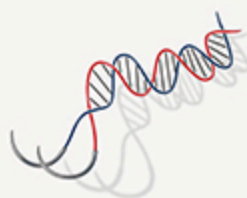


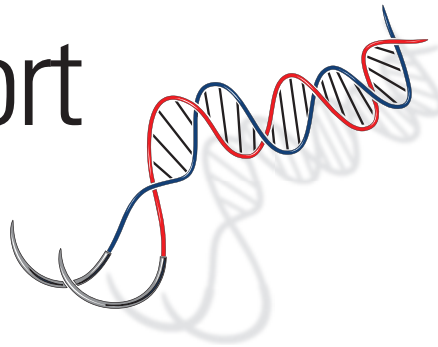


Department of Surgery
Annual Report
JULY 1, 2013 – JUNE 30, 2014



Department of Surgery Annual Report

JULY 1, 2013 – JUNE 30, 2014



R.S. McLaughlin Professor And Chair

Dr. J.T. Rutka

Associate Chair And Vice-Chairs

Dr. O. Rotstein	Associate Chair
Dr. D.A. Latter	Vice-Chair, Education
Dr. R.R. Richards	Vice-Chair, Clinical
Dr. M. Fehlings	Vice-Chair, Research
Dr. R. McLeod	Vice-Chair, Quality
Dr. A. Kapus	Associate Chair, Research
Dr. S. Keshavjee	Vice-Chair, Surgical Innovation

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. C. Compeau	St. Joseph's Health Centre
Dr. O.D. Rotstein	St. Michael's Hospital
Dr. A. Nathens	Sunnybrook Health Sciences Centre
Dr. G. Simone	The Toronto East General Hospital
Dr. S. Keshavjee	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. P. Ferguson	Albert and Temmy Latner Chair, Division of Orthopaedics
Dr. C. Forrest	Plastic Surgery (Interim Chair)
Dr. T. Waddell	F.G. Pearson/R.J. Ginsberg Chair in Thoracic Surgery
Dr. N. Fleshner	Martin Barkin Chair in Urological Research
Dr. T. Lindsay	Vascular Surgery



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40th GALLIE DAY Friday May 9, 2014

Gallie-Bateman and McMurrich Research Presentations



Joan Lipa: Morning Session Chair.



Charles de Mestral (SSTP): "Cost-utility analysis comparing alternative timeframes of surgery for acute cholecystitis" (Supervisor: Avery B. Nathens)



Jennica Platt (SSTP): "Pre-consultation educational group intervention to improve shared decision-making for post-mastectomy breast reconstruction: A pilot randomized controlled trial" (Supervisor: Toni Zhong)



Uzwa Shahzad: "Transmyocardial revascularization enhances mesenchymal stem cell engraftment in infarcted hearts through SCF-ckit and SDF-1-CXCR4 signaling axes" (Supervisor: Terrence M. Yau)



Kimberly Lau: "Anisotropic stress orients remodeling of mammalian limb bud ectoderm" (Supervisor: Sevan Hopyan)



Vijay Ramaswamy: "Recurrence patterns differ across medulloblastoma subgroups" (Supervisor: Michael D. Taylor)



Gregory Borschel, Afternoon Session Chair.



Shabana Amanda Ali "Cholesterol homeostasis mediates Hedgehog signaling in chondrocytes and osteoarthritis" (Supervisor: Benjamin A. Alman)



Parvati Dadwal: "Activating endogenous neural precursor cells using metformin leads to neural repair and functional recovery in a model of childhood brain injury" (Supervisor: Cindi Morshead)



David W. Cadotte (SSTP), "Visualizing structural and functional plasticity of the human cervical spinal cord" (Supervisor: Michael G. Fehlings)



J. Michael Hendry (SSTP): "The ERBB2 receptor pathway regulates regeneration following the acute and chronic repair of nerve injuries" (Supervisor: Gregory H. Borschel)



Marisa Louridas (SSTP): "Mental practice to enhance advanced laparoscopic surgical performance in the operating room: A randomized controlled trial" (Supervisor: Teodor P. Grantcharov)

SYMPOSIUM: Commercialization and Research



Michael Tymianski, MD PhD FRCSC, Head, Division of Neurosurgery, Senior Scientist, Division of Fundamental Neurobiology, Toronto Western Research Institute “Commercialization the Hard Way”



Milos R. Popovic, PhD, PEng, Toronto Rehab Chair in Spinal Cord Injury Research “Commercialization: Where Brownian Motion Meets Serendipity”



Paul Walker, MD PhD FRCSC, President and CEO, Spectral Diagnostics Inc “Why Commercialize Your Discovery - A View From The Front Line”

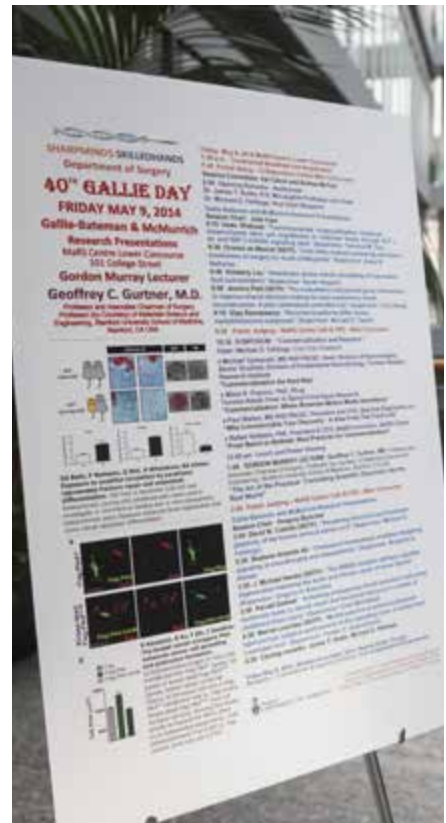


Rafael Hofstein, PhD, President & CEO, MaRS Innovation, MaRS Centre “From Bench to Bedside: Best Practices for Commercialization”

Gordon Murray Lecture



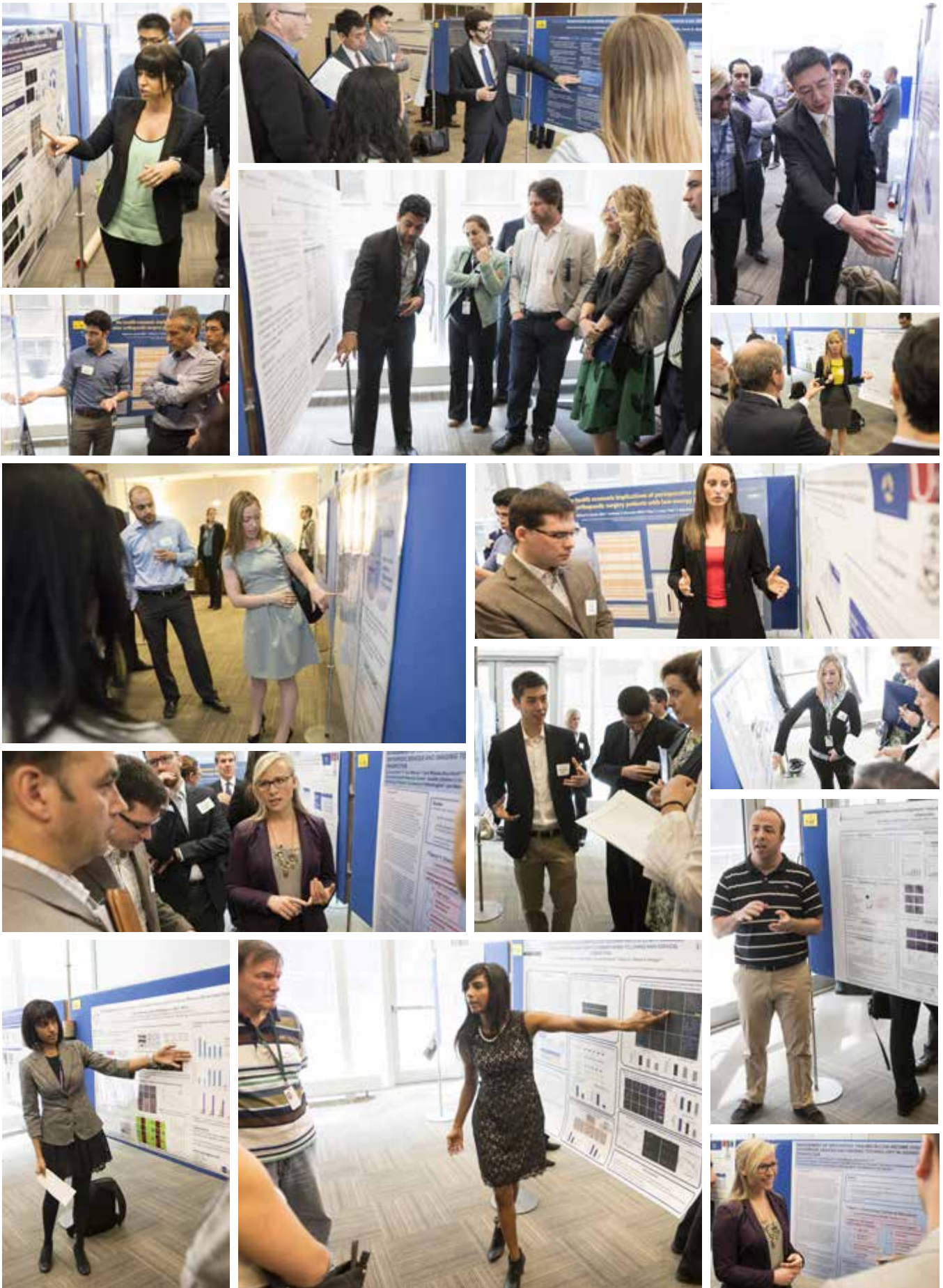
Geoffrey C. Gurtner, MD, Professor and Associate Chairman of Surgery, Professor (by courtesy) of Materials Science and Engineering, Stanford University School of Medicine, Stanford, CA USA “The Art of the Practical: Translating Scientific Discovery into the Real World”



40th GALLIE DAY Friday May 9, 2014

Poster Judging





40th GALLIE DAY Friday May 9, 2014

Reception, Dinner & Awards Ceremony





40th GALLIE DAY Friday May 9, 2014

Reception, Dinner & Awards Ceremony

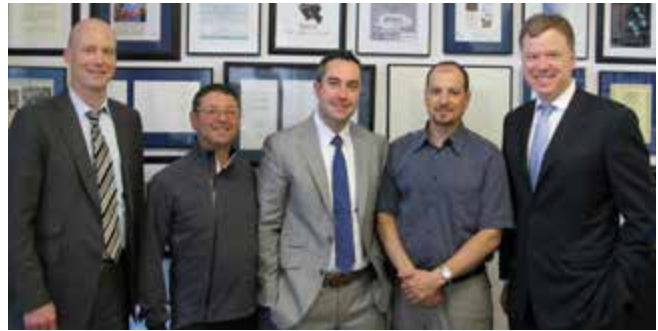




Continuing Appointment Reviews 2013-14



Cil: John Semple, Tulin Cil, Andy Smith, Dimitri Anastakis, David McCready



Jackson: Allan Okrainee, Lorne Rotstein, Tim Jackson, David Urbach, Andy Smith



daCosta: Michael Schwartz, Todd Mainprize, Leo DaCosta, Avery Nathens, Andres Lozano



Jeschke: Avery Nathens, Marc Jeschke, Chris Forrest



Das: Loch MacDonald, Sunit Das, Andres Lozano



Lawless: Nancy Baxter, Bernard Lawless, Ori Rotstein, Andras Kapus



Ghanekar: Lorne Rotstein, Shaf Kashavjee, Anand Ghanekar, Peter Dirks



Moussa: Fuad Moussa, Chris Caldarone

University Rounds

Annual Address



Dr. J. Rutka, Dr. Ori Rotstein



Bigelow Lecture, Drs. Kizer and Caldarone



Harland-Smith Lectureship, Andy Smith, Ori Rotstein, Steven Strasberg, Steven Gallinger, Bernard Langer



Lister & Armstrong Rounds: James Rutka, Avery Nathens, Marc Jeschke, Ori Rotstein



Bigelow Lecture



Kergin Lecture: James Rutka, Eben Alexander, Dr. Ori Rotstein



Ben Alman Research & Science Rounds: Ben Alman, Tom Chav, Milos Popovic



Clinical Epidemiology Rounds Caprice Greenberg, David Urbach



Tile Lecture: Avery Nathens, Jerry Jurkovich, Marvin Tile

2013 Holiday Party Bata Shoe Museum



Chair's Report

Dr. James T Rutka, MD, PhD, FRCSC



For this past year, our top priorities for the Department of Surgery have been to appoint several new University Division Chairs; to appoint a new Vice Chair of Research; to surpass last year's record of grant capture and peer review publication; to lead efforts in health care simulation in the Faculty of Medicine; to implement faculty mentoring and quality/best practices programs; and to lead an aggressive advancement campaign to help fund numerous Departmental initiatives. As I write this column, I am pleased to inform you that we have achieved all of our top objectives this past year.

Tom Forbes was recruited from Western University to be the new Chair of Vascular Surgery. Tom is Section Editor of Rutherford's Textbook of Vascular Surgery, now in its 8th Edition, Associate Editor of the Journal of Vascular Surgery, and President of the Canadian Society of Vascular Surgery. Peter Ferguson was appointed as the Albert and Temmy Latner Chair of the Division of Orthopaedics. Peter has served as Program Director of Orthopaedics since 2011, and has received numerous awards for excellence in teaching including the WT Aikins Award, and the Bruce Tovee Postgraduate teaching award. With his colleagues, Peter helped to establish the novel Competency Based Curriculum (CBC) in Orthopaedics. Finally, Carol Swallow was appointed as the Bernard and Ryna Langer Chair of the Division of General Surgery following an international search. Carol is Professor of Surgery, has over 75 peer reviewed publications, and as a surgeon-scientist, has received funding from numerous peer review granting agencies over many years.

Michael Fehlings was appointed as Vice Chair of Research, replacing Ben Alman who had served in the role for 7 years, and who has recently left UofT to accept the position as Chair of the Department of Orthopaedic Surgery at Duke University. Michael is Professor of Neurosurgery, former medical director of the Krembil Neuroscience Center, co-director of the UofT Spine Program, former director of the Neuroscience Program at UofT, recipient of the Department of Surgery Lister Prize, past President of the Cervical Spine Research Society, and AOSpine Research Foundation. Michael has published over 400 peer reviewed papers, and is extremely well funded by the Canadian Institutes of Health Research, Christopher Reeve Foundation, and the Ontario Stem Cell Initiative, among several others. Michael hosted a research "Town Hall" meeting for all faculty invested in research in the Department of Surgery, and a meeting of the surgeon:scientist trainees this year.

This past year, we received \$46,916,632 in research funding, up from last year, and a new all-time record in the Department of Surgery. We had 1,485 publications across the Department which represents a 3.6% increase over last year, with 6,133 citations, or 4.1 citations per publication. Our field-weighted citation impact was

1.48 suggesting that we are publishing 48% more articles than expected for the size of our faculty. Of note, there were 6 members of our faculty who ranked in the top 20 of all authors at the University of Toronto from 2009-2013, and 17 who were found in the top 100. I am absolutely delighted with the grant capture and prodigious academic output of our faculty, as demonstrated this past year. Some of the noteworthy high impact publications this year include Michael Taylor's in *Nature*; Rob Nam's in *Lancet Oncology*; Tony Zhong's in *J Clinical Oncology*; Catherine O'Brien's in *Science*; David Urbach's and Nancy Baxter's in *New England Journal of Medicine*; and Peter Dirks' in *Cancer Cell* to name just a few.

Dimitri Anastakis, Vice Dean Continuing Professional Development, and I were asked to host a Simulation Summit for the Faculty of Medicine on February 26, 2014. Numerous key stakeholders attended from across the campus from the Departments of Pediatrics, Anesthesiology, Critical Care Medicine, Otolaryngology, Psychiatry, and Surgery. There were numerous presentations followed by break-out sessions in attempts to co-ordinate efforts in simulation across the Faculty. In addition, we have been holding our own Surgery Simulation meetings this past year, and are moving closer towards optimizing educational experiences, rotations for residents and medical students, and determining a cost-recovery strategy with central infrastructure to support simulation efforts in the Department of Surgery.

The Annual Faculty Development Day was held on May 23rd, 2014, as organized by Dr's David Latter, George Christakis, and Ronald Levine. Topics that were highlighted this year included *Gender and Religious Sensitivities*, *Conflict Resolution*, *the Learner in Difficulty*, and *Teaching OR Skills with Multiple Levels of Learners*. In addition, Ori Rotstein, Associate Chair Surgery, and Paul Grieg have established a Faculty Mentoring Program whose goal is to provide equal access to the resources to allow faculty to reach their full academic potential. This program will be closely linked to the Centre for Faculty Development, and will begin recruitment later in 2014-15. Robin McLeod, Vice Chair Quality/Best Practices (Q/BP's), has led a highly effective working group which forms the "Quality Committee", and which has established a champion in each Division for Q/BP's. The first project which will be tackled by the Quality Committee is hospital readmission rates for index procedures across the various Divisions. In addition, a quality-based curriculum is being established for all residency training programs by Najib Safieddine, TEGH.

With the assistance of Darina Landa, Senior Development Officer, we raised over \$1.3 Million for fellowships across

the various Divisions, and added an additional \$1.3 Million for Divisional Programs. We have negotiated a joint fundraising agreement with Mount Sinai Hospital and Foundation for the Surgical Skills Centre. Six of our Divisions have demonstrated 100% participation in faculty member donation programs. Finally, I am very pleased to report that we have raised over \$22.5 Million total for the UofT *Boundless* Fundraising Campaign.

This year, we provide a special thanks to Dr. Martin Barkin who is stepping down from the position of Chair of the Surgical Alumni Association. Martin has served admirably in this capacity over many years, and is among the most highly decorated and notable members of our faculty having held the posts of Deputy Minister of Health from 1987-1991, and President and CEO of Sunnybrook Health Sciences Centre, among many other positions.

Other notable promotions for our faculty included the appointment of Dr Bob Bell as the Deputy Minister of the Ministry of Health and Long-Term Care, and Robin McLeod as the VP Clinical Programs and Quality Initiatives, for Cancer Care Ontario.

I am pleased to report the following promotions of our Faculty this year. From Lecturer to Assistant Professor: Abdollah Behzadi, Anand Ghanekar, Rajiv Singal, and Richard Jenkinson. From Assistant Professor to Associate Professor: Sean Cleary, Manuel Gomez, Erin Kennedy, Tom Harmantas, Armando Lorenzo, Rob Stewart, Veronica Wadey, Gelareh Zadeh, and Toni Zhong. And from Associate Professor to Full Professor: Walid Farhat, Abhaya Kulkarni, Calvin Law, Subodh Verma, and Albert Yee.

The following Faculty members successfully completed their Continuing Appointment Reviews (CAR's): Leo da Costa, Sunit Das, Marc Jeschke, Bernard Lawless, and Fuad Moussa. I should like to thank Ori Rotstein for leading the discussions of all the CAR's, and for his tremendous assistance with the entire process.

We were very fortunate to welcome several new Faculty to the Department of Surgery: Mohammed Al-Omran, Vascular Surgery; Dean Elterman, Urology; Suneil Kalia, Neurosurgery; Nicole Look Hong, General Surgery; Michael Ordon, Urology; Maral Ouzounian, Cardiac Surgery, Jory Simpson, General Surgery; William Stansfield, Cardiac Surgery; and Karen Wong, Plastic and Reconstructive Surgery.

A major accomplishment for the Department of Surgery this year was the harmonization of all academic salaries. We are the only Department that pays a stipend to every faculty member in the entire Faculty of Medicine. However, until recently, these stipends were quite variable across the board. Thanks to the leadership of Robin Richards, Vice Chair Clinical, we now have the following formula to help guide our payments of academic stipends for full-time Faculty: 1) Surgeon:Scientists: \$20K/yr, for 5 yrs, then \$14K/yr thereafter; 2) Surgeon:Investigators: \$15K/yr x 4 yr, then \$8K/yr; and 3) Surgeon:Teachers: \$2K/yr.

Our grant awards, honours, and research publications are too numerous to list here. Suffice it to say that

we have had yet again another banner year for these achievements by our faculty. Darlene Fenech received the Undergraduate, and Oleg Safir the Postgraduate Tovee Teaching Awards respectively. Gelareh Zadeh received the Bernard Langer Surgeon Scientist Award. Greg Borschel won the George Armstrong-Peters Prize; and Laurence Klotz, the Lister Prize. Avery Nathens received the Charles Tator Mentoring Award. At Gallie Day May 9th, 2014, Dr. Geoffrey Gurtner from Stanford University was the Gordon Murray Lecturer, and he spoke about the commercialization of surgical enterprises.

Other noteworthy awards include Michael Fehlings as a new member of the Royal Society of Canada, Bernard Langer receiving an honorary degree from Queen's University, Andres Lozano being named as a University Professor at UofT, Robin McLeod receiving the CPSO Council Award, and Emil Schemitsch being elected as President of the Canadian Arthroplasty Society.

This year, we reviewed the number of Endowed Chairs held by Surgical Faculty, and the numbers were staggering. There are 3 named University Chairs, 4 Joint Hospital – University Chairs, 36 Hospital – University Affiliated Chairs, and 20 Hospital Chairs. The total amounts to 63 Endowed Chairs to an approximate amount of \$150 Million. New Chairholders this year included Peter Dirks at Sick Kids, Steve Gallinger at UHN, Julian Spears at St Michael's, and Fred Gentili at UHN.

In any given year, many of our Faculty are the subjects of significant media attention. As some examples, Marc Jeschke spoke about his work creating skin grafts using 3D printers, Gideon Koren received publicity for using Twitter to broadcast the results of an open heart procedure, Teodur Grantcharov highlighted his simulation research using the OR "Black Box" protocol, and Charles Tator released the results of a 6 step guide to treating concussion. Elsewhere in the news, Andrew Lozano, Shaf Keshavjee, Ori Rotstein and I all gave TED talks to different audiences throughout North America.

Finally, I am absolutely delighted with the progress we are making with our Strategic Plan entitled *Transforming Surgery: Beyond the Cutting Edge* (2012 – 2017). We have made significant advances on the pillars of our plan for Research, Education, Q/BP's, Faculty Development, Innovation, and Integration/Global Outreach. For 2014-15, we hope to have successful external Reviews by the Royal College, potentially hire a surgical illustrator and establish an Editorial Office in the Department of Surgery, develop a plan for balancing new entry surgeons with late career surgeons, maintain a healthy carry forward in the Department, and continue with our aggressive advancement campaign to fund numerous Departmental initiatives.

I do hope you will enjoy reading the contents of this Annual Report. I am constantly in awe of the accomplishments of our Faculty, Residents, and Fellows. Thank you once again for your continued support of our efforts in the Department of Surgery. I look forward to achieving our goals together.

Research Report

Dr. Michael Fehlings, *Vice-Chair Research*



It is with great pride that I start as the new Vice Chair Research to discover the untapped excellence we have throughout the teaching hospitals and University of Toronto. Our 108 surgeon-investigators, 56 surgeon-scientists, 66 surgeon-teachers and 46 scientists are the shining stars of our research profile. We undertake high impact work that has a profound effect on surgical care, from bench to bed-side. Each year the number of high-impact journal publications continue to grow by leaps and bounds. Our faculty continues to be invited to give research presentations throughout the globe and participate in hundreds of national and international research meetings. The increased competitiveness of research funding from the Canadian Institutes of Health Research, CCSRI, and other funding agencies continues. Despite this, our department members continue to receive new grant at an increasingly phenomenal pace from these agencies. The list is extremely long. Here are a few samples of our brilliant researchers. Benjamin Alman, Nancy Baxter, Christopher Caldarone, Peter Dirks, Gregory Fairn, Michael Fehlings, Anna Gagliardi, Mojgan Hodaie, Sevan Hopyan, Paul Karanicolas, Shaf Keshavjee, Ian McGilvray, Robin McLeod, Cindi Morshead, Diane Nam, Unni Narayanan, Tom Schweizer, David Urbach, Thomas Willett, were among the great number of faculty who received new grants this year from CIHR. Congratulations to Nancy Baxter, Marcelo Cypel, Peter Dirks, Steven Gallinger, Girish Kulkarni, Alexandre Zlotta for their funding success from CCSRI. Catherine O'Brien received a 3-year Terry Fox New Investigator Award. Michael Reedjik received a 3-yr grant from Canadian Breast Cancer Foundation; James Eubanks received a 3-yr grant from the Pro Rett Ricerca Foundation (Italy). Michael Fehlings (yours truly) et al. were awarded a 5-year \$7.5M grant from the Ontario Brain Institute for the collaborative work on Childhood Cerebral Palsy Integrated Discovery Network. Taufik Valiante was awarded two 5-year grants from the Ontario Brain Institute. Mohammed Shamji received the Early Career Investigator Pain Research Grant. Andras Kapus and Victor Yang were successful in receiving NSERC grants. Victor Yang was also awarded Networks of Centres of Excellence and Canada Foundation of Innovation grants for several years. Subodh Verma has been awarded two 5 year grants from the Heart & Stroke Foundation of Canada. Our total research funding continues to surpass that of even many of the Universities in Canada, this year was over \$46,600,000.

The Surgeon Scientist Training Program remains as a very significant training program for residents at the graduate level in research. We have 19 new residents and 13 continuing resident enrolled in the SSTP for July 2014. It is always a great feeling to know that 94% of our Surgeon Scientist Training Program trainees were successful in receiving full or partial salary support from external

granting agencies. Thanks to the CIP-MOH funding, 5 of our SSTPs were awarded full funding for the Clinician Investigator Program. We had a very enjoyable evening with the new SSTPs to put a face to a name. Dr. Michael Fehlings welcomed the new trainees, with Drs. James Rutka and Andras Kapus giving them some positive highlights of the Program they are about to embark. David Cadotte, Kim Tsoi, and James Byrne ensured them that they represent the residents in the Program and are available any time. Likewise, Val Cabral, Nancy Calabrese-Condo and Tess Weber reassured them that their experience in the next 2 – 4 years will be a great experience in terms of research as well as collaboration.

This year marked the 40th Gallie Day celebration. To introduce the day, Professor James Rutka reflected on the major social, medical, scientific and political changes which have occurred over the past 40 years. The theme of this year's Gallie Day was "Commercialization and Research". Commercialization and innovation are key to driving new discoveries and to enable their translation into practical clinical solutions. These goals embody the essence of what it means to be an academic surgeon.

The symposium speakers emphasized their passion and commitment to their commercial ventures and the pressing need for the surgeon scientist phenotype to evolve if patients are to benefit from translation of discoveries. **Rafael Hofstein** (PhD, President & CEO, MaRS Innovation, MaRS Centre) presented his perspectives in a lecture entitled, "**From Bench to Bedside: Best Practices for commercialization**". Dr. Hofstein emphasized the role that MaRS can play in facilitating translational research and innovation. **Milos R. Popovic** (PhD, PEng, Toronto Rehab Chair in Spinal Cord Injury Research) described a 17-year long journey of developing a concept for electrically stimulating functional upper limb recovery from an idea to a Health Canada approved product, which has gone global. His talk was entitled, "**Commercialization: Where Brownian Motion Meets Serendipity**". **Michael Tymianski** (MD PhD FRCS, Head, Division of Neurosurgery; Senior Scientist, Division of Fundamental Neurobiology, TWRI-UHN), talked about his biotherapeutics company (NoNo Inc) dedicated to the research, development and commercialization of a novel pharmaceutical PSD95 antagonist for the treatment of stroke, traumatic brain injury, and pain. His talk was entitled, "**Commercialization the Hard Way**". **Paul Walker** (MD PhD FRCS, President & CEO, Spectral Diagnostics Inc. and Past Surgeon-in-Chief at UHN) discussed his unique path to developing a product focused on improving outcomes in sepsis. His talk was entitled, "**Why Commercialize Your Discovery - A View From The Front**".

Line". Each of the speakers presented a unique perspective but each emphasized the importance of surgeons being involved with and leading efforts directed at innovation and commercialization.

This year's Gordon Murray Lecturer was **Geoffrey C. Gurtner, MD** (Professor and Associate Chairman of Surgery, Professor [by courtesy] of Materials Science and Engineering, Stanford University School of Medicine, Stanford, CA USA). Dr. Gurtner's talk was entitled, "**The Art of the Practical: Translating Scientific Discovery into the Real World**". The following words, provided by Dr. Gurtner, summarize his key message: "It is well known that surgeons have pioneered the technologies that have transformed medicine. The treatment of coronary artery disease, solid tumors and critically ill patients were all developed by surgeons and were based on insights gained in surgical research labs. However, as medicine has become more complex, innovation has changed from purely procedural (i.e., new operations) to more completely new approaches to existing disease states (i.e., minimally invasive valve replacement). Recently, new barriers to innovation have also arisen including the corporatization of intellectual property, increasing regulatory complexity, rising health care costs and conflict of interest concerns. These challenges have made it more difficult for practicing surgeon-scientists to bring scientific advances into the clinic. It seems likely that the successful practice of surgery in the future will require a greater familiarity process of technology development and an increased ability to work with the private sector. Understanding how medical technology is developed will be required for surgeons to move scientific discoveries into the clinic. Hopefully, these new skills will allow surgeon-scientists to remain leaders in the advancing patient care and medicine." (Geoffrey C. Gurtner)

We had a record number of abstracts submitted by trainees working with our faculty. There were 10 platform presentations and 78 poster presentations. The Gallie Bateman Awards (for Surgeon Scientist Training Program participants) and the McMurrich Awards (for any trainee working with a member of the faculty of surgery) were judged for both platform presentations and poster presentations. The range of assorted topics and researchers highlighted the wide-ranging and tremendously high quality research being conducted in our Department.

We had 10 superb oral presentations. All presentations scored highly. Surgeon Scientist Training Program (SSTP) trainees are awarded the Gallie Bateman prizes. First prize went **David W. Cadotte** (supervisor: Michael G. Fehlings), for his oral presentation entitled, "**Visualizing structural and functional plasticity of the human cervical spinal cord**". **Jennica Platt** (Natalie Causarano, Nancy Baxter, Shaghayegh Bagher, Jennifer Jones, Kelly A. Metcalfe, Stefan O.P. Hofer, Anne C. O'Neill, Terry Cheng, Elizabeth Starenkyj, [supervisor: Toni Zhong]) received second prize for her oral presentation entitled, "**Pre-consultation educational group intervention to improve shared decision-making for post-mastectomy breast reconstruction: A pilot randomized controlled**

trial". Third prize was awarded to **Marisa Louridas** (Esther M. Bonrath, Dana A. Sinclair, Nicolas J. Dedy, [supervisor: Teodor P. Grantcharov]) for her oral presentation entitled, "**Mental practice to enhance advanced laparoscopic surgical performance in the operating room: A randomized controlled trial**". The fourth prize was awarded to **Chethan Sathya** (Paul Wales, Damon Scales, Paul Karanicolas, [supervisor: Avery B. Nathens]), for the poster presentation entitled, "**Mortality among injured children treated at different trauma center types**".

The McMurrich Awards are presented to research trainees who are not in the Surgeon Scientist Training Program). The first place award was won by **Vijay Ramaswamy** (Supervisor: Michael D. Taylor) for his oral presentation, entitled, "**Recurrence patterns differ across medulloblastoma subgroups**". **Shabana Amanda Ali** (Mushriq Al-Jazrawe, Heather Whetstone, Raymond Poon, [supervisor: Benjamin A. Alman]) received second prize for her oral presentation entitled, "**Cholesterol homeostasis mediates Hedgehog signaling in chondrocytes and osteoarthritis**". Third prize was awarded to **Kimberly Lau** (Hirotaka Tao, Haijiao Liu, Kendra Sturgeon, Rodrigo Fernandez-Gonzalez, Yu Sun, [supervisor: Sevan Hopyan]) for her oral presentation entitled, "**Anisotropic stress orients remodeling of mammalian limb bud ectoderm**". **Hae-Ra Cho** (Hiroki Shimizu, Hiroaki Toba, Sylvia Asa, [supervisor: Mingyao Liu]) received fourth prize for the poster presentation entitled "**Deficiency of a novel adaptor protein, xb130, is associated with the development of severe multinodular goiter**".

Faculty research awards went to **Gelareh Zadeh - Bernard Langer Surgeon Scientist Training Program Award** - awarded to an outstanding graduate of the Surgeon Scientist Training Program in the Department, who shows the greatest promise for a career in academic surgery; **Gregory Borschel - 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; **Avery Nathens - Charles Tator Surgeon Scientist Mentoring Award** - recognizing individual supervising participants in the SSTP who emulate Professor Tator's qualities, namely excellence in research, commitment to SSTP mentoring and dedication to promotion of Surgeon-Scientists; **Laurence Klotz - 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 fourth **Shafie Fazel Award**, established in memory of Dr. Shafie Fazel is presented to an individual who has demonstrated outstanding accomplishments during his/her residency both as a surgeon and as an investigator, was presented to **Aria Fallah** (PGY 6, Division of Neurosurgery). The **Zane Cohen Clinical Fellowship** is presented to a clinical fellow who has practiced and

achieved at the highest level while being a clinical fellow in the Department of Surgery was awarded to **Niloofar Dehghan** (Division of Orthopaedics). The Tovee Award is presented to an academic staff member of the Department of Surgery who has made the greatest contribution to the educational activities of the Department, as exemplified by Dr. E. Bruch Tovee during his outstanding career. This year's recipient of the **Tovee Postgraduate Prize** is **Oleg Safir** and **new mom, Darlene Fenech** received the **Tovee Undergraduate**

Prize. The Surgical Skills Centre Distinguished Educator Award demonstrates the Centre's commitment to surgical skills education. This award recognizes those individuals who have made exemplary, innovative contributions to teaching and learning in the Surgical Skills Centre over the past year. This was presented to **George Oreopoulos. D.R. Wilson Award** for teaching is made annually to the surgical resident who is rated by undergraduate students as being an outstanding teacher. The recipient of this award was a resident whose teaching has been highly evaluated by medical students. The resident demonstrated both a positive attitude toward teaching and was considered a good surgical role model for undergraduate medical students, which went to **Justin Lee**.

Dr. Michael Fehlings hosted the first Town Hall meeting of scientists, surgeon investigators, surgeon scientists, surgeon scientist trainees and key stakeholders. Over 50 staff members attended this very informative meeting intended as an informal discussion forum of key issues related to research and research training in the Department of Surgery. Overall, it is noteworthy, that the faculty had a high degree of engagement in research and felt proud to work at the University of Toronto. Some challenges were noted however, recent changes at CIHR have made it more of a challenge to successfully receive funding. It is imperative that the research staff capitalize

on the importance and success of collaborative research within the teaching hospitals and University. Some next steps arising out of the Town Hall meeting and as a result of discussions and consultations leading up to and subsequent to the meeting are as follows:

- a) A focused effort to move fund raising for research in the Department of Surgery is underway with the assistance of the UT Advancement office.
- b) Michael Fehlings is planning to meet with surgeon scientist trainees and junior residents considering research as a career option in the next several months.
- c) A comprehensive synopsis of research activities by surgeon scientists, surgeon investigators and scientists in the Department of Surgery is being worked on.
- d) A PGY I and PGY II evening research orientation meeting is scheduled for October 2014.
- e) A retreat to discuss research strategic plan directions and priorities in the Department of Surgery is being planned for January 2015.

Research plays an incredibly important 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.

A very special thanks goes to **Val Cabral** for her incredible dedication and hard work to organize the Surgeon Scientist Training Program, and the Gallie Day events.

Val Cabral (with contributions from Michael G. Fehlings)

Ontario Med Student Workshop



Postgraduate Education

Ron Levine, *Director*



The Department of Surgery at the Postgraduate level is the largest in Canada with 267 residents and 256 clinical fellows. There have been many accomplishments and successes in the 2013-2014 academic year.

There are 11 surgical programs: 7 CaRMS entry and 4 subspecialty programs. The backbone of the 11 surgical programs is the Program Director and their administrative assistant. It is a huge thankless job to coordinate and maintain each of these surgical specialties.

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 Surgical Foundations. Besides attending specialty-specific academic endeavors, the Surgical Foundations residents attend the Surgical Foundations lectures to prepare them for the Surgical Foundations Royal College Exam. This academic year Dr. Maurice Blitz replaced Dr. Robert Mustard as the Director of Surgical Foundations. Dr. Blitz coordinated the weekly lecture seminars and he also organized the practice exam that took place in February 2014.

The newest program introduced this academic year is the surgical Prep Camp. This Prep Camp is mandatory for all PGY1 surgical residents and runs for the first two weeks of July. It is an intensive program of didactic lectures and learning of fundamental surgical skills. There is an exam at the end of Prep Camp. Several of the surgical specialties have their own prep camp either before or after the Surgical Prep Camp as well.

Also all PGY1 residents attend a surgical skills course in the fall. Each of the surgical specialties also run their own courses where surgical skills specific to their specialty are taught. Lisa Satterthwaite is the Senior Manager of this unique skills lab and Dr. Oleg Safir is head of the Surgical Skills Lab and has brought many new improvements to the Lab.

There are a number of academic days to enhance the educational experience of the surgical resident. In July the Core Surgery residents attend "The Surgeon in Society" where medical legal issues are discussed. This is run by Dr. John Bohnen and Dr. Ron Levine. Dr. John Murnaghan runs "Residents as Teachers" for the PGY1 and PGY3 residents, which 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. The Program Directors can monitor the operating experience of the learner at each hospital and can compare the experience from one hospital to another using the data from POWER case logging.

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 8 modules is required for all residents finishing their PGY2 year.

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 256 fellows in the Department of Surgery. The fellowship committee under the leadership of Dr. David Latter has moved to formalize all the fellowships in the Department of Surgery with definitive goals and objectives and uniformity of 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 family can get to know each other.

The running of the Department of Surgery with 267 residents, 256 fellows and 250 faculty members is a huge endeavor. This is masterfully done by Tess Weber and Robert Gardin.

Undergraduate Education

George Christakis, *Director*



The 2013-14 academic year has been a busy and productive period for Undergraduate Education. I am glad to report that we have, as a group, made significant progress in many areas of undergraduate teaching.

‘Crash Course in Surgery’ week: The week-long introductory series of teaching and skill sessions continue to evolve, providing clinical clerks with clinically-relevant, case-based, interactive sessions. Melinda Musgrave is spearheading the planning of substantial changes that include more active resident-involved teaching and small group sessions and further reducing the teaching hours. Several of the crash course sessions have been video-recorded and uploaded to the portal for 24x7 student access.

Online content: The Surgery Clerkship website (portal) continues to be enhanced and updated with relevant readings posted for students to review in preparation for each session. Several other learning resources, including videos and access to relevant library materials have been included. We continue to add more content to the mobile web app, which enables students to access relevant information “on-the-go.”

Division Directors in Undergraduate Education: To further the goal of delivering consistent and cohesive undergraduate education across all sites, I am happy to report that we have been able to establish the position of Division Director in Undergraduate Education. This person is the spokesperson and Division lead on all things related to Undergraduate Education. This person is responsible for undergraduate teaching activities, teaching assignments, and education-related communication within their Division, as well as to bring all the Surgical Leaders in Undergraduate Education (SLUE) in the Division for regular meetings.

Recording and recognizing faculty undergraduate teaching: In line with the Department’s strategic plan of recognizing and rewarding our teachers, we are currently in the process of identifying and documenting the various teaching and other undergraduate education-related activities over the four years that our faculty engage in. Our next step will be to form a Delphi panel to discuss and rank these activities in terms of importance and assign weightage.

Resident Leaders of Undergraduate Education: Recognizing that surgical residents are among the most important components of effective teaching and the overall level of quality in undergraduate education, a group of committed and enthusiastic residents has been formed. This group, known as Resident Leaders in Education, already has several ongoing projects.

Mississauga Academy of Medicine (MAM): This year saw a full complement of clinical clerks rotating at MAM.

While we still need to increase capacity, especially in General Surgery teaching, feedback has been positive. Again, I wish to thank Abdollah Behzadi and Christiane Werneck, along with all the teaching faculty and support staff for this exceptional show. I look forward to hearing more positive things from the team.

TEAM course at Peter-Boyd Academy: For the last two rotations, we have been “mirroring” the Trauma Evaluation And Management (TEAM) course at the Peters-Boyd academy. This is still a pilot project and the goal is provide clerks the benefit of smaller group sessions and eliminate the need for protracted travel. We are evaluating feedback on this initiative.

Longitudinal Integrated Curriculum (LIInC) project: Clerkship will also see the introduction of a new Longitudinal Integrated Curriculum project. This will be rolled out in the 2014-15 academic year at the FitzGerald Academy with 7 clerks. The plan is to expand this over the next years to other academies.

Pre-clerkship initiatives: I am extremely pleased with the success of ongoing pre-clerkship initiatives such as the Surgical Education And Discovery (SEAD) program, the Surgical Longitudinal Experience (SurgicLE), Student Surgical Skills Development (S3D) and the activities of the Surgical Interest Groups (SiG), to name a few. I wish to thank and congratulate Surgery Pre-clerkship Director, Ron Kodama and all the student leads and other staff who have made these events possible.

Continuing Professional Development

Terry Axelrod, *Director and Chair,*
Continuing Professional Development Committee



Overall CPD Goals

Promote best practices in continuing education and professional development (including Faculty Development, CE Professional Development)

Foster scholarship and research in continuing education

Broaden the scope and inclusiveness of continuing education (including international, interprofessional)

Work closely with CPD office at the University of Toronto to implement a new model of partnership, including funding and advertising of CE programmes

2013-14 Activities

26 CE events run through the CPD office, with 15 fully managed, the remainder with sponsorship for accreditation only. This is an increase over the previous two years in CPD managed and accredited events.

Superb success with enrollment in the hundreds for several courses, such as the Update in General Surgery 2014 (381), 11th Biannual Canadian Foot and Ankle Symposium 2014 (200), Urology Update 2013 (192), etc.

New programmes including the First Annual Pediatric Wound Care Symposium (Joel Fish and Irene Lara-Corrales) and the Hand and Upper Extremity Update (Steve McCabe).

Many faculty members involved as Chair and faculty in CE events nationally and internationally outside of the CPD jurisdiction

Objectives for 2014-15

Encourage all Divisions to run or accredit courses through CPD office.

Catalogue the National and International CE that is done outside of the CPD office

To serve as the Test Department for the implementation of the proposed new model of partnership between the CPD Office and the University Departments

Continue to encourage the development of more Web based programmes.

Promote the value of CE to the Faculty of Medicine vis a vis promotion and advancement of faculty through partnership with the Vice Dean of Continuing Professional Development

SickKids Neurosurgery Fellows Reunion



Office of International Surgery

Andrew Howard, Director



Overview

The Office of International Surgery (OIS) is founded on the principle of collective responsibility, with the belief that improving access to surgical care in low-income countries has the potential to reduce the global burden of disease. The Department of Surgery plays a scholarly role within the global health field by emphasizing education and research for improving clinical practice, education, and capacity-building around the world. In just the past few years, our faculty members have carried out almost 80 projects to this effect through treating the sick and injured, delivering preventative programs, and partnering with local health professionals.

Ongoing Projects

Faculty members across all divisions have extensively contributed towards curriculum development, educational outreach, and clinical care in a variety of countries over the past few years. Some notable examples include the following:

The Ukraine Child Health Project

In 2013, a partnership was established between the Children of Chernobyl Canadian Fund and the Sick Kids Foundation with the purpose of improving the quality of pediatric healthcare in Ukraine through the exchange of people, knowledge, and skill expertise from Sick Kids. At the Lviv City Children's Clinical Hospital, Mark Bernstein (NeuroSurg, TWH) led awake craniotomy operative sessions while coaching local neurosurgeons through the procedures while it was telecasted to regional health centers. In Kyiv, at the Ramodanov Neurosurgical Institute, James Rutka (NeuroSurg, HSC) trained the neurosurgeons on how to perform a craniotomy for corpus colostomy. At both locations, they led interactive lectures and provided patient consultations. Skill development and international team capacity was further developed last year in which three Ukrainian neurosurgeons were selected for intensive skill-training rotations at Sick Kids.

Clinical Care Projects

Leila Kasrai (Plastics, SJHC) has traveled to Ethiopia and Nepal for both clinical and educational missions, conducting extensive qualitative research on burn prevention, clinical treatment, social stigma in burn patients, and the gaps in surgical care accessibility. She has recently developed burn prevention programs in Kenya.

Toni Zhong (Plastics, TGH) is a dedicated member of Women for Women (WFW) and the Emirates Floating Hotel, which provides essential medical care to the residents of Chilmari, Bangladesh. She and her team perform approximately 45 procedures per mission, the majority of which are women with disfiguring physical injuries resulting from acid burning – a common form of

domestic violence. She strives to provide clinical treatment, social reintegration, and sustainability of WFW's loco-regional presence.

Christopher Forrest (Plastics, HSC) and a team from SickKids were invited by Transforming Faces Worldwide to oversee an extensive needs assessment of the provision of cleft lip care in Ethiopia. The site visit was instrumental in helping the Yekatit 12 Hospital in Addis Ababa develop an orthognathic surgery program for managing the needs of patients with cleft lips and palates.

Several faculty members are also involved with cleft lip and palate care through **Operation Smile**, including **Gregory Borschel** (Plastics, HSC), **David Fisher** (Plastics, HSC), **Ron Zuker** (Plastics, HSC), and **Howard Clarke** (Plastics, HSC).

Surgical Capacity-Building Projects

Georges Azzie (GenSurg, SickKids) annually travels to Botswana to train local specialists in laparoscopic simulation, as well as to establish contextualized training programs.

Ted Gerstle (GenSurg, SickKids) focuses on capacity-building in healthcare providers in Ethiopia, through his partnerships with Tikur Anbessa Hospital and Addis Ababa University. He is the Surgical Director of the Qatar Project, a joint initiative between Sick Kids and the state of Qatar, aimed at building a pediatric hospital.

Allan Okrainec (GenSurg, TWH) leads innovative training techniques, particularly laparoscopic skills, for surgeons overseas through the use of telesimulation. His work has allowed for the development of curriculums and assessment tools in remote regions of South America, Africa, Asia, and Eastern Europe.

Peter Chu (GenSurg, SHSC) annually travels to the Galmi Hospital in Niger to train African surgeons, while simultaneously supervising elective residents from Canada who wish to pursue globally-focused surgical careers.

Mojgan Hodaie (NeuroSurg, TWH) has pioneered neurosurgical education in developing countries, focusing on structured online learning. Her efforts are well underway in Ghana and are currently expanding within Africa. She is also an Affiliated Global Faculty for www.BIHE.org, an online university created in response to the lack of available post-secondary education in Bahrain, Iran.

Christine Novak (Plastics, TWH) utilizes her clinical practices as a physical therapist and rehabilitation scientist through her work with the Guatemala Healing Hands Foundation. She presents on a variety of hand surgery

and therapy-related topics, coordinates screening and pre/post operative care, as well as advocating for community development.

John Hagen (GenSurg, HRRH) travels to China to provide laparoscopic surgical care, followed by interactive learning sessions with the Chinese surgeons. He also travels to remote areas in the mountains Guatemala with HELPS International with a team of surgeons and volunteers to provide primary surgical care to locals in need.

Educational Support Projects

The Ptolemy Library

Through a partnership with the University of Toronto Libraries, the OIS continues its free provision of full-text access to the University of Toronto Library to the 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. This training is essential for covering the needs of the **Toronto Addis Ababa Academic Collaboration (TAAAC)**.

Surgery in Africa Reviews

We continue to publish narrative reviews on a broad range of surgical topics, focusing on clinical delivery in resource-constrained settings. A series of critical care and trauma has been added, and new reviews continue to be welcomed (contact andrew.howard@sickkids.ca if you wish to contribute). The College of Surgeons of East, Central, and Southern Africa (COSECSA) now includes our reviews as a mandatory component of their residency curriculum. Reviews from 2005 onwards can be viewed at www.ptolemy.ca/members.

Prakash Foundation LINCS Scholarships

The Prakash Foundation Low Income Country Surgical (LINCS) Scholarships allow trainee surgeons to pursue portions of their residency or fellowships at the University of Toronto. The Scholarship program began in 2013 at \$70 000 per year, with applicants selected on the basis of academic potential in their home country and acceptance by a surgeon or Division at the University.



Dr. J. Spears



2013-14 Hockey: Neurosurgery vs Urology



2014 Soccer Team



2014 Neurosurgery Softball Team



2013-14 Hockey: Ortho vs General Surgery



2013-14 Hockey

Division of Anatomy

Cindi M Morshead, *Division Head*



Anne Agur	Professor
Barbara Ann Ballyk	Sr. Lecturer
Judi Laprade	Sr. Lecturer
Paulo D. Koeberle	Associate Professor
Cindi M. Morshead	Professor
Hong-Shuo Sun	Assistant Professor
Mike Wiley	Professor
Ian Taylor	Professor

Each year over 2500 students and trainees from across seven faculties (Rehab science (OT; PT); Medicine (Meds (undergraduate and residents), PAP); Dentistry (undergraduate, graduate); Arts and Science; Pharmacy; Kinesiology and Physical Education; SGS (BMC; IMS; Anthropology; Psychology) are taught by our faculty in the Division of Anatomy. Most striking, we find each year there is a demand for even more anatomy training. Industry and health professionals seeking refresher training and advanced anatomy instruction are a couple of examples of groups seeking anatomical expertise. We see even at the undergraduate level, an enormous interest in continuing studies in anatomy. This academic session our faculty have taken on the task of designing a new Arts and Science course for advanced anatomical study to be offered to fourth year students in 2014. We have already received more interest in this course than we can accommodate. We are looking forward to teaching these bright and enthusiastic undergraduates and keeping the art of Anatomy alive.

Promotions:

We are happy to announce the promotion of Dr. Judi Laprade to Senior Lecturer. Dr. Laprade is the course director for anatomy in the Faculty of Physical Education and Kinesiology and the Faculty of Dentistry. She also contributes to the undergraduate medical curriculum. Her significant contribution to these programs is well received and appreciated by students and faculty alike. Dr. Cindi Morshead was promoted to full Professor.

Research Grants:

Our Division faculty had another successful year acquiring external funding for research and academic endeavours. Collectively we garnered over X dollars. These include a CIHR-Industry partner operating grant (Morshead); Heart and Stroke Canadian Partnership for Stroke Recovery (Morshead); Heart and Stroke Foundation Grant-in-aid (Sun); Mars Innovation POP (Koeberle); Ontario Brain Institute (Morshead)

Current Research Funding:

Agur AMR, Fels, S. (PI) et al. NSERC Collaborative Research and Development Grant - PHuman: Parametric multiscale modeling and simulation of human anatomy.

(\$480,000, 2012-2015).

Koeberle P (PI) CIHR - Focal Adhesion Kinase: A pivotal role in CNS apoptosis and regeneration (\$554,525, 2012-2017).

Koeberle P (PI) NSERC Discovery Grant - Molecular Interactions that modulate PI3 Kinase and MAP Kinase pathways during Apoptosis (\$130,000 2012 - 2017).

Koeberle P (PI) MaRS Innovation, POP - Neuroprotective Peptides for the treatment of blindness. (\$25,000, 2014-2015)

Morshead CM (PI), Corbett D, Shoichet M. Heart and Stroke Foundation Grant in Aid - Promoting self-repair of the stroke injured brain using neural stem cell stimulation and rehabilitation. (\$280,000 2012 - 2015).

Morshead CM, Miller F (PI), Biernaskie J, Kaplan and 2 others. Stem Cell Network Global Initiative - Regenerative Networks: Recruiting adult stem cells for tissue repair. (\$3,500,000 2011 - 2014).

Morshead CM (PI) CIHR Operating Grant - Isolation and characterization of a novel neural stem cell in the adult mammalian brain (\$569,445 2013-2018)

Morshead CM (PI) Corbett D, Shoichet M. CIHR Operating Grant - Promoting cognitive recovery using endogenous neural stem cell activation and rehabilitation following stroke. (\$992,394, 2013-2018)

Morshead CM, Miller F (PI), Mabbott D, Frankland P. Brain Canada - Recruitment of endogenous neural stem cells to promote repair following acquired brain injury in children. (\$1,500,000, 2013-2016)

Morshead CM (PI), Corbett D. Canadian Partnership for Stroke Recovery (Heart and Stroke Foundation) - Stimulating endogenous brain repair to promote cognitive recovery following neonatal hypoxia-ischemia (\$50,000, 2014-2015).

Morshead CM (PI), Dancause N, Fehlings M, Mendez I, Shoichet M. CIHR-Industry Operating Grant - Promoting neural regeneration with stem cell based therapies: A novel source of autologous human neural stem cells for transplantation, (\$2,500,000, 2014-2019).

Morshead CM, Fehlings D (PI) et al. Ontario Brain Institute - Advances in Cerebral Palsy: Cell to Person (\$5,000,000, 2013 - 2017).

Sun HS (PI) NSERC Discovery Grant (\$165,000 2011 - 2016).

Sun HS (PI) CIHR China-Canada Joint Health Research Initiative (\$225,000, 2014-2016).

Sun HS (PI) Heart and Stroke Foundation Grant in Aid (\$285,950, 2013-2016).

Sun HS (PI) Dean's Fund New Staff Grant (\$10,000, 2013-2014).

Sun HS (PI). Scottish Rite Charitable Foundation of Canada (\$105,000 2012 - 2015).

Trainee Awards

The trainees supervised by division faculty have received a number of accolades this past year. Nadia Sachewsky (Morshead, supervisor) successfully defended her PhD for her thesis "Activating neural stem and progenitor cells to enhance neural repair". Nadia was also awarded a Travel Award to the International Society for Stem Cell Research and selected for a poster teaser presentation at the meeting. Philip Donofrio (Agur&Koeberle, co-

supervisors) defended his MSc thesis and has started his PhD in the Department of Rehabilitation Science under the supervision of Dr. Paulo Koeberle. Parvati Dadwal (Morshead, supervisor) was the recipient of a CIHR training fellowship. Her work was also selected from over 400 abstracts to be presented at the International Regenerative Medicine conference in Germany. Her work was selected for the Laidlaw manuscript competition at the Department of Surgery Gallie Day. Labeeba Nusrat (Morshead, supervisor) was awarded the Ontario Graduate Student Fellowship. Summer students trained in the Division were recipients of Undergraduate Summer Research Fellowships (Ashkan Azimi, Morshead) and were the recipients of un

Publications:

Giangregorio LM, MacIntyre NJ, Heinonen A, Cheung AM, Wark JD, Shipp K, McGill S, Ashe MC, Laprade J, Jain R, Keller H, Papaioannou A (2014) Too Fit To Fracture: A consensus on future research priorities in osteoporosis and exercise. *Osteoporos Int.* 25(5):1465-72.

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Siu, M.T., M. Wiley, P. Wells (2013) Methanol teratogenicity in mutant mice with deficient catalase activity and transgenic mice expressing human catalase. *Reproductive Toxicology*, 36: 33- 39.

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Sachewsky N, Xu W*, Leeder R*, Rose KL, Yu F, van der Kooy D, Morshead CM. (2014) Primitive neural stem cells in the adult brain give rise to GFAP-expressing neural stem cells. *Stem Cell Reports*, doi 10.1016/j.stemcr.2014.04.008

Sachewsky N, Morshead CM. (2014) Pro-survival factors derived from the embryonic brain promote adult neural stem cell survival. *Stem Cells Dev.* [Epub ahead of print] PMID:24866786

Hunt J*, Sachewsky N*, Cooke MJ, Zaraneh T, Mui C, Shoichet MS, Morshead CM (2014). Cyclosporin A enhances neural precursor cell survival by blocking Cyclophilin D activation and inhibiting mitochondrial pore formation. *Disease Model Mech*, in press

Siddiqui A.M. Sabljic T.F. Koeberle P.D., and Ball A.K. (2014) Downregulation of BM88 after optic nerve injury. *Investigative Ophthalmology and Visual Science.* 55(3):1919-29.

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Books:

Moore, K.L.M., Agur A.M.R. and Dalley, A.F. (2015). *Essential Clinical Anatomy* (5th Edition). Lippincott Williams and Wilkins, Baltimore, MD, USA, 686 pages.

Invited speaker:

A. Agur: Plenary lecture: Evidence-based anatomy education: Innovations in teaching and research. Australian and New Zealand Association of Clinical Anatomists (ANZACA) 10th Annual Conference, University of Queensland, Brisbane, Australia

A. Agur: Mexican Anatomy Congress, October 2, 2013. Webinar. Title: Clinical Anatomy and Grant’s Atlas.

A. Agur: Innovative hand anatomy education and orthotic intervention. Canadian Association of Occupational Therapists Annual Conference, Preconference workshop, Victoria, BC, May 29-June 1, 2013 (7 hours)

A. Agur: Anatomy Software Glove Learning System. Department of Occupational Science and Occupational Therapy Faculty Research Symposium. Hart House, University of Toronto, Toronto, ON.

A. Agur: Overview of Arthrology. Advanced Clinician Practitioner in Arthritis Care Program. St. Michael’s Hospital, Toronto, ON.

J. Laprade: Safe Movement and Exercise Recommendations for Individuals at Risk of Falls & Fractures. National Fall Prevention Conference. Toronto, Ontario, Canada.

J. Laprade: Not Giving up Aikido for Osteoporosis: Individualization of Exercise at its Best, Canadian Society for Exercise Physiology (CSEP) Annual General Meeting and Conference. Toronto, Ontario, Canada.

J. Laprade: Bone Fit: An Evidence-informed Exercise Training Workshop. A Knowledge Translation Initiative in Exercise & Osteoporosis, Canadian Society for Exercise Physiology (CSEP) Annual General Meeting and Conference. Toronto, Ontario, Canada

CM. Morshead: Plenary Speaker. Promoting self repair of the injured CNS. Till and McCulloch Meeting, Banff, AB

CM. Morshead: Stem cell based therapies to treat Cerebral Palsy: Promoting self-repair. Centre for Stroke Recovery, Montreal, AC

CM. Morshead: Novel therapeutics to promote stem cell based neural repair. Neuro-translational Talks, Ontario Stem Cell Initiative, Toronto, ON

CM. Morshead: A novel population of neural stem cells in the adult spinal cord. Charles Tator and Barbara Turnbull Lectureship, The Bram & Bluma Appel Salon, Toronto, ON

CM. Morshead: Neural stem cells: From basic biology to tissue repair. University of Montreal Speaker Series, Montreal, QC

CM. Morshead: Primitive neural stem cells in the adult brain. Donnelly Seminar Series, University of Toronto

CM. Morshead: Neural stem cells: From basic biology to tissue repair. SURP Seminar Series, University of Toronto

M. Wiley: Keynote Speaker Transition to Residency Dinner

M. Wiley: “The Last Lecture” Invited by the University of Toronto Medical Class to give the final lecture of the Tovee lecture series and the last lecture of their undergraduate medical program.

Awards and Appointments

Dr. Anne Agur: Excellence in Undergraduate Life Sciences Teaching Awards, Faculty of Medicine, University of Toronto. This award recognizes sustained excellence in integrating research in undergraduate teaching in Arts and Science within Basic Science Departments in the Faculty of Medicine.

Dr. Anne Agur: Longstanding Academic Contribution and Collaboration from an External Partner Award. Division of Psychiatry, Department of Medicine, Faculty of Medicine, University of Toronto. In recognition of continued scholarly and collaborative academic contributions in the Division of Psychiatry, University of Toronto.

Dr. Barbara Ballyk: Excellence in Undergraduate Teaching in Life Sciences, Faculty of Medicine, University of Toronto. (Undergraduate Education, B. Sc.).

This award recognizes outstanding and sustained contributions to undergraduate Arts and Science teaching in Life Sciences programs and the undergraduate experience at the University of Toronto.

Dr. Mike Wiley: Dr Mary Hollington Excellence in Pre-Clinical Teaching Award. This award is presented to a teacher who has demonstrated excellence in the preclinical undergraduate medical education curriculum. Selected by Graduating Medical Class.

Dr. Cindi Morshead has taken on the role of CIHR University Delegate for a 3 year term.

Visiting Scientists

Philip Fabrezio from Mercer University, Atlanta, GA, USA. obtained a visiting scholarship from the American Association of Anatomists to join the Musculoskeletal Laboratory directed by Anne Agur.

The Division is preparing for some big changes as the undergraduate medical curriculum is being redesigned. The proposed changes will impact all aspects of our facilities and we are continuing to work closely with the curriculum directors, Deans and facilities management. Undoubtedly these changes will have a positive impact on medical training.

Breakfast with the Chairman



Division Of Cardiac Surgery

Christopher Caldarone, *Chair*



The Division of Cardiac Surgery continues to thrive. We are clinical innovators in mechanical support/heart failure, complex aortic reconstruction, mitral valve repair, and congenital heart surgery. Our research programs are largely focused on translational research with direct clinical application and lead by investigators from Saint Michael's Hospital, the Toronto General Hospital, Sunnybrook Health Sciences Center, and the Hospital for Sick Children. Trillium Health Center has become an important leader in teaching for our cardiac surgery residents.

We have continued to work towards greater integration of our clinical efforts and this integration is exemplified by the Toronto Aortic Collaborative which focuses on aortic disease. A recent initiative led by **Mark Peterson** and **Maral Ouzounian** (cardiac surgery) and **Andrew Dueck** (Vascular Surgery) will work to create a single point of access for CritiCall referrals for patients with acute aortic syndromes.

The **Cardiovascular Data Management Center (CVDMC)** seeks to encourage greater university-wide integration of quality improvement and clinical research activities by aggregating all clinical data on patients with cardiovascular disease in a single linkage-rich environment for the benefit of any clinician or researcher interested in cardiovascular disease.

Recruitment

William Stansfield was recruited to join the Cardiac Surgery group at the Toronto General Hospital as an Assistant Professor and a Surgeon Scientist with specific expertise in end stage heart disease.

Promotions

Subodh Verma (St. Michael's Hospital) was promoted to Full Professor in June 2014.

Research Grants

Christopher Caldarone holds a Canadian Institute of Health Research Pulmonary Vein Stenosis grant: Focus on Upstream Vasculopathy and one Children's Heart Foundation grant, Understanding Right Ventricle Physiology of Tetralogy of Fallot grant.

John Coles holds a Heart & Stroke Foundation of Ontario grant, Rescue of disputed mechanotransduction as a new therapeutic strategy in human dilated cardiomyopathy.

Osami Honjo holds a Labatt Family Heart Centre grant, Brain and Myocardial Protection by Extracorporeal Cardiopulmonary Resuscitation in Piglet Model of In-Hospital Cardiac Arrest Brain Injury.

Subodh Verma holds a Canada Foundation for Innovation grant, (John R. Evans Leaders Fund) Molecular pathology

of cardiovascular disease: understanding how gene expression is perturbed in clinical samples. Heart and Stroke Foundation of Ontario grant, Role of autophagy in cardiovascular disease: a bench to bedside translational approach. Brigham and Women's Hospital and National Heart, Lung, and Blood Institute (NHLBI)/National Institutes of Health (NIH) grant, Cardiovascular Inflammation Reduction Trial.

Resident/Fellows Honours/Awards/Positions Held

Sas Deb received the 2013 Heimbecker Award for Surgical Research.

Rachel Vanderlain was awarded a Banting Postdoctoral Fellowship by the Canadian Institutes of Health Research to support her research into the role of myofilament mechanics and calcium handling in the pathogenesis of hypertrophic cardiomyopathy under the mentorship of Peter Backx in Toronto and Pieter deTombe (Loyola University).

Rachel Vanderlain received funding for her work entitled "Understanding Right Ventricular Physiology in Tetralogy of Fallot" from the Children's Heart Foundation.

Faculty Honours/Awards/Positions Held

George Christakis received the Dean A.L. Chute Award (The Silver Shovel) undergraduate teacher who is deemed to have demonstrated excellence in overall clinical teaching in the undergraduate medical program.

George Christakis received the Bernard Goldman Award for Excellence in Cardiac Surgery Teaching award.

RJ Cusimano was awarded the 2013 Bruce Tovee Undergraduate Teaching Award.

David Latter was awarded the James Yao Award for Excellence in Cardiac Surgery Teaching Award.

Fuad Moussa was awarded the Peters-Boyd Academy Clerkship Teaching Award.

Joe Noora was appointed the Divisional Undergraduate Education Director at Trillium.

Glen Van Arsdell was awarded the William G. Williams Award for Excellence in Cardiac Surgery Teaching Award.

Subodh Verma received the Royal College Gold Medal in Surgery for his work entitled: "BRCA1 is an essential regulator of heart function and survival following myocardial infarction" at the 2013 Canadian Cardiovascular Congress.

Terry Yau received the Lynda L. Mickleborough Award

for Excellence in Cardiac Surgery Teaching award.

