Bisland S: Ontario Institute for Cancer Research. (\$530,361 2008 - 2011)*

Therapeutics and imaging for the injured spinal cord: MRI guided focused ultrasound and viral delivery across the blood spinal cord barrier - A pilot study. *Whyne C, Aubert I, Chopra R, Stanisz G, Hynynen K, Finkelstein J, Yee A: Sunnybrook Health Sciences Centre. (\$40,000 2011 - 2012)*

Towards the development of a pervasive prompting system for older adults with dementia: Developing the COACH task guidance system for use in the home. *Mihailidis A, Boutilier C, Cameron J, Fernie GR, Naglie G: Canadian Institutes of Health Research (CIHR). (\$265,155 2009 - 2012)*

Universal design in the built environment. *Steinfeld E, Fernie G, Lenker J: National Institute on Disability and Rehabilitation Research (NIDRR). (\$4,750,000 2010 - 2015)*

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

Axelrod TS: David Fear Fellowship Award (Continuing Education) Nominee. January 2011.

Nam D: University of Toronto Roscoe Reid Graham Scholarship in Surgical Science. October 2010.

Richards RR: Nominee, W.T. Aikins Award for Individual Teaching Performance to a Large Group. April 2011.

Wadey V: 2011 Education Development Fund: University of Toronto 6.7K "The integration of basic science with clinical knowledge in undergraduate teaching (M. Kulasegaram, V. Wadey, N. Woods). March 2011.

Wadey V: Nominee for 2010 - 2011 Peters Boyd Academy Teaching Award. January 2011.

Whyne C: 2011 Gallie Day, 3rd Place Winner for the McMurrich Poster Award. Can an atlas-based algorithm quantify femoral shaft fracture alignment based on a single cone-beam CT image of the fractured leg? (Crookshank M, Schemitsch E, Beek M, Hardisty M, Whyne C). May 2011.

Yee AJM: 2011 Award for Excellence in Postgraduate Medical Education (Development and Innovation), University of Toronto, Faculty of Medicine. March 2011.

■ 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. M. Jeschke Associate Professor
Dr. J. Lipa Associate Professor
Dr. S. Shahrokhi Lecturer
Dr. L. Snell Assistant Professor

PUBLICATIONS

Al-Mousawi AM, Jeschke MG, Herndon DN: The demographics of modern burn care: should most burns be cared for by non-burn surgeons? *American Journal of Surgery*: 2011: pp 97-99.

Al-Mousawi AM, Jeschke MG, Herndon DN: What's new in shock, June 2010? *Shock*: June 2010: 33(6): pp 559-61.

Al-Mousawi AM, Kulp GA, Branski LK, Kraft R, Mecott-Rivera GA, Williams FN, Herndon DN, Jeschke MG: Impact on Analgesia and sacrifice technique on the pro-inflammatory cytokine profile in a rodent model of severe burn injury. *Shock*: September 2010: 34(3): pp 261-268.

Branski LK, Herndon DN, Byrd J, Lee JO, Kinsky M, Jeschke MG: Transpulmonary thermomodulation for hemodynamic measurements in severely burned children. *Critical Care*: April 2011: 15(2): pp R118. E-published April 21, 2011.

Cartotto R, Kattan A, Fish JS: Exfoliative disorders. In: *Plastic Surgery* (McCarthy, ed.) Thieme, 2010.

Cartotto R, Zhou A: Fluid creep: The pendulum hasn't swung back yet! *Journal of Burn Care and Research*: July 2010: 31(4): pp 551-558.

Catapano J, Fialkov JA, Binhammer PA, McMillan C, Antonyshyn OA: A new system for severity scoring of facial fractures: Development and validation. *Journal of Craniofacial Surgery*: July 2010: 21(4): pp 1098-1103.

Gauglitz GG, Korting HC, Pavicic T, Ruzicka T, Jeschke MG: Hypertrophic scarring and keloids: Pathomechanisms, current and emerging treatment strategies. *Journal of Cellular and Molecular Medicine* (Jan-Feb Issue): October 2010: 17(1-2): pp 113-125. E-published October 5, 2010.

Huang N, Ashrafpour H, Levine RH, Forrest CR, Neligan PC, Lipa JE, Pang CY: Vasorelaxation effect and mechanism of action of vascular endothelial growth factor-165 in isolated perfused human skin flaps. *Journal of Surgical Research*: E-published September 8, 2010.

Jeschke MG, Kraft R, Kulp G, Emdad F, Williams F, Herndon DN: Glucose control in severely thermally injured pediatric patients. Is glycemic control beneficial and what glucose range should be the target? *The Annals of Surgery*: September 2010: 252(3): pp 521-528.

Jeschke MG, Kraft R, Song J, Kulp G, Gauglitz GG, Cox RA, Brooks N, Finnerty CC, Herndon DN, Boehning D: Insulin improves hepatic structure and function by attenuating hepatic ER stress/UPR and apoptosis. *Molecular Medicine*: May 2011: 17(5-6): pp 516-522.

Jeschke MG: Endothelial progenitor cells. In: *Trauma* 2011: pp 464-465.

Klassen A, Cano S, Scott A, Snell L, Pusic A: Measuring patient-reported outcomes in facial aesthetic patients: Development of the face-Q. *Facial Plastic Surgery*: August 2010: 26(4): pp 303-309.

Kobayashi M, Jeschke MG, Asai A, Yoshida S, Herndon DN, Suzuki F: Propranolol as a modulator of M2b monocytes in severely burned patients. *Journal of Leukocyte Biology*: May 2011: 89(5): pp 797-803. E-published February 17, 2011.

Kotz KT, Xiao W, Miller-Graziano C, Qian WJ, Russom A, Warner EA, Moldawer LL, De A, Bankey PE, Petritis BO, Camp DG 2nd, Rosenbach AE, Gorman J, Fagan SP, Brownstein BH, Irimia D, Xu W, Wilhelmy J, Mindrinos MN, Smith RD, Davis RW, Tompkins RG, Toner M and the Inflammation and the Host Response to Injury Collaborative Research Program, Baker HV, Balis UG, Billiar TR, Calvano SE, Cobb JP, Cuschieri J, Finnerty CC, Gamelli RL, Gibran NS, Harbrecht BG, Hayden DL, Hennessy L, Herndon DN, Jeschke MG: Clinical microfluidics for neutrophil genomics and proteomics. *Nature Medicine*: September 2010:16(9): pp 1042-1047.

Kraft R, Kulp GA, Herndon DN, Emdad F, Williams FN, Hawkins HK, Leonard K, Jeschke MG: Is there a difference in clinical outcomes, inflammation and hypermetabolism between scald and flame burn? *Pediatric Critical Care Medicine*: E-published February 3, 2011.

Lannon DA, Ross GL, Addison PD, Novak CB, Lipa JE, Neligan PC: Versatility of the proximally-pediced anterolateral thigh flap and its use in complex abdominal and pelvic reconstruction. *Plastic and Reconstructive Surgery*: February 2011: 127(2): pp 677-688.

Lipa JE: Chapter 57: Immediate reconstruction after skin sparing mastectomy through a periareolar approach. In: *Surgery of the Breast: Principles and Art*, 3rd Edition (Spear SL, ed). Lippincott Williams & Wilkins, Philadelphia, Pennsylvania: 2010

Lipa JE: Chapter 9: DIEP Flap Breast Reconstruction. In: *Aesthetic and Reconstructive Surgery of the Breast*: (Hall-Findlay EJ and Evans GRD, ed.) Elsevier, London, United Kingdom: 2010.

Mecott GR, Kulp GA, Finnerty CC, Herndon DN, Jeschke MG: The use of exenatide in severely burned pediatric patients. *Critical Care Medicine*: August 2010: 14(4): p R153.

Nguyen LT, Yen PH, Nie J, Liadis N, Ghazarian D, Al-Habeeb A, Easson A, Leong W, Lipa J, McCready D, Reedijk M, Hogg D, Joshua A, Quirt I, Messner H, Shaw P, Crump M, Sharon E, Ohashi PS: Expansion and characterization of human melanoma tumor-infiltrating lymphocytes (TILs). *PLoS ONE*: November 2010: 5(11): e13940.

Pang J, Assaad D, Breen D, Fialkov J, Antonyshyn O, Balogh J, Tsao M, Kamra J, Czarnota G, Barnes EA: Extramammary paget disease: Review of patients seen in a non-melanoma skin cancer clinic. *Current Oncology*: September 2010: 17(5): pp 230-232.

Qian WJ, Petris BO, Kaushal A, Finnerty CC, Jeschke MG, Monroe ME, Moore RJ, Schepmoes AA, Xiao W, Moldawer LL, Davis RW, Tompkins RG, Herndon DN, Camp DG 2nd, Smith RD; Inflammation and the Host Response to Injury Large Scale Collaborative Research Program (Baker HV, Balis U, Bankey P, Billiar TR, Brownstein BH, Calvano SE, Chaudry IH, Cobb JP, Cuschieri J, De AK, Freeman B, Gamelli RL, Gibran NS, Harbrecht BG, Hayden DL, Hennessy L, Horton JW, Johnson J, Klein MB, Lowry SE, Maier RV, Mannick JA, Mason PH, McDonald-Smith GP, Miller-Graziano CL, Mindrinos MN, Minei JP, Moore EE, Nathens AB, O'Keefe GE, Rahme LG, Remick DG Jr, Schoenfeld DA, Shapiro MB, Silver GM, Storey J, Tibshirani R, Toner M, Warren S, West MA): Plasma proteome response to severe burn injury by applying 18O-labeled "universal" reference-enable quantitative proteomics. *Journal of Proteome Research*: September 2010: 9(9): pp 4779-4789.

Rajicic N, Cuschieri J, Finkelstein DM, Miller-Graziano CL, Hayden D, Moldawer LL, Moore E, O'Keefe G, Pelik K, Warren HS, Jeschke MG, Schoenfeld DA: Inflammation and the Host Response to Injury Large Scale Collaborative Research Program. Identification and interpretation of longitudinal gene expression changes in trauma. *PLoS One*: December 2010: 5(12): pp e14380.

Rivero H, Herndon DN, Lee JO, Mecott GR, Jeschke MG: Pancreatitis in pediatric burn patients: Incidence and outcomes. *Burns*: September 2010: 37(1): pp 82-88.

Roostaiean J, Pavone L, Da Lio A, Lipa J, Festekjian J, Crisera C: Immediate placement of implants in breast reconstruction: Patient selection and outcomes. *Plastic and Reconstructive Surgery*: April 2011: 124(4): pp 1407-1416.

Shahrokhi S, Jeschke MG: What's new in Shock, October 2010? *Shock*: October 2010: 34(4): pp 323-326.

Snell L, McCarthy C, Klassen A, Cano S, Rubin L, Hurley K, Montgomery G, Cordeiro PG, Pusic A: Clarifying the expectations of patients undergoing implant breast reconstruction: A qualitative study. *Plastic and Reconstructive Surgery*: December 2010: 126(6): pp 1825-1830.

Tseng CY, Lipa JE: Perforator flaps in breast reconstruction. *Clinics in Plastic Surgery*: October 2010: 37(4): pp 641-654.

Tuvdendorj D, Chinkes D, Zhang XL, Suman OE, Aarsland AA, Ferrando A, Kulp GA, Jeschke MG, Wolfe RR, Herndon DN: Long-term oxandrolone treatment increases muscle protein net deposition via improving amino acid utilization in pediatric patients 6 months after burn injury. *Surgery* 2011: May 2011: 149(4): pp 645-653. E-published February 11, 2011.

Tuvdendorj D, Zhang XJ, Chinkes DL, Aarsland A, Kulp GA, Jeschke MG, Herndon DN: Intensive insulin treatment increases donor site wound protein synthesis in burn patients. *Surgery*: April 2011: 149(4): pp 512-518. E-published January 14, 2011.

Walia G, Jada G, Cartotto R: Anesthesia and intraoperative high-frequency oscillatory ventilation during burn surgery. *Journal of Burn Care and Research*: January-February 2011: 32(1): pp 118-123.

Williams FN, Herndon DN, Suman OE, Lee JO, Norbury WB, Branski LK, Micak RP, Jeschke MG: Changes in cardiac physiology after severe burn injury. *Journal of Burn Care and Rehabilitation*: March-April 2011: 32(2): pp 269-274.

INVITED VISITS

Antonyshyn O: American Society of Plastic Surgeons, Plastic Surgery 2010, Toronto, Ontario, Canada, October 2010. (1) Expert Panel: Facial fractures: The new issues, (2) Instructional Courses: (a) Cranioplasty: Current concepts and techniques, (b) Post-traumatic orbital deformities: Current management.

Antonyshyn O: Pfiedler Enterprises, Advanced Pediatric and Adult Craniomaxillofacial Symposium, Toronto, Ontario, Canada, October 2010. (1) Liver Surgery: Enophthalmos repair and navigation, (2) Reconstruction of the collapsed nose, (3) Modeling autogenous craniofacial reconstructions, (4) Patient-specific alloplastic cranial vault reconstruction: Pitfalls in design and execution.

Antonyshyn O: Canadian Plastic Surgery Resident Review Course, Ottawa, Ontario, February 2011. Adult Craniofacial Surgery: Trauma and Reconstruction.

Antonyshyn O: Canadian Society of Plastic Surgeons, 16th World Congress of the International Confederation for Plastic, Reconstructive and Aesthetic Surgery, Vancouver, Canada, May 2011. (1) Craniofacial Panel: 3D physical prototypes in craniofacial surgery, (2) Craniofacial Surgery Master Class. Orbital reconstruction.

Antonyshyn O: European Association for Cranio-Maxillo-Facial Surgery, 4th International Conference on Advanced Digital Technology in Head and Neck Reconstruction, Freiburg, Germany, May 2011. 3D models for the design of craniofacial reconstructive procedures.

Antonyshyn O: Stryker Leibinger Company, Freiberg, Germany, May 2011. Clinical applications of patient-specific titanium mesh.

Cartotto RC: Queen's University, William Ghent Visiting Trauma Professor, Kingston, Ontario, Canada, October 2010. (1) Acute care of the burn patient in the trauma room, (2) Burns for surgical residents, (3) Controversies in ICU care of the burn patient.

Cartotto RC: American Burn Association, Annual Meeting, Chicago, Illinois, USA, March 2011. (1) Postgraduate Course B: From Kabul to Chicago: Therapies and innovations for inhalation injury in the civilian sector, (2) Postgraduate Course C: Artificial dermis is necessary for treatment of 3rd degree burns: Pro-Con Debate.

Jeschke MG: International Symposium on Resuscitation, Toronto, Ontario, Canada, October 2010. Burn resuscitation.

Jeschke MG: Critical Care Canada Forum (CCCCF), Toronto, Ontario, Canada, November 2010. (1) Controversies in burn resuscitation, (2) Novel Therapies and state-of-the-art in burn care.

Lipa JE: American Society of Plastic Surgeons (ASPS), Women Plastic Surgeons Annual Workshop: Monterey, California, USA, August 2010. Leadership in breast reconstruction, breast reconstruction panel.

Lipa JE: Quality Medical Publishing Inc. (QMP), Fourth Annual Reconstructive Surgery Symposium, St. Louis, Missouri, USA, November 2010. (1) Faculty: (a) Decision making in implant Surgery, (b) Repositioning the nipple when incorrectly placed, (c) Nipple-areolar reconstruction, (d) Latissimus dorsi breast reconstruction; (2) Panelist: Different Approaches to Breast Reconstruction: Choosing the Right Technique: When to Choose Flap over Expander/Implant and When Fat Grafting is Appropriate, (3) Moderator: Finishing Touches: Revising the Reconstructive Mound.

Lipa JE: Plastic Surgery Research Council, Louisville, Kentucky, USA, April 2011. Moderator: Clinical Outcomes Research.

Lipa JE: Wisconsin Surgical Club, Toronto, Ontario, Canada, May 2011. Oncoplastic breast reconstruction.

RESEARCH AND INVESTIGATIONS

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 (AO CMF CPP) (\$125,000 2009 - 2011)*

Assessment of Anabolic Agents/Exercise in burned children. *Herndon DN, Jeschke MG: National Institutes of Health, P50 GM60338 Burn Center Grant. (\$1,850,630 2009 - 2011)*

Assessment of Mechanisms of improved wound healing and protein metabolism of insulin in severely burned patients. *Jeschke M: Shriners. (\$270,000 2008 - 2010)*

Characteristics and Applicability of Amnion as a Wound Coverage Material and as a Biomatrix. *Herndon DN, Jeschke MG: Clayton Foundation for Research. (\$250,000 2006 - 2010)*

Characterization of burn induced hepatic dysfunction. *Jeschke M: National Institutes of Health Research (NIH). (\$850,000 2010 - 2015)*

Characterization of hepatic dysfunction post burn. *Jeschke M: Canada Foundation for Innovation (CFI).* (\$1,000,000 2010)

Design of custom made skin from cord lining and amniotic stem cells. *Jeschke M: Carl C. Anderson Sr and Marie Joe Anderson Charitable Foundation.* (\$158,000 2008 - 2010)

Development of new technologies to improve cellular regeneration in burns, trauma and wound healing. *Herndon DN, Jeschke MG: Clayton Foundation for Research.* (\$90,293 2006 - 2010)

Effect of Insulin and Propranolol on Post Burn Hypermetabolism and Inflammation. *Herndon DN, Jeschke MG: National Institutes of Health.* (\$2,300,158 2007 - 2012)

Evaluation of a 3D facial fracture biomodel as a teaching tool for management of facial fractures. *Antonyshyn O, Mahoney M-H, Edwards G, Mainprize J: Sunnybrook Hospital/University of Toronto (SHUTC) Academic Trust Education Research Grant.* (\$10,000 2011)

Evaluation of a 3D facial fracture biomodel as a teaching tool for management of facial fractures. *Antonyshyn O: Stryker Canada Education Grant.* (\$56,000 2011)

Finite element modeling of the human craniofacial skeleton. *Fialkov J, Whyne C: Advanced Cranio-Maxillofacial Forum Research Grant.* (\$60,000 2010)

Glucose control in severely burned patients: mechanisms and therapeutic potential. *Jeschke M: Physicians' Services Incorporated Foundation (PSI).* (\$165,000 2011 - 2012)

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)

Insulin attenuates inflammation and hypermetabolism after severe burn via modulation of PI3K and the PI3K signaling pathway. *Jeschke MG: Shriners Hospitals for Children.* (\$185,768 2008 - 2010)

Postdoctoral Training in Trauma and Burns. *Herndon DN, Jeschke MG: National Institutes of Health.* (\$103,004 2006 - 2011)

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)

The role of mitochondrial oxidation on insulin resistance in burn patients treated Fenofibrate. *Aarsland A, Jeschke, MG: The Shriners Hospital.* (\$169,200 2008 - 2010)

HONOURS RECEIVED

Cartotto RC: 1st Prize for Best in Category in Poster Competition at the American Burn Association Annual Meeting in Chicago, Illinois, for: The 3P's: Assessment of tissue viability under tourniquets and tumescence during burn wound debridement. March 2011.

Jeschke MG: Fellow Critical Care Medicine (FCCM). January 2011.

Lipa JE: American Society of Plastic Surgeons - 2010 Reconstructive Bowl - Best Case. October 2010.

Division Of Urology

Dr. L.K. Carr	Assistant Professor	Dr. R.T. Kodama	Associate Professor
Dr. S. Herschorn	Professor	Dr. R.K. Nam	Associate Professor
Dr. L.H. Klotz	Professor (Division Head)	Dr. V. Venkateswaran	Assistant Professor

PUBLICATIONS

Alibhai SM, Breunis H, Timilshina N, Johnston C, Tomlinson G, Tannock I, Krahm M, Fleshner NE, Warde P, Canning SD, Klotz L, Naglie G: Impact of androgen-deprivation therapy on physical function and quality of life in men with nonmetastatic prostate cancer. *Journal of Clinical Oncology*: December 2010; 28(34): pp 5038-5045.

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 α -blocker: effect of baseline prostate-specific antigen concentration. *British Journal of Urology International*: November 2010; 106: pp 1332-1338.

Gordanpour A, Stanimirovic A, Nam RK, Moreno CS, Sherman C, Sugar L, Seth A: miR-221 Is down-regulated in TMPRSS2:ERG fusion-positive prostate cancer. *Anticancer Research*: February 2011; 31(2): pp 403-410.

Haddad AQ, Fleshner N, Nelson C, Saour B, Musquera M, Venkateswaran V, Klotz L: Antiproliferative mechanisms of the flavonoids 2,2'-dihydroxychalcone and fisetin in human prostate cancer cells. *Nutrition and Cancer*: July 2010; 62(5): pp 668-681.

Herschorn S, Gajewski J, Ethans K, Corcos J, Carlson K, Bailly G, Bard R, Valiquette L, Baverstock R, Carr L, Radomski S: Efficacy of botulinum toxin A injection for neurogenic detrusor overactivity and urinary incontinence: a randomized, double-blind trial. *The Journal of Urology*: June 2011; 185: pp 2229-2235.

Herschorn S, Pommerville P, Stothers L, Egerdie B, Gajewski J, Carlson K, Radomski S, Drutz H, Schulz J, Barkin J, Hirshberg E, Corcos J: Tolerability of solifenacin and oxybutynin immediate release in older (> 65 years) and younger (= 65 years) patients with overactive bladder: sub-analysis from a Canadian, randomized, double-blind study. *Current Medical Research and Opinion*: December 2010; 27: pp 375-382.

Herschorn S, Vicente C, Piwko C: Canadian cost-effectiveness analysis of solifenacin compared to oxybutynin immediate-release in patients with overactive bladder. *Journal of Medical Economics*: November 2010; 13: pp 508-515.

Hou M, Venier N, Sugar L, Musquera M, Pollak M, Kiss A, Fleshner N, Klotz L, Venkateswaran V: Protective effect of metformin in CD1 mice placed on a high carbohydrate-high fat diet. *Biochemical Biophysical Research and Communications*: July 2010; 297(3): pp 537-542.

Klotz L: Active surveillance for prostate cancer: Patient selection and management. *Current Oncology*: September 2010; 17(2): pp S11-S17.

Klotz L: Dutasteride and prostate cancer (Letter). *New England Journal of Medicine*: August 2010; 363(8): pp 794-795.

Klotz L: Proceedings of the 2009 World Urologic Oncology Federation Conference (Guest Editor). *Urologic Oncology: Seminars and Original Investigations*. December 2010; 28(6): pp 668-669.

Klotz L: Words of wisdom. Re: Effect of dutasteride on the risk of prostate cancer. Andriole G, Bostwick D, Brawley O, et al. *New England Journal of Medicine*: 2010; 362: 1192-1202. *European Urology*: August 2010; 58(2): p 313; e19-e29. E-published July 26, 2010.

Klotz LH: An unsung Canadian hero!. *Canadian Urological Association Journal*: December 2010; 4(6): pp 371-372.

Lawrentschuk N, Finelli A, Van der Kwast TH, Ryan P, Bolton DM, Fleshner NE, Trachtenberg J, Klotz L, Robinette M, Woo H: Salvage radical prostatectomy following primary high intensity focused ultrasound for treatment of prostate cancer. *Journal of Urology*: March 2011; 185(3): pp 862-868. E-published January 15, 2011.

Lawrentschuk N, Klotz L: Active surveillance for favorable-risk prostate cancer: A short review. *Korean Journal of Urology*: October 2010; 51(1): pp 665-670.

Loblaw A, Zhang L, Lam A, Nam R, Mamedov A, Vesprini D, Klotz L: Comparing prostate specific antigen triggers for intervention in men with stable prostate cancer on active surveillance. *The Journal of Urology*: November 2010; 184(5): pp 1942-1946. E-published September 17, 2010.

- Meehan B, Appu S, St Croix B, Rak-Poznanska K, Klotz L, Rak J:** Age-related properties of the tumour vasculature in renal cell carcinoma. *British Journal of Urology International*: February 2011: 107(3): pp 416-424. E-published August 27, 2010.
- Quon R, Loblaw A, Nam R:** Dramatic increase in prostate cancer cases by 2021. *British Journal of Urology International*: April 2011. E-published April 20, 2011.
- Rajarubendra N, Lawrentschuk N, Bolton DM, Klotz L, Davis ID:** Prostate cancer immunology - an update for urologists. *British Journal of Urology International*: April 2011: 107(7): pp 1046-1051. E-published November 10, 2010.
- Savas S, Ibrahim-Zada I, Jarjanazi H, Choi YH, Briollais L, Fleshner NE, Venkateswaran V, Ozcelik H:** A whole-genome SNP association study of NCI60 cell line panel indicates a role of Ca2+ signaling in selenium resistance. *PLoS ONE* September 2010: 5(9): p e12601.
- Siddiqui K, Chopra R, Vedula S, Sugar L, Haider M, Boyes A, Musquera M, Bronskill M, Klotz L:** MRI-guided transurethral ultrasound therapy of the prostate gland using real-time thermal mapping: Initial studies. *Urology*: December 2010: 76(6): pp 1506-1511. E-published August 14, 2010.
- Smith MR, Klotz L, Persson BE, Olesen TK, Wilde AA:** Cardiovascular safety of degarelix: results from a 12-month, comparative, randomized, open label, parallel group phase III trial in patients with prostate cancer. *The Journal of Urology*: December 2010: 184(6): pp 2313-2319.
- Thompson IM, Klotz L:** Active surveillance for prostate cancer. *Journal of the American Medical Association*: December 2010: 304(21): pp 2411-2412.
- Van Poppel H, Da Pozzo L, Albrecht W, Matveev V, Bono A, Borkowski A, Colombel M, Klotz L, Skinner E, Keane T, Marreaud S, Collette S, Sylvester R:** A prospective, randomised EORTC Intergroup Phase 3 Study comparing the oncologic outcome of elective nephron-sparing surgery and radical nephrectomy for low-stage renal cell carcinoma. *European Urology*: December 2010: 59(4): pp 543-552. E-published December 22, 2010.
- Venier N, Klotz LH, Fleshner NE, Venkateswaran V:** Chemopreventative strategies in prostate cancer: Role of dietary agents. *Invited Review. Current Cancer Therapy Reviews*: November 2010: 6: pp 308-316.
- Venkateswaran V, Klotz LH:** Diet and prostate cancer: Mechanisms of action and implications for chemoprevention. *Nature Reviews Urology*: August 2010: 7(8): pp 442-453. E-published July 20, 2010.
- Welk BK, Herschorn S:** Are male slings for post-prostatectomy incontinence a valid option? *Current Opinion in Urology*: November 2010: 20: pp 465-470.
- Whelan KF, Lu JP, Fridman E, Wolf A, Honig A, Paulin G, Klotz L, Pinthus JH:** What can surrogate tissues tell us about the oxidative stress status of the prostate? A hypothesis-generating in-vivo study. *PLoS One*: December 2010: 5(12): p e15880.

INVITED VISITS

- Herschorn S:** Fifth International Congress on Urinary Incontinence and Pelvic Floor Reconstruction, Sao Paulo, Brazil, July 2010. (1) Epidemiology of incontinence; (2) The value of urodynamics in the work-up of stress urinary incontinence; (3) Tension-free vaginal tape or transobturator tape? (4) Canadian experience with botulinum toxin.
- Herschorn S:** International Continence Society/International Urogynecologic association Combined Meeting, Toronto, Ontario, Canada, August 2010. (1) Panel symposium on How to avoid, diagnose, and manage mid-urethral sling complications. Presentation: How to avoid and treat intra-operative complications. Moderator. (2) Podium session in Male lower urinary tract symptoms. Moderator. (3) Workshop on Controversies in the management of post-prostatectomy incontinence. Artificial sphincter for post-prostatectomy incontinence; (4) Workshop on Urethral Bulking Agents for the Minimally Invasive Treatment of Stress Urinary Incontinence. Complications of urethral bulking agents.
- Herschorn S:** SIU World Meeting on Lower Urinary Tract Dysfunction, Marrakech, Morocco, October 2010. (1) Plenary Session on Overactive Bladder. Assessment of overactive bladder/detrusor overactivity; (2) Plenary ICUD Consultation on Urethral Strictures. Vesico-urethral stenosis after treatment for prostate cancer; (3) Surgical Tips: Post-prostatectomy Incontinence. Artificial sphincter; in vance male sling.
- Herschorn S:** University of California Irvine, Irvine, California, USA, February 2011. Visiting Professor. (1) Augmentation cystoplasty – does it still have a role in the management of neurogenic bladder? (2) Controversies in the surgical treatment of female stress urinary incontinence; (3) The emerging role of botulinum toxin for refractory detrusor overactivity; (4) How I got here; (5) Surgical skills lab on male and female slings.
- Herschorn S:** 4th National Spinal Cord Injury Conference, Niagara Falls, Ontario, Canada, October 2010. The use of botulinum toxin in the management of neurogenic bladder dysfunction.

Herschorn S: Society for Urodynamics and Female Urology, Phoenix, AZ, March 2011. (1) Panelist in case presentations in voiding dysfunction and incontinence. (2) Post-radical prostatectomy complications – vesicourethral stenosis and rectourethral fistula in session on management of GU strictures after treatment of prostatic disease.

Herschorn S: American Urological Association Annual Meeting, Washington, DC, May 2011. Moderator. (1) Global Perspectives in Urology Forum – Male incontinence and the use of prosthetics to enhance urinary control. Management of PPI from the Canadian perspective. (2) Are mini-slings ready for 'prime time'.

Herschorn S: Canadian Urological Association Annual Meeting, Montreal, Quebec, June 2011. Moderator.

Plenary session Update on Management of OAB and educational forum on Clinical Problems in OAB Therapy. Management of neurogenic detrusor overactivity.

Klotz LH: Urologic Research Society, Annual Meeting, Niagara on the Lake, September 2010. Conference Chairman.

Klotz LH: New Brunswick Urological Society, St. John, New Brunswick, Canada, October 2010. Guest Speaker.

Klotz LH: Swiss Urological Association, 'Arena' Conference, Berne, Switzerland, November 2010. Management of favorable risk prostate cancer.

Klotz LH: International Radiology Society/International Prostate MRI Working Group, Chicago, Illinois, USA, December 2010. Active Surveillance in management of prostate cancer.

Klotz LH: Controversies in Urology (CURy) Annual Conference, Paris, France, January 2011. Management of localized prostate cancer.

Klotz LH: European Society of Urologic Oncology, London, England, January 2011. Conservative management of localized prostate cancer.

Klotz LH: European Urology Association, Winter Forum, Davos, Switzerland, February 2011. What's new in prostate cancer.

Klotz LH: European Association of Urology, Vienna, Austria, March 2011. Metabolic effects of androgen deprivation: Agonists vs antagonists.