Visiting Professors

Joseph Dearani, Chief of Cardiovascular Surgery at the Mayo Clinic presented the 2013 Heimbecker Lecture entitled “Hypertrophic Cardiomyopathy – Surgery for Obstructive & Non-obstructive types” followed by a lecture to the Labatt Family Heart Center entitled “Ebstein Anomaly - What operation and When to do it”.

Kenneth W. Kizer, former Director of the US Department of Veterans Affairs and founding President and CEO of the National Quality Forum presented the 2013 Bigelow Lecture entitled ‘Achieving Change in Complex Systems’.

Division Firsts

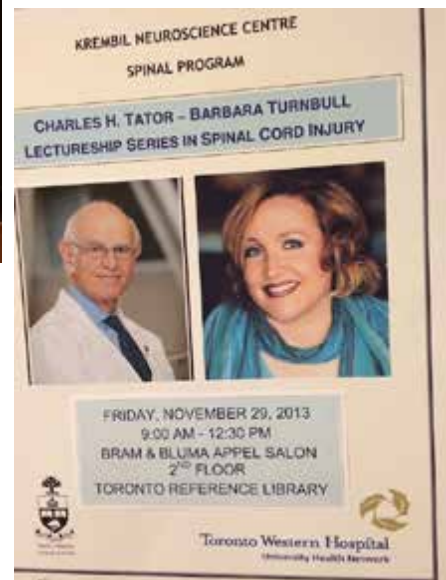
Mark Peterson and a team from Saint Michaels Hospital implanted a novel transcatheter mitral valve through a left ventricular apical incision. The valve is indicated for high risk patients with severe native mitral valve regurgitation. This was the first implantation of this device in North America.



Faculty Development Day 2014



Michael Fehlings, Charles Tator, James Rutka, Albert Yee



C. Tator B. Turnbull

Division of General Surgery

Andy Smith, *Chair*

The Division of General Surgery continues to excel and make major contributions to the University of Toronto and to the healthcare system. In addition to delivering excellent care to their patients and their families, individuals and teams across the division are having a major system impact within the context of the rapidly changing healthcare system. In addition to standard metrics such as papers and grants, there is significant tangible evidence of the positive impact the division has on the entire healthcare system.

Education

The significant education research, particularly in the area of simulation, continues to develop. Consistent with excellence in this domain was the fact that Drs. Chethan Sathya and Marisa Louridas won prizes in the Gallie-Bateman research competition in the 2013-14 academic year. In addition, Dr. Grace Ma was first nation-wide out of all 590 residents on the CAGS exam and Dr. Matt Strickland won the National CAGS Laparoscopic Suturing Competition in Ottawa.

General surgery boasts eight formal fellowships. Under the leadership of Dr. Paul Greig, there has been increasing organization and coordination of the fellowship leaders and their programs. Fellowships have been an enabler of enhanced coordination of the various sites within the University of Toronto divisions.

There were many major teaching awards won during the year including Dr. John Hagen winning the Faculty Award for Excellence in Community-Based Teaching, Dr. Stan Feinberg winning the PARO award for Excellence in Clinical Teaching and Dr. Darlene Fenech winning the Tovee Award for Excellence in Undergraduate Teaching at the University of Toronto. Once again, awards won by Drs. Hagen and Feinberg are testament to the strength and importance of the roles that the “community-based” hospitals play within the University community.



Research and Innovation

In the research domain, the papers and grants compiled within the yearly report show the sustained productivity of the Division. Drs. Marisa Louridas and Chethan Sathya won 3rd and 4th prize respectively at the Gallie day this year for wide-ranging work on topics including. Dr. Avery Nathens won the Carolyn Tuohy Impact on Public Policy Award in addition to the Tator Award for Mentorship.

Faculty Development

Dr. Nicole Look Hong was recruited to the Breast Surgical Oncology team at the Sunnybrook Hospital. Dr. Julie Hallet was also recruited to Sunnybrook to the HPB Surgical Oncology team. Dr. Jory Simpson was recruited to the Breast Surgical Oncology unit at St. Michael's Hospital. In addition, a number of Physician Assistants were hired across the city to assist in the care of our surgical patients.

Drs. Sean Cleary, Tom Harmantas and Erin Kennedy were promoted to Associate Professor. Dr. Calvin Law was promoted to Full Professor.

The graduating class from the Gallie program in General Surgery this year numbered ten. This group of individuals went on to next steps including some who went on to prestigious fellowships in the United States.

Division Of Neurosurgery

Andres Lozano, *Chair*



The Division of Neurosurgery enjoyed another year of excellence in the academic, research, clinical and teaching domains. Our 64 Faculty and residents performed over 6,000 cases and published over 360 papers. Our members received prestigious awards and distinctions, including James Rutka's election to the Order of Ontario and Michael Fehlings' appointment as Vice Chair Research in the Department of Surgery. Our residents again took home the McKenzie Prizes for the best clinical research in Canada performed by neurosurgical trainees. We launched a new city-wide Brain Tumor Bank at the University of Toronto, thanks to the generous support of the Dan Family. And on October 6-8, 2013, we celebrated 90 Years of Neurosurgery at the University of Toronto with a three-day event attended by over 250 participants including a panel of world-leading scientific speakers and our alumni from around the world.

Recruitment.

We welcomed Suneil Kalia to the Neurosurgical Faculty at Toronto Western Hospital.

Research Grants.

Our neurosurgeons and affiliated neuroscientists held over \$34.4M in total grant funding, including 19 newly awarded research grants.

Resident/Fellows Honours/Awards/Positions Held

George Ibrahim (PGY4) and Shobhan Vachhrajani (PGY5) won the 2014 K.G.McKenzie Prizes in Clinical Neuroscience Research.

David Cadotte (PGY4) received the Gallie Bateman Award, 1st Place, for the top paper presented by a Surgeon-Scientist Program trainee in the Department of Surgery.

Faculty Honours/Awards/Positions Held

R.S. McLaughlin Chair of Surgery James Rutka was elected to the Order of Ontario, the Province's highest honour.

- Michael Fehlings was appointed as Vice Chair Research in the Department of Surgery at the University of Toronto.

- Michael Taylor and Peter Dirks at the Hospital for Sick Children received Garron Family Chairs in Childhood Cancer Research.

- Fred Gentili was appointed as the Alan and Susan Hudson Chair in Neuro-Oncology at University Health Network.

- Charles Tator delivered the inaugural Charles Tator Honorary Lectureship on Spinal Trauma at the Annual Scientific meeting of the AANS.

- Andres Lozano received the 2013 Margolese National Prize in Brain Disorders, awarded to a Canadian who has transformed care in heart and brain diseases.

- Gelareh Zadeh won 2014 Bernard Langer Surgeon-Scientist Award, presented annually to an outstanding graduate of the Surgeon-Scientist Training Program in the Department of Surgery who shows the greatest promise for a career in academic surgery.

- Todd Mainprize received the Marvin Tile Distinguished Service Award at Sunnybrook Hospital.

- Andres Lozano was appointed as Chair of the Scientific Advisory Committee of the Weston Brain Institute.

- Michael Fehlings was elected to the Canadian Academy of Health Sciences.

Visiting Professors

John Kestle, University of British Columbia, 28th E. Bruce Hendrick Visiting Professorship, Oct. 8, 2013

Juan C. Fernandez-Miranda, University of Pittsburgh, 46th Lougheed Microsurgical Course, Oct. 28-Nov. 1, 2013

Sebastien Froelich, Hôpital Lariboisière, Paris, 47th Lougheed Microsurgical Course, Mar. 31-Apr 3, 2014 and City-Wide Rounds, Toronto Western Hospital, Apr. 3, 2014.

Howard Riina, NYU Langone Medical Center, City-Wide Rounds at St. Michael's Hospital, May. 23, 2014

Franco De Monte, MD Anderson Cancer Center, 39th William S. Keith Visiting Professorship, Jun. 12-13, 2014

Peter Vajkoczy, Charite Universitätsmedizin, Berlin, City-Wide Rounds at Sunnybrook Hospital, Jun. 27, 2014

Division Firsts

■ January 10, 2014 marked the first Skype broadcast by the University of Toronto Brain School to the Neurosurgery Program in Kijabe, Kenya, as part of International Surgery Rounds. We thank Alireza Mansouri (PGY3) for his efforts in this initiative.

■ Our Division held its first Cerebrovascular Neurosurgery Soiree on Feb. 24, 2014 with Faculty participation from each of our four hospitals. Attendees presented developments in clinical, research and teaching work at their sites, and discussed opportunities for new synergies across the University-wide program. The event was followed by Soirees for Neurooncology (March 3), Spine (April 14) and Gamme Knife Surgery (May 26).

Leadership Changes/Progressions

Michael Fehlings was appointed as Vice Chair Research in the Department of Surgery at the University of Toronto.

Royal College Fellowships

The following PGY6 residents successfully passed their FRCSC fellowship examinations: Julius Ebinu, Aria Fallah, Carlo Santaguida, Mehdi Shahideh and Sunjay Sharma.

It is with a sense of accomplishment that we can reflect on the past academic year. We have been enriched by new Faculty recruitment as well as by our 25 clinical fellows from around the world. We pause to remember the passing of Professor Emeritus Dr. Ross Fleming. We are on a strong course to continue leading our discipline globally in research and training. I thank each of our Faculty, fellows and residents for their tremendous dedication and contributions to the success of Toronto Neurosurgery.

SpineFEST 2014



Division of Orthopaedic Surgery

Peter Ferguson, *Albert and Temme Latner Chair*



It has been an enormous honour to serve as Interim Chair of this talented and energetic division over the past year. The following achievements and accomplishments serve to confirm that our division continues to stand among the best academic Divisions of Orthopaedics in the world.

We have recruited 3 new faculty – Dr. Tim Dwyer at Women’s College and Mount Sinai Hospitals, Dr. Aaron Nauth at St. Michael’s Hospital and Dr. Jihad Abouali at Toronto East General Hospital.

Dr. Albert Yee was promoted to full professor and Dr. Veronica Wadey was promoted to Associate Professor.

Amongst various grants received, both Dr. Sevan Hopyan (“Genetic control of mammalian limb pattern”) and Dr. Tom Willett (“Engineering of irradiation-sterilized skeletal allograft for improved clinical outcomes”) received operating grants by the CIHR.

The Lawson award for best academic resident went to Simon Harris, and the Meisami award for most compassionate resident went to Laura Kember and Simon Harris. Junior Lawson Awards went to Matthew Tsuji (PGY 4), Alireza Naderipour (PGY 3) Ujash Sheth (PGY 2) and Zachary Tan (PGY 1). The R.I. Harris Award for the best resident research presentation at the Graduation Day went to Kevin Koo and the award for the best debate went to Justin Hodgins. The James Waddell award for the best PGY 4 resident was awarded to Bheeshma Ravi. Bheeshma also won the Robin Sullivan Award for best presentation at Resident Research Day. At the Canadian Orthopaedic Residents Association meeting, Mike Zywiell PGY-3 was awarded the JA Nutter award for the best research project. This award, which is open to all orthopaedic residents across Canada, has been won by residents from the University of Toronto 5 times since 2007. Furthermore, Sam Park PGY3 won the COA Award for 3rd place at the meeting. Aidin Kashigar (UofT medical student) received the CanOOS award for best trainee oncology presentation at the Canadian Orthopaedic Association. This award has been won by UofT trainees the past 2 years. Michael Olsen PGY-1 was awarded the Sopman Humanitarian award at TWH/UHN. At our recent 5th Annual Fellowship Day, Brian Devitt, Ryan Martin and Cara Cipriano were awarded prizes for the best fellow research projects.

Jeremy Hall received the Divisional Award for Best Teacher as selected by the residents. Oleg Safir was awarded the Excellence in Post Graduate Medical Education Award – Development and Innovation from the University of Toronto. This award, which is open to all faculty members in the Faculty of Medicine, has been won by members of the Orthopaedic Division 5 years in a row! Rajiv Gandhi has been named an ABC travelling fellow for 2015.

Visiting professors in 2013/14 included Perry Schoenecker (St. Louis), Steven Mac Donald (London, ON), David Stanley (Sheffield, England), Michael Reed (Ashington, England) and Andrew Furey (St. Johns, Newfoundland). We had the third Stefansky lecture for teaching better communication to orthopaedists. Mohit Bhandari (Hamilton) was our lecturer. Our Graduation Day Visiting Professor was Robert Grimer from Birmingham UK. He gave a fabulous and very insightful “The past, present and future of Orthopaedic Oncology” talk as his Salter lecture.

Special recognition goes to Dr. Bob Bell for being named the Deputy Minister of Health for the Province of Ontario.

All of our trainees were successful on their recent specialty exams. We welcome Ilyas Aleem, Herman Dhotar, Simon Harris, Justin Hodgins, Laura Kember, Kevin Koo, Clifford Lin, Brent Mollon, Hadi Sayedi, Steven Sylvester, David Walmsley and Cameron Yau as newest Fellows of the Royal College.

I’m sure there are myriad other awards and accolades that I could mention, these are but a few. Thanks to everyone for your tremendous support of our division and program over the past year. I’m incredibly excited about our collective future!

Division of Plastic and Reconstructive Surgery

Christopher R. Forrest, MD, MSc, FRCSC, FACS *Chair*



The division has expanded tremendously and has grown into a consolidated group of 49 surgeons, 3 senior scientists, 26 residents and 25 fellows working at 12 units in 10 teaching hospitals in the greater Toronto area all under the University of Toronto academic mission. Our division has expertise in the entire breadth and depth of Plastic and Reconstructive Surgery in the arenas of pediatric surgery, cleft, craniofacial, burns, microsurgery, hand, facial reanimation, upper extremity, breast, aesthetic and oncologic surgery providing state of the art in patient care. Our program and its members are recognized across the globe and we attract a large number of medical observers who travel to visit and see firsthand the innovative techniques developed here. We train the largest number of residents and fellows in the country including tomorrow's generation of surgeon-scientists.

Departures:

W. R. N. Lindsay, MD, FRCSC (1926 - 2013). The Division of Plastic and Reconstructive Surgery at the University of Toronto was saddened to hear of the passing of Dr. William R. N. Lindsay on November 3, 2013 at the age of 87. "WRN" graduated from the University of Alberta in 1949 and pursued his post-graduate training in Toronto and the UK. Dr. Lindsay became the first chief of the Division of Plastic Surgery at the Wellesley Hospital in 1966 at the corner of Wellesley and Sherbourne for many years and was one of the first to develop the Rosedale Medical Clinic, a free-standing surgi-centre. With Dr. Leith Douglas, the Wellesley rotation was one of the best opportunities for surgical residents to access great pathology and fascinating cases. He was also one of the pioneers in trans-gender surgery and had a busy aesthetic practice. He was one of the founding members of MANUS Canada and under his direction developed the Wellesley Hospital Aesthetic Surgery Symposium. This event continues as the UoT Annual Aesthetic Plastic Surgery Symposium which held its 43rd event earlier this year. A lecture is named in honor of Dr. Lindsay and delivered yearly. Dr. Lindsay joined the Canadian Society of Plastic Surgery in 1958 and was the society president at the - Victoria meeting in 1972. Although he retired several years ago, he continued to support the Division of Plastic and Reconstructive Surgery and attended the 2011 residents graduation dinner. His efforts along with Leith Douglas and Ross Tilley led to the development of a regional burn centre at the Wellesley Hospital.

Joel Fish - I am indebted to the tireless efforts of Dr. Joel Fish who has done a phenomenal job over the past 8 years as the Division Research Director. Joel's efforts have transformed the annual resident research day to a world-class event which highlights the high quality of research

performed by the residents of the division. His personal interest in ensuring the success of each of the residents in their projects is a touch of class. Thank-you to Joel for elevating the bar to a new standard.

Peter Bray - For the last few years, the Division M&M rounds have rested in the very capable hands of Dr. Peter Bray (UHN) and I would like to take this moment to thank him for his efforts and dedication. These rounds are an integral component to both education and also Quality Improvement as well as a significant opportunity for the senior residents to practice their positions on the "hot seat".

Recruitment:

Karen Wong was recruited as an Assistant Professor as well as Quality Improvement Coordinator in the Division of Plastic and Reconstructive Surgery, University of Toronto and began her staff appointment at the Hospital for Sick Children on August 19, 2013. Commencing July 1, 2014, Karen will be taking over coordinating the Division City-Wide M&M Rounds.

Greg Borschel was appointed as the new Research Director of the Division of Plastic and Reconstructive Surgery, University of Toronto on June 30, 2014. Greg is well suited to manage this division portfolio given his record of success in the research world in terms of mentorship, surgeon-scientist trainees, peer-reviewed grants and innovations in the research world.

Promotions

Manuel Gomez (Sunnybrook Health Sciences Centre) was promoted to **Associate Professor**

Toni Zhong (UHN) was promoted to **Associate Professor**

Faculty and Resident Grants

Greg Borschel: Use of a tissue engineered nerve graft to improve nerve regeneration. Comprehensive Research Experience for Medical Students (CREMS). Summer Program 2014. Collaborator(s): **Tessa Gordon**, David Scholl (U of T medical student) \$2,750 CAD.

Greg Borschel, Joseph Catapano: Evaluation of the novel aminopropyl carbazole in nerve regeneration. RestraComp. Postdoctoral fellowship funding program. *P7C3 and its analogs will be tested in neonatal and adult models of peripheral nerve injury to determine efficacy and dose response relationships.* July 2013-June 2015 (\$80,000 CAD)

Greg Borschel, Tessa Gordon, Molly Shoichet:

Enhancement of nerve regeneration with controlled release of neurotrophic factors. Canadian Institutes of Health Research / CIHR. operating grant, CIHR/NSERC Collaborative Health Research. *The goal of the project is to enhance nerve regeneration by local controlled release of glial derived neurotrophic factor (GDNF) to rescue neurons from degenerating after injury.* April 2013- April 2016 (\$536,711 CAD).

Greg Borschel, Tessa Gordon: Electrical stimulation of muscle to improve specificity of reinnervation of denervated muscle. Med-El Medical Electronics (USA). *We propose applying electrical stimulation to denervated muscle to improve their capacity to support nerve regeneration and improve their functional characteristics.* July 2013-July 2015 (\$395,410 CAD)

Greg Borschel, Ron Zuker, Elizabeth Donner, Douglas Cheyne: Sensorimotor plasticity following reconstructive surgery for facial nerve palsy. The Hospital for Sick Children. Peri-Operative Service. *We propose to use a combination of functional and structural brain imaging techniques to study sensorimotor cortical plasticity underlying motor function recovery in children undergoing dynamic facial reanimation at the Hospital for Sick Children. The hypothesis that cortical reorganization underlies these changes in sensorimotor function will be tested using magnetoencephalographic (MEG) functional mapping prior to and after surgery. We will also take advantage of a novel, unique, validated motion tracking system for monitoring facial kinematics developed at SickKids.* July 2013-June 2014 (\$11,750 CAD)

Greg Borschel, Joseph Catapano: Enhancement of nerve regeneration with aminopropyl carbazoles following nerve injury. PSI Foundation. PSI Foundation. *The applicants propose to investigate the utility of using a novel molecular tool to enhance motor and sensory neuron survival and to improve regeneration and behavioral recovery following peripheral nerve injury.* July 2013-June 2014 (\$20,000 CAD).

Joseph Catapano, Greg Borschel and Tessa Gordon: Enhancement of nerve regeneration following neonatal nerve injury. PSF (\$9,930USD 2013-2014).

Rob Cartotto: Surviving Sepsis after Burns Campaign (SSABC). “Multi-center Trials in Burns to Improve Combat Casualties”. US Army, Department of Defense / American Burn Association. US Army Department of Defense/American Burn Association. W81XWH-09-02-014. (20,000 USD 2014).

Rob Cartotto: Multicentre Transfusion Trigger Study. University of California (Davis, CA). US Army Department of Defense/American Burn Association. W81XWH08-107-60 PI: Palmieri, T. (\$1,500 USD Start Up, 1,500 USD/enrolled subject , 2014)

Rob Cartotto: Queen’s University - John F. Sparks Memorial Studentship (Summer Research). Collaborator(s): Student: Li, Zeyu. (\$5,000 CAD, 2013).

Rob Cartotto: Queen’s University - John F. Sparks Memorial Studentship (Summer Research). Collaborator(s): Student: Steve Hanna.(\$ 5,000 CAD 2013).

Christopher Forrest, A. Klassen, A. Pusic, K.W. Wong: An international study to develop a patient-reported outcome instrument for cleft lip and/or palate patients: the CLEFT-Q. CIHR Open Operating Grant 2013-2018 (\$602,389).

Manuel Gomez, Paula J. Gardner, Dafna Knittel-Keren, Jennifer Shaffer: Screening Outpatients for Psychological Distress, Access to Psychological Services, Functional Capacity and Insurance Coverage Following Traumatic Injury. Practice-Based Research Award, Sunnybrook Health Sciences Centre, \$6,000 (Dec 2013-Nov 2015)

Christine Novak, Steve McCabe and Jamil Ahmad: Botulinum Toxin Type A for cold sensitivity after hand trauma. PSF/AAHS Combined Pilot Research Grant (\$9,980USD 2013-2014).

Cho Pang: Miscellaneous Funding ; \$ 105,000; July 1,2013-December 30, 2014.

Jennica Platt, Toni Zhong, Stefan Hofer and Tulin Cil : Nipple Delay Prior to Nipple Sparing Mastectomy: A Pilot RCT Program. PSF (\$10,000USD 2013-2014).

John Semple, Katie Armstrong, Sacha Bhatia and Peter Coyte: Replacing ambulatory clinic follow-up with remote home monitoring using smartphones in breast reconstruction patients: Is it cost-effective? E-Health Innovation Catalyst Grant. (\$39,903 2013-2014).

Laura Snell: Awarded the 2014 CSPS Outcomes Grant for her study “A novel touch-based educational module for intraoperative training in plastic surgery”.

Toni Zhong: Healthcare Utilization during the Survivorship Period: A Population-Based Study of Mastectomy and Breast Reconstruction in Ontario. Canadian Breast Cancer Foundation (CBCF). Fellowship Grant. PI: Roberts, Amanda. Collaborator(s): Baxter, Nancy. July 2013 – June 2015 (\$143,000 CAD)

Residents Honours/Awards/Positions Held

Katie Armstrong: Received the 2014 American Telemedicine Association Student Paper Award for her paper “Breast Reconstruction Follow-up Using QoC Mobile App: A Societal Economic Evaluation” with co-authors John Semple and Peter Coyte.

Katie Armstrong: Mentor Canada, Johnson and Johnson Medical Companies Prize for Best Clinical Paper Award, 2014. Title: “*Replacing Ambulatory Surgical Follow-up Visits with Smartphone Home Monitoring: Modeling Cost-Effective Scenarios*”. Authors: K. Armstrong, P. Coyte, and JL Semple. Supervisor: Dr. John Semple

Ryan Austin: Best in Category Poster Presentation (Wounds).Can you save both money and time? A comparison of a biosynthetic dressing and cadaveric allograft in acute burn management. 46th Annual Meeting – American Burn Association (Boston, MA, USA) 2014.

Heather Baltzer: Educational Foundation Award for the best Epidemiology & Biostatistics Presentation by a resident for her paper entitled “A mixed-methods assessment of direct and indirect patient costs following hand trauma” with co-authors M. Roy, C. Novak, S. McCabe, P. Binhammer and H. von Schroeder. 2014

Heather Baltzer: 2014 GAM Canada Scholarship Award.

Joseph Catapano: Awarded first prize at the Hospital for Sick Children 2014 Peri-Operative Research Symposium in the Basic Science category for his work entitled “Enhancement of nerve regeneration following neonatal nerve injury.”

Siba Haykal: 2014 Hugh G. Thomson Humanitarian Award was presented to Dr. Siba Haykal. Dr. Hugh G. Thomson, MD, MSc, FRCSC (1930 – 2012) was Professor Emeritus in the Division of Plastic and Reconstructive Surgery, University of Toronto and staff surgeon at the Hospital for Sick Children for 43 years (1960 – 2003). During his tenure, he mentored and influenced hundreds of students, residents and fellows and was integral in shaping the Canadian Society of Plastic Surgeons with the introduction of the “Resident’s Corner” and “Beyond the Knife”. Above all, Dr. T was known for his values of collegiality, honesty, generosity, mentorship and humanitarianism. To commemorate his legacy, the Thomson family and the Division of Plastic and Reconstructive Surgery at the Hospital for Sick Children have established an award in his name to be given to the trainee in Plastic and Reconstructive Surgery who best emulates his philosophies as a humanitarian. It was a pleasure to commemorate his philosophies by recognizing Siba as this year’s recipient.

Mike Hendry: Surgeon Scientist Trainee Dr. J. Michael Hendry successfully defended his MSc thesis “The ERBB2 receptor pathway regulates regeneration following the acute and chronic repair of nerve injuries” under the supervision of Dr. Greg Borschel with senior scientist, Dr. Tessa Gordon as co-supervisor. This work was performed over the past 2 years in Dr. Borschel’s lab at the Hospital for Sick Children and represents innovative and unique insights into the pathophysiology of peripheral nerve injury.

Mike Hendry: Best Basic Science Award, *Division of Plastic and Reconstructive Surgery, University of Toronto 2014*. Title: “*The Monoclonal Antibody Nerceptin Improves Regeneration After Injured Nerves are Repaired Immediately or After a Period of Chronic Denervation*”

Authors: JM Hendry, E Placheta, T Gordon and G. Borschel. Supervisors: Dr. Greg Borschel.

Mike Hendry: Successful defense of MSc thesis “The ERBB2 receptor pathway regulates regeneration following the acute and chronic repair of nerve injuries” under the supervision of Dr. Greg Borschel with senior scientist, Dr. Tessa Gordon as co-supervisor through IMS.

Jennica Platt: Awarded 2nd Prize in the Gallie-Bateman - University of Toronto Department of Surgery research award for research by a trainee enrolled in the

Surgical Scientist Training Program – “Pre-consultation educational group intervention to improve shared decision-making for post-mastectomy breast reconstruction: A pilot randomized controlled trial” (Supervisor: Dr. Toni Zhong, UHN - \$1,000).

Jennica Platt: Best Clinical Paper Award, *Division of Plastic and Reconstructive Surgery, University of Toronto 2014* Title: “Preconsultation Educational Group Intervention to Improve Shared Decision-Making for Postmastectomy Breast Reconstruction: A Pilot Randomized Controlled Trial” Authors: Platt J, Causarano N, Baxter N, Bagher S, Jones J, Metcalfe K, Hofer S, O’Neill A, Cheng T, Starenkyj E, Zhong T. Supervisor: Dr. Toni Zhong

Jennica Platt: 2013 Canadian Society of Plastic Surgery Educational Foundation Award for Best Presentation by a Resident in Epidemiology and Biostatistics (\$500)

Natalia Ziolkowski: Conference Poster acceptances include:

1. Evidence Based Plastic Surgery: Randomized Controlled Trials Comparing Surgical Interventions, A Systematic Review. Voineskos S, Corneos CJ, Ziolkowski N, Kaur M, Banfield L, Busse J, Meade M, Thoma A, Bhandari M. AAPS 93rd Annual Meeting, Miami Beach, Florida, USA, April 5-8, 2014
2. Complications with forearm pediatric compartment syndrome Ziolkowski N, Zive L, Ho E, Zuker R. CSPS, 68th annual conference. Montreal, Canada. June 25-28, 2014

Faculty Honours/Awards/Positions Held

Jamil Ahmad: Invited Speaker: June 2014 The National Hospital in Oslo, Norway

1. Clinical analysis and nasofacial proportions
2. Key concepts in open rhinoplasty
3. Safe management of the nasal airway

Jamil Ahmad: April 2014 The American Society for Aesthetic Plastic Surgery

1. Panel Co-Moderator, Shaped vs. round - Can you tell the difference?
2. Scientific Session Co-Chair, Rhinoplasty

Jamil Ahmad: April 2014 The University of Toronto Aesthetic Plastic Surgery Symposium

1. Course Director
2. Incorporating drainless abdominoplasty into your practice

Jamil Ahmad: March 2014 The Dallas Rhinoplasty Symposium

1. Anatomy Lab Co-Director
2. Reassessing the nasal-chin relationship
3. Safe management of the nasal airway
4. Role of fillers in rhinoplasty today
5. Panelist, Clinical analysis: How I do it
6. Panelist, Three cases in my practice from which I learnt the most

Jamil Ahmad: March 2014 The Dallas Cosmetic Symposium

1. Drainless abdominoplasty: Making it work in your practice

Jamil Ahmad: September 2013 Canadian Society for Aesthetic Plastic Surgery

1. Assessing patient safety in Canadian surgical facilities: Results from the 2010 CAAASF survey

Dimitri Anastakis: *University of Toronto:* Member, Governing Council Academic Board, Toronto, Ontario, Canada. Member, Faculty of Medicine, Academic Board. Member, Faculty of Medicine Design Thinking Working Group, Toronto, Ontario, Canada.

Dimitri Anastakis: Facilitator. Surgery Education Retreat and Strategic Planning, State University of New York at Stony Brook, School of Medicine. Stony Brook, New York, United States. Presenter(s): Anastakis DJ and Scriven R. Facilitate education planning session. Faculty divided into 5 working groups and each addressed the following education strategic priority (1) Innovating the curriculum (2) Teaching Excellence; (3) Educational Technology; (4) Structure and Governance and (5) Scholarly training. Mar 11, 2014.

Dimitri Anastakis: Course Instructor. Week-Long Case. American College of Surgeons, Surgeons as Educators. Atlanta, Georgia, United States. Presenter(s): Anastakis DJ Sept 10, 2013.

Dimitri Anastakis: Course Instructor. Leadership Competencies, American College of Surgeons, Surgeons as Educators. Atlanta, Georgia, United States. Presenter(s): Anastakis DJ. Overview of leadership competencies required in health professions education. Sept 10, 2013.

Dimitri Anastakis: Course Instructor. Personal and Career Goal Development, American College of Surgeons, Surgeons as Educators. Atlanta, Georgia, United States. Presenter(s): Anastakis DJ. The four D model for career development. Sept 10 2013.

Dimitri Anastakis: Facilitator. Microteaching, American College of Surgeons, Surgeons as Educators. Atlanta, Georgia, United States. Presenter(s): Anastakis DJ, Sept 10 2013

Dimitri Anastakis: Facilitator. Due Process and the Failing Student, American College of Surgeons, Surgeons as Educators. Atlanta, Georgia, United States. Presenter(s): Anastakis DJ, Richards K. Sept 10 2013.

Dimitri Anastakis: Speaker. Continuing Professional Development - The Importance of having Influence and Power, AAME. Prague, Czech Republic. Presenter(s): Anastakis DJ. Outline of past and present levels of influence and power held by CPD both at the Faculty of Medicine/UofT and provincial levels. Aug 24, 2013.

Dimitri Anastakis: Invited Speaker. Academic Business Planning for Continuing Professional Development, Council of Ontario Faculties of Medicine. Toronto, Ontario, Canada. Presenter(s): Anastakis DJ. Overview of elements of an academic business plan. Dec. 20, 2013.

Dimitri Anastakis: Invited Speaker. SIM-one Ontario's Simulation Network - Positioning Ontario as a global leader in health professions simulation, South Western Academic Health Network - Simulation Consortium. London, Ontario, Canada. Presenter(s): Anastakis DJ Sept 21, 2013.

Dimitri Anastakis: Invited Speaker. Understanding Influence and Power, Association for Future Fundraising Leaders (AFFL). Toronto, Ontario, Canada. Presenter(s): Anastakis DJ. Oct 15, 2013.

Dimitri Anastakis: Invited Speaker. An Overview of Current Thinking in CPD, Continuing Education Leadership Program, CEPD, University of Toronto. Toronto, Ontario, Canada. Presenter(s): Anastakis DJ, Silver I, Sept 30, 2013.

Oleh Antonyshyn: Other Creative Professional Activity: Medical Mission to Ukraine: Urgent Medical Needs Assessment, Invited by the Ministry of Health, Ukraine. Supported by the Canadian Ukrainian Foundation. Kyiv and Lviv, Ukraine, April 3-11, 2014

Oleh Antonyshyn: Member of Canadian Ukrainian Foundation (CUF) Medical Response Committee. Executive Committee Member, Appointed April 2014

Oleh Antonyshyn: Invited Speaker: Launching a Medical Device Startup Company. Professor's Rounds, Division of Plastic Surgery, University of Toronto, June 13, 2014

Oleh Antonyshyn: CUF Medical Needs Mission to the Ukraine. Resident Rounds, Division of Plastic Surgery, University of Toronto, June 13, 2014

Oleh Antonyshyn: Current Management of Facial Trauma. Keynote Address: Orthopedic Acute Care and Beyond Conference, Sunnybrook Health Sciences Centre, Toronto, June 19, 2014

Oleh Antonyshyn: Complications of Mandibular Fractures and Their Treatment. AO CMF Principles of Operative Treatment of Craniomaxillofacial Trauma and Reconstruction, Montreal, Canada, June 24, 2014

Oleh Antonyshyn: Surgical Approaches to the Orbital Floor/Rim. Invited Lecture. AO CMF. Craniomaxillofacial Surgery: Orbital Approaches and Fundamentals. AO CMF Faculty, Las Vegas, Nevada, April 25th, 2014

Oleh Antonyshyn: Problems in Secondary Orbital Reconstruction. Invited Lecture. AO CMF. Craniomaxillofacial Surgery: Orbital Approaches and Fundamentals. AO CMF Faculty, Las Vegas, Nevada, April 26th, 2014

Oleh Antonyshyn: Adult Craniofacial and Post trauma deformities. Invited lecture, Faculty of Dentistry, University of Toronto, Postgraduate Cleft Lip and Palate and Craniofacial Anomalies Course, Jan 27, 2014

Oleh Antonyshyn: Transparotid approach for exposure of the condylar neck and vertical ramus of the mandible. Antonyshyn O, Higgins K, Enepekides D. Canadian Society of Plastic Surgeons 68th Annual Meeting, Montreal, Quebec, June 26, 2014

Oleh Antonyshyn: Course Chairman: AO CMF Principles of Operative Treatment of Craniomaxillofacial Trauma and Reconstruction, Montreal, Canada, June 24, 2014

Oleh Antonyshyn: Titanium Cranioplasty. O. Antonyshyn, J Mainprize, Edwards G. Northwest Society of Plastic Surgery Meeting, Sun Peaks, BC, Feb 18, 2014

Paul Binhammer: Awarded Arnis Freiberg Faculty Teaching Excellence Award 2014.

Greg Borschel: Awarded the George Armstrong Peters Prize for 2014. This is awarded to a young investigator who has shown outstanding productivity during his/her initial period as an independent investigator as evidenced by research publications in peer reviewed journals, grants held, and students trained and represents the highest level of recognition that can be bestowed by the Department of Surgery on a young surgeon.

Greg Borschel: Presenter. Brachial Plexus Anatomy 101: A guided tour (book and surgical) Neonatal Brachial Plexus Palsy. Detroit, Michigan, US. May 13, 2014.

Greg Borschel: Invited Speaker. Facial Paralysis in Children. Mexican Association of Plastic Reconstructive and Aesthetic Surgery. Mexico City, Mexico. May 13, 2014. Brachial Plexus Anatomy 101: A guided tour (book and surgical) Neonatal Brachial Plexus Palsy. Detroit, Michigan, US. May 13, 2014.

Greg Borschel: Invited Speaker. Facial Paralysis in Children. Mexican Association of Plastic Reconstructive and Aesthetic Surgery. Mexico City, Mexico. May 13, 2014. Brachial Plexus Anatomy 101: A guided tour (book and surgical) Neonatal Brachial Plexus Palsy. Detroit, Michigan, US. April 30, 2014.

Greg Borschel: Invited Speaker. Regenerative Medicine Approaches to Nerve Regeneration. Mexican Association of Plastic Reconstructive and Aesthetic Surgery. Mexico City, Mexico. May 13, 2014. Brachial Plexus Anatomy 101: A guided tour (book and surgical) Neonatal Brachial Plexus Palsy. Detroit, Michigan, US. April 30, 2014.

Greg Borschel: Invited Speaker. Restoration of Corneal Sensation with Regional Nerve Transfers and Nerve Grafts: A New Effective, Minimally Invasive Approach to a Difficult Problem. American Association of Plastic Surgeons, Miami, Florida, US. April 8, 2014.

Greg Borschel: Invited Speaker. The Great Debate: Be it resolved: There are too many free flaps being done. American Association of Plastic Surgeons, Miami, Florida, US. April 7, 2014.

Greg Borschel: Co-Moderator. Scientific Session. American Society for Peripheral Nerve. Kauai, Hawaii, United States. (Trainee Presentation). Jan. 12, 2014.

Greg Borschel: Invited Speaker. End to Side Nerve Repair. American Society for Peripheral Nerve. Kauai, Hawaii, United States. Presenter(s): **Borschel, Gregory H;** Fausto Viterbo; Ayato Hayashi. This course will present the scientific basis for the clinical use of end to side nerve repairs. The faculty will present clinical cases in which this technique is used, and discuss the risks, benefits,

potential complications and outcomes following the use of the technique. (Trainee Presentation). Jan. 12, 2014.

Greg Borschel: Presenter. End to Side Nerve Repair. American Society for Peripheral Nerve. Kauai, Hawaii, United States. Presenter(s): **Borschel, Gregory H;** This course will present the scientific basis for the clinical use of end to side nerve repairs. The faculty will present clinical cases in which this technique is used, and discuss the risks, benefits, potential complications and outcomes following the use of the technique. (Trainee Presentation). Jan. 12, 2014.

Greg Borschel: Invited Instructor. Pediatric Microsurgery: Fresh faces, new cases. American Society for Peripheral Nerve. Kauai, Hawaii, United States. Presenter(s): Taghinia, Amir; Tse, Raymon; **Borschel, Gregory H.;** Wu, Liza, Chair. (Trainee Presentation). Jan. 11, 2014.

Greg Borschel: Invited Lecturer. Facial Paralysis in Children, A Novel Compound to Enhance Nerve Regeneration. The Fourth Annual Congress of Hand and Reconstructive Microsurgical Unit of Orthopaedic Department, in Collaboration with Egyptian Society for Surgery of the Hand and Microsurgery. Hurghada, Egypt. Presenter(s): **Borschel, Gregory H.** Nov 22, 2013.

Greg Borschel: Invited Lecturer. A Novel Compound to Enhance Nerve Regeneration. The Fourth Annual Congress of Hand and Reconstructive Microsurgical Unit of Orthopaedic Department, in Collaboration with Egyptian Society for Surgery of the Hand and Microsurgery. Hurghada, Egypt. Nov. 22, 2013.

Greg Borschel Speaker. P7C3 enhances neuron survival and functional recovery in a model of obstetrical brachial plexus palsy. Sunderland Society. Leiden, South Holland, Netherlands. Sept 15, 2013.

Greg Borschel Speaker. Functional MRI assessment of cerebral cortical plasticity in children with congenital facial palsy who have undergone dynamic facial reanimation by gracilis muscle transfer. International Facial Nerve Symposium. Boston, Massachusetts, United States. Presenter(s): Swan, Marc C; Simon, T; Donner, Elizabeth; Wang, Frank; **Borschel, Gregory H;** Zuker, Ronald M. 2013 Jun 29

Greg Borschel Moderator. Neuroorrhaphy and Nerve Regeneration. International Facial Nerve Symposium. Boston, Massachusetts, United States. Presenter(s): **Borschel, Gregory H.** 2013 Jun 29

Greg Borschel Moderate presentation of Abstracts. 1) Botulinum toxin for reestablishment of symmetry in pediatric lower lip paralysis /2) Long-term outcome in peripheral nerve palsy in children /3)- Facial reanimation in pediatric patients /4) Developmental facial paralysis - Stigmata and outcomes. International Facial Nerve Symposium. Boston, Massachusetts, United States. Presenter(s): **Borschel, Gregory H.** 2013 Jun 29

Greg Borschel Speaker. Update on management of facial palsy in children. International Facial Nerve Symposium. Boston, Massachusetts, United States. Presenter(s): **Borschel, Gregory H.** 2013 Jun 29

Greg Borschel Invited Speaker. Nerve substitutes; state of the art / Vascularized composite allotransplantation; a specialty in evolution. Dr. Fausto Viterbo / UNESP, Sao Paulo State University. Botucatu, São Paulo, Brazil. Presenter(s): **Borschel, Gregory H.** 2013 Jun 14

Greg Borschel Invited Speaker. Congenital hand surgery - Syndactyly. Dr. Fausto Viterbo / UNESP, Sao Paulo State University. Botucatu, São Paulo, Brazil. Presenter(s): **Borschel, Gregory H.** 2013 Jun 14

Greg Borschel Invited Speaker. Pediatric hand trauma. Dr. Fausto Viterbo / UNESP, Sao Paulo State University. Botucatu, São Paulo, Brazil. Presenter(s): **Borschel, Gregory H.** 2013 Jun 14

Greg Borschel Invited Speaker. Pediatric sarcoma reconstruction. Dr. Fausto Viterbo / UNESP, Sao Paulo State University. Botucatu, São Paulo, Brazil. Presenter(s): **Borschel, Gregory H.** 2013 Jun 14

Greg Borschel Invited Speaker. Use of the ten test in children. Dr. Fausto Viterbo / UNESP, Sao Paulo State University. Botucatu, São Paulo, Brazil. Presenter(s): **Borschel, Gregory H.** 2013 Jun 14

Greg Borschel Invited Speaker. Reconstruction of the anophthalmic orbit. Dr. Fausto Viterbo / UNESP, Sao Paulo State University. Botucatu, São Paulo, Brazil. Presenter(s): **Borschel, Gregory H.** 2013 Jun 14

Greg Borschel Invited Speaker. Facial palsy in children in an oncologic setting. Dr. Fausto Viterbo / UNESP, Sao Paulo State University. Botucatu, São Paulo, Brazil. Presenter(s): **Borschel, Gregory H.** 2013 Jun 13

Greg Borschel Invited Speaker. Nerve injury in children / Obstetrical brachial plexus palsy. Dr. Fausto Viterbo / UNESP, Sao Paulo State University. Botucatu, São Paulo, Brazil. Presenter(s): **Borschel, Gregory H.** 2013 Jun 13

Greg Borschel Invited Speaker. Neuroprotection with P7C3 to rescue neurons from death / Enhancement of nerve regeneration with controlled delivery of neurotrophins / protection of distal nerve stumps with end to side nerve grafts to improve nerve regeneration in the hindlimb and the face. Dr. Fausto Viterbo / UNESP, Sao Paulo State University. Botucatu, São Paulo, Brazil. Presenter(s): **Borschel, Gregory H.** 2013 Jun 12

Greg Borschel Invited Speaker. Outcomes measure in nerve regeneration research / Development of a transgenic rat expressing green fluorescent protein in its nerves and neurons. Dr. Fausto Viterbo / UNESP, Sao Paulo State University. Botucatu, São Paulo, Brazil. Presenter(s): **Borschel, Gregory H.** 2013 Jun 11

Greg Borschel Invited Speaker. Simultaneous adjacent web syndactyly release: safety and early results. Pediatric Hand Study Group Meeting. Sacramento, California, United States. Presenter(s): **Borschel, Gregory H.** 2013 Feb 9

Greg Borschel Presenter. Tissue Engineering and Regenerative Medicine. American Society for Peripheral Nerve (ASPN). Naples, Florida, United States. Presenter(s): **Borschel, Gregory H;** Midha, Rajiv. This course will discuss new ideas of bioengineering for the construction

of improved artificial nerve conduits by the use of skin-derived precursor cells, adult autologous Schwann cells and cytokine/drug delivery. 2013 Jan 13

Mitch Brown: Induction into the membership of the American Association of Plastic Surgeons 2014. Criteria for membership in this prominent society are robust and the candidate must show recognized contributions of quality in the field of plastic surgery as a pre-requisite to membership. They will be expected to have made outstanding contributions to the field of plastic surgery in the areas of education, research or clinical excellence.

Mitch Brown: Invited Speaker: American Society of Plastic Surgeons Annual Meeting, San Diego, California, October 12, 2013. Panel Moderator - Inframammary fold in breast augmentation.

Mitch Brown: Invited Speaker: American Society of Plastic Surgeons Annual Meeting, San Diego, California, October 13, 2013. Identifying the beautiful breast: The golden ratio.

Mitch Brown: Invited Speaker: American Society of Plastic Surgeons Annual Meeting, San Diego, California, October 13, 2013. Panel moderator - Breast Augmentation - Master's panel.

Mitch Brown: Invited Speaker: Seventh European Conference on Reconstructive Surgery of the Breast., Milan, Italy, December 6, 2013. Breast Reconstruction Awareness Day.

Mitch Brown: Invited Speaker: Seventh European Conference on Reconstructive Surgery of the Breast., Milan, Italy, December 7, 2013. Augmenting the opposite breast in breast reconstruction.

Mitch Brown: Invited Speaker: Seventh European Conference on Reconstructive Surgery of the Breast., Milan, Italy, December 7, 2013. Options in nipple areola reconstruction.

Mitch Brown: Invited Speaker: Seventh European Conference on Reconstructive Surgery of the Breast., Milan, Italy, December 7, 2013. Use of shaped implants in breast reconstruction.

Mitch Brown: Invited Speaker: Aesthetic Symposium at the American Association of Plastic Surgeons 93rd Annual Meeting, Miami, FL, April 5, 2014. Keynote address: Shaping the breast with shaped implants.

Mitch Brown: Invited Speaker: American Society of Aesthetic Plastic Surgeons Meeting, San Francisco, CA, April 27, 2014. Instructional Course: Direct to implant breast reconstruction.

Mitch Brown: Invited Speaker: Rome Breast Surgery Symposium, Rome, Italy, June 4, 2014. ADM + implant based reconstruction.

Mitch Brown: Invited Speaker: Rome Breast Surgery Symposium, Rome, Italy, June 4, 2014. ADM and implant reconstruction with RT.

Mitch Brown: Invited Speaker: Rome Breast Surgery Symposium, Rome, Italy, June 5, 2014. Debate - Breast augmentation: The accesses: Periareolar fold vs axilla.

Rob Cartotto: Invited Speaker: Canadian Society of Plastic Surgeons Annual Meeting, Montreal, June 28 2014: “*Canadian Expert Series: Burn Care in Canada*”

Rob Cartotto: Invited Speaker: American Burn Association Annual Meeting. Boston, Massachusetts, United States. March 20, 2014: “*Wound and Scar Complications*”.

Rob Cartotto: Invited Speaker: American Burn Association Annual Meeting. Boston, Massachusetts, United States. Mar 23, 2014 : “*Albumin is required for burn resuscitation*”

American Burn Association Annual Meeting. Palm Springs, California, United States. Apr 26, 2013: “*From Grant to Bedside - Getting Started with Burn Research*”

Rob Cartotto: Invited Speaker: American Burn Association Annual Meeting. Palm Springs, California, United States. Apr 24, 2013: “*Toxic Epidermal Necrolysis - Diagnosis, classification, and SCORTEN*”.

Howard Clarke: Invited Speaker: Toronto Obstetrical Brachial Plexus Palsy Workshop. Intervention / Activities: Toronto Obstetrical Brachial Plexus Palsy Workshop, Toronto, Ontario, May 9-10, 2014. Course Director, initiated concept, organized scientific meeting, chaired sessions for this international workshop which drew equal numbers of registrants from Canada, the United States and Europe. 2014 May 9 - 2014 May 10

Howard Clarke: Invited Speaker: Anatomic sites of origin of the suprascapular and lateral pectoral nerves within the brachial plexus, American Society for Peripheral Nerve. Kauai, Hawaii, United States. Presenter(s): Clarke HM, Arad E, Li Z, Sitzman T, Agur AMR Jan 12, 2014.

Howard Clarke: Invited Speaker: Extending the indications for primary nerve surgery in obstetrical brachial plexus palsy, The Tenth Annual Lindsay-Thomson Symposium in Pediatric Plastic Surgery. Toronto, Ontario, Canada. June 3, 2014.

Howard Clarke: Invited Speaker: Outcomes after neonatal brachial plexus palsy, Neonatal Brachial Plexus Palsy: Moving the Science Forward, Wayne State University. Detroit, Michigan, United States. May 14, 2014.

Howard Clarke: Invited Speaker: Hand injuries in children: If it’s broken, fix it! Annual Paediatric Update Conference, Department of Paediatrics, Hospital for Sick Children. Toronto, Ontario, Canada, Total Hours: 1.5. May 2, 2014.

Howard Clarke: Invited Speaker: Hand Injuries in Children, University of Toronto, Faculty of Medicine, Department of Surgery, Hand and Upper Extremity Update. Toronto, Ontario, Canada. Feb 8, 2014.

Howard Clarke: Invited Speaker: Past Presidents Invited Panel, American Society for Peripheral Nerve. Kauai, Hawaii, United States. Jan. 12, 2014.

Howard Clarke: Instructional Course: Obstetrical Brachial Plexus Palsy, American Society for Peripheral Nerve. Kauai, Hawaii, United States. Presenter(s): Malessy M, Yang L, Clarke HM. Jan. 12, 2014.

Howard Clarke: Pediatric Brachial Plexus: Managing the Shoulder, American Association for Hand Surgery. Kauai, Hawaii, United States. Presenter(s): Kozin SH, Duff SV, de Pawlikowski W, Elhassan B, Clarke HM. Jan. 9, 2014.

Howard Clarke: Member: American Society of Plastic Surgeons, Board of Directors, ASPN Representative. 2013 – present. Canadian Society of Plastic Surgeons, Vice-President, 2014-Present. University of Toronto, Co-Chair, Promotions Committee, Department of Surgery. 2013-Present.

Joel Fish: Received the Chair’s Award for 2014. Many thanks to Joel for all of his dedication over the years.

Joel Fish: Received Fire Safety Award from the Fire Marshal’s Public Fire Safety Council at a ceremony on June 19, 2014 in Toronto. The annual Fire Safety Awards recognize outstanding contributions to fire protection and prevention in Ontario. “There is no question that the professional and enthusiastic support of the SickKids Burn Prevention Outreach Team has helped to increase public awareness about the risk of burns and scalds,” said Ted Wieclawek, Chair, Fire Marshal’s Public Fire Safety Council. “The result of their efforts is a safer environment at home, work and play for people of all ages.” The SickKids Burn Prevention Outreach Team’s ongoing commitment to fire safety includes public awareness campaigns with literature, posters, flyers and website postings.

Joel Fish Launch of Laser Program - Foundation Event. Official launch of the Sick Kids Laser Program for Burns. Introduction, tour of laser room, operation of equipment, talk, thank-you lunch for donors to the program. April 23, 2014

Joel Fish Hawaii Pediatric Burn Program Collaborative. Visits from various personnell from the Hawaii Pediatric Burn Program to aide in the restructuring of their program. 2013 Jul 15 - 2013 Jul 19

Joel Fish: Sick Kids Burn Program Verificaiton - American Burn Association.

The Sick Kids Burn Program underwent ABA verification. Verifiers from the American Burn Association reviewed the program in great detail on a 2 day visit. At the end of the two day visit, the Sick Kids Burn Program was recommended for verification.

Program promotion within the institution. Program recognition world-wide. 2013 Aug 14 - 2013 Aug 15

Joel Fish: Invited Speaker. Pediatric Burn Reconstruction. The European Pediatric Burn Conference (EPBC). Munich, Germany. Oct. 14, 2013.

Joel Fish: Invited Speaker. Closed Dressing Technique. The European Pediatric Burn Conference (EPBC). Munich, Germany. Oct. 14, 2013.

Joel Fish: Invited Speaker. Technique of Scar Release. The European Pediatric Burn Conference (EPBC). Munich, Germany. Oct 14, 2013.

Joel Fish: Invited Speaker. Treatment of Minor Pediatric Burns. CEPD, University of Toronto, Hospital for Sick Children. Toronto, Ontario, Canada. Presenter(s): Dr. Joel

Fish. Treatment of Minor Pediatric Burns. Oct 19, 2013.

Joel Fish: Invited Speaker. Burns in Trauma. Pediatric Trauma III 2014. Ontario, Canada. Feb. 24, 2014.

Joel Fish: Speaker. Leadership Development. Carroll University. Wisconsin, United States. Presenter(s): Dr. Joel Fish, Charis Kelly (NP), Lisa Lazarotto (OT), Jamil Lati (PT). Talk to students from Carroll University about leadership development in healthcare. March 19, 2014.

Joel Fish: Invited Speaker. Burn Management. University of Toronto - Division of Rehabilitation Medicine. Toronto, Ontario, Canada. Presenter(s): Dr. Joel Fish. Update on Paediatric Burns as it Pertains to Physiotherapy. March 5, 2014.

Joel Fish: Invited Speaker. Division of Emergency Medicine - Sick Kids. Hospital for Sick Children - Emergency. Toronto, Ontario, Canada. Presenter(s): Dr. Joel Fish. Not Another Burn Case. Feb. 7, 2014.

Joel Fish: Invited Speaker. IPE Session on Burns. U of T. Toronto, Ontario, Canada. Presenter(s): Sick Kids Burn Team. Session to students at the U of T (Multidisciplinary). Jan. 16, 2014.

Joel Fish: Invited Speaker. Division of Plastic and Reconstructive Surgery Rounds - Sick Kids. Hospital for Sick Children - Plastics. Toronto, Ontario, Canada. Presenter(s): Dr. Joel Fish. Lasers and Burns. Jan. 8, 2014.

Joel Fish: Invited Speaker. Division of Plastic and Reconstructive Surgery - Sick Kids. Hospital for Sick Children - 8C Nurses. Toronto, Ontario, Canada. Presenter(s): Dr. Joel Fish. Burn Wound Care In-service. Nov. 28, 2013.

Joel Fish: Invited Speaker. Emergency Department. Hospital for Sick Children - Plastics. Toronto, Ontario, Canada. Nov. 14, 2013.

Joel Fish: Invited Speaker. Division of Plastic and Reconstructive Surgery - Sick Kids. Hospital for Sick Children - Plastics. Toronto, Ontario, Canada. The Guinea Pig Club. Nov. 6, 2013.

Joel Fish: Presenter. Approach to Minor Burns. Pediatric Wound Care Symposium. Toronto, Ontario, Canada. Nov. 1, 2013.

Joel Fish: Presenter. Burns. Interviewer: Sick Kids. Plastic Surgery, Sick Kids Website. Toronto, Ontario, Canada. Presenter(s): Dr. Joel Fish / Charis Kelly. Several video tapings on various burn topics such as first aid, treatment of burns, wounds, skin grafts, etc. 2013.

Joel Fish: Invited Speaker. Conte Foundation Gala. Conte Foundation. Toronto, Ontario, Canada. Presenter(s): Dr. Joel Fish. Conte Foundation Annual Gala to raise funds for the development of the Sick Kids Laser Program for Burn Scars. Apr 4, 2014.

Christopher Forrest: Invited Speaker. Plagiocephaly and Helmet Therapy Re-Visited. Pediatric City Wide Rounds. Toronto, Ontario, Canada. September 17, 2013.

Christopher Forrest: Presenter. Age-based approach to sagittal synostosis: Application of extended strip

craniectomy (ESC) and total vault reshaping (TCVR) techniques. 67th Annual Meeting of the Canadian Society of Plastic Surgeons. Calgary, Alberta, Canada. June 1, 2013.

Christopher Forrest: Presenter. Use of the free anterolateral thigh flap for reconstruction of the pediatric anophthalmic orbit. 67th Annual Meeting of the Canadian Society of Plastic Surgeons. Calgary, Alberta, Canada. Presenter(s): Hynes S, **Forrest CR** and Borschel G. June 1, 2013.

Christopher Forrest: Presenter. Outcome analysis after helmet therapy using 3D photogrammetry in patients with deformational plagiocephaly: The role of root mean square. 67th Annual Meeting of the Canadian Society of Plastic Surgeons. Calgary, Alberta, June 1, 2013.

Manuel Gomez: Invited Presentation at the 1st Annual Sunnybrook Burn Symposium, Sunnybrook Health Sciences Centre, Toronto, Ontario, June 4, 2013. New Developments in Burn Rehabilitation Research.

Manuel Gomez: Invited Presentation at the Evaluative Clinical Sciences Rounds, Sunnybrook Health Sciences Centre, Toronto, Ontario, October 29, 2013. Relationships Among Personality Type, Risk Propensity, Risk Perception, and Occupational Electrical Injury.

Manuel Gomez: Invited Presentation at the Professors' Rounds, Division of Plastic and Reconstructive Surgery, Department of Surgery, University of Toronto. Toronto, Ontario, January 31, 2014. Innovations in the "Road to Recovery" Through Rehabilitation Research.

Stefan Hofer: Invited Speaker. Mastectomy with immediate reconstruction - Autogenous. 2nd International Breast Symposium. Dusseldorf, Germany. April 5 2014.

Stefan Hofer: Moderator. Live Surgery Session. Barcelona Breast Meeting. Barcelona, Spain. March 6 2014.

Stefan Hofer: Invited Speaker. 5' of surgical tricks for avoiding problems - SGAP/IGAP. Barcelona Breast Meeting. Barcelona, Spain. March 6 2014.

Stefan Hofer: Invited Speaker. Management of partial flap necrosis in autologous tissue breast reconstruction. Barcelona Breast Meeting. Barcelona, Spain. March 6 2014.

Stefan Hofer: Invited Speaker. Autologous tissue breast reconstruction with insufficient tissue: Algorithms for bipediced abdominal flaps and implant enhancement. Barcelona Breast Meeting. Barcelona, Spain. March 6 2014.

Stefan Hofer: Invited Speaker. Limiting complications in implant based breast reconstruction: What do we need to know? Barcelona Breast Meeting. Barcelona, Spain. March 6 2014.

Stefan Hofer: Chair. Extremity Sarcoma 101. How To Achieve Excellence In Diagnosis, Management, Reconstruction And Outcomes. American Society for Reconstructive Microsurgery Annual Meeting. Kauai, Hawaii. Jan 13 2014.

Stefan Hofer: Invited Lecturer. Approach to Management

of Partial Flap Loss in Autologous Breast Reconstruction. The 7th Congress of the World Society for Reconstructive Microsurgery. Chicago, Illinois, United States. July 14, 2013.

Stefan Hofer: Invited Lecturer. Optimal Management of Composite Extremity Defects Following Sarcoma Excision. The 7th Congress of the World Society for Reconstructive Microsurgery. Chicago, Illinois, United States. July 14, 2013.

Stefan Hofer: Moderator. Achieving “Normal” in Autologous Reconstruction of the Breast. The 7th Congress of the World Society for Reconstructive Microsurgery. Chicago, Illinois, United States. July 13, 2013.

Stefan Hofer: Moderator. Achieving “Normal” In A Complex Reconstruction. The 7th Congress of the World Society for Reconstructive Microsurgery. Chicago, Illinois, United States. July 12, 2013.

Marc Jeschke: Received successful Continuing Appointment Review. This process has supplanted the traditional 3-year review that all staff members undergo as part of their academic appointment. Marc was integral in securing American Burn Association certification for the Ross Tilley Burn Centre and was named Chair of Burn Research at Sunnybrook Health Science Centre in 2013.

Marc Jeschke: Distinguished Speaker. Nutrition in Burns. American Society for Parenteral and Enteral Nutrition. Georgia, United States. Feb 2014

Marc Jeschke: Invited Speaker. When prevention fails: state of the art burn care and novel developments. Interdisciplinary Trauma Conference. Toronto, Ontario, Canada. Feb 2014

Marc Jeschke: Keynote Speaker. State of the Art and New Therapies in Burn Care. Centre hospitalier de l'University de Montreal. Montreal, Quebec, Canada. Keynote lecture at the Symposium en soins intensifs aux brules. Nov 2013

Marc Jeschke: Invited Lecturer. Pulmonary management in the pediatric burn patient including inhalation injury and intoxication. Sainte-Justine Hospital. Montreal, Quebec, Canada. Nov 2013

Marc Jeschke: Invited Lecturer. Travelling through time_ lessons learned in hypermetabolism research. Department of Surgery. Toronto, Ontario, Canada. Surgical Grand Rounds- Peter Armstrong Research Award Lecture. Nov 2013

Marc Jeschke: Invited Lecturer. Anabolic agents in burns. European Burn Association. Vienna, Austria. August 2013

Marc Jeschke: Invited Lecturer. Novel technologies to improve outcomes in burn patients. European Burn Association. Vienna, Austria. August 2013

Marc Jeschke: Distinguished Speaker. Als Chirurg in USA und Kanada ein Vergleich mit Deutschland. Deutsche Gesellschaft fuer Chirurgie. Munich, Bayern, Germany. April 2013

Marc Jeschke: Distinguished Speaker. Updates in Burn Care. Deutsche Gesellschaft fuer Chirurgie. Munich, Bayern, Germany. April 2013

Marc Jeschke: Invited Speaker. Modern burn technology. 45th Annual Meeting of the American Burn Association. Palm Springs, California, United States. April 2013

Marc Jeschke: Invited Speaker. Infection prevention and gut decontamination. 45th Annual Meeting of the American Burn Association. Palm Springs, California, United States. April 2013

Marc Jeschke: Distinguished Speaker. Anabolic and anti-catabolic therapy in burn injury and critical illness. American Society for Parenteral and Enteral Nutrition. Arizona, United States. Feb 2013

Marc Jeschke: Distinguished Speaker. Nutrition and Anti-catabolic/Anabolic Therapy in burn injury. American Society for Parenteral and Enteral Nutrition. Arizona, United States. Feb 2013

Leila Kasrai: Invited speaker at the joint winter meeting of BAPRAS/Irish society last 2013: Training of residents in aesthetic surgery- The Canadian Perspective.

Ron Levine: Received the Sustained Excellence in Community-Based Teaching award from the faculty of Medicine for his efforts promoting sustained and exemplary teaching skills, a demonstrated ability to stimulate learners to think critically, analytically and independently and commitment to the enhancement of the learner experience.

Frank Lista: Invited speaker at the educational foundation of CSPS in Montreal in June 2014. Invited speaker at CATBAS, an international plastic surgery meeting in Brussels in June 2014. Moderator for panel on breast augmentation at ASAPS in San Francisco in April 2014. Invited faculty at an ISAPS course with the South African Society of Plastic Surgeons in Feb 2014. Invited speaker at the Pan Pacific plastic surgery meeting in Hawaii in January 2014.

Steve McCabe: Received the William K. Lindsay Faculty Research Mentor Award 2014.

Steve McCabe: American Association for Hand Surgery, Baltzer H, **Novak CB, McCabe SJ.** DASH Score Reporting for Hand and Wrist Conditions: A Scoping Review. Poster presented at American Association for Hand Surgery, Annual Meeting, Kauai, Hawaii, January 8-11, 2014. McClelland BW, McCabe S. Decision Analysis of Upper Extremity Transplantation

Steve McCabe: Instructional Course: Getting Out of the Tunnels – Managing Proximal Forearm Compression Neuropathy Faculty: **Steven McCabe, MD;** With: Elizabeth Hager, MD, PhD (chair), Robert Spinner, MD;

Christine Novak: AAHS/ASPN/ASRM Joint Outstanding Papers. Moderator: **Christine B. Novak, PT, PhD;** With Steven L. Moran, MD, Liza Wu, MD

Christine Novak: Presidential Invited Speaker. “100 & Counting... The Glamorous Life of a Clinical Researcher: Practical Applications” American Society of Hand Therapists, Annual Meeting, Chicago, Illinois, October 26, 2013.

Christine Novak: American Association for Hand Surgery, Poster Presentations

Novak CB, Williams M, Conaty K. Evaluation of the Patient Specific Functional Scale in Hand Fractures Poster presented at American Association for Hand Surgery, Annual Meeting, Kauai, Hawaii, January 8-11, 2014.

Christine Novak: Baltzer H, Novak CB, McCabe SJ. DASH Score Reporting for Hand and Wrist Conditions: A Scoping Review. Poster presented at American Association for Hand Surgery, Annual Meeting, Kauai, Hawaii, January 8-11, 2014.

Christine Novak : Davidge KM, Kahn LC, Juknis N, Ruvinskaya R, **Novak CB,** Fox IK: Optimizing Post-Surgical Nerve Transfer Motor Reeducation in Tetraplegia. Poster presentation at the American Association for Hand Surgery Annual Meeting, Kauai, Hawaii, January 8-11, 2014.

Christine Novak: American Society for Peripheral Nerve, Program Chair: **Christine B. Novak, PT, PhD,** Poster Session Co-Moderator: **Steven McCabe, MD**

Christine Novak: Poster Presentations: **Novak CB, McCabe SJ,** Li Y, Fernie G. Cold Sensitivity Evaluation Using Cold Air Exposure Versus Cold Water Immersion. Poster presented at American Society for Peripheral Nerve, Annual Meeting, Kauai, Hawaii, January 8-11, 2014.