Klotz LH: Scottsdale Prostate Cancer Conference, Scottsdale, Arizona, USA, March 2011. Active surveillance.

Klotz LH: Utah Urological Society, Salt Lake, Utah, USA, March 2011. Active surveillance.

Klotz LH: Cornell Medical School/New York Hospital, New York, New York, USA, April 2011. LeFrak Lecture.

Klotz LH: European School of Oncology/Memorial Sloan-Kettering Cancer Center (MSKCC) Conference on Predictive Markers in Prostate Cancer, New York, New York, USA, April 2011. Role of biomarkers and PSA in active surveillance.

Klotz LH: Arab Association of Urology, Washington, District of Columbia, USA, May 2011. Guest Speaker.

Klotz LH: Cornell Prostate Cancer Symposium, New York, New York, USA, May 2011. Guest Speaker.

Klotz LH: Huangzhou University, Huangzhou, China, May 2011. Visiting Professor.

Klotz LH: Indian American Urological Association, Washington, District of Columbia, USA, May 2011. Guest Speaker.

Klotz LH: Moffitt Cancer Centre Urology Conference, Tampa Florida, USA, May 2011. Guest Speaker.

Klotz LH: Nanjing University, Nanjing, China, May 2011. Visiting Professor.

Klotz LH: Fuzhou University, Fuzhou, China, June 2011. Visiting Professor.

Klotz LH: Shangyuan University, Shangyuan, China, June 2011. Visiting Professor.

Klotz LH: Tienjing University, Tienjing, China, June 2011. Visiting Professor.

Nam RK: Urological Society of Australia and New Zealand, Melbourne, Australia, October 2010. Prostate cancer genetics and risk factors.

Nam RK: Memorial Sloan Kettering Cancer Center, New York, New York, USA, April 2011. Prostate cancer nomograms.

Venkateswaran V: Australian-Canadian Prostate Cancer Research Alliance (PCC/AC-PCRA), God Coast, Australia, August 2010. Metformin enhances the efficacy of androgen deprivation therapy in prostate cancer.

Venkateswaran V: AWIC Community and Social Services, Toronto, Ontario, Canada, April 2011. Diet, Exercise and Prostate Cancer.

RESEARCH AND INVESTIGATIONS

A multicenter, 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 multicenter, 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 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 phase III, randomized, double-blind, parallel group, placebo-controlled, multicenter study to assess the efficacy and safety of the beta-3 agonist YM178 (25 mg 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, multicenter 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)

Assessing the radiosensitizing capacity of capsaicin. *Loblaw A, Venkateswaran V, Klotz L, Fleshner N, Venier N, Colquhoun A: Rapid Astra-Zeneca CARO Evaluation of Radiomodifiers (RACZER).* (\$25,537 2010 - 2011)

Effect of desmopressin and in combination with docetaxel in prostate cancer. *Klotz L, Venkateswaran V: Ferring Pharmaceutical.* (\$100,000 2010 - 2012)

ETS gene translocations as biomarkers of prostate cancer. *Seth A, Nam RK: National Cancer Institute of Canada (NCIC).* (\$619,500 2008 - 2013)

Microchip-based devices for the analysis of circulating prostate cancer markers. *Nam R, O'Kelley S, Sargent E, Wheeler A: Canadian Institutes of Health Research, Emerging Team Grant for Regenerative Medicine and Nanomedicine.* (\$1,735,400 2011 - 2015)

Micronutrients and prostate cancer: Prevention to treatment. *Venkateswaran V, Klotz L, Fleshner N, Sugar L, Teahan S: Canadian Institutes of Health Research.* (\$247,413 2006 - 2012)

Randomized trial of botulinum toxin A versus placebo in the management of overactive bladder. *Herschorn A, Carr L: Allergan.* (\$30,000 2010)

Randomized trial of polyacrylamide gel versus collagen for female SUI. *Herschorn S: Conura.* (\$25,000 2011)

Utilizing metformin to enhance the efficacy of androgen deprivation therapy in prostate cancer. *Venkateswaran V, Klotz L, Fleshner N, Sugar L, Pollak M, Colquhoun A: Prostate Cancer Canada.* (\$119,996 2010 - 2012)

Utilizing metformin to enhance the efficacy of androgen deprivation therapy in prostate cancer. *Venkateswaran V, Klotz L, Fleshner N, Sugar L, Pollak M, Colquhoun A: Canadian Institutes of Health Research, Institute of Nutrition, Metabolism and Diabetes - Bridge Funding Priority Funding.* (\$92,605 2010 - 2012)

HONOURS RECEIVED

Herschorn S: Chairman of Section on vesicourethral Stenosis after treatment for prostate cancer at the International Consultation on Urethral Stricture Disease. 2010.

Herschorn S: Co-Chairman and Scientific Committee Chairman of International Continence Society/ International Urogynecologic Association Combine Meeting. 2010.

Herschorn S: Post-president Canadian Urologic Association. 2011.

Klotz LH: Guest Editor, Urologic Oncology, December 2010.

Klotz LH: Honorary Professor, Peking University Wu Jieping Urology Center, June 2011.

Klotz LH: International Editor, Chinese Journal of Urology, June 2011.

Venkateswaran V: Best Poster for Abstract titled "The Use of Metformin to Enhance the Efficacy of Androgen Deprivation Therapy in Prostate Cancer," at the Society of Urologic Oncology Meeting in Washington, DC, November 2010.



Toronto East General Hospital

Laura Tate, *Surgeon-in-Chief*

HEADS OF DIVISION

Dr. P. Bernick	General Surgery
Dr. P. Weiler	Orthopaedics
Dr. L. Dvali	Plastic and Reconstructive Surgery
Dr. R. Singal	Urology

Toronto East General continues to be a leading Community Teaching Hospital in Toronto as our teaching days have increased again this year with excellence recognized in TES scores. We are planning to increase our Bariatric case numbers from ninety to one hundred and twenty to meet the provincial targets this year. Patient safety continues to be at the forefront of our focus and information will be available on our website redesign. Surgical Site Infection data has been collected and distributed to each surgeon and post discharge surveys have been instituted to try and collect post-operative information. Antibiotic Stewardship has proved to be a very useful strategy in our Critical Care and Surgical In-patient Care, combining best practice and cost savings. Provincial funding of emergency department wait-times has affected our in-patient bed management strategies.

NEW STAFF

In the Spring of this year, Dr. Linda Dvali joined our Division of Plastic and Reconstructive Surgery as the new Division Head. Ryan Groll is also a recent recruit in the Division of Urology. Najib Safieddine, a Thoracic surgeon, new staff in the Division of General Surgery.

DEPARTURES

Tom Dickie has moved to Lakeridge Health Oshawa to become the Chief of Surgery.

APPOINTMENTS AND PROMOTIONS

Rob Zeldin, Division of General Surgery, has been promoted to Assistant Professor. Now holding the rank of Lecturer are Atul Kesarwani, Ryan Groll and Hany Sawires.

DIVISION OF 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 and our representative for Best Practices in General Surgery.

Dr. Bernick chairs the General Surgery Tumour Board (MCC) and is the MCC Chair that oversees all tumor boards at TEGH. The Division of General Surgery has partnered with the Odette Cancer Centre Radiation Oncology Group which now attends a very successful Multidisciplinary Cancer Conference (MCC). Hany Sawires won the John Fowler Family Practice Resident Teaching Award 2011. TES Scores for Drs. Bernick, Gilas, Simone, Zeldin and Sawires were excellent. There is one full time and two part-time General Surgery Fellows this year. [Undergrad teaching days 136/ Postgrad 2345]. Dr. Bob Mackenzie has moved to Modified Active Staff and continues to see Breast Cancer patients and assist in the OR.

TEGH continues to be a Level 1 Thoracic Center with Cancer Care Ontario's continued support for thoracic cases. Our relationship with the Royal Victoria Hospital Respiriologists and Oncologists in Barrie has been working well. The Thoracic Surgery group and its administrators, in collaboration with the cancer centre at Royal Victoria Hospital in Barrie (RVH), has won the 2010 Cancer Care Ontario Quality Award. This was awarded for our work in setting up a partnership with RVH to deliver Thoracic Surgery services to the North Simcoe Muskoka LHIN and setting up a Diagnostic Assessment Unit at RVH. Simon Iu continues perform thoracic surgery at TEGH. Najib Safieddine is our newest Thoracic Surgeon and brings his expertise in minimally invasive surgery specifically VATS. Najib obtained his MD from the University of Western, General Surgery Fellowship from the University of Ottawa and Toronto, Thoracic Surgery Fellowship from the University of Toronto and completed his Fellowship at Cedars Sinai Medical Center in California. He was recruited from State University of New York as an Assistant Professor. Rob Zeldin has been promoted to Associate Professor this year. Rob is also the Chairman of the Section of Thoracic Surgery.

DIVISION OF ORTHOPAEDICS

We have been working collaboratively to implement the Fractured Hip Initiative successfully. The Bruce Tovee Award for Postgraduate Education went to Bill Kraemer who also had outstanding TES scores this year. Receiving also excellent TEX scores were Peter Weiler, Frank Mastrogiamco, and Paul Wong. The Orthopedic TEGH Fellowship continues to rate as the highest Fellowship program at UofT. Dr. Wong is a member of the University Postgraduate Resident Committee. [Undergrad teaching days 234/ Postgrad 2916]

DIVISION OF AND RECONSTRUCTIVE PLASTIC SURGERY

We are looking forward to working with Linda Dvali, our successful candidate for Division Head. Linda will bring her expertise in teaching to the Division and increasing teaching commitments. She obtained her MD from Western, Plastic Surgery Residency in Toronto, Masters Science in Harvard and a Peripheral Nerve Fellowship with Susan MacKinnon at Washington University in St. Louis. Linda has been a cross-appointee at UHN-Orthopaedics/Hand Program since 2003. Brett Beber has been a 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. Atul Kesarwani has been promoted to Lecturer. He has been on active staff at TEGH since 1988 and we will now be able to support our resident teaching within TEGH. Undergrad teaching days 132/ Postgrad 372] Dr. Tate organized the 2nd Annual Rotman Advanced Health Leadership Program April 2011.

DIVISION OF UROLOGY

Multidisciplinary Tumour Boards have been regularly in place this year. It is the 10th year of our Endo-Urology Fellowship and PGY 4 Residents rotated electively. We are still in fundraising mode for the Da Vinci Robot. John Kell was a teacher for ASCM II this year. [Undergrad teaching days 41/ Postgrad teaching days 81] The CCO Surgical Pathology Indicators Report, released in November 2010, was very complementary of our Pathology and Surgical teams. TEGH was the only hospital in the Central LHIN with 0% of discrete synoptic prostate cancer resection reports with positive pT2 margins. As noted earlier, Ryan Groll is our newest Urologist. Ryan obtained his MD from Toronto, a Masters of Science in Health Administration, Urology Residency and Endo-urology Fellowship also in Toronto. Ryan is helping us review our HSMR surgical data. TEGH, in collaboration with the Urology Service, established a continence group that has reduced catheter use in the hospital and will hopefully reduce risk of catheter related infections. John Kell is leading a safety initiative in catheter injury reduction.

RESEARCH AND INVESTIGATIONS

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: Robin Sullivan Award for Best Paper at Orthopaedic Research Day. 2010.

Kraemer WJ: Bruce Tovee Postgraduate Teaching Award, May 2011.

■ Division Of Plastic And Reconstructive Surgery

Dr. B. Beber Lecturer
Dr. L. Dvali Assistant Professor
(Division Head)

Dr. A. Kesarwani Lecturer
Dr. L.J. Tate Assistant Professor

■ Division Of Urology

Dr. R. Groll Lecturer
Dr. R.K. Singal Lecturer **(Division Head)**
Dr. P. Vlaovic Lecturer



University Health Network

Shafique Kesharjee, *Surgeon-in-Chief/
James Wallace McCutcheon Chair in Surgery*

HEADS OF DIVISIONS

Dr. T.E. David	Cardiac Surgery
Dr. L. Rotstein	General Surgery
Dr. C. Wallace	Neurosurgery
Dr. N. Mahomed	Orthopaedics
Dr. S. Hofer	Plastic Surgery
Dr. T. Waddell	Thoracic Surgery
Dr. N. Fleshner	Urology
Dr. T. Lindsay (Acting)	Vascular Surgery

DIVISION OF CARDIAC SURGERY

Members of the Division of CVS remain academically very active with 37 peer-reviewed publications during the past academic year. Drs. Weisel, Li, Yau and Rao were successful in their grant applications to support their research laboratories. A successful fund-raising event on November 20, 2010 allowed for maintenance of our philanthropically funded transcatheter aortic valve implantation program and also creation of a new chair in heart valve diseases.

DIVISION OF GENERAL SURGERY

The Division of General Surgery at the University Health Network is a large Division with 20 Faculty covering three different sites, Toronto General, Toronto Western and Princess Margaret Hospitals. The focused areas of activity in the division include: at Toronto General, hepatobiliary surgery and transplantation. At Princess Margaret, the emphasis is on cancer of the breast, melanoma and endocrine oncology. At Toronto Western the focus is minimally invasive surgery including advanced minimally invasive techniques, colorectal oncology and bariatric surgery.

NEW FACULTY

Dr. Tim Jackson joined the faculty in the division of General Surgery having completed his residency training in the Department of Surgery at McMaster University and his Master Degree in Public Health and Fellowship training in Advanced Minimally Invasive Surgery at Harvard Medical School. Dr Jackson's academic area of interest is quality assessment and quality control.

DEPARTURES

Dr. Richard Reznick has left this division in order to take on the position of Dean of the Faculty of Health Sciences at Queen's University Medical School,

Kingston, Ontario.

Dr. Bryce Taylor has retired from clinical practise as of May 1, 2011 but continues to be actively involved in the administration of the International Patient Program at University Health Network.

The Division of General Surgery at University Health Network is actively involved in the University of Toronto Bariatric Surgical assessment and treatment program. There is an assessment centre at the Toronto Western site as well as a Centre of Excellence for provision of Bariatric Surgical Care. The target for 2011 fiscal year is 300 bariatric surgical operations. Tied to this program has been the development of a quality initiative enrolling in the NSQIP (National Surgical Quality Improvement Program) Bariatric Surgical Module, in order to carefully monitor process and outcome in bariatric surgical operations. This adds a much needed element of academic rigor to this practise. Our Division has also enrolled in the General Surgical Module of NSQIP which will allow for improvements in assessment of process and outcomes in General Surgery at our Centre and across the breadth of General Surgery. We are one of a very small number of Canadian Centres that are involved in this program and this will allow us to benchmark with other major teaching centres, predominantly those in the United States. Drs. Timothy Jackson and David Urbach are spearheading this initiative.

We have also initiated a Robotic Colorectal Surgery Program to perform minimally invasive robot assisted operations for cancers of the rectosigmoid. This will hopefully allow for these patients to have shorter hospitalizations, speedier recovery, and early return to normal activity.

The Hepatobiliary Surgery Oncology Program continues to flourish, under the leadership of Dr. Steven Gallinger. We perform over 300 major hepatobiliary pancreatic oncologic ablative procedures annually at University Health Network. Additionally, we have programs in place to monitor quality and outcomes in these patients and are actively involved in research in outcomes, multidisciplinary treatment, molecular biology and genetics of cancers of the liver, pancreas and colon.

PROMOTIONS

We are pleased to announce the promotion of Dr. Anna Gagliardi to Associate Professor within the Department of Surgery, and Dr. David Urbach to Professor of Surgery.

DIVISION OF NEUROSURGERY

The Division of Neurosurgery at UHN has undergone significant restructuring over this past academic year in preparation for growth and the hiring of 5 additional neurosurgeons to our faculty. Members of the Division have continued to excel clinically, in research, and in education. The Division, along with the UHN foundation, have committed funds to an Endowed Chair for the Division Chief of Neurosurgery at TWH.

Dr. Tymianski has been named a Canada Research Chair (Tier 1) in Translational Stroke Research, has completed a 14-site multi-center, randomized, double blinded clinical trial of a neuroprotectant initially discovered in his scientific laboratory, and has received a 5 year ORF grant for his scientific work on TRPM7 channels.

Dr. Michael Fehlings continues to work on translational and clinical aspects of cervical myelopathy, has published multiple papers on the topic, and has participated in the completion of two multicentre international clinical trials on cervical myelopathy. He was awarded the Hansjörg Wyss Foundation Award from AOSpine International.

Dr. Andres Lozano was appointed as the Chairman of the division of neurosurgery at the University of Toronto. Among multiple awards, he was this year's recipient of the 2010 Winn Prize Award from the Society of Neurological Surgeons.

Dr. Mark Bernstein was appointed as the inaugural Greg Wilkins-Barrick Chair in International Surgery. The Chair is the centerpiece of a \$5.5 million gift from Barrick and the Wilkins family to the Toronto General & Western Hospital Foundation, in tribute to Greg Wilkins, Barrick's late CEO.

Dr. Gelareh Zadeh was an Invited Speaker at multiple international meetings, received the Annual Clinician Scientist Award and the Best Abstract Award at the American Society for Therapeutic Radiation and Oncology (ASTRO) Annual Meeting, and a B.R.A.I.N. child grant for her work "Identifying non-invasive biomarkers of response to combinatorial antiangiogenic and radiation therapy".

Dr. Mojgan Hodaie was awarded the Wightman-Berris Award for postgraduate education, May 12, 2011. She was also promoted to the rank of Associate Professor, and appointed as a member of the WFNS education Committee, and the AANS Neurosurgeons Editorial Board.

Dr. Eric Massicotte was an Invited Speaker and Moderator at the 8th Asian Congress of Neurological Surgeons. 1/Management of cervico-thoracic spine injuries, 2/management of thoraco-lumbar spine injuries, 3/Anterior fixation and fusion in cervical spondylotic myelopathy, 4/Timing of surgery for spinal cord injury. 5/ moderated symposium on spine and degenerative spine disease. Kuala Lumpur, Malaysia. November 20 - 23, 2010.

Dr. Fred Gentili has lectured at multiple international meetings on various aspects of neurosurgical endoscopy and skull base neurosurgery. He continues to be a sought-after teacher, and trains multiple clinical fellows.

Dr. Charles Tator was the recipient of the UHN 2011 Global Impact Award, given to a UHN staff member have been leaders in medicine and science, and whose past work has led to improvements in health care well beyond our borders. Dr. Tator was selected as this year's recipient, in recognition of his pioneering research in spinal cord injury in Canada, and as an international leader in prevention of head injury.

In addition, trainees of UHN neurosurgeons continue to win major awards: Douglas Cook (1st prize; Supervisor - Dr. Michael Tymianski) and Gregory Hawryluk (2nd prize; Supervisor - Dr. Michael Fehlings) swept the Basic Neuroscience Research category of this year's K.G. McKenzie Prize competition for their papers entitled "Extending the therapeutic window for reperfusion after stroke in non-human primates using a PSD-95 inhibitor" and "Understanding how a cell transplantation paradigm leads to functional recovery from spinal cord injury: the importance of remyelination", respectively. Adrian Laxton (Supervisor - Dr. Andres Lozano) was awarded 1st Prize in the K.G. McKenzie Prize in Clinical Neuroscience Research competition for his work entitled "A Phase I trial of deep brain stimulation of memory circuits in Alzheimer's disease". The McKenzie Prizes are awarded by the Canadian Neurological Society for the best manuscript submitted to the Society by a neurosurgical resident who is the principal author on the work. In addition, Suneil Kalia (Supervisor - Dr. Andres Lozano) was 2nd author on a paper, authored by his wife Lorraine, entitled "Regulation of alpha-synuclein oligomerization and ubiquitinylation by molecular chaperones" that won the Andre Barbeau Memorial Prize.

DIVISION OF ORTHOPAEDICS

We recruited a new clinical epidemiologist to the division, Dr. Anthony Perruccio. Anthony completed his PhD in Epidemiology at the University of Toronto and finished a post-doctoral fellowship at Harvard. Anthony's focus will be on clinical epidemiology health services research around patients with arthritis related disorders. He has published 15 peer-reviewed articles/chapters/abstracts over the past year and was appointed Co-Chair of the MSK working group for the Ontario Health Study.

Under the leadership of Dr. Christian Veillette the division has developed an integrated clinical outcomes measurements database called UHN DADOS. This is a web based health information platform that provides the core data management and outcomes research infrastructure for prospective data collection in clinical and translational research. It has currently been implemented within the UHN Orthopaedic and Spine programs; however, its capabilities are of benefit to additional programs, academic institutions and research communities across Ontario and world-wide.

The innovation aims to address three key problems that currently plague attempts to improve the quality of care, compare effectiveness of treatments and bridge the gap between research and clinical care:

- 1) Lack of standardization of outcome collection and reporting tools,
- 2) Spread of data across isolated/disperate institutional repositories,
- 3) Reliance on

costly, proprietary third-party vendors to deploy patient outcome reporting

Under the leadership of Dr. Rajiv Gandhi the division has developed and instituted a clinical tissue biobank which captures and stores clinical specimens from patients undergoing surgery at the University Health Network. We have had a number of peer reviewed publications centred around this work in the past year.

Working in collaboration with Dr. Mark Takahashi at the MaRS Discovery Center, the division has been looking at translational research projects looking at the impact of obesity and leptin adiponectins in the modulation of osteoarthritis and its impact at the time of surgery.

Under the leadership of Dr. Raj Rampersaud, the Division has implemented an integrated adverse events tracking program called ORTHOSAVES. The goal of this project is to capture adverse events in the intraoperative and in the perioperative period to provide an infrastructure for quality improvement and patient safety strategies. This is modelled after the program that Raj has developed in spine surgery called Spine AdVerse Events Severity system (SAVES).

Dr. Stephen Lewis was invited as one of ten founding members of the AO Spine's Knowledge Forum on Deformity (an international group of spinal deformity surgeons). He chaired International and a national spinal deformity courses and was the local host of the 17th annual International Meeting of Advanced Spine Techniques (IMAST).

Dr. Darrell Ogilvie-Harris has completed the first year as Head of the Sports Program in combination with Women's College Hospital. The teaching curriculum for residents has been reorganised with a defined body of knowledge and formal testing with OSCE, MCQ, case write up and STACERS. The fellowship program consisted of combined staff/fellow rounds and formal teaching by the fellows. A bioskills lab (drylab) has been set up and incorporated into teaching rounds using a donation in kind of the old UHN arthroscopy equipment and generous support from Smith and Nephew. It is part of the "simulation laboratory" at WCH including anaesthesia and nursing

The Division of Orthopaedics, in conjunction with the Arthritis Program at the University Health Network has launched a fundraising campaign called the "Arthritis Campaign" with a target goal of raising 25 million dollars for research towards translational research in arthritis with a primary focus around osteoarthritis. To date, we have raised 15 million dollars towards this goal.

The Division at UHN will be working in collaboration with the MSK EDU and the McEwen Center for Regenerative Medicine at UHN to evolve and develop a focused program for regenerative strategies for osteoarthritis over the next three to five years.

Dr. Rod Davey was appointed co-chair of the Joint Health Disease Management Task Force for the Toronto Central LHIN. In Rod's role he oversees the implementation and delivery of orthopaedic and associated services for patients undergoing hip and knee replacement, as well as hip fracture surgery in the Toronto Central LHIN. Rod's other provincial roles of leadership includes sitting on the Toronto Central Wait

Times Strategies Committee and on a task force looking at complexity of total joint patients and a task force looking at the discharge status of total joint patients in the Toronto Central LHIN.

Dr. Mark Erwin, a researcher within the Division of Orthopaedics at UHN, has been recognized with several recent research awards for his work on regenerative disc biology. His progress last year included his laboratory being able to suppress apoptosis and degeneration of intervertebral disc-derived chondrocyte-like cells in vitro. Furthermore, his lab has successfully differentiated disc-derived stem cells into chondrogenic, adipogenic, osteogenic and neurogenic lineages as well as successfully transplanted disc stem cells into the brain and spinal cord of animals.

DIVISION OF PLASTIC AND RECONSTRUCTIVE SURGERY

The Division of Plastic and Reconstructive Surgery at UHN has had a very productive year in the areas of education, research, publications and presentations and clinical outreach programs.

In the area of education, the TWH Hand Program collaborating with the Physiotherapy and Occupational Therapy Departments, University Health Network organized a 2-day Hand Surgery and Rehabilitation Symposium covering selected topics in hand surgery and rehabilitation. The First Paediatric Upper Extremity Symposium was organized by Drs. Stefan Hofer and Christopher Forrest and held in October 2010 with Guest Speaker, Professor Steven Hovius, from Rotterdam, The Netherlands and combined with the 8th Annual Ralph T. Manktelow Hand Symposium.

In terms of Research funding and collaboration, Divisional peer-reviewed funding was obtained from the following agencies: CBCF, CSPS, CIHR, PSIF, and PSEF/ASRM for projects ranging from basic science, new surgical biomaterials applications, quality of life outcomes, pain management and population-based studies.

Dr. Toni Zhong was awarded one of two outstanding paper presentations by the American Society for Reconstructive Microsurgery (ASRM) 2011 as well as the William K. Lindsay Faculty Research Mentor Award, Division of Plastic Surgery, University of Toronto 2011. In addition, Dr. Zhong was appointed as the Breast Cancer Reconstruction Fellowship Coordinator as well as the Clinical Fellowship Coordinator for the Division at the University of Toronto.

During the past academic year, division members published 19 peer-reviewed papers, presented 24 scientific papers and presented 15 invited lectures.

TWH - Hand Program

Dr. Brent Graham has stepped down as Director of the Hand Program after 12 years. Dr. Stefan Hofer has taken on this role and the Hand Program is currently working to recruit two new hand surgeons for strategic growth and further development in our expertise in microsurgery, peripheral nerve surgery, reconstructive carpal surgery and arthroscopy/minimally invasive wrist and hand procedures.

We are pleased to announce that Dr. Christine Novak has recently been recruited and appointed as an Associate Professor in the Division of Plastic & Reconstructive Surgery, Department of Surgery, as a Scientist at the Toronto Rehabilitation Institute and a Research Associate at the University Health Network in the Hand Program (Toronto Western Hospital).

Dr. Toni Zhong received a M.H.S. degree specializing in Clinical Epidemiology from the School of Public Health at Harvard University and she was also promoted to Assistant Professor in the Department of Surgery.

DIVISION OF THORACIC SURGERY

This year 2010-2011 has been a stellar period of advancement for our Division of Thoracic Surgery (DOTS). It continues to have the largest clinical activity of any thoracic program in Canada. We successfully recruited Dr. Marcelo Cypel after an international search for a Surgeon-Scientist with research and clinical interests in lung transplantation and extra-corporeal life support. Dr. Cypel completed general surgery and thoracic surgery training in Brazil before coming to Toronto, where he completed his MSc working on Ex Vivo Lung Perfusion under Dr. Shaf Keshavjee. He then completed additional fellowship training at TGH in thoracic surgery and lung transplantation. Dr. Cypel has won the prestigious Michael DeBakey Research Scholarship as the most promising young faculty member in North America from the American Association for Thoracic Surgery. Dr. Andrew Pierre were promoted to Associate Professor for his contributions to education. Dr. Darling was appointed as the surgical lead for the thoracic site in the leading radiation oncology trials group, RTOG. Dr. Yasufuku was appointed to the lung site group for the CCO Program in Evidence-Based Care. Dr. Keshavjee was appointed to the Council of the AATS. Dr. Waddell was appointed Chair of the AATS Research Committee and continued to serve on the Research Committee of the TSFRE and the Program Planning Committee for the Annual Meeting of the STS.

EDUCATION

Dr. Sameena Uddin successfully completed her completed her training this year and has taken a clinical position in Mississauga. Fellows graduating from our program included Dr. Masaki Anraku, who has returned as Assistant Professor at Keio University in Japan, Dr. Masaaki Sato, who has joined the University of Kyoto, to extend our long-term collaboration with this important group. Both Dr. Anraku and Dr. Sato trained for many years in Toronto, including experience in both advanced laboratory research, thoracic surgery, and lung transplantation. Dr. Eero Sihvo returned to his position as Deputy-Chief, Thoracic Surgery in Finland after training in thoracic surgery and lung transplantation. Dr. Isabelle Schmitt-Opitz returned to her faculty position at the University of Zurich in Switzerland after specialized training in mesothelioma and surgery for chronic thromboembolic pulmonary hypertension. Dr. Gustavo Fortunato returned to his faculty position in Brasil after completing training in lung transplantation. Dr. Nona Zeitlin returned to her faculty position in Israel after completing her time of training which included both lab research and clinical thoracic surgery.

RESEARCH AND ACADEMIC PRODUCTIVITY

Clinical and research activity together led to 49 peer reviewed primary publications with an additional 9 reviews or chapters. Division members also participated in a total of 36 invited visits. 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, especially image-guided therapeutics and nanotechnology. Collectively, they attracted almost \$2M in peer-reviewed research funding, excluding research contracts with corporate sponsors. Major highlights for 2010-2011 include: Dr. Takahiro Nakajima was awarded the Young Investigator Award from the American College of Chest Physicians for his work on molecular assessment of lung cancer (Supervisor, Dr. K Yasufuku), the publication of our clinical trial of "Normothermic Ex vivo lung Perfusion in Clinical Lung Transplantation" in the New England Journal of Medicine (Cypel et al, NEJM, 364(15):1431-1440) and the presentation of our single center study comparing endobronchial ultrasound to cervical mediastinoscopy as the opening plenary paper at the 2011 American Association for Thoracic Surgery meeting (Yasufuku et al, JTCVS in press).

DIVISION OF UROLOGY

The Division of Urology at the University Health Network continued to have an extremely productive year. We have published collectively over 40 peer reviewed manuscripts and many of our members continue to have peer reviewed grant funding.

Dr. Antonio Finelli continues his work in minimally invasive and robotic surgery at the UHN. From a research point of view, he continues to work on knowledge translation strategies and health services research as it applies to kidney and prostate cancers.

Dr. Neil Fleshner continues his clinical focus in prostate and bladder cancers. In 2011, he had a major presentation on the results of the REDEEM study which was a featured paper at GU ASCO, AUA and EAU meetings. He continues to run an active research program in prostate cancer prevention through the Love chair. He also leads the GU BIOBANK initiative.

Dr. Magdy Hassouna has had a successful year. He continues his clinical work which focuses on bladder neurostimulation for end stage bladder disease and chronic pelvic pain.

Dr. Michael Jewett continues his clinical work in genitourinary oncology. He maintains an active research program in kidney cancer through the Farquharson chair. This year Dr. Jewett was awarded medals of merit from the AUA, SUO and CUA.

Dr. Sidney Radomski continues his work in female urology and complex neuro-urology. He has been invited lecturer in many North American sites this year.

Dr. Michael Robinette continues his clinical devotion to kidney transplantation. He has also been the physician lead on the 123 Edward Street clinic.

Dr. John Trachtenberg continues his innovative academic work in prostatic diseases through the Fleck Tannenbaum Chair. His research in image guided focal therapy in prostate cancer has gained international interest and now in phase II testing.

Dr Alexander Zlotta continues his translational research in prostate and bladder cancer. In July, he will assume the directorship of our uro-oncology fellowship program. This program has blossomed into a world-class teaching program with 3 clinical and up to 9 research fellows per year.

DIVISION OF VASCULAR SURGERY

The Division remains active in clinical work, research, teaching and provides leadership at hospital, university and provincial levels. A focus of emerging expertise and innovation surrounds the application of endovascular aneurysm technology to repair aneurysms in all areas of the arterial tree. A collaborative partnership with Interventional Radiology in the use of branched and fenestrated endovascular devices for the arch, thoracic, thoracoabdominal, abdominal and iliac vessels is gaining strength as a signature program.

Dr. Rubin continues as Program Medical Director of the Peter Munk Cardiac Center, Chairman and CEO of the MSH-UHN Academic Medical Organization and Representative to the Provincial Academic Medical Steering Committee. In May of 2011 Dr. Thomas Lindsay was named Acting Division Head at UHN to succeed Dr. Rubin. Dr. George Oreopoulos completed a Fellowship in Interventional Radiology at the University of Toronto and will become a joint member of the Division of Medical Imaging. Dr. Leonard Tse is embarking on his own research program after having completed his Master's degree under the supervision of Dr. Cristina Amon in the Department of Engineering at the University of Toronto. Dr. Roche-Nagle has lead the Quality of Care initiative within the Division through membership in the New England Vascular Study Group.

Dr. Rubin continues with funding for 3 CIHR grants. New grants were obtained by Dr. Douglas Wooster and Dr. Leonard Tse. The Division was responsible for the publication of 10 peer reviewed articles. Dr. Johnston with his co-author Dr. Jack Cronenwett published the revised Rutherford Textbook of Vascular Surgery.

Dr. Lindsay was awarded the Ross Fleming Surgical Educator award at the University Health Network in May 2011.

The Division was extremely active at the Canadian Society for Vascular Surgery meeting presenting seven papers at the 2010 meeting and was active in the 2011 Winnipeg Vascular and Endovascular symposium. Dr. Wooster presented at the 2011 Society for Vascular Surgery annual meeting and well as numerous other national and international meetings.

■ Division Of Cardiac Surgery

Dr. J.S. Brister	Associate Professor	Dr. A.C. Ralph-Edwards	Lecturer
Dr. R.J. Cusimano	Associate Professor	Dr. V. Rao	Professor
Dr. T.E. David	University Professor (Division Head)	Dr. G. Ropchan	Associate Professor
		Dr. H. Scully	Professor
Dr. C.M. Feindel	Professor	Dr. R. D. Weisel	Professor
Dr. R. K. Li	Professor	Dr. T.M. Yau	Professor

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INVITED VISITS

Brister SJ: Canadian Cardiovascular Congress, Montreal, Quebec, Canada, October 2010. Interesting developments and clinical trials.

Cusimano RJ: University of Calgary, Scientific Session, Clinical Update - Slothus Medicus Reunion, Calgary, Alberta, Canada, October 2010.

David TE: Sociedade de Cardiologia do Estado do Rio de Janeiro, 27th Congresso de Cardiologia, Rio de Janeiro, Brazil, August 2010. (1) Aortic root aneurysm: diagnosis, treatment and outcomes, (2) Debate: Aortic valve replacement is the treatment of choice for aortic stenosis, (3) Debate: PCI or CABG: Patients with triple vessel disease should have CABG.

David TE: Association of Thoracic and Cardiovascular Surgeons of Asia (20th Annual Congress), in conjunction with the Chinese Society for Thoracic and Cardiovascular Surgery (10th Annual Congress), Beijing, China, October 2010. (1) Aortic valve repair - how to do it; (2) Aortic valve sparing operations: history, techniques and clinical outcomes; (3) Aortic valve replacement with Hancock II bioprosthesis.

David TE: Hartford Hospital, The Henry Low Heart Centre, 26th Annual Cardiovascular Symposium, Hartford, Connecticut, USA, October 2010. What's new in cardiac surgery?

David TE: The Chinese University of Hong Kong/Prince of Wales Hospital, Department of Surgery, Division of Cardiothoracic Surgery, Shatin, NT, Hong Kong, October 2010. Tricuspid valve repair or replacement?

David TE: Friedrich-Schiller University Jena, University of Heart Center Thuringen, Jena, Germany, January 2011. Visiting Professor: Heart Valve reconstruction. Lessons from the master.

David TE: Brazilian Society of Cardiovascular Surgery (38th Congress) and the Latin American Society of Cardiovascular and Thoracic Surgery (V Congress), Porto Alegre, Brazil, March 2011. Invited Guest Speaker: Lectures: (1) Aortic valve repair, (2) Surgery of the aortic root: State of art, (3) Hancock II bioprosthesis: Hemodynamics and long-term outcomes.

David TE: American Association for Thoracic Surgery, 91st Annual Meeting, Philadelphia, Pennsylvania, USA, May 2011. (1) Invited discussant paper 44: Valve-sparing aortic root repair without downsizing of the annulus: long-term results, (2) Invited Speaker: For the care of the cardiothoracic surgery patient, the Canadian System is superior to the US.

David TE: American Association for Thoracic Surgery, 2011 Mitral Conclave, Guest Speaker, New York, New York, May 2011. Lecture: Prevention of atrioventricular rupture.

David TE: Cleveland Clinic Hospital, Visiting Professor, Cleveland, Ohio, USA, May 2011. The Hancock II bioprosthesis for aortic valve replacement - the gold standard in bioprosthetic durability?

David TE: II Ethicon Latin American Forum, Sao Paulo, Brazil, June 2011. Aortic valve conservative surgical treatment.

David TE: Association of Cardiac Surgeons, XXVII Meeting, Montreal, Quebec, Canada, June 2011. Invited Speaker: Long-term results of valve-sparing root reconstruction in Marfan syndrome.

David TE: Cincinnati Congenital Adult Heart Disease Conference, Cincinnati, Ohio, USA, June 2011. (1) The asymptomatic dilating aortic root and ascending aorta: What can we do? Can the guidelines guide us? (2) When can the regurgitant aortic valve be repaired?

Feindel CM: Canadian Cardiovascular Society, Montreal, Quebec, Canada, October 2010. Determinants of variation in revascularization practices in Ontario (VRPO).

Feindel CM: Canadian Cardiovascular Society, Montreal, Quebec, Canada, October 2010. Workshop: Variation in Revascularization practices in Ontario: Clinical and non-clinical factors and outcomes.

Feindel CM: The New Orleans Conference, Practices in Cardiac Surgery and Extracorporeal Technologies, New Orleans, Louisiana, USA, June 2011. Contemporary Management of Mitral Valve Disease.

Feindel CM: The New Orleans Conference, Practices in Cardiac Surgery and Extracorporeal Technologies, New Orleans, Louisiana, USA, June 2011. Debate: U.S. vs Canadian Health Care System.

Li R-K: Medical College of National Cheng Kung University, Minipigs in Biomedical Research Meeting, Guest Speaker, Tainan, Taiwan, August 2010. Swine model in cardiovascular research.

Li R-K: National Tsing Hua University, Department of Chemical Engineering, Hsinchu, Taiwan, August 2010. Tissue engineering in cardiovascular research.

Li R-K: American Heart Association, Scientific Sessions 2010, Chicago, Illinois, USA, November 2010. Are allogeneic stem cells rejected?

Li R-K: Università Di Roma "Tor Vergata", Adult Progenitor Cell Standardization, Rome, Italy, December 2010. (1) Chairman of Round Table, (2) Guest Speaker: Feasibility of allogeneic bone marrow cells for cell therapy to repair damaged myocardium after myocardial infarction/ Which strategies to govern adult progenitor cells differentiation?

Li R-K: Cardiovascular Research Foundation, Sixth International Conference on Cell Therapy for Cardiovascular Disease, Moderator, New York, New York, USA, January 2011. Allogeneic cells, molecular agents, and specialty products.

Li R-K: Keystone Symposium on Molecular and Cellular Biology, Extracellular Matrix and Cardiovascular Remodelling, Tahoe City, California, USA, January 2011. Cell and gene therapy preserves matrix homeostasis: A novel paracrine mechanism preventing detrimental myocardial matrix modulation.

Li R-K: Hospital General Universitario Gregorio Marañón, 8th International Simposio en Stem Cell Therapy and Cardiovascular Innovations, Madrid, Spain, June 2011. Allogeneic stem cell therapy for cardiac regeneration.

Scully H: Canadian Cardiovascular Congress, October 2010. Bigelow Lecture/invited plenary lecture.

Scully H: Surgical Club of Wisconsin, Wisconsin, USA, May 2011. Guest Lecturer: Canadian healthcare: Myths and realities.

Weisel RD: American Heart Association, Chicago, Illinois, USA, November 2010. (1) Commentary on cell and gene therapy, (2) Seminar Moderator for Enhanced Stem Cell Therapy.

Yau TM: 21st Century Cardiothoracic Surgical Society, Rio Mar, Puerto Rico, February 2011. A novel mechanism of action of transmyocardial revascularization.

Yau TM: 12th International Congress of Cardiovascular Anesthesia, Beijing, China, September 2010. Emerging technologies in cardiac surgery.

RESEARCH AND INVESTIGATIONS

Acadesine to reduce perioperative ischemic injury. *Yau T, Weisel RD: Schering-Plough.* (\$100,000 2009 - 2010)

Advance targeted transfusion in anemic cardiac surgical patients for kidney protection. *Karkouti, Keyvan, Yau TM: Heart and Stroke Foundation of Canada.* (\$124,202 2009 - 2011)

An angiogenic progenitor cell niche in the uterus: Potential implications for cell therapy. *Li R-K: Canadian Institutes of Health Research.* (\$681,120 2008 - 2013)

An RCT of women's adherence to women-only, home-based and traditional cardiac rehabilitation (CR4HER). *Grace SL, Pilote L, Arthur HM, Stewart DE, Oh P, Melvin K, Sternberg L, Brister SJ: Heart and Stroke.* (\$369,204 2009 - 2013)

Anaconda trial. *Wasowicz M, Yau TM: Innovations Fund.* (\$91,722 2010 - 2011)

Chitosan hydrogel with immobilized growth factors for cell therapy in myocardial infarction. *Radisic M, Li R-K: Heart and Stroke Foundation of Ontario.* (\$210,648 2010 - 2013)

Electrophysiological implications of regenerative therapy. *Terrence M, 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.* (\$10,000 2010 - 2012)

Harnessing the immune system to achieve cardiac restoration by allogeneic cell transplantation. *Li R-K: Canadian Institutes of Health Research.* (\$698,984 2010 - 2015)

Inflammation, infection, trauma and repair cluster - Canada Research Chair in Cardiac Regeneration. *Li R-K: Canadian Institutes of Health Research.* (\$1,400,000 2006 - 2014)

Modifying cardiac repair using molecular and cellular interventions. *Li R-K: 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 R-K, Liu M, Rottapel R, Walker G, Wilson B: Canada Foundation for Innovation.* (\$2,486,515 2009 - 2014)

Restoration of cardiac function: cellular regeneration and matrix reconstruction. *Li R-K: Heart and Stroke Foundation of Ontario.* (\$439,750 2006 - 2011)

The cardiac regeneration project: Quantitative cell tracking and response for cardiac regenerative approaches (CARE Project). *Li R-K, Weisel RD, Jaffray D, Neverova I, Sefton M, Wilson B: Canadian Institutes of Health Research. (\$2,287,690 2006 - 2012)*

The design and planning of a randomized controlled trial to evaluate a tailored cardiovascular surgical patient education intervention in reducing post-hospital discharge complications and readmission rates. *Fredericks SM, Yau TM: Canadian Institutes of Health Research. (\$140,000 2011 - 2013)*

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 Regenerative Medicine (REMEDI) Project. *Weisel RD, Jaffray D, Keating A, Keller G, Kotra L, Liu P, Li R-K, Sefton M, Wright G: Canadian Foundation for Innovation and Ontario Research Fund. (\$14,400,000 2006 - 2011)*

The Regenerative Medicine Project (REMEDI). *Weisel RD, Li R-K, Jaffray D, 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 R-K, Stanford WL: Natural Sciences and Engineering Research Council of Canada (NSERC). (\$444,765 2010 - 2013)*

HONOURS RECEIVED

Li R-K: CPAC Professional Achievement Award, Chinese Professionals Association of Canada (CPAC), October 2010.

Scully H: Medal of Service (Top Award), Canadian Medical Association, August 2010

Scully H: Annual (Lifetime) Achievement Award (Top Award), Canadian Cardiovascular Society. October 2010.

Weisel RD: Chairman Innovation Fund Provincial Oversight Committee and Showcase, November 2010.

■ Division Of General Surgery

Dr. M.S. Cattral	Professor	Dr. I.D. McGilvray	Associate Professor
Dr. T. Cil	Assistant Professor	Dr. C.A. Moulton	Assistant Professor
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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. L. E. Rotstein	Professor (Division Head)
Dr. R.M. Gorczynski	Professor	Dr. M. Selzner	Assistant Professor
Dr. D. Grant	Professor	Dr. B. R. Taylor	Professor
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Dr. T. Jackson	Assistant Professor	Dr. A.C. Wei	Assistant Professor
Dr. W.L. Leong	Assistant Professor	Dr. H. Weizel	Associate Professor
Dr. D.R. McCready	Professor	Dr. L. Wright	Assistant Professor

PUBLICATIONS

Al-Husaini H, Subramanyam D, Reedijk MJ, Sridhar SS: Notch signaling pathway as a therapeutic target in breast cancer. *Molecular Cancer Therapeutics*: January 2011: 10(1): pp 9-15. E-published October 22, 2010.

Angarita F, Acuna SA, Fonseca A, Crystal P, Escallon J: Impact of preoperative breast MRIs on timing of surgery and type of intervention in newly diagnosed breast cancer patients. *Annals of Surgical Oncology*: October 2010: 17(13): pp 273-279. E-published September 19, 2010.

Bane AL, Pinnaduwa D, Colby S, Reedijk M, Egan SE, Bull SB, O'Malley FP, Andrulis IL: Erratum to: Expression profiling of familial breast cancers demonstrates higher expression of FGFR2 in BRCA2-associated tumors. *Breast Cancer Research and Treatment*: February 2011: 126(1): p 269.

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Bertuccio P, la Vecchia C, Silverman DT, Petersen GM, Bracci PM, Negri E, Li D, Risch HA, Olson SH, Gallinger S, Miller AB, Bueno-de Mesquita HB, Talamini R, Polesel J, Ghadirian P, Baghurst PA, Zatonski W, Fontham E, Bamlet WR, Holly EA, Lucenteforte E, Hassan M, Yu H, Kurtz RC, Cotterchio M, Su J, Maisonneuve P, Duell EJ, Bosetti C, Boffetta P: Reply to Are cohort data on smokeless tobacco use and pancreatic cancer confounded by alcohol use? *Annals of Oncology*: June 2011: 22 (8): 1931-1932. E-published June 23, 2011.

Bertuccio P, la Vecchia C, Silverman DT, Petersen GM, Bracci PM, Negri E, Li D, Risch HA, Olson SH, Gallinger S, Miller AB, Bueno-de Mesquita HB, Talamini R, Polesel J, Ghadirian P, Baghurst PA, Zatonski W, Fontham ET, Bamlet WR, Holly EA, Lucenteforte E, Hassan M, Yu H, Kurtz RC, Cotterchio M, Su J, Maisonneuve P, Duell EJ, Bosetti C, Boffetta P: Cigar and pipe smoking, smokeless tobacco use and pancreatic cancer: an analysis from the International Pancreatic Cancer Case-Control Consortium (PanC4). *Annals of Oncology*: June 2011: 22(6): pp 1420-1426. E-published January 18, 2011.

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Bruni R, Wright L: Sharing organs with foreign nationals. *Progress in Transplantation*: March 2011: 21: pp 78-82.

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Gagliardi AR, Wright FC: Exploratory evaluation of surgical skills mentorship program designs and outcomes. *The Journal of Continuing Education in the Health Professions*: October 2010: 30(1): pp 51-56.

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Yang S, Hongjinda S, Hanna S, Gallinger S, Wei AC, Kiss A, Law C: Utility of preoperative imaging in evaluating colorectal liver metastases declines over time. *HPB (Oxford)*: November 2010; 12(9): pp 605-609. E-published September 2, 2010.

INVITED VISITS

Cil T: McMaster University, Centre for Minimally Invasive Surgery/Cancer Care Ontario, Sentinel Lymph Node Biopsy in Breast Cancer Course, Hamilton, Ontario, Canada, September 2010. Why perform sentinel lymph node biopsy?

Cleary S: Canadian Surgical Forum, Quebec, Canada, September 2010. (1) Colorectal metastases - what every surgeon should know in 2010, (2) Right hepatectomy for hepatocellular carcinoma.

Cleary S: Alberta Health Services, Provincial Gastrointestinal Tumour Group Meeting, Edmonton, Alberta, Canada, November 2010. Optimizing treatment of colorectal cancer: Rationale, barriers and benefits of a multidisciplinary clinic.

Escallon J: American Association of Academic Surgeons/Columbian Surgical Society, Symposium on Residency Education, Bogota, Colombia, August 2010. Lecture: The role of the mentor in a surgical career.

Escallon J: American College of Surgeons, Annual Clinical Congress/Latin American Day 2010, Washington, District Columbia, USA, October 2010. (1) Guest Speaker: Clinical case: Laparoscopic cholecystectomy. (2) Lecture: Bile duct injuries prevention and management.

Escallon J: Colombian Association of General Surgery, Board of Past Presidents, Bogota, Colombia, May 2011. Recommendation of the future of general surgery residency programs.

Escallon J: Canadian Breast Cancer Symposium, Toronto, Ontario, Canada, June 2011. Event co-Chair.

Gagliardi AR: Canadian Partnership against Cancer, Montreal, Quebec, Canada, June 2011. Plenary Speaker: Planning for guideline implementation. Responding to distress: Implementing guidelines into routine practice workshop.

Gagliardi AR: The Royal College of Physicians and Surgeons of Canada, Maintenance of Competence Strategic Planning Conference, Ottawa, Ontario, Canada, December 2010. Review of strategies and support for performance assessment.

Gallinger S: Canadian Association of General Surgeons/Canadian Hepato-Pancreato-Biliary Society, Canadian Surgery Forum, CAGS/CHPBS Symposium: Colorectal Metastases - What Every Surgeon Should Know in 2010, Quebec City, Quebec, Canada, September 2010. Pushing the boundaries of respectability.

Gallinger S: Eastern Canada Colorectal Cancer Consensus Conference (EC5) 2010, Ottawa, Ontario, Canada, October 2010. Chemotherapy and biologics with regard to surgery.

Gallinger S: Canadian Cancer Society, Colon Cancer Gala 2010, Toronto, Ontario, Canada, October 2010. Keynote Speaker.

Gallinger S: The American Society of Human Genetics, 60th Annual Meeting, Mismatch Repair in Health and Disease Session, Washington, District Columbia, USA, November 2010. Presentation: Mismatch repair deficient genotype and phenotypes.

Gallinger S: Canadian Surgery Forum CAGS/CHPBS Symposium: Colorectal Metastases- What Every Surgeon Should Know in 2010, Quebec City, Quebec, Canada, September 2010. Pushing the boundaries of resectability.

Gorczynski RM: Annual meeting, Antalya Gerontology Society, Antalya, Turkey, October 2010. R. Gorczynski, CD200 regulates immunity in human breast cancer.

Gorczynski RM: Montreux, Switzerland, October 2010. Do MPLA and rapamycin share a common mechanism of action, through altered fetal hemoglobin induction and altered REDOX levels?

Gorczynski RM: Montreux, Switzerland, January 2011. Do MPLA and rapamycin alter REDOX levels in stem cell microenvironments and can control bone metabolism.

Gorczynski RM: Annual meeting, Polish Hematology Society, October 2010, Lublin, October 2010. Role of CD200 in regulation of immunity in human lymphoma and breast cancer.

Grant D: Canadian Transplant Society, Vancouver, British Columbia, Canada, August 2010. Debate: Liver transplantation for hepatocellular cancer beyond the UCSF criteria (PRO).

Grant D: The Transplantation Society, Vancouver, British Columbia, Canada, August 2010. World-wide morbidity and mortality of living donor liver transplantation.

Grant D: University of Chicago / University of Pittsburgh, Chicago, Illinois, USA, September 2010. Keynote Address: A review of the international transplant registry.

Grant D: International Liver Transplant Society, Valencia, Spain, June 2011. Are the Milan criteria still relevant? No.

Grant D: Munich University, Department of Surgery, Munich, Germany, November 2010. Pediatric liver transplantation.

Grant D: Zurich University Hospital, Zurich, Switzerland, December 2010. Role of living donor liver transplantation for hepatocellular carcinoma.

Grant D: Asia Pacific Society, Busan, Korea, January 2011. Living liver donor safety and outcomes: Canadian experience.

Grant D: International Pediatric Transplant Association, Plenary Session, Montreal, Quebec, Canada, June 2011. Plenary Session: Debate: Tolerance: Hope or hype?

McCready DR: Society of Surgical Oncology National Videoconference Series, Toronto, Ontario, Canada, October 2010. Breast cancer in a patient with implants.

McCready DR: Ontario Association of Radiologist (OAR), Breast MRI - Detection and Diagnosis of Breast Cancer in the 21st Century, Toronto, Ontario, Canada, October 2010. Surgeon's view on breast MRI.

Moulton C-A: Association for Medical Education in Europe, Glasgow, United Kingdom, September 2010. Advances in understanding self-assessment.

Moulton C-A: American College of Surgeons Workshop, Accredited Education Institutes: Enhancing patient safety through simulation, Toronto, Ontario, Canada, October 2010. The use of simulation for assessment of technical skills and intra-operative decision making.

Moulton C-A: Karolinska Hospital, CME, Stockholm, Sweden, February 2011. Qualitative research methodology in research practice.

Moulton C-A: Oresund Symposium, Copenhagen, Denmark, February 2011. Slowing down when you should: Key to expert performance.

Moulton C-A: Rigshospitalet Hospital, Copenhagen, Denmark, February 2011. Slowing down when you should: key to expert performance.

Moulton C-A: Clinical Training Centre, Karolinska Institute, Stockholm, Sweden, February 2011. Staying out of trouble in automaticity.

Moulton C-A: Wisconson Surgical Club, Toronto, Ontario, May 2011. The Fall: A Surgeon's Reaction to Failure.

O'Brien C: Jackson Laboratories, Bar Harbour, Maine, USA, October 2010. Colon cancer in murine models and humans III.

Okraïne A: Canadian Association of General Surgeons-Canadian Surgical Forum, Quebec, Quebec, Canada, September 2010. (1) CAGS Instructional Video Session on Solid Organ Minimally Invasive Surgery: General approach to laparoscopic solid organ surgery, (2) Minimally Invasive Surgery Postgraduate Course: Laparoscopy and endoscopy in the acute setting, (3) The good, the bad, the metabolic - Managing the intraoperative hiatal hernia.

Okraïne A: Donetsk National Medical University, Donetsk, Ukraine, September 2010. The history of telesimulation and its potential role in the Ukraine and Russia.

Okraïne A: American College of Surgeons, 95th Annual Clinical Congress, Chicago, Illinois, USA, October 2010. Fundamentals of Laparoscopic Surgery Course: Intraoperative considerations in laparoscopy.

Okraïne A: American College of Surgeons, Accredited Education Institutes, 3rd Annual Postgraduate Course, Toronto, Ontario, Canada, October 2010. Outreach Programs Touching the World: Laparoscopy and telesimulation in Botswana and Africa.

Okraïne A: Symposium on Metabolism Gastrointestinal Surgery for Type II Diabetes, Toronto, Ontario, Canada, October 2010. New clinical trials in metabolic surgery in Canada.

Okraïnec A: Korle-Bu Teaching Hospital, Accra, Ghana, November 2010. (1) Intraoperative considerations in laparoscopy, (2) The role of laparoscopy for managing intra-abdominal emergencies.

Okraïnec A: Ontario Bariatric Network, Hamilton, Ontario, Canada, June 2011. Management of Surgical Complications.

Selzner M: Canadian Society of Transplantation, Vancouver, British Columbia, Canada, August 2010. Ex-vivo liver perfusion for the assessment and repair of marginal grafts.

Urbach DR: Radiological Society of North America, Chicago, Illinois, USA, November 2010. Clinical correlates of improvement in esophageal emptying on timed barium esophagram after treatment for achalasia.

Urbach DR: The Ottawa Hospital, Ottawa, Ontario, Canada, December 2010. Structures, processes and outcomes of care for colorectal cancer surgery.

Wei AC: Alberta Health Services, Provincial Gastrointestinal Tumour Board, Edmonton, Alberta, Canada, November 2010. Colorectal Cancer: Principles of Multidisciplinary Oncology Care.

Wei AC: Central East LHIN, Update in Surgical Oncology, Oshawa, Ontario, Canada, December 2010. Current management of colorectal liver metastases.

Wei AC: Update in General Surgery, University of Toronto, Toronto, ON, April 2011. Liver Metastastectomy: Where is the line in the sand?

Wright L: Canadian Society for Transplantation, Annual Meeting, Vancouver, British Columbia, Canada, August 2010. (1) co-chaired and organized debate, (2) Co-author on one paper: Should Canada share organs with foreign nationals?

Wright L: The Transplantation Society, Vancouver, British Columbia, Canada, August 2010. Altruistic kidney and liver donors.

Wright L: Canadian Society of Transplantation, Annual Scientific Meeting, Mont Tremblant, Quebec, Canada, March 2011. Co-chair of Ethics Forum.

RESEARCH AND INVESTIGATIONS

A new model of acute hepatitis C virus infection using ex vivo liver perfusion: Ex vivo, ex virus. *McGilvray I, Selzner N, Selzner M: Roche/MultiOrgan Transplant Program, University of Toronto.* (\$100,000 2011- 2013)

Adult-to-adult living liver transplantation (A2ALL). *Grant DR, Levy G, Clarke H, Abbey S, Holtzman S: National Institutes of Health (NIH).* (\$1,514,400 2009 - 2014)

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 (CIHR).* (\$503,248 2008 - 2011)

Assessment of Risk for Colon Tumors in Canada (ARCTIC). *Zanke B., Hudson T, Gallinger S, and 8 others: Ontario Research Fund (ORF).* (\$2,200,000 2010 - 2013)

Association between allergy history, immunologic genetic variants and pancreatic cancer risk. *Cotterchio M, Gallinger S, Greenwood C: Canadian Institutes of Health Research (CIHR).* (\$625,293 2010 - 2013)

Best Practice in General Surgery Multidisciplinary Consensus Workshop on Perioperative Care. *McLeod R, Aarts MA, Fenech D, Lindsay D, Nathens A, Okraïnec A, Pearsall E, Rotstein L, Smith A, Stotland P: Canadian Institutes of Health Research.* (\$13,750 2010 - 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.* (\$661,302 2005 - 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)

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)

Characterizing factors that influence physical activity promotion in primary care by realist systematic review. *Gagliardi AR, Abdallah F, Barnsley J, Ciliska D, Faulkner G: Canadian Institutes of Health Research.* (\$99,455 2011 - 2012)

CIHR Phase I Clinician Scientist Training Award: "Identification and Characterization of Human Liver Cancer Stem Cells". *Ghanekar A, Dick J, Dirks P: Canadian Institutes of Health Research.* (\$172,500 2009 - 2012)

CIHR Team in Interdisciplinary Research on Colorectal Cancer. *McLaughlin J, Gallinger S, and 25 others: Canadian Institutes of Health Research.* (\$3,627,210 2006 - 2011)

Clinical 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, Escallón J: Susan G. Komen, the Cure Grants.* (\$600,000 2008 - 2011)

CLP Research Gene expression studies and altered immunoregulation during aging following injection of MPLA in humans. *Gorczyński R: CLP Research.* (\$200,000 2010 - 2012)

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 a patient and family-centred approach for measuring the quality of trauma care. *Stelfox T, Tallon J, Kirkpatrick AW, Straus S, Evans D, Gagliardi A, Hameed SM, Hudak P, Nathens A, Quan H, Santana M: Canadian Institutes of Health Research.* (\$631,942 2011 - 2014)

Developing and validating a predictive micro-RNA signature of node-negative breast cancer area of focus. *Liu, F-F, Hui A, Wie S, Fyles A, McCready DR, Pintilie M, Miller N, Whelan T: Canadian Breast Cancer Foundation.* (\$393,105 2008 - 2011)

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 interprofessional knowledge exchange capacity for health services research. *Gagliardi AR, Paige CJ, Dobrow MJ: Canadian Institutes of Health Research.* (\$24,093 2010 - 2011)

Development of a clinical predictive model to drive quality improvement in bariatric procedures. *Jackson TD, Huller MM, Okrainec A, Urbach DR: Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) Career Development Award.* (\$60,000 2010- 2011)

Development of an integrated surgical skills course- supporting complex communication and procedural skill acquisition. *Tabak D, Moulton CA, MacRae H, LeBlanc V: NESTCL.* (\$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)

Dynamic case studies and the impact on health policy decision preparedness. *Dobrow MJ, Brouwers M, Burchett H, Gagliardi A, Hoch J, McBride M, Peacock S, Wright F: Canadian Institutes of Health Research.* (\$450,027 2011 - 2014)

Early Researcher Award. *Moulton CA: Ministry of Research and Innovation.* (\$105,000 2011 - 2013)

Effect of metformin on breast cancer. *Goodwin P, Escallón J, Leong W, Easson A: Canadian Health Institutes of Research.* (\$10 2009 2011)

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: 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)

Evaluation of an online CME resource for sentinel lymph node biopsy. *Cill T, Tail G, McCready DR: University of Toronto, Faculty of Medicine, Continuing Education Research and Development.* (\$4,654 2010 - 2011)

Ex vivo human liver perfusion: Assessment and repair of marginal grafts for transplantation. *Selzner M, Grant D, Levy G, Keshavjee S: Physician Services Incorporated Foundation (PSI).* (\$168,000 2010 - 2012)

Ex vivo human liver perfusion: Assessment and repair of marginal liver grafts for transplantation. *Selzner M, Grant D, Levy G: Roche Organ Transplantation Research Foundation.* (\$314,777 2010 - 2013)