Christine Novak: Kristen Davidge, MD, Lorna Kahn, PT, CHT, **Christine B. Novak, PT, PhD,** Neringa Juknis, MD, Rimma Ruvinskaya, MD and Ida K. Fox, MD. The Deltoid to Triceps Nerve Transfer: a Novel Approach to Early Salvage of Elbow Extension in Cervical Spinal Cord Injury

Christine Novak: American Association for Hand Surgery & American Society for Peripheral Nerve, combined program. AAHS/ASPN Panel: Radial Nerve Transfer vs. Tendon Transfer: What's Best When, What's The Evidence. Panel member: Christine B. Novak, PT, PhD; With: Robert Spinner, MD (moderator), Thomas Tung, MD; Allen T. Bishop, MD; David C. Ring, MD; Milan Stevanovic, MD Scientific Paper Session Co-Moderator: **Steven McCabe, MD**

Christine Novak: American Society for Peripheral Nerve and American Society for Reconstructive Microsurgery, combined program. Podium Presentation Davidge KM, Kahn LC, Novak CB, Juknis N, Ruvinskaya R, Fox IK: Restoring Prehension/Wrist Flexion and Decreasing Spasticity 11 years Following Spinal Cord Injury: a Case Study of Use of the Brachialis Nerve Transfer.

Christine Novak: American Association for Hand Surgery, American Society for Peripheral Nerve and American Society for Reconstructive Microsurgery, combined program. Instructional Course: Nerve Transfers for Ulnar and Radial Nerve Injury Faculty: Christine B. Novak, PT, PhD; With: Amy M. Moore, MD (chair), Thomas H. Tung, MD; Ida K. Fox, MD

Christine Novak: Professional Affiliations & Related Activities:

American Society for Peripheral Nerve, Chair, 2014 Annual Meeting

American Association for Hand Surgery, Co-Chair, Annual Meeting, (2014)

Christine Novak: Guatemala Healing Hands Foundation, Hand Surgery/Therapy Mission, Guatemala City, Guatemala, December 3-14, 2013.

Christine Novak: Associate Editor for Journal of Hand Surgery, HAND and Physiotherapy Canada

Anne O'Neill: Invited Speaker: Canadian Breast Symposium in Toronto in June 2013

Anne O'Neill: Invited Speaker: Timing of breast reconstruction: immediate versus delayed. 39th Congress of the Colombia Surgical Association. Bogota, Colombia. Aug 2013.

Anne O'Neill: Invited Speaker: Radiation after breast reconstruction. 39th Congress of the Colombian Surgical Association. Bogota, Colombia. Aug. 2013.

Anne O'Neill: Invited Speaker: Complex reconstruction of the perineum. 39th Congress of the Colombian Surgical Association. Bogota, Colombia. Aug 2013.

John Semple: Received the "Cause Leadership Award" from the Canadian Breast Cancer Foundation (Ontario Chapter) at the Annual CBCF Awards Event held at the Fairmont Royal York Hotel, April 6th 2014. Dr Semple was honoured for his leadership in Breast Reconstruction in breast cancer patients and for his outstanding clinical accomplishments and research in this area. The award was presented by Beverly Thompson from CTV and Christy Teasdale, VP on the Board of Directors for CBCF.

John Semple: Lymphatic Course - LMP412, Dr. Miles Johnston, University of Toronto - Medical Science Building, Toronto, Ontario, Nov 21, 2013. 1 hour lecture on the clinical aspects of lymphedema.

John Semple: Invited Speaker: University of Toronto, General Surgical Oncology Fellowship Program Research Day - Vaughan Estates of Sunnybrook, Toronto, Ontario, Feb 28, 2014. Surgical Innovation and Networking.

John Semple: Invited Speaker: 14th Annual Breast Surgery Symposium, Toronto, Ontario, Apr 3, 2014. Fat grafting to the radiated mastectomy site.

John Semple: Invited Speaker: 67th Annual Meeting of the Canadian Society of Plastic Surgeons, Calgary, Alberta, May 28, 2013 - Jun 1, 2013. 67th Annual Meeting of the Canadian Society of Plastic Surgeons.

John Semple: Invited Speaker: George Brown Waterfront Campus - The Seven Habits of Highly Intelligent Communities, Canada's Intelligent Communities Movement Meets the Global ICF Community Forum, Toronto, Ontario, Jun 3, 2013 - Jun 4, 2013. Panelist: Lac Carling 3.0: Open Data and m-Government Applications for Municipal, Provincial and Federal Governments.

John Semple: Invited Speaker: Canadian Orthopaedic Association, Winnipeg, Manitoba, Jun 20, 2013 - Jun 22, 2013. Assessing in-training competency of orthopaedic residents: Use of an Objective Structured Clinical Examination (OSCE) after a sports medicine rotation.

John Semple: Invited Speaker: Canadian Breast Cancer Foundation - Ontario Region, Toronto, Aug 22, 2013. Breast Cancer Research - Update.

John Semple: Invited Speaker: International Institute for Critical Studies in Improvisation (IICSI/ICASP) Meeting, Guelph, Ontario, Sep 2, 2013 - Sep 3, 2013. International Institute for Critical Studies in Improvisation (IICSI/ICASP) Meeting.

John Semple: Invited Speaker: American Telemedicine Association (ATA), Toronto, Ontario, Sep 8, 2013 - Sep 10, 2013. American Telemedicine Association (ATA).

John Semple: Invited Speaker: International Conference Resident Education, Calgary, Alberta, Sep 26, 2013 - Sep 28, 2013. Assessing in-training competency of orthopaedic residents: Use of an Objective Structured Clinical Examination (OSCE) after a sports medicine rotation.

John Semple: Invited Speaker: St. Michael's College, Toronto, Ontario, Oct 16, 2013. Third Annual BRA DAY - Panelist Discussion on Breast Reconstruction.

John Semple: Invited Speaker: Canadian Breast Cancer Foundation Ontario Region and Central Office - Staff Lunch and Learn, Toronto, Ontario, Nov 25, 2013. Clinical breast reconstruction, lymphedema, and innovative models of ambulatory patient care.

John Semple: Invited Speaker: Health Quality Ontario Expert Advisory Panel on Episode of Care Patients Undergoing Arthroscopic Knee Surgery (invited panelist), Toronto, Ontario, Dec 6, 2013. Health Quality Ontario Expert Advisory Panel on Episode of Care Patients Undergoing Arthroscopic Knee Surgery (invited panelist).

John Semple: Invited Speaker: Alberta Provincial Breast Tumour Team Meeting, Edmonton, Alberta, Mar 8, 2014. Enhanced Recovery with Smartphone Technology.

John Semple: Invited Speaker: Familial Breast Cancer Research Unit - Women's College Research Institute: Latest Updates in BRCA1 and BRCA2: A Biannual Conference on Hereditary Breast and Ovarian Cancer, Toronto, Ontario, May 9, 2014. Prophylactic mastectomy for the prevention of breast cancer.

John Semple: 5th International Lymphoedema Framework Conference, Glasgow, Scotland, Jun 5, 2014. 5th International Lymphoedema Framework Conference.

John Semple: Invited Speaker: Virtual Health Symposium - Women's College Hospital Institute for Health Systems Solutions and Virtual Care (WIHV) & PwC, Toronto, Ontario, Jun 17, 2014. Clinical Integration of Virtual Care: Dr. Edward Brown & Dr. John Semple.

Herb von Schroeder: American Association for Hand Surgery Hand Review Course

Herb von Schroeder, MD, Salvage Procedures for the Arthritic Wrist 2014.

Kyle Wanzel: Division of Plastic and Reconstructive Surgery Chair's Award for "going above and beyond" 2014 This year's award was given to Dr. Kyle Wanzel who works tirelessly to organize the resident seminar series and also functions as the Associate Program Director.

Karen Wong: Developing the CLEFT-Q: a 90-minute panel session at the American Cleft Palate-Craniofacial Association annual meeting in Indianapolis, USA (Dr. Karen Wong, Dr. Christopher Forrest, Dr. Anne Klassen, Dr. Andrea Pusic, Dr. Sophie Ricketts)

Toni Zhong: Appointed by Cancer Care Ontario as the Provincial Clinical Lead to establish Standardized Provincial Post mastectomy Breast Reconstruction (PMBR) Clinical Guidelines.

Toni Zhong: Nominated for the **Gerald Kirsh Humanitarian Award**, Princess Margaret Cancer Centre, University Health Network.

Toni Zhong: Selected by the Membership Committee as a Mentor for the Plastic Surgery Research Council (PSRC) Mentorship Program 2014 - 15

Toni Zhong: Presented at the Breast Reconstruction Awareness (BRA) flagship event, "An Evening of Education and Empowerment," at the Centre for the Arts, St. Michael's College School on October 16, 2013. The event was hosted by the Willow Breast Cancer Support Group.

Toni Zhong: Expert. Panel Expert. ASRM Annual Meeting. Kauai, Hawaii, United States. Presenter(s): Scientific Paper Session "Outcome Studies". Jan 14, 2014.

Toni Zhong: Presenter. Barriers to Immediate Breast Reconstruction in the Canadian Universal Healthcare System. Canadian Cancer Research Conference. Toronto, Ontario, Canada. New Investigator Poster Presentation. Nov 4, 2013.

Toni Zhong: Invited Speaker. Ten Year Results from the Natrelle 410 Anatomical Form Stable Silicone Breast Implant Core Study. Canadian Society of Plastic Surgeons Annual Meeting. Montreal, Ontario, Canada. Presenter(s): **Toni Zhong.** Scientific Program, General Session, Abstract #2152. June 28, 2014.

Toni Zhong: Invited Speaker. Panel: Who Should Do What? Is Oncoplastic Surgery the Future? Canadian Society of Plastic Surgeons (CSPS) Educational Foundation Symposium. Montreal, Ontario, Canada. Presenter(s): **Toni Zhong.** Canadian Society of Plastic Surgeons' Educational Foundation Symposium entitled, "The Present and Future of Breast Surgery". June 25, 2014.

Toni Zhong: Invited Speaker. Psychological Assessment & Education of Breast Reconstruction Patients Pre-operatively. Canadian Society of Plastic Surgeons (CSPS) Educational Foundation Symposium. Montreal, Ontario, Canada. Presenter(s): **Toni Zhong.** Canadian Society of Plastic Surgeons' Educational Foundation Symposium entitled, "The Present and Future of Breast Surgery". June 25, 2014.

Toni Zhong: Chair. The Realities of Reconstruction: A Complex Choice. Rethink Breast Cancer/ Breast Fest. Toronto, Ontario, Canada. Presenter(s): **Toni Zhong**. The Scar Project co-presented by the UHN Breast Reconstruction Program/ Willow Breast Cancer Support Canada. April 1, 2014.

Toni Zhong: Discussant. Gallie Day. Department of Surgery, University of Toronto. Toronto, Ontario, Canada. Presenter(s): Jennica Platt (SSTP). Pre-consultation educational group intervention to improve shared decision-making for postmastectomy breast reconstruction: A pilot randomized controlled trial. (Trainee Presentation). May 9, 2014.

Toni Zhong: Keynote Speaker. From Breast Health, to Population Health, to Global Health. Sprott Department of Surgery, Surgical Grand Rounds. Toronto, Ontario, Canada. April 11, 2014.

Ron Zuker: Awarded Canadian Society of Plastic Surgeons Lifetime Achievement Award for 2014.

Ron Zuker: Invited Lecturer. The Boad Brush of Pediatric Microsurgery - Cover the canvas! 2014 Mayo - Chang Gung Reconstructive Microsurgery Symposium. Taipei, Taiwan, Province Of China. May 9, 2014.

Ron Zuker: Invited Lecturer. Vascularized Composite Allotransplantation in Children: Issue and answers. 2014 Mayo - Chang Gung Reconstructive Microsurgery Symposium. Taipei, Taiwan, Province Of China. May 9, 2014.

Ron Zuker: Invited Lecturer. Facial Paralysis Reconstruction: Unilateral in children using cross face nerve graft and muscle transplant. 2014 Mayo - Chang Gung Reconstructive Microsurgery Symposium. Taipei, Taiwan, Province Of China. May 8, 2014.

Ron Zuker: Invited Lecturer. Facial Paralysis Reconstruction: Bilateral in children and adults using motor nerve to masseter. 2014 Mayo - Chang Gung Reconstructive Microsurgery Symposium. Taipei, Taiwan, Province Of China. May 8, 2014.

Visiting Professors

Dimitri Anastakis: Cortical Plasticity - what you need to know when training surgeons, State University of New York at Stony Brook, School of Medicine. Stony Brook, New York, United States. Presenter(s): Anastakis DJ. March 12, 2014.

Dimitri Anastakis: Trends and the future of surgical education, State University of New York at Stony Brook, School of Medicine. Stony Brook, New York, United States. Presenter(s): Anastakis DJ. Lecture on trends and the future of surgical education. Three main trends: (1) competency based curriculum; (2) simulation and (3) eLearning. March 11, 2014.

Dimitri Anastakis: Distinguished Speaker. Clinician Educators - The Four D Model for Career Success, Southern Illinois University, Faculty of Medicine, Department of Surgery. Springfield, Illinois, United States. Presenter(s): Anastakis DJ. Surgical Education Grand Rounds.

Ron Zuker: Restoration of Corneal Sensation with Regional Nerve Transfers and Nerve Grafts. American Association of Plastic Surgeons Annual Meeting. Miami, Florida, United States. Presenter(s): Borschel GH, Bains R, Elbaz U, Ali A, **Zuker RM**. April 8, 2014.

Ron Zuker: Invited Lecturer. Facial Paralysis Reconstruction in Children. Association of Plastic Surgeons of Malaysia. Kuala Lumpur Academy of Sciences. Kuala Lumpur, Malaysia. May 17, 2014.

Ron Zuker: Invited Lecturer. Conjoined Twins: Etiology Classification and Surgical Separation: Lessons Learned. Association of Plastic Surgeons of Malaysia. Kuala Lumpur Academy of Sciences. Kuala Lumpur, Malaysia. May 17, 2014.

Ron Zuker: Invited Lecturer. The Broad Brush of Pediatric Microsurgery - Cover the Canvas! Association of Plastic Surgeons of Malaysia - Kuala Lumpur Academy of Sciences. Kuala Lumpur, Malaysia. May 17, 2014.

Ron Zuker: Invited Lecturer. The broad brush of pediatric microsurgery - cover the canvas. 2014 Mayo - Chang Gung Reconstructive Microsurgery Symposium. Taipei, Taiwan, Province Of China. May 9, 2014.

Ron Zuker: Invited Lecturer. Facial Paralysis Reconstruction: Unilateral in children using cross face nerve graft and muscle transplant. 2014 Mayo - Chang Gung Reconstructive Microsurgery Symposium. Taipei, Taiwan, Province Of China. May 8, 2014.

Ron Zuker: Keynote Speaker. Vascularized Composite Allotransplantation - What is it? Can we do it? 7th Annual Regenerative Medicine Symposium. Toronto, Ontario, Canada. April 10, 2014.

Ron Zuker: Invited Speaker. "Operation Smile - Personal Perspectives". Johnson and Johnson Charity Launch. Markham, Ontario, Canada. Presenter(s): **Zuker RM**. March 24, 2014.

Ron Zuker: Invited Lecturer. N.B. - Important to remember. 10th Annual Lindsay-Thomson Symposium. Toronto, Ontario, Canada. June 4, 2014.

Attendees: Faculty, Housestaff, medical students, nurse educators, therapists, Sept 5, 2013.

Dimitri Anastakis: Visiting Professor. Restoring Form and Function: The impact of our work on the central nervous system, Southern Illinois University, Faculty of Medicine, Department of Surgery. Springfield, Illinois, United States. Presenter(s): Anastakis DJ. Overview of cortical plasticity research - the impact of peripheral nerve injury, reconstruction and rehabilitation on the human CNS. (Trainee Presentation) Sept 3, 2013.

Dimitri Anastakis: Visiting Professor. Plastic and Reconstructive Surgery - Resident Case Presentations, Southern Illinois University, Faculty of Medicine, Department of Surgery. Springfield, Illinois, United States. Presenter(s): Anastakis DJ. Resident and Fellow Case Presentations, Sept 3, 2013.

Oleh Antonyshyn: From Surgical Innovation to Commercial Venture. Invited Lecture, Grand Surgical Rounds, Visiting Professor, University of Manitoba, Winnipeg, Manitoba, April 2, 2014

Oleh Antonyshyn: Orbital Trauma and Reconstruction. Invited Lecture, Resident Rounds, Visiting Professor, University of Manitoba, Winnipeg, Manitoba, April 2, 2014

Oleh Antonyshyn: Saddle Nose Deformity: Classification and Surgical Treatment. Invited Lecture, Plastic Surgery Resident Day, Visiting Professor, University of Manitoba, Winnipeg, Manitoba, April 2, 2014

Oleh Antonyshyn: Genioplasty: Planning, Technique and Morphological Outcomes. Invited Lecture, Plastic Surgery Resident Day, Visiting Professor, University of Manitoba, Winnipeg, Manitoba, April 2, 2014

Greg Borschel: Visiting Professor in Houston, Texas July 9, 2013.

Mitch Brown: Seventh European Conference on Reconstructive Surgery of the Breast., Milan, Italy, December 6-7, 2013.

Mitch Brown: Rome Breast Surgery Symposium, Rome, Italy, June 4-6, 2014.

David Fisher: Congress on Oral & Maxillofacial Surgery, on behalf of Quintessence International Publishing Group, Berlin and Riyadh College of Dentistry & Pharmacy, Riyadh, Saudi Arabia, Sep 18, 2013 - Sep 20, 2013. Alveolar bone graft.

David Fisher: Congress on Oral & Maxillofacial Surgery, on behalf of Quintessence International Publishing Group, Berlin and Riyadh College of Dentistry & Pharmacy, Riyadh, Saudi Arabia, Sep 18, 2013 - Sep 20, 2013. Bilateral cleft lip repair - principle and procedures prior to definitive lip repair.

David Fisher: Congress on Oral & Maxillofacial Surgery, on behalf of Quintessence International Publishing Group, Berlin and Riyadh College of Dentistry & Pharmacy, Riyadh, Saudi Arabia, Sep 18, 2013 - Sep 20, 2013. Cleft lip anatomy, classification, unilateral cleft lip repair.

David Fisher: Congress on Oral & Maxillofacial Surgery, on behalf of Quintessence International Publishing Group, Berlin and Riyadh College of Dentistry & Pharmacy, Riyadh, Saudi Arabia, Sep 18, 2013 - Sep 20, 2013. Complication of cleft lip repair and management of secondary deformity.

David Fisher: 27th Michigan Cleft Palate Association Conference, East Lansing, Michigan, USA, Nov 1, 2013. History and evolution of unilateral and bilateral cleft lip repair.

David Fisher: 27th Michigan Cleft Palate Association Conference, East Lansing, Michigan, USA, Nov 1, 2013. History of pre-surgical orthodontics.

David Fisher: 27th Michigan Cleft Palate Association Conference, East Lansing, Michigan, USA, Nov 1, 2013. Panel discussion of cleft palate repair. Discussors: Fisher DM, Doumit G, Gossain A; Moderator Mann RJ.

David Fisher: BAPRAS/IAPS (British Association of Plastic Reconstructive and Aesthetic Surgeons/Irish Association of Plastic Surgeons), Dublin, Ireland, Nov 28, 2013. Management of secondary cleft lip and nasal deformities.

David Fisher: BAPRAS/IAPS (British Association of Plastic Reconstructive and Aesthetic Surgeons/Irish Association of Plastic Surgeons), Dublin, Ireland, Nov 28, 2013. Modifications of the Nagata 3D framework-autologous ear reconstruction in a single stage.

David Fisher: BAPRAS/IAPS (British Association of Plastic Reconstructive and Aesthetic Surgeons/Irish Association of Plastic Surgeons), Dublin, Ireland, Nov 28, 2013. Unilateral cleft lip repair.

David Fisher: CoRSU (Comprehensive Rehabilitation Services in Uganda. For People with Disability), Uganda, East Africa, Feb 15, 2014 - Feb 23, 2014. Cleft lip & palate; microtia reconstruction.

Christopher Forrest: Invited Lecturer. CAD CAM Technology in pediatric craniofacial surgery. University of Massachusetts-Worcester. Worcester, Massachusetts, United States. Nov. 6, 2013.

Christopher Forrest: Invited Lecturer. Cleft Septorhinoplasty. University of Massachusetts. Worcester, Massachusetts, United States. Nov. 5, 2013.

Christopher Forrest: Invited Lecturer. The evolution of treatment for sagittal synostosis. Northwestern University. Kansas City, Kansas, United States. Oct. 24-25, 2013.

Christopher Forrest: Invited Lecturer. The evolution of treatment for sagittal synostosis. University of Kansas. Kansas City, Kansas, United States. Sept. 27, 2013.

Christopher Forrest: Invited Lecturer. Cleft Septorhinoplasty. University of Kansas. Kansas City, Kansas, United States. Sept. 26, 2013.

Christopher Forrest: Johns Hopkins University, Baltimore, MD - presented on The evolution of Treatment for Sagittal Synostosis, and Surgical treatment of hypertelorism. April 17, 2014.

Christopher Forrest: Yekatit 12 Hospital, Addis Ababa, Ethiopia -- Team from Sic Kids invited to carry out a needs assessment to manage complex surgical cleft lip and palate patients and the feasibility in establishing an Orthognathic Surgery Program. Jan 13 to 17, 2014.

Brent Graham: June 2014 Visiting Professor, British Columbia Hand Society, Squamish, BC.

John Semple: Invited Speaker: University of Ottawa Heart Institute, Ottawa, Ontario, Apr 2, 2014. Remote Monitoring of Post-Operative Patients at Home Using Smart Phone Technology.

John Semple: Invited Speaker: International Society of Aesthetic Plastic Surgery (ISAPS), Tokyo, Japan, Oct 19, 2013. Disruption of Lymphatic Function following Lymph Node Excision and Radiation.

Ron Zuker: Course Director. Animating the Paralyzed Face: Keys to Evaluation and Surgical Management.

Washington University School of Medicine. St. Louis, Missouri, United States. June 7 2014.

Ron Zuker: The Broad Brush of Pediatric Microsurgery. James Barrett Brown Research Day, Washington University School of Medicine. St. Louis, Missouri, United States. June 5, 2014.

Continuing Medical Education

3rd Annual Breast Reconstruction Awareness Day (BRA Day) was held Wednesday, October 16th, 2013 from 7:00-9:30 p.m. at the Centre for the Arts at St. Michael's College School in Toronto. Breast cancer survivors, patients and medical experts gathered for this event to learn more about breast reconstructive surgery post-mastectomy. A group of five panelists, including Women's College Hospital's Dr. Mitchell Brown, founder of BRA Day, Dr. John Semple, WCH's chief of surgery, and Dr. Brett Beber, each took the stage to discuss various topics surrounding breast reconstruction. The audience was also given the opportunity to listen firsthand to two breast cancer survivors who both shared their remarkable stories. The event also included a "show-and-tell" lounge, where a group of 15 courageous volunteers bared their chests to attendees in order to give them a firsthand perspective on what breast reconstruction looks and feels like.

BRA Day, which formed a formal partnership this year with Willow Breast Cancer Support Canada, is now internationally recognized in almost 30 countries and is open to the public each year.

The 14th Annual Toronto Breast Symposium was held on April 3rd, 2014 at the Toronto Hilton and welcomed Visiting Professors: **Dr. Louis L. Strock ASPS Visiting Professor Lecturer**, Harris Methodist Hospital, Fort Worth Surgery Center, and Clear Fork Surgery Center (Fort Worth, TX), **Dr. William P. Adams Jr, The University of Toronto Annual Lecturer**, UT Southwestern Medical Center (Dallas, TX) and **Dr. Peter Lennox, The J Michael Drever Lecture**, President of the Educational Foundation of the Canadian Society of Plastic Surgeons (Vancouver, BC). This symposium was chaired by Dr. Mitch Brown and co-chaired by Dr. Brett Beber and Dr. Kyle Wanzel.

The 44th Annual Aesthetic Plastic Surgery Symposium was held from April 4-5, 2014. Visiting Professors included: **Dr. Sherrell J. Aston** (New York, NY), **Dr. H. Steve Byrd** (Dallas, TX), and **Dr. J. Peter Rubin** (Pittsburgh, PA). This symposium was chaired by Dr. Jamil Ahmad and co-chaired by Dr. Frank Lista and Dr. Tom Bell.

1st Annual Pediatric Wound Care Symposium was held on November 1, 2013 at the Peter Gilgan Centre for Learning and Research. Course directors: Dr. Joel Fish and Dr. Irene Lara-Corrales.

1st Annual Canadian Burn Symposium was held May 26-27, 2014 at the Westin Harbour Castle, Toronto, ON. Focusing on educating plastic and trauma surgeons, as well as allied health and dermatologists who specialize in burn wounds. Highlights of the program include updates

in all aspects of clinical care and education research.

KLS Martin Craniofacial Lectureship

Thanks to the generosity of KLS Martin, former Toronto alumnus Dr. Joe Gruss (University of Washington, Seattle) gave the 2014 KLS Martin Craniofacial Lecture in pediatric craniofacial surgery in May 2014.

2014 Hoyle Campbell Visiting Professor

The Division of Plastic and Reconstructive Surgery shone brightly at the 30th Annual Hoyle Campbell Annual Research Day on Friday February 21, 2014 at the Peter Gilgan Centre for Research and Learning. We were exceptionally fortunate to have Dr. Paul Cederna, who is the Chief of the Section of Plastic Surgery, Professor in the Department of Surgery, and a Professor in the Department of Biomedical Engineering at the University of Michigan, Ann Arbor as this year's Tau Omicron Visiting Professor. His inspiring lecture on neuromuscular interfaces in prosthetic rehabilitation of amputees was a terrific highlight of the day demonstrating the powers of collaboration, team-work, innovative thinking and persistence. I was immensely proud of the great job our residents did in making Paul feel comfortable and welcomed.

12th Annual Ralph T. Manktelow Hand and Microsurgery Lectureship

This year's Ralph T. Manktelow Hand Surgery Day was held on Friday October 18, 2013. This year's Visiting Professor was Dr. Brian D. Adams, Professor, Department of Orthopedics & Rehabilitation, University of Iowa, Iowa City, Iowa Dr. Adam's keynote address was entitled, "Optimizing Wrist and DRUJ Arthroplasty"

10th Annual Lindsay-Thomson Symposium in Paediatric Plastic Surgery

The 10th Annual Lindsay-Thomson Symposium in Paediatric Plastic Surgery was held on June 4, 2014 at the Peter Gilgan Centre for Research and Learning. The Vale Visiting Professor was Mr. Jonathan Britto. Consultant Plastic and Craniofacial Surgeon at Great Ormond Street Hospital for Children in London. His lecture was entitled "Paediatric orbito-palpebral surgery: An evidence based philosophy".

Dupuytren's Day: Held on Tuesday, January 28, 2014 at North 44. This event was held by Drs Paul Binhammer and Steve McCabe. The topic for discussion was "The Latest Advancement in Treating Dupuytren's Contracture"

Lifetime Achievement Award

Ron Zuker: CSPS Lifetime Achievement Award was given to Dr. **Ron Zuker** of Toronto, Ontario. The Award presentation took place during the President's Banquet at the CSPS Annual Meeting, on the evening of Friday, June 27th, 2014 at the Westin Hotel in Montréal. This award honors members of the CSPS who have made outstanding contributions to the profession and to the Society. Dr. Zuker is one of the original pioneers of microsurgery. He is a founding member of the American Society of Reconstructive Microsurgery and the Group

for Advancement of Microsurgery (GAM - Canada). He has had important leadership positions in our specialty's important societies including the American Academy of Pediatrics, the American Association of Plastic Surgeons, the American Association of Pediatric Plastic Surgeons, the American Burn Association, the American Cleft-Craniofacial Association, the American Society for Reconstructive Microsurgery, the American Society of Peripheral Nerve, the American Society of Plastic Surgeons, the Congress of the International Microsurgery Society, the Canadian Society of Plastic Surgeons amongst many others, culminating with the Presidency of the International Society of Plastic Reconstructive and Aesthetic Surgery Congress in Vancouver 2011. His CV is rich with accolades, honors, peer-review papers and scientific presentations. He has been teaching residents and medical students in Plastic Surgery since 1978. He has taught fellows from all points of the globe. He has given lectures on 4 of the 5 major continents. He has well over 100 scientific peer review publications and book chapters. One of his most significant contributions has been his textbook entitled Principles and Practice of Pediatric Plastic Surgery (co-edited with Bruce Bauer and Mike Bentz) which has become the go-to book for Pediatric Plastic and Reconstructive Surgery and is heading for a 3rd edition any day now! He has acted as a great mentor for the latest generation of reconstructive microsurgeons and is generous in sharing his surgical secrets. His name is synonymous with excellence and innovation. In the arena of innovative reconstructive microsurgery, Ron has few equals. Dr. Ron Zuker has made significant innovations in the unique areas of conjoined twins, composite vascularized allotransplantation, free functioning muscle transfer, solid organ transplantation and global outreach. In the field of Plastic & Reconstructive Surgery, Ron is an icon and highly deserving of the Canadian Society Lifetime Achievement Award.



Cho Pang PhD, Senior Scientist, The Hospital for Sick Children was recognized for a lifetime of achievement and dedication to the Department of Surgery. Cho has been an active member of the Research Institute for 32 years and sat on the Department of Surgery Research Committee for 24 years. He has mentored dozens of surgeon-scientists during his time in the Division of Plastic and Reconstructive Surgery including 3 chairs and has been

recognized by the American Society of Plastic Surgeons for his achievements.



Robert Knowlton: This year celebrated the career of Dr. Robert Knowlton who served as the chief at St. Joseph's Health Science Centre for more than 10 years and sat on the residency program committee for over 15 years, contributing to the advancement of the specialty and the division spanning a remarkable 6 decades.



Graduation Gala Event

One of the highlights for the past year was the Division Graduation Gala Event. This was held at the University Club of Toronto on Thursday, June 19, 2014. A faculty roast was given by the residents and a competition was held to determine the "best of the best" and special awards presentations were made in recognition of all the faculty who give tirelessly of themselves in the pursuit of research and education in this division.

Royal College Fellowships

Heather Baltzer successfully passed her RCPSC fellowship examination.

Olivia Ho successfully passed her RCPSC fellowship examination.

Matthew McRae successfully passed his RCPSC fellowship examination

Mathew Plant successfully passed his RCPSC fellowship examination.

Division of Plastic & Reconstructive Surgery



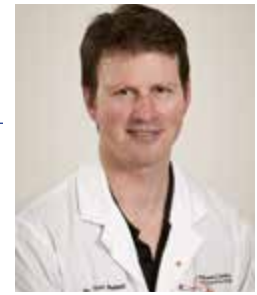
I am also very pleased to announce that the new division website has gone live as of 12:01 am Friday 13th, June 2014. I hope that you will take the opportunity to explore and see the new face of our division: [w](#) Take a look at our new webpage for the Resident Aesthetic Clinic as well: <http://www.uoftplasticsurgery.ca/clinic/>

General Surgery Assembly 2014



Division of Thoracic Surgery

Tom Waddell, *Chair*



2013-14 was an outstanding year for the Division of Thoracic Surgery at the University of Toronto. The American Association for Thoracic Surgery held its Annual meeting in Toronto this spring and it was a wonderful opportunity to connect with alumni and friends in a lovely reception at the Gardiner Museum. Our annual retreat focused on interprofessional and interspecialty collaboration, for example with Interventional Pulmonology and Radiation Oncology. It highlighted the tremendous pleasures of our complex and multi-faceted specialty. This year was notable for the development of partnership with the Massachusetts General Hospital, who sent to outstanding residents to us for 4 month rotations as part of their US residency training requirements. An additional resident joined us from the University of Colorado.

Recruitment

There were no recruits to the Division of Thoracic Surgery this year.

Promotions

There were no promotions in the Division of Thoracic Surgery in 2013/2014.

Research Grants

Drs. Cypel, Liu, and Keshavjee received a 5 year CIHR grant entitled “Advanced therapeutic strategies for ex vivo repair of lungs for transplantation”. Dr. Cypel also received funding from the Canadian Cancer Society Research Institute for an Innovation Grant entitled “Development of isolated lung perfusion for the treatment of cancer metastases to the lungs”. Dr. Mingyao Liu received CIHR funding for his grant “Signal cross talk in lung injury and repair”. Dr. Waddell received funding from the Roche Organ Transplant Research Foundation for “Lung Progenitor Cell Profiling in the Development of Bronchiolitis Obliterans Syndrome”. He also received funding from the Centre for Commercialization of Regenerative Medicine (CCRM) for “Expansion of patient-specific Cystic Fibrosis epithelial cells for drug screening through transient partial reprogramming”. To help commercialize this technology, Dr. Waddell also received funding to support the patent application for “Methods and Compositions for Producing Induced Airway Tissue Progenitor Cells.” from the Stem Cell Network. Dr. Waddell also received funding for a Catalyst Grant from the Transplantation and Regenerative Medicine Centre, Hospital for Sick Children, entitled “Targeting Rejection: Reversal and Prevention of Allograft fibrosis by direct reprogramming of Activated Myofibroblasts.”

Resident/Fellows Honours/Awards/Positions Held

The academic year concluded with Pearson Day, an annual celebration of clinical and laboratory research by trainees in our Division. The Pearson Day Visiting Professor was Dr. Bryan Meyers from Washington University in St. Louis. Dr. Tiago Machuca won the Award for Best Clinical Research paper and Dr. Jonathan Yeung won the Best Basic Science Research Award.

Faculty Honours/Awards/Positions Held

Dr. Marcelo Cypel was awarded a Premier’s Early Research Award. Notably, Dr. Cypel led the development of a hands-on course in ECLS technology at the Annual Meeting of the American Association for Thoracic Surgery. Dr. Tom Waddell was appointed to the Council of the newly inaugurated Ontario Institute of Regenerative Medicine. Dr. Yasufuku again led the annual EBUS Training Course who also created a Robotic Thoracic surgery hands on course for the AATS and the development of the first pan-Canadian Boot Camp in advanced Thoracic Surgery technology open to any new resident in Thoracic Surgery in Canada. These three training course all occurred in the space of 3 months. Dr. Yasufuku also was recognized at the American Association of Bronchology and Interventional Pulmonology, Fall Scientific Symposium, 2013 in Chicago where he received the Geoffrey McLennan Memorial Award, and had a paper receive the “Most Intriguing” Award. Dr. Keshavjee was appointed to the Board of Directors of the American Association for Thoracic Surgery Leadership Academy

Within our own Division, Teaching Awards were awarded to Dr Gail Darling (Gail E. Darling Award for Excellence in Undergraduate Teaching) and Tom Waddell (Robert J. Ginsberg Award for Excellence in Postgraduate Teaching). Dr. Pedro Reck dos Santos won the F. Griffith Pearson Award for Best Resident Fellow Teacher.

Visiting Professors

Visiting Professors for 2013-14 academic year were: Benjamin Kozower (University of Virginia, Charlottesville, Virginia) and Dr Gunda Leschber (Berlin Chest Hospital, Berlin, Germany). Another highly successful Toronto Thoracic Surgery Refresher Course was held in June 2014 and included the following Visiting Faculty: Paul De Leyn (University Hospital, Leuven, Belgium), Thierry Le Chevalier (Institute Gustav Roussy, Paris, France), Steve Cassivi (Mayo Clinic, Rochester, Minnesota), and Michael Humer (Kelowna General Hospital, Kelowna, BC).

Division Firsts

Dr. Marc de Perrot, along with radiation oncology colleague, Dr. John Cho, have pioneered the use of neoadjuvant radiation in mesothelioma prior to extrapleural pneumonectomy.

Leadership Changes/Progressions

Dr. Maurice Blitz (St. Joseph's Healthcare Centre, Toronto) assumed Leadership of the Foundations Course for the Department of Surgery. Dr. Najib Safieddine assumed responsibility as the Division Lead for Quality and Best Practice.

Royal College Fellowships

Our Division did not have any graduating residents this year.

Our clinical programs and results continue to be amongst the best in the world. As we did not select a resident in 2011, we will have three outstanding residents graduating next year. The caliber of our fellows recruited from around the world continues to increase. Additional American residents will be coming in 2014-15. Our focus for the 2014 Retreat will be on building the broader University of Toronto Division of Thoracic Surgery as a platform for integrated Thoracic Surgical Care for our Region. It is my great pleasure to serve this Division as Chair and I look forward to new and exciting horizons.



ASTS Award Picture



Michael and Amira Dan Neurosurgery Fellows Dinner

Division Of Urology

Neil Fleshner, *Chair*



The Division Of Urology has had a productive academic year. We currently span 28 geographic full time faculty as well as 3 full-time PhD scientists, spanned over 6 fully affiliated University-based hospitals. We train over 42 students including 24 residents and 18 fellows.

Recruitment

Drs Dean Elterman (TWH) and Michael Ordon (SMH) joined our faculty in this academic year

Academic Promotion

Dr. Walid Farhat was promoted to Full Professor

Dr. Robert Stewart was promoted to Associate Professor

Dr Armando Lorenzo was promoted to Associate Professor

Research Grants:

The Division of Urology had a solid year in terms of peer-reviewed grant capture. The following faculty served as PI's or Co- PI's on peer-reviewed grants totaling over 4 million dollars:

Michael Jewett

Neil Fleshner

Robert Hamilton

Girish Kulkarni

Andrew Matthew

Bharti Bapat

Darius Bagli

Keith Jarvi

Resident/Fellow Awards

Dr Bimal Bhindi won an award from the Health Policy Management and Evaluation (HPME) Department as the most promising researcher.

Dr Justin Lee (PGY5) was voted best undergraduate educator in the Department of Surgery

Dr Laurence Klotz won the Lister Prize at Gallie Day

Dr Thomas Hermanns won Best Poster at the European Association of Urology

Faculty Awards:

Dr Laurence Klotz continues as Chair of the World Uro-Oncology Federation

Dr Fleshner continues as Chair of the Canadian Uro-Oncology group

Faculty teaching awards went to Drs Lee, Stewart, Kodama, Kulkarni, Klotz and Zlotta.

Dr Trachtenberg was awarded an Honorary Doctorate from University of Guelph

Visiting Professors:

Dr Dean Assimos was our Menkes lecturer

Dr John Denstedt was our Robson Professor

Dr Mark Litwin was our Colapinto Lecturer

Urology Update visitors included: Drs Colin Dinney, Christopher Evans, Joel Nelson, Howard Goldman, Christopher Payne, Chandhu Sundarum and Alexis Te

Division Firsts

Dr Michael Ordon performed the first Urology-led percutaneous renal tumor ablation

Dr Dean Elterman performed the first University of Toronto green-light laser for benign prostatic hyperplasia

Drs Elterman, Fleshner, Grober, Herschorn, and Jarvi conveyed the first Men's Health Summit in January 2014.

Leadership Changes/Progressions:

Dr Pippe-Salle has taken an important position in pediatric urology in Qatar after a stellar career at the University of Toronto.

Highlights

SickKids

Dr Martin Koyle continued his clinical research in pediatric urology. He had numerous visits as visiting speaker/professor throughout the globe. He has taken over as site chief at the Hospital For Sick Children.

Dr. Joao Pippi-Salle He was an invited speaker, surgeon, and visiting professor at many locations around the world. He has recently departed to Qatar on a full time basis after a stellar career at the University of Toronto

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 also served as Deputy Chief of Surgery at Hospital for Sick Children and staff coordinator of Urology Resident Research.

Dr. Walid Farhat continued his work in tissue engineering with projects funded by The Hospital for Sick Children's Foundation and the Dean's Fund. He participated in projects funded by the Ontario Research Fund and Canadian Foundation for and the Center for Computer-Assisted Intervention and Innovation. He was promoted to full professor

He organized and directed the 7th Annual North American Pediatric Fellows Laparoscopy Course.

He was an invited speaker both within and outside of North America.

Dr. Armando Lorenzo continued his work in Clinical Epidemiology and minimally invasive pediatric surgery. He has also been critical in coordinating resident surgical skills sessions.

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 Europe and North America and was promoted to Associate Professor

MSH

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 and will assume role as coordinator for the Urology School lecture series.

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

He continued work in 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 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 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 Europe, Asia and South America. He continued his research with funding from Ontario Institute for Cancer Research, CIHR, Canadian Cancer Society Research Institute, and the Canadian Uro-oncology Group. Dr Zlotta has had a benner year in grant capture with his collaborations with Drs Bapat and Ranna.

Dr Bharati Bapat continued her work in epigenetics and cancer biology in bladder and prostate cancer. She has procured over 2 million in peer-reviewed funding this year and has lectured throughout the globe.

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 is in charge of Journal Seminars for Urology residents.

Dr. Sender Herschorn, 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 invited speaker and lecturer throughout the globe.

He also directed the 20th annual U of T Urology Update.

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 and Ferring,. He was guest speaker and visiting professor in Asia, UK, Europe, South and North America. Dr Klotz won the coveted Lister prize and was awarded the SUO Medal of Merit.

Dr. Ron Kodama, site Chief at Sunnybrook, organized the 10th Annual Resident Basic Science Course in February. He also directed the annual Urology Fair 2013.

He won the Faculty Postgraduate Teaching Award in 2013.

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

He was an invited speaker in many places within and outside North America.

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

Dr Venkateswaran continues her major role at the Institute of Medical Sciences as Graduate Coordinator.

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 GSK.

He was invited speaker at meetings in Canada, U.S, Israel, Asia and Europe.

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 and Pfizer

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

He was an invited speaker and/or visiting professor in North America, Europe, Middle East and Asia.

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 and NCIC. He continues his work on focal therapy in Prostate cancer

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 and Pfizer.

He was invited speaker in Europe, US, and Canada.

He also served as chair of the 5th Annual Uro-Oncology Dialogue meeting in Niagara on The Lake.

Dr. Andrew Matthew, clinical psychologist, continued his work in outcomes after prostate cancer therapy. Dr Matthew has had a banner year with over 1.5 million in peer-reviewed funding in prostate cancer survivorship. He was an invited speaker in the Canada.

Dr Girish Kulkarni continued his excellent research as a junior investigator/surgeon scientist securing peer-reviewed grants from Canadian Urologic Association, CIHR and a salary support award from prostate Cancer Canada. He continues his epidemiological research in bladder and prostate cancer. He was an invited speaker throughout Canada

Dr Robert Hamilton received numerous peer reviewed grants from CCSRI, CUA and internal PMH funds. He continues his work on statins, SNP's and prostate cancer. He was an invited speaker throughout Canada

UHN - TWH

Dr. Magdy Hassouna continued his basic and clinical work in neurourology and neuromodulation.

He was an invited speaker in Asia, Middle East, Europe and North America.

Dr. Sidney Radomski continued his work in incontinence, overactive bladder and erectile dysfunction.

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

Dr Dean Elterman commenced as a 3rd urologist at TWH as a surgeon-investigator. His interests include: men's health, incontinence and reconstructive surgery.

St. Michael's Hospital

Dr. Kenneth Pace continued as site chief as St Michaels Hospital. He continued his work in clinical epidemiology, stone disease, and Minimally Invasive Surgery.

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

He continued in the American Urological Association Leadership Program.

Dr. John Honey continued his work as a minimally invasive Urologist at SMH

He continued his clinical research studies in lithotripsy. He was course director at a Hands-on course at the American Urological Association (AUA) Meeting in Atlanta. He was guest speaker in the U.S. and Canada

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).

Dr Jason Lee continued his work in education-based research and minimally invasive surgery .Dr Lee will assume a major role in core curriculum development for undergraduate education.

Dr Michael Ordon commenced his career as a surgeon-investigator. His interests include large database outcome analyses as well as percutaneous renal tumor ablation.

Academic Events & Awards

The **Annual Charles J. Robson Research Day** was held on April 10th. The Visiting Professor was Dr. John Denstedt , Professor of Surgery University of Western Ontario.

The **Patrick Harty Award for Excellence in Patient Care** was awarded to **Dr. Yonah Krakowsky**

The PGY-5s **Drs. Justin Lee, Wilfred Tam and Nicole Golda** successfully completed their Royal College Examinations.

Conclusion

The Division of Urology continues as one of the most pre-eminent urology programs in the world. We are proud of the accomplishments of all divisional members.

Division of Vascular Surgery

Tom Lindsay, *Chair*

As I complete my term as University Division Chair, and reflect on changes in Vascular Surgery since 2003, I would like to highlight the following developments. First, there has been significant improvement in the organization for delivery of Vascular Surgery elective and emergency care with increased provincial funding in the Greater Toronto Area (GTA). The increased costs associated with the transition to Endovascular Aneurysm Repair (EVAR) partially sparked this change. Therapy for peripheral arterial disease (PAD) has also moved towards a minimally invasive approach with better techniques, technologies and clinical outcomes. University teaching and affiliated hospitals previously reluctant to hire new staff, have renewed their workforce with excellent recruits. Research productivity has improved and the new faculty members of the Division are well positioned to achieve significant academic success. Teaching scores for the Vascular Division remain among the top scores for the Department. At the Royal College, changes to Vascular training have also been dramatic. Vascular Surgery has shifted from a subspecialty to a specialty with a direct entry application process, five plus zero residency from the previous standard of a five (usually General Surgery training) plus two (Vascular Surgery training). This popular new training paradigm has reinvigorated the Vascular Surgery residency program in Toronto with similar effects across Canada. Our initial cohort of trainees from 2012, Drs. Roy and Hussain, have both enrolled in the surgical scientist program for the coming year. Surgical skills training began ten years ago as five afternoon surgical skills sessions. Last July 2013, it was transformed by Dr. George Oreopoulos into a two-week boot camp of vascular-specific skills sessions and seminars to prepare our residents with the essential skills they require to begin residency. We recently held the Third Annual Vascular Surgery Research Day, which includes the KW Johnston Lectureship. Fund raising for this important Divisional activity continues to accrue. The Division Chair no longer serves as the Program Director. Dr. Oreopoulos manages both the Program Director duties and our fellowship program, which has become increasingly competitive. In summary, the Division of Vascular Surgery has made important gains across the clinical, educational and research domains; there is a strong foundation in place to move forward, especially in the current priority areas of research and innovation.

Recruitment

During the past year Dr. Mohammed Al-Omran became the Division Head at St Michael's Hospital and a surgical investigator. Also three new recruits have been hired and will be starting in 2014. First, Dr. Thomas L. Forbes will join the UHN Division and become the new University Division Chair. Dr John Byrne has been hired as a surgical scientist at UHN and will be a Black Family Fellow as he

transitions to a staff person in 2014. Dr Elisa Greco (a U of T Vascular Graduate) will join the Division at St Michael's Hospital in October 2014.



Research Grants

Drs Dueck and Wright were awarded a CIHR grant for a project on MR guided peripheral revascularization for \$562k.

Dr Roche-Nagle was the recipient of the 2013 CSVS Gore Research Award for a project titled "The therapeutic and prognostic value of perfusion angiography with indocyanine green fluorescence in patients with critical ischemia." Two student supervised by Dr. Roche-Nagle were awarded 2013 CSVS National Student Research Awards: Oliver Alying "Peripheral nerve blocks after lower limb amputations" and Nicholas Bowers. "Using a multimedia presentation to improve patient understanding and satisfaction with informed consent for minimally invasive vascular procedures: a prospective randomized trial"

Dr George Oreopoulos was the winner of the Surgical Skills Centre Distinguished Educator Award at Gallie Day 2014. Dr. Dueck was awarded a Sunnybrook Clerkship award for excellence in teaching.

Visiting Professors

Dr. Philip Goodney from Dartmouth, was the KW Johnston Lecturer on June 22nd 2014 at Research day, delivering two outstanding talks on databases and clinical research. Dr. Michael Farkouh from the Peter Munk Cardiac Center lectured on using existing databases from clinical trials to answer questions different from those previously proposed. Winner of the Best presentations were Dr. Mohammad Hussain for his project "Long term effects of an educational intervention for cardiovascular risk reduction in peripheral arterial disease" and Dr. Sydney Wong for his project "Building a personal vascular database".

Division Firsts

In July 2013 Dr. George Oreopoulos organized the first Vascular Surgical Boot camp for incoming trainees.

In September 2013 Dr Jonathan Cardella organized the initial Canadian Endovascular Skills Course (CESS). Vascular Surgical trainees from all across Canada came to Toronto for a two days of didactic sessions and hands on endovascular skills training.

Leadership Changes/Progressions

Dr. Mohammed Al-Omran became the Head of the Vascular Division at St Michael's Hospital. Dr. Thomas Forbes will succeed Dr. Lindsay as the University Division Chair in September 2014. Dr. Vern Campbell will retire from St Michael's Hospital in December 2014 after a long career in Vascular Surgery that began at Toronto East General Hospital.

Royal College Fellowships

Dr. Varun Kapila completed his Royal College training in June 2013 and successfully completed certification in the fall of 2013.

I am delighted with the progress the Division has made over the last eleven years. It is the contributions of many that have allowed the Division to succeed, transition to a new training paradigm, improve teaching scores, recruit successfully and position ourselves to achieve significant academic contributions in the years to come.



Dr. Manuel Gomez receiving the ESA Chief Public Safety Officer Special Recognition Award 2013



Robert Filler Symposium



The Hospital for Sick Children

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

Heads of Divisions:

Dr. G. Van Arsdell	Cardiovascular Surgery
Dr. A. Pierro	General and Thoracic Surgery
Dr. J. Drake	Neurosurgery
Dr. A. Howard (interim)	Orthopaedic Surgery
Dr. C. Forrest	Plastic and Reconstructive Surgery
Dr. M. Koyle	Urology

The Department of Surgery at The Hospital for Sick Children has had a productive year. Dr. James Wright completed his second-term review as Surgeon-in-Chief and Chief of Perioperative Services and the search for his successor has begun. Drs. James Drake, Division of Neurosurgery, and Christopher Forrest, Division of Plastic and Reconstructive Surgery both successfully completed their second-term reviews as Division Head and were re-appointed to a third-term. The Division Head of Orthopaedic Surgery search is near completion. Special thanks to Dr. Andrew Howard for his service as interim Division Head.

Our business case received support from the Ministry of Health and Long-Term Care (MOHLTC) to perform 457 additional cases to address our wait-lists. The percentage of children at SickKids who exceeded our nationally accepted access targets peaked at more than 45% in 2007 and is now approximately 11%.

We completed the three-phase major renovation in the OR with total fundraising goal of \$8.8M; two state-of-the-art ORs, an additional OR to further facilitate minimally invasive surgery, Pre-Anesthesia Clinic, “Playroom” and the PACU. We are embarking on fundraising for staged renovation of the remaining ORs.

Until this past month, we have had no Alternate Funding Plan approved new positions since 2007. We have been meeting with the MOHLTC since November to develop an accountability framework and a human health resource plan for new positions.

In conjunction with the Rotman School of Business and SickKids, we have developed and just concluded our second, five-module, ten-day leadership development course. This joint learning experience included 45 physicians, managers and directors from Perioperative Services and Paediatrics. Our second course was enhanced by tying the learning to a specific SickKids project. We are planning the third course for 2014-15.



In preparation for succession to the new Chief of Surgery and Perioperative Services in six months, we have developed a framework for succession planning based on key competencies that will allow development of internal candidates and inform the search process.

New Staff:

Dr. Karen Wong joined the Division of Plastic and Reconstructive Surgery as a surgeon-scientist in August 19, 2013. Her area of clinical expertise lies in cleft and microsurgery.

Departures:

Dr. Pippi Salle’s departed in April 2014 to pioneer a formal paediatric urology clinical and training program at Sidra Hospital in Qatar.

Appointments and Promotions:

Promotions include Dr. Walid Farhat as Director of the Fellowship Training Program at SickKids, and Professor of Surgery, University of Toronto and Dr. Armando Lorenzo as Associate Professor at the University of Toronto.

Appointments include Dr. Peter Dirks as Chair Holder, The Hospital for Sick Children, the Garron Family Chair in Childhood Cancer Research and Dr. Armando Lorenzo as Director of Nephrourology at SickKids.

Education:

The Department of Surgery continues to have an active education program training 47 clinical fellows and 107 residents originating from 24 countries worldwide.

Research:

Of 41 surgeons, 25 have funded research programs. The department is engaged in a wide variety of clinical and basic research supervising 23 research fellows, 31 Masters and 10 PhD students.

Division of Cardiovascular Surgery

The Division of Cardiovascular Surgery at SickKids has focused on team clinical performance, for the past several years, in a forum labeled Performance Rounds. The concept has been driven by the idea that best patient outcomes are achieved by making optimal decisions and interventions at each point along the care pathway. Performance Rounds is a management system that entails reviewing each patients' clinical course, from diagnosis through hospital discharge, using a proprietary individualized patient graphic. The weekly review is performed with team members from cardiology, intensive care, anaesthesia, and allied health professionals. Through this system we are able to identify specific patient issues as well as structural areas for improvement even in the face of good patient outcome. The long term goal is to gradually enhance team learning and team performance. The concept is also a strong academic platform. Ed Hickey had a plenary session presentation at the American Association for Thoracic Surgery using the performance rounds format and the NASA flight error model. Glen Van Arsdell had 2 invited plenary session presentations: one at the Chinese Thoracic Surgery annual meeting and another at the Pan Asian Congenital Heart meeting.

Osami Honjo has continued with his epidemiologic work with 3 presentations at the American Heart Institute. Chris Caldarone holds a CIHR grant studying the mechanism of problematic pulmonary vein stenosis and John Coles holds a Heart and Stroke grant continuing to pursue his interest in signaling mechanisms and potential interveners for cardiomyopathy. The Division is making progress in its dual mission of sustainable high clinical and academic performance.

Division of General and Thoracic Surgery:

In June 2013 Dr. Agostino Pierro was re-appointed as Chairman of the European Pediatric Surgery Association (EUPSA) Network dedicated to the establishment and co-ordination of multicentre research.

Dr. Georges Azzie was appointed an honorary Professor in the Department of Surgery at the University of Cape Town, South Africa. He is assisting with surgical curriculum development at the Schools of Medicine of the Universities of Botswana and Namibia. His team, including Dr. Gerstle and Engineer Brian Carrillo, has developed the only validated Pediatric Laparoscopic Surgery simulator.

Dr. Chiu continues to be a member of the Canadian Association of Paediatric Surgeons (CAPS) Research and Program Committees. In 2014, she will take over as the CAPS Program Committee Chair. She continues as a member of the CAPSNet Steering Committee and a member of the EPIQ review on CDH Care. Dr. Chiu joined the American Academy of Pediatrics Section on Surgery Delivery of Surgical Care Committee as a member of the Transitional Care and Resource Optimization subcommittees.

Dr Annie Fecteau continues to have a busy clinical practice and is developing an innovative approach of compression for giant omphalocele.

Dr. J. Ted Gerstle became the Director of the Surgical Oncology Program at Sickkids in 2013. He is also involved in a number of important initiatives with SickKids International and the Global Child Health Centre.

Dr. Sharifa Himidan is working on establishing programs that bridge relationships between academic and community centres affiliated with the University of Toronto. She is actively involved in Surgical Innovation and collaborating with many national and international centres in the field of Surgical Robotics, Smart tools and simulation. She is a member of the Canadian Pediatric Surgery Network (CAPSNet) Steering Committee and RCPSC Specialty Exam Board in pediatric surgery.

Dr. Jack Langer continues to be the President of the Canadian Association of Paediatric Surgeons (CAPS). From January to June 2014 Dr. Langer took a sabbatical at the University of California, San Francisco, which was partially funded by a Detweiler Fellowship from the Royal College of Physicians and Surgeons of Canada. During his sabbatical he studied new techniques in fetal surgery and worked with the Pediatric Device Consortium based at UCSF. Dr. Langer was named one of the top 30 doctors in Toronto by Toronto Life magazine.

Dr. Paul Wales continues in his role as Director of The Group for Improvement of Intestinal Function and Treatment (GIFT), the only formalized program for intestinal failure in Canada. Dr. Wales won five awards this past year with the latest being the Best Published Clinical Research Article in May 2013.

DIVISION OF NEUROSURGERY

This year has been another successful year. The Division received numerous funding awards. One award totaled \$14,500,000 lead by Dr. Michael Taylor as Co-PI entitled "Immunogenomics to Create New Therapies for High Risk Childhood Cancers". There have been 60 new publications this year alone and our Staff have been invited and presented at over 38 venues and associations around the globe. We trained four fellows and 13 residents. The expertise and knowledge sharing is our focus and commitment.

Dr. Abhaya Kulkarni continues as Neurosurgery Residency Program Director and attracted the top pool of candidates to the University of Toronto program.

Dr. James Drake continues as Director, Image Guided Innovation and Therapeutic Intervention and mentor to members of The Canadian Pediatric Neurosurgery Study Group. He and Dr. Kulkarni continue their involvement with research and quality improvement initiatives lead by the Hydrocephalus Clinical Research Network and continuously review the care and treatment of hundreds of children affected by hydrocephalus. Dr. Drake continues to supervise a large cadre of undergraduate engineers from the University of Waterloo, and Toronto, and graduate students in the IBBME and Mechanical Engineering Department.

In December, Dr. Drake, with co-chairs Drs. Rutka and Kulkarni hosted the American Association of Neurological Surgeons – Pediatric Section which in addition to the main scientific program (Drake), included a pediatric epilepsy course (Rutka and Drake), an Advanced Practitioners course (Kulkarni), breakfast seminars (Kulkarni and Mazzola), a social program (Drake), followed by a fellowship reunion celebrating 80 years of pediatric neurosurgery at Sickkids (Drake). Meeting evaluations were extremely high and broke previous attendance records.

Dr. James Rutka was elected to the Order of Ontario in June, 2014. He was appointed President, World Academy of Neurological Surgery and continues to take on new responsibilities including Editor-in-Chief, Journal of Neurosurgery, July 2013. He continues with a full clinical workload and supervises a large basic science laboratory.

Dr. Michael Taylor supervised Dr. Steve Mack, winner of the prestigious Governor General’s Gold Medal Award, created in 1873 by Lord Dufferin to encourage academic excellence across the nation. Dr. Steve Mack completed his doctoral dissertation entitled “*The Genetic and Epigenetic Basis of Posterior Fossa Ependymoma*” in April 2014.

Dr. Peter Dirks continues his basic research into brain tumour initiating cells, supervising a large basic science laboratory.

The 28th Bruce E. Hendrick Lectureship took place at the Hospital for Sick Children on Oct 8, 2013, with John Kestle, University of British Columbia as the Guest Lecturer.

Division of Orthopaedic Surgery

Dr. Andrew Howard became a member of the Institute of Medical Science. He continued as the Interim Head of the Division of Orthopaedics at the Hospital for Sick Children.

Dr. Steve Lewis received the Russell S. Hibbs Clinical Award, Scoliosis Research Society (Research Award), for the Best Clinical Presentation at the 2013 Scoliosis Research Society Annual Meeting.

Dr. Lucas Murnaghan took part in the POSNA/BIOMET Travelling Fellowship.

Dr. Unni Narayanan was awarded the 2013 Arthur Huene Memorial Award of POSNA.

Dr. John Wedge was awarded the Doctor of Laws (LLD) (Hon.), University of Saskatchewan.

This year the division hosted a father and son duo as our Robert B. Salter Visiting Professors in October. Dr. Perry Schoenecker, orthopaedic surgeon, Chief of Staff at Shriners Hospital, St. Louis and Acting Chairman of the Department of Orthopaedics at the St. Louis Children’s Hospital and Dr. Jonathan Schoenecker, orthopaedic surgeon, Monroe Carell Jr. Children’s Hospital at Vanderbilt and Assistant Professor, Department of Orthopaedics, Pathology, Pediatrics and Pharmacology, Vanderbilt University, Nashville, TN.

We also hosted Professor Christopher Lavy, orthopaedic surgeon, Oxford, UK, as our Mercer Rang Visiting Professor in June.

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.

Members of the division presented 87 lectures and other presentations, published 66 papers and hold 23 grants.

The Division of Orthopaedics is continuing to build the Bone Health Centre focusing on the care of children with musculoskeletal conditions requiring multidisciplinary care, and in the development of collaborative research.

Division of Plastic and Reconstructive Surgery

It has been a stellar year for our division, the largest group of full-time pediatric plastic surgeons in North America.

Cho Pang PhD, Senior Scientist, was recognized for a lifetime of achievement and dedication to the Department of Surgery. Cho has been an active member of the Research Institute for 32 years and sat on the Department of Surgery Research Committee for 24 years. He has mentored dozens of surgeon-scientists during his time in our division, including three chairs and has been recognized by the American Society of Plastic Surgeons for his achievements. Cho will officially be retiring at the end of 2014 and assume Professor Emeritus status.

Dr. Greg Borschel was awarded the George Armstrong Peters Prize for 2014.

Dr. Howard Clarke, with the help from Emily Ho, hosted the Toronto Obstetrical Brachial Plexus Palsy Workshop on May 10, 2014. This event was a true interdisciplinary approach to managing issues specific to obstetrical brachial plexus palsy with neurosurgery, orthopedic surgery, plastic surgery, OT and PT participation.

Dr. Joel Fish and the entire Pediatric Burn Program team at SickKids were the first pediatric burn program in Canada to receive full accreditation by the American Burn Association.

Dr. John Phillips embarked on a unique sabbatical opportunity that he entitled “Teach the teacher”. His goal was to visit as many former fellows as possible and charge them with the mission to teach him something that they

have subsequently modified or learned after completing their fellowship in pediatric craniofacial surgery. John travelled to California, Texas, Colorado, Taiwan, Singapore and made multiple stops in Australia.

Dr. Karen Wong is the first full-time female member of our division. She is completing her PhD through McMaster University focusing on the development of a patient-reported outcome measure to assess the impact of cleft surgery on children, teens and young adults. She obtained CIHR funding and has established a six-country network to help support this initiative.

Dr. Ronald Zuker received an Honorary Fellowship of the College of Plastic Surgeons of South Africa, an Honorary Membership in the Association of Plastic Surgeons of South Africa and also the Humanitarian Award from The Smile Foundation of South Africa during a recent invited visit. He ended the trip with a visit to Johannesburg to operate. He was also awarded the 2014 Canadian Society of Plastic Surgeons Lifetime Achievement award at their 68th Annual Meeting on June 27, 2014.

The first Hugh G. Thomson Award was received by Dr. Karen Cross at last year's Gala Graduation dinner. This award was established and funded by the SickKids' division members and acknowledges Dr. T's values of collegiality, collaboration and simply being a good human being.

The First Pediatric Wound Care Symposium was held on November 1, 2013 with course directors Drs. Joel Fish and Irene Lara-Corrales (Pediatrics). Over 130 health care providers from surgery, pediatrics, dermatology, nursing and wound care specialists attended this event. Over half of the attendees were community based with representation from London, Hamilton, Ottawa, Montreal and the GTA hospitals.

In a continuing relationship with Operation Smile and the facility in Guwahati, Asaam, India, Drs. Zuker, Borschel and two clinical fellows travelled in January 2014 for another site visit. Surgeons, anaesthetists, speech and language pathologists and dieticians from the Guwaharti Comprehensive Care Centre have visited SickKids to see first-hand how cleft care is delivered here. This model of an ongoing collaboration is working exceptionally well, many thanks to the personnel involved on both sides.

The 10th annual Lindsay Thomson Symposium in Pediatric Plastic Surgery was held on June 4, 2014. This year's Vale Lecture was given by Mr. Jonathan Britto, Consultant and Pediatric Craniofacial Surgeon at Great Ormond Street Hospital in London, UK.

Division of Urology

The division has been very active. Dr. Armando Lorenzo completed a handbook for medical students rotating at SickKids. Dr. Bägli continued in his role as Associate Surgeon-In-Chief at SickKids and directing resident research within the University of Toronto Urology residency program. Along with Drs. Lorenzo, Salle and Koyle, he was significantly involved in the First International Consensus Symposium in Hypospadias held in Las Vegas in September, 2013. He, was Co-PI for the CIHR Planning Grant and co-organizer of this meeting. Dr. Bägli was appointed for a 3-year term to the American Urological Association's Research Council and represented SickKids at the First Innovation Leadership Forum held in La Jolla. Dr. Martin Koyle was highly involved in the program for the European Society of Pediatric Surgery meeting in Dublin held in June, 2014. He and co-authors were united in February, 2014, to be honored at Dallas Children's Hospital to mark the 20th anniversary of the "TIP" urethroplasty publication - the most commonly performed operation for hypospadias. Dr. Walid Farhat successfully ran his 7th Annual Pediatric Urology Laparoscopy course for all pediatric urology fellows across North America. He and Dr. Koyle were extensively involved in the Annual Paediatrics Update, 2014 discussing "Nuts & Bolts of paediatric urology: a rational primary care approach to common problems".

Dr. Michael Mitchell was the inaugural Robert Jeffs Visiting Professor in Paediatric Urology at SickKids and the University of Toronto.

The division attracted its top fellowship choices for both the American Board of Urology accredited and the international 2-year spots, hosted numerous observers and represented SickKids in multiple venues from around the world. They continue to be major contributors to the major paediatric urological publications and meeting abstracts.