Expansion of the Gattuso Rapid Clinic for Breast Cancer. *McCready DR: Slaughter and Gattuso Family Foundation and Princess Margaret Hospital Foundation.* (\$2,000,000 2009 - 2018)

Exploring barriers to access to care for colorectal cancer metastases: A mixed methods approach. *Wei AC, Kennedy ED, Baxter N, Gagliardi A, Urbach D: Colon Cancer Canada.* (\$30,000 2009 - 2010)

fgl2/FGL2 and xenograft transplantation. *Levy G, Gorczyński 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)
- Future of medical education in Canada, Part 2 PGME Environmental Scan. Project funding for the University of Toronto site. *Hodges B, LeBlanc V, Moulton CA, Herold J: Health Canada, Association of Faculties of Medicine of Canada.* (\$45,000 2010 - 2011)
- Gattuso Rapid Diagnostic Clinic for Breast Cancer. *McCready DR: Telus Corporation.* (\$500,000 2010)
- Generation of de novo molecular targets for optical imaging-guided surgical interventions in breast cancer. *DaCosta D, Leong WL, Sidhu S, Easson A, Done SJ: Cancer Imaging Network of Ontario.* (\$70,000 2011 - 2013)
- Generation of de novo molecular targets for optical imaging-guided surgical interventions in breast cancer. *DaCosta D, Leong WL, Sidhu S, Easson A, Done SJ: Canadian Institute for Photonic Innovations.* (\$95,000 2011 - 2012)
- 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)
- Guided acute resuscitation: Does education depend on trainees' interactions and participation (the GUARDED TIP study). *LeBlanc V, Piquette D, Moulton CA: the Physicians Services Incorporated.* (\$43,150 2010 - 2012)
- Guideline implementation: Developing collaborative capacity for rapid cycle research and application. *Gagliardi AR, Bombardier C: Canadian Institutes of Health Research.* (\$322,000 2011 - 2014)
- High resolution genetic analysis of genetic loci implicated in colorectal cancer. *Hudson T, Gallinger S, Lemire M, Peltekova V: Canadian Institutes of Health Research (CIHR).* (\$798,539 2010 - 2015)
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- 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)
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- 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 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)
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- Improving post-transplant outcomes in Hepatitis C: Identifying biomarkers and therapeutic targets. *Selzner N, McGilvray I: Roche Organ Transplantation Research Foundation.* (\$100,000 2011 - 2012)
- Improving quality and access to care in liver resection for metastatic colorectal cancer in Ontario. *Wei AC, McLeod R, Gallinger S, Moulton CA, Ruo L, Auer R, Quan D, Jalink D, Law C, Hart R: Ministry of Health and Long-Term Care, Alternate Funding Program, Phase III Innovation Fund.* (\$129,880 2009 - 2011)
- Improving quality of care for pancreatic cancer: developing evidence based clinical pathways for patients undergoing pancreatic cancer surgery. *Wei AC, Gallinger S: Cancer Care Ontario/ Ontario Institute for Cancer Research.* (\$128,774 2011 - 2012)
- Improving quality through process change: A scoping review of process improvement tools in cancer surgery. *Wei A, Urbach D, Kennedy ED, Gagliardi AR, Baxter NN, Taylor B, Bathe O, McLeod R: Canadian Institutes of Health Research.* (\$49,815 2010 - 2011)
- Integrated molecular profiling of patient-derived tumor xenograft models for preclinical evaluation of targeted drugs and biomarker discoveries (IMPPX Cancer Project). *Sui L, Tsao M, Bedard P, Chen E, Oza A, Reedijk M: Ontario Institute for Cancer Research.* (\$100,455 2011 - 2012)

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- 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. *Gorczyński R, (with Dr. Hughson et al): Joint initiative of Canadian Institutes of Health Research: Canadian Space Agency (CIHR-CSA).* (\$200,000 2009 - 2012)
- Molecular pathogenesis of Hepatitis C viral infection. *McGilvray I, Heathcote J: Canadian Institutes of Health Research.* (\$377,000 2009 - 2012)
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- 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)
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- Ontario Familial Colorectal Cancer Registry- Phase III. *Gallinger S, Cotterchio M, Bapat B, Esplen MJ, Gryfe RN, McKeown-Eyssen G, McLaughlin J, Pollet A, Woods M: National Institutes of Health Research – USA.* (\$4,400,000 2008 - 2012)
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- Pancreatic Cancer Linkage Consortium (Renewal). *Petersen, GM, Gallinger S. and 27 others: National Institutes of Health.* (\$4,000,000 2008 - 2013)
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- POP-CURE- colon cancer research collaboration with Pfizer. *Wouters B, McPherson H, Shaw P, Gallinger S, O'Brien C, Dick J: Pfizer.* (\$6,000,000 2009 – 2010)
- Pressures on surgeons to "measure up" with their effects on surgical judgment. *Moulton CA, Matimianakis T, Kitto S, Murnaghan L: Physicians Services Inc.* (\$98,000 2011 - 2013)
- Prioritizing research on interventions to prevent and reduce surgical device-based adverse events. *Gagliardi AR, Urbach D, Lehoux P, Ross S, Ducey A: Canadian Institutes of Health Research.* (\$24,628 2011 - 2012)
- 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.* (\$720,000 2010 - 2012)
- Randomized clinical trials for breast cancer. *McCready DR: National Adjuvant Breast and Bowel Project (NSABP).* (\$21,100 2010)
- Remote evaluation of laparoscopic performance using the global operative assessment of laparoscopic skills. *Okrainec A, Choy I, Jackson T: Society of American Gastrointestinal and Endoscopic Surgeons.* (\$11,259 2011 -2012)
- 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 interactions in regulation of cardiac transplant survival (H & S). *Gorczyński R: Heart and Stroke Association.* (\$290,000 2010 - 2013)

Role of sCD200 in diagnosis, prognosis and treatment in CLL. *Gorczyński R: Canadian Institutes of Health Research.* (\$550,000 2010 - 2015)

Role of sCD200 in predicting graft rejection in liver transplant recipients. *Gorczyński R: Physicians Services Inc. (PSI).* (\$185,000 2010 - 2012)

Role of immediate dendritic cell precursors in allograft rejection and tolerance. *Cattral MS: Heart and Stroke Foundation.* (\$230,082 2008- 2011)

Slowing down when you should: A new model of expert surgical judgment. *Moulton CA, Regehr G, MacRae H: Physicians' Services Incorporated.* (\$41,000 2007 - 2010)

Storage, assessment, and repair of liver grafts for transplantation using ex vivo liver perfusion. *Selzner M: Astellas Academic Enrichment Fund.* (\$100,000 2010 - 2012)

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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 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 (CIHR).* (\$577,989 2008 - 2011)

Thyroid cancer surgery in Ontario. *Urbach D, Rotstein L, Goldstein D, Irish J: Cancer Care Ontario.* (\$45,000 2009 - 2010)

Tools to support effective knowledge translation practice and research in cancer control. *Brouwers MC, Gagliardi AR: Ontario Institute for Cancer Research.* (\$168,853 2011 - 2012)

Transition to survivorship: Translating knowledge to action for testicular and endometrial cancer populations. *Jones J, Howell D, Buchman S, Ferguson S, Gospadarowicz 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)

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 (CIHR).* (\$215,139 2008 - 2011)

Validation and fine-scale mapping of pancreatic cancer susceptibility Loci. *Klein A, Petersen G, Brennan P, Bracci P, Risch H, Gallinger S and 6 others: National Institutes of Health- NCI.* (\$761,032 2011 - 2015)

HONOURS RECEIVED

Escallon J: Wightman-Berris Academy Excellence in Teaching Award. 2011

Ghanekar A: First Prize, Research Competition, Canadian Undergraduate Conference on Healthcare; "An orthotopic mouse model of hepatocellular carcinoma" presented by Matthew Iu (supervisor: Anand Ghanekar), November 2010.

Jackson T: Career Development Award, from the Society of American Gastrointestinal and Endoscopic Surgeons. 2010.

McCready DR: Breast Journal Award for Most Atmost Significant Publication, July 2010.

Moulton C-A: Best Poster Presentation (CREMS Scholar Category), February 2011.

Moulton C-A: Consortium of Bioethics Education - Favourites Reading List Author, April 2011.

Moulton C-A: Paper of Distinction, Association of Surgical Education, April 2011.

Moulton C-A: Early Researcher Award, Ministry of Research and Innovation, May 2011.

O'Brien C: New Investigator Award, from the Ontario Institute for Cancer Research. 2010.

■ Division Of Neurosurgery

Dr. M. Bernstein	Professor	Dr. K. Johnston	Assistant Professor
Dr. K. D. Davis	Professor	Dr. A. Lozano	Professor
Dr. J. Eubanks	Associate Professor	Dr. E. Massicotte	Associate Professor
Dr. M. Fehlings	Professor	Dr. C. Tator	Professor
Dr. F. Gentili	Professor	Dr. M. Tymianski	Professor
Dr. A. Guha	Professor	Dr. T. Valiante	Assistant Professor
Dr. C. Hamani	Assistant Professor	Dr. A. Velumian	Assistant Professor
Dr. M. Hodaie	Assistant Professor	Dr. M.C. Wallace	Professor (Division Head)
Dr. W. Hutchison	Associate Professor	Dr. G. Zadeh	Lecturer

PUBLICATIONS

Agnihotri S, Wolf A, Gajadhar A, Restrepo A, Kesari S, Fuller G, Aldape K, Mischel P, Hawkins C, Guha A: A GATA4-regulated tumor suppressor network represses formation of malignant human astrocytomas. *Journal of Experimental Medicine*: March 2011: 208(4): pp 689-702.

Agnihotri S, Munoz D, Guha A: Pre-Clinical Transgenic Mouse Models of Nervous System Tumors. *ACP Journal Club/Annals of Internal Medicine*: September 2010: 1(2): pp 139-147.

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Agnihotri S, Munoz D, Guha A: Brain Tumour Initiating Cells: History, New Advances, Therapeutic Promises and Pitfalls. In: *Practice & Principles of Neurooncology* (Chang S, Guha A, Mehta M, Vogelbaum M, eds). Demos Medical, New York, 2010.

Al-Habib A, Al-Radi OO, Shannon P, Al-Ahmadi H, Petrenko Y, Fehlings MG: Myxopapillary ependymoma: Correlation of clinical and imaging features with surgical respectability in a series with long-term follow-up. *Spinal Cord*: 2011: 49: 1073-1078. E-published June 7, 2011.

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INVITED VISITS

Bernstein M: Cleveland Clinic Ethics Symposium, Cleveland, Ohio, USA, October 2010. Ethical issues around awake brain surgery.

Bernstein M: 14th Canadian Neuro-Oncology Meeting, Niagara-on-the-Lake, Ontario, Canada, September 2010. Lessons learned by chatting with brain tumour patients: A qualitative study.

Bernstein M: Medical University of South Carolina, South Carolina, USA, November 2010. Thomas Pitts Lectureship.

Bernstein M: Tokyo Rosai Hospital, Tokyo, Japan, December 2010. Visiting Professor.

Bernstein M: University of Ibadan, University College Hospital, Ibadan, Nigeria, February 2011. Visiting Professor - "Deception, surgeon, qualitative research".

Bernstein M: Korle Bu Teaching Hospital, University of Ghana, Accra, Ghana, January 2011. Visiting Professor - "Patient safety and error in the world of the surgeon".

Davis KD: 11th International Congress of Behavioral Medicine, Washington, District of Columbia, USA, August 2010. Master Lecture: Development of new diagnostic tools and treatments for brain disorders.

Davis KD: International Association for Study of Pain (IASP), Montreal, Quebec, Canada, August - September 2010. (1) Session Chair of Joint Neuropathic Pain and Orofacial Pain Special Interest groups, (2) Neuropathic pain: Focus on oro-facial mechanisms and quantitative sensory testing. A tribute to Professor Ronald Dubner.

Davis KD: Society For Neuroscience, 40th Annual Meeting, Nanosymposium Chair, San Diego, California, USA, November 2010. (1) Nanosymposium Chair, (2) Seeing and feeling pain.

Davis KD: North America Neuromodulations Society, 14th Annual Meeting, Las Vegas, Nevada, USA, December 2010. Special Topics in Neuromodulation: Functional and structural brain imaging technologies.

Eubanks JH: European Working Group on Rett Syndrome, Invited Panel of Experts, Edinburgh, Scotland, October 2010. Current state of translational efforts to understand and treat Rett Syndrome.

Eubanks JH: European Working Group on Rett Syndrome, Edinburgh, Scotland, October 2010. Targeted reintroduction of MeCP2 in MeCP2-deficient mice facilitates behavioral and neurophysiological improvements.

Eubanks JH: International Rett Syndrome Foundation, Leesburg, Virginia, USA, June 2011. HDAC6 inhibitors attenuate epileptiform activity in a mouse model of Rett Syndrome.

Fehlings MG: University of California San Francisco, Sonoma, California, USA, July 2010. Neurosurgery 2010 in the Wine Country: (1) New concepts in the pathophysiology and treatment of cervical spondylotic myelopathy, (2) Repair and regeneration of the injured spinal cord - What is new on the horizon?

Fehlings MG: AOSpine North America, Chicago, Illinois, USA, August 2010. Fellows Course: Evidence-Based Medicine & Effective Teaching (1) co-Chair, (2) Getting your papers published, (3) Setting up a research program.

Fehlings MG: International Spinal Research trust (ISRT), Christopher and Dana Reeve Foundation/ North American Clinical Trial Network (CDRF/NACTN), Zurich, Switzerland, August 2010. Spinal Cord Research on the Way to Translation: (1) Clinical trials in SCI, (2) Repair and regeneration of the injured spinal cord: From molecule to man.

Fehlings MG: German Society of Neurosurgery, Heidelberg, Germany, September 2010. Anatomical remarks & bio-mechanics of the cervical spine. Indications for surgical intervention and stabilisation techniques.

Fehlings MG: AOSpine, AOSpine Symposium: Advances in Tumor Spine Surgery, Curitiba, Brazil, October 2010. (1) Lecture: Session II: Adjuvant therapy: What is the best evidence, (2) Lecture: Session III: Approach decision for transition zones: Cervicothoracic junction, (3) Lecture: Session V: Spine Metastasis I: Evaluation of oncological instability and decision making in the cervical spine, (4) Lecture: Session VII: Spine Metastasis II: Occipito-cervical metastasis, (5) Lecture: Session VIII: Spine Metastasis III - Treatment discussion based on specific situations: Pure neurological compression, (6) Lecture: Session XIV: Intradural Tumors: Intradural tumors.

Fehlings MG: Congress of Neurological Surgeons, San Francisco, California, USA, October 2010. Invited talk: Current management of spinal cord injury.

Fehlings MG: University of California Los Angeles, David Geffen School of Medicine, Los Angeles, California, USA, October 2010. Dawson Memorial Lectureship: Repair and regeneration of the injured spinal cord from molecule to man.

Fehlings MG: Asia Pacific Cervical Spine Society Meeting, Sydney, Australia, November 2010. (1) Lecture: Cervical spondylotic myelopathy: Surgical indications and results, (2) Panel member: Myelopathy and OPLL focusing on anterior or posterior approach, (3) Lecture: Update on management of acute spinal cord injury; The AOSpine International cervical myelopathy trial: One year results.

Fehlings MG: Chilean Orthopedic and Traumatology Society, LaSerena, Chile, November 2010. (1) Current concepts in the pathophysiology and treatment of spinal cord injury, (2) Perioperative spinal cord injury: Strategies for avoidance and management, (3) Advances in the pathophysiology and treatment of cervical myelopathy.

Fehlings MG: Rick Hansen Foundation and Queensland Office of Health and Medical Research, Bridging the Gap Breakfast Event, Brisbane, Australia, November 2010. Translational research in spinal cord injury: Where are the Opportunities?

Fehlings MG: AOSpine, Davos, Switzerland, December 2010. (1) Surgery in acute spinal injury, (2) Postoperative management of the spinal injured patient, (3) Lecture: BMP's are the future.

Fehlings MG: Cervical Spine Research Society, Charlotte, North Carolina, USA, December 2010. (1) Economics of operative vs. nonoperative treatment of cervical spondylotic myelopathy, (2) Co-Moderator, Session XII - Basic Science: Spinal Cord.

Fehlings MG: Broadwater / Medical Education Resource, Spine on the Mountain, Vail, Colorado, USA, January 2011. Invited talk: Corpectomy versus multi-level ACDF for cervical myelopathy.

Fehlings MG: US Department of Defense / American Academy of Orthopaedic Surgeons / Orthopaedic Trauma Association / Society of Military Orthopaedic Surgeons / Orthopaedic Research Society, Washington, District of Columbia, January 2011. Extremity War Injuries VI: Data-Driven Progress in Combat Casualty Care: Overview spinal cord injuries and how it relates to spine.

Fehlings MG: Federation of Spine Associations, Spine Special Day at the American Association of Orthopaedic Surgeons (AAOS) Meeting, San Diego, California, USA, February 2011. (1) The spinal cord, (2) Early decompression: Safety and efficacy?

Fehlings MG: National Neuroscience Institute, Singapore, February 2011. AOSpine Principles Course. Spinal cord injury: Translational research update.

Fehlings MG: Queensland University of Technology, Brisbane, Australia, February 2011. Visiting Professor, Spinal cord injury: From molecule to man.

Fehlings MG: Seoul National University Bundang Hospital, 3rd Spine Centre Symposium of Spinal Disorder, Seoul, South Korea, February 2011. (1) High cervical fractures and injuries, (2) Spinal cord injury.

Fehlings MG: American Association of Neurological Surgeons/ Congress of Neurological Surgeons (AANS/CNS), Section on Disorders of the Spine and Peripheral Nerves, Phoenix, Arizona, USA, March 2011. Subaxial myelopathy: Anterior treatment.

Fehlings MG: AOSpine International, Global Spine Congress 2011, Barcelona, Spain, March 2011 (1). Update from the AOSpine MESCC trial - comparing surgical vs. nonoperative treatment of metastatic epidural spinal cord compression, (2) Biologics for repair and regeneration of the injured spinal cord-What's hot? What's new?, (3) Bilateral facet fracture with complete spinal cord injury with a disc (4) Thoracolumbar burst fracture with neurological deficit, (5) Burning issues in the treatment of spinal cord injuries-how can AOSpine contribute to improve patients' lives?

Fehlings MG: AOSpine North America, 9th Annual AOSpine North America Fellows Forum, Banff Springs, Alberta, Canada, March 2011. (1) AOSNA clinical trials network - SpineNET: Clinical studies update, (2) Safety and effectiveness of opioids, NSAIDS, and antidepressants for treatment of chronic LBP in subpopulations.

Fehlings MG: American Association of Neurological Surgeons, Denver, Colorado, April 2011. Management of patients with CNS hemorrhage who have a medical need for anticoagulation.

Fehlings MG: International Neurotrauma Society, Shanghai, China, April 2011. (1) Guidelines for the treatment of spinal cord injury, (2) Co-Moderator: Clinical management of TBI, (3) The global experience in spinal cord injury, (4) Moderator: Patient management in CNS injury.

Fehlings MG: Trauma Association of Canada, Frazer Gurd Lecture, Banff, Alberta, Canada, April 2011. Regeneration of the injured spinal cord: From molecule to man.

Fehlings MG: AOSpine/EuroSpine, Dubai, United Arab Emirates, May 2011. Dubai Masters Spine Course: (1) Translational therapies: Steroids and beyond, (2) Subaxial cervical spine injuries.

Fehlings MG: NeuroDevNet, Keynote Address, Toronto, ON, May 2011. Repair and regeneration of the brain with stem cells in cerebral palsy: Hope or hype?

Fehlings MG: American Society of Neuroradiology, 49th Annual Meeting, Seattle, Washington, USA, June 2011. (1) Keynote speaker, (2) Management of spinal cord injury: Current state of the art, (3) Management of the spine column trauma: Current state of the art.

Fehlings MG: NeuroDevNet, Ontario Brain Institute Workshop for Cerebral Palsy, Toronto, Ontario, Canada, June 2011. Guest Speaker: Animal models of cerebral palsy.

Fehlings MG: NeuroDevNet, Vancouver, British Columbia, June 2011. 2011 Brain Development Conference: (1) Chair, Plenary Session #3: Neural stem cell transplantation and unmet need: At the crossroads in pediatric neurological disorders, (2) Chair: Plenary Session #6: Imaging minisymposium, (3) Research models and therapeutics expert at Meet the Experts Lunch.

Fehlings MG: Tissue Engineering & Regenerative Medicine International Society (TERMIS), Granada, Spain, June 2011. Keynote Speaker: Regenerative medicines for spinal cord injured patients - The experience of a principal clinical investigator.

Fehlings MG: University of Medicine and Dentistry of New Jersey, New Jersey Medical School, Newark, New Jersey, USA, May 2011. Repair and regeneration of the injured spinal cord from a translational perspective: What's hot? What's new?

Fehlings MG: Spinal Cord Research Foundation, Wings for Life, Barcelona, Spain, July 2010. Repair and regeneration of the injured spinal cord: The translational impact of iPSC-derived neural stem cells.

Guha A: Acoustic Neuroma Society of Canada (ANAC), Niagara Falls, Ontario, Canada, September 2010. Potential biological therapy of vestibular schwannomas: Bench to bedside.

Guha A: Novartis, Focused Group on Neurofibromatosis, New Jersey, USA, November 2010. A potential biological therapy of growing vestibular schwannomas: Bench-bedside.

Guha A: Society of Neurooncology, Developmental Profile and Regulation of the Glycolytic Enzyme Hexokinase 2 in Normal Brain and GBM, Montreal, Quebec, Canada, November 2010. (1) An NF1 - LRPPRC interaction reveals a novel role of NF1 in RNA granules. (2) In situ proximity ligation-based analysis reveals aberrant dimerization and activation of epidermal growth factor receptors prevalent in glioblastoma multiforme. (3) Inaugural Victor Levin Award Lecture: Perspectives of a clinician-scientist and a cancer patient. (4) Isocitrate dehydrogenase 1 (IDH) mutations as molecular predictor of progression of low grade to high grade glioma. (5) Isocitrate dehydrogenase 1 (IDH1) mutations in GFAP: V12Ha-Ras mouse glioma model. (6) Ras regulated over-expression of inhibitors of apoptosis protein (IAPs) in gliomagenesis. (7) Role of neuropilin1 and its co-factors VEGF and SEMA3A in regulating heterogeneous microenvironment of glioblastoma multiforme. (8) Studying the gliomagenic potential of different cellular compartments within the subventricular zone of adult mice.

Guha A: Society of Neurooncology, Inaugural Victor Levin Award Lecture, Montreal, Quebec, Canada, November 2010. Perspectives of a clinician-scientist and a cancer patient.

Hamani C: University of Rochester, Division of Neurosurgery, Rochester, New York, USA, November 2010. Translational research on deep brain stimulation for depression.

Hamani C: British Stereotactic and Functional Neurosurgery Group, Bristol, United Kingdom, March 2011. Subgenua cingulum DBS: Clinical and translational aspects.

Hamani C: Charite University, Department of Psychiatry, Berlin, Germany, April 2011. Translational research on deep brain stimulation.

Hamani C: University of Amsterdam, Department of Psychiatry, Amsterdam, Netherlands, May 2011. Translational research on deep brain stimulation.

Hamani C: Asian-Australasian Society for Stereotactic Functional Neurosurgery, Jeju, South Korea, June 2011. DBS and memory.

Hamani C: Asian-Australasian Society for Stereotactic Functional Neurosurgery, Jeju, South Korea, June 2011. Subgenua region DBS for depression.

Hamani C: 9th Dutch Endo-Neuro-Psycho Meeting, Lunteren, Netherlands, May 2011. Deep brain stimulation for depression.

Hamani C: University of Maastricht, Department of Neuroscience, Maastricht, Netherlands, November 2010. Translational research on deep brain stimulation.

Hodaie M: University of Western Ontario, ENT Grand Rounds, London, Ontario, Canada, September 2010.

Hodaie M: University of Western Ontario, Neurosurgery Grand Rounds, London, Ontario, Canada, September 2010.

Hodaie M: 10th Annual Hospice Palliative Care Conference, Ajax, Ontario, Canada, October 2010. Radiosurgical treatment of intractable cancer pain.

Hodaie M: World Federation of Neurosurgical Societies, Havana, Cuba, May 2011. (1) Surgical treatment of trigeminal neuralgia, (2) WFNS online course modules - a new addition to the WFNS educational courses, (3) Neuromodulation for the treatment of movement disorders and pain.

Hodaie M: Canadian Neurological Sciences Federation, 46th Annual Congress Meeting, Vancouver, British Columbia, Canada, June 2011. Functional Neurosurgery Course - Radiosurgical management of trigeminal neuralgia.

Lozano AM: Consorci Universitat Internacional Menendez Pelayo de Barcelona (CUIMPB), Centre Ernest Barcelona Summer Course - Brain and Cognition V: Cognitive Enhancement, Barcelona, Spain, July 2010. Guest Speaker, Electrical stimulation of the brain and cognitive enhancement in humans with mental pathologies.

Lozano AM: International Neuroscience Institute (INS), Hannover, Germany, July 2010. (1) Co-Chair, Session on "Neuromodulation - State of the Art (with Professor H. J. Freund), (2) Guest Speaker: Towards surgery for mood and mind of man.

Lozano AM: Brown University, Inaugural John H. Mislaw Memorial Lecture, Providence, Rhode Island, USA, September 2010. Adjusting the activity of dysfunctional brain circuits with deep brain stimulation.

Lozano AM: 2010 European Society for Stereotactic and Functional Neurosurgery (ESSFN), Athens, Greece, September 2010. Guest Speaker (1) New targets for the future, (2) Results of DBS trials in epilepsy, (3) Deep brain stimulation for cognition-strategies for cognitive enhancement, (4) PPN DBS surgery for gait disorders in Parkinson's disease.

Lozano AM: Clinical Neuroscience Center Inauguration Conference, Haifa, Israel, October 2010. Guest Speaker: Neurosurgical approaches.

Lozano AM: Research Update in Neuroscience for Neurosurgeons (RUNN) Course, Marine Biology Lab, Woods Hole, Massachusetts, USA, October 2010. Guest Lecturer: Adjusting the activity in human brain circuits.

Lozano AM: University of Rochester, Deep Brain Stimulation: Motor Systems and Beyond Symposium, Rochester, New York, USA, October 2010. Guest Speaker: Modulation of cognitive circuits with DBS.

Lozano AM: 9th Annual Charles H. Tator - Barbara Turnbull Lectureship Series in Spinal Cord Injury, Toronto, Ontario, Canada, November 2010. Stimulating the brainstem to improve walking in patients.

Lozano AM: University of Alabama at Birmingham, Birmingham, Alabama, November 2010. (1) Invited Lecturer: Comprehensive Neuroscience Center Seminar, "New frontiers in functional neurosurgery;" (2) Presenter. Neurology Grand Rounds: Deep brain stimulation and Parkinson's disease; (3) Presenter: Grand Rounds: Deep brain stimulation: The new neurosurgery for depression.

Lozano AM: Deep Brain Stimulation in Psychiatry Conference, Bonn, Germany, January 2011. Guest Speaker, Advancing the frontiers of functional neurosurgery.

Lozano AM: Cedars-Sinai Medical Center, Advances in Neurology and Neurosurgery 2011 Symposium, Marina Del Rey, California, USA, February 2011. Keynote Speaker: Deep brain stimulation for Depression.

Lozano AM: Japan Science and Technology Agency, International Parkinson's Disease Symposium, 10th Anniversary, Takamatsu, Japan, February 2011. Guest Speaker: What's new in DBS: Past present and future.

Lozano AM: Stanford University, Department of Neurosurgery, Neuromodulation Symposium, Guest Lecturer, Stanford, California, USA, February 2011. Deep brain stimulation for cognitive enhancement.

Lozano AM: University of Virginia, Charlottesville, Virginia, USA, February 2011. Visiting Professor, Surgery for psychiatric disorders: Dubious past and hope or hype for the future.

Lozano AM: Seoul National University Hospital, 6th Anniversary Symposium of Movement Disorder Center, Guest Lecturer, Seoul, Korea, March 2011. Guest Lecturer: (1) Advances in surgery for Parkinson's disease, (2) Experience of STN DBS in SNUH MDC with introduction of DELAS.

Lozano AM: World Society for Stereotactic and Functional Neurosurgery (WSSFN), Psychiatric Surgical Treatment Forum, Shanghai, China, March 2011. Guest Speaker: (1) Psychiatric surgery review - DBS, (2) Guideline and standard for psychiatric surgery - minimal request for treatment team, equipment, training, (3) Worldwide psychiatric surgical treatment practice - Canada.

Lozano AM: American Association of Neurological Surgeons (AANS), 2011 Annual Meeting, Denver, Colorado, USA, April 2011. (1) Director of the 701 international Stereotactic and Functional Masters Course, (2) Discussant: Deep brain stimulation of the human entorhinal region enhances memory.

Lozano AM: Boston Society of Neurology and Psychiatry, Denny Brown Lecturer, Boston, Massachusetts, USA, May 2011. DBS for depression.

Lozano AM: International Neuromodulation Society (INS), 10th World Congress, London, United Kingdom, May 2011. Guest Speaker: (1) Surgery for depression and Alzheimer's, (2) Thalamic neuromodulation for epilepsy.

Lozano AM: Ottawa Hospital, Ottawa, Ontario, Canada, May 2011. Guest Speaker: Surgery for movement disorders.

Lozano AM: Quebec Symposium on Neurodegenerative Diseases Therapeutics, Plenary Lecturer, Quebec, Quebec, Canada, May 2011. Plenary Lecture: Modulating the activity of human brain circuits with deep brain stimulation.

Lozano AM: Spanish Society of Neurosurgery (SENEC), XVI National Congress, Madrid, Spain, May 2011. Guest Speaker: (1) Advancing the frontiers of functional neurosurgery, (2) Neuromodulation for epilepsy.

Lozano AM: University of Ottawa, Collins Surgery Day, Ottawa, Ontario, Canada, May 2011. Honoured Guest Speaker: Towards restoring function in neurological and psychiatric disorders with neurological surgery.

Lozano AM: National Hospital for Neurology and Neurosurgery, Guest Lecturer, Queens Square, London, United Kingdom, June 2011. Guest Lecturer: Functional neurosurgery: From movement to mood to memory.

Lozano AM: The Movement Disorder Society, 15th International Congress of Parkinson's Disease and Movement Disorders, Toronto, Ontario, Canada, June 2011. Co-Chair of: (1) Therapeutic Session 1107 - Deep Brain Stimulation: New Developments, (2) Skills Workshop 2406 - Meet the Expert: Problematic DBS Cases.

Lozano AM: Botterell Lectureship Series, Toronto, Ontario, Canada, November 2010. Emerging indications in functional neurosurgery.

Lozano AM: The 2011 Keith Professorship in Neurosurgery, Toronto, Ontario, Canada, June 2011. How to breed excellence in neurosurgery.

Lozano AM: University of South Florida, CME PD Seminar, Innovations and Insights: Parkinson's Disease and Multiple Sclerosis, Invited Faculty, ULake Buena Vista, Florida, USA, February 2011. Opportunities and challenges in surgery for Parkinson's disease.

Massicotte EM: European Accreditation Council for Continuing Medical Education, World Forum for Spine Research 2010, Montreal, Quebec, Canada, July 2010. Case presentation: The Intervertebral Disc - Diagnostic challenges, to highlight deficiencies of current methods.

Massicotte EM: Asian Congress of Neurological Surgeons (Symposium 1.3 Spine), Malaysia, Kuala Lumpur, November 2010. (A) Symposium 1.3: (1) Moderator: Trauma - Management of cervicothoracic and thoracolumbar spine injury, (2) Presenter: (a) (Plenary Section 4) - Spine: Timing of spinal cord injury, (b) Management of thoracolumbar spine injury, (c) Reconstruction of cervicothoracic junction, (B) Symposium 5.2: Degenerative Spine Disease: (1) Presenter: Anterior fixation and fusion in cervical spondylotic myelopathy, (2) Moderator: Degenerative Spine Disease

Tator CH: Community Foundation of Kingston and Area, Kingston, Ontario, Canada, October 2010. Making our community safer.

Tator CH: Kingston General Hospital, Neurosciences Rounds, Queen's University, Maitland Baldwin Memorial Lecturer, Kingston, Ontario, Canada, October 2010. What do you know about concussions?

Tator CH: Mayo Clinic Ice Hockey Summit, Action on Concussion, Rochester, Minnesota, USA, October 2010. Effective implementation of concussion education across sectors in ice hockey.

Tator CH: Ontario Physical Health Education Association/Physical Health Education Canada National Conference, Toronto, Ontario, Canada, October 2010. Managing concussions at school.

Tator CH: Ontario Teachers Federation, Toronto, Ontario, Canada, October 2010. Keynote Presentation: Violence in sports: promotion in the media.

Tator CH: University of Washington, Harborview Medical Center, 9th Annual Harborview Medical Center Spine Symposium, Seattle, Washington, USA, October 2010. (1) A brief history of research in spinal cord injury: A personal journey. (2) Spinal cord injury research where do we go from here?

Tator CH: Reebok CCM Safety Summit, Concussions in Hockey: Management and Education, Ottawa, Ontario, Canada, February 2011.

Tator CH: Ontario Medical Association, Section on Physical Medicine and Rehabilitation, Toronto, Ontario, Canada, April 2011. Concussion diagnosis, management and prevention.

Tator CH: The Physicians' Services Incorporated Foundation, Scientific Session, Toronto, Ontario, Canada, April 2011. (1) Culture of adult human spinal cord stem/progenitor cells and their transplantation into spinal cord injured rats, (2) Post-concussion syndrome in professional athletes: A multidisciplinary study.

Tator CH: Ontario Women's Hockey Association, Annual General Meeting, Huntsville, Ontario, Canada, May 2011. Concussions.

Tator CH: University of Ottawa, Brien Benoit Lectureship, Ottawa, Ontario, Canada, May 2011. Guest Lecturer: (1) Clinical treatment trials in spinal cord injury, (2) Management and prevention of sports concussions.

Tymianski M: Canadian Society for Clinical Investigators (CSCI)/Clinician Investigator Trainee Association of Canada (CITAC), Annual Conference and Young Investigators Forum, Ottawa, Ontario, Canada, September 2010. Guest Speaker: Work + Research - Clinician Scientist perspective.

Tymianski M: Stroke Treatment Academic Industry Roundtable (STAIR) Conference, Washington, District of Columbia, USA, September 2010. Participant in Roundtable Discussions: Neuroprotectants for a new decade.

Tymianski M: Kyoto University, Biomembrane and Channels GCOE Symposium, Kyoto, Japan, December 2010. Guest Speaker: Progress on the effects of TRPM7 and TRPM2 inhibition on ischemic cell damage.

Tymianski M: University of Buffalo, Department of Neurosurgery, Millard Fillmore Hospital, Neurosurgery Grand Rounds, Buffalo, New York, USA, January 2011. Guest Speaker: EC- IC bypass in 2011.

Tymianski M: University of Illinois at Chicago, Department of Neurosurgery, Neurosurgery Grand Rounds, Chicago, Illinois, USA, January 2011. Guest Speaker: Innovation in cerebrovascular surgery.

Tymianski M: International Stroke Conference, Los Angeles, California, USA, February 2011. Moderator: Junior Investigator Session II.

Tymianski M: Philippine General Hospital, Department of Neurosciences, Section of Neurosurgery, 6th Annual Visiting Cerebrovascular Professorship, Manila, Philippines, April 2011. Guest Speaker: (1) Treatment of acute ischemic stroke in non-human primates and in humans - Evolution of the ENACT trial, (2) From minimally-invasive outpatient aneurysm surgery to maximally-invasive excimer laser-assisted non-occlusive anastomosis for complex brain aneurysms.

Tymianski M: State University of New York (SUNY), Upstate Medical University, Department of Neurosurgery, Neuro Research Day 2011, Guest Speaker, Syracuse, New York, USA, April 2011. Neuroprotection in acute ischemic stroke.

Tymianski M: University Hospital, Department of Clinical Neurosciences, Geneva, Switzerland, May 2011. Guest Speaker: (1) PSD95 inhibitors for procedurally induced and acute ischemic strokes, (2) EC- IC bypass in moyo-moya and steno-occlusive disorders.

Tymianski M: University Medical Centre, Department of Neurosurgery, Symposium on Non-Occlusive Anastomosis, Utrecht, The Netherlands, May 2011. Guest Speaker: Vascular and minimal invasiveness.

Tymianski M: Canadian Neurological Sciences Federation (CNSF), Annual Conference, Vancouver, British Columbia, Canada, June 2011. Moderator: Stroke and Neurovascular disease topics.

Valiante T: McMaster University, Medical School, PGME Multidisciplinary Academic Day, Hamilton, Ontario, Canada, February 2011.

Wallace C: International Society of Radiographers and Radiological Technologists (ISRRT), 11th Annual Interventional Neuroradiology Symposium, Toronto, Ontario, Canada, September 2010. Surgical management of small size (< 3mm) ruptured aneurysms.

Zadeh G: International Society of Pituitary Surgeons, Sonoma, California, USA, October 2010. Silent corticotroph adenomas.

Zadeh G: The Leksell International Gamma Knife Registry Project, London, United Kingdom, October 2010. International database.

Zadeh G: MacMaster Hospital, Annual Thoracic Oncology Meeting-Cancer Centre Event, Niagara-on-the-Lake, Ontario, Canada, April 2011. Approach to the management of oligometastatic disease in lung cancer.

Zadeh G: Canadian Neurological Sciences Federation, Vancouver, British Columbia, Canada, June 2011. Course Instructor: Annual Canadian Neuro-oncology Course - Surgical Update on Management of Brain Metastases.

Zadeh G: Society of University Neurosurgeons, Istanbul, Turkey, June 2011. Identifying molecular signature of bone invading skull base meningiomas.

RESEARCH AND INVESTIGATIONS

A bioengineered approach to enhance recovery following severe traumatic spinal cord injury (PSI# 10q2119). *Fehlings MG, Shoichet M: The Physicians' Services Incorporated Foundation.* (\$154,800 2010 - 2012)

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: AOSpine 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)

Aberrations in EGFR in human GBMs: Novel diagnostic and biomarker strategies. *Guha A, Siu M, Rak J, Croul S: Cancer Research Society.* (\$120,000 2010 - 2012)

Access to Clinical Trials: Functional magnetic resonance imaging evaluation of the injured human spinal cord: An assessment of recovery and functional plasticity (Participant Expenses). *Cadotte D, Fehlings MG: Rick Hansen Foundation.* (\$1,500 2009 - 2010)

Adult derived neural precursor cells transplanted into the acutely injured spinal cord promote recovery of somatic and autonomic nerve function. *Satkunendrarajah K, Fehlings MG: Ontario Neurotrauma Foundation.* (\$90,000 2009 - 2011)

An assessment of surgical techniques for treating cervical spondylotic myelopathy - International study. *Fehlings MG: AO Clinical Investigation and Documentation.* (\$151,896 2010)

Antidepressant effects of deep brain stimulation and the serotonergic system. *Hamani C, Nobrega J, Fletcher P: Canadian Institutes of Health Research.* (\$580,586 2011 - 2015)

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)

AOSpine North America 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 JH, Zhang L, Brotchie J: Canadian Institutes of Health Research.* (\$610,225 2006 - 2011)

Building the UHN advanced therapeutics research platform. *Paige C, Fehlings MG et al (over 20 names): Canada Foundation for Innovation.* (\$92,255,967 2008 - 2012)

Canada Research Chair in Neuroscience Tier 1. *Lozano, AM: Canada Institutes for Health Research.* (\$1,400,000 2005 - 2012)

Cardiovascular research. *Tymianski M: Pfizer, The Jean Davignon Distinguished Cardiovascular, Metabolic Search Award.* (\$100,000 2010)

Characterization of the physiological incorporation of oligodendroglial precursor cells in the injured spinal cord. *Buttigieg J, Fehlings MG: Ontario Neurotrauma Foundation.* (\$90,000 2009 - 2011)

Chitosan guidance channels containing a scaffold and seeded spinal cord derived neural stem/progenitor cells, and chondroitinase-ABC for repair of chronic spinal cord injury. *Tator CH, Shoichet M, Mothe A: Christopher Reeve Paralysis Foundation.* (\$158,753 2011 - 2013)

Clinician scientist fellowship, Phase I. *Gelareh Z: Canadian Institutes of Health Research.* (\$75,000 2009 - 2010)

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)

- Commercial development of bioengineered therapeutic strategy for spinal cord. *Shoichet MS, Fehlings MG: Canadian Institutes of Health Research.* (\$159,996 2010 - 2011)
- COSAT-hUTC delivery of HAMC carrier for spinal cord injury treatment. *Tator CH, Shoichet M: Johnson & Johnson Pharmaceutical Research & Development, LLC.* (\$110,000 2010)
- 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)
- 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)
- Describing pathophysiology to promote focal therapy in the treatment of schizophrenia- an animal experimental study. *Winter C, Hamani C, Juckel G, Weiner I, Desco M: Canadian Institutes of Health Research (Era-Net).* (\$1,100,000 2011 - 2015)
- Determinants of outcomes from traumatic spinal cord injury: Development of a novel classification system to facilitate clinical trials and improved therapeutic strategies. *Wilson J, Fehlings MG: Cervical Spine Research Society.* (\$15,000 2010 - 2011)
- Determinants of outcomes from traumatic spinal cord injury: Development of a novel classification system to facilitate clinical trials and improved therapeutic strategies. *Wilson J, Fehlings MG: Christopher Reeve Foundation.* (\$120,000 2011 - 2012)
- Development of small molecule inhibitors of TRPM7 for myocardial ischemia. *Tymianski M: Pfizer Cardiovascular Research Award: The Jean Davignon Distinguished Cardiovascular -Metabolic Research Award.* (\$100,000 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)
- Differential gene response to cerebral ischemia in rats and non-human primates. *Tymianski M: Heart and Stroke Foundation of Ontario.* (\$150,000 2010 - 2012)
- Diffusion - based tractography and structural brain imaging in trigeminal neuralgia: Correlation with quantitative sensory testing and response to treatment. *Hodaie M, Davis K: The Physicians' Services Incorporated Foundation.* (\$154,000 2009 - 2011)
- Diffusion based tractography and structural brain imaging in trigeminal neuralgia: Correlation with quantitative sensory testing and response to treatment. *Hodaie M, Davis KD: Physicians' Services Incorporated Foundation.* (\$154,000 2009 - 2011)
- Discovery of biomarkers to guide individualized therapy of brain metastases. *Menard C, Zadeh G: Canadian Brain Tumor Foundation.* (\$25,000 2010 - 2011)
- Dopamine and synaptic plasticity in human substantia nigra pars reticulata. *Hutchison WD, Dostrovsky JO, Moro E, Hodaie M, Lozano AM: Canadian Institute of Health Research (CIHR).* (\$490,745 2009 - 2014)
- Evaluating carbonic anhydrase inhibitors as treatments for Rett syndrome. *Zhang L, Eubanks J: International Rett Syndrome Foundation.* (\$50,000 2010 - 2011)
- 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. *Fehlings MG: Baxter Healthcare Corporation.* (\$125,000 2010 - 2012)
- Examination of the neuroprotective role of IgG for spinal cord injury. *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).* (\$126,095 2009 - 2010)
- Examining the molecular profile of bone invading meningiomas. *Zadeh G: Brain Tumor Foundation of Canada.* (\$25,000 2011 - 2012)
- Functional assessment of upper limb recovery in individuals with traumatic and non-traumatic cervical spinal cord injury. *Kalsi-Ryan S, Fehlings MG: Canadian Institutes of Health Research.* (\$110,000 2010 - 2012)
- Functional magnetic resonance imaging evaluation of the injured human spinal cord: An assessment of recovery and functional plasticity. *Cadotte D, Fehlings MG: Ontario Neurotrauma Foundation.* (\$90,000 2009 - 2011)
- Functional assessment of upper limb recovery in individuals with traumatic and non-traumatic cervical spinal cord injury. *Kalsi-Ryan S, Fehlings MG: Canadian Institutes of Health Research.* (\$110,000 2010 - 2012)

- 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)
- Functional magnetic resonance imaging evaluation of the injured human spinal cord: An assessment of recovery and functional plasticity. *Cadotte D, Fehlings MG: Ontario Neurotrauma Foundation.* (\$90,000 2009 - 2011)
- GATA4 and GATA6 transcription factors in gliomagenesis. *Guha A, Hawkins C, Stanford W: Canadian Institutes of Health Research.* (\$808,632 2010 - 2015)
- Global Blueprint for stem cell innovation, translation & commercialization. *Fehlings MG: SCI Solutions Network.* (\$276,000 2010)
- Global Blueprint for translation of stem cells into patients with spinal cord injury. *Fehlings MG, Baptiste D: Ontario Neurotrauma Foundation.* (\$55,000 2010)
- Global Blueprint Stakeholders Conference for Stem Cell Translation. *Fehlings MG, Daar AS, Bassett-Spiers K: Canadian Institutes of Health Research.* (\$15,000 2009 - 2010)
- Globus pallidus deep brain stimulation in children with dystonia. *Soman T, Moro E, Lozano AM, Hodaie M, Westmacott R, Gorman D: The Hospital for Sick Children Foundation.* (\$118,617 2008 - 2010)
- Health applications of cell signaling in mucosal inflammation & 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: CIHR 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 MRI non-invasive biomarkers of response to combinatorial therapy. *Zadeh G: B.R.A.I.NChild.* (\$45,000 2010 - 2011)
- Interveterebral disc-derived multipotent stem cell rescue of the injured spinal cord. *Erwin WM, Inman R, Fehlings M, Mohamed N: AOSpine International & Hansjorg Wyss Foundation.* (\$30,000 2011 - 2012)
- Investigation and treatment of traumatic axonal dysfunction after spinal cord injury (MOP-82782). *Fehlings MG: Canadian Institutes of Health Research (CIHR).* (\$634,713 2007 - 2012)
- 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)
- Investigation of the neuroprotective effects of thioredoxin for the treatment of spinal cord injury. *Eftekharpour E, Karimi S, Schmidt B, Fehlings MG: Cervical Spine Research Society.* (\$25,000 2010 - 2011)
- Investigations of the expression, activation and functional relevance of receptor mediated targets of nilotinib in pediatric high-grade gliomas. *Guha A, Hawkins C: Novartis.* (\$15,000 2011 - 2012)
- iPS derived neural stem cells and bioengineered strategies to treat chronic spinal cord injury. *Fehlings MG, Nagy A, Shoichet M, van der Kooy D: McEwen Centre for Regenerative Medicine.* (\$340,000 2010 - 2012)
- Local cell delivery strategies. *Shoichet M, Tator CH: Department of Defense (USA).* (\$106,383 2010 - 2011)
- Microenvironment induced molecular heterogeneity in glioblastoma multiforme (GBM). *Guha A. Canadian Institutes of Health Research.* (\$125,000 2008- 2012)
- Minimally- invasive drug delivery strategy for acute spinal cord injury repair. *Shoichet M, Tator CH: Canadian Institutes of Health Research (CIHR).* (\$516,004 2008-2012/\$50,000 Dr. Tator's Portion)
- Neural Development and Repair Network (NeuroDevNet). *Goldowitz D, Fehlings MG, et al (over 70 names): Networks of Centres of Excellence.* (\$19,572,000 2009 - 2014)
- Neuroprotective approaches to enhance recovery in cervical spondylotic myelopathy. *Fehlings MG: North American Spine Society.* (\$53,818 2009 - 2011)
- Neuroprotective approaches to enhance recovery in cervical spondylotic myelopathy (MOP-97852). *Fehlings MG: Canadian Institutes of Health Research.* (\$378,105 2009 - 2012)
- Neuroprotective and regenerative bioengineered approaches for the treatment of spinal cord injury. *Austin JW, Fehlings MG: Canadian Institutes of Health Research.* (\$150,000 2009 - 2012)
- New emerging team in spinal cord injury research. *Fehlings MG: Krembil Foundation.* (\$1,500,000 2006 - 2011)

- Nilotinib in growing vestibular schwannomas. *Guha A, Bouffet A, Laperriere N, Rutka J, Zadeh G: Novartis.* (\$400,000 2010 - 2013)
- Nilotinib in growing vestibular schwannomas. *Guha A, Bouffet E, Adelman D, Laperriere N, Rutka J, Zadeh G: Ontario Institute for Cancer Research.* (\$538,142 2010 - 2013)
- Non-invasive MRI biomarkers of response to combinatorial therapy with SUTENT and RT. *Menard C, Zadeh G: Canadian Association of Radiation Oncology (CARO), RACZER Award.* (\$20,000 2009 - 2010)
- Normal brain response to ionizing radiation. *Zadeh G: B.R.A.I.N.Child.* (\$55,000 2011 - 2012)
- North American clinical trials network for the treatment of spinal cord injury. *Fehlings MG, Tator CH: Christopher Reeve Foundation.* (\$178,000 2010)
- On-line international educational courses in neurosurgery. *Hodaie, M: The Integra Foundation/Foundation for International Education in Neurological Surgery (FIENS).* (\$4,000 2010 - 2011)
- Pain-attention interactions and the descending pain modulation system. *Davis KD: Canadian Institutes of Health Research.* (\$626,420 2010 - 2015)
- Pathophysiology of Parkinson's Disease. *Chen R, Hodaie M, Lozano A, 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: AOSpine International.* (\$258,000 2008 - 2010)
- Phenotypic correction of Rett-like deficiencies in MeCP2-deficient mice by targeted MeCP2 reintroduction. *Eubanks JH, Zhang L: International Rett Syndrome Foundation.* (\$100,000 2009 - 2011)
- PiggyBac-induced pluripotent stem cells for regeneration following spinal cord injury. *Salewski R, Fehlings MG: Canadian Institutes of Health Research.* (\$17,850 2011)
- Post-concussion syndrome in professional athletes: A multidisciplinary study. *Wennberg R, Tator CH, Cassidy JD, Davis KD, Soklaridis S, Green R, Hazrati L-N, Feinstein A, Keightley M: The Physicians' Services Incorporated Foundation.* (\$170,000 2011 - 2013)
- Pre-clinical evaluation of nilotinib in vestibular schwannomas. *Guha A: Novartis.* (\$11,000 2009 - 2010)
- Pre-clinical studies on neurological function after spinal cord injury exploring cell transplantation as a potential therapy. *Fehlings MG: Create Cord Blood Bank Inc.* (\$365,829 2011 - 2014)
- 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.* (\$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. *Martino R, Streiner DL, Fehlings MG, Davis AM, Ringash J: Canadian Institutes of Health Research.* (\$396,289 2009 - 2012)
- Receptor tyrosine kinase expression, activations and inhibition in high grade pediatric gliomas. *Guha A, Hawkins C: B.R.A.I.N Child.* (\$100,000 2011 - 2012)
- Regenerative medicine strategies of spinal cord repair. *Fehlings, MG, Morshead C, Shoichet MS, Stanis G, van der Kooy D, Tator CH: Krembil Neuroscience Centre.* (\$1,500,000 2006 - 2011/ \$50,000 Dr. Tator's portion).
- Regenerative medicine strategies for spinal cord injury repair with integration of stem cell biology, nanotechnology, bioengineering, imaging approaches and neurosurgical application. *Fehlings MG: Krembil Foundation.* (\$1,500,000 2011 - 2014)
- 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)
- Rick Hansen Spinal Cord Injury Registry (RHSCIR), SCI Solutions Network (SCISN). *Fehlings MG: Rick Hansen Foundation.* (\$120,000 2009 - 2011)
- Role of a Novel NF1 - LRPPRC interaction in RNA granule transport. *Guha A: B.R.A.I.N Child.* (\$40,000 2010)
- Role of bone marrow derived cells in brain tumor angiogenesis. *Zadeh G: B.r.a.i.n.child.* (\$30,000 2010)
- Role of TRM7 channels in myocardial ischemia. *Tymianski M: Heart and Stroke Foundation of Ontario.* (\$377,015 2010 - 2013)
- Role of TRPM channels in ischemic brain damage. *Tymianski M: Canadian Institutes for Health Research (CIHR).* (\$900,000 2008 - 2013)

Schering-Plough Canada Unrestricted Educational Grant: Canadian Virtual Brain Tumor Bank. *Guha A: Merck-Schering Plough Canada.* (\$25,000 2010 - 2011)

Signal processing of EEG for detection and classification of clinical brain states. *Valiante TA, Bardakjian B, Carlen P: Mitacs-Accelerate Cluster Award.* (\$60,000 2011 - 2012)

Spatial and temporal characterization of hippocampal memory processes: Studies in the normal brain and individuals with medial temporal-lobe epilepsy and excisions. *Valiante T, McAndrews MP, Cohn M, Protzner A: Canadian Institutes of Health Research.* (\$240,000 2009 - 2012)

Spinal cord regeneration. *Tator CH: Canadian Paraplegic Association.* (\$46,230 2010 - 2011)

States of mind: Emerging issues in neuroethics. *Baylis F, Bernstein M, Fine A, Glannon W, Kimmelman J, Reid L: Canadian Institutes for 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: AOSpine North America.* (\$304,020 2007 - 2011)

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.* (\$120,057 2009 - 2011)

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, G: Natural Sciences and Engineering Research Council of Canada (NSERC).* (\$125,000 2008 - 2013)

The mammalian sirtuin Sirt3: Mediator of longevity. *Eubanks J: Canadian Institutes of Health Research.* (\$50,000 2009 - 2010)

The mammalian sirtuin Sirt3: Novel neuroprotective factor? *Eubanks JH, Mills L, Nash J: Heart and Stroke Foundation.* (\$154,710 2010 - 2012)

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)

Tissue factor in tumour progression and angiogenesis. *Rak J, Guha A, Weitz J: Canadian Institutes of Health Research.* (\$744,120 2010 - 2015)

Toronto Western Hospital Spinal Program. *Fehlings MG: DePuy Spine, Johnson & Johnson Medical Products, a division of Johnson & Johnson, Inc.* (\$160,000 2009 - 2010)

Towards the correction of Rett-Like Behaviour in MeCP2-deficient mice. *Eubanks JH, Burnham WM, Carter Snead III O, Josselyn S, Zhang L: Canadian Institutes of Health Research.* (\$746,825 2010 - 2015)

Translational stroke research. *Tymianski M: Canada Research Chairs Grant, Tier I.* (\$200,000 2010 - 2017)

Transplantation of adult human spinal cord stem/progenitor cells for spinal cord repair. *Mothe A, Tator CH: AO Spine International.* (\$30,944 2010 - 2011)

TRPM7 Inhibitors for the treatment of stroke and myocardial ischemia. *Tymianski M: Ministry of Research and Innovation, Ontario Research Fund-Research Excellence Round 5.* (\$1,474,417 2011 - 2016)

Unilateral pedunculopontine deep brain stimulation in progressive supranuclear palsy. *Moro E, 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)

Unrestricted educational grant. *Guha A: Merck-Schering Plough Canada/Canadian Virtual Brain Tumour Bank.* (\$25,000 2010- 2011)

HONOURS RECEIVED

Fehlings MG: Best Clinical Research Paper at the Global Spine Congress in Barcelona, Spain for The AOSpine North America cervical spondylotic myelopathy study: Perioperative complication rates associated with surgical treatment based on a prospective multicenter study of 302 patients. March 2011.

Fehlings MG: Inaugural recipient of The Gerry and Tootsie Halbert Chair in Neural Repair and Regeneration, June 2011.

Fehlings MG: 3rd Place Clinical Science Award from the Cervical Spine Research Society for his paper, Anterior vs. posterior surgical approaches to treat cervical spondylotic myelopathy: Outcomes of the prospective multicenter AOSpine North America CSM study in 280 patients, December 2010.

Fehlings MG: First Place for the Highest Ranked Abstract on Patient Care: "Is blood alcohol concentration on admission a determinant of survival, neurological recovery and functional outcome following traumatic SCI?" at the 4th National Spinal Cord Injury Conference, October 2010.

Fehlings MG: The People's Choice Award for the Best Poster Presentation: "Is blood alcohol concentration on admission a determinant of survival, neurological recovery and functional outcome following traumatic SCI?" at the 4th National Spinal Cord Injury Conference, October 2010.

Hodaie M: Wightman-Berris Academy Award for postgraduate education, May 2011.

Tator CH: American Spinal Injury Association (ASIA), Lifetime Achievement Award, for his contribution to the world of spinal cord injury care, presented at the International Congress on Spinal Cord Medicine and Rehabilitation in Washington, District Columbia, June 2011.

Tator CH: Appreciation Award of the Ontario Women's Hockey Association for outstanding contributions to the OWHA for over 20 years, and for the work in the areas of research prevention and management of spinal and brain injuries, May 2011.

Tator CH: Dr. Tator was named One of Canadas Top Sports Personalities, in the Globe and Mail's Sports Power 50 List, February 2011.

Tator CH: Global Impact Award, University Health Network, June 2011.

Tator CH: Maitland Baldwin Memorial Lecturer, Queen's University, Kingston, Ontario, October 2010.

Tator CH: Outstanding Achievement Award, The Medico-Legal Society of Toronto, in recognition of significant contributions to the society, the professions and the community at large, May 2011.

Tymianski M: Pfizer Cardiovascular Research Award: The Jean Davignon Distinguished Cardiovascular - Metabolic Research Award. \$100,000.00, July 2010.

Zadeh G: American Academy of Neurology: Top Ten Abstract Presentation, 2011 Hawaii, USA, March 2011.

Zadeh G: Clinician Scientist Award from the American Society for Radiation Oncology, October 2010.

■ Division Of Orthopaedics

Dr. R.J. Davey	Associate Professor	Dr. K. Marshall	Assistant Professor
Dr. W.M. Erwin	Assistant Professor	Dr. D. Ogilvie-Harris	Associate Professor
Dr. R. Gandhi	Assistant Professor	Dr. Y. Rampersaud	Associate Professor
Dr. B.A. Graham	Assistant Professor	Dr. K. Syed	Lecturer
Dr. J. Lau	Assistant Professor	Dr. C.H. Veillette	Assistant Professor
Dr. S.J. Lewis	Assistant Professor	Dr. H.P. von Schroeder	Associate Professor
Dr. N.N. Mahomed	Professor (Division Head)		

PUBLICATIONS

- Alzahrani K, Gandhi R, Davis A, Mahomed NN:** In-hospital mortality following hip fractures in Southern Ontario. *Canadian Journal of Surgery*: October 2010: 53 (5): pp 294-298.
- Alzahrani K, Gandhi R, deBeer J, Petruccioli D, Mahomed NN:** Prevalence of no clinically significant improvement following total knee arthroplasty. *Journal of Rheumatology*: April 2011: 38: pp 753-759.
- Antapur P, Gandhi R, Mahomed NN:** All hip replacement patients should receive metal-on-polyethylene bearings: The Case for MOP. *COA Bulletin*: July 2010: 89: pp 23-24.
- Antapur P, Mahomed NN, Gandhi R:** Fractures in the elderly: When is hip replacement a necessity? *Clinical Interventions in Aging*: January 2011: 6: pp 1-7. E-published December 20, 2010.
- Brull R, Prasad GA, Gandhi R, Ramlogan R, Khan M, Chan VW:** Is a patella motor response necessary for continuous femoral nerve blockade performed in conjunction with ultrasound guidance? *Anesthesia and Analgesia*: April 2011: 112: pp 982-986.
- Cheng F, You J, Rampersaud YR:** Relationship between spinal magnetic resonance imaging findings and candidacy for spinal surgery. *Canadian Family Physician*: September 2010: 56(9): pp 323-330.
- 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*: December 2010: 69(6): pp 1497-1500.
- Fisher CG, Saravanja DD, Dvorak MF, Rampersaud YR, Clarkson PW, Hurlbert J, Fox R, Zhang H, Lewis S, Riaz S, Ferguson PC, Boyd MC:** Surgical management of primary bone tumors of the spine: Validation of an approach to enhance care and reduce local recurrence. *Spine*: May 2011: 36(1): pp 830-836.
- Foote M, Letourneau D, Hyde D, Massicotte E, Rampersaud R, Fehlings M, Fisher C, Lewis S, La Macchia N, Yu E, Laperrier N, Sahgal A:** Technique for stereotactic body therapy for spinal metastases. *Journal of Clinical Neuroscience*: December 2010: 18(2): pp 276-279. E-published December 13, 2010.
- Gandhi R, Dhotar H, Davey JR, Mahomed NN:** Predicting the longer term outcomes of total hip replacement. *Journal of Rheumatology*: December 2010: 37 (12): pp 2573-2577. E-published September 1, 2010.
- Gandhi R, Diwanji S, Mahomed NN:** Pain, functional outcome, and patient satisfaction-home-based versus inpatient rehabilitation after primary unilateral total hip or knee replacement. *US Musculoskeletal Review*: August 2010: 10: pp 7-10.
- Gandhi R, Razak F, Davey JR, Mahomed NN:** Metabolic syndrome and the functional outcomes of hip and knee arthroplasty. *The Journal of Rheumatology*: September 2010: 37(9): pp 1917-1922. E-published July 15, 2010.
- Gandhi R, Smith H, Lefaivre K, Davey JR, Mahomed NN:** Complications following minimally invasive total knee replacement as compared to traditional incision techniques: A meta-analysis. *Journal of Arthroplasty*: January 2011: 26(1): pp 29-35. E-published February 9, 2010.
- Gandhi R, Takahashi M, Smith H, Rizek R, Mahomed NN:** The Synovial Fluid adiponectin-leptin ratio predicts pain with knee osteoarthritis. *Clinical Rheumatology*: November 2010 (11): 29: pp 1223-1228. E-published March 28, 2010.
- Gandhi R, Tsvetkov D, Dhotar H, Davey JR, Mahomed NN:** Quantifying the pain experience in hip and knee osteoarthritis. *Pain Research Management*: July- August 2010: 15(4): pp 224-228.
- Gandhi R, Wasserstein D, Razak F, Davey JR, Mahomed NN:** Body mass index independently predicts younger age at hip and knee replacement surgery. *Obesity (Silver Spring)*: December 2010: 18 (2) : pp 2362-2366. E-published April 8, 2010.