On a personal note, this being my last annual report, it has been an extraordinary honour and privilege to lead SickKids' Department of Surgery and Perioperative Services since January 2005. I am so grateful to have worked with so many hard-working, talented and dedicated staff over the past 10 years who have contributed to our vision of "Healthier Children. A Better World".

Division of Cardiac Surgery

Dr. C.A. Caldarone Professor
 Dr. J. Coles Professor
 Dr. E. Hickey Assistant Professor

Dr. O. Honjo Assistant Professor
 Dr. G.S. Van Arsdell Professor (Division Head)

Publications

- Baba K, Honjo O, Chaturvedi RR, Lee KJ, Van Arsdell G, Caldarone CA, Benson LN.** “Reverse Blalock-Taussig shunt”: Application in single ventricle hybrid palliation. *J Thorac Cardiovasc Surg.* 2013 Aug; 146(2): 352-7.
- Babu B, Caldarone CA.** Management of tetralogy of fallot with unilateral absence of pulmonary artery: an overview. *World Journal Pediatric Congenital Heart Surgery.* 2014 Jan 1; 5(1): 70-9.
- Chaturvedi RR, Ryan G, Seed M, Van Arsdell G, Jaeggi ET.** Fetal stenting of the atrial septum: Technique and initial results in cardiac lesions with left atrial hypertension. *International Journal of Cardiology.* 2013 Oct 4; 168(3): 2029-36.
- Friedberg MK, Cho MY, Li J, Assad RS, Sun M, Rohailla S, Honjo O, Aptiz C, Redington AN.** Adverse Biventricular Remodeling in Isolated Right Ventricular Hypertension is Mediated by Increased TGFβ1 Signalling and is Abrogated by Angiostenis Receptor Blockade. *American Journal of Respiratory Cell Molecular Biology.* 2013 Dec. 49(6):1019-28.
- Grosse-Wortmann L, Dragulescu A, Drolet C, Chaturvedi R, Kotani Y, Mertens L, Taylor K, La Rotta G, Van Arsdell GS, Redington A, Yoo SJ.** Determinanats and clinical significance of flow via the fenestration in the Fontan pathway: A mulitimodality study. *International Journal of Cardiology.* 2013 Sep 30; 168(2): 811-7.
- Grosse-Wortmann L, Yoo SJ, Van Arsdell GS, Chetan D, Macdonald C, Benson L, Honjo O.** Preoperative total pulmonary blood flow predicts right ventricular pressure in patients early after complete repair of tetralogy of Fallot and pulmonary atresia with major aortopulmonary collateral arteries. *Journal of Thoracic and Cardiovascular Surgery.* 2013 Nov; 146(5): 1185-90.
- Hamilton BC, Honjo O, Alghamdi AA, Caldarone CA, Schwartz SM, Van Arsdell GS, Holtby H.** Efficacy of Evolving Early-Extubation Strategy of Early Postoperative Functional Recovery in Pediatric Open-Heart Surgery: A Matched Case-Control Study. *Seminars in Cardiothoracic and Vascular Anesthesia.* 2014 Feb.
- Honjo O, Kotani Y, Bharucha T, Mertens L, Caldarone CA, Redington AN, Van Arsdell G.** Anatomical factors determining surgical decision-making in patients with transposition of the great arteries with left ventricular outflow tract obstruction. *European Journal Cardiothoracic Surgery.* 2013 Dec; 44(6): 1085-94.
- Honjo O, Van Arsdell GS.** Tetralogy of Fallot. In: *John Hopkins Medicine Textbook of Cardiothoracic Surgery.* Second Edition. 2014 Mar 28;1069-83.
- Kato H, Fu YY, Zhu J, Wang L, Aafaqi S, Rahkonen O, Slorach C, Traister A, Leung CH, Chiasson D, Mertens L, Benson L, Weisel RD, Hinz B, Maynes JT, Coles GG, Caldarone CA.** Pulmonary vein stenosis and the pathophysiology of “upstream” pulmonary veins. *J Thorac Cardiovasc Surg.* 2013 Sep 28. AID: 10.1016/j.jtcvs.2013.08.046. pii: S0022-5223(13)00966-5. [Epub ahead of print].
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- Kotani Y, Tweddell J, Gruber P, Pizzaro C, Austin EH 3rd, Woods RK, Gruenwald C, Caldarone CA.** Current cardioplegia practice in pediatric surgery: a North American multiinstitutional survey. *Annals Thoracic Surgery.* 2013 Sep; 96(3): 923-9.
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- McCrinkle B, Clarizia NA, Khaikin S, Holtby HM, Manlhiot C, Schwartz SM, Caldarone CA, Coles JG, Van Arsdell GS, Scherer SW, Redington AN.** Remote ischemic preconditioning in children undergoing cardiac surgery with cardiopulmonary bypass: A single centre double-blinded randomized trial. *J Am Heart Assoc.* 2014 Jun 30.

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Invited Visits

Coles J: 4th Canadian Cardiac Pathology & Imaging Course, Toronto, 11 Sep 2013. Discussant: Multi-Disciplinary case-based discussions.

Coles J: The Society of Thoracic Surgeons, Orlando, FL, 27 Jan 2014. Discussant: VEGF and SOD SNPs predict survival following congenital heart disease surgery.

Coles J: Fairchild TV, Toronto, 26 Apr 2014. Presenter: Cardiac surgery, research and technology.

Hickey E: World Congress for Pediatric Cardiology and Cardiac Surgery, Cape Town, 2013. Speaker: Chasing the 5-sigma.

Honjo O: American Heart Association, Dallas, Texas, United States, 18-19 Nov 2013. Presenter: 1/ Clinical outcomes in patients with persistent ventricular dysfunction after Stage I palliation for hypoplastic left heart syndrome. 2/ Anatomical risk factors associated with left-sided pulmonary vein obstruction in single ventricle patients. 3/ Salvage Hybrid Palliation for Critically-ill Infants with Functionally Single Ventricle Physiology. 4/ Outcomes of mechanical circulatory support for patients with functionally single ventricle physiology at different stages of surgical palliation. 5/ Mechanical Circulatory Support by Impella Improved Failing Single Ventricle Physiology in Pigs.

Van Arsdell GS: Advocate Children's Hospital, Chicago, Illinois, United States, 18 Oct 2013. Invited Lecturer: Hypoplastic left heart variant: how small is small: Surgical perspectives.

Van Arsdell GS: Chinese Society for Thoracic and Cardiovascular Surgery, Wuhan, China, 8 Nov 2013. Invited Lecturer.

Van Arsdell GS: Society of Thoracic Surgeons, Orlando, Florida, United States, 27-28 Jan 2014. Presenter: 1/ Fate of Hypoplastic Proximal Aortic Arch in Infants Undergoing Repair for Coarctation of the Aorta via Left Thoracotomy. 2/ Individualizing Care for the Patient with Neonatal Ebstein's Malformation. 3/ Perspectives on the Current Controversies in Tetralogy.

Research and Investigations

A Randomized Controlled Trial of Hybrid and Norwood Surgical Strategies for Single Ventricle Congenital Heart Disease. *Canadian Institutes of Health Research.* Caldarone CA. (\$707,219.00, Jul 2011 - Jun 2016).

Can Sustained Post-Operative Biventricular Pacing Improve Hemodynamics in Children with Electro-Mechanical Dyssynchrony After Surgical Repair of Congenital Heart Disease. *The Heart and Stroke Foundation.* Friedberg M, Van Arsdell GS. (\$172,481.00 CAD, Jul 2012 - Jul 2014).

Cardiovascular Biomarker Discovery and Validation. *Ministry of Health of Ontario.* Coles J. (\$268,000.00, Jul 2010 - Jun 2014).

Clinical Assessment of Thrombosis in Children after Heart Surgery: The CATCH study. *Canadian Institutes for Health Research.* McCrindle BW, Manlhiot C, Gruenwald CE, Brandao LR, Chan AK, Mertens L, Mital S, Holtby HM, Sivarajan VB, Schwartz SM, Van Arsdell GS, Caldarone CA. (\$1,514,330.00 CAD, 2010 - 2015).

Establishment of mechanically-assisted primary cavopulmonary connection physiology in infantile piglets: A proof of concept animal study. *Labatt Family Heart Centre.* Honjo O. (\$25,000.00 CAD, 2011 - present).

Linking the Congenital Heart Surgery Database of the Society of Thoracic Surgeons (STS) with the Congenital Heart Surgeons' Society (CHSS) Database. *The Children's Heart Foundation.* Jacobs JP, Marshall LJ, Jonas R, Mayer JE, Mavroudis C, Austin E, Pasquali S, Williams WG, Gaynor JW, Blackstone E, McCrindle B, O'Brien SM, Edwards FH, Shahian DM, Caldarone CA. (\$199,973.00, Jan 2012 - Dec 2013).

Pulmonary Vein Stenosis: Focus on Upstream Vasculopathy. *Canadian Institute of Health Research.* Caldarone CA. (Feb 2014 - Feb 2017).

Pulmonary venous obstruction in congenital heart disease. *Saving Tiny Hearts Society.* Caldarone CA. (\$80,000.00 USD, 2012 - 2013).

Understanding Right Ventricle Physiology of Tetralogy of Fallot. *Children's Heart Foundation (CHF).* Caldarone CA. (Jan 2014 - Jan 2015).

Division of General Surgery

Dr. G.R. Azzie	Associate Professor
Dr. P.P.L. Chiu	Assistant Professor
Dr. A. Fecteau	Associate Professor
Dr. J.T. Gerstle	Associate Professor

Dr. S. Himidan	Assistant Professor
Dr. J.C. Langer	Professor
Dr. A. Pierro	Professor (Division Head)
Dr. P. Wales	Associate Professor

Publications

Alagaratnam S, Nathaniel C, Cuckow P, Duffy P, Mushtaq I, Cherian A, Desai D, Kiely E, Pierro A, Drake D, De Coppi P, Cross K, Curry J, Smeulders N. Testicular outcome following laparoscopic second stage Fowler-Stephens orchidopexy. *Journal of pediatric urology.* 2013 Aug 31. PMID: 24045121. AID: 10.1016/j.jpuro.2013.08.005.

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- Beres A, Baird R, Gerstle JT.** Comparative outcome analysis of the management of pediatric intussusception with or without surgical admission. *Journal of Pediatric Surgery*. 2014 Jan.
- Berman JN, PPL Chiu, G Dellaire.** “Preclinical animal models for cancer genomics”. In: RJ Arceci, J Berman, G Dellaire. (eds), *Cancer Genomics: from the bench to developing personalized medicine approaches*. 2013 Dec 11. Waltham, United States: Elsevier Press.
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- Eaton S, Zani A, Pierro A, De Coppi P.** Stem cells as a potential therapy for necrotizing enterocolitis. Expert opinion on biological therapy. 2013 Dec 1; 13(12): 1683-9.
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Invited Visits

- Chiu PPL:** University of Hong Kong, Pokfulam, Hong Kong, 11 Nov 2013. Invited Speaker: Learning from Xenograft Models: The tool for cancer studies.
- Fecteau A:** Canadian Biliary Atresia Registry Planning Meeting, Montreal, Quebec, Canada, 16 Sep 2013. Invited Lecturer: Liver Transplantation for Biliary Atresia in Canada.
- Grant D:** Studies of Pediatric Liver Transplantation, Toronto, Ontario, Canada, 27 Sep 2013. Invited Speaker: Living Donor Liver Transplantation: The University of Toronto Perspective.

Grant D: Canadian Liver Transplant Network, Montreal, Quebec, Canada, 26 Oct 2013. Invited Lecturer: Living Donor Liver Transplantation: The University of Toronto Perspective.

Grant D: Addenbrooke's Hospital, Cambridge, United Kingdom, 9 Dec 2013. Visiting Professor: Living Donor Liver Transplantation: The University of Toronto Perspective.

Pierro A: Division of Neonatology, University of Rome, Rome, Italy, 17 Oct 2013. Invited Lecturer: Acidosis in Thoroscopic surgery in Neonates. Grand Rounds, Department of Pediatrics.

Pierro A: Manitoba Institute of Child Health, Winnipeg, Manitoba, Canada, 13 Nov 2013. Visiting Professor: Randomised Controlled Trials in Paediatric Surgery Invited lecturer: Thorlakson Lecture, Surgical Grand Rounds, Manitoba Institute of Child Health.

Pierro A: Division of Pediatric Surgery, Children's National Health Systems, Washington, District of Columbia, United States, 11 Dec 2013. 1/ Visiting Professor: Necrotising Enterocolitis: Experimental and Clinical Studies. 2/Judson Randolph Lecturer: Surgical Grand Rounds.

Pierro A: University of Milan, Red Cross Children's Hospital, Cape Town and Cincinnati Children's Hospitals, Milan, Milano, Italy, 5 Apr 2014. Invited Lecturer: Gastric Pull-up: 20 years of experiences.

Pierro A: Japanese Society of Pediatric Surgeons, Osaka, Ôsaka [Osaka], Japan, 8-10 May 2014. 1/ Chair: International Session on Neonatal Surgery. 2/ Keynote Speaker: Necrotising Enterocolitis. 3/ Invited Lecturer: Randomized Controlled Trials in Pediatric Surgery.

Wales P: Icahn School of Medicine at Mount Sinai, Guts and the City: Intestinal Failure Rehabilitation and Transplant Symposium, New York, New York, United States, 12 Apr 2014. Invited Lecturer: 1/ Multi-Disciplinary Management of Pediatric Intestinal Failure. 2/ Newer Lipid Emulsions.

Wales P: Canadian Nutrition Society, St. John's, Newfoundland and Labrador, Canada, 6 Jun 2014. Invited Speaker: Dana Boctor, Valerie Marchand- Chair. Nutritional and Surgical Management of Paediatric Intestinal Failure.

Wales P: Stanley Mercer Visiting Professorship, Department of Surgery Research Symposium, Children's Hospital of Eastern Ontario, Ottawa, Ontario, Canada, 18 Jun 2014. Visiting Professor: 1/ Perspective On The Use of Alternative Parenteral Lipid Emulsions in Paediatric Intestinal Failure. 2/ Multidisciplinary Intestinal Rehabilitation Teams for Paediatric Intestinal Failure.

Research and Investigations

Advancing research into paediatric surgical techniques and childhood nutrition by utilization of Isotope-Ratio Mass Spectrometry. *Canada Foundation for Innovation (CFI)*. Pierro A, Post M, Pencharz P. (\$269,340.00 CAD, Jul 2013 - Jun 2014).

A Pilot Study of Systemic Glucagon Like Peptide Combined With Oral Epidermal Growth Factor and Characterization of Gut Microbiome in Short Bowel Piglets With and Without Ileum. *A.S.P.E.N. Rhoads Research Foundation*. Levesque C, Turner JM, Wales PW, Li J. (\$24,900.00 CAD, Sep 2012 - Aug 2013).

Canadian Biliary Atresia Registry Planning Meeting. *Canadian Institutes of Health Research (CIHR)*. Schreiber R, Ahmed N, Emil S, Fecteau A, Laberge JM. (\$25,000.00 CAD, Jul 2013 - Jun 2014).

ChiDREN: Childhood Liver Disease and Research Network Consortium. *National Institutes of Health*. Ng V, Avitzur Y, Durie P, Chung C, Fecteau A. (\$730,381.00 USD, 2009 - 2014).

Computer Stereo Vision for Image Guided Surgery. *Ontario Centres of Excellence*. Wildes R, Himidan S, Jasiobedzki P, Vesoughi S, Gryn J, Umasuthan M, Shang L. (\$24,999.30 CAD, Sep 2012 - Aug 2013).

Costal Cartilage: Ultra Structural Properties in Chest Wall Deformities. *National Institute of Health (NIH), R21*. Fecteau A. (USD, 2006 - present).

Determination of molecular signatures that allow differentiation between unilateral and bilateral Wilms' tumors using genome-wide arrays and whole-exome sequencing. *C17 Research Network*. Weksberg R, Lorenzo A, Gerstle JT, Romao R, Bagli D, Grant R, Choufani S, Shuman C, Taylor G. (\$150,000.00 CAD, Jul 2013 - Jun 2015).

Development of Highly Active Anti-Leukemia Stem Cell Therapy (HALT). *CIRM-CSCC Team Grant*. Dick J, Wang J, Danska J, Guidos C, Hitzler J, Chiu P. (\$2,100,615.00 CAD, Mar 2010 - Feb 2014).

Evaluation of the nurse practitioner/enterostomal therapist role for the Hirschsprung disease and anorectal malformation population. *Hospital for Sick Children*. Colapinto K, Dupuis K, Lapidus-Krol E, Langer JC. (\$128,783.00 CAD, 2011 - 2014).

High-Impact Strategies Toward Overweight Reduction in Youth. *Canadian Institute for Health Research*.

McCordle BW, Anderson G, Hamilton J, Parkin P, Pencharz PB, Birken CS, Dettmer EL, Langer JC, O'Connor DL, Tein I. (\$2,420,495.00, 2008 - 2013).

Parenteral Omega-3 Fatty Acids for Treatment of Intestinal Failure Associated Liver Disease: A Translational Research Study. *CIHR*. Wales P, Turner J, Pencharz P, Ball R, Field C, Van Aerde J, Clandini T. (\$264,169.00 CAD, Jan 2011 - Jan 2014).

Short Bowel Piglet Studies. *The Hospital for Sick Children Foundation*. Turner JM, Wales PW. (\$307,550.00 CAD, Jul 2011 - Jun 2014).

Short Bowel Syndrome and Glucagon-Like Peptide-2 Therapy: Actions and Mechanisms Studied in Neonatal Piglets. *CIHR/IRSC*. Turner JM, Wales PW, Brubaker P, Pencharz PB, Ball RO, Nation PN, Sigalet D, Vine D. (\$548,528.00 CAD, Apr 2013 - Apr 2017).

The Effect of Music Exposure on Psychological and Physiological Functioning in Children Undergoing Elective Surgery: A Randomized Controlled Trial. *North York General Hospital*. Himidan S, Oliveira C, Pierro A, Eaton S, Joo D, Grace N, Wilonska J, Campbell F. (\$49,755.00 CAD, Sep 2013 - Aug 2014).

The Optimal Parenteral Lipid To Ensure Healthy Outcomes In Preterm Neonates. *CIHR*. Tuner J, Wales P, Field C, Willing B, Mager D, Sauve. (\$612,070.00 CAD, Jul 2013 - Jun 2014).

The use of the intravenous metoclopramide vs. placebo in infants with gastroschisis: a pilot double blinded randomized controlled trail. *PSI, Physicians' Services Incorporated Foundation*. Langer JC. (\$134,500.00 CAD, 2013 - 2015).

Using the Zebrafish as a Pre-Clinical Animal Tumour Model for Drug Discovery and the Evaluation of Anti-Leukemia Agents. *Canadian Institute of Health, CIHR-NSERC*. Dellaire G, Berman J, Whitlock J, Chiu P. (\$600,000.00 CAD, Apr 2012 - Apr 2015).

Honours Received

Gerstle JT: Chief Surgical Residents' Award for the Best Teacher, The Hospital for Sick Children, General Surgery, Dept of Surgery, Faculty of Medicine, Canada. 2014.

Langer JC: Detweiler Traveling Fellowship, Royal College of Physicians and Surgeons of Canada, Canada. \$7,000.00 CAD. Jul 2013 - Jun 2014.

Langer JC: "Toronto's 30 Best Doctors", Toronto Life Magazine, Dept of Medicine, Canada. 2014.

Wales P: Paediatric General Surgery Fellowship Teaching Award, The Hospital for Sick Children, General Surgery, Dept of Surgery, Faculty of Medicine, Toronto, Ontario, Canada. Jun 2014.

Division of Neurosurgery

Dr. P.B. Dirks	Professor
Dr. J.M. Drake	Professor (Division Head)
Dr. A. Kulkarni	Associate Professor

Dr. J.T. Rutka	Professor
Dr. M.D. Taylor	Professor

Publications

Agnihotri S, Burrell KE, Wolf A, Jalali S, Hawkins C, Rutka JT, Zadeh G. Glioblastoma, a brief review of history, molecular genetics, animal models and novel therapeutic strategies. *Arch Immunol Ther Exp*. 2013 Feb; 61(1):25-41.

Ahmed N, Devitt KS, Keshet I, Spicer J, Imrie K, Feldman L, Cools-Lartigue J, Kayssi A, Lipsman N, Elmi M, Kulkarni AV, Parshuram C, Mainprize T, Warren RJ, Fata P, Gorman MS, Feinberg S, Rutka J. A systematic review of the effects of resident duty hour restrictions in surgery: Impact on resident wellness, training, and patient outcomes. *Ann Surg*. 2014 Jun; 259(6): 1041-1053.

Al-Ahmed IH, Boughamoura M, Dirks P, Kulkarni AV, Rutka JT, Drake JM. Neurosurgical management of neuroenteric cysts in children. *J Neurosurg Pediatrics*. 2013 May; 11(5):511-517.

Al-Tamimi YZ, Sinha P, Chumas PD, Crimmins D, Drake J, Kestle J, Hayward R, Solanki GA, Thomson S, Thorne J. Ventriculoperitoneal shunt 30-day failure rate: a retrospective international cohort study. *Neurosurgery*. 2014 Jan;74(1):29-34.

Badhiwala JH, Thompson EM, Lorenzo AJ, Kulkarni AV. Spontaneous improvement in urological dysfunction in children with congenital spinal lipomas of the conus medullaris. *J Neurosurg Pediatrics*. 2014 May; 13(5): 536-540.

- Barnett C, Bril, V, Kapral M, Kulkarni A, Davis AM.** A conceptual framework for evaluating impairments in myasthenia gravis. *PLoS ONE*. 2014 May; 9(5): e98089.
- Bennett-Back O, Ochi A, Widjaja E, Nambu S, Kamiya A, Go C, Chuang S, Rutka JT, Drake J, Snead OC III, Otsubo H.** Magnetoencephalography delineates the extent of the epileptogenic zone for surgical planning in children with intractable epilepsy due to porencephalic cyst/encephalomalacia. *J Neurosurg:Pediatrics*. 2014.
- Breimer G, Bodani V, Looi T, Drake J.** Design and evaluation of a new synthetic brain simulator for endoscopic third ventriculostomy. *Journal of Neurosurgery, Pediatrics*. 2014.
- Brooks RJ, Piper H, Looi T, Drake J.** NOTES suction grasper for tubular viscera - characterization of gripping force when varying hole size, diameter, and number. *Conf Proc IEEE Eng Med Biol Soc*. 2013; 2013:4726-9.
- Buss MC, Remke M, Lee J, Gandhi K, Schniederjan MJ, Kool M, Northcott PA, Pfister SM, Taylor MD, Castellino RC.** The WIP1 Oncogene Promotes Progression and Invasion of Aggressive Medulloblastoma Variants. *Oncogene*. 2014.
- Cheung CL, Looi T, Lendvay TS, Drake JM, Farhat WA.** Use of 3-Dimensional Printing Technology and Silicone Modeling in Surgical Simulation: Development and Face Validation in Pediatric Laparoscopic Pyloroplasty. *Journal of Surg Educ*. 2014.
- Cohen M, Bartels U, Branson H, Kulkarni AV, Hamilton J.** Trends in treatment and outcomes of pediatric craniopharyngioma, 1975-2011. *Neuro-Oncology*. 2013 Aug; 15(6): 767-74.
- Dey J, Dubuc AM, Pedro KD, Thirstrup D, Mecham B, Northcott PA, Wu X, Shih D, Tapscott SJ, Leblanc M, Taylor MD, Olson JM.** MyoD Is a Tumor Suppressor Gene in Medulloblastoma. *Cancer Research*. 2013 Nov 15. 73(22):6828-37.
- Diaz RJ, McVeigh PZ, O'Reilly MA, Burrell K, Bebenek M, Smith C, Etame A, Zadeh G, Hynynen K, Wilson BC, Rutka JT.** Focused ultrasound delivery of Raman nano particles across the blood-brain barrier: Potential for targeting experimental brain tumours. *Nanomedicine*. 2013. Dec 26. pii: S1549-9634(13)00717-X. doi: 10.1016/j.nano.2013.12.006. [Epub ahead of print].
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- Ellis MJ, Armstrong D, Vachhrajani S, Kulkarni AV, Dirks PB, Drake JM, Smith ER, Scott RM, Orbach DB.** Angioarchitectural features associated with hemorrhagic presentation in pediatric cerebral arteriovenous malformations. *J NeuroInterventional Surg*. 2013 Aug; 5(3): 191-5.
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- Fallah A, Ibrahim GM, Rutka JT.** Hemispherectomy: When half is better than the whole. *Journal of Clinical Neuroscience*. 2013 Mar; 20(3):478.
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Lichter P, Laughton SJ, Lee S, McCowage G, Northcott PA, Olson JM, Packer RJ, Pfister SM, Pietsch T, Pizer B, Pomeroy SL, Remke M, Robinson GW, Rutkowski S, Schoep T, Shelat AA, Stewart CF, Sullivan M, Taylor MD, Wainwright B, Walwyn T, Weiss WA, Williamson D, Gajjar A. Medulloblastoma Down Under 2013: a report from the third annual meeting of the International Medulloblastoma Working Group. *Acta Neuropathologica*. 2014; 127(2):189-201.

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Ibrahim GM, Wong SM, Anderson RA, Singh-Cadieux G, Akiyama T, Ochi A, Otsubo H, Okanishi T, Valiante TA, Donner E, Rutka JT, Snead OC 3rd, Doesburg SM. Dynamic modulation of epileptic high frequency oscillations by the phase of slower cortical rhythms. *Exp Neurol*. 2014 Jan; 251:30-8.

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Invited Visits

Dirks PB: World Congress of Neurosurgery, Seoul, Korea, Republic Of, 9 Sep 2013. Invited Lecturer: 1/ The Layers of Brain Tumor Heterogeneity. 2/ Surgical Management of Brain Stem Tumors.

Dirks PB: Congress of Neurosurgical Surgeons, San Francisco, California, United States, 21 Oct 2013. Invited Lecturer: Managing Pediatric Neurovascular Diseases.

Dirks PB: Medulloblastoma in the Mountains 2, St.Moritz, Switzerland, 15 Jan 2014. Invited Lecturer: Defining Tumorigenic Lineage Properties in Shh Medulloblastoma.

Dirks PB: The Stem Cell Niche, Copenhagen, Denmark, 20 May 2014. Invited Lecturer: Rare quiescent Sox2+ cells drive medulloblastoma growth and relapse.

Drake JM: Congress of Neurosurgery, San Francisco, United States, 9 Oct 2013. Presenter: Complication Avoidance in Intracranial Endoscopy, “Masters of Endoscopy”.

Drake JM: Hydrocephalus Clinical Research Network, Salt Lake City, Utah, United States, 18 Oct 2013. Invited Lecturer.

Drake JM: 72nd Japanese Neurosurgical Society, Yokohama, Japan, 15-18 Oct 2013. Presenter: 1/ Recent Progress in the Surgical Treatment of Pediatric Hydrocephalus. 2/ The Next Generation of Image Guided Surgery - Integrating Robotics, Imaging and Simulation.

Drake JM: Pediatric Oncology Group of Ontario, Toronto, Canada, 22 Nov 2013. Keynote Speaker: Diagnostic Imaging and New Surgical Techniques.

Drake JM: American Association of Pediatric Neurosurgery, Guanacosta, Costa Rica, 28 Jan 2014. Invited Speaker: Development of an Synthetic Simulator for Neuroendoscopy - Validation and Performance Assessment. Will you have to “Fly” it to Maintain Competence?

Drake JM: American Association of Neurological Surgery, Annual Meeting, San Francisco, United States, 7 Apr 2014. Presenter: Pediatric Intracranial Endoscopy, Applications, Outcomes, Complication Avoidance.

Kulkarni AV: Congress of Neurological Surgeons Annual Meeting, San Francisco, California, United States, Oct 2013. Invited Seminar Panelist: Complex hydrocephalus management.

Kulkarni AV: North American Senior Resident Course on Neurotrauma and Critical Care, Toronto, Nov 2013. Invited Lecturer: Pediatric Head Injury Management.

Kulkarni AV: 5th Latin American Congress of Pediatric Neurosurgery, Cartagena, Colombia, Nov 2013. Visiting Professor: 1/ Slit ventricle syndrome. 2/ Outcome of CSF shunting and endoscopy in children. 3/ Radiosurgery in children.

Kulkarni AV: International Federation of Neuroendoscopy, Mumbai, Maharashtra, India, Dec 2013. Invited Lecturer: 1/ International trials in neuroendoscopy. 2/ Endoscopic third ventriculostomy & choroid plexus cauterization.

Rutka JT: Portland International Symposium, Portland, Oregon, United States, 18 Jul 2013. Invited Speaker: Neurosurgical Oncology: Toward Personalized Medicine.

Rutka JT: University of Bergen, Bergen, Norway, 8 Aug 2013. Invited Speaker: Translational Research; Fact or Fiction.

Rutka JT: WFNS World Congress of Neurosurgery, Seoul, Korea, Republic Of, 9 Sep 2013. Speaker: 1/ How to Begin Research in Neuro-oncology. 2/ Pediatric Brain Tumors: A Histologic and Genetic Update.

Rutka JT: Samsung Hospital, Seoul, Korea, Republic Of, 10 Sep 2013. Invited Lecturer: The pendulum keeps on swinging.

Rutka JT: American Academy of Neurological Surgeons, Newport Beach, California, United States, 28 Sep 2013. Presenter: Re-operation for intractable epilepsy after hemispherectomy: Utility of DT1 linked to neuronavigation.

Rutka JT: 63rd Annual Meeting of the Congress of Neurological Surgeons, San Francisco, California, United States, 19-24 Oct 2013. 1/ Moderator: Negotiation Tactics from the Experts - Getting the Best Deal (Hospital Negotiations). 2/ Speaker: Nanoparticle Delivery to Brain Tumors with MRI-guided Focused Ultrasound. 3/ Moderator: Operative Neurosurgery Session “Techniques to Advance Safety and Efficacy in Microneurosurgery”.

Rutka JT: RUNN, Massachusetts, United States, 29 Oct 2013. Invited Lecturer: Glioblastoma multiforme: Advances beyond the leading edge.

Rutka JT: Havergal College, TED Talk, Toronto, Ontario, Canada, 16 Nov 2013. Speaker: Six Dreaded Words.

Rutka JT: AANS/CNS Fellows Reunion, Toronto, Ontario, Canada, 6 Dec 2013. Speaker: William Keith, Canada’s First Pediatric Neurosurgeon.

Rutka JT: UCLA, Los Angeles, California, United States, 15 Jan 2014. Invited Lecturer: Advances in epilepsy surgery in children: Better arrows in the quiver.

Rutka JT: Rocky Mountain Neurosurgical Society, June 15-18, 2014, Victoria, British Columbia, Canada. Honoured Guest: 1/ Neurosurgical Leadership: Lessons learned. 2/ Neurosurgical Oncology: What neurosurgeons should know.

Taylor MD: Institute For Cancer Research, Sutton, United Kingdom, 5 Jul 2013. Invited Lecturer: How Genomics Can Inform the Clinical Care of Children with Ependymoma and Medulloblastoma.

Taylor MD: Institute Curie, Paris, France, 9 Jul 2013. Invited Lecturer: How Genomics Can Inform the Clinical Care of Children with Ependymoma and Medulloblastoma.

Taylor MD: New York University Medical Center, New York City, New York, United States, 29 Jul 2013. Invited Lecturer: Clinical Implications of Genomics for the Care and Classification of Children with Malignant Brain Tumors.

Taylor MD: Journal of Internal Medicine, Stockholm, Sweden, 3 Sep 2013. Invited Lecturer: Genetically bland ependymomas of infancy are driven by epigenetic mechanisms 10th Journal of Internal Medicine Key Symposium: Taming the Cancer Cell.

Taylor MD: Paediatric Nordic Neuro-Oncology Meeting, Copenhagen, Denmark, 4 Sep 2013. Invited Lecturer: 1/ Medulloblastoma Heterogeneity through space and time accounts for the differences in behaviour in the clinic. 2/ One of these things is not like the others: poor prognosis amongst epigenetically driven ependymomas.

Taylor MD: Canadian Society for Clinical Investigation Annual Meeting, Ottawa, Ontario, Canada, 18 Sep 2013. Doupe Prize Lecturer: One of these things is not like the others: poor prognosis amongst epigenetically driven ependymomas.

Taylor MD: The Second Minnesota Neuro-Oncology Symposium, Minneapolis, Minnesota, United States, 26 Sep 2013. Invited Lecturer: Intra and Intertumoral Heterogeneity Explains the Clinical Behavior of Medulloblastoma Plenary Session.

Taylor MD: Genetech, San Francisco, California, United States, 11 Oct 2013. Invited Lecturer: Genomic Characteristics Drive the Clinical Behavior of Medulloblastoma.

Taylor MD: University of California, San Francisco, California, United States, 12 Oct 2013. Invited Lecturer: Genetic Heterogeneity Through Space and Time Drives The Clinical Behavior of Childhood Brain Tumors Cancer Center Seminar Series.

Taylor MD: Research Update in Neuroscience for Neurosurgeons, Woods Hole, Massachusetts, United States, 30 Oct 2013. Invited Lecturer: Clinical Implications of Pediatric Brain Tumor Molecular Genetics.

Taylor MD: Canadian Cancer Research Conference, Toronto, Ontario, Canada, 5 Nov 2013. Invited Lecturer: Heterogeneity through space and time drives the clinical behavior of childhood brain tumors in the clinic.

Taylor MD: Society for Neuro-Oncology, San Francisco, California, United States, 22 Nov 2013. Invited Lecturer: Molecular Genetics of Medulloblastoma.

Taylor MD: Medulloblastoma in the Mountains 2, St.Moritz, Switzerland, 14 Jan 2014. Invited Lecturer: Chromosome Engineering to Model Copy Number Aberrations.

Taylor MD: Keystone Meeting: Developmental Pathways and Cancer: Wnt, Notch, and Hedgehog, Banff, Alberta, Canada, 5 Feb 2014. Invited Lecturer: Heterogeneity and Therapeutic Resistance Among the Shh Medulloblastomas.

Taylor MD: New York University, Department of Neurosurgery, New York City, New York, United States, 19 Feb 2014. Invited Lecturer: Molecular Heterogeneity Drives the Clinical Behavior of Childhood Brain Tumors.

Taylor MD: Canadian Pediatric Neurosurgery Meeting, Whistler, British Columbia, Canada, 26 Feb 2014. Invited Lecturer: 1/ Genomics of Medulloblastoma and Outcome Based on Surgical Resection. 2/ Mother Nature 1, Surgeons 0. How the natural history of molecular variants of ependymomas drives their behaviour in the clinic.

Taylor MD: CMM/LICR Lecture Series at University of California, San Diego, California, United States, 10 Apr 2014. Invited Lecturer: Molecular Heterogeneity Drives the Clinical Behaviour of Childhood Brain Tumors.

Taylor MD: University of North Carolina Lineberger Symposium, Chapel Hill, North Carolina, United States, 21 Apr 2014. Invited Lecturer: Epigenetic Events in the Initiation and Maintenance of Childhood Brain Tumors.

Taylor MD: O.I.C.R. Cancer Stem Cell Scientific Advisory Board Meeting, Toronto, Ontario, Canada, 25 Apr 2014. Invited Lecturer: Poor prognosis amongst the epigenetic driven ependymomas of infancy.

Taylor MD: Terry Fox Research Institute 5th Annual Scientific Meeting, Montreal, Quebec, Canada, 7 May 2014. Invited Lecturer: Heterogeneity through space and time drives the clinical behavior of childhood brain tumors.

Taylor MD: 2014 PBTF Scientific Conference, San Antonio, Texas, United States, 14 May 2014. Invited Lecturer: Wrong does not cease to be wrong because the majority share in it: Erroneous and harmful assumptions about pediatric brain tumors debunked through tumor genomics.

Research and Investigations

Addressing tumor heterogeneity through targeting of subgroup specific shared maintenance genes – the correct target for each cancer. *CIHR Team Grant – Terry Fox Frontiers Program.* Taylor MD, Egan S, Woodgett J, Zacksenhaus E. (\$3,032,612.00 CAD, Aug 2011 - Jul 2014).

Anastomosis Tool Kit. *MaRS Innovation.* Drake JM, Looi T. (\$85,000.00 CAD, Apr 2012 - Apr 2014).

Asymmetrical self renewal in normal and cancer stem cells of the human brain. *Canadian Institutes of Health Research (CIHR).* Dirks PB. (\$588,180.00 CAD, 2008 - 2013).

Blockade of aberrant HGF/cMET signaling in medulloblastoma. *Canadian Cancer Society Research Institute.* Rutka, JT. (\$432,000.00 USD, 2011 - 2014).

Cellular and Genetic Basis of Anaplastic Medulloblastoma. *National Institute of Health.* Taylor M, Weiss B, Wech-Reya R. (\$2,686,145.00 USD, 2011 - 2016).

CSF levels of L1CAM and amyloid precursor protein in post-hemorrhagic hydrocephalus of prematurity. *National Institutes of Health (NIH) (USA).* Limbrick D, Inder T, Holtzman M, Leonard J, Kulkarni AV, Kestle JR, Riva-Cambrin J, Wellons JC, Park TS, Holukbov R; Whitehead WE. (\$794,780.00 USD, Apr 2012 - Mar 2017).

Development of a tool to measure school performance in children following traumatic brain injury. *CIHR Fellowship.* Kulkarni AV. (\$275,000.00 CAD, Jan 2010 - Jan 2015).

Identification of novel small-molecules to target the most aggressive subgroup of medulloblastoma. *The Garron Family Cancer Centre.* Rutka JT, Faria C. (\$50,000.00 CAD, 2012 - 2013).

Immunogenomics to Create New Therapies for High Risk Childhood Cancers. *Stand Up 2 Cancer Pediatric Dream Team.* Taylor MD, Maris, John, Mackall, Crystal. (\$14,500,000.00 CAD, 2013 - 2017).

Magnetic Resonance Guided Focused Ultrasound for Noninvasive Pain Therapy of Osteoid Osteoma in Children- A pilot study. *Focused Ultrasound Foundation.* Drake JM. (2014 - 2015).

Medulloblastoma and Metastases. *National Institutes of Health (NIH) (USA).* Taylor MD, Weiss B. (\$2,815,548.00 USD, Jul 2010 - Jun 2015).

Medulloblastoma Metastases Arise From the Cancer Stem Cell Compartment. *Ontario Institute of Cancer Research Cancer Stem Cell Program.* (\$582,640.00 CAD, 2012 - 2016).

Molecular targeting of the Rho-GTPase pathway in human astrocytomas. *Canadian Institutes of Health Research (CIHR).* Rutka JT, Hynynen K, Mainprize T. (\$797,005.00 CAD, 2010 - 2015).

MRgFUS for intraventricular hemorrhage of prematurity. *Garron Family Cancer Centre.* Andrew J, Looi T, Drake J. (\$50,000.00 CAD, 2012 - 2013).

Non-invasive treatment of paediatric neurological disorders using MR-guided focused ultrasound (MRgFUS). *Brain Canada.* Drake JM. (\$1,500,000.00 CAD, 2014 - 2017).

Non- Invasive Treatment of Pediatric Neurological Disorders using MR-guided Focused Ultrasound-Part1 Pediatric Skull Characterization and Re-focusing. *Focused Ultrasound Foundation.* Drake JM. (\$100,000.00, 2014 - 2015).

Optosim. *Ontario Centres of Excellence.* Drake JM. (\$25,000.00 CAD, 2013).

Otoscopy and Ophthalmology Training Technology Development. OtoSim and Optosim Devices. *Mitacs-Accelerate.* Drake JM. (\$80,000.00 CAD, 2014 - 2015).

Overcoming resistance in high-risk medulloblastoma. *CureSearch.* Weiss B, Bradner J, Wechsler-Reya R, Taylor MD. (\$450,000.00 CAD, 2013 - 2016).

Physicians' Services Incorporated Foundation Mathematical optimization of pediatric cranial vault remodeling and robotic CO2 etching of skull contours. *Physicians' Services Incorporated.* Drake JM. (\$169,000.00, 2012 - 2013).

Post-infectious hydrocephalus in African infants: Causes, prevention and treatment. *National Institutes of Health (NIH) (USA), NINDS.* Kulkarni AV. (\$356,401.00 USD, Jan 2013 - Jul 2015).

SNCAIP: a novel oncogene restricted to Group 4 medulloblastoma. *Canadian Institutes of Health Research.* Taylor MD. (\$847,065.00 CAD, 2013 - 2018).

Stratifying and Targeting Medulloblastoma Through Genomics. *Genome Canada.* Taylor MD. (\$9,856,814.00 CAD, 2011 - 2014).

Temperature measurement in cortical bone and bone marrow during magnetic resonance guided focused ultrasound thermotherapy in a porcine model. *Canadian Institutes of Health Research (CIHR).* Drake JM. (\$450,000.00, 2013 - 2015).

Translational targeting of Group D medulloblastoma. *Pediatric Brain Tumor Foundation.* Rutka JT, Taylor MD. (\$1,000,000.00 USD, 2011 - 2014).

Honours Received

Kulkarni AV: Alan Hudson Faculty Teaching Award. Neurosurgery, Dept of Surgery, Faculty of Medicine. For excellence in post-graduate neurosurgery residency education. Jul 2013 - Jun 2014.

Rutka JT: Fellow, American Surgical Association. The American Surgical Association is the nation's oldest and most prestigious surgical organization. 2013.

Rutka JT: Editor-in-Chief, Journal of Neurosurgery. Jul 2013.

Rutka JT: Order of Ontario. Jan 2014.

Rutka JT: Honorary Degree, PhD, Faculty of Medicine, Bahcesehir University, Istanbul, Turkey. May 2014.

Division of Orthopaedics

Dr. B. Alman	Professor
Dr. S. Hopyan	Assistant Professor
Dr. A. Howard	Associate Professor (Interim Division Head)
Dr. S. Kelley	Assistant Professor
Dr. M.L. Murnaghan	Assistant Professor

Dr. U. Narayanan	Associate Professor
Dr. J.H. Wedge	Professor
Dr. J.G. Wright	Professor
Dr. R. Zeller	Associate Professor

Publications

Ainsworth KE, Chavhan GB, Gupta AA, Hopyan S, Taylor G. Congenital infantile fibrosarcoma: review of imaging features. *Pediatr Radiol.* 2014 Apr 6. PMID: 24706181. AID: 10.1007/s00247-014-2957-5 [doi].

Baht GS, Silkstone D, Nadesan P, Whetstone H, Alman BA. Activation of hedgehog signaling during fracture repair enhances osteoblastic-dependent matrix formation. *J Orthop Res.* 2014 Apr; 32(4): 581-586.

Borkhoff CM, Hawker GA, Kreder HJ, Glazier RH, Mahomed NN, Wright JG. Influence of patients' gender on informed decision making regarding total knee arthroplasty. *Arthritis Care Res (Hoboken).* 2013 Aug;

65(8): 1281-90.

Boutis K, Grootendorst P, Willan A, Plint AC, Babyn P, Brison RJ, Sayal A, Parker M, Mamen N, Schuh S, Grimshaw J, Johnson D, Narayanan U. Effect of the Low Risk Ankle Rule on the frequency of radiography in children with ankle injuries. *CMAJ*. 2013 Oct 15; 185(15): E731-8.

Boutis K, Howard A, Constantine E, Cuomo A, Somji Z, Narayanan UG. Evidence into Practice: Pediatric Orthopaedic Surgeon Use of Removable Splints for Common Pediatric Fractures. *J Pediatr Orthop*. 2014 May 30. PMID: 24887079. AID: 10.1097/BPO.0000000000000223 [doi].

Boutis K, Howard AW, Constantine E, Cuomo A, Narayanan U. Evidence into Practice: Emergency Physician Management of Common Pediatric Fractures. *Academic Emergency Medicine*. 2013 Nov.

Boutis K, Howard A, Constantine E, Cuomo A, Somji Z, Narayanan UG. Evidence into Practice: Pediatric Orthopaedic Surgeon Use of Removable Splints for Common Pediatric Fractures. *J Pediatr Orthop*. 2014 May 30. PMID: 24887079. AID: 10.1097/BPO.0000000000000223.

Boutis K, Howard A, Constantine E, Cuomo A, Narayanan U. Evidence Into Practice: Emergency Physician Management of Common Pediatric Fractures. *Pediatr Emerg Care*. 2014 Jun 20. PMID: 24977995. AID: 10.1097/PEC.0000000000000162.

Campbell V, Nadesan P, Ali SA, Wang CY, Whetstone H, Poon R, Wei Q, Keilty J, Proctor JL, Wang LW, Apte SS, McGovern K, Alman BA, Wunder J. Hedgehog pathway inhibition in chondrosarcoma using the Smoothened inhibitor IPI-926 directly inhibits sarcoma cell growth. *Mol Cancer Ther*. 2014 Mar 14; Epub ahead of print.

Carey JL, EJ Wall, KG Shea, NL Grimm, AF Anderson, EW Edmonds, HG Chambers, BE Heyworth, MS Kocher, RM Lyon, ML Murnaghan, CW Nissen, J Polousky, J Weiss, RW Wright. Reliability of the ROCK Osteochondritis Dissecans Knee Arthroscopy Classification System - Multi-center Validation Study. *Orthopaedic Journal of Sports Medicine*. 2013 Sep; 1(4).

Chaudhry S, Hopyan S. Bipolar latissimus transfer for restoration of elbow flexion. *J Orthop*. 2013 Jul 17;10(3):133-8.

Dolan LA, Wright JG, Weinstein SL. Effects of bracing in adolescents with idiopathic scoliosis. *N Engl J Med*. 2014 Feb 13;370(7):681.

Dold AP, Murnaghan ML, Xing J, Abdalla FW, Brull R, Whelan DB. Pre-operative Femoral Nerve Block in Hip Arthroscopy: A Retrospective Review of 108 Consecutive Cases. *American Journal of Sports Medicine*. 2014 Jan; 42(1): 144-149.

Dwyer T, Theodoropoulos JS, Herold J, Henry P, Wasserstein D, Murnaghan ML, Wadey V, Hodges B, Semple J, Ogilvie-Harris D. Assessing competence of orthopaedic residents: the reliability and validity of an objective structured clinical examination after a sports medicine rotation. *Journal of Bone and Joint Surgery - American*. 2013 Nov; 95(22).

Dwyer T, Whelan DB, Khoshbin A, Wasserstein D, Dold A, Chahal J, Nauth A, Murnaghan ML, Ogilvie-Harris DJ, Theodoropoulos JS. The sizing of hamstring grafts for anterior cruciate reconstruction: intra- and inter-observer reliability. *Knee Surgery, Sports Traumatology, Arthroscopy*. 2014 Mar.

Fixler T, Wright JG. Identification and Use of Operating Room Efficiency Indicators: The Problem of Definition. *Can J Surg*. 2013 Aug; 56(4): 224-6.

Gardner RO, Bradley CS, Howard A, Narayanan UG, Wedge JH, Kelley SP. The incidence of avascular necrosis and the radiographic outcome following medial open reduction in children with developmental dysplasia of the hip: a systematic review. *Bone Joint J*. 2014 Feb; 96-B(2): 279-86.

Ghanbari-Azarnier R, Sato S, Wei Q, Al-Jazrawe M, Alman BA. Targeting stem cell behavior in desmoid tumors (aggressive fibromatosis) by inhibiting hedgehog signaling. *Neoplasia*. 2013 Jul; 15(7): 712-719.

Heyworth B, Edmonds E, Murnaghan ML, Kocher M. Drilling Techniques for Osteochondritis Dissecans. *Clinics in Sports Medicine - Osteochondritis Dissecans: Diagnosis and Treatment Options for Athletes*. 2014 Apr; 33(2): 305-312.

Jung NH, Brix O, Bernius P, Schroeder AS, Kluger GJ, Beyerlein A, Weir S, von Kries R, Narayanan UG, Mall V, Berweck S. German Translation of the Caregiver Priorities and Child Health Index of Life with Disabilities Questionnaire: Test-Retest Reliability and Correlation with Gross Motor Function in Children with Cerebral Palsy. *Neuropediatrics*. 2014 Apr 3. PMID: 24700153. AID: 10.1055/s-0034-1372304.

Kelley SP, Bradley CS, Wedge JH. El manejo quirúrgico de la displasia del desarrollo de la cadera luxada. Técnica quirúrgica, optimizando los resultados y resultados a largo plazo (The Operative Management of the Developmentally Dislocated Hip: Surgical Technique, Optimizing Outcomes and Long-Term Results).

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Kelley SP, Wedge JH. Management of hip instability in trisomy 21. *J Pediatr Orthop.* 2013 Jul; 33(Suppl 1): S33-8.

Kenawey M, Hopyan S, Murnaghan ML, Howard A, Wright JG, Kelley SP. Ischiopubic Segment Growth and Pelvic Morphology in Bladder Exstrophy: Understanding the Diastasis. *Bone and Joint Journal.* 2013 Dec.

Khoshbin A, Law PW, Caspi L, Wright JG. Long Term Functional Outcomes of Resected Tarsal Coalitions. *Foot and Ankle International.* 2013 Oct; 34(10): 1370-1375.

Khoshbin A, Leroux T, Wasserstein D, Wolfstadt J, Law PW, Mahomed N, Wright JG. The Epidemiology of Pediatric Supracondylar Fracture Fixation: A Population-Based Study. *Injury.* 2013 Oct 17. PMID: 24183392. AID: 10.1016/j.injury.2013.10.004. pii:20020-1383(13)00452-X. [Epub ahead of print].

Knight DM, Alves C, Alman B, Howard AW. Percutaneous Screw Fixation Promotes Healing of Lateral Condyle Non-union in Children. *Journal of Pediatric Orthopaedics.* 2014; 34(2): 155-160.

Kwan C, Doan Q, Oliveria JP, Ouyang M, Howard A, Boutis K. Do obese children experience more severe fractures than nonobese children? A cross-sectional study from a paediatric emergency department. *Paediatr Child Health.* 2014 May;19(5):251-5.

Lebel DE, Al-Aubaidi Z, Shin E, Howard AW, Zeller R. Three dimensional analysis of brace biomechanical efficacy for patients with AIS. *European Spine Journal.* 2013 Jul 23. AID: 10.1007/s00586-013-2921-3. doi: 10.1007/s00586-013-2921-3.

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Moktar J, Popkin CA, Howard A, Murnaghan ML. Development of a Cast Application Simulator and Evaluation of Objective Measures of Performance. *Journal of Bone and Joint Surgery - American.* 2013 Sep.

Narayanan UG, Caird M. Neuromuscular Disorders in Children. In: *Orthopaedic Knowledge Update.* 11th ed. 2014. American Academy of Orthopaedic Surgery.

Pellegrino LA, Ortolan EV, Magalhães CS, Viana AA, Narayanan UG. Brazilian Portuguese translation and cross-cultural adaptation of the “Caregiver Priorities and Child Health Index of Life with Disabilities” (CPCHILD©) questionnaire. *BMC Pediatr.* 2014 Feb 1; 14(1): 30.

Popkin CA, Gundry CR, Larson CM, Murnaghan ML. Remembering our Roots: Eponyms in Sports Medicine. *American Journal of Sports Medicine.* 2013 Jul; 41(7): 1703-1711.

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Richmond SA, Zhang YJ, Stover A, Howard A, Macarthur C. Prevention of bicycle-related injuries in children and youth: a systematic review of bicycle skills training interventions. *Inj Prev.* 2014 Jun;20(3):191-195.

Rothman L, Buliung R, Macarthur C, To T, Howard A. Walking and child pedestrian injury: a systematic review of built environment correlates of safe walking. *Inj Prev.* 2014 Feb 1; 20(1): 41-9.

Rothman L, Macarthur C, To T, Buliung R, Howard A. Motor Vehicle-Pedestrian Collisions and Walking

to School: The Role of the Built Environment. *Pediatrics*. 2014 Apr 7. PMID: 24709929. AID: 10.1542/peds.2013-2317.

Rothman L, To T, Buliung R, Macarthur C, Howard A. Influence of social and built environment features on children walking to school: an observational study. *Prev Med*. 2014 Mar;60:10-5.

Sainsbury DC, Liu EH, Alvarez-Veronesi MC, Ho ES, Hopyan S, Zuker RM, Borschel GH. Long-Term Outcomes Following Lower Extremity Sarcoma Resection and Reconstruction with Vascularized Fibula Flaps in Children. *Plast Reconstr Surg*. 2014 Jun 18. PMID: 24945953. AID: 10.1097/PRS.0000000000000555 [doi].

Simniceanu A, Richmond SA, Snowdon A, Hussein A, Boase P, Howard A. Child Restraint Use in Canadian Provinces with and Without Legislation in 2010. *Traffic Inj Prev*. 2013 Nov 26. PMID: 24279898. AID: 10.1080/15389588.2013.867483 [doi].

Sonnadara RR, Garbedian S, Safir O, Mui C, Mironova P, Nousiainen M, Ferguson P, Alman B, Kraemer W, Reznick R. Toronto Orthopaedic Boot Camp III: Examining the efficacy of student-regulated learning during an intensive, laboratory-based surgical skills course. 2013 Jul; 154(1): 29-33.

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Szynkaruk M, Stephens D, Borschel G, Wright JG. Socioeconomic Status and Wait Times for Pediatric Surgery in Canada. *Pediatrics*. 2014 May 7.

Tjong VK, Murnaghan ML, Nyof-Young JM, Ogilvie-Harris DJ. A qualitative investigation of the decision to return to sport after anterior cruciate ligament reconstruction: to play or not to play. *American Journal of Sports Medicine*. 2014 Feb; 42(2): 336-342.

Vitale MG, Riedel MD, Glotzbecker MP, Matsumoto H, Roye DP, akbarnia BA, Anderson RCE, Brockmeyer DL, Emans JB, Flynn JM, Lenke LG, Lewis SJ, Luhmann SJ, McLead LM, Newton PO, Nyquist AC, Richards S III, Shah SA, Skaggs DL, Smith JT, Sponseller PD, Sucato DJ, Zeller RD, Saiman L. Building Consensus: Development of a Best Practice Guideline (BPG) for Surgical Site Infection (SSI) Prevention in High-risk Pediatric Spine Surgery. *J. Pediatr Orthop*. 2013 Jul; 33(No.5).

Weinstein SL, Dolan LA, Wright JG, Dobbs MB. Design of the Bracing in Adolescent Idiopathic Scoliosis Trail (BrAIST). *Spine*. 2013 Oct 1; 38(21): 1832-41.

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Zalmstra TA, Elema A, Boonstra AM, Maathuis KG, Narayanan UG, V D Putten AA, Reinders-Messelink HA, Vlaskamp C, Lindeboom R. Validation of the Caregiver Priorities and Child Health Index of Life with Disabilities (CPCHILD) in a sample of Dutch non-ambulatory children with cerebral palsy. *Disabil Rehabil*. 2014 May; 26: 1-6.

Zhulyn O, Li D, Deimling S, Vakili NA, Mo R, Puvindran V, Chen MH, Chuang PT, Hopyan S and Hui CC. A switch from low to high Shh activity regulates establishment of limb progenitors and signaling centers. *Dev Cell*. 2014 Apr 28;29(2):241-9.

Invited Visits

Kelley S: International Pediatric Orthopaedic Symposium, Orlando, Florida, United States, Dec 2013. Invited Lecturer: 1/ Adolescent Hip Subluxation: Diagnosis and Management Adolescent Hip Disorders Session. 2/ Timing of Hemiepiphyodesis Principles of Guided Growth Session.

Kelley S: Pediatric Orthopaedic Society of North America (POSNA), Los Angeles, California, United States, May 2014. Invited Lecturer: Indications and Technique of Anterior Open Reduction in DDH.

Kelley S: Smith and Nephew, Mississauga, Ontario, Canada, Jun 2014. Invited Lecturer: Growing Children: Limb Lengthening and Reconstruction with the TSF.

Murnaghan ML: Rocky Mountain Hospital for Children, POSNA, AOSSM, Vail, Colorado, United States, 25 Jan 2014. Invited Speaker: Medial Epicondyle Fractures - Panel Discussion.

Murnaghan ML: POSNA, Sihhiye, Ankara, Turkey, 10 Apr 2014. Speaker: 1/ Osteochondritis Dissecans of the Knee. 2/ ACL Reconstruction in the Growing Athlete.

Murnaghan ML: Israel Pediatric Orthopaedic Society, Tel-Aviv, Tel-Aviv, Israel, 24-25 Apr 2014. Invited Speaker: 1/ Osteochondritis Dissecans of the Capitellum in Adolescent Athletes: Pathogenesis, Evaluation and Treatment. 2/ The Role of Hip Arthroscopy in the Pediatric Patient. 3/ Knee OCD - Epidemiology,

Pathophysiology, Evaluation, Decision Making. 4/ : Around the hip pain and click: evaluation and diagnosis of typical and unique entities.

Narayanan UG: Black Sea International Cerebral Palsy Symposium, Arabatska, Strilka, Ukraine, 5 Sep 2013. Invited Speaker: Role of orthopaedic surgery in the management of cerebral palsy: an evidence based overview.

Narayanan UG: Pediatric Orthopaedic Club of New York, Stanley Children's Hospital, New York, New York, United States, 11 Sep 2013. Visiting Professor: Are we making a difference? Measuring meaningful outcomes for children with disabilities.

Narayanan UG: 67th AACPDM Annual Meeting, Wisconsin, United States, 18 Oct 2013. Presenter: 1/ Whose Life Is It Anyway? 2/ Measuring Meaningful Outcomes For Children With Severe Disabilities.

Narayanan UG: Birmingham, United Kingdom, 7 Nov 2013. Invited Lecturer: The Learning Curve for ESIN In Femoral Fractures And Avoidance Of Complications.

Narayanan UG: St. Justine Paediatric Orthopaedic Review Course, Montreal, Quebec, Canada, 6 Mar 2014. Speaker: 1/ The Hip in the Spastic Child: Orthopaedic Perspective, 2/ Angular Deformities of the Lower Extremities: To Treat or not To Treat? 3/ The Limping Child: Septic Arthritis or Synovitis?

Narayanan UG: Australasian Academy of Cerebral Palsy and Developmental Medicine - 7th Biennial Scientific Conference, Sydney, Australia, 11 Mar 2014. Keynote Speaker: Quality of Life.

Wedge JH: The 23rd Australian Paediatric Orthopaedic Society Annual Scientific Meeting, Noosa, Queensland, Australia, 23-25 Aug 2013. 1/ Invited Lecturer: ICL-Current concepts in the management of symptomatic hip deformity in adolescents and young adults. 2/ Keynote Speaker: The Future of Paediatric Orthopaedics. 3/ Invited Lecturer: ICL-The results of early treatment of DDH have not improved for 40 years: Why? 4/ Invited Lecturer: ICL-Osteotomies for hip dysplasia from 18 months of age to skeletal maturity. 5/ Invited Lecturer: IC Programme-Femoroacetabular impingement and late adolescent hip dysplasia.

Wedge JH: EPOC Messe Frankfurt GmbH-Paediatric Orthopaedic Surgery Conference, Dubai, United Arab Emirates, 4 Oct 2013. Invited Lecturer: 1/ The older child with DDH - When is reduction of complete dislocation indicated? 2/ Preventing and managing redislocation after open reduction. 3/ Panel discussion of cases.

Wright JG: APOS, Sydney, Nova Scotia, Canada, 12 Sep 2013. Invited Speaker: Are patients getting the orthopaedic procedures they need?

Wright JG: CAPHC, Ontario, Canada, 2 Oct 2013. Invited Speaker: Parental Presence During Induction of Anesthesia: Finding Common Webinar presentation.

Research and Investigations

Articular chondrocyte differentiation and Osteoarthritis. *Canadian Institutes of Health Research (CIHR).* Alman B, Stanford WL, Keller GM. (\$721,855.00 CAD, 2010 - 2015).

Auto21. *Networks of Centres of Excellence (NCE).* Howard AW and 185 other investigators. (\$23,000,000.00 CAD, 2001 - 2015).

Beta-catenin in aggressive fibromatosis. *National Cancer Institute of Canada (NCIC).* Alman B. (\$681,140.00 CAD, 2008 - 2013).

Characterizing the sarcoma tumor initiating cell: Implications for the development of novel treatments for undifferentiated pleomorphic sarcoma. *Canadian Institutes of Health Research (CIHR).* Alman BA, Wunder JD. (\$732,722.00 CAD, Oct 2012 - Sep 2017).

Child pedestrian injury in the City of Toronto: The role of the built environment and active school transportation. *CIHR, Doctoral Award-Frederick Banting and Charles Best Canada.* Howard A, Rothman L. (\$105,000.00 CAD, May 2011 - Apr 2014).

Coaching Surgeons: The Pursuit of Surgical Excellence. *Canadian Medical Protective Association (CMPA).* Murnaghan ML. (\$24,400.00 CAD, Jan 2013 - present).

Evaluating Outcomes of Hip Interventions in Children with Severe Non-ambulatory Cerebral Palsy using the CPCHILD®: A Prospective Cohort Study. *Ontario Federation for Cerebral Palsy.* Narayanan U, Fehlings D. (\$44,445.00 CAD, 2010 - 2014).

Evaluation of Outcomes of Hip Interventions for Children with Cerebral Palsy – An International Multi-Centre Prospective Longitudinal Comparative Cohort Study. *Pediatric Orthopaedic Society of North America, Arthur H. Huene Memorial Award.* Narayanan U, Fehlings D, Stephens D, Mulpuri K, Graham

K, Snyder B, Shore B, Novacheck T, Davids JR, Hamdy R, Jozwiak M, Hagglund G, Stott S, Theologis T, Givon U, Truong W. (\$30,000.00 USD, 2013 - present)

Fatal Child Injuries in Real World Crashes A504-AFC. Networks of Centres of Excellence (NCE) Auto21. Howard A, Snowdon A, Altenhof W, Shkrum M, Pike I, Boase P, Baine B, Cass D, Lauwers B. (\$264,000.00 CAD, Jun 2012 - May 2014).

Fatal Child Injuries in Real World Crashes A504-AFC. Networks of Centres of Excellence (NCE) Auto21. Howard A, Snowdon A, Altenhof W, Shkrum M, Pike I. (\$153,000.00 CAD, Jun 2014 - May 2015).

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. Canadian Institutes of Health Research (CIHR). Narayanan U, Willan AR, Wedge J, Fehlings DL, Redekop S, Zabjek K. (\$314,633.00 CAD, 2009 - 2015).

Growth arrest and osteoporosis in Duchenne muscular dystrophy patients treated with glucocorticoids. Canadian Institutes of Health Research (CIHR). Grynepas MD, Alman BA, Howard AW, Michelle JA. (\$803,623.00 CAD, Oct 2012 - Sep 2017).

Hedgehog signaling in cartilage neoplasia and development. Canadian Institutes of Health Research (CIHR). Alman B, Wunder, JS. (\$807,945.00 CAD, 2008 - 2013).

Identifying novel drug therapies for desmoid tumors. Desmoid Tumor Research Foundation. Alman BA. (\$85,000.00 USD, Aug 2012 - Jul 2013).

Integration of multiple cellular mechanisms and intertissue forces during initial limb bud outgrowth. Hopyan S. (Jun 2012 - May 2015).

International Competency Based Assessment of Pavlik Harness Application. The Hospital for Sick Children. Kelley S, Murnaghan L, Bradley C, Wedge J. (\$2,500.00 CAD, May 2014 - Aug 2014).

International Competency Based Training for the Application of a Pavlik Harness. Pediatric Orthopaedic Society of North America. Kelley S, Murnaghan ML. (\$9,700.00 USD, Jun 2014 - May 2015).

Long Term Follow-up of Instrumentation in Spina Bifida Scoliosis. CIHR, Master's Award: Frederick Banting and Charles Best Canada. Wright JG, Khoshbin A. (\$17,500.00, Sep 2012 - Aug 2013).

Mental Imagery in Surgery - A Qualitative Study. PSI. Cil T, Murnaghan M, Moulton CA. (\$13,500.00 CAD, Jul 2012 - Jul 2013).

Molecular mechanisms in Fractures and Wound healing. Canadian Institutes of Health Research (CIHR). Alman BA, Nam D. (\$930,804.00 CAD, Apr 2013 - Mar 2018).

Molecular mechanisms in fracture and wound healing. Canadian Institutes of Health Research (CIHR). Alman BA. (\$931,675.00 CAD, 2008 - 2013).

Murine model of adynamic bone disease. Canadian Institutes of Health Research (CIHR). Alman BA, Grynepas M. (\$484,962.00 CAD, 2009 - 2014).

Outcomes of Hip Interventions for Children with Cerebral Palsy - An International Multi-Centre Prospective Comparative Cohort Study. Canadian Institutes of Health Research. Narayanan U, Fehlings D, Graham K, Hamdy R, Mulpuri K, Stephens D, Willan A. (\$678,974.00 CAD, 2014 - 2019).