- Glazebrook M, Lau J, Allard JP:** Osteochondral lesions of the talar dome: Cartilage replacement using osteochondral autogenous transplantation and mosaicplasty. In: AANA Advanced Arthroscopy: The Foot and Ankle (Amendola A, Stone JW, eds). Elsevier Inc., Philadelphia 2010: pp 117-124.
- 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*: September 2010: 35(19): pp E981-E987.
- Latham W, Lau J:** Bone stimulation: A review of its use as an adjunct. *Techniques in Orthopaedics*: March 2011: 26(1): pp 14-21.
- Lau, JTC, Alexander PJ, Penner MJ, Younger A:** Canadian experience of total ankle arthroplasty. *Seminars in Arthroplasty*: December 2010: 21(4): pp 295-302.
- Lau JTC, Henderson BW, Yee G:** Surgical correction of bunions deformity. In: *Operative Techniques in Orthopaedic Surgery* (Wiesel S, ed). Lippincott Williams & Wilkins, Philadelphia: 2011: pp 3730-3735.
- Lewis SJ, David K, Singer S, Bacon SA, Kopka M, Gray R, Magana S:** A technique of anterior screw removal through a posterior costotransversectomy approach for posterior-based osteotomies. *Spine*: November 2010: 35(11): pp E471-E474.
- Lewis SJ, Gray R, David K, Kopka M, Magana S:** Technique of reverse Smith Petersen Osteotomy (RSPO) in a patient with fixed lumbar hyperlordosis and negative sagittal imbalance. *Spine*: July 2010: 35(15): pp E721-E725.
- Liu J, Lane K, Lo E, Lam M, Truong T, Veillette C:** Addressing SNOMED CT implementation challenges through multi-disciplinary collaboration. *Studies in Health Technology and Informatics*: October 2010: 160(Pt 2): pp 981-985.
- Mussett S, Henderson BW, Glazebrook M, Lau J:** Osteochondral lesions of the talar dome: Anatomy, etiology, and evaluation. In: AANA Advanced Arthroscopy: The Foot and Ankle (Amendola A, Stone JW, eds). Elsevier Inc., Philadelphia, Pennsylvania: 2010: pp 97-104.
- Patel AA, Lindsey R, Bessey JT, Chapman J, Rampersaud R; Spine Trauma Study Group:** Surgical treatment of unstable type II odontoid fractures in skeletally mature individuals. *Spine*: October 2010: 35(21 Supp): pp S209-S218.
- Saleh K, Lee, Gandhi R, Ingersoll, Mahomed NN, Sheibani-Rad, Novicoff W, Mihalko WM:** Quadriceps strength in relation to total knee arthroplasty outcomes. In: *Instructional Course Lecture* (O'Connor M, ed). American Academy of Orthopedic Surgeons, Rosemont, Illinois: 2010: pp 119-130.
- Sarro A, Rampersaud YR, Lewis S:** Nurse practitioner-led surgical spine consultation clinic. *Journal of Advanced Nursing*: September 2010: 66(12): pp 2671-2676.
- Schemitsch LA, Schemitsch EH, Veillette CJH, Zdero R, McKee M:** Function plateaus after one year in patients with surgically treated midshaft clavicle fractures. *Clinical Orthopaedics and Related Research*. E-published May 18, 2011.
- Syed K, Gandhi R, Davey JR, Mahomed NN:** Risk of wound infection is greater after skin closure with staples than with sutures in orthopaedic surgery. *Journal of Bone and Joint Surgery (American)*: November 2010: 92: p 2732.
- Veillette CJ:** ABJS Carl T. Brighton workshop on health informatics in orthopaedic surgery. *Clinical Orthopaedics and Related Research*: October 2010: 468(10): pp 2561-2564.
- Veillette CJH:** Orthopaedia - Collaborative Orthopaedic Knowledgebase. *Orthopaedia.com* (Veillette CJH and Bernstein J, eds). Association of Bone and Joint Surgeons, Philadelphia, Pennsylvania, 2010.
- Waida PM, Tan G, Munhoz RP, Fox SH, Lewis SJ, Lang A:** Surgical correction of kyphosis in patients with camptocormia due to Parkinson's disease: A retrospective evaluation. *Journal of Neurology, Neurosurgery, and Psychiatry*: May 2011: 82(4): pp 364-368. E-published July 28, 2010.
- Wilson RK, Tomlinson G, Stas V, Ridout R, Mahomed NN, Gross A, Cheung AM:** Male and non-English-speaking patients with fracture have poorer knowledge of osteoporosis. *The Journal of Bone and Joint Surgery, American Volume*: April 2011: 93(8): pp 766-774.
- Wong J, Abrishami A, El Beheiry H, Mahomed NN, Davey JR, Gandhi R, Syed KA, Hasan SM, De Silva Y, Chung F:** Topical application of tranexamic acid reduces postoperative blood loss in total knee arthroplasty: A randomized, double-blinded, placebo controlled trial of efficacy. *The Journal of Bone and Joint Surgery, American*: November 2010: 92(15): pp 2503-2513.
- Zdero R, McConnell A, Peskun C, Syed K, Schemitsch E:** Biomechanical measures of torsion-tension coupling in human cadaveric femurs. *Journal of Biomechanical Engineering*: January 2011: 133(1): p 014501.

INVITED VISITS

Davey JR: Division of Orthopaedic Surgery, Wascana Club, Regina, Saskatchewan, July 2010. Triathlon Design Rationale. Triathlon TS Revision TKA.

Erwin WM: International Spine Intervention Society, Maui, Hawaii, July 2010. Cellular and molecular mechanisms inherent in disc degeneration and pain.

Erwin WM: American Association of Orthopaedic Medicine, Denver, Colorado, USA, August 2010. The use of growth factors and stem cells in orthopaedic medicine.

Erwin WM: University of British Columbia, Vancouver, British Columbia, Canada, September 2010. Regenerative medicine applications to intervertebral disc disease.

Erwin WM: University of British Columbia/British Columbia Chiropractic Association, Vancouver, British Columbia, Canada, May 2011. Regenerative medicine and the spine.

Gandhi R: Smith and Nephew National Sales Meeting, Toronto, ON, January 2011. Hip and knee arthroplasty for 2011.

Gandhi R: American Academy of Orthopedic Surgeons, San Diego, California, USA, February 2011. (1) A prospective study of asymptomatic pulmonary embolism after hip and knee arthroplasty. (2) The synovial fluid adiponectin-leptin ratio predicts pain with knee osteoarthritis.

Gandhi R: Segal North American Osteoarthritis Workshop, Chicago, Illinois, USA, March 2011. Metabolic relationship between Obesity and OA.

Lau JTC: University of Michigan, 10th Annual Foot & Ankle Lectureship, Ann Arbor, Michigan, USA, September 2010. Assessment and treatment of accessory navicular and tarsal coalition.

Lau JTC: Third Military Medical University, 1st Annual Foot and Ankle Conference, Chongqing, China, October 2010. (1) Ankle fracture revisions and syndesmotic injuries, (2) Surgical treatment of diabetic foot complications. (3) Hallux rigidus: Fusion or replacement?

Lau JTC: Canadian Orthopaedic Foot and Ankle Society, Vancouver, British Columbia, Canada, January 2011. (1) Moderator: Flat Foot, (2) Differential Diagnosis in Ankle Instability. (3) Maximizing post-operative care.

Lau JTC: University of Pittsburgh, Pittsburgh, Pennsylvania, USA, January 2011. (1) Achilles tendon ruptures: New evidence, (2) Hallux rigidus: Fusion or replacement?

Lau JTC: Baltimore Fellows Foot & Ankle Meeting, Breckenridge, Colorado, USA, March 2011. (1) Debate: 70 year old with hallux valgus with IM angle 20 degrees - 1st MTPJ fusion, (2) Total ankle experience in Canada.

Lau JTC: 15th Surgery of the Adult Foot & Ankle Course, Stanmore, England, May 2011. (1) Ankle ligament injuries: Late problems, (2) Other forefoot disorders: Sesamoid disorders.

Lau JTC: Canadian Orthopaedic Resident Forum, Calgary, Alberta, Canada, April 2011. Foot & Ankle Review.

Lau JTC: Third Military Medical University, 1st Annual Foot and Ankle Conference, Chongqing, China, October 2010. Surgical treatment of diabetic foot complications.

Lau JTC: Baltimore Fellows Foot & Ankle Meeting, Breckenridge, Colorado, USA, March 2011.

Lewis SJ: Scoliosis Research Society, 17th International Meeting on Advanced Spine Techniques (IMAST), Toronto, Ontario, Canada, July 2010. Instructional course lecturer: My worst complications.

Lewis SJ: Stryker, Bordeaux, France, March 2011. Adult degenerative scoliosis.

Lewis SJ: Stryker, Toronto, Ontario, Canada, July 2010. Chair: Deformity and navigated spine.

Lewis SJ: Glenrose Rehabilitation Hospital, Edmonton, Alberta, Canada, November 2010. (1) Acute and chronic management spine trauma patients, (2) Planning osteotomies: The science of spinal alignment, available algorithms, and how to determine the necessary re-alignment for the pediatric deformity patient, (3) Pros and cons of reductions in high grade spondylolisthesis.

Lewis SJ: Medtronic, Advances in Spine: Adult Deformity: Surgical Skills, Toronto, Ontario, Canada, November 2010. (1) Osteotomy options in spinal deformities, (2) Case example, (3) Three column osteotomies for severe deformities, (4) Management of deep infections in spinal deformity.

Lewis SJ: Stryker, Las Vegas, Nevada, USA, November 2010. (1) Spondy technique: Nerve decompression, partial decompression, and TLIF techniques, (2) VCR: Technique, indications and pitfalls.

Lewis SJ: Stryker, Bordeaux, France, March 2011. Advanced academy focus deformity.

- Lewis SJ:** Medtronic, Brampton, Ontario, Canada, February 2011. (1) Lumbar conditions and surgical treatment options – Spondylolisthesis, (2) Lumbar conditions and surgical treatment options – Degenerative, (3) Canadian nurse's spinal training, (4) Thoracolumbar conditions and surgical treatments options- Deformity, (5) Thoracolumbar deformity correction demonstration.
- Lewis SJ:** Canadian Spine Society, 11th Annual Scientific Conference, Quebec City, Quebec, Canada, March 2011. (1) Correction techniques for large deformity scoliosis, (2) Neuromonitoring and perioperative complications.
- Lewis SJ:** Stryker, Bordeaux, France, March 2011. (1) Adult degenerative scoliosis, (2) Advanced academy focus deformity, (3) History and scoliosis overview, (4) Cases discussion with audience, (5) Stryker training course in spinal deformity
- Lewis SJ:** IMAS, Toronto, Ontario, Canada, July 2010. Instructional Course Lecture: My worst complication.
- Marshall KW:** Calcutta, India, July 2010. Multimodal non-arthroplasty management of knee OA.
- Marshall KW:** Delhi, India, July 2010. Multimodal non-arthroplasty management of knee OA.
- Marshall KW:** Hyderabad, India, July 2010. Multimodal non-arthroplasty management of knee OA.
- Marshall KW:** Mumbai, India, July 2010. Multimodal non-arthroplasty management of knee OA.
- Marshall KW:** National Advisory Board, Toronto, Ontario, Canada, November 2010. Viscosupplementation: Moving beyond pain.
- Marshall KW:** Osteoarthritis Research Society International (OARSI), Biomarker Forum, Atlanta, Georgia, USA, November 2010. Genomics - Implications for osteoarthritis.
- Marshall KW:** 1st Latin America Forum of Osteoarthritis, Salvador de Bahia, Brazil, December 2010. (1) Viscosupplementation: From basic science to clinical practice, (2) Multimodal non-arthroplasty management of knee OA.
- Marshall KW:** Genzyme Biosurgery Latin America, 1st Synvisc Educational Program, Santiago, Chile, May 2011. (1) Multimodal non-arthroplasty management of knee OA, (2) Viscosupplementation: A strong scientific foundation supporting innovative clinical practice.
- Rampersaud YR:** Cleveland Spine Review: Hands-On 2010, Cleveland, Ohio, USA, July 2010. (1) Interbody fusions: Indications and techniques, (2) MIS surgery tricks, pearls and results.
- Rampersaud YR:** Medtronic, Advances in Spine Surgery - Current Techniques in Minimal Access, Toronto, Ontario, Canada, July 2010. Course Chairman: MAST DLIF technique training.
- Rampersaud YR:** Scoliosis Research Society, 17th International Meeting on Advanced Spine Techniques (IMAST), Toronto, Ontario, Canada, July 2010. (1) Comparison of the incidence of radiculitis and radiographic adverse event following minimally invasive lumbar transforaminal interbody fusions (TLIF) with and without the use of bone morphogenetic protein (BMP), (2) Assessment of the incremental cost-utility of surgery compared to medical management for the treatment of hip, knee and spine osteoarthritis, (3) Metabolic syndrome (MetS) increases the risk of prevalent spine osteoarthritis, (4) The impact of obesity on the incidence of adverse events following spine surgery. (5) Post-operative improvement in health related quality of life: A national comparison of surgical treatment for focal (1-2 level) lumbar spinal stenosis compared to total joint replacement for osteoarthritis (OA), (6) Spine adverse events severity system (SAVES-V2): Multicenter development with inter-intra observer reliability assessment.
- Rampersaud YR:** Medtronic, Sunnyvale, California, USA, August 2010. Course Chairman: Current Techniques in Minimal Access.
- Rampersaud YR:** Institute of Health Economics, Edmonton, Alberta, Canada, October 2010. Cost analysis of MRI utilization in spine surgery.
- Rampersaud YR:** Society of Minimally Invasive Spine Surgery, 10th Annual Meeting, Miami, Florida, USA, November 2010. MIS Costs.
- Rampersaud YR:** University of Louisville, Department of Orthopaedic Surgery, Louisville, Kentucky, USA, January 2011. Comparative effectiveness for surgical management of spinal stenosis.
- Rampersaud YR:** Society of Lateral Access Surgery (SOLAS), 4th Annual Research Meeting, San Diego, California, USA, March 2011. MIS spine surgery: The value of clinical and economic data.
- Rampersaud YR:** Society for Minimally Invasive Spine Surgery, Chicago, Illinois, USA, May 2011. Short and long-term outcomes and economics for MIS techniques - Mini TLIF.
- Syed K:** American Society for Bone and Mineral Research, Toronto, Ontario, Canada, October 2010. Atypical femur fractures and bisphosphonate use in a Canadian tertiary care academic hospital.

Veillette CJH: American Academy of Orthopaedic Surgery, Electronic Skills Pavillion, San Diego, California, USA, February 2011. (1) Managing your internet reputation for orthopaedic surgeons, (2) Search engine optimization and marketing for office websites.

RESEARCH AND INVESTIGATIONS

A cellular and molecular strategy to unlock the regenerative potential of the notochordal cell: A novel approach to treat intervertebral disc degeneration. *Erwin W, Inman R., Fehlings M.: AO Spine International.* (\$30,000 2010 - 2011)

A multi-centre randomized clinical trial of non-operative versus operative treatment of acute acromioclavicular joint dislocation. *McKee M, Veillette C, Syed K: Canadian Orthopaedic Trauma Society.* (\$30,000 2009- 2011)

A multi-center randomized controlled study on vanguard regenerex tibial tray in total knee atihroplasty. *Syed K, Mahomed N, Gandhi R, Davey JR: Biomet Canada.* (\$360,000 2010- 2013)

An in-patient rehabilitation model of care targeting cognitive impairment for patients post hip fracture surgery. *McGilton K, Mahomed N, Davies A, Naglie G, Jaglal S, Rochon E, Flannery J: Canadian Institute of Health Research.* (\$381,095 2008 - 2011)

Biological effects of DRS upon intervertebral disc nucleus pulposus cells. *Erwin W: Skoll Foundation.* (\$120,000 2009 - 2010)

Can ultrasound predic nerve injury following posterior tibial nerve block in diabetic patients with peripheral neuropathy? *Riazi S, Brull R, Chan V, Bril V, Beheiry H, Lau J, Syed A: American Society of Regional Anesthesia.* (\$33,696 2010- 2012)

Centre for Research Expertise in Improved Disability Outcomes (CREIDO). *Cassidy JD, Cote P, Carette S, Mahomed N, Hamer H, Inman R, von Schroeder H, 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, matching funds from University Health Network and Institute for Work and Health (IWH).* (\$3,750,000 2006 - 2011)

Centre of Research Expertise in Improved Disability Outcomes (CREIDO). *Cassidy JD, Cote P, Carette S, Mahomed N, Hamer H, von Schroeder H, Inman R, Gignac M, Evans M, Bombardier C, Ammendolia C, Franche RL, Cole D, Reardon D, Guzman, 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 Working Group: 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)

Effect of intraoperative music use on post operative pain control and patient satisfaction in joint replacement patients. *Syed K, Brull R, Chan V, Gandhi R, Davey J, Mahomed N: University Health Network.* (\$2,000 2009-2011)

Evaluation of rivaroxaban following hip and knee arthroplasty: Phase IV evaluation. *Gandhi R, Mahomed N, Davey J, Syed K: Bayer Canada.* (\$154,000 2010)

Fluid Lavage of Open Wounds (FLOW): A multi-center, blinded, factorial trial comparing alternative irrigating solutions and pressures in patients with open fractures. *Bhandari M, Syed K, Guyatt G, Tanetta P, Schemitsch E, Liew S: United States Army Institute of Surgical Research Orthopaedic Trauma Research Program (OTRP); Association internationale pour l'Osteosynthese Dynamique (AIOD); Canadian Institutes of Health Research.* (\$50,000 2010- 2011)

Hip fracture evaluation with alternatives of total hip arthroplasty versus hemi-arthroplasty (HEALTH): A multi-centre randomized trial comparing total hip arthroplasty and hemi-arthroplasty on revision surgery and quality of life in patients with displaced femoral neck fractures. *Bhandari M, Guyatt G, Syed K, Tetsworth K, Dowick A, Liew S: Canadian Institutes of Health Research.* (\$50,000 2010 - 2011)

Identification of loci and genes in patients with osteoarthritis in hip and knee. *Syed K, Mahomed N, Gandhi R, Davey J: Toronto Western Hospital, Department of Orthopedic Surgery.* (\$5,000 2010 - 2011)

Impact of psychosocial and treatment choice on return to work in carpal tunnel syndrome. *Binhammer P, Binhammer P, Dvali L, von Schroeder H, Anastakis D: American Foundation for Surgery of the Hand.* (\$16,000 2009 - 2010)

Intervertebral disc-derived multipotent stem cell rescue of the injured spinal cord. *Erwin WM, Fehlings MG: AO-Spine.* (\$30,000 2011 - 2012)

Minimal Access Ambulatory Spine Surgery Research and Education Program. *Rampersaud YR: Toronto General and Western Foundation.* (\$1,000,000 2007 - 2012)

Open and arthroscopic stabilization for anterior shoulder instability in Ontario. *Ogilvie-Harris D, Wasserstein D, Dwyer T, Mahomed N, Gandhi R, Veillette C: University Health Network, Division of Orthopaedics. (\$25,000 2011)*

OrthoSaves - Adverse events in orthopedic surgery. *Rampersaud R, Gandhi R, Mahomed N, Davey J: University Health Network/MS AMO Funds. (\$166,000 2011 - 2013)*

Predictive value of helical computed tomography in the diagnosis of pulmonary embolus following total joint replacement. *Gandhi R, Syed K, Mohamed N, Davey J: Pfizer Inc. (\$30,000 2009 - 2010)*

Predictors of disability following revision knee arthroplasty. *Davis E, Garbuz D, Gignac M, Kiss A, Mahomed N, Gross A, Schemitsch E: Canadian Institutes of Health Research. (\$74,132 2005 - 2010)*

Regenerative approach to the treatment of intervertebral disc disease. *Erwin W: Skoll Foundation. (\$624,000 2010 - 2013)*

HONOURS RECEIVED

Gandhi R: 2011 Canadian Association of Physical Medicine and Rehabilitation Research Award for "The Opinion of Orthopaedic Surgeons in Ontario on Hip Precautions Following Primary Total Hip Arthroplasty for Osteoarthritis", March 2011.

■ Division Of Plastic And Reconstructive Surgery

Dr. D. Anastakis
Dr. P. Bray
Dr. B. Graham
Dr. S. Hofer

Associate Professor
 Assistant Professor
 Assistant Professor
 Associate Professor
 (Division Head)

Dr. C. Novak (PhD) Associate Professor
Dr. H.P. von Schroeder Associate Professor
Dr. T. Zhong Lecturer

PUBLICATIONS

- Ferguson NM, Mathijssen IMJ, Hofer SO, Mureau MA:** Decision making in reconstruction of defects of the eyelid. *Journal of Plastic Surgery and Hand Surgery*: February 2011: 45(1): pp 45-50. E-published August 31, 2010.
- Haykal S, Waddell TK, Hofer SOP:** Commentary - Re: Moving towards in situ tracheal regeneration: The bionic tissue engineered transplantation approach. *Journal of Cellular Molecular Medicine*: July, 2010: 14 (7): pp. 1877-1889. E-published April 19, 2010
- Hofer SOP, Mureau MA:** Pedicled perforator flaps in head and neck reconstruction. *Clinics in Plastic Surgery*: October 2010: 37(4): pp 627-640.
- Hofer SOP, Mureau MAM:** Improving outcomes in aesthetic facial reconstruction. *Perioperative Nursing Clinics - Plastic and Reconstructive Surgery*: June 2011: 6(2): pp 147-158.
- Hofer SOP, Payne CE:** Functional and aesthetic outcome enhancement of head and neck reconstruction through secondary procedures. *Seminars in Plastic Surgery*: August 2010: 24(3): pp 309-318.
- Hofer SOP, Zhong T:** Microsurgery 101: How to get from being good to better. In: *Plastic Surgery Pulse News (V3N2)* (Aly A, ed). Quality Medical Publication Inc., St. Louis, Missouri: 2011.
- Hofer SOP, Zhong T, Ahmad J, Janis JE:** Outcomes after abdominal wall reconstruction using acellular dermal matrix: A systematic review. In: *Advances in Abdominal Wall Reconstruction* (Losken A, Janis JE, eds). Quality Medical Publishing Inc., St. Louis, Missouri: 2011.
- Moolenburgh SE, McLennan L, Levendag PC, Munte K, Scholtemeijer M, Hofer SOP, Mureau MA:** Nasal reconstruction after malignant tumor resection: An algorithm for treatment. *Plastic and Reconstructive Surgery*: July 2010: 126(1): pp 97-105.
- Novak CB, Anastakis DJ, Beaton DE, Mackinnon SE, Katz J:** Biomedical and psychosocial factors associated with pain and disability after peripheral nerve injury. *The Journal of Bone and Joint Surgery*: May 2011: 93(10): pp 929-936.
- Novak CB, Beaton DE, Anastakis DJ, Mackinnon SE, Katz J:** Relationships among pain disability, pain intensity, illness intrusiveness and upper extremity disability in patients with traumatic peripheral nerve injury. *The Journal of Hand Surgery*: October 2010: 35(10): pp 1633-1639.
- Power SM, Matic DB, Zhong T, Husein M, Lao A, Spouge AR:** Definition of the lateral bulge deformity after primary cleft lip repair using real-time high-resolution ultrasound. *The Journal of Craniofacial Surgery*: September 2010: 21(5): pp 1493-1499.
- Taylor KS, Anastakis DJ, Davis KD:** Chronic pain and sensorimotor deficits following peripheral nerve injury. *Pain*: July 2010: 151(3): pp 582-591. E-published July 23, 2010.
- van Driel AA, Mureau MA, Goldstein D, Gilbert R, Irish J, Gullane P, Neligan P, Hofer SOP:** Aesthetic and oncologic outcome after microsurgical reconstruction of complex scalp and forehead defects after malignant tumor resection: An algorithm for treatment. *Plastic and Reconstructive Surgery*: August 2010: 126(2): pp 460-470.
- Verseijden F, Posthumus-van Sluijs SJ, Farrell E, van Neck JW, Hovius SE, Hofer SOP, van Oorschot GJ:** Prevascular structures promote vascularization in engineered human adipose tissue constructs upon implantation. *Cell Transplantation*: August 2010: 19(8): pp 1007-1020.
- Visser NJ, Damen TH, Timman R, Hofer SOP, Mureau MA:** Surgical results, aesthetic outcome, and patient satisfaction after microsurgical autologous breast reconstruction following failed implant reconstruction. *Plastic and Reconstructive Surgery*: July 2010: 126(1): pp 26-36.
- Zhong T:** Invited Commentary on "Minimally invasive free flap salvage: Indication, efficacy, and implications for reconstructive microsurgeons". *Journal of Plastic, Reconstructive and Aesthetic Surgery*: November 2011: 64 (11): pp 1520-1521. E-published April 2011.

Zhong T, Janis J, Ahmad J, Hofer SOP: Outcomes after abdominal wall reconstruction using acellular dermal matrix: A systematic review. *Journal of Plastic, Reconstructive and Aesthetic Surgery*: 2011; 64: pp 1562-1571. E-published May 28, 2011.

INVITED VISITS

Anastakis DJ: International Federation of Societies for Surgery of the Hand, 11th Triannual Congress, Seoul, South Korea, October 2010. (1) Chair, Oral Presentations, (2) Cutting your nerve changes your brain.

Anastakis DJ: American Association for Hand Surgery (AAHS)/ American Society for Peripheral Nerve (ASPN)/ American Society for Reconstructive Microsurgeons (ASRM), 41st Annual Meeting, Cancun, Mexico, January 2011. (1) Abstract (Poster) Session Moderator, (2) Instructional Course Chair: Cortical plasticity and changes with nerve injury.

Anastakis DJ: International Confederation for Plastic, Reconstructive and Aesthetic Surgery (IPRAS), Vancouver, British Columbia, May 2011. Cortical mapping in reconstructive surgery.

Hofer SOP: Duke Flap Course, Durham, North Carolina, USA, August 2010. (1) Dissection faculty, (2) Reconstruction and innovations.

Hofer SOP: European Plastic Surgery Research Council (EPSRC), 2nd Annual Meeting, Hamburg/ Germany, August 2010. (1) Chair, Scientific Session 3: Reconstruction I, (2) Novel techniques in head and neck surgery.

Hofer SOP: University of Helsinki, Helsinki, Finland, November 2010. (1) Complications in microsurgical breast reconstruction, (2) External Reviewer for PhD Thesis Defence Committee.

Hofer SOP: American Society for Reconstructive Microsurgery, 2011 Annual General Meeting, Cancun, Mexico, January 2011. Break Out Panel: Scalp Reconstruction.

Hofer SOP: International Plastic, Reconstructive and Aesthetic Surgery Meeting, Vancouver, British Columbia, May 2011. Chair Podium Session: (1) Head and Neck Panel and Papers, (2) Melanoma Panel and Skin Cancer Papers, (3) Master Class - How to get your work published!

RESEARCH AND INVESTIGATIONS

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, matching funds from University Health Network and Institute for Work and Health (IWH). (\$3,750,000 2006- 2011).*

Defining the structural integrity of decellularized tracheal allografts. *Haykal S, Hofer SOP, Waddell T: The Physicians' Services Incorporated Foundation. (\$19,000 2010 - 2011)*

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)*

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 (CIHR). (\$326,763 2009 - 2012)*

Impact of psychosocial factors and treatment choice on return to work in carpal tunnel syndrome. *Binhammer PA, Dvali LT, von Schroeder HP, Anastakis DJ: 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)*

Pre-existing patient factors associated with sensorimotor recovery, chronic pain, and brain plasticity following surgical repair of peripheral nerve injuries. *Davis KD, Anastakis DJ, Katz JD: Workers' Safety and Insurance Board, Research Advisory Counsel. (\$348,273 2011 - 2014)*

Quality of life and patient reported outcomes of reconstruction in breast cancer survivors. *Macadam S, Lennox P, Van Laeken N, Zhong T, Lipa J, Snell L, Vidal C, Lemaine P, Hazen A: Canadian Breast Cancer Foundation - British Columbia/ Yukon Chapter. (\$100,000 2010 - 2011)*

The use of transversus abdominis plane (TAP) block in autologous breast reconstruction donor site: A randomized, double-blind, placebo-controlled trial. *Zhong T, Srinivas C, McCluskey S, Hofer SOP: Plastic Surgery Educational Foundation/American Society for Reconstructive Microsurgery, Combined Pilot Research Grant. (\$10,000 2011 2012)*

The use of transversus abdominis plane (TAP) block in autologous breast reconstruction donor site: A randomized, double-blind, placebo-controlled trial. *Zhong T, Srinivas C, McCluskey S, Hofer SOP: Educational Foundation/ Canadian Society of Plastic Surgeons - Outcome/ Clinical Study Research Grant.* (\$10,000 2011 - 2012)

Utilization of breast reconstruction in the treatment of breast cancer in Ontario and identification of barriers to access: A population-based study. *Zhong T, Baxter N, Urbach D, Sutradhar R, Hofer SOP, Musgrave M, Davidge K, Platt J: Canadian Breast Cancer Foundation - Ontario Region.* (\$257,474 2011 - 2014)

HONOURS RECEIVED

Anastakis DJ: The Wightman-Berris Academy, Award for Individual Teaching Excellence 2010-2011, University of Toronto, Faculty of Medicine, May 2011.