Outcomes of Hip Interventions for Children with Cerebral Palsy – An International Multi- Centre Prospective Comparative Cohort Study. American Academy of Cerebral Palsy and Developmental Medicine (AACPD), Pedal-With-Pete Foundation. Narayanan U. (\$25,000.00 USD, 2014 - 2015).

Pedestrian Countdown Timers: Effect on Pedestrian Injury Rates. A controlled cohort study using spatial analysis in the city of Toronto. Canadian Institutes of Health Research (CIHR). Howard A, Buliung RN, McArthur C, Rothman L, Willan AR. (\$70,720.00 CAD, Oct 2011 - Sep 2013).

Percutaneous Screw versus Percutaneous Drill Epiphysiodesis for Leg Length Discrepancy: A Randomized Controlled Trial". Pediatric Orthopaedic Society of North America (POSNA). Dodwell E, Wright JG. (\$30,000.00 CAD, Jun 2014 - May 2015).

Physical forces drive limb bud morphogenesis. Hopyan S. (Jun 2012 - May 2017).

Putting the Pieces Together – Distal radius buckle fractures from the ED to the PCP. The Hospital for Sick Children, Division of Emergency Medicine. Boutis K, Koelink E, Schuh S, Howard A, Fregonas C, Stimec J. (\$7,000.00 CAD, Jan 2013 - Dec 2013).

Retro-Articular vs. Trans-Articular Drilling for Stable Juvenile Osteochondritis Dissecans (OCD) of the Knee. American Orthopaedic Society for Sports Medicine (AOSSM). Heyworth B, ROCK Group,

Murnaghan ML. (\$40,000.00 USD, Jul 2012 - Jul 2014).

Safer Surgery Obstetrics and Surgery in Africa. CIDA. Lett R, Braun L, Howard A. (\$2,100,000.00 CAD, Jul 2010 - Jul 2013).

Salter Harris Type I Fracture of the Distal Fibula: Clinical Suspicion versus Reality. *Physicians' Services Incorporated (PSI) Foundation.* Boutis K, Babyn P, Plint A, Schuh S, Stimec S, Brison R, Stephens D, Narayanan UG. (\$170,000.00 CAD, 2012 - 2014).

Simple Bone Cysts in Kids (SBocK). *Canadian Institutes of Health Research (CIHR).* Hopyan S, Doria A, Wright JG. (\$968,081.00 CAD, Oct 2013 - Sep 2018).

Simulation Team Training and Critical Event Checklist use for optimizing the management of critical preoperative events in an ambulatory surgical facility. *CMPA Grant.* Morgan P, Tregunno D, Brydges R, Carnahan H, Kurrek M, Murnaghan ML, Semple J, Bell S, Groff N, Forde D. (\$49,663.46 CAD, Jan 2013 - Jul 2014).

The ectodermal basis of early limb bud morphogenesis and malformation. *Canadian Institute of Health Research.* Hopyan S. (\$687,100.00 CAD, Jun 2013 - May 2018).

Traffic and Road Injury Prevention (TRIP) Program for Canadian Children. *Canadian Institutes of Health Research (CIHR).* Snowdon A, Howard A. (\$1,600,000.00 CAD, Apr 2010 - Mar 2015).

Honours Received

Murnaghan ML: POSNA/BIOMET Traveling Fellowship, POSNA/BIOMET. Mar 2014 - Apr 2014.

Narayanan UG: POSICON 2014 Faculty Award, The Pediatric Orthopaedic Society of India. Jan 2014.

Narayanan UG: Pedal-With-Pete Foundation Award, American Academy for Cerebral Palsy and Developmental Medicine. 2014.

Narayanan UG: Arthur H. Huene Memorial Research Award, Pediatric Orthopaedic Society of North America. 2013.

Division of Plastic and Reconstructive Surgery

Dr. G.H. Borschel	Associate Professor	Dr. C. Forrest	Professor (Division Head)
Dr. H. Clarke	Professor	Dr. J. Phillips	Associate Professor
Dr. J.S. Fish	Associate Professor	Dr. K.W.Y. Wong	Assistant professor
Dr. D. Fisher	Associate Professor	Dr. R. Zuker	Professor

Publications

Bade SA, Lin JC, Curtis CG, Clarke HM. Extending the indications for primary nerve surgery in obstetrical brachial plexus palsy. *BioMed Research International.* Hindawi Publishing Corporation. 2014: 5 pages. doi: 10.1155/2014/627067.

Baluch N, Nagata S, Park C, Wilkes GH, Reinisch J, Kasrai L, Fisher DM. Auricular reconstruction for microtia: a review of available methods. *The Canadian Journal of Plastic Surgery.* 2014 Mar; 22(1): 39-43.

Borschel GH, Bains R, Elbaz U, Ali A, Zuker RM. Restoration of Corneal Sensation with Regional Nerve Transfers and Nerve Grafts: A New, Effective, Minimally Invasive Approach to a Difficult Problem. *Rod J Rohrich, MD (eds), Plastic and Reconstructive Surgery.* 2014 Apr; Volume 133(Number 4): page 1020. United States: Lippincott, Williams & Wilkins.

Fattah A, Khechoyan D, Phillips JH, Forrest CR. Paediatric craniofacial fibrous dysplasia: The Hospital for Sick Children experience and treatment philosophy. *Journal of Plastic Reconstructive Aesthetic Surgery.* 2013 Oct; 66(10): 1346 - 1355.

Fattah AY, Ravichandiran K, Zuker RM, Agur AMR. A three-dimensional study of the musculotendinous and neurovascular architecture of the gracilis muscle: Application to functional muscle transfer. *Journal of Plastic, Reconstructive & Aesthetic Surgery.* 2013 Sep; 66(9): pp 1230-1237.

Fisher MD, Fisher DM, Marcus JR. Correction of the cleft nasal deformity: from infancy to maturity. *Sitzman TJ, Marcus JR (eds), Clinics in Plastic Surgery: Cleft Lip and Palate: Current Surgical Management.* 2014 Apr; 41(2): 283-299.

- Flynn J, Zlotnik Shaul R, Hanson M, Borschel G, Zuker R.** Pediatric Facial Transplantation: Ethical Considerations. *Canadian Journal of Plastic Surgery*. 2014 Jun; 22(2): 67-69.
- Grigorovich A, Gomez M, Leach L, Fish J.** Impact of Posttraumatic Stress Disorder and Depression on Neuropsychological Functioning in Electrical Injury Survivors. *Journal of Burn Care and Research*. 2013 Nov; 34(6): 659 – 665.
- Gur E, Zuker R, Arad E.** Facial Paralysis Reconstruction. Focus on Long Lasting Facial Paralysis, Cross Face Nerve Grafting and Free Gracilis Muscle Transfer. In: Ziv Gil, Dan M. Fliss (eds), *Atlas of Head & Neck Surgery*. First Edition. 2013: 464 - 473.
- Ho ES, Ponnuthurai J, Clarke HM.** The incidence of idiopathic musculoskeletal pain in children with upper extremity injuries. *Journal of Hand Therapy*. 2014; 27(1): 38-43.
- Kasrai L, Snyder-Warwick AK, Fisher DM.** Single-stage autologous ear reconstruction for microtia. *Plastic and Reconstructive Surgery*. 2014 Mar; 133(3): 652-662.
- Kemp SW, Phua PD, Stanoulis KN, Wood MD, Liu EH, Gordon T, Borschel GH.** Functional recovery following peripheral nerve injury in the transgenic Thy1-GFP rat. *Journal of the Peripheral Nervous System*. 2013 Sep 18; 18(3): 220-31.
- Khechoyan DY, Saber NR, Burge J, Fattah A, Drake J, Forrest CR, Phillips JH.** Surgical outcomes in craniostylosis reconstruction: The use of prefabricated templates in cranial vault remodelling. *Journal of Plastic Reconstructive and Aesthetic Surgery*. 2014 Jan 7; 67 (1) 9 -16.
- Liu EH, Alqahtani S, Alsaaran RN, Ho E, Zuker RM, Borschel G.** A Prospective Study of Pediatric Hand Fractures and Review of the Literature. Patricia Llenado (eds), *Pediatric Emergency Care*. 2014 May; 30(5): 1. Lippincott Williams & Wilkins.
- Mahoney MH, Swan M, Fisher DM.** Prospective analysis of presurgical risk factors for outcomes in primary palatoplasty. *Plastic and Reconstructive Surgery*. 2013 Jul; 132(1), pp 167-171.
- Moghaddam MB, Brown TM, Clausen A, DaSilva T, Ho E, Forrest CR.** Outcome analysis after helmet therapy using 3D photogrammetry in patients with deformational plagiocephaly: the file of root mean square. *Journal of Plastic Reconstructive Aesthetic Surgery*. 2014 Feb 1; 67(2): 159 - 165.
- Moreira I, Suri S, Ross B, Tompson B, Fisher D, Lou W.** Soft-tissue profile growth in patients with repaired complete unilateral cleft lip and palate: A cephalometric comparison with normal controls at ages 7, 11, and 18 years. *American Journal of Orthodontics and Dentofacial Orthopedics*. 2014 Mar; 145(3): 341-358.
- Rumsey DG, Temple M, Borschel G, Tse SM.** Ischemic reaction secondary to corticosteroid injection of the joint. *Arthritis Rheum*. 2013 Aug 1; 65(8): 2189.
- Seruya M, Tran J, Kumar S, Forrest CR, Chong DK.** Computed tomography-based morphometric analysis of extended strip craniotomy for sagittal synostosis. *Journal of Craniofacial Surgery*. 2014 Jan; 25(1): 42 - 47.
- Taylor HO, Morrison CS, Linden O, Phillips B, Chang J, Byrne ME, Sullivan SR, Forrest CR.** Quantitative facial asymmetry: Using three-dimensional photogrammetry to measure baseline facial surface symmetry. *Journal of Craniofacial Surgery*. 2014 Jan; 25(1): 124 - 128.
- Wong KW, Forrest CR, Goodacre TEE, Klassen AF.** Measuring outcomes in craniofacial and pediatric plastic surgery. *Clinics in Plastic Surgery*. 2013; 40(2): 305-12.
- Zhong T, Wong KW, Cheng H, Ojha M, Coimbatore S, McCluskey SA, Clarke H, Jacks L, Hofer SOP.** Transversus Abdominis Plane (TAP) catheters inserted under direct vision in the donor site following free DIEP and MS-TRAM breast reconstruction: a prospective cohort study of 45 patients. *Journal of Plastic, Reconstructive & Aesthetic Surgery*. 2013; 66(3): 329-36.
- Zuker RM, Gur E, Hussain G, Manktelow RT.** Facial Paralysis. In: *Plastic Surgery, Third Edition*. 2013. 2013;11: 278-306.

Invited Visits

- Borschel GH:** Sunderland Society, Leiden, South Holland, Netherlands, 15 Sep 2013. Speaker: P7C3 enhances neuron survival and functional recovery in a model of obstetrical brachial plexus palsy.
- Borschel GH:** The Fourth Annual Congress of Hand and Reconstructive Microsurgical Unit of Orthopaedic Department, in Collaboration with Egyptian Society for Surgery of the Hand and Microsurgery, Hurghada, Egypt, 22 Nov 2013. Invited Lecturer: 1/ Facial Paralysis in Children, A Novel Compound to Enhance Nerve Regeneration. 2/ A Novel Compound to Enhance Nerve Regeneration.

- Borschel GH:** American Society for Peripheral Nerve, Kauai, Hawaii, United States, 11-12 Jan 2014. 1/ Invited Speaker: End to Side Nerve Repair. 2/ Co-Moderator: Scientific Session. 3/ Presenter: End to Side Nerve Repair. 4/ Chair. Pediatric Microsurgery: Fresh faces, new cases.
- Clarke H:** American Society for Peripheral Nerve, Kauai, Hawaii, United States, 12 Jan 2014. Presenter: 1/ Anatomic sites of origin of the suprascapular and lateral pectoral nerves within the brachial plexus. 2/ Past Presidents Invited Panel. 3/ Obstetrical Brachial Plexus Palsy. 4/ Pediatric Brachial Plexus: Managing the Shoulder.
- Clarke H:** Neonatal Brachial Plexus Palsy: Moving the Science Forward, Wayne State University, Detroit, Michigan, United States, 14 May 2014. Speaker: Outcomes after neonatal brachial plexus palsy.
- Fish JS:** The European Pediatric Burn Conference (EPBC), Munich, Germany, 14 Oct 2013. Invited Speaker: 1/ Pediatric Burn Reconstruction. 2/ Closed Dressing Technique. 3/ Technique of Scar Release.
- Fish JS:** Carroll University, Wisconsin, United States, 19 Mar 2014. Speaker: Leadership Development Talk to students from Carroll University about leadership development in healthcare.
- Fisher D:** Congress on Oral & Maxillofacial Surgery, on behalf of Quintessence International Publishing Group, Berlin and Riyadh College of Dentistry & Pharmacy, Riyadh, Saudi Arabia, 19 Sep 2013. Invited Lecturer: 1/ Alveolar bone graft. 2/ Bilateral cleft lip repair - principle and procedures prior to definitive lip repair. 3/ Cleft lip anatomy, classification, unilateral cleft lip repair. 4/ Complication of cleft lip repair and management of secondary deformity.
- Fisher D:** American Society of Plastic Surgeons, San Diego, California, United States, 11 Oct 2013. Course Instructor: Carving a 3-D ear framework: a hands on surgical simulation.
- Fisher D:** 27th Michigan Cleft Palate Association Conference, East Lansing, Michigan, United States, 1 Nov 2013. Keynote Speaker: 1/ History of pre-surgical orthodontics. 2/ History and evolution of unilateral and bilateral cleft lip repair. 3/ Panel discussion of cleft palate repair.
- Fisher D:** BAPRAS/IAPS (British Association of Plastic Reconstructive and Aesthetic Surgeons/Irish Association of Plastic Surgeons), Dublin, Ireland, 28 Nov 2013. Invited Lecturer: 1/ Modifications of the Nagata 3D framework-autologous ear reconstruction in a single stage. 2/ Management of secondary cleft lip and nasal deformities. 3/ Unilateral cleft lip repair.
- Fisher D:** CoRSU (Comprehensive Rehabilitation Services in Uganda. For People with Disability), Uganda, 1 Feb 2014. Invited Lecturer: 1/ Microtia reconstruction. 2/ Cleft lip & palate.
- Forrest C:** 15th International Congress of the International Society of Craniofacial Surgery, Jackson Hole, Wyoming, United States, 10-14 Sep 2013. Presenter: 1/ Posterior cranial vault distraction in the management of syndromic multi-suture craniosynostosis: Outcomes and 3D photographic/CT-based morphometric analysis. 2/ Evaluation of surgical outcomes in cranio-orbital reshaping with novel quantitative craniometric analysis. 3/ Age-based approach to sagittal synostosis: Application of extended strip craniectomy (ESC) and total vault reshaping (TCVR) techniques. 4/ Back to Front: Posterior Distraction in Syndromic Craniosynostosis Panel Session: What are the new perspectives in craniosynostosis surgery. 5/ Pre-Congress Symposium: Controversy and Consensus in Craniosynostosis and Cranial Vault Surgery.
- Forrest C:** University of Kansas, Kansas City, Kansas, United States, 26-27 Sep 2013. Invited Lecturer: 1/ The evolution of treatment for sagittal synostosis. 2/ Cleft Septorhinoplasty.
- Forrest C:** Northwestern University, Kansas City, Kansas, United States, 25 Oct 2013. Invited Lecturer: The evolution of treatment for sagittal synostosis.
- Forrest C:** University of Massachusetts-Worcester, Worcester, Massachusetts, United States, 5-6 Nov 2013. Invited Lecturer: 1/ CAD CAM Technology in pediatric craniofacial surgery. 2/ Cleft Septorhinoplasty.
- Forrest C:** Yekatit 12 Hospital, Adis Abeba, Ethiopia, 15 Jan 2014. Invited Lecturer: Team from SickKids invited to carry out a needs assessment to manage surgical cleft lip and palate patients and the feasibility in establishing an Orthognathic Surgery Program.
- Forrest C:** Baltimore, Maryland, United States, 17 Apr 2014. Invited Lecturer: The evolution of treatment for sagittal synostosis.
- Phillips J:** The Royal Children's Hospital, Melbourne, Australia, 5 Feb 2014. Visiting Professor: Computer Assisted Systems in Pediatric Craniofacial Surgery.
- Phillips J:** Chang Gung Memorial Hospital, Taipei, Taiwan, Province Of China, 14 Feb 2014. Visiting Professor: Computer Assisted Systems in Pediatric Craniofacial Surgery.
- Phillips J:** Texas Childrens' Hospital, Baylor College of Medicine, Houston, Texas, United States, 17 Feb 2014. Visiting Professor: 1/ Computer Assisted Systems in Pediatric Craniofacial Surgery 2/ Cleft

Orthognathic Surgery.

Phillips J: University of Colorado School of Medicine, Children's Hospital Colorado, Denver, Colorado, United States, 19 Feb 2014. Visiting Professor: Computer Assisted Systems in Pediatric Craniofacial Surgery.

Zuker R: 11th IHCTAS Meeting, Wroclaw, Poland, Aug 2013. 1/ Chair: Noela & Dimitri Nakos Melina Nakos Symposium - Perspectives: Are we ready for VCA in hand/face congenital mutilations in children. 2/ Invited Lecturer: Melina Nakos Symposium - Perspectives: Are we ready for VCA in hand/face congenital mutilations and in children? Hand Tx for congenital anomalies.

Zuker R: Ichilov Hospital, Tel Aviv, Israel, 20 Oct 2013. Invited Speaker: Common Embryological Events and Reconstructive Solutions Plastic Surgery Rounds, Ichilov Hospital.

Zuker R: Sourasky Medical Centre, Tel Aviv, Israel, 22 Oct 2013. Keynote Speaker: 1/ "The Broad Brush of Pediatric Microsurgery". 2/ "Controversies in the Management of Congenital Melanocytic Nevi". 3/ "Conjoined Twins - Etiology, Clinical Presentation, Surgical Separation and Lessons Learned".

Zuker R: College of Medicine of South Africa, Presidential Dinner, South Africa, 23 Oct 2013. Invited Speaker: The History of Muscle Transplantation for Facial Paralysis in South Africa and The Birth of The Smile Foundation.

Zuker R: Annual Meeting of the Association of Plastic Surgeons of South Africa, Drakensberg, South Africa, 28 Oct 2013. Invited Speaker: 1/ "The Chachapoyas of Peru". 2/ "Facial Paralysis Reconstruction". 3/ "The Broad Brush of Pediatric Microsurgery". 4/ "Conjoined Twins".

Zuker R: The Department of Plastic Surgery, The University of the Witwatersrand, Johannesburg, South Africa, 31 Oct 2013. Invited Speaker: 1/"Common Embryological Events and Reconstructive Solutions". 2/"The Cleft Lip and Palate Programme at The Hospital for Sick Children, Toronto".

Zuker R: The University of the Witwatersrand, Johannesburg, South Africa, 1 Nov 2013. Invited Lecturer: The Smile Foundation and The Department of Plastic Surgery.

Zuker R: 2014 Mayo - Chang Gung Reconstructive Microsurgery Symposium, Taipei, Taiwan, Province Of China, 8-9 May 2014. Invited Lecturer: 1/ The Boad Brush of Pediatric Microsurgery - Cover the canvas! 2/ Vascularized Composite Allotransplantation in Children: Issue and answers. 3/ Facial Paralysis Reconstruction: Unilateral in children using cross face nerve graft and muscle transplant. 4/ Facial Paralysis Reconstruction: Bilateral in children and adults using motor nerve to masseter. 5/ The broad brush of pediatric microsurgery - cover the canvas. 6/ Vascularized Composite Allotransplantation in Children: Issue and answers. 7/ Facial Paralysis Reconstruction: Unilateral in children using cross face nerve graft and muscle transplant. 8/ Facial Paralysis Reconstruction: Bilateral in children and adults using motor nerve to masseter.

Zuker R: Association of Plastic Surgeons of Malaysia. Kuala Lumpur Academy of Sciences, Kuala Lumpur, Malaysia, 17 May 2014. Invited Lecturer: 1/ Facial Paralysis Reconstruction in Children. 2/ Conjoined Twins: Etiology Classification and Surgical Separation: Lessons Learned. 3/ The Broad Brush of Pediatric Microsurgery - Cover the Canvas!.

Zuker R: James Barrett Brown Research Day, Washington University School of Medicine, St. Louis, Missouri, United States, 5 Jun 2014. Invited Lecturer: The Broad Brush of Pediatric Microsurgery.

Zuker R: Washington University School of Medicine, St. Louis, Missouri, United States, 7 Jun 2014. Course Director: Animating the Paralyzed Face: Keys to Evaluation and Surgical Management.

Research and Investigations

An international study to develop a patient reported outcome instrument for cleft lip and/or palate patients: The CLEFT-Q. *CIHR open Operating Grant.* Wong KW, Klassen A, Forrest C, Pusic A. (\$602,389.00 CAD, Jan 2013 - Dec 2018).

An Optical Imaging Device for a Rapid Assessment of Tissue Viability and Wound Healing. *Centre for Security Science CRTI.* Sowa M, Fish JS. (\$180,000.00 CAD, Jan 2011 - Dec 2014).

Comparisons of Tests of Sensory Outcome After Nerve Injury in Children. *Ontario Society of Occupational Therapists.* Ho E, Clarke H, Borschel GH. (\$1,000.00 CAD, Sep 2012 - Sep 2013).

Early Researcher Award: Enhancing Recovery Following Nerve Injury. *Ontario Ministry of Research and Innovation.* Borschel GH, Gordon T. (\$150,000.00 CAD, Jul 2012 - Jul 2015).

Educational Exchange Programme for Cleft Lip and Palate Repair. West Bengal and Assam, India. *Donner Foundation.* Zuker R. (\$230,000.00 CAD, 2007 - present).

Electrical stimulation of muscle to improve specificity of reinnervation of denervated muscle. *Med-El Medical Electronics (USA).* Borschel GH, Gordon T. (\$395,410.00 CAD, Jul 2013 - Jul 2015).

Enhancement of nerve regeneration with controlled release of neurotrophic factors. *Canadian Institutes of Health Research / CIHR*, CIHR/NSERC Collaborative Research. Borschel GH, Gordon T, Shoichet MS. (\$536,711.00 CAD, Apr 2013 - Apr 2016).

Enhancement of nerve regeneration with aminopropyl carbazoles following nerve injury. *PSI Foundation*. Borschel GH, Catapano J. (\$20,000.00 CAD, Jul 2013 - Jun 2014).

Enhancing outcomes following nerve injury using combined electrical stimulation and nerve bridges to the chronically denervated stump. *RestraComp*. Borschel GH, Hendry M. (\$80,000.00 CAD, Sep 2012 - Aug 2014).

Evaluation of the novel aminopropyl carbazole in nerve regeneration. *RestraComp*. Borschel G, Catapano J. (\$80,000.00 CAD, Jul 2013 - Jun 2015).

GDNF and BDNF Microspheres for Treatment of Nerve Injury. *Ontario Ministry of Innovation*. Borschel GH, Wood M, Gordon T, Shoichet M. (\$100,000.00 CAD, Jul 2011 - Jul 2013).

Improving functional recovery after peripheral nerve injury. *Canadian Institute for Health Research (CIHR)*. Borschel G, Gordon T. (\$290,996.00 CAD, Jun 2011 - Jul 2014).

Mathematical Optimization of Pediatric Cranial Vault Remodeling and Robotic CO2 Etching of Skull Contours. *Physicians Services Incorporated Foundation*. Phillips J. (\$169,000.00 CAD, Jul 2013 - Jul 2015).

Ministry of Training, Colleges and Universities Student Financial A. *Ministry of Training, Colleges and Universities*. Borschel GH. (\$15,000.00 CAD, Jul 2012 - Jul 2013).

Sensorimotor plasticity following reconstructive surgery for facial nerve palsy. *The Hospital for Sick Children, Peri-Operative Service*. Borschel GH, Zuker R, Donner E, Cheyne D. (\$11,750.00 CAD, Jul 2013 - Jun 2014).

The Use of Prefabricated Templates in Cranial Vault Remodeling. *Hospital for Sick Children*. Phillips J, Saber N, Forrest C. (\$10,000.00 CAD, Nov 2011 - Nov 2013).

Treatment of Peripheral Nerve Injury with P7C3. *Plastic Surgery Foundation*. Borschel GH, Kemp S. (\$10,000.00 USD, Jul 2012 - Jul 2013).

Honours Received

Wong KWY: Junior Investigator Scholarship, 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies. Based on abstract submission for travel to conference for presentation. 2013

Zuker R: Clinician of the Year, American Academy of Pediatrics - Section on Plastic Surgery, United States. Dec 2013.

Zuker R: Humanitarian Award, The Smile Foundation of South Africa. Nov 2013.

Zuker R: Honorary Fellowship, Fellow of The College of Plastic Surgery of South Africa, Spain. Nov 2013.

Zuker R: Fellow of The College of Plastic Surgery of South Africa, The Association of Plastic Surgeons of South Africa, South Africa. Oct 2013.

Division of Urology

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

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

Publications

Alali S, Aitken KJ, Schröder A, Gribble A, Bagli DJ, Vitkin IA. Assessment of local structural disorders of the bladder wall in partial bladder outlet obstruction using polarized light imaging. *Biomed Opt Express*. 2014 Feb 1; 5(2): 621-9.

Badhiwala JH, Thompson EM, Lorenzo AJ, Kulkarni AV. Spontaneous improvement in urological dysfunction in children with congenital spinal lipomas of the conus medullaris. *J Neurosurg Pediatr*. 2014 Mar 28. PMID: 24679080. AID: 10.3171/2014.2.PEDS13519.

Bagli DJ, Salle JP, de Jesus LE. Low Flows After Tubularized Incised Plate TIP Urethroplasty: Increased Fibrogenesis, Elastin Fibers Loss or None of the Above. *Journal of Urology*. 2013 Nov 25; JU-13-2071R1. URL: www.jurology.com.

- Blankstein U, Longarini Z, Ramadan K, Virani K, Bramall A, Herschorn S, Lorenzo A.** Toronto Notes, Urology Section. 2014. Editor.
- Braga LH, Pemberton J, Heaman J, Demaria J, Lorenzo AJ.** Pilot randomized, placebo controlled trial to investigate the effect of antibiotic prophylaxis on the rate of urinary tract infection in infants with prenatal hydronephrosis. *J Urol.* 2014 May 1; 191(5 Suppl): 1501-7.
- Braga LH, Ruzhynsky V, Pemberton J, Farrokhyar F, Demaria J, Lorenzo AJ.** Evaluating practice patterns in postnatal management of antenatal hydronephrosis: a national survey of Canadian pediatric urologists and nephrologists. *Urology.* 2014 Apr 1; 83(4): 909-14.
- Cheung JJ, Koh, J, Mackinnon K, Brett C, Bagli DJ, Kapralos B, Dubrowski A.** The Use of Web-Based Learning for Simulation-Based Education and Training of central Venous Catheterization in Novice Learners. *Studies in Health Technology and Informatics.* 2013; 84:71-7.
- Figuroa V, Romao R, Pippi Salle JL, Koyle MA, Braga LH, Bägli DJ, Lorenzo AJ.** Single-center experience with botulinum toxin endoscopic detrusor injection for the treatment of congenital neuropathic bladder in children: Effect of dose adjustment, multiple injections, and avoidance of reconstructive procedures. *J Pediatr Urol.* 2014 Apr 1; 10(2): 368-73.
- Gleason JM, Daniels C, Williams K, Varghese A, Koyle MA, Bägli DJ, Pippi Salle JL, Lorenzo AJ.** Single center experience with oxybutynin transdermal system (patch) for management of symptoms related to non-neuropathic overactive bladder in children: An attractive, well tolerated alternative form of administration. *J Pediatr Urol.* 2014 Jan 17. PMID: 24477421. AID: 10.1016/j.jpuro.2013.12.017.
- Gleason J, Lorenzo AJ.** Chapter 24: Endoscopic techniques for lower urinary tract pathology in children. In: Duncan Wilcox, Prasad Godbole, Martin Koyle (eds), *Endourology techniques.* 2nd Edition. 2013 Nov 27. United Kingdom.
- Herschorn S, Jarvi K, Lorenzo A.** Chapter 29. Toronto Notes Urology Section. 2014. Editor.
- Jednak R, Pippi Salle JL.** Treatment alternatives for different types of neurogenic bladder dysfunction in children. In: *Textbook of Clinical Neurogenic Bladder, Third Edition*, edited by Corcos, Karsenty and Ginsberg. (eds), 2013.
- Jesus LE, Schanaider A, Patterson G, Marchenko A, Aitken KJ, Leslie B, Bagli DJ, Pippi-Salle JL.** Urethral compliance in hypospadias operated by tubularized incised urethral plate (TIP) with and without a dorsal inlay graft: an experimental controlled study. *World Journal of Urology.* 2013 Jul; 31:971-975, 2013.
- Jesus LE, Schanaider A, Kirwan T, Aitken KJ, Caldas ML, Fonseca E, Marchenko A, Bagli DJ, Pippi-Salle JL.** Reduced Flow after Tubularized Incised Plate Urethroplasty Increased Fibrogenesis, Elastin Fiber Loss or Neither. *J Urol.* 2014 Jun; 191: 1856-1862.
- Kanaroglou N, Wehbi E, Alotay A, Bagli DJ, Koyle MA, Lorenzo AJ, Farhat W.** Is There A Role For Prophylactic Antibiotics After Stented Hypospadias Repair. *Journal of Urology.* 2013 Oct.
- Koh J, Cheung JJ, Mackinnon K, Brett C, Bagli DJ, Kapralos B, Dubrowski A.** Web-Based Learning and Computer Supported Collaborative Learning for Psychomotor Skill Acquisition: Perspectives of Medical Undergraduate Students. *Studies in Health Technology and Informatics.* 2013; 184:222-4.
- Kwong J, Lorenzo AJ, DeMaria J, Braga LH.** Bilateral epididymitis in a child with undiagnosed posterior urethral valves. *Journal of Urology.* 2013 Jul.
- Lorenzo AJ.** A novel alternative for renal replacement therapy for developing countries: Two-year successful colonic dialysis via malone antegrade continent enema stoma. *Journal of Pediatric Urology.* 2013 Dec 30.
- Lorenzo AJ, Lynch J, Matava C, El-Beheiry H, Hayes J.** Single Center, Parallel, Randomized, Controlled Trial Comparing Ultrasound Guided Transversus Abdominis Plane vs Surgeon Administered Intraoperative Regional Field Infiltration with Bupivacaine for Early Postoperative Pain Control in Children Undergoing Open Pyeloplasty. *J Urol.* 2014 Feb 8. PMID: 24518763. AID: 10.1016/j.juro.2014.01.026.
- Lorenzo AJ, Pippi Salle JL, Zlateska B, Koyle MA, Bägli DJ, Braga LH.** Decisional regret after distal hypospadias repair: single institution prospective analysis of factors associated with subsequent parental remorse or distress. *J Urol.* 2014 May 1; 191(5 Suppl): 1558-63.
- Minevich E, Lorenzo AJ, DeFoor WR, Koyle MA.** Pediatric Renal Tumors. In: Kanwal Kher, H. William Schnaper, Larry A. Greenbaum (eds), *Clinical Pediatric Nephrology.* Third Edition. 2014. Informa Publishers, London 2014.
- Pippi Salle JL.** Antenatal hydronephrosis. In: *Clinical Pediatric Urology.* 2013. Edited by Docimo, Canning and Khoury, 6th edition, published by Informa Health Care UK, Ltd. 2013.

- Pippi Salle JL.** Disorders of Sex Development. In: Edited by Docimo, Canning and Khoury, 6th edition, published by Informa Health Care UK, Ltd. (eds), Clinical Pediatric Urology. 2013.
- Pippi Salle JL.** Complications of surgery for disorders of sex development. In: edited by Wilcox, Koyle, and Godbole, Wiley publishers, Oxford, UK (eds), Pediatric Urology: Surgical Complications and Management. 2013.
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- Pippi Salle JL.** Glans Amputation during routine neonatal circumcision: Mechanism of injury and strategy prevention. *Journal of Pediatric Urology*. 2013 Nov; 9: 763-768.
- Pippi Salle JL, Bagli D, de Jesus LE.** Low Flows After Tubularized Incised Plate TIP Urethroplasty: Increased Fibrogenesis, Elastin Fibers Loss or None of the Above. *The Journal of Urology*. 2013 Nov 25; JU-13-2071R1. URL: www.jurology.com.
- Pippi Salle JL, Lorenzo AJ.** Vascular anastomosis for pediatric renal transplantation--a potential new strategy in low-weight children. *Pediatr Transplant*. 2014 Jun;18(4):321-2.
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- Romao RL, Koyle MA, Pippi Salle JL, Alotay A, Figueroa VH, Lorenzo AJ, Bagli DJ, Farhat WA.** Failed pyeloplasty in children: revisiting the unknown. *Urology*. 2013 Nov 1; 82(5): 1145-7.
- Romao RL, Weber B, Gerstle JT, Grant R, Pippi Salle JL, Bägli DJ, Figueroa VH, Braga LH, Farhat WA, Koyle MA, Lorenzo AJ.** Comparison between laparoscopic and open radical nephrectomy for the treatment of primary renal tumors in children: Single-center experience over a 5-year period. *J Pediatr Urol*. 2013 Nov 23. PMID: 24331167. AID: 10.1016/j.jpuro.2013.11.002.
- Romao R, Pinto L, Figueroa V, Farhat WA.** Laparoscopy in Pediatric Urology. In: 2013. Textbook of Pediatric Urology. 1st ed. Editora Sparta, São Paulo, Brazil, 2013. [Portuguese]. Edited by: Carnevale, José.
- Wehbi E, Patel P, Kanaroglou N, Tam S, Weber B, Lorenzo A, Pippi Salle JL, Bagli D, Koyle M, Farhat WA.** Urinary tract abnormalities in boys with recurrent urinary tract infections after hypospadias repair. *BJU Int*. 2014 Feb 1; 113(2): 304-8.
- Wright I, Cole E, Farrokhyar F, Pemberton J, Lorenzo AJ, Braga LH.** Effect of preoperative hormonal stimulation on postoperative complication rates after proximal hypospadias repair: a systemic review. *Journal of Urology*. 2013 Aug; 2013.
- Zareba P, Lorenzo AJ, Braga LH.** Risk factors for febrile urinary tract infection in infants with prenatal hydronephrosis: comprehensive single center analysis. *J Urol*. 2014 May 1; 191(5 Suppl): 1614-9.

Invited Visits

- Farhat WA.** Kuwait, 2013. Speaker: Laparoscopic Pyeloplasty, Orchidopexy, Nephrectomy, Pyelolithotomies.
- Farhat WA.** 16th Brazilian Pediatric Urology Meeting, Tersina, Brazil, 16-17 Aug 2013. Speakers 1/ Performed live surgery: laparoscopic pyeloplasty. 2/ Performed live surgery: Laparoscopic Retroperitoneal Nephrectomy (prone position). 3/ Speaker: Anorectal Anomalies and Neuropathic Bladder. 4/ Invited Speaker: Hypospadias Cripple. 5/ Invited Speaker: Ureterocele: Endoscopic Treatment. 6/ Speaker: Farhat WA. Oxybutinine and Alpha-Blockers in Patients with Posterior Valves. 7/ Speaker: Vesicoureteric Reflux in Neonates.
- Lorenzo AJ:** Fundacion Cardioinfantil, Bogota, Colombia, 14 Aug 2013. Speaker: 1/ Pediatric Urology Surgical Workshop. 2/ Surgical correction of proximal hypospadias, botulinum toxin intravesical injection for neuropathic bladder dysfunction, laparoscopic assisted creation of Mitrofanoff channel, and buccal graft vaginoplasty.
- Lorenzo AJ:** Presentations at the XLVIII Congress of the Colombian Urological Association (International Urology Course Cali 2013), Bogota, Colombia, 15-17 Aug 2013. 1/ Presenter: Botulinum toxin injection

for neuropathic bladder dysfunction. 2/ Presenter: Laparoscopy and renal tumors. 3/ Presenter: Ultrasound evaluation for cryptorchidism. 4/ Panel Member: Antenatal hydronephrosis. 5/ Presenter: Ectopic ureter and poorly functioning upper pole moiety.

Lorenzo AJ: 33rd Congress of the Societe Internationale D’Urologie, Vancouver, British Columbia, Canada, 8-11 Sep 2013. 1/ Panelist: Cryptorchidism. 2/ Invited Lecturer: The Application of Adult Urological Principles to Pediatric Urology.

Lorenzo AJ: Society for Pediatric Urology, Las Vegas, Nevada, United States, 19 Sep 2013. Panelist: Hypospadias Clinical Research: Breakout Group Discussion on What to Report: Follow up Reporting.

Lorenzo AJ: IX Interantional Course on Pediatric Urology, Hospital Exequiel Gonzalez Cortes, Santiago, Región Metropolitana de Santiago, Chile, 5-6 Dec 2013. Invited Lecturer: 1/ Surgical and urological complications after pediatric renal transplantation. 2/ Preparing the urinary tract for pediatric renal transplantation.

Lorenzo AJ: Urology school, Department of Urology Pediatric Grand Rounds, IWK Health Centre and Dalhousie University, Halifax, NS, 19-20 Feb 2014. 1/ Visiting Professor: Fertility preservation efforts in children and adolescents: The value of innovation and foresight. 2/ Speaker: Pediatric urology cases. 3/ Speaker: Surgery workshop: Vaginectomy and buccal graft vaginoplasty for local management of rhabdomyosarcoma of the vagina.

Pippi Salle JL: Course on Bladder Pathology, Chilean Urological Association, Santiago, Chile, 2013. Invited Lecturer: 1/ How useful is bladder augmentation to obtain urinary continence in the child. 2/ Catheterizable conduits: When and how to use them. 3/ New approaches in the management of bladder exstrophy. 4/ Experience with botox injection in pediatrics to improve bladder elasticity.

Pippi Salle JL: 2013. International Pediatric Urology Task Force on Hypospadias – to standardize surgical outcomes in clinical research.

Pippi Salle JL: International Workshop on Exstrophy and Epispadias, Casablanca, Morocco, 2013. Presenter: One Stage x Staged repair of bladder exstrophy.

Pippi Salle JL: European Society of Pediatric Surgeons, San Diego, United States, 2013. Invited Speaker: Early vs. late feminizing genitoplasty (favoring early).

Pippi Salle JL: Hospital Pequeno Principe, Brazil, 20-27Oct 2013. 1/ Invited Speaker: Proximal Hypospadias: A Continuum Dilemma. 2/ Live Surgical Demonstration: Dorsal Inlay TIP in Proximal Hypospadias.

Pippi Salle JL: Ibero-American Congress of Pediatric Urology and XXXII, Lima, Peru, Oct 2013. 1/ Panelist: Management Of Sphincteric Urinary Incontinence Conference: Thoughts on Tubularized Incised Urethroplasty and Dorsal Inlays TIP. 2/ Panelist: Complications in Pediatric Urology “how to manage them?” 3/ Moderator: Abstract Session on “Reconstructions”.

Pippi Salle JL: International Congress of Reconstructive Pediatric Urology, Belgaum, India, 15-17 Nov 2013. 1/ Invited Speaker: Bladder Neck Repairs. 2/ State of the Art Lecturer: Intersex. 3/ Surgery: Construction of Catheterisable Channels Live Surgical Demonstration. 4/ Surgery: Repair of Cloacal Variant Live Surgical Demonstrations. 5/ /Surgery: Hypospadias Repair Using Dorsal Inlay TIP.

Pippi Salle JL: International Workshop in Hypospadias, Dallas, 22-23 Feb, 2013. Invited Speaker: Management of hypospadias: lessons learned.

Pippi Salle JL: International Workshop in Hypospadias in Nis, Serbia, 21-24 March 2013. Surgery: performing live hypospadias surgeries.

Research and Investigations

ALPHA: Antibiotic prophylaxis versus placebo in infants diagnosed with hydronephrosis antenatally: a prospective, randomized controlled trial. *Physicians’ Services Incorporated Foundation.* Lorenzo AJ. (\$164,500.00 CAD, Aug 2012 - Jun 2014).

Basis of Overactive Bladder Disease (CIHR - Sleep and Rhythms Toronto). Bagli DJ. (Jul 2013 - Jun 2014).

CIHR Team in the Effects of Brominated Flame Retardans on Reproductive Health: Animal, Human, Ethical, Legal and Social Studies Human Development, Child and Youth Health. *Canadian Institutes of Health Research (CIHR).* Goodyear C, Bagli DJ. (\$499,000.00, 2009 - 2013).

Determination of molecular signatures that allow differentiation between unilateral and bilateral Wilms’ tumors using genome-wide arrays and whole-exome sequencing. *C17 Council and Childhood Cancer Care Canada Foundation.* Lorenzo A. (\$175,000.00 CAD, Jul 2013 - Jul 2015).

Environmental Micro-Gene Interactions: Role of Host Epigenetics in Chronic Urinary Tract Infection. *Canadian Institutes of Health Research (CIHR)*. Bagli D, Rosenblum N, Brumell J, Delgado P. (\$80,000.00 CAD, Jul 2013 - Jul 2014).

Epigenetic regulation of bladder response to obstruction. *Canadian Institutes of Health Research (CIHR)*. Bagli DJ. (\$828,370.00 CAD, Jul 2013 - Jul 2018).

Establishing an International Pediatric Urology Task Force on Hypospadias Repair: Standardizing Surgical Outcomes in Clinical Research. *Population and Public Health*. Braga L, Bagli D, Lorenzo A, Pemberton J, Pippi Salle J. (\$25,000.00 CAD, Jan 2013 - Jan 2014).

External Ear Project. *ENT and the Transplant Centre, Hospital for Sick Children*. Farhat WA. (\$50,000.00 CAD, Jan 2013 - Dec 2015).

Improving Access to Standardized Fertility Preservation Information in Pediatric Oncology: a 1 yr Pilot Knowledge Translation Intervention. *Pediatric Oncology Group of Ontario*. Lorenzo A. (\$14,961.80 CAD, May 2014 - Jun 2015).

Inaugural Innovation Fund. *The Hospital for Sick Children*. Lorenzo A. (\$10,000.00 CAD, Sep 2010 - 2013).

Interactive multi-media CD-Rom for teaching operative pediatric urology. *University of Toronto*. Lorenzo AJ, Khoury AE. (\$16,795.00 CAD, 2004 - present).

Normothermic Kidney Perfusion Ex Vivo to Enhance Transplant Graft Utility. *Transplant and Regenerative Medicine Centre – Sickkids Research Institute*. Robinson L, Bagli D, Selzner M. (\$150,000.00 CAD, Jul 2013 - Jul 2015).

Normothermic Renal Perfusion to Increase Graft Survival in Kidney Transplantation. *Multiorgan Transplant Centre – University Health Network*. Robinson L, Bagli D, Selzner M. (\$100,000.00 CAD, Jul 2013 - Jul 2015).

Novel Therapeutic Approaches For Obstructive Bladder Disease. *Canadian Institutes of Health Research (CIHR)*. Bagli D. (\$440,000.00, 2009 - 2013).

Parent, provider and survivor perspectives of investigational fertility preservation interventions for pre-pubertal boys with cancer: Exploring the factors influencing decisions and measuring preferences. *C17 Research Network, Pediatric Oncology Stem Cell Transplantation*. Lorenzo A. (\$79,054.00 CAD, Sep 2012 - Sep 2013).

Strategies for MRI Assessment of Microvessel Integrity in Angiogenesis. *Heart and Stroke Foundation of Ontario*. Cheng HL, Farhat WA. (\$162,274.00 CAD, Jul 2012 - Jul 2015).

Summer Research Program. *Hospital for Sick Children, The Dr Lorus J Milne and Dr Margery J Milne Award*. Bagli DJ. (\$3,000.00 CAD, Jul 2013 - Jun 2014).

Develop clinical pathways and tools to facilitate standardized information delivery to oncology patients and families concerning fertility preservation. *Mary Jo Haddad (MJH) Innovation Fund Award*. Lorenzo AJ. (\$10,000.00 CAD, Jul 2013 - Jul 2014).

Honours Received

Bagli DJ: Named to Presidents Circle, The Hospital for Sick Children. Apr 2014.

Lorenzo AJ: Clinical Prize, Pediatric Urology Fall Congress. Sep 2013

Mount Sinai Hospital



Jay S. Wunder,
*Surgeon-in-Chief,
Rubinoff-Gross Chair in
Orthopaedic Oncology*

Heads of Division

Dr. C. Swallow General Surgery
Dr. D. Backstein Orthopaedic Surgery
Dr. K. Jarvi Urology

Division of General Surgery

The Division has been very productive this past year, having published 48 articles, along with numerous international lectures that were given. Research funding has come from the American Society of Colon and Rectal Surgeons, American Board of Surgery, Canadian Institutes of Health Research, Terry Fox Research Institute, Canadian Radiation Oncology Foundation/Sanofi-aventis, Canadian Institute for Photonic Innovations, Canadian Cancer Society Research Institute Innovation Grants, Canadian Breast Cancer Foundation, Canadian Partnership Against Cancer, Canadian Society for Surgical Oncology, Council of Academic Hospitals, The Kristen Ann Carr Fund, Cancer Care Ontario, Council of Academic Hospitals of Ontario, and Ontario Institute for Cancer Research.

Of note: Robin McLeod received the Award of Excellence from the College of Physicians and Surgeons of Ontario, and the Robert Mustard Mentor of the Year Award from the Division of General Surgery, University of Toronto. Although Robin closed her clinical practice and became a Vice President of Clinical Programs & Quality Initiatives at Cancer Care Ontario, she still managed to be awarded a CIHR grant aimed at developing a decision rule for discharge following colorectal surgery. Erin Kennedy was promoted to Associate Professor at the University of Toronto, and was elected as the Cancer Care Ontario Gastrointestinal Lead with the Disease Pathway Management Program. Erin was also awarded a \$1 Million grant from the Canadian Partnership Against Cancer to improve care and outcomes for patients with rectal cancer across Canada.

Division of Orthopaedics

Sixty-two articles were published in peer-reviewed journals as well as multiple visiting professorsips and lectures. Research funding was received from Canadian Institutes of Health Research, Stryker Canada, Zimmer Canada, Ontario Institute for Cancer Research, Orthopaedic Research and Education Fund, and The



Natural Sciences and Engineering Research Council of Canada, and The US Department of Defense.

Of note: Oleg Safir received the 2014 Award for Excellence in Postgraduate Medical Education at the University of Toronto in the category of Development and Innovation for development of the novel “Surgical Prep Camp” curriculum in the Surgical Skills Center, and also the Bruce Tovee Award for Postgraduate Education from the Department of Surgery. David Backstein was voted one of the top knee surgeons in North America by Orthopedics This Week, a leading U.S.-based industry publication. This closely followed David being ranked as one of Toronto’s top doctors by Toronto Life Magazine. Peter Ferguson received the Ivan Silver Award from the University of Toronto Faculty of Medicine for Excellence in Creative Professional Development related to the new Competency Based Curriculum in the Division of Orthopaedic Surgery.

Division of Urology

Forty-five papers were published for the academic year 2013-2014, along with numerous international lectures. Research funding was awarded from MaRS Innovation, National Institutes of Health, Canadian Institutes of Health Research, McLaughlin Centre at the University of Toronto, Canadian Cancer Society, Canadian Cancer Society Research Institute, Canadian Urology Research Consortium, Pfizer Pharmaceuticals, Spectrum Pharmaceuticals and Astellas Pharma Global Development.

Of note: Kirk Lo won the A.W. Bruce Faculty Undergraduate Teaching Award from the Department of Surgery. Alex Zlotta was awarded the European Association of Urology’s Platinum Award. Alex also received the Basic Science Research Award at the Charles J. Robson Division of Urology Research Day, and won three best poster awards at the European Association of Urology Meeting. Keith Jarvi completed his Presidency of the Society for Studies in Male Reproduction. Keith and colleagues published a landmark paper in Science Translational Medicine describing a non-invasive method for diagnosing the cause of male infertility.

Division of General Surgery

Dr. Z. Cohen	Professor	Dr. E.D. Kennedy	Assistant Professor
Dr. A.M. Easson	Assistant Professor	Dr. H. MacRae	Associate Professor
Dr. R. Gladdy	Assistant Professor	Dr. J.A. McCart	Associate Professor
Dr. A. Govindarajan	Assistant Professor	Dr. R.S. McLeod	Professor
Dr. R.N. Gryfe	Assistant Professor	Dr. C.J. Swallow	Professor (Division Head)

Publications

Ahmadi N, Dubois L, McKenzie M, Brown CJ, MacLean AR, McLeod RS. Role of Evidence-Based Reviews in Surgery in teaching critical appraisal skills and in journal clubs. *Can J Surg*: 2013 Aug; 56(4): E98-102.

Al-Sukhni E, Messenger DE, Victor JC, McLeod RS, Kennedy ED. Do MRI reports contain adequate pre-operative staging information for end users to make appropriate treatment decisions for rectal cancer? *Annals of Surgical Oncology*: 2013; 20(4): 1148-1151.

Bellolio F, Cohen Z, Macrae HM, O'Connor BI, Huang H, Victor JC, McLeod RS. Outcomes following surgery for perforating Crohn's disease. *Br J Surg*: 2013 Sep; 100(10): 1344-8.

Ben-Bassat O, Tyler AD, Xu W, Kirsch R, Schaeffer DF, Walsh J, Steinhart AH, Greenberg GR, Cohen Z, Silverberg MS, McLeod RS. Ileal Pouch Symptoms Do Not Correlate With Inflammation of the Pouch. *Clin Gastroenterol Hepatol*: 2013 Sep 27; (13): 1432-8.

Bickenbach KA, Karanicolas PJ, Ammori JB, Jayaraman S, Winter JM, Fields RC, Govindarajan A, Nir I, Rocha FG, Brennan MF. Up and down or side to side? A systematic review and meta-analysis examining the impact of incision on outcomes after abdominal surgery. *American Journal of Surgery*: 2013 Sep; 206(3): 400-9.

Brar S, Law C, McLeod RS, Helyer L, Swallow C, Paszat L, Seevaratnam R, Cardoso R, Dixon M, Mahar A, Lourenco LG, Yohanathan L, Bocicariu A, Bekali-Saab T, Chau I, Church N, Coit D, Crane CH, Earle C, Mansfield P, Marcon N, Milner T, Noh SH, Porter G, Posner MC, Prachanc V, Sano T, van de Velde C, Wong S, Coburn N. International multidisciplinary Expert Panel. Defining Surgical Quality in Gastric Cancer using a RAND/UCLA Appropriateness Study. *J Am Coll Surg*: 2013 Aug; 217(2): 347-357.

Brar SS, Mahar AL, Helyer LK, Swallow C, Law C, Paszat L, Seevaratnam R, Cardoso R, McLeod R, Dixon M, Yohanathan L, Lourenco LG, Bocicariu A, Bekali-Saab T, Chau I, Church N, Coit D, Crane CH, Earle C, Mansfield P, Marcon N, Miner T, Noh SH, Porter G, Posner MC, Prachand V, Sano T, van de Velde C, Wong S, Coburn NG. Processes of care in the multidisciplinary treatment of gastric cancer: results of a RAND/UCLA expert panel. *JAMA Surg*: 2014 Jan; 149(1):18-25.

Brar SS, Provvidenza C, Hunter A, Victor JC, Irish JC, McLeod RS, Wright FC. Improving multidisciplinary cancer conferences: a population-based intervention. *Ann Surg Oncol*: 2014 Jan 1; 21(1):16-21.

Brown CJ, Achkar JP, Bressler BL, MacLean AR, Femzi FH, McLeod R. Evidence Based Reviews in Surgery Group. *Dis Colon Rectum*: 2014 Feb; 57(2): 278-81.

Coburn N, Seevaratnam SR, Paszat L, Helyer L, Law C, Swallow C, Cardoso R, Mahar A, Lourenco LG, Dixon M, Bekali-Saab T, Chau I, Church N, Coit D, Crane CH, Earle C, Mansfield P, Marcon N, Miner T, Noh SH, Porter G, Posner MC, Prachand V, Sano T, van de Velde C, Wong S, McLeod RS. Optimal management of gastric cancer: results from an international RAND/UCLA expert panel. *Ann Surg*: 2014 Jan; 259(1):102-8.

Darling G, Malthaner R, Dickie J, McKnight L, Nhan C, Hunter A, McLeod RS. Lung Cancer Expert Panel: Quality indicators for non small cell lung cancer operations with use of a modified Delphi Consensus panel. *Ann Thorac Surg*: 2014 April; 25.

Dixon E, Buie WD, Heisse CP, McLeod RS. Members of the Evidence Based Reviews in Surgery Group: What is the preferred surgery for perforated left sided diverticulitis? *J Am Coll Surg*: 2014 June; 218(6): 495-7.

Dixon M, Mahar A, Paszat L, McLeod RS, Law C, Swallow C, Helyer L, Seevaratnam R, Cardoso R, Bekali-Saab T, Chau I, Church N, Coit D, Crane CH, Earle C, Mansfield P, Marcon N, Miner T, Noh SH, Porter G, Posner MC, Prachand V, Sano T, Van de Velde CJ, Wong S, Coburn. What provider volumes and characteristics are appropriate for gastric cancer resection? Results of an international RAND/UCLA expert panel. *Surgery*: 2013 Nov; 154(5):1100-09.

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Dixon M, Yang S, Alibhai S, Kennedy ED, Coburn NG, Kiss A, Law CHL. Optimal management of colorectal liver metastases in older patients: a decision analysis. *HPB*: 2014 Jun 24. doi: 10.1111/hpb.12292.

Fiore M, Coppola S, Cannell AJ, Colombo C, Bertagnoli MM, George S, Le Cesne A, Gladdy RA, Casali PG, Swallow CJ, Gronchi A, Bonvalot S, Raut CP. Desmoid-type fibromatosis and pregnancy. A multi-institutional analysis of recurrence and obstetric risk. *Annals of Surgery*: 2014; 259(5): 973-8.

Gladdy RA, Qin LX, Brennan MF, Singer S. Predictors of Survival in Primary and Recurrence Leiomyosarcoma. *Annals of Surgical Oncology*: 2013; 20(6): 1851-1857.

Govindarajan A, Baxter NN. Lymph node assessment: Quality, not quantity. *Annals of Surgical Oncology*: 2013 Oct; 20(11): 3357-8.

Halverson AL, Sellers MM, Billmoria KY, Hawn MT, Williams MV, McLeod RS, Ko CY. Identification of process measures to reduce post-operative readmission. *J Gastrointest Surg*: 2014 June; 10(6).

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Lazure P, St-Germain F, Gryfe R, Trudeau M, Hayes S. Communication – the foundation for collaborative relationships amongst providers, and between providers and patients: a case in breast and colorectal cancer. *Journal of Communication in Healthcare*: 2014 Mar; 7(1): 41-56.

Loo LW, Tiirikainen M, Cheng I, Lum-Jones A, Seifried A, Church JM, Gryfe R, Weisenberger DJ, Lindor NM, Gallinger S, Haile RW, Duggan DJ, Thibodeau SN, Casey G, Le Marchand L. Integrated analysis of genome-wide copy number alterations and gene expression in microsatellite stable, CpG island methylator phenotype-negative colon cancer. *Genes Chromosomes Cancer*: 2013 May;52(5):450-66.

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Mastracci TM, Greenberg CC, Kortbeek JB, McLeod RS. What are the effects of introducing the WHO “surgical safety checklist” on in-hospital mortality? *J Am Coll Surg*: 2013 Dec; 217(6): 1151-3.

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Nadler A, Pearsall EA, Victor JC, Aarts MA, Okrainec A, McLeod RS. Understanding Surgical Residents’ Postoperative Practices and Barriers and Enablers to the Implementation of an Enhanced Recovery After Surgery (ERAS) Guideline. *J Surg Educ*: 2014 July-Aug; 71(4):632-8.

O’Riordan JM, Macrae HM, Gryfe R, Cohen Z, McLeod RS. Ileo neo-rectal anastomosis for colitis and familial adenomatous polyposis. *Int J Colorectal Dis*: 2013 Sep; 28(9): 1313-4.

Ottolino-Perry K, Tang N, Head R, Ng C, Arulanandam R, Angarita FA, Acuna SA, Chen Y, Bell J, Dacosta RS, McCart JA. Tumor vascularization is critical for oncolytic vaccinia virus treatment of peritoneal carcinomatosis. *Int J Cancer*: 2014 Feb 1;134(3):717-30.

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- Schmocker S, Harden H, Victor JS, Law C, McCart JA, Kennedy ED.** Physicians' awareness of cytoreductive surgery and hyperthermic intraperitoneal chemotherapy. *Can. J. Surg*: 2013 Aug; 56(4):237-42.
- Serrano P, Grant R, Berk T, Kim D, Al-Ali H, Cohen Z, Pollett A, Riddell R, Silverberg M, Koran P, May G, Gallinger S.** Progression and management of duodenal neoplasia in familial adenomatous polyposis: a cohort study. *Annals of Surgery*: 2014 Jun.
- Skeldon S, Semotiuk K, Aronson M, Holter S, Gallinger S, Pollett A, Kuk C, van Rhijn B, Bostrom P, Cohen Z, Fleshner N, Jewett M, Hanna S, Shariat S, Van Der Kwast T, Evans A, Catto J, Bapat B, Zlotta A.** Patients with Lynch Syndrome Mismatch Repair Gene Mutations Are at Higher Risk for Not Only Upper Tract Urothelial Cancer but Also Bladder Cancer. *European Urology*: 2013; 63: 379-385.
- Spiegel G, Schmocker S, Huang H, Victor JC, Law C, McCart AJ, Kennedy ED.** Physicians' awareness of cytoreductive surgery and hyperthermic intraperitoneal chemotherapy for colorectal cancer carcinomatosis. *Canadian Journal of Surgery*: 2013 Aug; 56(4): 237-242.
- Strigley J, Lankshear S, Brierley J, McGowan T, Divaria D, Yurcan M, Rossi R, Yardley T, Kng MG, Ross J, Irish J, McLeod R, Sawka C.** Closing the loop: facilitating improvement in oncology practice through timely access to clinical performance indicators. *J Oncol Pract*: 2013 Sep;9(5):e255-61.
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- Urbach DR, Govindarajan A, Saskin R, Wilton AS, Baxter NN.** Introduction of surgical safety checklists in Ontario, Canada. *New England Journal of Medicine*: 2014 Mar 13; 370(11): 1029-38.
- Wei AC, Devitt KS, Wiebe M, Bathe OF, McLeod RS, Urbach DR.** Surgical process improvement tools defining quality gaps and priority areas in gastrointestinal cancer surgery. *Curr Oncol*: 2014 April; 21(2):195-202.
- Zih FSW, Wong-Chong N, Panzarella T, Hummel C, Petronis J, McCart JA, Swallow CJ.** Mucinous tumor of the appendix with peritoneal spread - Is there a role for expectant observation? *Annals of Surgical Oncology*: 2014 Jan;21(1):225-31.

Invited Visits

- Cohen Z:** Columbian Surgical Congress, Bogota, Colombia, August 2013. Invited Speaker: IBD Update and Lynch Syndrome Talks.
- Cohen Z:** The Philip Gordon Lectureship Canadian Association of General Surgeons Annual Meeting, Ottawa, Canada, September 2013. HNPCC - A Personal Story.
- Easson AM:** Grand River Regional Cancer Centre, Surgical Oncology, Kitchener-Waterloo LHIN, Cambridge, Canada, 4 April 2014. Invited Speaker: Breast reconstruction in breast cancer: where does it fit?
- Gladdy R:** Canadian Surgery Forum, Ottawa, Ontario, Canada, 20 September 2013. Chair: CAGS-CSSO Scientific Session - Abstracts.
- Gladdy R:** Society of Surgical Oncology, Cancer Symposium, Phoenix, Arizona, United States, 13 March 2014. Invited Speaker: Multimodality Management of Soft Tissue Sarcoma – Personalized Medicine in Practice Session. Talk: Desmoid Fibromatosis: Changes to NCCN Guidelines Based on Emerging Data Multimodality Management of Soft Tissue Sarcoma – Personalized Medicine in Practice Session.

Gladdy R: 9th Annual Canadian General Surgery Review, Toronto, Ontario, Canada, 29 March 2014. Presenter: Soft Tissue Sarcomas.

Govindarajan A: American Society of Clinical Oncology GI Cancers Symposium, United States, January 2014. Presenter: Impact of colonoscopically missed cancers on patient outcomes.

Kennedy ED: Canadian Surgery Forum, Canadian Society of Colon and Rectal Surgeons Paper Session, Ottawa, Ontario, Canada, 21 September 2013. 1/ Presenter: Radiation exposure from computed tomography in Crohn's disease patients undergoing ileocolic resection. 2/ Invited Speaker: Dysplasia and cancer in the IBD patient.

McLeod RS: Department of Digestive Surgery of the Pontificia Universidad Catolica de Chile, Santiago, Chile, August 2013. 1/ Invited Lecturer: Surgical options in Crohn's Disease. 2/ Invited Lecturer: How to avoid problems in the making of an ileoanal pouch. 3/ Invited Lecturer: Short and Long term complications of the ileoanal pouch.

McLeod RS: Canadian Surgery Forum, Ottawa, Canada, September 2013. 1/ Invited Lecturer: Overview of Evidence Based Reviews in Surgery. 2/ Implementation of ERAS in Ontario.

McLeod RS: Principles and Practice of Clinical Research, McMaster University, Hamilton, Ontario, September 2013. Adopting Evidence in to Practice-what are the challenges?

McLeod RS: American College of Surgeons Annual Meeting, Washington, United States, October 2013. How to treat rectal cancer: Can MRI or Ultrasound make the decisions for you?

McLeod RS: Medical College of Wisconsin, Madison, United States, March 2014. Invited Lecturer: 41st Annual Edwin H Ellison Memorial Lecture "Adopting Evidence into Practice: How do we change Physician Behavior?"

McLeod RS: Surgery Grand Rounds, Medical College of Wisconsin, Madison, United States, March 2014. Improving the Quality of Cancer Surgery in a Single Payer System.

McLeod RS: Southwest Surgical Oncology Quality Symposium, London, Ontario, April 2014. Ontario's Initiatives in Surgical Quality-The Successes & Where We're Headed.

McLeod RS: American Society of Colon and Rectal Surgeons Meeting, Florida, United States, May 2014. Invited Lecturer: Barriers to Adoption of Enhanced Perioperative Care Pathways.

McLeod RS: Digestive Disease Week, Chicago, United States, May 2014. Here Comes Generation Y, Presidential Address, Society for Surgery of the Alimentary Tract.

Research and Investigations

A Correlative Study of Melanoma Tumor-Infiltrating Lymphocytes (TILs) and Response to Ipilimumab.

Joshua A, Butler M, Hogg D, Gedye C, Spreafico A, Ohashi P, Chappell MA, DeLuca S, Zhang B, Piryatinsky E, Easson A. (2013 - present).

A Phase I/II study of high dose rate brachytherapy for the palliation of rectal cancer. *Canadian Radiation Oncology Foundation/Sanofi-aventis. CASARIA. Wong KSR, Bayley A, Brierley J, Cummings B, Dinniwell R, Easson A, Kennedy E, Le L, Ringash J, Jezioranski J, Kim E. (\$20,000 2010 - present).*

A phase II study to assess the safety and feasibility of refined selection criteria for pre-operative chemoradiation for rectal cancer. *MSH-UHN. Kennedy E, Baxter N, Simunovic M, McLeod R: (\$189,590 2013-2015).*

A phase III randomized study of preoperative radiotherapy plus surgery versus surgery alone for patients with retroperitoneal sarcoma (RPS). *STRASS. Swallow CJ, Catton CN, Gladdy RA, Chung PM, O'Sullivan B. (2011 - 2015).*

A randomized phase III trial of preoperative chemoradiotherapy vs. preoperative chemotherapy for resectable gastric cancer. *Canadian Institutes of Health Research (CIHR). Wong RKS, O'Callaghan CJ, Darling G, Jonker D, Kollmannsberger C, Liu G, Mittman N, Ringash J, Swallow CJ. (\$241,547 2011-2018).*

A Single, Blind, Randomized Controlled Study to Evaluate the Safety and Effectiveness of EVICEL® as an Adjunct to Gastrointestinal Anastomosis Techniques. *Ethicon™. McLeod RS. (\$10,000 USD 2012-2013).*

Accelerated implementation diffusion of quality initiatives for rectal cancer across Canada using a multi-faceted knowledge translation strategy. *Canadian Partnership Against Cancer (CPAC). Kennedy E, Baxter N, Simunovic M, McLeod RS. (\$903,000 2014 - 2017).*

Building Capacity for Provincial Lynch Syndrome Screening in Ontario. *Ontario Institute for Cancer Research / Cancer Care Ontario. Baxter N, Rabeneck L, Gagliardi A, Kennedy ED, Timmouth J, Pollett A,*

Gallinger S, Covelli A, Facey M. (\$148,572 2014-2015).

Canadian Oncolytic Virus Consortium. Terry Fox Research Institute (TFRI). McCart A. (\$7,500,000 2012-2017).

CIHR Strategic Training Grant in the Development of Biological Therapeutics. Canadian Institutes of Health Research (CIHR). 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. (\$1,787,630 2009-2015).

Clinical Validation of PRODIGI, a New Handheld Optical Imaging Technology for Real-time Intraoperative-guidance of Breast Tumour Resection. Canadian Cancer Society Research Institute. Da Costa R, Leong W, Wilson B, Done S, Easson A. (\$160,000 2011 - 2013).

Defining the Polo-Like Kinase 4 (Plk4) Interactome. Canadian Society for Surgical Oncology (CSSO). Karineh K, Swallow C. (2012 - 2013).

Designing a next generation vaccinia virus using high through-put screening. Canadian Cancer Society Research Institute (CCSRI). Stojdl D, McCart A. (\$200,000 2012 -2014).

Development of a Decision Rule for Discharging Patients following Colorectal Surgery based on Post-operative Serum C Reactive Protein and/or Procalcitonin Levels. Canadian Institutes of Health Research (CIHR). McLeod, R, Aarts MA, Marshall J, McCluskey S, Morris A, Okrainec A, Rotstein O, Stiel I. (\$489,000 2014 - 2015).

Development of PRODIGI, a Handheld Optical Imaging Technology for Real-time Intraoperative-guidance of Breast Tumour Resection. Canadian Institutes of Health Research, Cancer Research. Da Costa R, Easson A, Done S, Leong W, Wilson B. (\$145,000 2011 - present).

Enhanced Recovery after Surgery Guideline to Optimize Outcome following Colorectal Surgery. Council of Academic Hospitals. McLeod R, Aarts MA, Okrainec A, Siddiqui N, Gotlib-Conn L, McKenzie M, Pearsall E. (\$1,729,505 2013 - 2015).

Evaluating a synoptic MRI report as a knowledge translation intervention for rectal cancer. CCO/OICR. Kennedy E, McLeod RS, Milot L, Fruitman M, Brown G, Victor JC. (\$49,585 2012-2013).

Evidence Based Reviews in Surgery. Ethicon and Ethicon Endosurgery. McLeod R. (\$35,000 1999 - 2013).

Evidence Based Reviews in Surgery. American Board of Surgery. McLeod RS. (\$20,000 2012 - 2014).

Generation of De Novo molecular targets for optical imaging-guided surgical interventions in breast cancer. Cancer Care Ontario. Da Costa R, Easson A, Wey L, Wilson B, Susan D. (\$100,000 2011 - present).

Growth of Tumor Infiltrating Lymphocytes (TIL) and Tumor Cells (TC) from human melanoma explants. Ohashi P, Easson A, Nguyen L, Ghazarian D, Leung W, McCready D, Joshua, A, Rosenberg S. (2007 - present).

Implementation of an Enhanced Recovery after Surgery (iERAS) program. Council of Academic Hospitals of Ontario (CAHO), ARTIC. McLeod RS, Okrainec A, Aarts MA, Gotlib L, Siddiqui N. (\$80,000 2014).

Improving the quality of oncofertility decision making among young women at risk of infertility during cancer survivorship. Canadian Cancer Society Research Institute. Baxter N, Kennedy E, Simmons C, Brezden-Masley C, Hicks L, Gupta A, Nathan P, Greenblatt E, Yee S. (\$299,936 2014-2017).

Improving the quality of rectal cancer multidisciplinary cancer conference (MCC) in the Toronto Central (South) LHIN. Cancer Care Ontario. Kennedy E, McLeod RS, Brierley J, Jhaveri K, Kirsch R, Victor JC. (\$37,000 2012-2014).

Multimodal Optical Imaging of Breast Tumor Receptors for Diagnosis and Interventional Guidance In Vivo. Canadian Breast Cancer Foundation (CBCF). DaCosta R, Leong W, Easson A, Wilson B, Sidhu S, Done S. (\$440,000 2013-2016).

Novel Translational Mosaic Mouse Models of Sarcoma. Murray Brennan Award, The Kristen Ann Carr Fund. Gladdy R. (\$150,000 USD 2013-2014).

Pan-Canadian Colorectal Cancer Consortium: Improving the health of Canadians by reducing colorectal cancer risk, by improving outcomes through earlier diagnosis and by improving therapeutic outcomes for those with more advanced disease. Terry Fox Research Institute (TFRI). Gallinger S, Gryfe RN. (\$1,263,831 2012-2014).

Patient and physician preferences for the management of low rectal cancer. American Society of Colon & Rectal Surgeons. McLeod RS, Kennedy ED, Smith A, Baxter N, Brierley J, Kim J, Victor C. (\$49,690 2010-2014).

Population-based assessment of sleep deprivation in staff physicians and its impact on patient care.

University of Toronto, Dean's Fund. Govindarajan A, Baxter N. (\$19,662 2013-2015).

Population-based assessment of sleep deprivation in staff physicians and its impact on patient care and outcomes.

Canadian Institutes of Health Research (CIHR). Baxter N, Govindarajan A, Gagliardi A, Juurlink D, Kennedy E, Murray B, Sutradhar R, Urbach D. (\$308,760 2013-2016).

Selected Therapies and Functional Genomics in Sarcoma. *Ontario Institute for Cancer Research. Gladdy R. (\$1,750,000 2008-2014).*

Sub-Project: Knowledge to Action: Improving local therapy for young women with breast cancer across Canada. *Canadian Breast Cancer Foundation / Canadian Institute of Health Research - Institute of Cancer Research. Baxter N, Simunovic M, Tyldesley S, Quan ML, Kennedy ED. (\$497,549 2014-2019).*

Sub-Project: SPOKE & GYPSY: Studies to Encourage Early Fertility Preservation Referral and to Predict Effects of Treatment on Fertility of Young Women with Breast Cancer. *Canadian Breast Cancer Foundation / Canadian Institute of Health Research - Institute of Cancer Research, CBCF-CIHR. Warner E, Glass K, Foong S, Kennedy ED. (\$348,781 2014-2019).*

Translational research resource for Benign Breast Cases. *Hold'em for Life Research Fund and revenue.*

Goodwin P, Woodgett J, Ennis M, Escallon J, Easson A, Leong W, Khokha R, Crystal P, Hofer S, O'Neill A, Zhong T. (2014).

Honours Received

McLeod RS: Award of Excellence, College of Physicians and Surgeons of Ontario, Ontario, Canada. 2013.

McLeod RS: Robert Mustard Mentor of the Year Award, Division of General Surgery, University of Toronto, Dept of Surgery, Faculty of Medicine, Toronto, Ontario, Canada. 2014.

Division of Orthopaedics

Dr. D. Backstein	Associate Professor (Division Head)	Dr. P. Kuzyk	Assistant Professor
Dr. P. Ferguson	Associate Professor	Dr. O. Safir	Assistant Professor
Dr. A. Gross	Professor	Dr. T. Willett	Assistant Professor
		Dr. J.S. Wunder	Professor

Publications

Abolghasemian M, Gharanzadeh K, Kuzyk P, Masdari Z, Fakharian M, Safir O. Hips with Synovial chondromatosis may display the features of femoroacetabular impingement. *Journal of Bone and Joint Surgery American*: 2014 Jan 15; 96(2): 1-6.

Abolghasemian M, Sadeghi Naini M, Tangsataporn S, Lee P, Backstein D, Safir O, Kuzyk P, Gross AE. Reconstruction of massive uncontained acetabular defects using allograft with cage or ring reinforcement: an assessment of the graft's ability to restore bone stock and its impact on the outcome of re-revision. *Journal of Bone and Joint Surgery*: 2014 Mar 1; 96B(3): 319-24.

Abolghasemian M, Samiezadeh S, Jafari D, Bougherara H, Gross AE, Ghazavi MT. Displacement of the hip center of rotation after arthroplasty of Crowe III and IV dysplasia: A radiological and biomechanical study. *The Journal of Arthroplasty*: 2013; 28:1031-1035.

Abolghasemian M, Samiezadeh S, Sternheim A, Bougherara H, Barnes CL, Backstein DJ. Effect of Patellar Thickness on Knee Flexion in Total Knee Arthroplasty: A Biomechanical and Experimental Study. *Journal of Arthroplasty*: 2014 Jan;29(1):80-4.

Abolghasemian M, Sternheim A, Shakib A, Safir OA, Backstein D. Is arthroplasty immediately after an infected case a risk factor for infection? *Clinical orthopaedics and related research*: 2013 Jul; 471(7): 2253-8.

Abolghasemian M, Tangsataporn S, Drexler M, Barbuto R, Backstein D, Safir O, Kuzyk P, Gross A. The challenge of pelvic discontinuity: Cup-cage reconstruction does better than conventional cages in mid-term. *Journal of Bone and Joint Surgery British*: 2014 Feb 1; 96(B2): 195-200.

Abolghasemian M, Tangsataporn S, Sternheim A, Backstein DJ, Safir OA, Gross AE. Porous metal augments: big hopes for big holes. *Journal of Bone and Joint Surgery (Br)*: 2013 Nov 1; 95-B(11A): 103-8.

- Al Sulaimani S, Turcotte RE, Ferguson P, Canadian Orthopaedic Oncology Society (CANOOS) Collaborators.** Iterative curettage is associated with local control in giant cell tumours of the distal tibia. *Clinical Orthopaedics and Related Research*: 2013 Aug 20; 471(8): 2668-74.
- Alman BA, Ferguson P, Kraemer W, Nousiainen MT, Reznick RK.** Competency-based education: a new model for teaching orthopaedics. *Instr Course Lect*: 2013; 62: 565-9.
- Anastassiades T, Rees-Milton K, Xiao H, Yang X, Willett T, Grynepas M.** N-acylated glucosamines for bone and joint disorders: effects of N-butyryl glucosamine on ovariectomized rat bone. *Translational Research*: 2013 Aug; 162(2): 93-101.
- Baroudi MR, Ferguson PC, Wunder JS, Isler MH, Mottard S, Werier JA, Turcotte RE.** Forearm soft tissue sarcoma: Tumors characteristics and oncologic outcomes following limb salvage surgery. *J Surg Oncol*: 2014 Jun 9. PMID: 24910319. doi: 10.1002/jso.23686.
- Burton B, Gaspar A, Tupy J, Josey D, Grynepas MD, Willett TL.** Bone Embrittlement and Collagen Modification Due to High Dose Gamma-Irradiation Sterilization. *Bone*: 2014 Apr.
- Campbell V, Nadesan P, Ali SA, Wang CY, Whetstone H, Poon R, Wei Q, Keilty J, Proctor JL, Wang LW, Apte SS, McGovern K, Alman BA, Wunder J.** Hedgehog pathway inhibition in chondrosarcoma using the Smoothened inhibitor IPI-926 directly inhibits sarcoma cell growth. *Mol Cancer Ther*: 2014 Mar 14.
- Citak M, Argenson J, Masri B, Kendoff D, Springer B, Alt V, Baldini A, Cui Q, Deirmengian G, Del Sel H, Harrer M, Israelite C, Jahoda D, Jutte PC, Levicoff E, Meani E, Motta F, Pena O, Ranawat A, Safir O, Squire M, Taunton M, Vogely C, Wellman S.** Spacers. *J Arthroplasty*: 2014 Feb 1; 29(2 Suppl): 93-9.
- Davidge KM, Raghuram K, Hofer SO, Ferguson PC, Wunder JS, Swallow CJ, Zhong T.** Impact of flap reconstruction on perineal wound complications following ablative surgery for advanced and recurrent rectal cancers. *Ann Surg Oncol*: 2014 Jun; 21(6): 2068-73.
- Davies J, Tsui D, Syed K, Kuzyk P, Agur A.** The Musculoskeletal Exam. In: Justin Hall, Katrina Piggott, Miliana Vojvodic, Kirill Zaslavsky (eds), *Essentials of Clinical Examination Handbook*: 2013 Aug 27.
- Drexler M, Dwyer T, Chakraverty R, Backstein D, Gross AE, Safir O.** The Outcome of Modified Extended Trochanteric Osteotomy in Revision THA for Vancouver B2/B3 Periprosthetic Fractures of the Femur. *Journal of Arthroplasty*: 2014 Mar 28; PMID: 24736292.
- Drexler M, Dwyer T, Chakraverty R, Farno A, Backstein D.** Assuring the happy total knee replacement patient. *Journal of Bone & Joint Surgery (BR)*: 2013 Nov 1; 95-B(11, supp A): 120-3.
- Drexler M, Gross A, Dwyer T, Safir O, Backstein D, Chaudhry H, Goulding A, Kosashvili Y.** Distal femoral varus osteotomy combined with tibial plateau fresh osteochondral allograft for post-traumatic osteoarthritis of the knee. *Knee Surg Sports Traumatol Arthrosc*: 2014 Jan 14. PMID: 24420606. AID: 10.1007/s00167-013-2828-x.
- Dwyer T, Willett TL, Dold A, Petrera M, Wasserstein D, Whelan D, Theodoropoulos J.** Maximum load to failure and tensile displacement of an all-suture glenoid anchor compared with a screw-in glenoid anchor. *Knee Surgery, Sports Traumatology, Arthroscopy*: 2013 Oct.
- Ferguson PC.** Pelvic Sarcoma Resection and Reconstruction. *Orthopaedic Knowledge Update Musculoskeletal Tumors 3*: 2014 Jan 6.
- Ferguson P, Kraemer W, Nousiainen M, Safir O, Sonnadara R, Alman B, Reznick R.** Three-year experience with an innovative, modular competency-based curriculum for orthopaedic training. *J Bone Joint Surg Am*: 2013 Nov 6; 95(21): e166.
- Gross AE, Callaghan JJ, Zywiell MG, Greiner JJ, Kosashvili Y, Johnson AJ, Clohisy JC, Backstein D, Mont M.** Total hip arthroplasty in down syndrome patients: An improvement in quality of life Replacement Arthroplasty in Down Syndrome (RADS) Study Group. *The Journal of Arthroplasty*: 2013; 28: 701-706.
- Hui Y, Safir O, Dubrowski A, Carnahan H.** What skills should simulation training in arthroscopy teach residents? A focus on resident input. *International Journal of Computer Assisted Radiology and Surgery*: 2013 Nov; 8(6): 945-53.
- Kashigar A, Vincent A, Gunton MJ, Backstein DB, Safir O, Kuzyk PR.** Predictors of Failure for Cephalomedullary Nailing of Proximal Femoral Fractures. *The Bone and Joint Journal*: 2014 Aug; 96-B(8):1029-34.
- Khanna V, Tushinski D, Drexler M, Backstein D, Gross A, Safir O, Kuzyk P.** Cartilage Restoration of the Hip using Fresh Osteochondral Allograft: Resurfacing the Potholes. *The Bone and Joint Journal*: 2014 Jun; 96-B(Supp 8, 31).

- Khoja H, Griffin A, Dickson B, Wunder J, Ferguson P, Howarth D, Kandel R.** Sampling modality influences the predictive value of grading in adult soft tissue extremity sarcomas. *Arch Pathol Lab Med*: 2013 Dec;137(12):1774-9.
- Kosashvili Y, Drexler M, Backstein D, Safir O, Lakstein D, Safir A, Chakraverty R, Dwyer T, Gross A.** Dislocation after the first and multiple revision total hip arthroplasty: comparison between acetabulum-only, femur-only and both component revision hip arthroplasty. *Canadian Journal of Surgery*: 2014 Apr 1; 57(2).
- Kosashvili Y, Gross AE, Ziv YB, Backstein D.** Distal femoral varus osteotomies for lateral osteoarthritis of the knee. *The Knee Reconstruction Replacement and Revision*: 2013;1: 381 - 386.
- Kuzyk P, Dhotar H, Sternheim A, Gross A, Safir O, Backstein D.** Two-stage Revision Arthroplasty for Management of Chronic Periprosthetic Hip and Knee Infection: Techniques, Controversies, and Outcomes. *J Am Acad Orthop Surg*: 2014 Mar 1; 22(3): 153-64.
- Lee PTH, Gyomory S, Safir O, Backstein D, Gross AE.** Bone Grafts in Hip Surgery. *Surgery of the Hip*: 2013; 13: 182-197.
- Lee PTH, Safir O, Kellett CF, Backstein DJ, Gross AE.** Femoral Revision: Allograft and Prosthetic Composites and Proximal Femoral Replacement. *Surgery of the Hip*: 2013; 99: 1179-1193.
- Lo WW, Pinnaduwa D, Gokgoz N, Wunder JS, Andrusis IL.** Aberrant Hedgehog Signaling and Clinical Outcome in osteosarcoma. *Sarcoma*: 2014 Mar 30.
- Lo WW, Wunder JS, Dickson BC, Campbell V, McGovern K, Alman BA, Andrusis IL.** Involvement and targeted intervention of dysregulated hedgehog signaling in osteosarcoma. *Cancer*: 2014 Feb 15;120(4):537-47.
- Ng AH, Willett TL, Alman BA, Grynblas MD.** Development, validation and characterization of a novel mouse model of Adynamic Bone Disease (ABD). *Bone*: 2014 Aug 8;68C:57-66.
- Nicholls F, Janic K, Filomeno P, Willett T, Grynblas M, Ferguson P.** The Effects of Radiation and Surgery on Healing of Femur Fractures in a Rat Model. *Journal of Orthopaedic Research*: 2013 Aug; 31(8): 1323-1331.
- Nicholls F, Ng AH, Su S, Janic K, Fallis C, Willett T, Grynblas M, Ferguson P.** Can OP-1 Stimulate Union in a Rat Model of Pathological Fracture Post Treatment for Soft Tissue Sarcoma. *Journal of Orthopaedic Research*: 2014 Oct;32(10):1252-63.
- O'Donnell PW, Griffin AM, Eward WC, Sternheim A, Catton CN, Chung PW, O'Sullivan B, Ferguson PC, Wunder JS.** The effect of the setting of a positive surgical margin in soft tissue sarcoma. *Cancer*: 2014 Jun 3. PMID: 24894656. doi: 10.1002/cncr.28793.
- O'Donnell PW, Griffin AM, Eward WC, Sternheim A, White LM, Wunder JS, Ferguson PC.** Can Experienced Observers Differentiate between Lipoma and Well-Differentiated Liposarcoma Using Only MRI? *Sarcoma*: 2013 Dec 10; Article ID 982784: 6 Pages.
- O'Donnell PW, Griffin AM, Eward WC, Sternheim A, Wunder JS, Ferguson PC.** Early follow-up of a custom non-fluted diaphyseal press-fit tumour prosthesis. *Int Orthop*: 2013 Sep 5. PMID: 24005239. AID: 10.1007/s00264-013-2078-z [doi].
- Paneduro D, Pink LR, Smith AJ, Chakraborty A, Kirshen AJ, Backstein D, Woods NN, Gordon AS.** Development, implementation and evaluation of a pain management and palliative care educational seminar for medical students. *Pain Research & Management*: 2014 May 24. PMID: 24851239.
- Polkowski GG, Lieberman JR, Rogers BA, Garbedian S, Kuchinad R, Gross AE, Safir O, Backstein D.** Periprosthetic fractures in specific anatomical locations - Pelvis and acetabulum. *Periprosthetic Fracture Management, AO Trauma*: 2013; 156 - 160.
- Ravichandiran K, Elserafi J, Neufeld M, Stockton D, von Schroeder H, Nousiainen M, Kuzyk P.** *Orthopaedic Surgery, Toronto Notes*: 2014 Mar.
- Restrepo C, Schmitt S, Backstein D, Alexander BT, Babic M, Brause BD, Esterhai JL, Good RP, Jørgensen PH, Lee P, Marculescu C, Mella C, Perka C, Pour AE, Rubash HE, Saito T, Suarez R, Townsend R, Tözün IR, Van den Bekerom MP.** Antibiotic treatment and timing of reimplantation. *Journal of Arthroplasty*: 2014 Feb 1; 29(2 Suppl): 104-7.
- Restrepo C, Schmitt S, Backstein D, Alexander BT, Babic M, Brause BD, Esterhai JL, Good RP, Jørgensen PH, Lee P, Marculescu C, Mella C, Perka C, Eslam A, Rubash HE, Saito T, Suarez R, Townsend R, Tözün IR, Van den Bekerom MP.** Antibiotic treatment and timing of reimplantation. *Journal of Orthopaedic Research*: 2014 Jan 1; 32(suppl 1): 136-40.

- Rogers BA, Garbedian S, Kuchinad R, Gross AE, Safir O, Backstein D, Lyons MC, MacDonald SJ.** Periprosthetic fractures in specific anatomical locations - Hip. *Periprosthetic Fracture Management, AO Trauma*: 2013; 154 - 155.
- Rogers B, Kuchinad R, Garbedian S, Backstein D, Gross A, Safir O.** Cement Augmentation of the Acetabulum for Revision Total Hip Arthroplasty for Infection. *The Journal of Arthroplasty*: 2014 Feb 13. DOI: 10.1016/j.arth.2014.01.017.
- Safir O, Williams C, Dubrowski A, Backstein D, Carnahan H.** Self-directed practice schedule enhances learning of suturing skills. *Can J Surg*: 2013 Dec 1; 56(6): E142-7.
- Saidi K, Ben-Lulu O, Tsuji M, Safir O, Gross AE, Backstein D.** Supracondylar Periprosthetic Fractures of the Knee in the Elderly Patients: A Comparison of Treatment Using Allograft-Implant Composites, Standard Revision Components, Distal Femoral Replacement Prosthesis. *The Journal of arthroplasty*: 2014 Jan; 29(1): 110-4.
- Sivasundaram R, Shah S, Ahmadi S, Wunder JS, Schemitsch EH, Ferguson PC, Zdero R.** The Biomechanical Effect of Proximal Tumor Defect Location on Femur Pathological Fractures. *Orthop Trauma*: 2013 Aug 2; 27: 174-180.
- Sonnadara R, McQueen S, Mironova P, Safir O, Nousiainen M, Ferguson P, Alman B, Kraemer W, Reznick R.** Reflections on current methods for evaluating skills during joint replacement surgery: a scoping review. *Bone Joint J*: 2013 Nov 1; 95-B(11): 1445-9.
- Sonnadara R, Mui C, McQueen S, Mironova P, Nousiainen M, Safir O, Kraemer W, Ferguson P, Alman B, Reznick R.** Reflections on competency-based education and training for surgical residents. *J Surg Educ*: 2014 Jan 1; 71(1): 151-8.
- Sonnadara RR, Garbedian S, Safir O, Mui C, Mironova P, Nousiainen M, Ferguson P, Alman B, Kraemer W, Reznick R.** Toronto Orthopaedic Boot Camp III: Examining the efficacy of student-regulated learning during an intensive, laboratory-based surgical skills course. *Surgery*: 2013 Jul 1; 154(1): 29-33.
- Sternheim A, Drexler M, Kuzyk PR, Safir OA, Backstein DJ, Gross AE.** Treatment of failed allograft prosthesis composites used for hip arthroplasty in the setting of severe proximal femoral bone defects. *Journal of Arthroplasty*: 2014 May 1; 29(5): 1058-62.
- Sternheim A, Saidi K, Lochab J, O'Donnell P, Eward W, Griffin AM, Wunder JS, Ferguson PC.** Internal fixation of radiation-induced pathologic fractures of the femur has a high rate of failure. *Bone Joint Journal*: 2013 Aug 5; 95-B (8): 1144-1148.
- Tangsataporn S, Abolghasemian M, Kuzyk PR, Backstein DJ, Safir OA, Gross AE.** Salvaged failed roof rings and antiprotrusion cages: surgical options and implant survival. *Hip International*: 2013; 2(23): 166-172.
- Townley WA, Mah E, O'Neill AC, Wunder JS, Ferguson PC, Zhong T, Hofer SO.** Reconstruction of sarcoma defects following pre-operative radiation: Free tissue transfer is safe and reliable. *J Plast Reconstr Aesthet Surg*: 2013 Jul 4. PMID: 23831122. doi:10.1016/j.bjps.2013.06.029.
- van Kollenburg JA, Vrahas MS, Smith RM, Guitton TG, Ring D.** Diagnosis of union of distal tibia fractures: accuracy and interobserver reliability. *Injury*: 2013 Aug.
- Venkataramanan V, Gignac MA, Dunbar M, Garbuz D, Gollish J, Gross AE, Hedden D, MacDonald SJ, Mahomed NN, Schemitsch, E, Davis AM.** The importance of perceived helplessness and emotional health in understanding the relationship among pain, function, and satisfaction following revision knee replacement surgery. *Osteoarthritis Cartilage*: 2013 Jul; 21(7): 911-7.
- Walmsley D, Backstein D.** Rotational Alignment in Toptotal Knee Arthroplasty. *Seminars in Arthroplasty*: 2013 Sep 1; 24(3): 156-159.
- Willett TL, Pasquale J, Grynypas MD.** Collagen Modifications in Post-Menopausal Osteoporosis: Advanced Glycation Endproducts May Affect Bone Volume, Structure and Quality. Jeffrey Nyman (eds), *Current Osteoporosis Reports*: 2014 Sep;12(3):329-37.
- Zywiell MG, Mont MA, Callaghan JJ, Clohisy JC, Kosashvili Y, Backstein D, Gross AE.** Surgical challenges and clinical outcomes of total hip replacement in patients with Down's syndrome. *Journal of Bone and Joint Surgery (Br)*: 2013 Nov 1; 95-B(11 Suppl A): 41-5.

Invited Visits

Backstein D: Musculoskeletal Infection Society, Annual Meeting, Philadelphia, Pennsylvania, United States, 3 August 2013. Speaker: Infected Joint Replacement: Challenges We Face Panel Discussion.

Backstein D: American Academy of Orthopaedic Surgeons Annual Meeting, New Orleans, Louisiana, United States, 13 March 2014. 1/ Presenter: Ceftazidime-Vancomycin Impregnated Cement Spacers in Two Stage Revision for Infected TKA peer reviewed paper presentation. 2/ Facilitator: Adult Reconstruction Knee: Revision Paper Session.

Ferguson P: International Competency Based Medical Education Collaborators Group, Calgary, Alberta, Canada, October 2013. Facilitator: Implementation of Competency Based Medical Education.

Ferguson P: Candu Nuclear Energy, Mississauga, Canada, December 2013. Invited Speaker: Sarcoma - An Introduction to a Rare Cancer.

Ferguson P: 2nd Emirates Orthopaedic Conference, Dubai, United Arab Emirates, December 2013. 1/ Invited Speaker: Computer Navigation for Pelvic Sarcomas. 2/ Invited Lecturer: Building a better bone - Evolution of endoprosthetic design for primary bone tumours. 3/ Invited Lecturer: Metastatic Bone Disease - General Considerations. 4/ Invited Lecturer: Advances in management of complications of sarcoma treatment.

Ferguson P: Canadian Orthopaedic Resident Review Course, Mississauga, Ontario, Canada, January 2014. Invited Speaker: Benign Bone Tumours.

Ferguson P: 3rd Annual Sacro-Pelvic Tumor Conference, New York, New York, United States, 24 January 2014. Invited Speaker: Radiation-associated sacral fractures - can we learn lessons from other fractures?

Ferguson P: University of Manitoba, Winnipeg, Manitoba, Canada, April 2014. 1/ Invited Speaker: Competency Based Medical Education – The Future of Training but at what cost? Invited Lecture to local and provincial health care leaders. 2/ Invited Speaker: CanMEDS 2015 and Competency Based Medical Education in Post Graduate Training Lecture to University program directors and subsequent small group workshop. 3/ Invited Speaker: Practical Implementation of a Competency Based Curriculum for Post Graduate Training Medical Education Grand Rounds.

Ferguson P: 1st International Sarcoma Symposium, Toronto, Ontario, Canada, June 2014. Invited Speaker: How Can We Improve Functional Outcome in Extremity Sarcomas?

Ferguson P: AOA/COA Combined Meeting Symposium, Montreal, Quebec, Canada, June 2014. Invited Speaker: Competence as a Medical Expert – When does it occur and how do we know it when we see it?

Ferguson P: Council of Orthopaedic Residency Directors, American Orthopaedic Association, Montreal, Quebec, Canada, June 2014. Invited Speaker: Implementation and Initial Experiences with a Competency Based Orthopaedic Residency.

Ferguson P: New England Orthopaedic Society, Jay Peak, Vermont, United States, June 2014. 1/ Invited Lecturer: Management of Metastatic Disease of the Acetabulum. 2/ Invited Lecturer: Initial Experience with a Competency Based Curriculum for Post Graduate Orthopaedic Training. 3/ Invited Lecturer: Management of Extremity Soft Tissue Masses - Staying out of Trouble.

Gross A: VIII International Course Ciudad De Medellin Hip & Knee, Medellin, Colombia, 3 October 2013. 1/ Presenter: Conversion of a Fused Hip to a THA. 2/ Presenter: Impaction Grafting in Paprosky Type IV Femurs: There are better alternatives. 3/ Presenter: Modular Stems: Simplicity and Efficiency. 4/ Presenter: The Difficult Primary Hip. 5/ Presenter: The Dysplastic Hip: Not for the Shallow Surgeon. 6/ Presenter: Total Hip Revision: A Day in the Life of. 7/ Presenter: THA in the Patient with Down Syndrome. 8/ Presenter: Trabecular Metal Clinical Results Summary Zimmer Hip Meeting.

Gross A: University of Calgary, Calgary, Alberta, Canada, 17 October 2013. 1/ Invited Lecturer: The Difficult Primary Hip. 2/ Invited Lecturer: The Dysplastic Hip: Not for the Shallow Surgeon. 3/ The Role of Allografts in Lower Extremity Reconstruction.

Gross A: Harvard Medical School Department of Continuing Education, Cambridge, Massachusetts, United States, 23 October 2013. 1/ Presenter: Present Role of Structural Allografts vs Trabecular Metal for Acetabular Revision. 2/ Presenter: Standard Exposure Versus Extensile Exposure. 3/ Presenter: Trabecular Metal Augments for Bone Loss in Revision THA. 4/ Presenter: Cases 43rd Annual Course - Arthroplasty innovation in an Era of Health Care Reform: The Rapidly Changing Scene in Diagnostics, Early Intervention and Joint Replacement. 5/ Presenter: Standard exposure versus extensile exposure - Video Vignette. 6/ Presenter: Complex acetabular revisions requiring augments. 7/ Presenter: Role of structural allografts vs trabecular metal 43rd Annual Course - Arthroplasty Innovation in an Era of Health Care Reform: The Rapidly Changing Scene in Diagnostics, Early Intervention and Joint Replacement.

Gross A: 2nd Annual Current Concepts in Joint Replacement A Short Course Held in Conjunction with The Eight International Congress of the Chinese Orthopaedic Association Beijing, China, November 2013. 1/ Presenter: The dysplastic hip: Not for the shallow surgeon. 2/ Presenter: Strategies for dealing with massive

acetabular bone loss. 3/ Presenter: Trabecular metal augments for bone loss in revision THA.

Gross A: 13th Annual Current Concepts in Joint Replacement Winter 2013, Current Concepts Institute, Orlando, Florida, United States, December 2013. 1/ Presenter: Cartilage restoration: Resurfacing the potholes. 2/ Presenter: Severe bone loss and pelvic discontinuity: The cup cage solution. 3/ Presenter: The dysplastic hip: Not for the shallow surgeon.

Gross A: Mount Sinai School of Medicine, Department of Orthopaedics, New York, New York, United States, 29 January 2014. Visiting Professor: The Present Status of Allografts in Lower Extremity Reconstruction Grand Rounds.

Gross A: American Academy of Orthopaedic Surgeons, New Orleans, Louisiana, United States, 14 March 2014. 1/ Instructional Course Lecturer: The role of allografts in lower extremity reconstruction. 2/Presenter: When acetabular cages are necessary Symposium.

Gross A: 87th Annual Meeting of the Japanese Orthopaedic Association, The Japanese Orthopaedic Association, Kobe, Japan, 24 May 2014. Speaker: The use of trabecular metal in revision arthroplasty of the acetabulum.

Kuzyk P: American Academy of Orthopaedic Surgeons 2014 Annual Meeting, New Orleans, Louisiana, United States, 11 March 2014. Presenter: Does Magnitude of Femoral Version Affect Outcomes for Femoroacetabular Impingement Surgery?

Safir O: Ontario Orthopaedic Association, Toronto, Ontario, Canada, 8 November 2013. Hip Arthroplasty Complications.

Safir O: The ISRAEL Hip and Knee Society, Eilat, Israel, 24 April 2014. 1/ Keynote Speaker: Expedited Training of Orthopedic Residents: The Highway for Resident Training To Surgical Excellence Keynote lecture. 2/ Moderator: Safir O Difficult primary THA: What would you do? Round table. 3/ Moderator: Difficult revision THA: What would you do? Round table. 4/ Author: Dealing with Acetabular Defects: From the “Bone Age” to the “tantilenium” - What have we learned?

Willett T: Mechanical And Materials Engineering, Queen’s University, Kingston, Ontario, Canada, 6 November 2013. Invited Speaker: Skeletal Allograft Engineering Invited talk as part of interview process for a Tier II Canada Research Chair in Biomaterials/Biomechanics.

Wunder JS: International Society of Limb Salvage, Bologna, Italy, 12 September 2013. 1/ Gene expression signature from tumor initiating population predicts clinical outcome in undifferentiated pleomorphic sarcoma. 2/ Clinical and functional outcome of patients with sarcoma in the hand and wrist.

Wunder JS: American College of Veterinary Surgeons (ACVS): Veterinary Society of Surgical Oncology (VSSO): Sarcoma Symposium, San Antonio, United States, 26 October 2013. 1/ Invited Speaker: Prosthetic Reconstruction for Limb Salvage in Humans. 2/ Invited Speaker: Human Osteosarcoma. 3/ Invited Speaker: Human soft tissue sarcoma.

Wunder JS: Connective Tissue Oncology Society, New York, United States, 1 November 2013. Comprehensive analysis of DNA copy number variations and gene expression in osteosarcoma.

Wunder JS: IVINS - Mayo Clinic, Rochester, Minnesota, United States, 21 November 2013. 1/ Visiting Professor: Novel Treatment Opportunities for Chondrosarcoma: Bench to bedside translational research. 2/ Visiting Professor: Soft tissue Sarcoma: Improving the Therapeutic Ration.

Wunder JS: 2nd Emirates International Orthopaedic Conference, Dubai, Dubai, United Arab Emirates, 30 November 2013. 1/ Distinguished Speaker: Advances in limb salvage for soft tissue sarcoma. 2/ Distinguished Speaker: Management of pathologic fractures of the acetabulum from metastatic disease. 3/ Distinguished Speaker: Pathological Fracture.

Wunder JS: ASRAM 214 Annual Meeting - Kauai Hawaii, 13 January 2014. Invited Speaker: How to achieve excellence in diagnosis, management, reconstruction and outcomes.

Wunder JS: 5th Annual, New York City, New York, United States, 25 January 2014. Invited Lecturer: Management of giant cell tumors of the sacrum.

Research and Investigations

A Biomechanical Comparison of Four Methods of Treatment for Distal Femoral Periprosthetic Fractures. *Zimmer Canada.* Willett T, Kuzyk P, Backstein D, Dhotar H. (2013 - 2014)

A Murine Model of Adynamic Bone Disease. *Canadian Institutes of Health Research (CIHR).* Willett T, Grynypas M, Alman B. (\$480,000 2010 - 2014)

Biomechanical validation of a composite model of the human pelvis as an experimental model. *Sawbones Inc.* Kuzyk P, Willet T, Girardi B. (2013 - 2014)

Biomechanics of Novel Implant for Unstable Hip Fracture Fixation. *Stryker Canada.* Kuzyk P, Schemitsch E, Walmsley D. (2012 - 2013)

Cancer Stem Cells: Musculoskeletal Tumours. *Ontario Institute for Cancer Research (OICR).* Alman B, Dick J, Wunder J. (\$150,000 2013 - 2018)

Characterizing the Sarcoma Tumor Initiating Cell: Implications for the Development of Novel Treatments for Undifferentiated Pleomorphic Sarcoma. *Canadian Institutes of Health Research (CIHR).* Alman B, Wunder J. (\$732,720 2012 - 2017)

Comparison of a Retrograde Intramedullary Nail, Polyaxial Locking Plate, and Intramedullary Fibular Strut Allograft with Polyaxial Locking Plate for Fixation of Periprosthetic Distal Femur Fracture Post Total Knee Arthroplasty. *Orthopaedic Research and Education Fund (OREF).* Kuzyk P, Backstein D, Willet T, Dhotar H. (\$41,850 2012 - 2014)

Engineering of Irradiation-Sterilized Musculoskeletal Allografts for Improved Biomechanical Performance. *Canadian Institutes of Health Research (CIHR).* Willett T, Gryn timer M. (\$230,350 2011 - 2014)

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

Implications of pathologic changes to bone material properties on the skeletal stability of the metastatic spine. *Canadian Institutes of Health Research (CIHR).* Whyne C, Yee A, Willett T. (\$100,000 2012 - 2013)

Implications of pathologic changes to bone material properties on the skeletal stability of the metastatic spine. *CIHR.* Willett T, Whyne C, Yee A. (\$720,465 2013 - 2017)

Irradiation-Sterilized Skeletal Allografts with Superior Biomechanical Performance through Collaborative Multidisciplinary Translational Research. *(CIHR/NSERC), Collaborative Health Research Projects.* Willett T, Gryn timer M, Kuzyk P, Ferguson P, Sukhu B, Wang Z, Sone E, Akins M, Banks K. (\$360,000 2013 - 2016)

PelvAssist™ Limited Release Trial. *Avenir Medical Inc.* Kuzyk P, Backstein D, Safir O, Wolfstadt J. (2014 - 2015)

Why do only some women develop post-menopausal osteoporosis? *US Department of Defense, Congressionally Directed Medical Research Programs.* Willett T, Gryn timer M, Banks K. (\$180,348 2013 - 2015)

Honours Received

Ferguson P: Ivan Silver Award, University of Toronto. Dept of Surgery, Faculty of Medicine. Excellence in CPD. 2013 - 2014.

Safir O: Faculty of Medicine Awards for Excellence in Postgraduate Medical Education – Development & Innovation, University of Toronto, Toronto, Ontario, Canada.

Division of Urology

Dr. K. Jarvi Professor (Division Head)

Dr. K.C.L. Lo Associate Professor
Dr. A. Zlotta Professor

Publications

Bachir B, Jarvi K. Infectious, inflammatory, and immunologic conditions resulting in male infertility. *Urologic Clinics of North America*: 2014 Feb;41(1):67-81.

Bachir BG, Shariat SF, Zlotta A, Svatek R, Black PC, Shah JB, Kassouf W; on behalf of the Bladder Cancer Think Tank (Bladder Cancer Advocacy Network) and Canadian Bladder Cancer Network (Bladder Cancer Canada). Demographic analysis of randomized controlled trials in bladder cancer. *BJU Int*: 2013; 111(3):419-26.

Bhindi B, Locke J, Alibhai SM, Kulkarni GS, Margel DS, Hamilton RJ, Finelli A, Trachtenberg J, Zlotta AR, Toi A, Hersey KM, Evans A, van der Kwast TH, Fleshner NE. Dissecting the Association Between Metabolic Syndrome and Prostate Cancer Risk: Analysis of a Large Clinical Cohort. *Eur Urol*: 2014. doi: 10.1016/j.eururo.2014.01.040.

Bhindi B, Margel D, Trottier G, Hamilton RJ, Kulkarni GS, Hersey KM, Finelli A, Trachtenberg J, Zlotta A, Toi A, Evans A, van der Kwast T, Fleshner NE. Obesity Is Associated With Larger Prostate Volume but not With Worse Urinary Symptoms: Analysis of a Large Multiethnic Cohort. *Urology*: 2014; 83(1): 81-7.

- Bhindi B, Yu J, Kuk C, Sridhar SS, Hamilton RJ, Finelli A, Jewett MA, Evans A, Fleshner NE, Zlotta AR, Kulkarni GS.** The Importance Of Surgeon Characteristics In Impacting Oncologic Outcomes In Patients Undergoing Radical Cystectomy. *J Urol*: 2014 Sep;192(3):714-20.
- Domes T, Jarvi K.** The initial assessment of male. In: Rizk B, Aziz N, Agarwal A, Sabanegh E (eds), *Surgical and Medical Management of Male Infertility*: 2013 Sep 15; 46-55.
- Domes T, Lo KC.** Repopulating the Testes: Are Stem Cells a Reality? In: Rizk B, Aziz N, Agarwal A, Sabanegh E (eds), *Medical & Surgical Management of Male Infertility*: 2013 Aug; 320-325.
- Downes MR, Torlakovic EE, Aldaoud N, Zlotta AR, Evans AJ, van der Kwast TH.** Diagnostic utility of androgen receptor expression in discriminating poorly differentiated urothelial and prostate carcinoma. *J Clin Pathol*: 2013; 66(9):779-86.
- Drabovich AP, Dimitromanolakis A, Saraon P, Soosaipillai A, Batruch I, Mullen B, Jarvi K, Diamandis EP.** Differential diagnosis of azoospermia with proteomic biomarkers ECM1 and TEX101 quantified in seminal plasma. *Science Translational Medicine*: 2013 Nov 20; 5(212):160.
- Drabovich AP, Saraon P, Jarvi K, Diamandis EP.** Seminal plasma as a diagnostic fluid for male reproductive system disorders. *Nat Rev Urol*: 2014 Apr 8; PMID: 24709963. AID: 10.1038/nrurol.2014.74.
- Hermanns T, Bhindi B, Wei Y, Yu J, Noon AP, Richard PO, Bhatt JR, Almatar A, Jewett MA, Fleshner NE, Zlotta AR, Templeton AJ, Kulkarni GS.** Pre-treatment neutrophil-to-lymphocyte ratio as predictor of adverse outcomes in patients undergoing radical cystectomy for urothelial carcinoma of the bladder. *Br J Cancer*: 2014 Jul 29;111(3):444-51.
- Karagiannis GS, Saraon P, Jarvi KA, Diamandis EP.** Proteomic signatures of angiogenesis in androgen-independent prostate cancer. *Prostate*: 2013 Oct 26. DOI:10.1002/pros.22747
- Larré S, Catto JW, Cookson MS, Messing EM, Shariat SF, Soloway MS, Svatek RS, Lotan Y, Zlotta AR, Grossman HB.** Screening for Bladder Cancer: Rationale, Limitations, Whom to Target, and Perspectives. *Eur Urol*: 2013; 63(6):1049-58.
- Légaré C, Cloutier F, Makosso-Kallyth S, Laflamme N, Jarvi K, Tremblay RR, Sullivan R.** Cysteine-rich secretory protein 1 in seminal plasma: potential biomarker for the distinction between obstructive and non-obstructive azoospermia. *Fertility and Sterility*: 2013 Nov; 100(5):1253-60.
- Neuzillet Y, van Rhijn BW, Prigoda NL, Bapat B, Liu L, Bostrom PJ, Fleshner NE, Gallie BL, Zlotta AR, Jewett MA, van der Kwast TH.** FGFR3 mutations, but not FGFR3 expression and FGFR3 copy-number variations, are associated with favourable non-muscle invasive bladder cancer. *Virchows Arch*: 2014 Aug;465(2):207-13.
- Ooi CY, Dupuis A, Ellis L, Jarvi K, Martin S, Ray PN, Steele L, Kortan P, Gonska T, Dorfman R, Solomon M, Zielenski J, Corey M, Tullis E, Durie P.** Does extensive genotyping and nasal potential difference testing clarify the diagnosis of cystic fibrosis among patients with single-organ manifestations of cystic fibrosis? *Thorax*: 2014 Mar;69(3):254-60.
- Ooi CY, Dupuis A, Gonska T, Ellis L, Ni A, Jarvi K, Martin S, Ray P, Steele L, Kortan P, Dorfman R, Solomon M, Zielenski J, Corey M, Tullis E, Durie P.** Does Integration of Different Ion Channel Measurements Improve Diagnostic Performance in Cystic Fibrosis? *Ann Am Thorac Soc*: 2014 Apr 3. PMID: 24697796. AID: 10.1513/AnnalsATS.201311-412OC.
- Perlis N, Lo KC, Grober ED, Spencer L, Jarvi K.** Coital frequency and infertility: Which male factors predict less frequent coitus among infertile couples? *Fertility and Sterility*: 2013 Aug; 100(2): 511-5.
- Perlis N, Turker P, Bostrom PJ, Kuk C, Mirtti T, Kulkarni G, Fleshner NE, Jewett MA, Finelli A, Zlotta AR.** Upper urinary tract and urethral recurrences following radical cystectomy: review of risk factors and outcomes between centres with different follow-up protocols. *World J Urol*: 2013; 31(1):161-7.
- Perlis N, Zlotta AR, Beyene J, Finelli A, Fleshner NE, Kulkarni GS.** Immediate Post-Transurethral Resection of Bladder Tumor Intravesical Chemotherapy Prevents Non-Muscle-invasive Bladder Cancer Recurrences: An Updated Meta-analysis on 2548 Patients and Quality-of-Evidence Review. *Eur Urol*: 2013; 64(3):421-30.
- Rink M, Xylinas E, Trinh QD, Lotan Y, Margulis V, Raman JD, Fisch M, Lee RK, Chun FK, Abdennabi J, Seitz C, Pycha A, Zlotta AR, Karakiewicz PI, Babjuk M, Scherr DS, Shariat SF; Upper Tract Urothelial Carcinoma Collaboration (UTUCC).** Gender-specific effect of smoking on upper tract urothelial carcinoma outcomes. *BJU Int*: 2013; 112(5):623-37.
- Samplaski M, Daniel A, Jarvi K.** Vasectomy as a reversible form of contraception for select patients. *Can J Urol*: 2014 Apr 1; 21(2): 7234-40.

- Samplaski M, Domes T, Jarvi K.** The Role of Chlamydial Infection Male Infertility. *Advances in Andrology*: 2014 Jun; 14: 11.
- Samplaski M, Lo K, Grober E, Jarvi K.** Finasteride Use in the Male Infertility Population: Effects on Semen and Hormonal Parameters. *Fertility and Sterility*. 2013 Dec;100(6):1542-6.
- Samplaski M, Lo KC, Grober ED, Millar A, Dimitromanolakis A, Jarvi KA.** Phenotypic differences in mosaic Klinefelter patients as compared with non-mosaic Klinefelter patients. *Fertil Steril*: 2014 Apr 1; 101(4): 950-5.
- Samplaski M, Loai Y, Wong K, Lo KC, Grober ED, Jarvi KA.** Testosterone use in the male infertility population: prescribing patterns and effects on semen and hormonal parameters. *Fertil Steril*: 2014 Jan 1; 101(1): 64-9.
- Samplaski M, Deault-Bonin M, Lo K.** Genetic and Epigenetic Changes after Spermatogonial Stem Cell Culture and Transplantation. *eJIFCC*: 2014 Apr; 25(1): 27-41.
- Samplaski M, Yu C, Kattan MW, Lo KC, Grober ED, Zini A, Lau S, Jarvi KA.** Nomograms for predicting changes in semen parameters in infertile men after varicocele repair. *Fertil Steril*: 2014 May 10. PMID: 24825425. AID: 10.1016/j.fertnstert.2014.03.046.
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- Skeldon SC, Simmons A, Hersey K, Finelli A, Jewett MA, Zlotta AR, Fleshner NE.** Lean Methodology Improves Efficiency in Outpatient Academic Uro-oncology Clinics. *Urology*: 2014 May;83(5):992-7.
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- Wong LM, Alibhai SM, Trottier G, Timilshina N, Van der Kwast T, Zlotta A, Lawrentschuk N, Kulkarni G, Hamilton R, Ferrara S, Margel D, Trachtenberg J, Jewett MA, Toi A, Evans A, Fleshner NE, Finelli A.** A Negative Confirmatory Biopsy Among Men on Active Surveillance for Prostate Cancer Does Not Protect Them from Histologic Grade Progression. *Eur Urol*: 2013. doi: 10.1016/j.eururo.2013.04.038.
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- Wong LM, Trottier G, Toi A, Lawrentschuk N, Van der Kwast TH, Zlotta A, Kulkarni G, Hamilton R, Trachtenberg J, Evans A, Timilshina N, Fleshner NE, Finelli A.** Should Follow-up Biopsies for Men on Active Surveillance for Prostate Cancer Be Restricted to Limited Templates? *Urology*: 2013; 82(2):405-9.
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Yuen RK, Merkoulouvitsh A, Macdonald JR, Vlasschaert M, Lo K, Grober E, Marshall CR, Jarvi KA, Kolomietz E, Scherer SW. Development of a high-resolution Y-chromosome microarray for improved male infertility diagnosis. *Fertil Steril*: 2014 Apr 1; 101(4): 1079-1085.

Zlotta AR. Bladder cancer: Validating what we've got. *Can Urol Assoc J*: 2013; 7(1-2):33-4.

Zlotta AR, Egawa S, Pushkar D, Govorov A, Kimura T, Kido M, Takahashi H, Kuk C, Koyulina M, Aldaoud N, Fleshner N, Finelli A, Klotz L, Sykes J, Lockwood G, van der Kwast TH. Prevalence of Prostate Cancer on Autopsy: Cross-Sectional Study on Unscreened Caucasian and Asian Men. *J Natl Cancer Inst*: 2013; 105(14):1050-1058.

Zlotta AR, Kuk C. Positive Surgical Margins: Race or Surgeon? *Eur Urol*: 2014. doi: 10.1016/j.eururo.2014.05.036.

Zlotta AR, Kuk C. Prevalence of prostate cancer across the globe: what can autopsy studies teach us about this peculiar disease? *Arch Esp Urol*: 2014; 67(5):400-408.

Invited Visits

Jarvi K: Canadian Association Of Nigerian Physicians and Dentists CME conference, Toronto, Ontario, Canada, 3 August 2013. Invited Lecturer: Male sexual dysfunction.

Jarvi K: 33rd Congress of the Société Internationale d'Urologie, Vancouver, British Columbia, Canada, 9 September 2013. Chair: Androgen in Male Health and Disease.

Jarvi K: Clinical American Society for Reproduction Medicine Annual Meeting, Boston, Massachusetts, United States, 15 October 2013. Moderator: Free Communication/Oral Abstract Sessions: Male Reproduction and Urology.

Jarvi K: The International Society of Men's Health World Congress, Washington, District of Columbia, United States, 7 December 2013. Invited Speaker: Update on male infertility and reproduction Men's Health.

Jarvi K: American Urological Association Annual Meeting, Orlando, Florida, United States, 20 May 2014. Moderator: Poster Session - Infertility: Evaluation.

Jarvi K: Society for the Study of Male Reproduction Annual Meeting, Orlando, Florida, United States, 20 May 2014. Invited Speaker: Use of adjuncts with vasovasostomy: Can we really make this procedure any better?

Jarvi K: Canadian Urological Association, St. John's, Newfoundland and Labrador, Canada, 30 June 2014. Invited Lecturer: Management of Scrotal Pain.

Zlotta A: 6th Uro-Oncology Congress, Sao Paolo, Brazil, 16 August 2013. Keynote Speaker: Evolução da quimioterapia citotóxica no tratamento do câncer prostático resistente a castração?

Zlotta A: Urological Research Society, Vancouver, British Columbia, Canada, 6 September 2013. Invited Speaker: Prevalence of Inflammation, BPH, and Prostate Cancer in Unscreened Asian and Caucasian Men: An Autopsy Study.

Zlotta A: 5th European Multidisciplinary Meeting on Urological Cancers, Marseille, France, 15 November 2013. Invited Speaker: Active Surveillance or active treatment for localized PCa: Screening the right patient.

Zlotta A: The 8th Engadin Prostate Cancer Winter Symposium, Zuoz, Switzerland, 27 February 2014. Speaker: Fine-mapping of the kallikrein gene region and its role in PCa aggressiveness: Results from a Canadian and ERSPC Aarau cohorts.

Zlotta A: European Association of Urology, Stockholm, Sweden, 12 April 2014. Chair: Prostate Cancer - Screening, diagnosis and staging - ESU Course 1.

Research and Investigations

A non-invasive assay that enables non-invasive differentiation between obstructive and non-obstructive azoospermia. *MaRS Innovation..* Jarvi K, Diamandis EP. (\$100,000 2013 - 2013).

A Novel Testicular Germ Cell Maturation Model for Fertility Preservation in Pre-pubertal Cancer Patients and Studies of Gonadotoxic Agents. *National Institutes of Health (NIH) (USA)*. Lo K, McKerlie C, Jarvi K, Mullen B. (\$723,516 2010 - 2014).

A Phase 3 International, Multicenter, Double-Blind, Placebo-Controlled, Randomized Trial Evaluating the Efficacy and Safety of Multiple Instillations of Intravesical Apaziquone vs. Placebo in Patients with Low-Intermediate Risk Non-Muscle Invasive Bladder Cancer (NMIBC). *Spectrum Pharmaceuticals Inc.* Kulkarni G, Finelli A, Fleshner N, Jewett M, Zlotta A, Trachtenberg J. (2012 - 2013).

A randomized, double-blind, parallel, placebo-controlled, phase 4, multicenter study to assess efficacy and safety of VESIcare® (solifenacin succinate) to improve urinary continence of subjects after robotic assisted radical prostatectomy. *Astellas Pharma Global Development Inc.* Fleshner N, Finelli A, Jewett M, Kulkarni G, Zlotta A. (2012 - 2013).

Active Surveillance Magnetic Resonance Imaging Study (ASIST Trial). *Canadian Urology Research Consortium.* Fleshner N, Kulkarni G, Finelli A, Jewett M, Zlotta A, Trachtenberg J, Ghai, S. (2011 - 2013).

Discovery of genetic abnormalities associated with male infertility. *McLaughlin Centre, University of Toronto.* Jarvi K, Kolomietz E, Lo K, Grober E. (\$50,000 2012 - 2013).

Establishing a biological network strategy for personalizing cancer diagnosis, prognosis and drug development using genitourinary cancer as a model. *Canadian Cancer Society.* Wrana J, Zlotta A, van der Kwast T, Azar A. (\$199,680 2012 - 2014).

Establishing a biological network strategy for personalizing prognosis in non-muscle invasive bladder cancer. *Canadian Cancer Society.* Wrana J, van der Kwast T, Azad A, Kulkarni K, Blencowe B, Morris Q, Zlotta A. (\$1,249,950 2014 - 2019).

Genome-wide distribution and dynamic regulation of 5-hydroxymethylation in prostate carcinogenesis. *Canadian Cancer Society.* Bapat B, Fleshner N, Van der Kwast T, Zlotta A. (\$188,000 2012 - 2014).

Identifying novel markers to non-invasively detect and grade prostatic inflammation. *MaRS Innovation.* Jarvi K, Diamandis EP, Mullen B, Drabovich A. (\$25,000 2014 - 2015).

Integrated Approach to Discover Prostate Cancer Biomarkers in Seminal Plasma. *Canadian Institutes of Health Research (CIHR).* Diamandis EP, Drabovich A, Jarvi K. (\$417,240 2013 - 2016).

Parent, provider, and survivor perspectives of investigational fertility preservation interventions for pre-pubertal boys with cancer: Exploring the factors influencing decisions and measuring preferences. *C17-Children's cancer blood disorders.* Lorenza A, Lo K. (\$97,054 2012 - 2013).

Prediction of successful sperm retrieval in patients with non-obstructive azoospermia using a panel of protein biomarkers measured in seminal plasma. *Canadian Institutes of Health Research (CIHR).* Keith J, Diamandis E, Drabovich A, Grober E, Lo K. (\$154,660 2013 - 2014).

Premature Hypogonadism and Cancer Survivorship: Exploring the Mechanism. *Pfizer-Canadian Male Sexual Health Council.* Lo K, Bapat B, McKerlie C, Bader G. (\$50,000 2013 - 2014).

Semen Proteomics - discovery of prostate cancer biomarkers. *cy pres, Judgement of the Honourable Mr. Justice John Brockenshire.* Lo K, Jarvi K, Diamandis E, Zlotta AR, Fleshner N, Finelli A. (\$600,000 2010 - 2014).

Semen Proteomics to Identify Novel Prostate Cancer Biomarkers. *Canadian Cancer Society.* Jarvi K, Diamandis EP, Zlotta AR, Fleshner N, Finelli A. (\$413,853 2010 - 2014).

Use of BOTOX to treat scrotal pain. *Allergan Inc.* Jarvi K, Gordon A. (\$22,100 2013).

Honours Received

Lo K: A.W. Bruce Faculty Undergraduate Teaching Award, University of Toronto, Dept of Surgery, Faculty of Medicine. 2013.

Zlotta A: 2012 Best Reviewer, The Journal Of Urology, Canada. 2013 - 2013.

Zlotta A: Basic Science Research Award, University of Toronto/2014 Charles J. Robson Research Day, Canada. 2014.

Zlotta A: Best Poster Award, European Association of Urology, Milan, Italy. The significance of finding no prostate cancer on the active surveillance confirmatory biopsy: Implications for pathological re-classification. 2013.

Zlotta A: Best Poster Award, European Association of Urology, Milan, Italy. Initial results of MR guided laser focal therapy for prostate cancer. 2013.

Zlotta A: Best Poster Award, European Association of Urology, Stockholm, Sweden. Fine-mapping of the Kallikrein region and its role in prostate cancer aggressiveness: Results from a Canadian cohort and the European Randomized Study for Prostate Cancer Screening. 2014.

St. Joseph's Health Centre



Chris Compeau,
Surgeon-in-Chief

Clinical excellence in surgery as well as an outstanding educational experience for undergraduate, graduate and post-graduate trainees has been the hallmark of the Department of Surgery at St. Joseph's Health Centre over the past year. Surgical volumes were maintained or exceeded in our priority programs (hepatobiliary, thoracic surgery, bariatrics, arthroplasties). Under the guidance of Dr. J. Maniate (Director of Medical Education) there has been an increase in the number of undergraduate medical trainees in our surgery program. Dr. Maurice Blitz, Director of Surgical Foundations in the Department of Surgery has been instrumental in enhancing the training experience for junior surgical residents in all subspecialties at the University of Toronto.

Division Heads

General Surgery	Paul Sullivan
Thoracic Surgery	Maurice Blitz
Orthopedic Surgery	Amr El Maraghy
Plastic Surgery	Craig Fielding

Departures

There were no departures from our surgical department in 2013-14.

Publications

Dehler T, Pennings AL, ElMaraghy AW: Dermal allograft reconstruction of a chronic pectoralis major tear. *Journal of Shoulder and Elbow Surgery*: 2013; 22(10): pp e18-e22.

Devereaux MW, ElMaraghy AW: Improving the rapid and reliable diagnosis of complete distal biceps tendon rupture: a nuanced approach to the clinical examination. *The American Journal of Sports Medicine*: 2013; 41(9): pp 1998-2004.

ElMaraghy A, Devereaux M: The Bicipital Aponeurosis Flex Test: evaluating the integrity of the bicipital aponeurosis and its implications for treatment of distal biceps tendon ruptures. *Journal of Shoulder and Elbow Surgery*: 2013; 22: pp 908-914.

ElMaraghy AW, Rehsia SS, Pennings AL: Utility of the pectoralis major index in the diagnosis of structurally significant pectoralis major tears. *The Orthopaedic Journal of Sports Medicine*: 2013; 1(7).

Saleh H, Pennings A, ElMaraghy A: Venous thromboembolism after shoulder arthroplasty: a systematic review. *Journal of Shoulder and Elbow Surgery*: 2013; 22(10): pp 1440-1448.



Education

Dr. Ron Levine was the recipient of a Faculty of Medicine Integrated Medical Education Award for Sustained Excellence in Community-Based Teaching at the University of Toronto. This award recognizes sustained and exemplary teaching skills, demonstrated ability to stimulate learners to think critically, analytically and independently and commitment to the enhancement of the learner experience.

Dr. Amr El Maraghy received a Recognition Award from the Department of Physical Therapy at the University of Toronto. These awards acknowledge individuals who have provided great learning environments, guidance, supervision and are an inspiration to physical therapy students.

Divisional teaching award winners 2013:

General/thoracic surgery – Dr. M. Blitz, Dr. C. Compeau, Dr. S. Jayaraman

Urology – Dr. A. McLean

Plastic surgery – Dr. L. Kasrai

Orthopedic surgery – Dr. A. El Maraghy



Division of General Surgery

Dr. C. Compeau	Assistant Professor (Division Head)
Dr. T.A. Harmantas	Assistant Professor
Dr. R.S. Hart	Lecturer

Dr. S. Jayaraman	Assistant Professor
Dr. D.R. Lindsay	Lecturer
Dr. P.A. Sullivan	Lecturer

Division of Orthopaedics

Dr. W.A. ElMaraghy	Assistant Professor
Dr. M. Kliman	Lecturer
Dr. M. Roscoe	Assistant Professor

Dr. G. Vincent	Assistant Professor (Division Head)
Dr. M. Wood	Lecturer

Publications

Dehler T, Pennings AL, ElMaraghy AW: Dermal allograft reconstruction of a chronic pectoralis major tear. *Journal of Shoulder and Elbow Surgery*: 2013; 22(10): e18-e22.

Devereaux MW, ElMaraghy AW: Improving the rapid and reliable diagnosis of complete distal biceps tendon rupture: a nuanced approach to the clinical examination. *The American Journal of Sports Medicine*: 2013; 41(9): 1998-2004.

ElMaraghy A, Devereaux M: The Bicipital Aponeurosis Flex Test: evaluating the integrity of the bicipital aponeurosis and its implications for treatment of distal biceps tendon ruptures. *Journal of Shoulder and Elbow Surgery*: 2013; 22: 908-914.

ElMaraghy A, Pennings A: Metacarpophalangeal joint extensor tendon subluxation: a reconstructive stabilization technique. *Journal of Hand Surgery*: 2013; 38A: 578-582.

ElMaraghy AW, Rehsia SS, Pennings AL: Utility of the pectoralis major index in the diagnosis of structurally significant pectoralis major tears. *The Orthopaedic Journal of Sports Medicine*: 2013; 1(7).

Saleh H, Pennings A, ElMaraghy A: Venous thromboembolism after shoulder arthroplasty: a systematic review. *Journal of Shoulder and Elbow Surgery*: 2013; 22(10): 1440-1448.

Invited Visits

ElMaraghy AW: Association of Egyptian-American Scholars, 40th Annual Conference: Scientific challenges and emerging technology transfer in modern Egypt and the Arab world, Alexandria, Egypt, Dec 28-30, 2013. Invited Speaker: The diagnosis and management of pectoralis major tears.

ElMaraghy AW: Arthrex, Naples, Florida, Jan 9-11, 2014. Invited Speaker: Faculty Forum.

Honours Received

ElMaraghy AW: 2013 Integrated Medical Education Excellence in Community -Based Teaching Award, University of Toronto. 2013.

ElMaraghy AW: St. Joseph's Health Centre Award for Best Academic Abstract, "The Efficacy of Kinesiology Tape versus NSAIDs as an Adjuvant Therapy to Exercise for Rotator Cuff Impingement". 2013.

ElMaraghy AW: Outstanding Teacher Award Orthopaedic Surgery, awarded by the Department of Surgery, St. Joseph's Health Centre. 2013.

ElMaraghy AW: Recognition Award, awarded by Department of Physical Therapy, University of Toronto. 2014.



Division of Plastic Surgery and Reconstructive Surgery

Dr. C. Fielding Lecturer (Division Head)
Dr. L. Kasrai Assistant Professor

Dr. R.H. Levine Professor
Dr. R.K. Wanzel Assistant Professor

Publications

Baluch N, Nagata S, Park C, Wilkes GH, Reinisch J, Kasrai L, Fisher DM: Auricular reconstruction for microtia: a review of available methods. *Canadian Journal of Plastic Surgery*: 2014; 22(1): 39-43.

Cross KM, Levine R, Fox M: Abdominoplasty in Combination With Other Cosmetic Procedures Can be Performed Safely as an Outpatient. *Plastic and Reconstructive Surgery*: 2013; 21: pp132

Kasrai L, Snyder-Warwick AK, Fisher DM: Single-stage autologous ear reconstruction for microtia. *Plastic and Reconstructive Surgery*: 2014; 133(3): pp 652-662.

Invited Visits

Kasrai L: BAPRAS/IAPS (British Association of Plastic Reconstructive and Aesthetic Surgeons/Irish Association of Plastic Surgeons), Dublin, Ireland, Nov 27, 2013. Invited Speaker: 1/ Avoiding complications in setback otoplasty. 2/ Training in aesthetic surgery - Canadian perspective.

Kasrai L: 5th Pan African Burn Society Conference, Accra, Ghana, Nov 4, 2013. Invited Speaker: Quantitative and mixed method study of burns in rural vs urban slum burns in children in Kenya.