Zhong T: Outstanding Paper Presentation, at the American Society for Reconstructive Microsurgery Annual

Meeting, Cancun, Mexico. January 2011.

Zhong T: William K. Lindsay Faculty Research Mentor Award, Division of Plastic Surgery, University of Toronto, June 2011.

■ Division Of Thoracic Surgery

Dr. G. Darling Professor
Dr. M. de Perrot Associate Professor
Dr. S. Keshavjee Professor
Dr. M. Liu Professor

Dr. M. McKneally Professor
Dr. A. Pierre Assistant Professor
Dr. T. Waddell Professor (**Division Head**)
Dr. K. Yasufuku Assistant Professor

PUBLICATIONS

Akram A, Han B, Masoom H, Peng C, Lam E, Litvak M, Bai X, Shan Y, Hai T, Batt J, Slutsky AS, Zhang H, Kuebler WM, Haitsma JJ, Liu M, dos Santos CC: Activating transcription factor 3 confers protection against ventilator induced lung injury. *American Journal of Respiratory and Critical Care Medicine*: August 2010: 182(4): pp 489-500. E-published April 22, 2010.

Anraku M, Tagawa T, Wu L, Yun Z, Keshavjee S, Zhang L, Johnston MR, de Perrot M: Synergistic anti-tumor effects of regulatory T cell blockade combined with pemetrexed in murine malignant mesothelioma. *Journal of Immunology*: July 2010: 185(2): pp 956-966. E-published June 14, 2010.

Bendzsak A, Nenshi R, Darling G, Schultz S, Gunraj N, Urbach D: An overview of lung cancer surgery in Ontario. *The Annals of Thoracic Surgery*: February 2011: 91(2): pp 361-366.

Bhinder S, Chowdhury N, Granton J, Krahn M, Tullis DE, Waddell TK, Singer LG: Feasibility of internet-based health-related quality of life data collection in a large patient cohort. *Journal of Medical Internet Research*: August 2010: 12(3): p e35.

Booth CM, Shepherd FA, Peng Y, Darling G, Li G, Kong W, Mackillop W: Adoption of adjuvant chemotherapy for non-small cell lung cancer: A population-based outcomes study. *Journal of Clinical Oncology*: July 2010: 28(21): pp 3472-3478.

Coate L, Massey C, Hope A, Sacher A, Barrett K, Pierre A, Leighl N, Brade A, de Perrot M, Waddell T, Liu G, Feld R, Burkes R, Cho B, Darling G, Sun A, Keshavjee S, Bezjak A, Shepherd F: Treatment of the elderly when cure is the goal: the influence of age on treatment selection and efficacy for stage III non-small cell lung cancer. *The Journal of Thoracic Oncology*: March 2011: 6(3): pp 537-544.

Cypel M, Kaneda H, Yeung JC, Anraku M, Yasufuku K, de Perrot M, Pierre A, Waddell TK, Liu M, Keshavjee S: Increased levels of interleukin-1B and tumor necrosis factor-α in donor lungs rejected for transplantation. *The Journal of Heart and Lung Transplantation*: April 2011: 30(4): pp 452-459. E-published January 15, 2011.

Cypel M, Kaneda H, Yeung JC, Anraku M, Yasufuku K, de Perrot M, Pierre A, Waddell TK, Liu M, Keshavjee S: Increased levels of interleukin-1B and tumor necrosis factor-α in donor lungs rejected for transplantation. *Journal of Heart and Lung Transplantation* April 2011: 30(4): pp 452-459.

Cypel M, Keshavjee S: Bilateral lobar transplantation with split cadaver lung. In: *CardioThoracic Surgery*: 2010

Cypel M, Keshavjee S: Bridge lobar transplantation with a mechanical device. In: *CardioThoracic Surgery*: 2010.

Cypel M, Keshavjee S: Bridging the patient to lung transplantation. In: *Clinics in Chest Medicine*: 2010.

Cypel M, Keshavjee S: Donor lung preservation. In: *CardioThoracic Surgery*: 2010.

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Yasufuku K: Complications of endobronchial ultrasound-guided transbronchial needle aspiration (Editorial). *Journal of Bronchology and Interventional Pulmonology*: October 2010: 4: pp 287-288.

Yasufuku K: Current clinical applications of endobronchial ultrasound. *Expert Review of Respiratory Medicine*: August 2010: 4(4): pp 491-498.

Yasufuku K, Keshavjee S: Staging non-small cell lung cancer: Endobronchial ultrasound versus mediastinoscopy. *Clinical Pulmonary Medicine*: September 2010: 17: pp 223-231.

Yasufuku K, Nakajima T, Fujiwara T, Yoshino I, Keshavjee S: Utility of endobronchial ultrasound-guided transbronchial needle aspiration in the diagnosis of mediastinal masses of unknown etiology. *The Annals of Thoracic Surgery*: March 2011: 91(3): pp 831-836.

INVITED VISITS

Darling GE: Canadian Anesthesiologists' Society, Toronto, Ontario, Canada, June 2011. Esophagectomy: Case Discussion.

Keshavjee S: XXIII International Congress of the Transplantation Society, Vancouver, British Columbia, Canada, August 2010. Lung Repair, regeneration and transplantation.

Keshavjee S: Beth Israel Medical Center, Newark, New Jersey, September 2010. State-of-the-art in lung transplantation: Molecular diagnostics and ex vivo organ repair.

Keshavjee S: Chest, Vancouver, British Columbia, November 2010. Lung transplantation: pushing the envelope.

Keshavjee S: Chinese University of Hong Kong and Prince of Wales Hospital, Hong Kong, China, November 2010. Dr. Anthony PC Yim Visiting Professor in Minimally Invasive Surgery and Innovative Technology: (1) Ex vivo repair and regeneration of lungs for transportation, (2) Surgical management of end stage pulmonary disease.

Keshavjee S: The Society of Thoracic Surgeons, 47th Annual Meeting, San Diego, California, January 2011. Advances in lung transplantation: X-Vivo Lung Perfusion (Vitrolife/Toronto approach).

Keshavjee S: Thomas E Starzl Transplant Institute, University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania, USA. January 7, 2011. Ex vivo repair of organs for transplantation.

Keshavjee S: University of Colorado, 8th Vail Cardiothoracic Transplantation 2011: An International Update, Vail, Colorado, January 2011. (1) Novalung as a bridge to transplant, (2) Ex-vivo lung perfusion- Which lungs need it and When is a lung good to go?, (3) Advanced ex-vivo organ repair strategies - what's next? 4) Ex-vivo lung perfusion demonstration hands on course, clinical and research applications.

Keshavjee S: University of Texas Health Sciences Center, San Antonio, Texas, USA, February 2011. (1) Cardiothoracic Surgery Grand Rounds: Optimizing lung donor management, (2) Transplant Grand Rounds: Ex-vivo repair donor lungs for transplantation.

Keshavjee S: Canadian Society of Transplantation, Mont Tremblant, Quebec, March 2011. Expanding the lung donor pool through gene therapy.

Keshavjee S: Duke University, Surgical Grand Rounds, North Carolina, USA, April 2011. Ex vivo repair of donor organs for transplantation.

Keshavjee S: International Society of Heart and Lung Transplantation, San Diego, California, April 2011. 1) Lung allograft procurement principles, additional donor options and future directions 2) Clinical experience with ex vivo lung perfusion 3) Plenary Presentation: Engineering lungs for transplant: The potential benefits of ex vivo therapy.

Keshavjee S: American Association for Thoracic Surgery, 2011 Leadership Academy, Philadelphia, Pennsylvania, USA, May 2011. Lessons learned from the six year cardiothoracic surgical training program in Canada.

Keshavjee S: University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania, May 2011. Henry T Bahnson Lecture: Can we engineer super organs for transplantation?

Keshavjee S: European Society of Thoracic Surgeons, Marseille, France, June 2011. Engineering lungs for transplant: The potential benefits of ex-vivo therapy.

Liu M: The Second Annual International Conference "Models of Human Diseases", Toronto, Ontario, Canada, June 2011. Ratman returns: rat models for human lung transplantation.

Pierre AF: Portuguese Society of Cardiothoracic Surgeon, 12th International Congress, Aveiro, Portugal, November 2010. Tracheal and carinal resection and reconstruction.

Waddell TK: 9th International Congress on Lung Transplantation, Paris, France, September 2010. Ex-vivo lung recovery and lung repair.

Waddell TK: 5th Chinese National Heart-Lung Transplantation Meeting, Wuxi City, Jiangsu, China, November 2010. Advanced lung transplantation.

Waddell TK: International Conference on Radiation Biology Nanotechnology, Imaging and Stem Cell Research in Radiation Oncology, Chennai, India, November 2010. Cell therapy for radiation induced lung damage.

Waddell TK: The European Association for Cardio-Thoracic Surgery, Vienna, Austria, December 2010. Cell replacement therapy for lung disease - The role of bone marrow cells.

Waddell TK: Vienna Medical University, Vienna, Austria, December 2010. Visiting Professor.

Waddell TK: 8th Vail Cardiothoracic Transplantation Meeting, Vail, Colorado, USA, January 2011. (1) Stem Cells - Repair your old lung, repair your new lung. (2) Thoracic regenerative medicine: Building a new lung and trachea - bench to bedside.

Waddell TK: University of Colorado, Denver School of Medicine, 8th Vail Cardiothoracic Transplantation Meeting, Vail, Colorado, USA, January 2011. Humoral immunity in lung transplantation.

Waddell TK: Annual Surgical Research Day, Edmonton, Alberta, Canada, May 2011.

Waddell TK: University of Maryland, 2nd Annual Hales Lung Conference, Maryland, Baltimore, USA, May 2011. Regenerative medicine approaches to the lung and airway.

Waddell TK: Kyoto University, Kansai Association for Thoracic Surgery, Osaka, Japan, June 2011. Lung regeneration.

Yasufuku K: CanMEDS Weekend 2010, Kingston, Ontario, Canada, October 2010. (1) Faculty - Endobronchial ultrasound hands-on workshop, (2) Keynote Speaker: Endobronchial ultrasound.

Yasufuku K: The American College of Chest Physicians, International Conference 2010, Vancouver, British Columbia, Canada, October 2010. (1) Invited Speaker/ Plenary Presentation: Difficult lung cancer case: An international approach to care. Surgical approach to the high risk patient, (2) Invited Speaker/Plenary Presentation: Update on imaging and diagnosis of lung cancer. Where are we with endobronchial ultrasound and endoscopic ultrasound?

Yasufuku K: European Society of Gastrointestinal Endoscopy, 17th International Symposium on Endoscopic Ultrasonography, Shanghai, China, November 2010. Guest Speaker. Minimally invasive staging of lung cancer-EBUS-TBNA.

Yasufuku K: EUS 2010, Shanghai, China, November 2010. (1) Faculty - EBUS training course - EUS 2010/Lectures: (a) Why is mediastinal staging important?, (b) EBUS-TNA results, (2) Hands-on training instructor.

Yasufuku K: The Oxford/Marseille International Thoracic Course, Oxford, United Kingdom, November 2010. (1) Faculty/Guest Lecturer: (a) Endobronchial ultrasound, (b) The peripheral nodule - Can we reach it? Radial probe EBUS, (2) Hands-on seminar instructor (EBUS), (3) Hands-on seminar: Bronchoscopy.

Yasufuku K: International Association for the Study of Lung Cancer, 4th Asia Pacific Lung Cancer Conference, Satellite Symposium, Seoul, Korea, December 2010. (1) Guest Speaker: Practical application of EBUS-TBNA, (2) Plenary Lecture: Role of diagnostic bronchoscopy in early lung cancer.

Yasufuku K: Lahey Clinic, Interventional Pulmonology, The 28th Year, Burlington, Massachusetts, USA, April 2011. (1) Faculty/Introductory Course Lecturer: EBUS II - TBNA Scope: Thoracic ultrasound for pulmonologist, (2) EBUS live case moderator, (3) Hands-on workshop (EBUS-TBNA), EBUS case studies.

Yasufuku K: American Thoracic Society, International Conference 2011, Denver, Colorado, USA, May 2011. Guest Speaker: Clinical topics in pulmonary medicine: Advances in stage III and IV lung cancer - EBUS for diagnosis, staging and molecular testing.

Yasufuku K: The National Lung Cancer Partnership, 2011 Annual Meeting, Chicago, Illinois, USA, June 2011. Guest Speaker: Innovations in minimally invasive surgical procedures.

RESEARCH AND INVESTIGATIONS

Cell replacement therapy for cystic fibrosis. *Waddell T: Canadian Cystic Fibrosis Foundation.* (\$245,000 2010 - 2012)

Determining the immunogenicity of decellularized tracheal allografts. *Waddell TK, Hofer S: Physicians' Services Incorporated Foundation.* (\$155,000 2011 - 2013)

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)

GABAergic regulations of airway epithelium in asthma. *Wei-Yang Lu, Inman M, Liu M: Canadian Institutes of Health for Research.* (\$675,414 2007 - 2012)

Impact of recipient lung gene expression profiles on primary graft dysfunction incidence and survival after lung transplantation for pulmonary fibrosis. *de Perrot M, Keshavjee S, Mura M, Anraku M: Multi-Organ Transplant, Academic Enrichment Fund.* (\$100,000 2009 - 2011)

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.* (\$115,800 2010 - 2011)

Lung progenitor cell profiling in the development of bronchiolitis obliterans syndrome. *Waddell TK: Roche Organ Transplant Research Foundation.* (\$212,000 2011 - 2014)

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 R-K, Liu M: Canadian Foundation of Innovation.* (\$2,486,515 2009 - 2014)

Nanotechnology-enabled image-guided interventions in vascular and lung diseases. *Zhen G, Yasufuku K: Canadian Institutes of Health Research.* (\$2,317,262 2011 - 2015)

Research in thoracic intervention. *Yasufuku K: Olympus Medical Systems Corporation/University Health Network.* (\$250,000 2010 - 2011)

Signal cross-talk in acute lung injury. *Liu M: Canadian Institutes of Health for Research.* (\$659,750 2003 - 2013)

The effect and mechanisms of a novel adoptive immunotherapy for lung cancer using ex vivo expanded human DNT cells. *Zhang L, de Perrot M, Tsao M, Johnston M: National Cancer Society (NCIC).* (\$705,000 2006 - 2011)

The role of bone marrow progenitors in lung regeneration. *Waddell, TK: Canadian Institutes of Health Research (CIHR).* (\$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)

Towards human tracheal decellularized allografts. *Waddell TK*: McEwen Centre for Regenerative Medicine. (\$180,000 2010 - 2012)

Translational and clinical studies in mesothelioma. *de Perrot M, Feld R, Tsao M*: Imperial Oil Foundation. (\$500,000 2009- 2014)

Ventilator-induced acute lung injury: from mechanotransduction to molecular therapies. *Liu M, Dr. Chen P, Han B*: Canadian Institutes of Health for Research. (\$789,240 2006 - 2011)

HONOURS RECEIVED

Waddell TK: Lister Prize, Department of Surgery, University of Toronto, June 2011.

■ Division Of Urology

Dr. A. Finelli	Assistant Professor	Dr. A. Matthew	Assistant Professor
Dr. N. Fleshner	Professor (Division Head)	Dr. S. Radomski	Professor
Dr. M. Hassouna	Professor	Dr. M. Robinette	Associate Professor
Dr. M. Jewett	Professor	Dr. J. Trachtenberg	Professor

PUBLICATIONS

Abdelgawad M, Wu C, Chien WY, Geddie WR, Jewett MA, Sun Y: A fast and simple method to fabricate circular microchannels in polydimethylsiloxane (PDMS). *Lab on a Chip*: February 2011; 11(3): pp 545-551. E-published November 16, 2010.

Abouassaly R, Finelli A, Tomlinson GA, Urbach DR, Alibhai SM: How often are patients with diabetes or hypertension being treated with partial nephrectomy for renal cell carcinoma? A population-based analysis. *British Journal of Urology*: December 2011; 108(11):1806-12. E-published May 23, 2011.

Abouassaly R, Yang S, Finelli A, Kulkarni GS, Alibhai SM: What is the best treatment strategy for incidentally detected small renal masses? A decision analysis. *British Journal of Urology*: October 2011; 108(8 Pt 2):E223-31. E-published May 13, 2011.

Abouassaly R, Alibhai SM, Shah N, Timilshina N, Fleshner N, Finelli A: Troubling outcomes from population-level analysis of surgery for upper tract urothelial carcinoma. *Urology*: October 2010; 76(4): pp 895-901.

Al-Shaiji T, Banakhar M, Hassouna M: Pelvic electric neuro modulation for the treatment of overactive bladder symptoms. *Advances in Urology*. E-published May 14, 2011.

Alibhai SM, Breunis H, Timilshina N, Marzouk S, Stewart D, Tannock I, Naglie G, Tomlinson G, Fleshner N, Krahn M, Warde P, Canning SD: Impact of androgen-deprivation therapy on cognitive function in men with nonmetastatic prostate cancer. *Journal of Clinical Oncology*: December 2010; 28(34): pp 5030-5037.

Alibhai SM, Duong-Hua M, Cheung AM, Sutradhar R, Warde P, Fleshner NE, Paszat L: Fracture types and risk factors in men with prostate cancer on androgen deprivation therapy: A matched cohort study of 19,079 men. *The Journal of Urology*: September 2010; 184(3): pp 918-923.

Alkhateeb SS, Van Rhijn BW, Finelli A, van der Kwast T, Evans A, Hanna S, Vajpeyi R, Fleshner N, 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.

Allard C, Yip P, Blasutig I, Hersey K, Fleshner N: Does the reflexive measurement of free PSA have a role in a tertiary care centre? *Canadian Journal of Urology*: October 2010; 4(5): pp 317-320.

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Alshumrani G, O'Malley M, Ghai S, Metser U, Kachura J, Finelli A, Mattar K, Panzarella T: Small (< 4cm) cortical renal tumors: Characterization with multidetector CT. *Abdominal Imaging*: August 2010; 35(4): pp 488-493.

Artan Y, Haider MA, Langer DL, van der Kwast TH, Evans AJ, Yang Y, Wernick MN, Trachtenberg J, Yetik IS: Prostate cancer localization with multispectral MRI using cost-sensitive support vector machines and conditional random fields. *IEEE Transactions on Image Processing*: September 2010; 19(9): pp 2444-2455.

Caughlin CE, Simons ME, Robinette MA: Direct percutaneous embolization of a renal pseudoaneurysm with use of N-butyl cyanoacrylate. *Journal of Vascular and Interventional Radiology*: August 2010; 21(8): pp 1317-1318. E-published July 13, 2010.

Chen J, Zheng Y, Tan Q, Zhang YL, Li J, Geddie WR, Jewett MA, Sun Y: A microfluidic device for simultaneous electrical and mechanical measurements on single cells. *Microfluidics*: March 2011; 5(1): p 014113.

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Zuniga A, Lawrentschuk N, Jewett MA: Organ-sparing approaches for testicular masses. *Nature Reviews, Urology*: August 2010: 7(8): pp 454-464.

INVITED VISITS

Finelli A: Congress of the Russian Association of Oncological Urology, Moscow, Russia, October 2010. (1) The role of preoperative tyrosine kinase inhibitor therapy. (2) What's new in kidney cancer?

Finelli A: International Continence Society, the 4th World Congress on Controversies in Urology, Paris, France, January 2011. Localized kidney cancer: Laparoscopic surgery.

Finelli A: Kidney Research Network of Canada (KCRNC), 3rd Canadian Kidney Cancer Forum, King City, Ontario, Canada, January 2011. (1) Imaging studies with neoadjuvant targeted therapy, (2) Kidney cancer quality of care indicators workshop report.

Finelli A: Issues & Controversies in Prostate Care, Whistler, British Columbia, Canada, February 2011. Surgical treatment for renal cell carcinoma.

Fleshner NE: Canadian Urology Association, Montreal, Quebec, Canada, June 2011. Use of 5 alpha reductase inhibitors in clinical practice.

Hassouna MM: International Continence Society and the International Urogynecological Association, Joint Meeting, Toronto, Ontario, Canada, August 2010. Sacral neuromodulation for dysfunctional voiders: Workshop W1 with webcast.

Hassouna MM: Canadian Diabetes Association, Toronto, Ontario, Canada, September 2010. Sexual function in patients with diabetes mellitus.

Hassouna MM: Johnson & Johnson, New Jersey, USA, October 2010. Transdermal stimulation for sacral nerves in rodent animal-model.

Hassouna MM: Canadian Paraplegic Society, Thunderbay, Ontario, Canada, November 2010. (1) Management of the bladder following spinal cord injury. (2) Medical management of the urinary bladder in spinal cord injury.

Hassouna MM: The Brazilian Neuromodulation Society, Goiania, Brazil, November 2010.

Hassouna MM: The Saudi Urological Annual Conference, Dammam, Saudi Arabia, February 2011. Guest Speaker: (1) Good urodynamic Practice; (2) HIFU and its role in localized prostate cancer, (3) Management of female urinary incontinence. (4) Pelvic neuromodulation after 25 years.

Hassouna MM: Society of Urodynamics and Female Urology (SUFU), Annual Meeting, Phoenix, Arizona, USA, March 2011. Chair of Session on Neuromodulation.

Hassouna MM: International Neuromodulation Society, London, England, May 2011.

Hassouna MM: Canadian Neuromodulation Society, Vancouver, British Columbia, Canada, June 2011. Chair of Session on Pelvic Neuromodulation

Jewett MAS: 10th International Congress on Genitourinary Malignancies, Washington, District Columbia, July 2010. How to treat small renal tumours: Observation.

Jewett MAS: 1st International Kidney Cancer Coalition Meeting: Expanding Circles in Supporting Kidney Cancer, Frankfurt, Germany, September 2010. Registries, tumour banks, genetics and other research projects.

Jewett MAS: Kidney Cancer Association, 9th International Kidney Cancer Symposium, Chicago, Illinois, USA,

October 2010. (1) Debate: Renal biopsy has a role in the management of small renal masses (SRMs). (2) Expert panel on prioritizing RCC research.

Jewett MAS: Society of Urologic Oncology, Annual Meeting, Bethesda, Washington, USA, December 2010. Moderator Debate: Management of sub-centimeter residual mass in NSCT.

Jewett MAS: Science and Medicine Canada, Issues and Controversies in Prostate Cancer, Whistler, British Columbia, Canada, February 2011. (1) Kidney Cancer Workshop, (2) Panel Moderator: Value in medicine, (3) The future of prostate cancer - the recent past to the future.

Jewett MAS: Allan Blair Cancer Centre, Regina, Saskatchewan, Canada, March 2011. Kidney cancer: the 21st century.

Jewett MAS: Regina Family Practice Symposium, Regina, Saskatchewan, Canada, March 2011. Benign prostate hypertrophy.

Jewett MAS: Society of Urologic Surgeons of Ontario, Toronto, Ontario, Canada, April 2011. Kidney Cancer 2011: What's new and how will it change what I do?

Jewett MAS: Society of Urologic Oncology, Washington, District Columbia, Canada, May 2011. Moderator and presenter: Kidney cancer case management panel: Approaches to small renal mass.

Jewett MAS: Canadian Urological Association, Annual Meeting, Montreal, Quebec, Canada, June 2011. Non-risk adapted surveillance in clinical stage I non-seminomatous germ cell tumours (NSGCT): The Princess Margaret Experience.

Matthew AG: Prostate Cancer Canada Network (PCCN), Toronto, Ontario, Canada, November 2010. Psychosocial aspects of prostate cancer.

Matthew AG: York University, Department of Psychology, Toronto, Ontario, Canada, February 2011. Health psychology and oncology.

Matthew AG: Kidney Cancer Canada, Toronto, Ontario, Canada, March 2011. Living well with kidney cancer: From patient to survivor.

Matthew AG: Canadian Association of Psychosocial Oncology, Toronto, Ontario, Canada, May 2011. Loss of sexual health and intimacy in patients/couples following radical prostatectomy.

Matthew AG: Pediatric Oncology Group of Ontario (POGO), 2011 Survivor Conference - Life After Childhood Cancer, Workshop Level 2: Romantic Relationships and Disclosure, King City, Ontario, Canada, May 2011. Building his or her mojo: Sex, intimacy and sharing.

Trachtenberg J: Prostate Cancer Canada Network, 2010 National Prostate Cancer Conference, Toronto, Ontario, Canada, September 2010. Recent research and medical advances.

Trachtenberg J: University of British Columbia, Whistler, British Columbia, Canada, February 2011. Robot assisted focal therapy of prostate cancer.

Trachtenberg J: European Urology Association, Vienna, Austria, March 2011. Focal therapy of prostate cancer.

Trachtenberg J: New York University, New York, New York, USA, June 2011. Minimally invasive treatment of prostate cancer.

RESEARCH AND INVESTIGATIONS

2-year follow-up study of the health effects of androgen deprivation therapy in men with non-metastatic prostate cancer. *Alibhai S, Canning DS, Fleshner N, Krahn M, Naglie G, Tannock I, Tomlinson G: Canadian Institutes for Health Research. (\$339,000 2007- 2010)*

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)*

A multicentre, double-blind, randomized, placebo-controlled, parallel-group study of the safety and efficacy of a single treatment of BOTOX followed by a treatment with BOTOX as applicable in patients with idiopathic overactive bladder with urinary incontinence. *Radomski SB: Allergan. (\$45,000 2010 - 2011)*

A multicentre, long-term follow-up study of the safety and efficacy of BOTOX in patients with idiopathic overactive bladder with urinary incontinence. *Radomski SB: Allergan. (\$60,000 2010- 2013)*

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 - 2011)*

A phase III, randomized, double blind, placebo-controlled trial of PROSCAR in men with initial negative prostate biopsies. *Finelli A, Fleshner N, Jewett M, Toi A, Trachtenberg J, Zlotta A: Merck Frosst Company. (\$64,320 2007 - 2011)*

- A proteomic and genetic biomarker panel for improving prostate specific antigen performance and identify 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 controlled trial of renal hypothermia during partial nephrectomy. *Fergusson D, Bergstrahl E, Blute M, Breau R, Chow G, Cook J, Finelli A, Frank I, Jewett M, Karnes R, Knoll G, Leibovich B, Lohse C, Morash C: Canadian Institutes of Health Research.* (\$404,250 2011 - 2015)
- 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)
- Development of performance measures for kidney cancer care: Use of a modified Delphi approach. *Finelli A, Gagliardi A, Jewett MAS, Woods L: Pfizer Canada.* (\$150,000 2010 - 2012)
- Farquharson Chair in Kidney Cancer Research. *Jewett MAS: Princess Margaret Hospital Foundation.* (\$5,000,000 2006 - 2016)
- Genetic, epigenetic and proteomic analysis of the Kallikrein family in search for novel diagnostic prognostic and risk susceptibility algorithms for prostate cancer. *Diamandis E, Fleshner N, Zlotta A: Canadian Institute for 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 prostate cancer biomarkers in the seminal plasma using a proteomic approach. *Jarvi K, Fleshner N: Canadian Cancer Society of Cancer Research.* (\$413,853 2010 - 2013)
- In bore robotic assisted image - guided focal ablation of prostate cancer. *Trachtenberg J, Haider M, Goldenberg A, Kucharczyk W: Princess Margaret Hospital Foundation / Barry Rose Foundation.* (\$1,000,000 2008 - 2010)
- Integration of a disease self-management approach in the cancer system to optimize health and living with cancer: A road map for implementation. *Howell D, Botroff J, Elser C, Fleshner N, Jones J, Krzyzanowski M, McGowan P: Canadian Institutes for Health Research.* (\$228,250 2010 - 2012)
- 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)
- Mentor-trainee-new investigator award in spinal cord injury research. *Hassouna M, Mohamed E: Ontario Neurotrauma Foundation.* (\$50,000 2011 - 2012)
- Microelectromechanical studies of urinary cytology in bladder cancer. *Jewett MAS, Sun Y: Natural Sciences and Engineering Research Council.* (\$100,000 2009- 2010)
- 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)
- Novel radiofrequency ablation technology for treatment of solid tumours. *Sherar M, Jewett M, McCann C: Ontario Institute for Cancer Research.* (\$300,000 2009 - 2011)
- Novel therapeutic strategies for obstructive bladder disease. *Bagli D, Hassouna M: Canadian Institutes for 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)
- Princess Margaret Hospital GU biobank REDUCE specimen project. *Fleshner N, Evans A, Bristow R: Prostate Cancer Research Foundation.* (\$150,000 2010 - 2011)

Prostate Cancer Prevention Clinic. *Trachtenberg J, Matthew AG, Horsburgh S: The Princess Margaret Hospital Foundation.* (\$1,000,000 2005 - 2011).

Prostate Cancer Proteomic Profiling Program. *Evans K, Bristow R, Fleshner N: Ontario Institute for Cancer Research.* (\$596,732 2011 - 2012)

Reduction in progression among men on watchful waiting using dutasteride. *Fleshner N, 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)

Selenium and vitamin E chemoprevention trial. *Coltman C, Albanes D, Alberts S, Bennett C, Brown P, Bubley G, Clinton, S, Fleshner N: National Institutes of Health.* (\$6,450,000 1999 - 2012)

Semen proteomics to identify novel prostate cancer biomarkers. *Jarvi K, Diamandis E, Finelli A, Fleshner N, Zlotta A, Briollais L, Grober E, Ghai S, Lo K, Margolis M, Mullen B, O'Malley M, Tannenbaum D, Toi A, van der Kwast T: Canadian Cancer Society Research Institute.* (\$413,853 2010 - 2013)

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 use of partial nephrectomy in the elderly for the treatment of kidney cancer. *Finelli A, Alibhai SMH, Tomlinson G, Urbach D: Canadian Cancer Society Research Institute.* (\$106,714 2010 - 2011)

Utilizing metformin to enhance the efficacy of androgen deprivation therapy in prostate cancer. *Venkateswaran V, Fleshner N, Klotz L: Prostate Cancer Canada.* (\$119,996 2010 - 2012)

Utilizing metformin to enhance the efficacy of androgen deprivation therapy in prostate cancer. *Venkateswaran V, Fleshner N, Klotz L: Canadian Institutes of Health Research.* (\$92,605 2010 - 2012)

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

Finelli A: Faculty Postgraduate Teaching Award Clinical, Division of Urology, Department of Surgery, University of Toronto, June 2011.

Jewett MAS: Distinguished Contribution Award (awarded for outstanding contributions to the science and treatment of urological malignancy), American Urological Association. May 2011.

Jewett MAS: Chair, Canadian GU Cancers Survivorship Conference 2011 "Foster the Partnership", January 2011.

Jewett MAS: Chair, Canadian Kidney Cancer Forum 2011, January 2011.