Kasrai L: Canadian Society of Plastic Surgeons, Montreal, Quebec, Jun 28, 2014. Invited Speaker: Single stage autologous ear reconstruction for microtia; 10 consecutive cases.

Research and Investigations

Burn Injury Prevention, Medical Advisor. Global Alliance of Clean Cook Stoves. Kasrai L. (Sep 2012 – Present)

IAMGOLD. ISBI (International Society of Burn Injuries). Kasrai L. (2011-Present)

Honours Received

Levine R: Sustained Excellence in Community-Based Teaching Award, University of Toronto, 2014

Wanzel RK: Chair's Award (Division of Plastic Surgery, University of Toronto). 2014

Division of Thoracic Surgery

Dr. M. Blitz Assistant Professor

Dr. C. Compeau Assistant Professor (Division Head)
Dr. M. Ko Assistant Professor

Division of Urology

Dr. A. Chawla Lecturer
Dr. U. Jain Lecturer (Division Head)
Dr. A. Marcuzzi Lecturer
Dr. A. McLean Lecturer

St. Michael's Hospital



Ori D. Rotstein, *Surgeon-in-Chief/Robert B. Salter Chair in Surgical Research*

Division Heads

Division of Cardiac Surgery	Dr. David Latter
Division of General Surgery	Dr. Nancy Baxter
Division of Neurosurgery	Dr. R. Loch Macdonald
Division of Orthopaedic Surgery	Dr. Timothy Daniels
Division of Plastic Surgery	Dr. James Mahoney
Division of Urology	Dr. Kenneth Pace
Division of Vascular Surgery	Dr. Mohammed Al Omran

Our Department welcomed five new individuals this year. Dr. Aaron Nauth joined the Division of Orthopaedic Surgery. Dr. Nauth is a graduate of the University of Toronto Surgery training program followed by two fellowships; the first in Sports Medicine and Arthroscopy at the University of British Columbia, the second in Trauma and Upper Extremity at the University of Toronto. Dr. Nauth's clinical focus is orthopaedic trauma, soft tissue reconstruction and arthroscopy. As a Scientist, his research focus is on the basic science of fracture and tendon healing with stem cell therapy in addition to conducting randomized clinical trials in orthopaedic trauma.

Dr. Michael Ordon joined the Division of Urology. Dr. Ordon is a graduate of the University of Toronto's Surgery training program and completed a fellowship at the University of Toronto and the University of California, Irvine Medical Centre to complete in Endourology and Minimally Invasive Surgery. Dr. Ordon's clinical focus is in the area of endourology, transplantation, minimal invasive urologic surgery and robotic procedures, with specific attention to cryoablative surgery. His research focuses on health services in the areas of kidney stones, kidney transplant and kidney cancer.

Dr. Jory Simpson joined the Division of General Surgery. Dr. Simpson is a graduate of the University of Toronto and completed a fellowship in Breast Surgical Oncology. His clinical focus is treating patients with benign and malignant breast diseases. His academic and research interests is improving breast cancer outcomes in disenfranchised populations and clinical trials. He is also the Associate Medical Director of the CIBC Breast Centre at St. Michael's Hospital.

Dr. Mohammed Al-Omran returned to Toronto to take on the position of Head, Division of Vascular Surgery at St. Michael's Hospital. Dr. Al-Omran has held many



leadership roles at the King Saud University and its affiliated Hospitals and was involved in establishing many educational and research programs such as the Medical Research Chair Program, International Twinning Program and Clinician Investigator Programs. Dr. Al-Omran's clinical interest is carotid surgery, open and endovascular intervention for peripheral arterial disease, vascular thoracic outlet syndromes, open and endovascular aneurysm repair. Dr. Al-Omran is also a scientist with special interest in peripheral arterial disease, health services research and knowledge translation. We also welcomed Dr. Krishna Singh as an Associate Scientist to the Divisions of Vascular and Cardiac Surgery. Dr. Singh received a PhD from the Institute of Human Genetics, Hannover Medical School in Hannover, Germany before completing a Postdoctoral fellowship in the Department of Laboratory Medicine and Pathology in 2007 and the Division of Vascular Surgery at the University of Toronto in 2011. He has since been a Research Associate working closely with Dr. Subodh Verma and Dr. Mohammed Al-Omran.

On October 1st we wished Dr. Jarley Koo a happy retirement. Dr. Koo joined St. Michael's Hospital as Head, Division of General Surgery in 1991. Through his career, he dedicated his efforts on improving breast cancer care. This included developing a new business plan in 2000 that lead to the expansion of the Centre and its current naming as the CIBC Breast Centre. He also attracted the Ontario Breast Screening Program to the hospital. He was also pivotal in securing and sustaining our involvement in clinical research. Over the years, he has always advocated for state-of-the-art care for our breast cancer patients. We will miss his dedication to excellence as a surgeon and his compassion as a physician and wish him all the best as he embarks on the next chapter of life.

Each year we celebrate unique contributors to the educational mission through distribution of a number of awards. Dr. Jeremy Hall won the Donald J. Currie Award for his contributions to undergraduate teaching. Dr. Emil Schemitsch won the William J. Horsey Teaching Award in Postgraduate Education. The Jameel Ali Continuing Education Award went to Dr. Teodor Grantcharov. The

Leo Mahoney Resident Teaching Award was awarded to Dr. Matt Strickland (G/S). The Dr. McGoey Award in Orthopaedic Surgery was awarded to Dr. Nick Bayley. The James Waddell Mentorship Award (Squires-Hyland Trust) was awarded to Dr. Alan Lossing for his extraordinary efforts in supporting young staff during the early years of their career. Dr. Rob Stewart has lead the involvement of surgery in the launching of the new Longitudinal Integrated Curriculum for clerkship level medical student at the University of Toronto.

In the Research domain, Dr. Emil Schemitsch, has been appointed the St. Michael's Hospital-University of Toronto Term Chair in Fracture Care Research. The five-year chair will support Dr. Schemitsch's research on how to best care for patients with musculoskeletal injuries, including gene therapy, bone substitutes, computer-assisted surgery and the stimulation of fracture healing.

Several of our faculty members have been featured in various forms of media such as Dr. Tom Schweizer's study on the dangers of using a cell phone while driving; Dr. Michael Cusimano was featured for his study on hefty medical bills and the benefits of keeping hockey players safe; Dr. Teodor Grantcharov's development of the use of "black box" technology for use in the operating room attracted attention from a number of media outlets.

St. Michael's 3.0 is the project directing the redevelopment of the hospital. This will include the building of a new clinical tower, the renovation of the Emergency Department and the redevelopment of the campus as a whole. Of particular interest to Surgery is the plan to build 7 new "state-of-the art" to support the delivery of the highest quality surgical care.

Division of Cardiac Surgery

Dr. D. Bonneau Associate Professor
Dr. L.E. Errett Professor

Dr. D.A. Latter Associate Professor (Division Head)
Dr. M. Peterson Assistant Professor
Dr. S. Verma Professor

Publications

Fedak PW, Verma S. The molecular fingerprint of bicuspid aortopathy. *J Thorac Cardiovasc Surg.* 2013. PMID: 23597625. 2013; 145(5):1334.

Fitchett DH, Mazer CD, Eikelboom J, Verma S. Anti-Platelet Therapy and Cardiac Surgery. Review of Recent Evidence and Clinical Implications. *Can J Cardiol.* 2013; 29: 1042-1047.

Hoff E, Eagle T, Pyeritz RE, Ehrlich M, Voehringer M, Bossone E, Hutchison S, Peterson MD, Suzuki T, Greason K, Forteza A, Montgomery DG, Isselbacher EM, Nienaber CA, Eagle KA. Pulse pressure and type A acute aortic dissection in-hospital outcomes (from the International Registry of Acute Aortic Dissection). *Am J Cardiol.* 2014 Apr 1; 113(7): 1255-9.

Jonker FH, Trimarchi S, Muhs BE, Rampoldi V, Montgomery DG, Froehlich JB, Peterson MD, Bartnes K, Gourineni V, Ramanath VS, Braverman AC, Nienaber CA, Isselbacher EM, Eagle KA, IRAD Investigators. The role of age in complicated acute type B aortic dissection. *The Annals of thoracic surgery.* 2013 Dec 1; 96(6): 2129-34.

Lovren F, Pan Y, Quan A, Singh KK, Khan R, Gupta N, Brezden-Masley C, Teoh H, Wheatcroft MD, Al-Omran M, Verma S. BRCA1 shields vascular smooth muscle cells From oxidative stress. *J Thorac Cardiovasc Surg.* 2014. 147(6):1946-1955.

Lovren F, Verma S. Evolving role of microparticles in the pathophysiology of endothelial dysfunction. *Clin Chem.* 2013. PMID: 23529703. 2013; 59: 1166-74.

Martin BJ, Verma S, Charbonneau F, Title LM, Lonn EM, Anderson TJ. The relationship between anthropometric indexes of adiposity and vascular function in the FATE cohort. *Obesity.* 2013; 21(2):266-73.

O'Neill BJ, Mann UM, Gupta M, Verma S, Leiter LA. A Survey of Diabetes Care in Patients presenting with Acute Coronary Syndromes in Canada. *Can J Cardiol.* 2013; 29: 1134-7.

Shih T, Myrmet T, Fattori R, Montgomery DG, Greason KL, Pape LA, Hughes GC, Peterson MD, Trimarchi S, Deeb GM, Teman NR, Isselbacher EM, Nienaber CA, Eagle KA, Froehlich JB, Patel HJ. Acute Renal Failure and Its Early and Late Implications in Acute Aortic Dissection: The IRAD Experience. *Journal of Thoracic and Cardiovascular Surgery.* 2013 Aug.

Singh KK, Shukla PC, Quan A, Al-Omran M, Lovren F, Pan Y, Brezden-Masley C, Ingram AJ, Stanford WL, Teoh H, Verma S. BRCA1 is a novel target to improve endothelial dysfunction and retard atherosclerosis. *J Thoracic Cardiovasc Surg.* 2013;146(4):949-960.

Singh KK, Shukla PC, Yanagawa B, Quan A, Lovren F, Pan Y, Wagg CS, Teoh H, Lopaschuk GD, Verma S. Regulating cardiac energy metabolism and bioenergetics by targeting the DNA damage repair protein BRCA1. *J Thoracic Cardiovasc Surg.* 2013; 146: 702-9.

Singh KK, Yanagawa B, Quan A, Wang R, Garg A, Khan R, Pan Y, Wheatcroft MD, Lovren F, Teoh H, Verma S. Autophagy gene fingerprint in human ischemia and reperfusion. *J Thoracic Cardiovasc Surg.* 2014. 147:1065-1072.

Tanguay J-F, Bell AD, Ackman ML, Bauer RDC, Cartier R, Chan W-S, Douketis J, Roussin A, Schnell G, Verma S, Wong G, Mehta SR. Focused 2012 Update of the Canadian Cardiovascular Society Guidelines for the Use of Antiplatelet Therapy. 2013. *Can J Cardiol* 29(11):1334-45.

Teoh H, Quan A, Creighton A, Bang KWA, Singh KK, Shukla PC, Gupta N, Pan Y, Lovren F, Leong-Poi H, Al-Omran M, Verma S. Gene therapy with BRCA1 reduces systemic inflammatory response and multiple organ failure and improves survival in experimental sepsis. *Gene Ther.* 2013; 20(1): pp 51-61.

Trop S, Marshall JC, Mazer D, Gupta M, Dumont DJ, Bourdeau A, Verma S. Perioperative cardiovascular system failure in South Asians undergoing cardiopulmonary bypass is associated with prolonged inflammation and increased Toll-like receptor signaling in inflammatory monocytes. *J Surg Res.* 2014; 187:43-52.

Verma S, Farkouh ME, Fitchett DH, Yanagawa B, Ahsan M, Ruel M, Sud S, Gupta M, Singh S, Gupta N, Cheema AN, Leiter LA, Fedak PWM, Teoh H, Latter DA, Fuster V, Friedrich JO. A meta-analysis of randomised controlled trials comparing coronary artery bypass surgery to percutaneous coronary intervention in diabetes. *Lancet Diabetes and Endocrinology.* 2013; 1(4):317-28.

Verma S, Farkouh ME, Yanagawa B, Fitchett D, Ahsan M, Ruel M, Gupta M, Singh S, Gupta N, Cheema A, Leiter LA, Fedak PWM, Teoh H, Latter DA, Fuster V, Friedrich JO. Comparison of coronary artery bypass surgery and percutaneous coronary intervention in patients with diabetes: a meta-analysis of randomised controlled trials. *The Lancet Diabetes & Endocrinology.* 2013 Dec 1; 1(4): 317-328.

Verma S, Lovren F, Pan Y, Yanagawa B, Deb S, Karkhanis R, Quan A, Teoh H, Feder-Elituv R, Moussa F, Souza DSR, Fremes SE. Pedicled 'No-Touch' Saphenous Vein Graft Harvest Limits Vascular Smooth Muscle Cell Activation – The PATENT Saphenous Vein Graft Study. *Eur J Cardio-Thorac Surg.* 2014; 45(4):717-25.

Verma S, Yanagawa B, Ahsan M, Fitchett D, Latter D, Ruel M, Farkouh M, Friedrich J. CABG Versus PCI in Patients with Diabetes: A Meta-Analysis of Randomized Controlled Trials in the Era of Des. *Canadian Journal of Cardiology.* 2013 Oct 25; 29(10): S254-S255.

Verma S, Yanagawa B, Kalra S, Ruel M, Peterson MD, Yamashita MH, Fagan A, Currie ME, White CW, Leung SWS, Rosu C, Singh S, Mewhort H, Gupta N, Fedak PW. Knowledge, Attitudes, and Practice Patterns in Surgical Management of Bicuspid Aortopathy: A Survey of 100 Cardiac Surgeons. *J Thorac Cardiovasc Surg.* 2013; 146(5): 1033-1040.

Verma S, Siu SC. Aortic Dilatation in Patients with Bicuspid Aortic Valve. *N Engl J Med.* 2014; 370(20):1920-9.

Wijesundera HC, Wong WWL, Bennell M, Fremes SE, Radhakrishnan S, Peterson M, Ko DT. Impact of wait times on the effectiveness of transcatheter aortic-valve replacement (TAVR) in severe aortic valve disease: a discrete event simulation model. *Canadian Journal of Cardiology.* 2014 Mar 13.

Yanagawa B, Gupta N, Verma S. A genetic advance: Lp(a) in aortic stenosis. *Clin Lipidol.* 2013; 8: 307-30.

Invited Visits

Peterson M: Canadian Cardiovascular Congress, Montreal, Quebec, Canada, 18-19 Oct 2013. 1/ Chair: Aorta/TAVI/Aortic Valves Chaired Session on Aortic Surgery, TAVI and Aortic Valves. 2/ Invited Speaker: Contemporary Management of Aortic Arch Aneurysm: St. Michael's Approach Surgical Treatment of Thoracic Aortic Disease.

Peterson M: Queen's University, Kingston, Ontario, Canada, 18 Nov 2013. Visiting Professor: 1/ An Obituary to Open Aortic Valve Replacement? Transcatheter Aortic Valve Replacement Comes of Age. 2/ Contemporary Management of Aortic Arch Aneurysm: St. Michael's Approach.

Peterson M: St. Luke's International Hospital, Tokyo, Japan, 25 Feb 2014. Keynote Speaker: Transapical Transcatheter Aortic Valve Replacement: The St. Michael's Experience.

Peterson M: Shonan Kamakura General Hospital, Yokohama, Japan, 13 May 2014. Invited Speaker: Transapical TAVR Comes of Age.

Peterson M: Transcatheter Valve Therapies 2014, Vancouver, British Columbia, Canada, 5 Jun 2014.

Presenter: 1/ Early Failure of Edwards Sapien Valve Treated with Implantation of St. Jude Portico Valve.
2/ FORTIS First in Man Experience.

Verma S: NB Heart Centre Symposium: Current Perspectives in Cardiovascular Disease, Miramichi, New Brunswick, Canada, 20 Sep 2013. Invited Speaker: 1/ BAV and aortopathy What is appropriate follow-up, Imaging and indications for surgery. 2/ Severe Mitral Regurgitation with EF < 20% when and if to operate.

Verma S: Malaysian Society of Interventional Cardiology, Kuala Lumpur, Malaysia, 5 Oct 2013. Invited Speaker: Acute Coronary Syndromes: From Bench to Bedside.

Verma S: Expert Opinions Clinical Impact - EOCI (at Canadian Cardiovascular Congress), Montreal, Quebec, Canada, 17 Oct 2013. Co-chair: Expert Opinions: Advances in Cardiology.

Verma S: Canadian Society of Cardiac Surgeons, Montreal, Quebec, Canada, 19 Oct 2013. Invited Speaker: 1/ DNA Damage Repair and Cardiovascular Disease : Lessons from BRCA1/2 Royal College Gold Medal Presentation. 2/ Bicuspid Aortic Valves CSCS Post Graduate Courses.

Verma S: Snell, Montreal, Quebec, Canada, 19 Oct 2013. Invited Speaker: VEGF and anti-VEGF mechanisms of action, efficacy and potential side effects Session: Anti-VEGF Therapy: More than meets the eye.

Verma S: AstraZeneca Canada, Sudbury, Ontario, Canada, 1 Nov 2013. Invited Speaker: Primary C.A.R.E. Clinical Advances for Reduction of Events.

Research and Investigations

Cardiovascular Inflammation Reduction Trial (CIRT). *Brigham and Women's Hospital and National Heart, Lung, and Blood Institute (NHLBI)/National Institutes of Health (NIH).* Verma S, Ridker P. (Apr 2013 - Dec 2018).

Current Trends in the Management of Atrial Fibrillation in Canada (SPRINT-AF Registry). *Bayer AG,* Verma S, Gupta M. (\$3,200,000.00 CAD, 2012 - May 2014).

Elucidating the Role of BRCA1 as a target to improve endothelial function, promote angiogenesis and attenuate atherosclerosis. Verma S. *Heart and Stroke Foundation of Ontario (The) (HSFO).* (\$341,143.00 CAD, Jul 2013 - Jun 2016).

Improving the Assessment and treatment of severe aortic stenosis by evaluating care gaps and advancing risk predictions. *Heart and Stroke Foundation of Ontario, Aortic Stenosis/TAVI.* Ko D, Peterson M. (\$331,058.00 CAD, Jul 2012 - Jul 2015).

Measurement of Frailty to Identify High-Risk Elderly Patients Referred for Surgical and Transcatheter Aortic Valve Replacement. *Canadian Institutes of Health Research (CIHR), Circulatory and Respiratory Health.* Peterson M, Afilalo J, Shahian DM, Bergman H, Morais JA, Perrault LP, Popma JJ, Rodes-Cabau J. (\$360,219.00 CAD, Jul 2012 - Jun 2016).

Molecular pathology of cardiovascular disease: understanding how gene expression is perturbed in clinical samples. *Canada Foundation for Innovation (CFI).* Marsden PA, Verma S. (\$376,643.00 CAD, Jul 2013 - Jun 2016).

Primary cARe AuDIt of Global risk Management (PARADIGM Study). *AstraZeneca Canada.* Verma S, Gupta M. (\$4,200,000.00 CAD, Jul 2008 - May 2014).

Rodent Cardiovascular and Physiological Investigations. *Canada Foundation for Innovation (CFI).* Verma S. (\$259,000.00 CAD, Jul 2009 - Jul 2013).

Role of autophagy in cardiovascular disease: a bench to bedside translational approach. *Heart and Stroke Foundation of Ontario (The) (HSFO).* Verma S, Anderson T, Finkel T, Cylulsky M, Ni H. (\$298,410.00 CAD, Jul 2013 - Jul 2016).

TAC-CALL: Thoracic Aortic Care. Comprehensive Aortic Care on-line from Acute Presentation to long-term Follow-up. *St. Michael's Hospital AFP.* Peterson M, Caldarone C, Fam N, Moloney T. (\$187,446.00 CAD, May 2013 - May 2015).

Traineeship in Atherosclerosis Program. *Canadian Rx&D companies.* Verma S. (\$6,000,000.00 CAD, Jul 2006 - Jun 2014).

Zebrafish Centre for Advanced Drug Discovery: A High Throughput Screening Platform Targeting Cardiovascular Diseases. *Canada Foundation for Innovation (CFI).* Wen X-Y, Dr Verma S, Marsden PA. (\$794,217.00 CAD, Jul 2010 - Jun 2014).

Honours Received

Latter DA: William Horsey Excellence in PG Education, University of Toronto, Post Graduate Department of Surgery, Dept of Surgery, Faculty of Medicine, Ontario, Canada. Jun 2013

Verma S: Jameel Ali Award for Excellence in Continuing Education in Surgery, St Michael's Hospital, Toronto, Ontario, Canada. 2013

Division of General Surgery

Dr. N. Ahmed	Associate Professor	Dr. J. Koo	Associate Professor
Dr. J. Ali	Professor	Dr. W. Kuebler	Associate Professor
Dr. N. Baxter	Associate Professor (Division Head)	Dr. B. Lawless	Assistant Professor
Dr. J.M.A. Bohnen	Professor	Dr. J.C. Marshall	Professor
Dr. M.J. Burnstein	Associate Professor	Dr. R. Mustard	Associate Professor
Dr. S. de Montbrun	Assistant Professor	Dr. J.B. Rezende-Neto	Associate Professor
Dr. R. George	Associate Professor	Dr. S. Rizoli	Professor
Dr. T. Grantcharov	Associate Professor	Dr. O. Rotstein	Professor
Dr. A. Kapus	Professor	Dr. J.S. Simpson	Lecturer
Dr. S. Kitto	Assistant Professor	Dr. K. Szaszi	Associate Professor

Publications

Adamina M, Ross T, Guenin MO, Warschkow R, Rodger C, Cohen Z, Burnstein M. Anal fistula plug: a prospective evaluation of success, continence and quality of life in the treatment of complex fistulae. *Colorectal Dis.* 2014 Feb 1; 16(7): 547-54.

Ahmed N, Devitt KS, Keshet I, Spicer J, Imrie K, Feldman L, Cools-Lartigue J, Kayssi A, Lipsman N, Elmi M, Kulkarni A, Parshuram C, Mainprize T, Warren RJ, Fata P, Gorman MS, Feinberg S, Rutka J. A Systematic Review of the Affects of Resident Duty Hour Restrictions in Surgery: Impact on resident wellness, training and patient outcomes. *Annals of Surgery.* 2014 Mar 25; 1-14.

Ali J. Torso Trauma. In: McGraw-Hill (eds), *Principles of Critical Care.* 4th. 2013.

Ali J, Chen R, Walsh F. Preoperative Assessment of the High Risk Surgical Patient. In: McGraw-Hill (eds), *Principles of Critical Care.* 4th Edition. 2013.

Ali J, Chen R, Walsh F. Priorities in Multisystem Trauma. In: McGraw-Hill (eds), *Principles of Critical Care.* 4th Edition. 2013.

Ali J, Sorvari A, Haskin D, Lucette F, Bowyer M. Potential Role of the ASSET (Advanced Surgical Skills for Exposure in Trauma) Course in Canada. *J. Trauma.* 2013.

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Invited Visits

Ahmed N: Trauma Association of Canada, Montreal, Canada, Apr 2014. Invited Speaker: Trauma General Surgery AFC - innovations in trauma education Plenary session on education.

Baxter N: American College of Surgeons, Washington, District of Columbia, United States, 4-9 Oct 2013. 1/ Moderator: Looking Back and Moving Forward: 100 Years of Surgical Research. 2/ Discussant: Forum on Fundamental Surgeons Surgical Form. 3/ Speaker: Update on Colorectal Cancer. 4/ Invited Speaker: Panel Discussion Psychometrics & Survey Research American Academic Surgeons Course.

Baxter N: Personalized Medicine in the Management of Colorectal Cancer Conference, Montreal, Quebec, Canada, 6 Nov 2013. Speaker: Biomarkers.

Baxter N: European Colorectal Congress Complications in Colorectal Surgery, Saint Gallen, Switzerland, 1-4 Dec 2013. Invited Speaker: 1/ To divert or not: evidence and decision-making around ostomies. 2/ Toxic Colitis.

Baxter N: General Medical Update, Lac Bay, Bonaire, Saint Eustatius And Saba, 28 Mar 2014. Invited Speaker: Does my patient have Lynch syndrome? Identifying the at risk patients in your practice.

Baxter N: Canadian General Surgery Review Program, Toronto, Ontario, Canada, 30 Mar 2014. Invited Speaker: Colon Cancer.

Baxter N: American Society of Clinical Oncology, Chicago, Illinois, United States, 31 May 2014. Invited Speaker: A chance to cut.

Burnstein MJ: Association of Surgeons in Jamaica, Kingston, West Indies, Jamaica, 17 May 2014. Invited Speaker: Technique of rectal cancer resection: important and imperfect.

de Montbrun S: Royal College International Consensus Meeting - The Retreat, Washington, District of Columbia, United States, 10 Oct 2013. Invited Speaker: Certification Competence Assessment of Technical Skill.

de Montbrun S: Colorectal Residents 4th Annual Career Course, Ohio, United States, 8 Nov 2013. Presenter: COSATS: What Colorectal Residents Must Know!

de Montbrun S: Royal College International Consensus Meeting - The Retreat, Florida, United States, 3 Jan 2014. Invited Speaker: Assessment for Certification.

George R: Thunder Bay Regional Hospital, Thunder Bay, Canada, 14 Sep 2013. Invited Speaker: Breast screening 2013: Dealing with the 40-50 age group.

Grantcharov T: 1st Global Conference in Sports Technology and Innovation, Las Vegas, Nevada, United States, 5 Aug 2013. Distinguished Speaker: Performance analysis for better training and patient outcomes in surgery.

Grantcharov T: Radio Canada International, Toronto, Ontario, Canada, 1 Oct 2013. Speaker.

Grantcharov T: CTV, Toronto, Ontario, Canada, 2 Oct 2013. Invited Speaker.

Grantcharov T: World Health Organization and Canadian Patient Safety Institute, Edmonton, Alberta, Canada, 22 Oct 2013. Keynote Speaker: Use of multi-channel recording device to register, analyze and prevent errors in the Operating Room.

Grantcharov T: Global TV, Toronto, Ontario, Canada, 11 Dec 2013. Invited Speaker: Evidence-based OR and ICU design.

Grantcharov T: Global TV, Toronto, Ontario, Canada, 27 Jan 2014. Invited Speaker: Toronto doctor hope to revolutionize the operating room with google glass.

Grantcharov T: CBC, Toronto, Ontario, Canada, 10 Feb 2014. Invited Speaker.

Lawless B: Ontario Hospital Association, Toronto, Ontario, Canada, 29 Aug 2013. Chair: Ontario's Life or Limb Policy: Implications for Ontario Hospitals Overview of the Life or Limb / Repatriation policies with description of roles / accountabilities LHINs, Hospitals and care providers.

Lawless B: Canadian Critical Care Forum, Toronto, Ontario, Canada, 10 Nov 2013. Invited Lecturer: Patient Flow and Critical Care; Ontario's Life or Limb Policy Discussing potential impacts on patient flow, both for access to emergent and urgent care as well as repatriation of stable patients.

Marshall JC: 2nd Singapore-ANZICS Intensive Care Forum, Singapore, 12-14 Jul 2013. Invited Speaker: 1/ Building the evidence base of critical care: Global collaboration in investigator-led research. 2/ Metaphor as syndrome: The Multiple Organ Dysfunction Syndrome in 2013. 3/ Resuscitation and deresuscitation of the critically ill patient. 4/ Host-microbial interactions in critical illness.

Marshall JC: Singapore ISARIC Roundtable Meeting, Singapore, 14 Jul 2013. Invited Lecturer: The Canadian Critical Care Trials Group and the International Forum for Acute Care Trialists (InFACT).

Marshall JC: 11th Congress of the World Federation of Societies of Intensive and Critical Care Medicine, Durban, South Africa, 28 Aug – 1 Sep 2013. Invited Speaker: 1/ Should ICU admission be dictated by prediction tools? 2/ The root cause of critical illness. 3/ Surgical source control. 4/ InFACT: Global collaboration in acute care research. 5/ Lessons learned from failed sepsis trials.

Marshall JC: 6th International Congress on Sepsis and Multiorgan Dysfunction, Weimar, Germany, 4-6 Sep 2013. Invited Speaker: 1/ The role of biomarkers to guide treatment in sepsis. 2/ PIRO: Sepsis diagnosis and stratification.

Marshall JC: Houston Methodist Hospital, Houston, United States, 12 Sep 2013. Keynote Speaker: World Sepsis Day at 2: Successes and challenges.

Marshall JC: European Society of Intensive Care Medicine 26th Annual Congress, Paris, France, 7-9 Oct 2013. Invited Lecturer: 1/ It is unsafe to resuscitate without SvCO₂: Con. 2/ Source control. 3/ Complicated surgical wounds 4. Source control in less than 12 hours.

Marshall JC: European Society of Intensive Care Medicine 26th Annual Congress, Paris, France, 8 Oct 2013. Keynote Speaker: Thinking big: Towards global collaboration in critical care research.

Marshall JC: International Sepsis Forum Sepsis 2013, Rio de Janeiro, Brazil, 5-6 Nov 2013. Invited Speaker: 1/ Planning for the next pandemic. 2/ Designing smarter Phase II trials 3/ Novel devices in sepsis. 4/ The Canadian Critical Care Trials Group: Current activities.

Marshall JC: XVIII Annual Congress, Brazilian Society of Intensive Care Medicine, Rio de Janeiro, Brazil, 7-9 Nov 2013. Invited Speaker: 1/ Iatrogenesis in the ICU. 2/ The global impact of investigator-led research in critical care.

Marshall JC: Asian Critical Care Conference, Hong Kong, China, 21-22 Nov 2013. Invited Speaker: 1/ Regulation of neutrophil survival in trauma and sepsis. 2/ Sepsis trials: Where have we gone wrong? 3/ Host-microbial interactions in critical illness.

Marshall JC: Annual Congress, British Society for Immunology, Liverpool, United Kingdom, 5 Dec 2013. Plenary Address: Evolving concepts in the pathophysiology of sepsis.

Marshall JC: Society of Critical Care Medicine/European Society of Intensive Care Medicine Consensus Conference on Definitions for Sepsis, San Francisco, California, United States, 13-14 Jan 2014. Invited Speaker: 1/ Sepsis: A history of the concept. 2/ Compartmentalization of inflammation.

Marshall JC: Critical Care Reviews, Galgorm, Ireland, 24 Jan 2014. Invited Speaker: 1/ Deresuscitation of the critically ill patient. 2/ Intensive care in 2034.

Marshall JC: Critical Care Congress, Society of Critical Care Medicine, San Francisco, California, United States, 12 Jan 2014. Invited Speaker: Empiric therapy and source control in septic shock.

Marshall JC: University of Washington Department of Anesthesia, Seattle, Washington, United States, 12 Feb 2014. Visiting Professor: Resuscitation and deresuscitation of the critically ill patient.

Marshall JC: Roundtable Meeting on Evidence in Critical Care Medicine, Brussels, Belgium, 15-17 Mar 2014. Invited Speaker: Building global collaboration in acute care research.

Marshall JC: 34th International Symposium of Intensive Care and Emergency Medicine, Brussels, Belgium, 18-21 Mar 2014. Invited Speaker: 1/ Pandemics: How should the critical care community respond? 2/ Apoptosis as a mechanism of critical illness. 3/ Big international research consortia. 4/ PBEF/Nampt/Visfatin. 5/ Core outcome measures for critical care research. 6/ The microbial flora of critical illness: What does it tell us? 7/ Abdominal trauma. 8. Acute pancreatitis: Principles of management.

Marshall JC: Shandong Provincial Critical Care Medicine Conference, Jinan, China, 18-20 Apr 2014. Distinguished Speaker: 1/ Sepsis trials: Where have we gone wrong? 2/ Host-microbial interactions in critical illness.

Marshall JC: Xiangya School of Medicine, Changsha, China, 21 Apr 2014. Visiting Professor: 1/ InFACT: Global collaboration in acute care research. 2/ Management of severe acute pancreatitis.

Marshall JC: Surgical Infection Society 34th Annual Meeting, Baltimore, Maryland, United States, 1-3 May 2014. Invited Speaker: The multiple organ dysfunction syndrome.

Marshall JC: Rapid Response Systems: Driving Patient Safety, 10th Annual Meeting,, Miami, Florida, United States, 11-13 May 2014. Invited Speaker: 1/ Building consensus on outcome measures for acute illness. 2/ Surgical checklists: Do they Work? 3/ Building global collaboration in critical care.

Marshall JC: Latinoamerican Clinical Trial Investigative Network (LACTIN) 2nd Annual Meeting, Casa Blanca, Chile, 14 May 2014. Invited Speaker: International Forum for Acute Care Trialists (InFACT) - Collaborative global acute care research.

Marshall JC: 12 Simposio Internacionale de Emergencias Médicas y Paciente Crítico, Santiago, Chile, 15-17 May 2014. Invited Speaker: 1/ Sepsis. 2/ Source control in complex infections. 3/ Scores: What is new?

Marshall JC: Canadian Perioperative Anesthesia and Medicine Meeting,, Toronto, Ontario, Canada, 31 May 2014. Invited Speaker: Sepsis 2014: New guidelines, old challenges.

Rezende-Neto JB: Canadian Surgical Forum, Ottawa, Ontario, Canada, 21 Sep 2013. Invited Speaker: Abdominal Compartment Syndrome.

Rezende-Neto JB: Trauma 2014 - Trauma Association of Canada, Montreal, Quebec, Canada, Apr 2014. Presenter: Rezende-Neto J 1/ Presence of a Traumatic Brain Injury is not an Independent Predictor of Acute Coagulopathy in Trauma Patients. 2/ Isolated Vena Cava Injuries from Blunt Trauma: A Diagnostic Dilemma with Life-Threatening Hemorrhage. 3/ Vagal Nerve Stimulation Improves Coagulopathy in Hemorrhagic Shock: A Thromboelastometric Study in an Animal Model.

Rotstein O: CAGS/TACS, Ottawa, Ontario, Canada, 21 Sep 2013. Invited Speaker: Abdominal catastrophes in the ICU- An update on their surgical management.

Rotstein O: Canadian General Surgery Review, Toronto, Ontario, Canada, 30 Mar 2014. Invited Speaker: Intra-abdominal Infections.

Rotstein O: Shock Society, Charlotte, North Carolina, United States, 9 Jun 2014. 1/ Facilitator: Plenary Session IV: Antioxidantive Therapies. 2/ Invited Speaker: Role of Oxidants in Cell Signaling.

Research and Investigations

Accelerated implementation diffusion of quality initiatives for rectal cancer across Canada using a multi-faceted knowledge translation strategy. *Canadian Partnership Against Cancer (CPAC).* Kennedy E, Baxter NN, Simunovic M, McLeod RS. (\$903,000.00 CAD, Jan 2014 - Mar 2017).

Addressing Key Knowledge Gaps and Building Capacity in Bariatric Care. (Co-Applicant). *CIHR: Bariatric Care- Management of Severe Obesity.* Rotstein O, Padwal R, Johnson J, Bacon S, Cheung A, Klarenbach S, Majumdar S, Twells L, Audas R, Boyd S, Chafe R, Denis R, Forhan M, Gregory D, Langlois MF, Mathus S, Pace D, Prado C, Santosa S. (CAD, Jul 2013 - Jun 2014).

Age of blood evaluation (ABLE) trial in the resuscitation of critically ill patients. *Canadian Institutes of Health Research (CIHR).* Lacroix J, Callum J, Fowler R, Rizoli S. (May 2009 - present).

American Board of Colon and Rectal Surgery COSATS Examination. *Covidien, Clinical Education Department Program.* deMontbrun S, MacRae H, Steele S, Roberts P. (\$13,366.00 USD, Jul 2013 - Jul 2014).

A multidisciplinary approach to reducing positive margin rate in breast conserving surgery. *St. Michael's Hospital, Quality Improvement in Oncology Care.* Simpson JS. (\$5,000.00 CAD, 2014 - 2015).

A phase II study to assess the safety and feasibility of refined selection criteria for pre-operative chemoradiation for rectal cancer. *MSH-UHN Academic Medical Organization.* Kennedy E, Baxter NN, Simunovic M, McLeod RS. (\$189,590.00 CAD, Jun 2013 - May 2015).

A pilot randomized controlled trial to evaluate the efficacy of unfractionated heparin in septic shock. Marshall JC, Zarychanski R, Fergusson DA. (\$100,000.00 CAD, 2011 - 2013).

An integrated multi-faceted knowledge translation intervention to improve bone health in men receiving androgen deprivation therapy for prostate cancer. *Canadian Cancer Society, Knowledge To Action Grant.* Jones J, Alibhai S, Kitto S, Catton C, Cheung A, Hamilton R, Warde P. (\$99,919.00 CAD, Aug 2013 - 2015).

Animals, Humans, and the Continuity of Evidence: A Study of Clinical Translation. *Canadian Institutes of Health Research (CIHR).* Fergusson DA, Kimmelman J, Grimshaw JA, Hackam DG, Knoll G, London AJ, Moher D, Ramsay TO, Sampson M, Stewart DJ, Weijer CE, Marshall JC. (\$273,952.00 CAD, Jul 2011 - Jun 2014).

A population-based study of cancer incidence and mortality in patients with solid organ transplants. *Canadian Institutes of Health Research.* Baxter N, Brezden-Masley C, Hicks L, Kim J, Paterson M, Sutradhar R, Urbach D. (\$682,732.00 CAD, Oct 2011 - Sep 2016).

Building Capacity for Population-based Lynch Syndrome Screening in Ontario. *OICR-CCO Knowledge Translation Network, Health Services Research.* Baxter N, Rabeneck L, Gagliardi A, Kennedy E, Tinmouth J, Pollett A, Gallinger S, Covelli A, Facey M. (\$148,572.00 CAD, Apr 2014 - Mar 2015).

Canadian Critical Care Knowledge Translation Network. *CIHR.* Muscedere J, Gibney N, Keenan S, Lawless B, Cook D, Dodek P, Heyland DK, Martin C, Scales D, et al. (\$599,611.00 CAD, Oct 2012 - Sep 2015).

Cancer Care Ontario Health Services Research Chair. *Cancer Care Ontario.* Baxter NN, (\$1,000,000.00 CAD, Jul 2009 - Jun 2014).

Cellular and Molecular Mechanisms of Prolonged Neutrophil-Mediated Inflammation in Trauma and Sepsis: The Role of PBEF/Nampt/Visfatin. *The Physicians' Incorporated Foundation.* Marshall JC. (\$169,500.00 CAD, 2012 - 2014).

Cellular Immunotherapy for Septic Shock (CISS): A Phase I Trial. *Canadian Institutes of Health Research (CIHR).* McIntyre LA, Courtman DW, Ferguson DA, Granton JT, Lalu MM, Marshall JC, Mei SH, Steward DJ, Walley KR, Winston BW. (\$366,811.00, 2012 - 2014).

Characterization of a novel, caspase-8 dependent survival pathway in inflammatory neutrophils. *Canadian Institutes of Health Research (CIHR).* Marshall JC. (\$501,135.00 CAD, Jul 2009 - Jun 2014).

Clinical validation of multimodal neuroimaging and blood-based proteomics as novel biomarkers for the early diagnosis and management of mild traumatic brain injury. *Canadian Institutes of Health Research (CIHR).* Rizoli S. (Mar 2013 - Feb 2014).

Coagulopathy in Trauma: A Comparative Study. *Defense Research and Development Canada.* Rizoli S. (2012 - 2016).

Combined in vitro/in vivo bioimaging approach for translational research in lung injury and repair. *Canadian Foundation for Innovation.* Kuebler W, Kapus A, Rotstein O. (\$389,428.00 CAD, Jul 2012 - Jun 2015).

Developing objective structured assessments of technical skill, and establishing technical competence through standard setting. *Society for Surgery of the Alimentary Tract (SSAT).* de Montbrun S. (\$40,000.00 USD, Jul 2013 - Jul 2015).

Development and Validations of a Curriculum for Laparoscopic Colorectal Surgery. *American Society of Colon & Rectal Surgeons.* Grantcharov T. (\$47,214.00, 2012 - 2013).

Development of Rotational Thromboelastometry (ROTEM) based transfusion guidelines for the optimal management of early resuscitation of bleeding trauma patients. *Canadian Institute Health Research (CIHR).* Veigas P, Rizoli S. (Jul 2013 - Jul 2014).

Efficacy and Safety of Mesenchymal Stromal Cells for Pre-Clinical Acute Lung Injury: A Systematic Review and Meta-Analysis. *Canadian Institutes of Health Research, Circulatory and Respiratory Health.* McIntyre LA, Fergusson D, Griffin G, Grimshaw J, Lalu M, Macleod M, Mei S, Rudnick M, Stewart D, Turgeon A, Marshall JC. (\$97,638.00 CAD, 2012 - 2013).

Effect of Remote Ischemic Preconditioning on Neutrophil Function and the Immune- Inflammatory and Coagulation Profiles in Trauma Patients with Hemorrhagic Shock. *Canadian Institutes of Health Research.* Rotstein OD, Rizoli SB, Leung CH, Rhind S. (\$141,790.00 CAD, Oct 2013 - Sep 2016).

Effective systems for procedure specific Health Care Simulation. *Ontario Research Fund (ORF).* Grantcharov T. (\$4,794,875.40, Jul 2011 - Jun 2016).

Establishment and maintenance of an educational program in simulation and minimally invasive surgery. *St. Michael's Hospital Foundation.* Grantcharov T. (\$4,000,000.00, 2010 - 2019).

Evaluating quality improvement interventions in colorectal cancer surgery in Ontario. *Canadian Institutes of Health Research.* Simunovic M, Baxter N, Brouwers M, Earle C, Forbes S, Smith A, Stukel T, Urbach D. (\$619,015.00 CAD, Mar 2012 - Feb 2017).

Evaluation research of meta-leadership in health professions education program. *Ontario Simulation Network.* Kitto S, Goldman J. (\$9,950.00 CAD, Oct 2013 - May 2014).

Exploring factors that influence breast reconstruction use and outcomes: Phase I: How do physician attributes influence reconstruction decision making? *Canadian Breast Cancer Foundation.* Musgrave M, Baxter N, Gagliardi A. (\$300,000.00 CAD, Jul 2011 - Jun 2014).

Exploring parent-health care provider decision making practices for children with complex health care needs receiving home care services. *The Hospital for Sick Children, Norman Saunders Complex Care Initiative (NSCCI).* LeGrow K, Cohen E, Espin S, Gibson B, Kitto S, Nicholas D. (\$26,152.00 CAD, Jan 2014 - Dec 2014).

From Bench to Bedside to Curbside. *Canadian Institutes of Health Research (CIHR).* Slutsky AS, Dorian P, Morrison L, Spence J, Baker AJ, Lavery J, Fowler R, Black S, Sibbald W, Rotstein O. (\$1,057,000.00 CAD, Jul 2009 - Jun 2016).

From Bench to Bedside to Curbside. *Heart and Stroke Foundation of Canada (HSFC).* Slutsky AS, Dorian P, Morrison L, Spence J, Baker AJ, Lavery J, Fowler R, Black S, Sibbald W, Rotstein O. (\$1,500,000.00 CAD, Jul 2010 - Jun 2016).

From Bench to Bedside to Curbside. *National Institutes of Health (NIH) (USA), Department of Health and Human Services.* Slutsky AS, Dorian P, Morrison L, Spence J, Baker AJ, Lavery J, Fowler R, Black S, Sibbald W, Rotstein O. (\$648,000.00 USD, Jul 2010 - Jun 2016).

High risk lung cancer screening. *Cancer Care Ontario (CCO).* Paszat L, de Kooning H, Rabeneck L, Baxter N, McGregor L. (\$751,600.00 CAD, Apr 2013 - Mar 2014).

HL-10-006 Toronto Regional Coordinating Center; Clinical Research Consortium to Improve Resuscitation Outcomes. *National Institutes of Health (NIH) (USA).* Morrison L, Baker A, Brooks S, Cheskes S, Craig A, Dainty K, Dorian P, Feldman M, Foeree R, Hutchinson J, Ferguson N, Laupacis A, MacDonald R, Mamdani M, Moran P, Nathens A, Needham D, Redelmeier D, Rizoli S, Rubinfeld G, Scales D, Schull M, Schwartz B, Slutsky A, Spence J, Stuss D, Verbeek R, Wax R, Rotstein O. (\$1,009,800.00 CAD, Jul 2010 - Jun 2016).

How do cell contacts regulate the expression of their components? *Natural Sciences and Engineering Research Council of Canada (NSERC).* Szaszi K. (\$130,000.00 CAD, Jun 2012 - Jun 2017).

Hypertonic modulation in Inflammation and Coagulation Following Injury. *Defense Research and Development Canada / National Institutes of Health.* Bulger E, Wolfgang Y, Rhind S, Rizoli S. (Jul 2007 - present).

Improving cancer screening among First Nations and Métis. *Canadian Institutes of Health Research.* Tinmouth J, Baxter N, Borkhoff C, Deber R, Dobrow M, Gesink D, Jackson S, Llovet D, Lofter A, Marrett L, Mackinnon M, Paszat L. (\$562,491.00 CAD, Jul 2013 - Jun 2017).

Improving Implementation: Exploring the uptake of safe surgery checklists. *Faculty of Community Service, Ryerson University.* Espin S, Safir O, Grant R, Kitto S. (\$9,125.00 CAD, May 2014 - Dec 2014).

Improving the quality of oncofertility decision making among young women at risk of infertility during cancer survivorship. *Canadian Cancer Society Research Institute (CCSRI), Quality of Life.* Baxter NN, Kennedy E, Simmons C, Brezden-Masley C, Hicks L, Gupta A, Nathan P, Greenblatt E, Yee S, Covelli A, Srikanthan A, Facey M. (\$299,936.00 CAD, Feb 2014 - Mar 2017).

Initiative to Maximize Progress in Adolescent Cancer Therapy (IMPACT). *C17 Research Network.* Baxter N, Nathan P, Alexander S, Barr R, Greenberg M, Gupta S, Gupta A, Hicks L, Johnston D, Pole J, Sussman J, Sutradhar R, Paszat L. (\$179,676.00 CAD, Sep 2013 - Aug 2015).

Initiative to Maximize Progress in AYA Cancer Therapy (IMPACT). *Canadian Institutes of Health Research (CIHR).* Baxter N, Nathan P, Alexander S, Barr R, Greenberg M, Gupta S, Gupta A, Hicks L, Johnston D, Pole J, Sussman J, Sutradhar R, Paszat L. (\$913,870.00 CAD, Apr 2014 - Mar 2019).

Interprofessional disaster preparedness for Japanese health care students and professions. *Ministry of Health, Japan.* Ohshima N, Bontje P, Oneyama H, Yoshiura T, Reeves S, Kitto S. (\$133,000.00 JPY, 2013 - 2016).

Interprofessional collaboration within the health professions in South Tyrol, Italy: How do the different professions view and evaluate the current status of interprofessional collaboration. *National Agency: Provincia Autonoma di Bolzano Italy.* Reeves S, Mischo-Kelling M, Tappeiner W, Lochner L, Vittadello F, Kitto S. (\$272,625.00 EUR, 2013 - 2015).

Knowledge to Action: Improving local therapy for young women with breast cancer across Canada. *Canadian Breast Cancer Foundation (CBCF) - Canadian Institutes of Health Research (CIHR), Breast Cancer in Young Women Research Program.* Baxter N, Simonovic M, Quan ML, Tyldesley S, Cao J, Hebbard P, Latosinsky S, Olivotto I, Winget M, Provencher L, Wright F, Lemieux J, Kennedy E, Sutradhar R. (\$497,549.00 CAD, Jun 2014 - May 2019).

Long-term live fluorescent imaging system for monitoring site-specific functions in epithelia. *Natural Sciences and Engineering Research Council of Canada (NSERC).* Kapus A, Szaszi K. (\$150,000.00 CAD, Apr 2014).

Long-term physical and psychological outcomes in colorectal cancer survivors. *Canadian Institutes of Health Research.* Hart T, Baxter N, Gallinger S, Cotterchio M. (\$144,487.00 CAD, Oct 2012 - Sep 2014).

Management and health outcomes in adolescents with non-Hodgkin lymphomas in Ontario. *Pediatric Oncology Group of Ontario (POGO) Unit Seed Fund.* Baxter N, Nathan P, Alexander S, Barr RD, Greenberg ML, Gupta S, Hicks L, Pole J. (\$14,934.00 CAD, Jun 2013 - Jun 2017).

Mechanisms of macrophage priming for LPS signaling by oxidative stress. *Canadian Institutes of Health Research (CIHR).* Rotstein O. (\$713,605.00 CAD, Oct 2010 - Sep 2015).

Molecular and cellular mechanisms underlying chronic kidney disease. *Ontario Ministry of Research and Innovation (ON).* Szaszi K. (\$100,000.00 CAD, Jul 2010 - Jun 2015).

- Pan-Canadian Colorectal Cancer Consortium.** *Terry Fox Research Institute Special Program Funding.* Gallinger S, Basik M, Batist G, Baxter N, Diaz Z, Gryfe R, McLaughlin J Pollett A, Spatz A. (\$2,500,000.00 CAD, Apr 2012 - Mar 2017).
- Pandemic Preparedness in the Interpandemic Period: ISARIC, InFACT, and the Global Response to Emerging Infectious Disease Threats.** *Canadian Institutes of Health Research (CIHR).* Marshall JC, Heslegrave RJ, Halperin SA. (\$25,000.00 CAD, 2012 - 2013).
- Participation in the ColonCancerCheck Program.** *Cancer Care Ontario (CCO).* Baxter NN, Bierman A, Del Guidice L, MacKinnon M, Paszat L, Rabeneck L, Sutradhar R, Tinmouth J, Urbach D. (\$219,842.00 CAD, Apr 2011 - Mar 2014).
- Peer Education with Intersecting Networks: The SACME Project in South Bronx Public Housing- Implementing the Diabetes Prevention Program among those most at risk and their healthcare providers.** *Society for Academic Continuing Medical Education (SACME).* Morrow R, Norwood C, Kitto S, Alexis K, Tiburcio J. (\$10,000.00 USD, Sep 2013 - Apr 2014).
- Population-based assessment of sleep deprivation in staff physicians and its impact on patient care and outcomes.** *Canadian Institutes of Health Research (CIHR).* Baxter NN, Govindarajan A, Gagliardi A, Juurlink D, Kennedy E, Murray B, Sutradhar R, Urbach D. (\$308,760.00 CAD, Sep 2013 - Aug 2016).
- Pre-consultation Educational Group Intervention to Improve Shared Decision-Making for Postmastectomy Breast Reconstruction: A Randomized Controlled Trial.** *Canadian Cancer Society Research Institute (CCSRI).* Zhong T, Baxter N, Metcalfe K, Jones J, Hofer S, O'Neill A, Panzarella T, Cheng T, Platt J, Hoch J, Isaranuwatthai W. (\$291,929.00 CAD, Jul 2013 - Jun 2014).
- Professional Development Grant.** *Royal College for Physicians and Surgeons of Canada.* Simpson J. (\$5,000.00 CAD, 2013 - 2014).
- PROSPECT: Probiotics: Prevention of Severe Pneumonia and Endotracheal Colonization Trial (PROSPECT): A Pilot Trial.** *Canadian Institutes of Health Research.* Cook DJ, Marshall JC. (\$223,231.00 CAD, Mar 2013 - Mar 2015).
- Refinement and Assessment of a Personalized Multifaceted Care Plan – Using Knowledge Translation To Engage, Educate and Enable Breast Cancer Patients To Become Self-Care Advocates in a Chronic Care Model.** *Wings of Hope Charitable Foundation and Astrazeneca Biopharmaceutical.* Haq R, Brezden-Masley C, Simpson JS, Richter S, George R, Rackal J, Leung F, Dastur D, Vu K. (\$68,000.00 CAD, 2013 - 2013).
- Regulation of ADAM17/TACE by Tumor Necrosis Factor- in tubular epithelium: role in junction regulation and wound healing.** *Kidney Foundation of Canada (KFC).* Szasz K. (\$100,000.00 CAD, Jul 2012 - Jun 2014).
- Resuscitation in Motion 2014: Building networks of excellence to advance resuscitation science research, development and practice.** *Canadian Institutes of Health Research (CIHR).* Morrison L, Baker A, Rotstein O. (\$24,600.00 CAD, Oct 2013 - Sep 2014).
- Resuscitation outcomes consortium - from bench to bedside to curbside.** (Co-Investigator). *National Institutes of Health / Canadian Institutes of Health Research (CIHR) / Heart and Stroke of Canada.* Slutsky AS, Rizoli S. (Sep 2004 - Dec 2015).
- SACME Terminology Project, Phase 2.** *Society for Academic Continuing Medical Education (SACME).* Van Hoof T, Kitto S. (\$180,000.00 USD, Nov 2013 - Dec 2014).
- Sepsis in emergency general surgery admissions: protocol for a multicentre audit.** *International Source.* Rezende-Neto JB. (Dec 2013 - present).
- Sepsis Outcomes National Registry to Improve Survival.** *Canadian Institutes of Health Research (CIHR).* Boyd J, Doig C, Hancock R, Kubes P, Russell J, Marshall JC. (\$200,000.00 CAD, Jul 2011 - Jun 2014).
- Should All Young Women with Breast Cancer be Treated by Mastectomy?** *Canadian Breast Cancer Foundation (CBCF).* Quan, ML, Baxter N, Hanna W, Paszat L, Rakovitch E, Saad R, Sawka C, Warner E, Wright F. (\$287,575.00 CAD, Nov 2008 - Sep 2013).
- Structures and processes of care in colorectal cancer surgery.** *Canadian Institutes of Health Research.* Urbach D, Baxter N. (\$1,047,225.00 CAD, Oct 2008 - Sep 2013).
- The impact of 1red blood cell: 1plasma: 1platelet transfusion versus laboratory-guided transfusion on coagulation in bleeding trauma patients.** *Dean's Fund of the University of Toronto.* Nascimento B, Rizoli S. (Jul 2013 - Jul 2014).
- The role of remote ischemic preconditioning (RIPC) in preventing organ dysfunction following hemorrhagic shock.** *MITACs Accelerate PhD Fellowship.* Rotstein OD, Caldarone C, Leung CH. (\$96,000.00 CAD, Jan 2014 - Dec 2016).

The use of human acellular dermal matrix in one-stage implant breast reconstruction: A multicenter, randomized, controlled trial. *Canadian Breast Cancer Foundation (CBCF)*. Zhong T, Baxter N, Hofer S, Semple J, Brown M, Beber B, Macadam S, Hoch J, Lennox P, Devins J. (\$368,449.00 CAD, Jul 2012 - Jun 2015).

The Young Adult Survivors of Cancer Study. *Canadian Institutes of Health Research (CIHR)*. Baxter NN, Del Guidice L, Paszat L, Rabaneck L, Sutradhar R, Urbach D. (\$351,000.00 CAD, Apr 2008 - Mar 2014).

Toronto LHIN Wellness Patient Transition. *Cancer Care Ontario*. George R. (\$100,000.00 CAD, Jul 2013 - Jul 2014).

Trauma System Development in Canada: Overcoming the Challenges of Geography Through an Evaluation of Structures and Process. (Decision Maker). *Canadian Institutes of Health Research (CIHR)*. Nathens A, Rubinfeld G, Morrison LM, Gagliardi A, Pong R, Schuurman N, Cusimano M, Hameed M, Lawless B, Peters P, Snider C, Tallon J, Schwartz B, Pandya A. (\$2,264,139.00 CAD, Jul 2010 - Jun 2015).

Understanding the nature of interprofessional teamwork in intensive care units: a multi-institutional ethnographic study. *Gordon & Betty Moore Foundation, California*. Reeves S, Kitto S, Provonost P, Grouper M, Aboumatar H, Wachter B. (\$2,167,937.00 USD, 2012 - 2015).

Utilization of Breast Reconstruction in the Treatment of Breast Cancer in Ontario and Identification of Barriers of Access: A Population-Based Study. *Canadian Breast Cancer Foundation*. Baxter NN, Zhong T, Davidge K, Hofer S, Musgrave M, Platt J, Sutradhar R, Urbach D. (\$257,474.00 CAD, Jul 2011 - Jun 2014).

Honours Received

Ahmed N: Donald Richard Wilson Award for Excellence in Implementing the CanMeds roles, Royal College of Physicians and Surgeons of Canada (The). Jul 2013 - Jul 2014.

Ahmed N: PARO 2014 Lois H. Ross Resident Advocate Award, Professional Association of Residents of Ontario, General Surgery, Surgery. Feb 2014 - Jul 2014.

Baxter N: Eugenie Stuart Best Instructor Award, University of Toronto, Inst of Health Policy, Mgmt & Evaluation, Faculty of Medicine, Toronto, Ontario. 2013.

de Montbrun S: 2013 SSAT Career Development Award for Clinical/Outcomes/Education Research, The Society for Surgery of the Alimentary Tract. Mar 2013 - Mar 2015.

Szaszi K: Early Researcher Award, Ontario Ministry of Research and Innovation, Canada. Sep 2010 - Aug 2015.

Division of Neurosurgery

Dr. M.D. Cusimano	Professor
Dr. S. Das	Assistant Professor
Dr. H. Ginsberg	Assistant Professor
Dr. R.L. Macdonald	Professor (Division Head)

Dr. R.G. Perrin	Associate Professor
Dr. T.A. Schweizer	Assistant Professor
Dr. J. Spears	Assistant Professor

Publications

Al-Khindi T, Macdonald RL, Mayer S, Schweizer TA. Behavior after Aneurysmal Subarachnoid Hemorrhage: Cognition and Functional Outcome. In: *The Behavioral Consequences of Stroke*. 2013.

Al-Khindi T, Macdonald RL, Schweizer TA. Decision making deficits persist following aneurysmal subarachnoid hemorrhage. *Neuropsychology*. 2014 Jan; 28(1): 68-74.

Alshafai N, Cusimano MD, Falenchuk O. Global differences in the present and future management of cerebral aneurysms. *World Neurosurg*. 2013 Dec; 80(6): 717-22.

Andersen J, Kot N, Ennis N, Colantonio A, Ouchterlony D, Cusimano MD, Toplovec-Vranic J. Traumatic brain injury and cognitive impairment in men who are homeless. *Disabil Rehabil*. 2014 Mar 13. PMID: 24621413. AID: 10.3109/09638288.2014.895870 [doi]. [Epub ahead of print].

Asbridge M, Mann R, Cusimano MD, Trayling C, Roerecke M, Tallon JM, Whipp A, Rehm J. Cannabis and traffic collision risk: findings from a case-crossover study of injured drivers presenting to emergency departments. *Int J Public Health*. 2013 Sep 24. Springer Basel. PMID: 24061594. AID: 10.1007/s00038-013-0512-z. [Epub ahead of print].

- Bahrami P, Graham SJ, Grantcharov TP, Cusimano MD, Rotstein OD, Mansur A, Schweizer TA.** Neuroanatomical correlates of laparoscopic surgery training. *Surg Endosc.* 2014 Feb 26. PMID: 24570013. AID: 10.1007/s00464-014-3452-7 [doi]. [Epub ahead of print].
- Balios B, Montanera W, Spears J.** Arachnoid Web and Altered CSF Flow Dynamics: Making the Diagnosis. *Journal of Neurosurgery.* 2014 Apr.
- Bonares MJ, de Oliveira Manoel AL, Macdonald RL, Schweizer TA.** Behavioural profile of unruptured intracranial aneurysms: A systematic review. *Annals of Clinical and Translational Neurology.* 2014 Mar; 1(3): 220-232.
- Clarke DB, Thibault-Halman G, Fenerty L, Wheadon-Hore K, Walling S, Cusimano M.** Implementation of an All-Ages Mandatory Helmet Policy for Ice Skating. *Journal of Trauma.* 2013 Dec.
- Cusimano MD, Chipman M, Donnelly P, Hutchison MG.** Effectiveness of an educational video on concussion knowledge in minor league hockey players: a cluster randomised controlled trial. *Br J Sports Med.* 2014 Jan; 48(2): 141-6.
- Cusimano MD, Cho N, Amin K, Shirazi M, McFaul SR, Do MT, Wong MC, Russell K.** Mechanisms of team-sport-related brain injuries in children 5 to 19 years old: opportunities for prevention. *PLoS One.* 2013 Mar 28; 8(3): e58868. PMID: 23555602. AID: 10.1371/journal.pone.0058868.
- Cusimano MD, Faress A, Luong WP, Lockhart S, Amin K, Garland RJ, Russell K.** Evaluation of a bicycle helmet safety program for children. *Can J Neurol Sci.* 2013 Sep; 40(5): 710-6.
- Cusimano MD, Holmes SA, Sawicki C, Topolovec-Vranic J.** Assessing Aggression Following Traumatic Brain Injury: A Systematic Review of Validated Aggression Scales. *J Head Trauma Rehabilitation.* 2014 Mar; 29(2): 172-84.
- Cusimano M, Luong WP, Faress A, Leroux T, Russell K.** Evaluation of a ski and snowboard injury prevention program. *Int J Inj Contr Saf Promot.* 2013; 20(1): 13-8.
- Cusimano MD, Suhardja AS.** Primary oculomotor nerve meningioma in an adult: Case report. *Skull Base Surgery.* 2013.
- Cusimano MD, Zanetti K, Sheridan C.** Severe traumatic brain injury. *J Neurosurg.* 2013 Sep; 119(3): 822.
- Das S, Marsden PA.** Angiogenesis in glioblastoma. *The New England journal of medicine.* 2013 Oct 17; 369(16): 1561-3.
- De Tommasi C, Goguen J, Cusimano MD.** Transphenoidal surgery without steroid replacement in patients with morning serum cortisol below 9 ug/dl(240 Nmol/l). *Acta Neurochir Suppl.* 2013 Oct; 154(10): 1903-15.
- Diaz RJ, Maggacis N, Zhang S, Cusimano MD.** Determinants of quality of life in patients with skull base chordoma. *J Neurosurg.* 2014 Feb; 120(2): 528-37.
- Di Ieva A, Niamah M, Menezes RJ, Tsao M, Krings T, Cho YB, Schwartz ML, Cusimano MD.** Computational Fractal-Based Analysis of Brain Arteriovenous Malformation Angioarchitecture. *Neurosurgery.* 2014 Mar 21. PMID: 24662509. [Epub ahead of print].
- Di Ieva A, Schmitz EM, Cusimano MD.** Analysis of Intracranial Pressure: Past, Present, and Future. *Neuroscientist.* 2013 Dec; 19(6): 592-603.
- Di Ieva A, Valli M, Cusimano MD.** Distinguishing Alzheimer's disease from normal pressure hydrocephalus: a search for MRI biomarkers. *J Alzheimers Dis.* 2014; 38(2): 331-50.
- Di Ieva A, Weckman A, Di Michele J, Rotondo F, Grizzi F, Kovacs K, Cusimano MD.** Microvascular morphometrics of the hypophysis and pituitary tumors: From bench to operating theatre. *Microvasc Res.* 2013 Sep; 89: 7-14.
- Donaldson L, Asbridge M, Cusimano MD.** Bodychecking rules and concussion in elite hockey. *PLoS One.* 2013 Jul; 8(7): e69122. PMID: 23874888. AID: 10.1371/journal.pone.0069122 [doi]. doi: 10.1371/journal.pone.0069122.
- Donaldson L, Li B, Cusimano MD.** Economic burden of time lost due to injury in NHL hockey players. *Injury Prevention.* 2014 Jan 19. PMID: 24446078. AID: 10.1136/injuryprev-2013-041016. [Epub ahead of print].
- Effendi K, Spears J.** Interventional Neuroradiology: Applications in Skullbase Surgery. In: Thieme (eds), *Handbook of Skullbase Surgery.* 2014 May.
- Egeto P, Fischer CE, Ismail Z, Smith EE, Schweizer TA.** Lacunar stroke, deep white matter disease and depression: a meta-analysis. *International Psychogeriatrics.* 2014 Apr 9.

- Etminan N, Spears J, Macdonald L, et al.** Multidisciplinary Consensus on Assessment of Unruptured Intracranial Aneurysms: Proposal of an International Research Group. *Stroke*. 2014 Mar 25; 14.
- Friedman SM, Brubacher JR, Chisolmi D, Hunte GS, Frendo T, Winters M, Babul S, Chipman ML, Crompton PA, Cusimano MD, Harris MA, Reynolds CCO, Teschke K.** Circumstances of injuries to cyclists resulting in emergency department visits in Toronto and Vancouver. *Canadian Journal of Emergency Medicine*. 2013.
- Garavaglia MM, Das S, Cusimano MD, Crescini C, Mazer CD, Hare GM, Rigamonti A.** Anesthetic Approach to High-Risk Patients and Prolonged Awake Craniotomy Using Dexmedetomidine and Scalp Block. *Journal of neurosurgical anesthesiology*. 2013 Sep 21. PMID: 24064713. AID: 10.1097/ANA.0b013e3182a58aba.
- Garavaglia MM, Hare GM, Cusimano MD.** Local Anesthetic Toxicity During Awake Craniotomy. *J Neurosurg Anesthesiol*. 2013 Jul; 25(3): 355-6.
- Garavaglia M, Mak T, Cusimano MD, Rigamonti A, Crescini C, McCredy V, Romaschin A, Baker AJ, Hare GM.** Body Mass Index as a risk factor for increased serum Lactate during Craniotomy. *Minerva Anesthesiol*. 2013 Oct; 79(10): 1132-9.
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Schweizer TA, Kan K, Hung Y, Tam F, Naglie G, Graham S. Brain activity during driving with distraction: an immersive fMRI study. *Frontiers in Human Neuroscience.* 2013; 7(53).