Jewett MAS: Society of Urological Oncology Medal awarded for significant contribution to the field of urological malignancy, specifically in kidney and testicular cancer, May 2011.

Jewett MAS: Canadian Urological Association Award, in recognition of outstanding contributions to the advancement of the art and science of Urology in Canada and beyond as a clinician teacher and leader throughout his career, June 2011.

Jewett MAS: University of Toronto Postgraduate Teaching Award – Surgical, in recognition of being instrumental in the individual development of postgraduate trainees, a role model during their training and having the greatest impact on their development as urologist and physicians, June 2011.

Matthew AG: Moderated Poster Award: First Place, June 2011.

■ Division Of Vascular Surgery

Dr. K.W. Johnston	Professor	Dr. B. Rubin	Professor
Dr. T. Lindsay	Professor (Division Head)	Dr. L.W.H. Tse	Assistant Professor
Dr. G. Oreopoulos	Assistant Professor	Dr. L. Wooster	Professor
Dr. G. Roche-Nagle	Assistant Professor		

PUBLICATIONS

- Brenneis C, Coste O, Altenrath K, Angioni C, Schmidt H, Schuh CD, Zhang DD, Henke M, Weigert A, Bruene B, Rubin B, Nusing R, Scholich K, Geisslinger G:** Anti-inflammatory role of microsomal prostaglandin E synthase-1 in a model of neuroinflammation. *Journal of Biological Chemistry*: January 2011: 286(3): pp 2331-2342. E-published November 12, 2010.
- Cronenwett JL, Johnston KW:** *Rutherford's Vascular Surgery, 7th Edition* (2,450 pages) (Cronenwett JL, Johnston KW, eds). Elsevier, Philadelphia 2011.
- Grenville J, Tan KT, Tse LW, Rajan DK, Lindsay TF:** Bridging stent-graft pullout force analysis. *Journal of Endovascular Therapy*: April 2011: 18(2): pp 161-168.
- Lindsay TF:** Abdominal aortic aneurysms: Ruptured. In: *Rutherford's Textbook of Vascular Surgery, 7th Edition* (Johnston KW, Cronenwett JL, eds). Elsevier, New York 2010:
- Papia G, Lindsay TF:** Post operative vascular patients in ICU. In: *Rutherford's Vascular Surgery, 7th Edition* (Johnston KW, Cronenwett JL, eds). Elsevier, New York, New York: 2010
- Pua U, Tan K, Rubin BB, Sniderman KW, Rajan DK, Oreopoulos GD, Lindsay TF:** Iliac branch graft in the treatment of complex aortoiliac aneurysms: Early results from a North American institution. *Journal of Vascular and Interventional Radiology*: April 2011: 22(4): pp 542-549.
- Tse LW, Shek TLT, Nabovati A, Amon CH:** Computational fluid dynamics modeling of redundant stent graft configurations in endovascular aneurysm repair. *Proceedings of the ASME 2010 International Mechanical Engineering Congress & Exposition* (American Society of Mechanical Engineers, ed). ASME, New York, New York: 2010: p 8.

INVITED VISITS

- Johnston KW:** 5th Gulf Vascular Society Conference in conjunction with 5th Scientific Meeting of the Saudi Society for Vascular Surgery, Festival City, Dubai, March 2011. (1) Difficult technical challenges of open AAA repair, (2) Mesenteric ischemia-diagnosis management, early and late results, (3) Uncommon or challenging vascular disorders.
- Johnston KW:** University of Manitoba, Winnipeg Vascular and Endovascular Symposium, Winnipeg, Manitoba, Canada, April 2011. Insights from a career in vascular surgery.
- Lindsay TF:** Canadian Society for Vascular Surgery, Vancouver, British Columbia, September 2010. (1) Initiation and implementation of the wait time strategy for vascular surgery in Ontario. (2) Peri renal aortic aneurysm repair using custom fenestrated aortic grafts: Early results and costs.
- Lindsay TF:** Endoluminaries – COOK Medical Technologies, Toronto, Ontario, Canada, October 2010. (1) Current results of fenestrated endovascular grafts, (2) Experiences with branch grafts for thoraco-abdominal repair, (3) Experiences with branched thoraco-abdominal repair.
- Lindsay TF:** Instituto Nacional De Ciencias Medicas Y Nutricion Salvador Zubiran, Mexico City, Mexico, February 2011. (1) Aortic aneurysm rupture, (2) EVAR fenestrated and branched cases.
- Lindsay TF:** Winnipeg Vascular and Endovascular Symposium, Winnipeg, Manitoba, Canada, April 2011. Management of caval tumors.
- Lindsay TF:** Vascular Imaging Toronto, Toronto, Ontario, Canada, March 2011. Aneurysmal disease - Iliac branched grafts vs. coiling vs. plugging.
- Oreopoulos GD:** Toronto and Vicinity Vascular Society, Toronto, Ontario, Canada, February 2011. Vascular Case Presentations.
- Roche-Nagle G:** University of Manitoba, Winnipeg Vascular and Endovascular Symposium 2011, Winnipeg, Manitoba, Canada, April 2011. Surgical safety.
- Rubin BB:** Goethe University, Frankfurt, Germany, September 2010. (1) Role of microsomal prostaglandin E2 synthase-1 in left ventricular remodeling, (2) State of the art - role of prostaglandins in left ventricular remodeling after myocardial infarction.

Rubin BB: Government of Canada, Ottawa, Ontario, Canada, March 2011. Venoplasty for multiple sclerosis - scientific, clinical and ethical considerations.

Tse LWH: University of Manitoba, Winnipeg Vascular & Endovascular Symposium, Winnipeg, Manitoba, Canada, April 2011. Angiosome concepts.

Tse LWH: Les Entretiens Vasculaires du Québec (EVXXIX), Montreal, Quebec, Canada, June 2011. Heparin induced thrombocytopenia in the presence of a heparin bonded bypass graft (presented by Fellow, Dr. M. Wheatcroft).

Wooster DL: University of Manitoba, Department of Surgery, Division of Vascular Surgery, Winnipeg Vascular and Endovascular Meeting, Winnipeg, Manitoba, April 2011. Mixed arterial and venous ulcers.

RESEARCH AND INVESTIGATIONS

Aortic aneurysm screening in Canada: A resource assessment and implementation strategy. *Wooster DL, Wooster EM, Cox H, Dueck A: Canadian Society for Vascular Surgery.* (\$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.* (\$5,000 2009 - 2010)

Complement mediated organ injury following ruptured abdominal aortic aneurysm: Human and animal investigations leading to pilot intervention studies. *Lindsay TF: The Physicians' Services Incorporated Foundation.* (\$80,000 2010 - 2011)

Development of a personal practice audit tool to assess health advocacy competence in practice. *Wooster DL, Wooster EM, Dueck A: The Royal College of Physicians and Surgeons of Canada/ Associated Medical Services.* (\$25,000 2009 - 2011)

Endovascular stent graft measuring- an online education tool. *Roche-Nagle G: John L. Provan Education Award.* (\$5,000 2010)

In vivo antegrade fenestration of aortic stent grafts using radiofrequency puncture. *Tse L, King M, Soulez G, Baylis Medical Company, Medtronic of Canada, Cook Medical, Zues Inc: Ontario Centres of Excellence.* (\$25,280 2010)

Role of Group V and Group X secretory phospholipase A2 in the innate immune responses to pulmonary bacterial infection. *Rubin B: Canadian Institutes of Health Research.* (\$388,520 2009 - 2013)

Role of Group V and Group X secretory phospholipases A2 in myocardial infarction. *Rubin B: Canadian Institutes of Health Research.* (\$428,342 2009 - 2013)

Role of microsomal prostaglandin E2 synthase in ventricular remodeling after myocardial infarction. *Rubin BB: Canadian Institutes of Health Research.* (\$384 2007 - 2011)

HONOURS RECEIVED

Johnston KW: First George Louridas Memorial Lecture, April 2011.

Lindsay TF: Ross Fleming Surgical Educator Award, for Excellence in Surgical Education - presented by University Health Network, April 2011.

Roche-Nagle G: 2nd Place Case Competition for Entry: Heparin induced thrombocytopenia in the presence of a heparin bonded bypass graft (Wheatcroft MD, Greco E, Tse L, Roche-Nagle G) at Entretiens Vasculaires XXIX, June 2011.

Roche-Nagle G: 2010 CSVS John L. Provan Educational Award (C\$5000) Project: Endovascular Stent Graft measuring - an online education tool, October 2010.

Roche-Nagle G: 2011 Allied Health Research Funding Award for project - Participation in Acute Rehabilitation and its implications following lower extremity amputation: A mixed-methods study, February 2011.

Wooster DL: Canadian Society for Vascular Surgery Sigvaris President's Award, September 2010.



Women's College Hospital

John Semple, *Surgeon-in-Chief*

HEADS OF DIVISIONS

Dr. M.H. Brown	Associate Professor
Dr. T. Cil	Assistant Professor
Dr. E. 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. Women's College continues to develop a city-wide focus in Orthopaedic Sports Medicine and building surgical strength in our core programs of Urology, Orthopaedics, Plastic Surgery and General Surgery.

NEW STAFF

Twenty three surgeons from eight different hospitals now work at Women's College Hospital in our key areas. We are actively recruiting in orthopaedics, plastic surgery and general surgery.

DEPARTURES

Dr. George Hiraki retired from the Department of Surgery at Women's College Hospital after over 40 years of service. He has been a major figure in our Department of Surgery and was well recognized for his wide scope of practice and his passion for teaching.

ORTHOPAEDIC SPORTS MEDICINE

Dr. Darrell Ogilvie-Harris has been appointed Director of the University of Toronto, Department of Surgery Orthopaedic Sports Medicine Program. Since WCH has become one of the primary hubs for orthopaedic sports medicine within this city-wide network and a primary training site for orthopaedic residents in this subspecialty, Dr. Ogilvie-Harris spends considerable time with us.



DIVISIONAL ACTIVITIES

Dr. Ethan Grober successfully passed his three-year review. Having six different research grants keeps him busy.

Dr. Mitch Brown chaired the 11th Annual Toronto Breast Surgery Symposium held this past April. Women's College Hospital continues to host international candidates under the Allergan Breast Reconstruction clinical fellowship.

EDUCATION

Women's College provides a unique surgical education setting because of its ambulatory mandate. Currently being developed is an ambulatory curriculum with learning objectives specific to ambulatory surgery. The experience rated by undergraduate, resident, fellows and CME is excellent. Teaching volumes have steadily increased over the transition period. A Simulation Education Centre has been established in a multidisciplinary content, with a primary contribution by Orthopaedic Surgery.

Women's College is now the primary rotation for Orthopaedic Sports Medicine residents at the University of Toronto Orthopaedic Sports Medicine.

Rounds are now broadcast around the province via the Ontario Telemedicine Network.

RESEARCH

The seven core surgeons at Women's College Hospital hold a total of 13 active research grants through 2010-2011. They are engaged in a variety of clinical and basic research. Several of them supervise residents and fellows in projects and graduate degree programs.

■ Division Of General Surgery

Dr. T. Cil Assistant Professor
Dr. G.Y. Hiraki Assistant Professor

Dr. L. Lickley Professor

INVITED VISITS

Cil T: McMaster University, Centre for Minimally Invasive Surgery/Cancer Care Ontario, Sentinel Lymph Node Biopsy in Breast Cancer Course, Hamilton, Ontario, Canada, September 2010. Why perform sentinel lymph node biopsy?

RESEARCH AND INVESTIGATIONS

Evaluation of an online CME resource for sentinel lymph node biopsy. *Cil T, Tait G, McCready DR: University of Toronto, Faculty of Medicine, Continuing Education Research and Development.* (\$4,654 2010 - 2011)

■ Division Of Orthopaedics

Dr. L. Murnaghan Assistant Professor
Dr. J. Theodoropoulos Lecturer

PUBLICATIONS

Petrera M, Patella V, Patella S, Theodoropoulos J: A meta-analysis of open versus arthroscopic Bankart repair using suture anchors. *Knee Surgery, Sports Traumatology, Arthroscopy*: December 2010;18(12): pp 1742-1747. E-published March 17, 2010.

Studler U, White LM, Deslandes M, Geddes C, Sussman MS, Theodoropoulos J: Feasibility study of simultaneous physical examination and dynamic MR imaging of medial collateral ligament knee injuries in a 1.5-T large bore magnet. *Skeletal Radiology*: March 2011: 40(3): pp 335-343. E-published February 14, 2010.

Theodoropoulos JS, Decroos A, Park S, Pilliar R, Kandel R: Integration of tissue-engineered cartilage to native cartilage: An in vitro model. *Clinical Orthopaedics and Related Research*: October 2011: 469(10): 2785-2795. E-published March 15, 2011.

Wasserstein D, White L, Theodoropoulos J: Traumatic brachialis muscle injury by elbow hyperextension in a professional hockey player. *Clinical Journal of Sports Medicine*: May 2010: 20(3): pp 211-212.

INVITED VISITS

Theodoropoulos J: International Cartilage Research Society (ICRS), Annual Meeting. Barcelona, Spain, September 2010. Poster Presentation: Integration of repair cartilage: An in vitro model.

Theodoropoulos J: International Skeletal Society, Athens, Greece, September-October 2010. (1) MRI and meniscal pathology, (2) Ankle arthroscopy.

Theodoropoulos J: Italian Society for Sports Medicine and Arthroscopy, Annual Meeting, Verona, Italy, October 2010. Poster Presentation: A meta-analysis of open versus arthroscopic bankart repair using suture anchors.

Theodoropoulos J: Tissue Engineering and Regenerative Medicine International Society, Annual Meeting, Orlando, Florida, USA, December 2010. Poster Presentation: Mechanical stimulation enhances integration in an in vitro model of cartilage repair.

Theodoropoulos J: Smith and Nephew, National Meeting 2011, Toronto, Ontario, Canada, January 2011. Shoulder arthroscopy: Techniques in labral and rotator cuff repair.

Theodoropoulos J: American Academy of Orthopedic Surgeons, Annual Meeting. San Diego, California, February 2011. Poster Presentation: The outcome of arthroscopic Bankart repair with suture anchors in contact versus non-contact athletes.

Theodoropoulos J: Ontario Medical Association/Sport Medicine, Annual Meeting 2011, Toronto, Ontario, Canada, February 2011. (1) A systematic review of the use of platelet rich plasma in sports medicine as a new treatment for tendon and ligament injuries, (2) A survey of Canadian orthopedic surgeons on the use of microfracture in the treatment of chondral injuries of the knee.

Theodoropoulos J: Arthroscopy Association of North America. San Francisco, California, USA, April 2011. Arthroscopic bankart repair with suture anchors in collision versus non-collision athletes.

Theodoropoulos J: Radiology Society of North America, Chicago, Illinois, USA, November 2011. Poster Presentation: MR imaging of the post-operative knee.

RESEARCH AND INVESTIGATIONS

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

■ Division Of Plastic And Reconstructive Surgery

Dr. M.H. Brown Associate Professor
Dr. J.L. Semple Professor

PUBLICATIONS

Brown MH: Primary and Secondary Mastopexy Augmentation. In: *Aesthetic and Reconstructive Surgery of the Breast*, Hall-Findlay E, Evans G (Sharon Nash, ed). Elsevier, London, UK 2010.

Brown MH: Revision augmentation with anatomical form stable silicone gel implants. In: *Surgery of the Breast: Principles and Art*, 3rd Edition, Spear S (Shaw R, ed). Lippincott Williams and Wilkins, Philadelphia, Pennsylvania 2010: pp 1516-1531.

Metcalf K, Semple J, Quan ML, Vadaparampil ST, Holloway C, Brown MH, Bower B, Sun P, Narod S: Changes in psychosocial functioning 1 year after mastectomy alone, delayed breast reconstruction, or immediate breast reconstruction. *Annals of Surgical Oncology*. E-published June 16, 2011.

INVITED VISITS

Brown MH: Atlanta Breast Surgery Symposium, Live Surgery Moderator, Atlanta, Georgia, USA, January 2011.

Brown MH: LifeCell Corporation, Faculty Member - LifeCell Summit on Alloderm in Breast Surgery, Whistler, British Columbia, Canada, July 2010.

Brown MH: Senior Resident Review Course, Ottawa, Ontario, Canada, February 2011. Aesthetic breast surgery.

Brown MH: LifeCell Corporation, Vancouver, British Columbia, Canada, May 2011. Alloderm use in breast reconstruction.

Brown MH: LifeCell Corporation, Toronto, Ontario, Canada, April 2011. Alloderm use in breast surgery.

Brown MH: Rethink Breast Cancer, Toronto, Ontario, Canada, October 2010. Approaches to breast reconstruction.

Brown MH: Allergan Canada, Toronto, Ontario, Canada, April 2011. Breast surgery for breast implant sales representatives.

Brown MH: Allergan Academy, Toronto, Ontario, Canada, October 2010. Correction of breast implant malposition.

Brown MH: International Congress of Plastic Reconstructive and Aesthetic Surgery, Vancouver, British Columbia, May 2011. Panel Moderator: Facelifts and aesthetic surgery.

Brown MH: American Society of Plastic Surgery, Annual Meeting, Toronto, Ontario, Canada, October 2010. Panel: Managing the secondary augmentation patient.

Brown MH: Florida Society of Plastic Surgeons, Orlando, Florida, USA, November 2010. The use of form stable gel implants in aesthetic and reconstructive breast surgery.

RESEARCH AND INVESTIGATIONS

Quality of recovery in women undergoing autogenous breast reconstruction in an ambulatory setting. *Morgan P, Davidge K, Brown M, Semple JL: PSI.* (\$13,500 2011)

Implementation of 23 hr length of stay for breast reconstruction surgery: Quality of recovery evaluation following discharge. *Semple J, Brown M, Morgan P, Davidge K: WCH AFP.* (\$29,841 2011 - 2012)

■ Division Of Urology

Dr. E. D. Grober Assistant Professor

PUBLICATIONS

Batruch I, Lecker I, Kagedan D, Smith CR, Mullen BJ, Grober E, Lo KC, Diamandis EP, Jarvi KA: Proteomic analysis of seminal plasma from normal volunteers and post-vasectomy patients identifies over 2000 proteins and candidate biomarkers of the urogenital system. *Journal of Proteome Research*: March 2011: 10(3):941-953. E-published February 14, 2011.

Grober ED, Jarvi K, Lo KC, Shin EJ: Mini-incision vasectomy reversal using no-scalpel vasectomy principles: efficacy and postoperative pain compared with traditional approaches to vasectomy reversal. *Urology*: March 2011: 77(3):602-606. E-published December 24, 2010.

INVITED VISITS

Grober ED: Sexual Medicine Society of North America, November 2010, Miami, Florida. Male Sling – Video Sessions.

Grober E: Abbott/Primary Care Physicians of the Greater Toronto Area, Continuing Education, Toronto, Ontario, Canada, May 2011. The couch potato syndrome: Testosterone deficiency – diagnosis, treatment and impact on men's health.

Grober E: Paladin, Specialists Consultative Meeting, Continuing Education, Toronto, Ontario, Canada, June 2011. Testosterone replacement therapy and prostate safety.

RESEARCH AND INVESTIGATIONS

Canadian Urological Association Scholarship. *Grober E, Jewett MAS: Canadian Urological Association Scholarship Foundation.* (\$40,000 2009-2011)

Intra-operative assessment of technical skill using economy of hand motion: Establishing learning curves of surgical competence. *Grober ED, Roberts M. Physicians Services Incorporated Foundation (PSI).* (\$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. Royal College of Physicians and Surgeons of Canada.* (\$59,900 2009 – 2011)

Novel semen biomarkers to identify sperm production in men with infertility. *Grober ED, Jarvi KA, Diamandis E, Lo K. MaRS Innovation.* (\$50,000 2010 – 2011)

Semen proteomics to identify novel prostate cancer biomarkers. *Grober ED, Jarvi KA, Diamandis E, Finelli A, Fleshner N, Zlotta A, Briollais L, Ghai S, Lo K, Margolis M, Mullen B, OMalley M, Tannenbaum D, Toi A, van der Kwast T. Canadian Cancer Society.* (\$413,853 2010 -2013)

Validation of real-time, intra-operative, surgical competence (RISC) assessments linked to patient outcomes. *Grober ED, Jewett MAS, Lorenzo A. Physicians Services Incorporated Foundation (PSI). (\$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 2010 - 2012)*



Division Of Anatomy

Cindi Morshead, *Chair*

Dr. A. Agur Professor
Dr. B. Ballyk Senior Lecturer
Dr. P. Koeberle Assistant Professor
Dr. J. Laprade Lecturer

Dr. C.M. Morshead Associate Professor
 (Division Head)
Dr. H-S Sun Assistant Professor
Dr. I.M. Taylor Professor
Dr. M.J. Wiley Professor

PUBLICATIONS

Bibliowicz J, Khan A, Agur A, Singh K: High-precision surface reconstruction of human bones from point-sampled data. Data creation of a three-dimensional representation of the wrist. Proceedings of the 2011 International Summit on Human Simulation (ISHS): May 2011.

D'onofrio PP, Magharious M, Koeberle PD: Methods for experimental manipulations after optic nerve transaction in the mammalian CNS. Journal of Visualized Experiments: May 2011: p 51.

Hunt J, Morshead CM: Cyclosporin A enhances cell survival in neural precursor populations in the adult central nervous system. Molecular Cellular Pharmacology: July 2010: 2(3): pp 80-88.

Koeberle PD, Schlichter LC: Targeting Kv channels rescues retinal ganglion cells in vivo directly and by reducing inflammation. Channels (Austin): September-October 2010: 4(5): pp 337-348.

Koeberle PD, Tura A, Tasew NG, Schlichter LC, Monnier PP: The repulsive guidance molecule, RBMa, promotes retinal ganglion cell survival in vitro and in vivo. Neuroscience: August 2010: 169(1): pp 495-504.

Magharious M, D'Onofrio PM, Koeberle PD: Optic nerve transaction: A model of adult CNS neuron apoptosis. Journal of Visualized Experiments: May 2011: p 51.

Moore KLM, Agur AMR, Dalley AF: Essential Clinical Anatomy, 4th Edition (Agur AMR, ed.), Lippincott, Williams and Wilkins, Baltimore, Maryland, 2011.

Moore KLM, Dalley AF, Agur AMR: Clinically Oriented Anatomy, 6th Edition, Lippincott, Williams and Wilkins, Baltimore, Maryland, 2010.

Nonoyama ML, Brooks D, Ponikvar A, Jassal SV, Kontos P, Devins GM, 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: December 2010: 42(4): pp 1125-1130. E-published March 7, 2010.

Nomura H, Kim H, Mothe A, Zahir T, Kulbatski I, Morshead CM, Shoichet MS, Tator CH: Endogenous radial glial cells support regenerating axons after spinal cord transaction. Neuroreport: September 2010: 21(13): pp 871-876.

Piccin D, Morshead CM: Wnt signaling regulates symmetry of division in adult neural stem cells. Stem Cells: March 2011: 29(3): pp 528-538. E-published March 21, 2011.

Ravichandran K, Ravichandran M, Oliver M, Singh K, McKee N, Agur AMR: Fiber bundle element method of determining physiological cross-sectional area from three-dimensional computer muscle models created from digitized fiber bundle data. Computer Methods and Programs in Biomechanics and Biomedical Engineering: December 2010: 13(6): pp 741-748. E-published June 3, 2010.

Scanga V, Goraltchuk A, Nussbai N, Shoichet MS, Morshead CM: Biomaterials for neural tissue engineering: Chitosan supports the survival, migration and differentiation of adult derived neural stem and progenitor cells. Canadian Journal of Chemistry: July 2010: 88: pp 277-287.

Sweeting N, Siu M, Wiley M, Wells P: Species- and strain-dependent teratogenicity of methanol in rabbits and mice. Reproductive Toxicology: January 2011: 31(1): pp 50-58. E-published October 16, 2010.

Wang Y, Cooke MJ, Lapitsky Y, Wylie RG, Sachewsky N, Corbett DC, Morshead CM, Shoichet MS: Transport of epidermal growth factor in the stroke-injured brain. Journal of Control Release: February 2011: 149(3): pp 225-235. E-published October 27, 2010.

Yu F, Morshead CM: Adult stem cells and bio-engineering strategies for the treatment of cerebral ischemic stroke. *Current Stem Cell Research and Therapy*: E-published April 11, 2011.

INVITED VISITS

Koeberle PD: International Society for Eye Research, XIX Biennial Meeting, Montreal, Quebec, Canada, July 2010. Role of caspase-6 in retinal ganglion cell apoptosis and axon regeneration.

Laprade J: American Association of Clinical Anatomists Meeting, Honolulu, Hawaii, USA, July 2010. Architecture and innervations of the vastus medialis muscle: A 3-dimensional modeling study.

Morshead C: Canadian Institutes of Health Research, Café-Scientifique, Toronto, Ontario, Canada, November 2010. Adult stem cells and regenerative medicine: Separating hope and hype.

Morshead C: York University, Public Lecture sponsored by Learning Unlimited, Toronto, Ontario, Canada, February 2011. The truth about stem cells.

Morshead C: Let's Talk Science Organization, Public Lecture, Toronto, Ontario, Canada, March 2011. Let's talk science – stem cell talks.

Morshead C: Festival of International Conferences on Caregiving, Disability, Aging and Technology (FICCDAT), Advances in Neurorehabilitation, Toronto, Ontario, Canada, June 2011. Enhancing brain repair: The molecules, the behaviour and the aged brain.

Morshead C: North American Biological Institute, 2nd International Conference on Models of Human Diseases Conference, Toronto, Ontario, Canada, June 2011. Neural stem cells and their role following stroke.

Morshead C: Bloor Rehabilitation Centre, Ontario Brain Institute Symposium/Cells to Person Cerebral Palsy Workshop, Toronto, Ontario, Canada, June 2011. Enhancing neural repair in a model of cerebral palsy.

Sun H-S: International Union of Basic and Clinical Pharmacology (IUPHAR), World Congresses of Pharmacology, Denmark, July 2010. Award Recipient.

RESEARCH AND INVESTIGATIONS

A novel VEGH upregulating zinc finger protein therapy for the treatment of stroke. *Fehlings M, Koeberle PD: Sangamo Pharmaceuticals*. (\$190,000 2008-2010)

Bioengineered cell delivery systems. *Tator C, Morshead C, Shoichet M: Collaborative Health Research Projects (CHRP), Natural Sciences and Engineering Council of Canada (NSERC), Canadian Institutes of Health Research (CIHR)*. (\$658,000 2011-2014)

Biomechanical and cellular changes within the rat gastrocnemius muscle and calcaneal tendon post tenotomy: Do traumeel injections make a difference? *Sauks K, Agur A: Holistic Health Research Foundation of Canada, Canadian CAM Research Fund*. (\$4,858 2010-2011)

Biomechanical determinants of surgical outcomes in adolescents with a paediatric spinal deformity. *Zabek KF, Zeller R, Agur A, Biddis E, Carnahan H, Lewis S, Mathur S, Meguid S: Canadian Institutes of Health Research*. (\$87,752 2010-2011)

Engineering stem cell delivery to treat spinal cord injury. *Nagy A, Morshead C, Shoichet M: Department of Defense (DOD), USA*. (\$100,000 2010-2011)

Focal adhesion kinase: A pivotal role in CNS apoptosis and regeneration: *Koeberle PD: Canadian Institutes of Health Research*. (\$450,000 2011-2014)

Molecular mechanisms of neurodegeneration after traumatic CNS injury and stroke. *Koeberle PD: Canada Foundation for Innovation*. (\$36,000 2009-2013)

Ontario initiative in personalized stem cell medicine. *Morshead C, Rossant J: The Canadian Foundation for Innovation (CFI)*. (\$18,932,011 2010-2012)

Patient simulator-based education for teaching anaesthesia residents cognitive and interpersonal non-technical skills for the management of life-threatening airway crisis: Impact of technical skills of cricothyrotomy. *You-Ten E, Graham M, Levin M, Cooper R, Friedman Z, Wiley M: The Network of Excellence in Simulation for Teaching and Learning*. (\$24,000 2009-2011)

Regenerative Networks: Recruiting adult stem cells for tissue repair. *Kaplan D, Biernaski J, Morshead C, Miller F: Stem Cell Network*. (\$3,500,000 2011-2015)

Repairing the injured spinal cord. *Morshead C, Fehlings M, and 4 others: Krembil Foundation*. (\$1,500,000 2011-2014)

Role of TRPM7 and TRPM2 channels in neuronal development and regeneration. *Sun HS: Natural Sciences and Engineering Research Council of Canada (NSERC)*. (\$28,000/year 2011-2016)

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 impact of ATP-sensitive potassium channels on stroke in diabetes and their therapeutic implications. *Sun HS: Heart and Stroke Foundation of Ontario (Canada).* (\$128,720 2011-2013)

The role of extracellular matrix interactions in adult CNS neuroprotection. *Koeberle PD: Canadian Institutes of Health Research.* (\$247,217 2008-2011)

HONOURS AND AWARDS

Agur A: Best Presentation Award for "High precision surface reconstruction of human bones from point-sample data. Data and creation of a three-dimensional representation of the wrist at the 2011 Summit on Human Simulation (ISHS) in Florida. 2011.

Sun H-S: First Prize (Poster), 2nd International Conference on Models of Human Diseases. 2011.

Sun H-S: Best Paper Award, Society of Chinese Bioscientists in America, Toronto Chapter, 2010.

Sun H-S: Boehringer-Ingelheim Post-Doctoral Award in Pharmacology, Canadian Society of Pharmacology and Therapeutics (CSPT). 2010.

Sun H-S: Marlene Reimer Brain Star of the Year Award, Canadian Institutes of Health Research (CIHR), Institute of Neurosciences, Mental Health and Addiction (INMHA) Canada. 2010.

Research In Education

Dr. R.R. Sonnadara Assistant Professor
Dr. N. Woods Assistant Professor

PUBLICATIONS

Sonnadara RR, Gonzalez D, Hansen S, Burkitt J, Lyons JL: Spatial properties of perceived pitch. Proceedings of the 11th International Conference on Music Perception and Cognition: Casual Productions 2010. Annals of the New York Academy of Science, The Neurosciences and **Music III: Disorders and Plasticity**: 2010: 1169: pp 503-507.

INVITED VISITS

Sonnadara RR: American College of Surgeon's Postgraduate Course, Toronto, Ontario, Canada, October 2010. Proficiency-based evaluations.

RESEARCH AND INVESTIGATIONS

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)

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)

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 Sciences)
Dr. W. Montanera	(Medical Imaging)
Dr. J. Mullen	(Laboratory Medicine and Pathobiology)
Dr. A. 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)