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Sheldon S, Macdonald RL, Cusimano M, Spears J, Schweizer TA. Long-term consequences of subarachnoid hemorrhage: Examining working memory. *J Neurol Sci.* 2013 Sep 15; 332(1-2): 145-7.

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Topolovec-Vranic J, Ennis N, Ouchterlony D, Cusimano MD, Colantonio A, Hwang SW, Kontos P, Stergiopoulos V, Brenner L. Clarifying the link between traumatic brain injury and homelessness: workshop proceedings. *Brain Inj.* 2013; 27(13-14): 1600-5.

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Invited Visits

Das S: Congress of Neurological Surgeons Annual Meeting, San Francisco, California, United States, 21 Oct 2013. Invited Speaker: Linc-mediated angiogenesis in glioblastoma.

Perrin RG: WFNS Rabat Reference Center-Mohammed V. University Souissi Course for African Neurosurgeons, Rabat, Morocco, 29 Mar 2014. Invited Speaker: The Raccoon Eye Unmasked.

Perrin RG: Neurosurgical Society of America, St. Andrews by the Sea, New Brunswick, Canada, 6-7 Jun 2014. Invited Speaker: 1/ Introduction to Canadian Healthcare. 2/ Dr. Thomas P. Morley.

Spears J: Annual International Neuroradiology Symposium, Toronto, Canada, 20 Sep 2013. Invited Lecturer: Operator Volume and Outcomes in Endovascular Neurosurgery.

Spears J: Caribbean neurological sciences 2014, Montego Bay, Jamaica, 31 Jan 2014. Invited Speaker: Modern management of cerebral aneurysms and beyond.

Spears J: Canadian Neurological Sciences Federation, Banff, Ontario, Canada, 5 Jun 2014. Invited Lecturer: Operator Volume and Outcomes in Endovascular Neurosurgery.

Research and Investigations

3 Dimensional Printing Technology. *James H. Cummings Foundation.* Cusimano MD. (\$100,000.00 CAD, Jul 2013 - Jul 2013).

Acute Carotid Care in the Prevention of Stroke. *MOHLTC, Innovation Funds Provincial Oversight Committee (IFPOC).* Spears J, Turkell-Parrella D. (\$130,000.00 CAD, Apr 2014 - Mar 2016).

CAIN 1: Canadian Atherosclerosis Imaging Network. *CIHR.* Spears J, Tardif JC. (Jul 2013 - Jun 2014).

CIHR Team Grant in Traumatic Brain Injury and Violence. *Canadian Institutes of Health Research (CIHR).* Schweizer T, Cusimano M, Mann R, Tator C, et al. (\$1,983,131.00 CAD, Apr 2010 - Mar 2015).

Driving and the aging brain: an fMRI study. *Canadian Institutes of Health Research (CIHR).* Schweizer T, Graham S, Naglie G, Fischer C, Bedard M. (\$144,553.00 CAD, Apr 2014 - Mar 2015).

Edge Therapeutics EG-1962-02 NEWTON STUDY. *Edge Therapeutics/Medpace.* Spears J. Collaborators: Multi Center Study. (\$2,438,411.00 CAD, Jun 2013 - Jun 2014).

ESCAPE TRIAL. *CIHR* Spears J. (Mar 2014 - Jul 2014).

Improved Functional Magnetic Resonance Imaging for Pre-Surgical Planning of Brain Tumours. *Canadian Cancer Society.* Graham S, Bharatha A, Cusimano M, Das S, Schweizer TA. (\$185,055.00 CAD, Apr 2013 - Mar 2014).

Improving assessment and outcome after aneurysmal subarachnoid hemorrhage. *Ontario Ministry of Research and Innovation.* Schweizer T. (\$150,000.00 CAD, May 2011 - May 2016).

iPad tablet technology for HOME Rehabilitation in patients after stroke. *Centre for Stroke Recovery.* Saposnik G, Schweizer T, Gladstone D. (\$49,608.00 CAD, Jul 2012 - Jan 2014).

Joint Funding Award for the 2013 Summer Undergraduate Research Program. *Institute of Medical Science, University of Toronto.* Cusimano MD. (\$4,800.00, Jun 2013 - Aug 2013).

Microvessel Endovascular/Interventional Neuroradiology Research Fellowship Grant. Spears J, Marotta T, Montanera W. (Jul 2013 - Jun 2014).

Neurodegenerative Diseases of Aging. *The W. Garfield Weston Foundation.* Cusimano MD. (\$99,360.00 CAD, Feb 2013 - Feb 2014).

Neuroimaging Correlates of Delusions in Alzheimer's Disease and Related Dementias. *Canadian Institutes of Health Research (CIHR).* Fischer C, Schweizer TA, Millikin C, Ismail Z, Lix L, Munoz D, Shelton P.

(\$98,390.00 CAD, Apr 2014 - Mar 2016).

Neuroimaging Profiles of Neuropsychiatric Subgroups in Mild Cognitive Impairment and Early Alzheimer's Disease. *Canadian Institutes of Health Research (CIHR)*. Millikin C, Fischer C, Ismail Z, Schweizer TA, Chow T, Lix L, Shelton P. (\$50,000.00 CAD, Mar 2013 - Mar 2014).

Strategic Team Grant in Applied Injury Research: Traumatic Brain Injury & Violence: Reducing the risks, improving the outcomes. *Canadian Institutes of Health Research (CIHR)*. Cusimano MD, Ackery A, Asbridge M, Bhalariao S, Clarke D, Colantonio A, Comper P, Cukier W, Cullen J, Delay D, Donnelly P, Graham S, Harris J, Hoch J, Hoshizaki T, Hutchison M, Hwang S, Kontos P, Man R, Morton T, Rinner C, Roy E, Schweizer T, Shlonsky A, Snider C, Tator C, Tepperman L, Topolovec-Vranic J, Voaklander D, Wolfe D. (\$1,750,000.00 CAD, Jul 2010 - Jun 2016).

Tablet Technology for Functional Magnetic Resonance Imaging of Brain Activity: Improved Neurosurgical Planning of Brain Tumours. *MaRS Innovation*. Graham S, Schweizer T. (\$175,000.00 CAD, Nov 2011 - Nov 2013).

Targeting vascular mimicry in glioblastoma. *b.r.a.i.n.child*. Das S. (\$50,000.00 USD, Jul 2013 - Jul 2015).

The role of the epithelial-mesenchymal transition in the maintenance of stem-cell identity in glioblastoma brain tumor stem cells. *b.r.a.i.n.child*. Das S. (\$44,100.00, Jul 2011 - Jul 2013).

Trauma System Development in Canada: Overcoming the challenges of geography through an evaluation of structure and process. *Canadian Institutes of Health Research (CIHR)*. Nathens A, Gagliardi A, Pong R, Rubinfeld G, Schuurman N, Hameed S, Lawless B, Morrison L, Pandya A, Peters P, Schwartz B, Snider C, Tallon J, Cusimano MD. (\$1,990,000.00 CAD, Jul 2010 - Jun 2015).

Understanding Post-Stroke Driving Capacity: an fMRI Driving Simulator Study. *Heart and Stroke Foundation of Canada (HSFC)*. Schweizer T, Graham S, Naglie G, Saposnik G, Macdonald RL, Hung Y. (\$113,770.00 CAD, Jul 2013 - Jun 2014).

Validation of non-invasive rapid eye movements measurement as screening tool for mild traumatic brain injury. *Canadian Institutes of Health Research (CIHR)*. Cusimano MD, Schweizer TA, Bharatha A, Graham S, Gupta N, Ing E, Mullen S, Russell K, Topolovec-Vranic J, Yucel Y. (\$250,140.00 CAD, Mar 2012 - Sep 2015).

White matter injury and cognitive outcome after aneurysmal subarachnoid hemorrhage. *Heart and Stroke Foundation of Canada (HSFC)*. Schweizer T, Macdonald RL, Graham S, Roy E, Tymianski M. (\$142,642.00 CAD, Jul 2012 - Jun 2014).

Division of Orthopaedics

Dr. H. Ahn	Assistant Professor
Dr. E.R. Bogoch	Professor
Dr. T. Daniels	Associate Professor (Division Head)
Dr. J. Hall	Assistant Professor

Dr. M. McKee	Professor
Dr. A. Nauth	Assistant Professor
Dr. E. Schemitsch	Professor
Dr. J.P. Waddell	Professor
Dr. D. Whelan	Assistant Professor

Publications

Atrey A, Morison Z, Waddell JP, Schemitsch EH. A technique for avoiding notching of the anterior femur in total knee arthroplasty. *Ann R Coll Surg Engl*. 2013. 95(7): 530.

Aziz MS, Nicayenzi B, Crookshank MC, Bougherara H, Schemitsch EH, Zdero R. Biomechanical measurements of cortical screw purchase in five types of human and artificial humeri. *J Mech Behav Biomed Mater*. 2013 Nov. 19;30C: 159-167.

Aziz MS, Nicayenzi B, Crookshank M, Bougherara H, Schemitsch EH, Zdero R. Biomechanical measurements of stiffness and strength for five types of human and artificial humeri. *J Biomech Eng*. 2014 Mar 1. Epub.

Aziz MS, Tsuji MR, Nicayenzi B, Crookshank MC, Bougherara H, Schemitsch EH, Zdero R. Biomechanical measurements of stopping and stripping torques during screw insertion in five types of human and artificial humeri. *Proc Inst Mech Eng H*. 2014; 228(5) 446-455.

Bagheri ZS, El Sawi I, Schemitsch EH, Zdero R, Bougherara H. Biomechanical properties of an advanced new carbon/flax/epoxy composite material for bone plate applications. *J Mech Behav Biomed Mater*. 2013. 8(Epub).

- Bagheri ZS, Tavakkoli Avval P, Bougherara H, Aziz MS, Schemitsch EH, Zdero R.** Biomechanics of a new CF/Flax/Epoxy Plate versus a traditional metal plate for Vancouver B1 femur fractures: An experimental and computational study. *J Biomech Eng.* 2014. Epub.
- Beaton DE, Dyer S, Jiang D, Sujic R, Slater M, Sale JE, Bogoch ER, The Osteoporosis Fracture Clinic Screening Program Evaluation Team.** Factors influencing the pharmacological management of osteoporosis after fragility fracture: results from the Ontario Osteoporosis Strategy's fracture clinic screening program. *Osteoporosis International.* 2014 Jan; 25(1): 289-296.
- Bhandari M, Tornetta P 3rd, Rampersad SA, Sprague S, Heels-Ansdell D, Sanders DW, Schemitsch EH, Swiontkowski M, Walter S.** (Sample) Size-matters! An examination of sample size from the SPRINT trial. *Journal of Orthopaedic Trauma.* 2013. 27(4): 183-8.
- Busse JW, Bhandari M, Einhorn TA, Heckman JD, Leung KS, Schemitsch EH, Tornetta P 3rd, Walter SD, Guyatt GH.** Trial to re-evaluate ultrasound in the treatment of tibial fractures (TRUST): a multicenter randomized pilot study. *Trials.* 2014. 4:15(1) 206.
- Canadian Arthroplasty Society.** The Canadian Arthroplasty Society's experience with hip resurfacing arthroplasty: An analysis of 2773 hips. *Bone Joint Surgery.* 2013. 95(B) 1045-51.
- Crookshank MC, Beek M, Hardisty MR, Schemitsch EH, Whyne CM.** 3D atlas-based registration can calculate malalignment of femoral shaft fractures in six degrees of freedom. *Comput Aided Surg.* 2014. 19(1-3): 48-56.
- Crookshank M, Beek M, Singh D, Schemitsch EH, Wayne CM.** Can a semi-automated surface matching and principal axis-based algorithm accurately quantify femoral shaft fracture alignment in six degrees of freedom? *Med Eng Phys.* 2013. 35(7): 1028-36.
- Crookshank MC, Edwards MR, Sellan M, Whyne CM, Schemitsch EH.** Can fluoroscopy-based computer navigation improve entry point selection for intramedullary nailing of femur fractures? PMID. 2013. 5(Epub).
- Daniels TR.** Video: Surgical Technique for total ankle arthroplasty in ankles with preoperative coronal plane varus deformity 10 degrees or greater. *Journal of Bone & Joint Surgery - American Volume.* 2013 Oct 2.
- Daniels TR, Baumhauer J, Beasley W, DiGiovanni CW, Donahue R, Evangelista PT, Glazebrook M, Pinzur MS, Younger AE.** Establishing the relationship between clinical outcome and extent of osseous bridging between computed tomography assessment in isolated hindfoot and ankle fusions. *Foot and Ankle International.* 2013 Dec; 34(12): 1612-8.
- Daniels TR, Baumhauer J, Beasley W, DiGiovanni CW, Donahue R, Lin SS, Pinzur MS.** Survey on the need for bone graft in foot and ankle fusion surgery. *Foot and Ankle International.* 2013 Dec; 34(12): 1629-33.
- Daniels TR, Baumhauer J, DiGiovanni CW, Donahue R, Evangelista P, Glazebrook M, Pinzur M, Younger A.** Establishing the relationship between clinical outcome and extent of osseous bridging between CT assessment in isolated hindfoot and ankle fusions. *Foot and Ankle International.* 2013 Sep 16.
- Daniels TR, Bouchard M, Jones M, Singer S, Pinsker E, Wing KJ, Younger AE, Penner MJ.** Outcomes of tibiotalar or pantalar fusion versus total ankle replacement with ipsilateral subtalar complex joint fusion. *JBJS.* 2014 Jan 27.
- Daniels TR, Bouchard M, Khoshbin A, Kreder H, Leroux T, Wasserstein D, Wright J.** Re-operations following tarsal coalition resections: A population based study. *Journal of Foot and Ankle Surgery.* 2014 Apr 29.
- Daniels TR, DiGiovanni CW, Lin SS, Baumhauer JF, Younger A, Glazebrook M, Andreson J, Anderson R, Evangelista P, Lynch SE, the North American Orthopedic Foot and Ankle Study Group.** Recombinant Human Platelet-Derived Growth Factor-BB and Beta-Tricalcium Phosphate (rhPDGF-BB/B-TCP): An Alternative to Autogenous Bone Graft. *Journal of Bone and Joint Surgery (Am).* 2013 Jul 3; 95(13): 1184-92.
- Daniels TR, Dryden PJ, Glazebrook MA, Penner MJ, Pedersen E, Pinsker E, Wing KJ, Younger A.** Outcomes of total ankle arthroplasty in patients with rheumatoid arthritis and non-inflammatory arthritis: A multicenter cohort study comparing clinical outcome and safety. *Journal of Bone and Joint Surgery (Am.).* 2014 May 7.
- Daniels TR, Dryden PJ, Glazebrook M, Penner MJ, Wing KJ, Wong H, Younger AE.** Intermediate-term results of total ankle replacement and ankle arthrodesis: a COFAS multicenter study. *JBJS-Am.* 2014 Jan 15; 96(2): 135-142.
- Daniels TR, Klejman S, Pinsker E, Singer S, Houck J.** Ankle arthroplasty and ankle arthrodesis: Gait analysis compared with normal controls. *Journal of Bone and Joint Surgery (American).* 2013 Dec 18; 2013;95:3191(1-10).

- Daniels TR, Mayich DJ, Brodsky JW, Novak A, Perry SD.** Gait analysis for foot and ankle surgeons -- topical review, part 2: Approaches to multisegmental modeling of the foot. *Foot and Ankle International*. 2014 Feb; 35(2): 178-91.
- Daniels TR, Mayich DJ, Brodsky JW, Novak A, Vena D.** Gait analysis in orthopaedic foot and ankle surgery-- topical review, part 1: Principles and uses of gait analysis. *Foot and Ankle International*. 2014 Jan; 35(1): 80-90.
- Daniels TR, Mayich DJ, Mayich MS, Pinsker E, Mak W.** An analysis of the use of the Kellgren and Lawrence grading system to evaluate peritalar arthritis following total ankle arthroplasty. *Foot Ankle Int*. 2013 Nov; 34(11): 1508-15.
- Daniels TR, the PRAISE Investigators.** Prevalence of Abuse and Intimate partner violence Surgical Evaluation (PRAISE): A multi-national prevalence study in orthopaedic fracture clinics. *Lancet*. 2013 Sep 7; 382(9895): 866-76.
- Daniels TR, Trajkovski T, Cadden A, Pinsker E.** Outcomes of ankle arthroplasty with preoperative coronal-plane varus deformity 10 degrees or greater. *Journal of Bone & Joint Surgery - American Volume*. 2013 Aug 7; 95(15): 1382-88.
- Davis ET, Pagkalos J, Gallie PA, Macgroarty K, Waddell JP, Schemitsch EH.** Defining the errors in the registration process during imageless computer navigation in total knee arthroplasty: A cadaveric study. *Journal of Arthroplasty*. 2013 Aug. 20 Epub.
- Dehghan N, deMestral C, McKee MD, Schemitsch EH, Nathens A.** Flail chest injuries: A review of outcomes and treatment practices from the National Trauma Data Bank. *J Trauma Acute Care Surg*. 2014. 76(2): 462-8.
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- Dunwoody JM, McKee M.** Clavicle Fractures. In: Gregory Nicholson (eds), *Orthopaedic Knowledge Update Shoulder and Elbow*. 4. 2013 Oct 1; Vol. 1: 447-455. Rosemont, Illinois, United States: AAOS.
- Dvorak MF, Noonan V, Fallah N, Fisher C, Rivers C, Ahn H et al.** Minimizing Errors In Acute Traumatic Spinal Cord Injury Trials By Acknowledging The Heterogeneity of Spinal Cord Anatomy and Injury Severity: An Observational Canadian Cohort Analysis. *J. Neurotrauma*. 2014 May 8; Epub.
- Dwyer T, Whelan DB, Khoshbin A, Wasserstein D, Dold A, Chahal J, Nauth A, Murnaghan ML, Ogilvie-Harris DJ, Theodoropoulos JS.** The sizing of hamstring grafts for anterior cruciate reconstruction: intra- and inter-observer reliability. *Knee Surg Sports Traumatol Arthrosc*. 2014 Mar 23. PMID: 24658277. AID: 10.1007/s00167-014-2945-1. [Epub ahead of print].
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- Evaniew N, Simunovic N, McKee MD, Schemitsch EH.** Cochrane in CORR: Surgical versus conservative interventions for treating fractures of the middle third of the clavicle. *Clin Orthop Relat Res*. 2014. Epub.
- Gomes B, Olsen M, Donnelly M, Kumar A, Schemitsch EH.** Should we worry about periacetabular interference gaps in hip resurfacing? *Clinical Orthopaedics and Related Research*. 2013. 471(2): 422-9.
- Hageman MG, Guitton TG, Ring D, Schemitsch E, Science of Variation Group.** How surgeons make decisions when the evidence is inconclusive. *J Hand Surg Am*. 2013. 38(6): 1202-8.
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Hoang-Kim A, Schemitsch EH, Kulkarni AV, Beaton D. Methodological challenges in the use of hip-specific composite outcomes: linking measurements from hip fractures trials to the International Classification of Functioning, Disability and Health Framework. *Arch Orthop Trauma Surgery*. 2013 Aug. 10: Epub.

Hoang-Kim A, Schemitsch EH, Sale JE, Beaton D, Warmington K, Kulkarni AV, Reeves S. Understanding osteoporosis and fractures: an introduction to the use of qualitative research. *Arch Orthop Trauma Surgery*. 2013 Jul. 17(Epub).

Jolles BM, Beaton DE, Gross DK, Bogoch ER. Patient specific indices provide additional understanding of the outcome of total hip arthroplasty in patients with juvenile idiopathic arthritis. *Quality of Life Research*. 2013 Sep.

Kreder HJ, Stephen DJG, Schemitsch EH, McKee MD. Functional outcome of unstable posterior pelvic ring disruptions treated by sacro-iliac plating. *Journal of Orthopaedic Trauma*. 2014.

Leiter JR, Levy BA, Stannard JP, Fanelli GC, Whelan DB, Marx RG, Stuart MJ, Boyd JL, Macdonald PB. Accuracy and reliability of determining the isometric point of the knee for multiligament knee reconstruction. *Knee Surg Sports Traumatol Arthrosc*. 2013 Oct 6. PMID: 24096377. AID: 10.1007/s00167-013-2661-2 [doi].

Li R, Nauth A, Mahomed N, Ogilvie-Harris D, Schemitsch EH. Endothelial Progenitor Cell-Based Therapy for Orthopaedic Regenerative Medicine. In: Rajendram R, Preedy VR, Patel V (eds), *Stem Cells and Bone Tissues*. 2013: 3-21. Boca Raton: Taylor & Francis.

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Invited Visits

Ahn H: Fragility Fracture Network, Berlin, Berlin, Germany, 30 Aug 2013. Invited Speaker: Vertebral Compression Fracture Surgery.

Ahn H: Hip, Knee Spine Combined Meeting, Busan, Busan Gwang'yeoksi [Pusan-Kwangyokshi], Korea, Republic Of, 6 Sep 2013. Invited Speaker: 1/ Anterior Vertebral Body Reconstruction. 2/ Navigation in Deformity.

Ahn H: AO SPINE, Toronto, Ontario, Canada, 4 Oct 2013. Invited Lecturer: 1/ Management of Odontoid Fractures. 2/ Management of L4 Disk Herniation.

Ahn H: American Spine Injury Association ASIA, San Antonio, Texas, United States, 27 Feb 2014. Presenter: Current Treatment of Individuals With Traumatic Spinal Cord Injuries: Do We Need Age Specific Guidelines?

Ahn H: Canadian Spine Society - New Zealand Spine Society - Australian Spine Society, Lake Louise, Alberta, Canada, 27 Feb 2014. Presenter: Current Treatment of Individuals With Traumatic Spinal Cord Injuries: Do We Need Age Specific Guidelines?

Ahn H: Hanoi Medical University Division of Neurosurgery, Ha Noi, Ha Noi, thu do, Viet Nam, 24 May 2014. Invited Speaker: 1/ My Personal Experience With Computer Assisted Spine Surgery. 2/ Current Standards In The Management of Traumatic Spinal Cord Injury.

Ahn H: Malaysian Orthopaedic Association/Asia Computer Assisted Orthopaedic Surgery Annual Meeting, Kuala Lumpur, Wilayah Persekutuan Kuala Lumpur, Malaysia, 27 May 2014. Invited Speaker: My Personal Experience With Computer Assisted Spine Surgery.

Ahn H: Sichuan College of Rehabilitation, Zigong, Sichuan, China, 5 Jun 2014. Visiting Professor: My Personal Experience With Computer Assisted Spine Surgery.

Ahn H: Ditan Hospital - Capital University, Beijing, Beijing, China, 11 Jun 2014. Visiting Professor: 1/ My Personal Experience With Computer Assisted Spine Surgery. 2/ Anterior Thoracolumbar Vertebral Body Reconstruction.

Ahn H: Shaanxi Province Orthopaedic Hospital, Xian, Shaanxi, China, 11 Jun 2014. Invited Speaker: My Personal Experience With Computer Assisted Spine Surgery.

Ahn H: Taishan Medical University, Taian, Shandong, China, 13 Jun 2014. Invited Speaker: Anterior Thoracolumbar Vertebral Body Reconstruction.

Ahn H: Yingkou Hospital, Yingkou, Liaoning, China, 13 Jun 2014. Invited Speaker: Anterior Thoracolumbar Vertebral Body Reconstruction.

Ahn H: Shandong Province Annual Orthopaedic Surgery Meeting, Laiwu, Shandong, China, 14 Jun 2014. Distinguished Speaker: Anterior Thoracolumbar Vertebral Body Reconstruction.

Bogoch ER: American Society for Bone & Mineral Research, Baltimore, Maryland, United States, 7 Oct 2013. Speaker: Outcomes of an Orthopaedic Post Fracture Bone Health Assessment Program.

Bogoch ER: National Osteoporosis Foundation Interdisciplinary Symposium on Osteoporosis: ISO2014, New Orleans, Louisiana, United States, 24 Apr 2014. Presenter: Symposium on Case Studies.

Bogoch ER: Combined Meeting of the American Orthopaedic Association and the Canadian Orthopaedic Association, Montreal, Quebec, Canada, 20 Jun 2014. What Works -- and What Doesn't -- in Fracture Secondary Prevention. In: Panel on Geriatric Fracture and Bone Health Care: What Progress Have We Made?

Daniels T: AOFAS, Hollywood, Florida, United States, 17 Jul 2013. Invited Speaker: Complex reconstruction: New advances and old favorites The adult flatfoot: Cavovarus deformity - Do we really need to cut the heel?

Daniels T: Doha, Qatar, 23-24 Nov 2013. Distinguished Speaker: 1/ Gait after TAR / Ankle fusion. 2/ Total ankle replacement in varus heel.

Daniels T: Canadian Orthopaedic Resident Review in Reconstructive Surgery 2014, Toronto, Ontario, Canada, 16 Jan 2014. Invited Speaker: 1/ CORR-Recon Ankle reconstruction. 2/ CORR-Recon Top 10 Things You Need to Know. 3/ CORR-Recon Foot and Ankle: Case Debrief.

Daniels T: AOFAS, La Jolle, California, United States, 17-18 Jan 2014. Invited Speaker: 1/ A Case-Based Approach to Deformity Correction Session on Ankle Arthritis Deformity - Arthroplasty: "Surgical Strategies for the Failed Total Ankle". 2/ A Case-Based Approach to Deformity Correction Session on Medial Column Deformity-Flatfoot: "Calcaneal Osteotomies". 3/ A Case-Based Approach to Deformity Correction Session on Tibio-Talar Trauma and Deformity: "Strategies for the failed total ankle".

Daniels T: The Dewar Society, San Francisco, California, United States, 6 Feb 2014. Presenter: Surgical technique for total ankle arthroplasty in ankles with perioperative coronal plane varus deformity of 10 degrees or greater Podium presentation.

Daniels T: AAOS 2014 Annual Meeting, New Orleans, Louisiana, United States, 14-15 Mar 2014. 1/ Distinguished Speaker: Ankle replacement: Implant positioning - Critical analysis. 2/ Moderator: Emerging methods for treatment of ankle arthritis Compare the functional and biomechanical outcomes of ankle fusion and TAR. Indications, complications, surgical techniques and outcomes of both surgical procedures.

Daniels T: Niagara Falls, Ontario, Canada, 4 Apr 2014. Keynote Speaker: Pedorthic Association of Canada - 2014 Symposium Biomechanics of the ankle and treatment options for end-stage ankle arthritis.

Daniels T: Canadian Orthopaedic Foot and Ankle Society, Toronto, Ontario, Canada, 11-12 Apr 2014. 1/ Chair: Tarsal coalitions in adults. 2/ Moderator: Revision Foot and Ankle Surgery -- Panel discussion. 3/ Moderator: Foot and Ankle Clinics -- "Four Live Interactive Patients Presentations" for clinical examination, advice.

Daniels T: AOFAS, Westerville, Ohio, United States, 3 Jun 2014. Invited Speaker: AAOS - AOFAS Specialty Day Webinar - The role of orthobiologic adjuncts in foot and ankle fusion: 1/ RHPDGF in hindfoot fusion. 2/ Case reviews.

Daniels T: COA/AOA. Montreal, Quebec, Canada, 2014 Jun 20. Presenter: 1/ Foot & Ankle. 2/ Does the SF-36 mental health composite score predict functional outcome after surgery in patients with end stage arthritis? 3/ Outcomes of tibiotalar or pantalar fusion versus total ankle replacement with ipsilateral subtalar or triple fusion.

Hall J: Zimmer Institute, Thunder Bay, Ontario, Canada, 28 Nov 2013. Facilitator: Upper Extremity.

McKee M: Edinburgh International Trauma Symposium, Edinburgh, City of, United Kingdom, 20-23 Aug 2013. Invited Lecturer: 1/ Clavicle Fractures Practical Workshop. 2/ Distal Humeral Fractures Practical Workshop. 3/ Terrible Triad Symposium. 4/ Elbow: Complications Symposium. 5/ The Case for Operative Treatment: Clavicle Symposium. 6/ ACJ Injuries Symposium.

McKee M: JBJS, Needham, Massachusetts, United States, 1 Sep 2013. Presenter: Displaced, fractures of the clavicle: Who should be fixed? web commentary.

McKee M: AO Trauma Columbia, Cartagena, Colombia, 25 Sep 2013. Invited Lecturer: 1/ Mala union de clavícula (clavicle malunion). 2/ No union de clavícula: Cuando y como? (clavicle nonunion). 3/ Luxo fractura posterior de hombro en paciente joven (posterior shoulder). 4/ No union y mala union de humero distal (distal humerus). 5/ Fracturas de olecranon (olecranon fractures). 6/ Artroplastia de codo: alternativa en fracturas de humero distal (TEA). 7/ Inestabilidad rotatoria posterolateral (PLRI). 8/ Inestabilidad medial: Codo inestable (medial instability).

McKee M: Orthopaedic Trauma Association, Phoenix, Arizona, United States, 10-11 Oct 2013. Presenter: 1/ Upper Extremity/Wrist/Hand. 2/ Assessment of Fracture Repair - What is the Problem and is there a Consensus? 3/ Managing Hardware-Related Infections: Evidence Based Strategies.

McKee M: AO Trauma, Davos, Switzerland, 10-13 Dec 2013. Invited Speaker: 1/ Proximal carpus injuries Masters Course-upper extremity. 2/ Distal radial and DRUJ injuries Masters Course-upper extremity. 3/ Humeral shaft and distal humeral injuries Masters Course-upper extremity. 4/ Malunion in Forearm Fractures Masters Course-Upper Extremity. 5/ Instability of the Elbow Master Course-Upper Extremity.

McKee M: AAOS, New Orleans, Louisiana, United States, 12 Mar 2014. Invited Speaker: Debate: Distal Radius Malunion - Treat the radius Specialty Day Combined Session.

McKee M: University of California at San Francisco, San Francisco, California, United States, 23 Apr 2014. Visiting Professor: 1/ Grand Rounds - UCSF Orthopaedics. 2/ Case Presentations - UCSF Orthopaedics. 3/ Resident Lecture Series.

McKee M: Columbia University, New York, New York, United States, 9-10 May 2014. Invited Lecturer: 1/ The two most important research papers this year in orthopaedic trauma. 2/ Total elbow replacement Orthopaedic Trauma. 3/ Clavicle fractures: When and how should they be fixed? 4/ Clavicle Orthopaedic Trauma.

Nauth A: 2013 Annual Meeting of the Orthopaedic Trauma Association, Phoenix, Arizona, United States, Oct 2013. Presenter: 1/ Operative Versus Non-Operative Treatment for Distal Radius Fractures: Evidence Based Medicine. 2/ Surgical Approaches for Rib Fracture Fixation. 3/ Efficacy of Autografts: Do Harvest Sites Matter? 4/ Stem Cell Populations for Fracture Healing: Which Ones are Most Useful? 5/ The Effects of Endothelial Progenitor Cell Therapy on Diabetic Rat Fracture Healing.

Nauth A: 2014 Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, Louisiana, United States, Mar 2014. Presenter: 1/ Periprosthetic Fractures of the Tibia in Total Knee Arthroplasty. 2/ Periprosthetic Fractures of the Femur in Total Hip Arthroplasty. 3/ Fractures of the Distal Humerus: Evidence-Based Surgical Approaches and Fixation Strategies. 4/ The Effects of Endothelial Progenitor Cell Therapy on Diabetic Rat Fracture Healing.

Nauth A: 2014 Annual Meeting of the Trauma Association of Canada, Montreal, Quebec, Canada, Apr 2014. Presenter: Evidence for Rib Fracture Fixation.

Schemitsch E: 7th Annual Baltimore Hip and Knee Course, Baltimore, Maryland, United States, Aug 2013. 1/ Moderator: Hip Resurfacing. 2/ Panelist: What would you do: complex hip and knee cases Part I. 3/ Panelist: What would you do: complex hip and knee cases Part II.

Schemitsch E: The Hip Society, Charleston, South Carolina, United States, Oct 2013. Presenter: 1/ Prevalence and predictors of pseudotumor and elevated metal ion levels following large-diameter head metal-on-metal total hip arthroplasty. 2/ The acetabular component introducer as a tool for intraoperative prediction of implant position in total hip arthroplasty. 3/ Prevalence and predictors of pseudotumor and elevated metal ion levels following large-diameter head metal-on-metal total hip arthroplasty. 4/ The acetabular component introducer as a tool for intraoperative prediction of implant position in total hip arthroplasty.

Schemitsch E: Orthopaedic Trauma Association Annual Meeting, Phoenix, Arizona, United States, Oct 2013. Presenter: 1/ Assessment of Fracture Repair: Moderator. 2/ Basic Science Paper Session: Moderator. 3/ The operative vs non-operative treatment of humeral shaft fractures: What does EBM tell us. 4/ Rib fracture fixation in 2013: The need for an RCT.

Schemitsch E: Basic Science Focus Forum Annual Meeting, Phoenix, Arizona, United States, Oct 2013. Presenter: 1/ Symposium: Hip fixation recommendations in 2013: intramedullary nailing. 2/ Conducting International Clinical Research: What resources are necessary. 3/ Infection symposium: moderator. 4/ Musculoskeletal infection: paper moderator and overview presenter.

Schemitsch E: 53rd Annual Manitoba Orthopaedic Symposium, Winnipeg, Manitoba, Canada, Oct 2013. Speaker: 1/ Hip resurfacing? MOM THA: Is there any role in 2013. 2/ Use of bone substitutes in orthopaedic trauma in 2013. 3/ Periprosthetic fractures of the femur: Current management concepts.

Schemitsch E: International Society for Technology in Arthroplasty, Palm Beach, Florida, United States, Oct 2013. Presenter: Total hip arthroplasty following failure of core decompression and tantalum rod insertion for femoral head avascular necrosis.

Schemitsch E: Great Expectations North Hip and Knee Meeting, Montreal, Quebec, Canada, Nov 2013. 1/ Moderator: Knee meeting. 2/ Presenter: Managing the stiff TKA 3/ Debater: The patella should not be resurfaced in TKA. 4/ Presenter: Metal allergy in TKA. 5/ Presenter: Tip and tricks to reduce dislocation in THA. 6/ Panelist: Hip cases.

Schemitsch E: Expert Meeting Proximal Humerus Fractures, Bologna, Italy, Dec 2013. Panelist.

Schemitsch E: Canadian Orthopaedic Association, Montreal, Quebec, Canada, Jun 2014. Speaker: 1/ Bone defects: When are orthobiologics indicated? 2/ Orthopaedic workforce needs: Challenges in a changing environment. 3/ Osteoporotic fractures in the elderly: Optimizing surgical management.

Waddell JP: Brazilian Society of Orthopaedics & Traumatology (SBOT), Rio de Janeiro, Brazil, 11 Jul 2013. Invited Speaker: The Most Frequent Complications in THA.

Waddell JP: Fragility Fracture Network Global Congress, Berlin, Germany, 20-31 Aug 2013. Presenter: 1/ Improving Access to Surgical Care for Hip Fracture Patients. 2/ A Scorecard for Hip Fracture Care.

Waddell JP: Fragility Fracture Network Global Congress, Berlin, Germany, 30 Aug 2013. Chair: 1/ Changing Policy and Practice. 2/ Can We Prove That Looking After Fragility Fractures Well Costs Less Than Looking After Them Badly?

Waddell JP: 7th International Symposium Total Knee Arthroplasty, Krakow, Poland, 4 Oct 2013. 1/ Moderator: Session 1: General Topics. 2/ Invited Speaker: Indications and Outcomes in Total Knee Replacement Surgery.

Waddell JP: Champlain LHIN, Ottawa, Ontario, Canada, 10 Oct 2013. Invited Speaker: Orthopaedics - Provincially / Nationally; Facilitated Discussion Consultation session about the Regional Orthopaedic Program and Distribution of Services, Champlain LHIN.

Waddell JP: 34th SICOT Orthopaedic World Congress, Hyderabad, India, 17-19 Oct 2013. 1/ Invited Speaker: Conservative Therapy ARTOF Instructional Course Lecture - Ankle Fractures. 2/ Instructor: External Fixateur, Open Reduction, Internal Fixation - Closed Reduction and Splinting ARTOF Surgical Instructional Course - Ankle Fractures. 3/ Invited Speaker: Early Total Care Instructional Course Lecture - Polytrauma. 4/ Invited Speaker: Complications of Acetabular Fractures by Means of Hip Arthroplasty Symposium - Acetabular Fractures.

Waddell JP: 33rd Israel Orthopaedic Association Meeting, Tel Aviv, Israel, 27-28 Nov 2013. 1/ Co-Moderator: Trauma. 2/ Invited Speaker: Treatment Algorithm for Femoral Neck Fractures. 3/ Invited Speaker: Randomized Trials of Bearing Surfaces in Total Hip Replacement - 20 Years Experience. 4/ Invited Speaker: Defining Best Practice for Hip Fracture Management.

Waddell JP: 10th Central European Orthopaedic Congress and Congress of the Croatian Orthopaedic and Traumatology Association, Split, Croatia, 9 May 2014. 1/ Presenter: A Randomized Controlled Trial Comparing Wear of Oxidized Zirconium and Cobalt-Chrome on Standard and Cross-Linked Polyethylene. 2/ Presenter: A Scorecard for Hip Fracture Care. 3/ Invited Speaker: ARTOF - Femoral Neck Fracture: ORIF or THR. 4/ Moderator: Session 4: Hip - Part 1.

Waddell JP: 15th European Federation of National Associations of Orthopaedics & Traumatology, London, United Kingdom, 4-6 Jun 2014. 1/ Presenter: A Randomized Controlled Trial Comparing Wear of Oxidized Zirconium and Cobalt-Chrome on Standard and Cross-Linked Polyethylene. 2/ Moderator: Thromboprophylaxis. 3/ Invited Lecturer: ARTOF: Periprosthetic Fractures (1) Diagnostic & Classifications (2) Instructional Workshop 2.

Waddell JP: Combined Canadian Orthopaedic Association and American Orthopaedic Association, Montreal, Quebec, Canada, 19 Jun 2014. Moderator: Adult Reconstruction; Hip 1.

Grants

Abuse screening in orthopaedic surgery: Building knowledge and capacity for change. *Faculty of Medicine, University of Toronto.* Schemitsch EH, Gotlib L, Young A, Rotstein O. (\$9,425.00 CAD, Jan 2013 - Dec 2014).

A comparison of endothelial progenitor cell (EPC) based gene therapy versus mesenchymal stem cell (MSC) based gene therapy for the healing of bone defects. *Orthopaedic Trauma Association (The) (OTA).* Nauth A, Schemitsch EH. (\$50,000.00 CAD, Jan 2013 - Dec 2015).

A Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Study to Evaluate the Efficacy, Safety, and Pharmacokinetics of SUN13837 Injection in Adult Subjects with Acute Spinal Cord Injury. *Asubio Pharmaceuticals.* Ahn H, Ginsberg H. (\$250,000.00 USD, Jul 2012 - Jul 2014).

A Multicentre, Randomized Trial of Simple Decompression vs. Anterior Transposition of the Ulnar Nerve for Acute, Displaced Fractures of the Distal Clavicle. *Orthopaedic Trauma Association (The) (OTA).* Schemitsch EH, Hall JA, McKee MD, Canadian Orthopaedic Trauma Society. (\$78,630.00 USD, 2010 - 2013).

A Multi-Centre 2x2 Factorial Randomized Trial Comparing Sliding Hip Screws versus Cancellous Screws AND Vitamin D versus Placebo on Patient-Important Complications and Quality of Life in the Treatment of Young Adult (Ages 18-60) Femoral Neck Fractures (FAITH-2). *Canadian Institutes of Health Research (CIHR)*. Nauth A. (\$198,226.00 CAD, Oct 2013 - Sep 2015).

A randomized clinical trial of early weight bearing for operative ankle fractures. *Canadian Orthopaedic Trauma Society*. Dehghan N, Schemitsch EH, McKee MD. (\$6,000.00 CAD, Dec 2012 - Dec 2013).

A randomized trial of cannulated screws vs sliding hip screws for femoral neck fractures. *Canadian Institutes of Health Research (CIHR), FAITH Investigators*. Schemitsch E. (\$1,780,737.00 CAD, Jul 2010 - Jun 2014).

Bone marrow-derived stem cell-based gene therapy to accelerate fracture healing. *Canadian Institutes of Health Research (CIHR)*. Aubin J, Li R, Nauth A. (\$293,268.00 CAD, Jul 2011 - Jun 2014).

Effect of teriparatide in fracture healing in patients with incomplete Atypical Femur Fractures: A randomized controlled trial (the TAFF Trial). *Physicians Services Incorporated Foundation (The) (PSI)*. Bogoch ER. (\$170,000.00 CAD, Jul 2013 - Jun 2015).

Endothelial progenitor cells for the biological augmentation of rotator cuff repair. *PSI Foundation*. Schemitsch E, Watts E, Nauth A. (\$20,000.00 CAD, Jan 2013 - Dec 2014). Funded.

Evaluation of a novel scaffold treatment with VEGF for fracture healing. *Orthopaedic Trauma Association*. Schemitsch E, Li R. (\$25,000.00 CAD, Jan 2011 - Dec 2013).

Fixation using alternatives for the treatment of hip fractures (FAITH-2): A multi-centre 2X2 factorial randomized trial comparing sliding hip screws versus cancellous screws and vitamin D versus placebo on patient important outcomes and quality of life in the treatment of young adult femoral neck fractures. *Canadian Institutes of Health Research (CIHR)*. FAITH 2 Investigators, Bogoch ER, Schemitsch E. (\$198,226.00 CAD, Jan 2013 - Dec 2015).

Geometric optimization for fretting corrosion reduction of the head-neck taper connection in modular hip replacement prostheses. *Natural Sciences and Engineering Research Council (NSERC)*. Wight C, Schemitsch EH. (\$21,500.00 CAD, Jul 2013 - Dec 2015).

Hip fracture evaluation with alternatives of total hi 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. *Canadian Institutes of Health Research*. Health Investigators. Schemitsch E. (\$1,434,636.00 CAD, Jan 2013 - Dec 2016).

How do fracture patients with comorbidities manage bone health treatment? *Canadian Institutes of Health Research (CIHR)*. Bogoch ER. (\$272,714.00 CAD, 2013 - 2016).

Instrumental activities of daily living and social roles following hip and knee replacement: Understanding why people's engagement doesn't change. *Arthritis Society (The)*. Davis A, Webster F, Jaglal S, Jenkinson R, Perruccio A, Waddell JP, Schemitsch E. (\$360,000.00 CAD, Jul 2011 - Jun 2014).

International orthopaedic multicenter study in fracture care (INORMUS). *Canadian Institutes of Health Research (CIHR)*. INORMUS Investigators, Schemitsch E. (\$500,000.00 CAD, Jan 2014 - Dec 2016).

Isolated locked compression plating versus cable plating and strut allograft with cerclage wiring for Vancouver B1 periprosthetic femoral fractures. *University of Toronto*. Nauth A, Schemitsch EH, U of T Arthroplasty/Trauma Collaborative. (\$45,000.00 CAD, Jan 2013 - Dec 2014).

Isolated Locked Compression Plating Versus Cable Plating and Strut Allograft with Cerclage Wiring for Vancouver B1 Periprosthetic Femoral Fractures: A Randomized Controlled Trial. *Orthopaedic Trauma Association (The) (OTA)*. Schemitsch E, Nauth A, Hall JA, McKee MD. (\$79,349.00 USD, Jan 2013 - Jan 2014).

Locked compression plating versus cable plating combined with strut allografts for Vancouver B1 periprosthetic femoral fractures: A randomized controlled trial. *Orthopaedic Trauma Association (The) (OTA)*. Nauth A, Schemitsch EH. (\$79,400.00 CAD, Jan 2013 - Dec 2015).

Management of Proximal Humerus Fractures: A Scoping Review. *Canadian Institutes of Health Research (CIHR)*. Bhandari M, McKee MD, Cripton P, Fitzgerald C, Guy P, Jain R, MacIntyre N, Richards D, Slobogean G. (\$49,772.00 CAD, Oct 2012 - Oct 2013).

Midterm outcomes of HIntegra total ankle replacement. Integra Life Sciences. Daniels T. (60,000 Jul 2013 - Jun 2014).

MOHLTC Evaluation of an Osteoporosis Screening Program for Fragility Fracture Patients - Year 6. *Ontario Ministry of Health and Long-Term Care*. Bogoch ER. (\$350,000.00 CAD, 2012 - 2013).

MOHLTC Evaluation of an Osteoporosis Screening Program for Fragility Fracture Patients - Year 7.

Ontario Ministry of Health and Long-Term Care. Bogoch ER. (\$350,000.00 CAD, 2013 - 2014).

Operative vs. Non-Operative Treatment of Acute Unstable Chest Wall Injuries - A Multicentered RCT.

AO Foundation. Dehghan N, McKee MD, Schemitsch EH, Hall JA, Canadian Orthopaedic Trauma Society.

(\$119,137.00 CHF, Mar 2012 - Mar 2014).

Operative versus non-operative treatment of acute unstable chest wall injuries: a multi centered randomized controlled trial.

PSI Foundation. McKee MD, Nauth A, Dehghan N, Vicente M, Schemitsch EH.

(\$126,000.00 CAD, Jan 2013 - Dec 2015).

ORIF vs non-operative treatment for unstable chest wall injuries. A randomized multi centre clinical trial.

AO Foundation. McKee MD, Dehghan N, Nauth A, Schemitsch EH. (\$120,000.00 CAD, Jan 2012 - Dec 2014).

Partnership for applied research in fracture prevention programs for the elderly.

Canadian Institutes of Health Research (CIHR). Bogoch ER. (\$499,499.00 CAD, Apr 2012 - Mar 2015).

Reamer Irrigator Aspirator (RIA) versus Autogenous Iliac Crest Bone Graft for the Treatment of Non-unions: A Randomized, Multicentre, Clinical Trial.

Orthopaedic Trauma Association (The) (OTA). Schemitsch EH, Nauth A, Hall JA, McKee MD.

(\$79,500.00 USD, Jul 2011 - Jun 2014).

Reamer Irrigator Aspirator (RIA) versus Autogenous Iliac Crest Bone Graft (ACIBG) for the Treatment of Non-unions: A Multicentre Randomized Trial.

AO Foundation. Nauth A, Schemitsch EH, Hall JA, McKee MD.

(\$130,000.00 CHF, Mar 2012 - Mar 2014).

Reporting outcomes of the Exemplary Care Program.

Amgen Canada Inc (Mississauga, ON). Bogoch ER.

(\$100,000.00 CAD, Nov 2013 - Oct 2014).

Research study of fracture secondary prevention.

Clifford Martin. Bogoch ER. (\$10,000.00 CAD, Jul 2013 - Jun 2014).

Rick Hansen Spinal Cord Injury Registry Grant.

Rick Hansen Institute. Ahn H, Ginsberg H. (\$120,000.00 CAD, Jul 2011 - Jun 2014).

The Use of Autologous Endothelial Progenitor Cells (EPCs) for the Healing of a Bone Defect in a Large Animal Model.

Orthopaedic Trauma Association (The) (OTA). Nauth A. (\$50,000.00 CAD, 2013).

The use of autologous endothelial progenitor cells for the healing of a bone defect in a large animal model.

Orthopaedic Trauma Association (The) (OTA). Nauth A, Schemitsch EH. (\$50,000.00 CAD, Jan 2014 - Dec 2016).

Dec 2016).

The use of endothelial progenitor cells (EPCs) for fracture healing in a diabetic fracture model.

Orthopaedic Trauma Association. Lin C, Schemitsch EH. (\$10,000.00 CAD, Jan 2011 - Dec 2013).

Transformative bioglass coatings for surgical applications.

Canadian Institutes of Health Research (CIHR). Towler MR, Schemitsch EH, Peel S, Zalzal P. (\$485,934.00 CAD, Jan 2014 - Dec 2017).

UTAC – University of Toronto Trauma-Arthroplasty Collaboration: A Randomized Controlled Trial of Isolated locked compression plating versus cable plating and strut allograft with cerclage wiring for Vancouver B1 periprosthetic femoral fractures.

University of Toronto, Orthopaedic Divisional Funding Collaboration Initiative. Nauth A. (\$45,000.00 CAD, 2013).

What are fracture patients' understanding of risk of future fracture?

Canadian Institutes of Health Research (CIHR). Bogoch ER. (\$150,738.00 CAD, 2012 - 2014).

Honours Received

Ahn H: Best Research Presentation, American Spinal Injury Association ASIA. Apr 2014 - Apr 2014.

Bogoch ER: Merck Canada - Patient First Award, Merck Canada, Canada. For leadership in developing and implementing The Exemplary Care Program. 2013

Bogoch ER: Lindy Fraser Award, Osteoporosis Canada, Canada. For research in osteoporosis. 2013

Hall J: Donald J. Currie Undergraduate Teaching Award, Orthopaedic Surgery, Dept of Surgery, Faculty of Medicine, Ontario, Canada. Display excellence in undergraduate education. Jul 2013 - Jun 2014.

Nauth A: Edwin G. Bovill Award, Orthopaedic Trauma Association. For best scientific paper at the 2013 Orthopaedic Trauma Association Annual Meeting, Phoenix, AZ. 2013

Schemitsch E: Canadian Orthopaedic Trauma Society. Bovil Award Best Paper 2013. Jul 2013 - Jul 2014.

Schemitsch E: St. Michael's Hospital Term Chair in Fracture Care Research, University of Toronto. Jul 2013 - Jun 2018.

Division of Plastic and Reconstructive Surgery

Dr. J.L. Mahoney Professor (Division Head)

Dr. M.A. Musgrave Assistant Professor

Publications

Fnais N, Gomes T, Mahoney J, Alissa S, Mamdami M. Temporal Trend of Carpal Tunnel Release Surgery: A Population-Based Time Series Analysis. *PLOS one*. 2014 May 1; 9(5): 1-6.

Gorrini C, Baniyadi PS, Harris IS, Silvester, J, Inoue S, Snow B, Joshi PA, Wakeham A, Molyneux SD, Martin B, Bouwman P, Cescon DW, Elia JA, Winterton-Perks Z, Cruickshank J, Brenner D, Tseng A, Musgrave M, Berman HK, Khokha R, Jonkers J, Mak TW, Gauthier ML. BRCA1 Interacts with NRF2 to regulate antioxidant signaling and cell survival. *Journal of Experimental Medicine* 2013 Jul 29; 210(8): 1529-44.

Invited Visits

Musgrave MA: Canadian Society of Plastic Surgeons 67th Annual Meeting, Calgary, Alberta, Canada, 2013. Presenter: Immediate breast reconstruction in patients with locally advanced breast cancer (LABC) is safe and does not interfere with oncology treatment.

Musgrave MA: Locally Advanced Breast Cancer National Consensus, Cambridge, Ontario, Canada, 2013. Invited Speaker: Breast Reconstruction: Biases in Delivery and Role of Immediate Reconstruction in LABC.

Musgrave MA: Trillium Health Center, Mississauga, Ontario, Canada, 12 Feb 2014. Invited Speaker: Breast Reconstruction: Balancing Patient's Desires & Oncological Safety.

Musgrave MA: Windsor Regional Hospital - Breast Health Center, Windsor, Ontario, Canada, Jun 2014. Invited Speaker: Breast Reconstruction on Breast Cancer Patients.

Research and Investigations

Exploring Factors that Influence Breast Reconstruction Use and Outcomes: Phase I: How do Physician Attributes Influence Reconstruction Decision Making. *Canadian Breast Cancer Foundation (CBCF)*. Gagliardi A, Baxter N, Musgrave MA. (\$188,180.00 CAD, 2011 - 2014). Funded.

Utilization and Timing of Breast Reconstruction in the Treatment of Breast Cancer in Ontario: A Population-Based Study. *Canadian Breast Cancer Foundation (CBCF)*. Zhong T, Baxter N, Hofer S, Urbach D, Sutradhar R, Musgrave MA. (\$257,474.00 CAD, 2011 - 2014).

Wounds and Surgical Site Infections II: Pilot Testing and Tool for Early Wounds Infection Detection. *Ontario Ministry of Health and Long-Term Care*. Mahoney JL. (\$4,701.14 CAD, Jul 2012 - present).

Wounds and Surgical Sites Infections III: Development and Evaluation of Mobile Application for patient Detection of Surgical Site Infections. *Ontario Ministry of Health and Long-Term Care*. Mahoney JL. (\$4,479.34 CAD, Mar 2014 - present).

Wounds and Surgical Site Infections: Development of a Web-based tool for Patient Education. *Ontario Ministry of Health and Long-Term Care*. Mahoney JL, Musgrave MA. (\$4,871.00 CAD, 2012 - 2013).

Honours Received

Musgrave MA: Medical Education Teaching Award for Clerkship, St. Michael's Hospital, Plastic Surgery, Dept of Surgery, Faculty of Medicine, Toronto, Ontario, Canada. Jul 2013.

Division of Urology

Dr. R.J.D. Honey Professor
Dr. J.Y. Lee Lecturer

Dr. M. Ordon Assistant Professor
Dr. K. Pace Associate Professor (Division Head)
Dr. R.J. Stewart Assistant Professor

Publications

Foell K, Finelli A, Yasufuku K, Bernardini M, Waddell T, Pace K, Honey J, Lee J. Robotic surgery basic skills training: Evaluation of a pilot multidisciplinary simulation-based curriculum. *Canadian Urological*

Association Journal. 2013 Dec; 7(11-12): 430-4.

Foell K, Furse A, Honey RJD, Pace KT, Lee JY. Multidisciplinary Validation Study of the da Vinci Skills Simulator®: Educational Tool and Assessment Device. *Journal of Robotic Surgery*. 2013 Dec; 7(4): 365-369.

Foell K, Honey RJ. Percutaneous Nephrolithotomy in the Prone-Flexed and Lateral-Flexed Positions. 2013. In: *Percutaneous Renal Surgery* (Manoj Monga, ed.). Wiley Blackwell.

Foell K, Honey RJ, Pace KT. Stone baskets and forceps. 2013. In: *Ureteroscopy: Indications, Instrumentation and Technique*. *Current Clinical Urology* (Manoj Monga, ed.).

Foell K, Ordon M, Ghiculete D, Lee JY, Honey RJ, Pace KT. Does baseline radiography of the kidneys, ureters, and bladder help facilitate stone management in patients presenting to the emergency department with renal colic? *J Endourol*. 2013 Dec; 27(12): 1425-1430.

Gupta V, Lantz AG, Alzharani T, Foell K, Lee JY. Baseline Urologic Surgical Skills among Medical Students: Differentiating Trainees. *Canadian Urological Association Journal*. 2014.

Johnson B, Abouassaly R, Ghiculete D, Stewart RJ. Evaluating the effectiveness of a smoking warning label on raising patient awareness of smoking and bladder cancer. *J Urol*. 2013 Aug; 190(2): 475-9.

Khan F, Moskowitz R, Graversen J, Ordon M, Clayman RV, Landman J. Instrumentation and Surgical Technique: Step-by-Step Percutaneous Nephrolithotomy: Endoscopic Guidance. In: Monga M and Rane A (eds), *Percutaneous Renal Surgery*. 2013. Wiley-Blackwell.

Kwong J, Lee JY. Robotic-assisted Pyeloureterostomy for Lower Pole Ureteropelvic Junction Obstruction in an Incomplete Duplicated System. *Journal of Endourology, Part B Videourology*. 2014 Apr; 28(2).

Lantz AG, O'Malley P, Ordon M, Lee JY. Endoscopic-guided Percutaneous Nephrolithotomy: A Technique to Reduce Radiation Dose. *Canadian Urological Association Journal*. 2014.

Lantz AG, Ordon M, Pace KT, Honey RJ. Prone versus supine lasix renal scan to assess surgical success after laparoscopic and robot-assisted pyeloplasty. *J Endourol*. 2013 Dec; 27(12): 1431-1434.

Lantz AG, Pace KT, Honey RJ. Flank bulge following supracostal percutaneous nephrolithotomy: a report of 2 cases. *Canadian Urological Association Journal*. 2013 Aug; 7:7-8.

Lee JY, Lantz AG, McDougall EM, Landman J, Gettman M, Sweet R, Sundaram CP, Zorn KC. Evaluation of Potential Distractors in the Urology Operating Room. *Journal of Endourology*. 2013 Sep; 27(9): 1161-1165.

Masui O, White NM, DeSouza LV, Krakovska O, Matta A, Metias S, Khalil B, Romaschin AD, Honey RJ, Stewart R, Pace K, Bjarnason GA, Siu KW, Yousef GM. Quantitative proteomic analysis in metastatic renal cell carcinoma reveals a unique set of proteins with potential prognostic significance. *Mol Cell Proteomics*. 2013; 12: 132-44.

Millman AL, Pace KT, Ordon M, Lee JY. Surgeon-specific factors affecting treatment decisions among Canadian urologists in the management of pT1a Renal Tumours. *Canadian Urological Association Journal*. 2014 Jun; 8(5-6): 183-189.

Ordon M, Eichel L, Landman J. Fundamentals of Laparoscopic and Robotic Urologic Surgery. In: Wein AJ, Kavoussi LR, Partin AW and Peters CA (eds), *Wein: Campbell-Walsh Urology*. 11. 2014 Feb; Vol. 1. United States: Elsevier.

Ordon M, Findeiss L, Landman J. MR-Guided Renal Ablation. In: Liao J and Su L-M (eds), *Advances in Image-Guided Urologic Surgery*. 2013 Jul. United States: Springer.

Ordon M, Landman J. Renal mass biopsy: "just do it". *J Urol*. 2013 Nov; 190(5): 1638-1640.

Ordon M, Perlis N, Landman J. Endoscopic Management of Upper Tract TCC. *Urology Practice*. 2014 May; 1(1): 22-26.

Satkunasivam R, Ordon M, Hu B, Mullen B, Lo K, Grober E, Jarvi K. Hormone abnormalities are not related to the Erectile Dysfunction and Decreased Libido Found in Many Men with Infertility. *Fertility and Sterility*. 2014 Feb.

White NM, Masui O, Desouza LV, Krakovska O, Metias S, Romaschin AD, Honey RJ, Stewart R, Pace K, Lee J, Jewett MA, Bjarnason GA, Siu KW, Yousef GM. Quantitative Proteomic Analysis Reveals Potential Diagnostic Markers and Pathways Involved in Pathogenesis of Renal Cell Carcinoma. *Oncotarget*. 2014 Feb; 5(2): 506 - 518.

Honours Received

Honey RJD: Annual Meeting Canadian Urological Association, St. John's, Newfoundland and Labrador, Canada, 29 Jun 2014. Presenter: 1/ Interim Results of a Randomized Trial Comparing Narrow versus Wide Focal Zones for Shock Wave Lithotripsy of Renal Calculi. 2/ Interim Results of a Randomized Trial Comparing Narrow versus Wide Focal Zones for Shock Wave Lithotripsy of Renal Calculi.

Lee J: 2013 World Congress of Endourology and Shock Wave Lithotripsy, Louisiana, United States, Oct 2013. Invited Speaker: Highlights: Education & Simulation.

Lee J: Canadian Urological Association Annual Meeting, Canada, Jun 2014. Presenter: Surgeon-specific Factors Affecting Treatment Decisions in the Management of Small Renal Cancers.

Lee J: Canadian Urological Association, Canada, Jun 2014. Invited Speaker: Educational Forum - Medical Management of Stones.

Ordon M: SIU Annual Meeting, British Columbia, Canada, 8-9 Sep 2013. Presenter: 1/ Regional Variation in the Surgical Management of Kidney Stone Disease in the Province of Ontario. 2/ The Changing Demographics of Patients Undergoing Surgical Treatment of Kidney Stone Disease Over the Last 20 Years.

Pace K: Societe Internationale d'Urologie, Vancouver, British Columbia, Canada, 8-9 Sep 2013. 1/ Invited Speaker: Ureteral Access Sheaths: Pro. 2/ Invited Speaker: Stone retropulsion in ureteroscopy. 3/ Invited Speaker: Tips and Tricks for ureteroscopy. 4/ Chair: Panel on Ureteroscopy: Putting it all together.

Pace K: Canadian Urology Research Consortium, Toronto, Ontario, Canada, 6 Oct 2013. Distinguished Speaker: Personalized medicine in 2013: Individualized management of nephrolithiasis.

Research and Investigations

Can surgical “warm-up” with instructor feedback improve operative performance of surgical trainees? *Sunnybrook Health Sciences Centre (Toronto, ON).* Kroft J, Ordon M, Lee JY, Pittini R. (\$9,704.00 CAD, Oct 2013).

Implementation of Multi-disciplinary Simulation-based Team Training: Improving Management of Surgical Crisis Situations. *St. Michael's Hospital Alternative Funding Plan.* Lee J, Pace K, Honey RJD, Stewart RJ, Hayter M. (\$9,592.00 CAD, Apr 2013 - Mar 2014).

Kidney Information Database Network Evaluation System. *Academic Health Science Centre AFP.* Ordon M, Lee J, Pace KT, Honey RJD, Stewart R. (\$9,840.00 CAD, Mar 2014 - Mar 2015).

Women's College Hospital. *AHSC AFP Innovation Funds.* Grober E, Pace K, Shuler T, Andonian S. (\$17,000.00 CAD, Jan 2013 - Jan 2014).

Honours and Awards

Lee J: DCCP Excellence Award in Education and Research for 2013, St Michael's Hospital, University of Toronto. Sep 2013

Lee J: CUA Scholarship Fund Award, Canadian Urological Association. \$40,000.00. Jun 2014

Lee J: Urology Faculty Postgraduate Teaching Award (Surgical Teacher), University of Toronto. Urology, Dept of Surgery, Faculty of Medicine. Jun 2014

Stewart R: Aikins award, University of Toronto. Dept of Surgery, Faculty of Medicine. Jul 2013 - Jun 2014.

Division of Vascular Surgery

Dr. M. Al-Omran Professor (Division Head)
Dr. V. Campell Assistant Professor

Dr. A. Moloney Assistant Professor
Dr. W. Tanner Assistant Professor
Dr. M.D. Wheatcroft Assistant Professor

Publications

Ali A, O'Callaghan A, Moloney MA, Kelly C, Moneley D, Leahy AL. The effect of carotid stenting on endarterectomy practice – A single institution experience. Surgeon. Epub May 2014.

Aljabri B, Al-Omran M. Surgical management of vascular thoracic outlet syndrome: A teaching hospital experience. *Annals of Vascular Disease.* 2013; 6(1): 74-79.

- Altoijry A, Al-Omran M, Lindsay TF, Johnston KW, Melo M, Mamdani M.** Validity of vascular trauma codes at major trauma centres. *Canadian Journal of Surgery*. 2013 Dec; 56(6): 405-8.
- Cape HR, Balaban DY, Moloney MA.** Endovascular repair of arteriovenous fistula after microendoscopic dissection and lamino-foraminotomy. *Vascular*. Epub 2014 Apr 9.
- El Eter E, Al Masri A, Habib S, Al Zamil H, Al Hersi A, Al Hussein F, Al Omran M.** Novel links among peroxiredoxins, endothelial dysfunction, and severity of atherosclerosis in type 2 diabetic patients with peripheral atherosclerotic disease. *Cell Stress Chaperones*. 2014 Mar; 19(2): 173-81.
- Fnaiss N, Soobiah C, Lillie E, Perrier L, Tashkhandi M, Straus S, Mamdani M, Al-Omran M, Tricco A.** Harassment and Discrimination in Medical Training: A Systematic Review and Meta-analysis. *Academic Medicine*. 2014 May; 89(5): 817-27.
- Grimaldi V, Mancini FP, Casamassimi A, Al-Omran M, Zullo A, Infante T, Napoli C.** Potential benefits of cell therapy in coronary heart disease. *Journal of Cardiology*. 2013 Nov; 62(5): 267-76.
- Lovren F, Pan Y, Quan A, Singh KK, Khan R, Gupta N, Brezden-Masley C, Teoh H, Wheatcroft MD, Al-Omran M, Verma S.** BRCA1 shields vascular smooth muscle cells from oxidative stress. *Journal of Thoracic and Cardiovascular Surgery*. 2014 Jun; 147(6): 1946-1955.
- Moloney A.** The Peripheral Vascular Exam. University of Toronto (eds), 2013. Faculty reviewer, University of Toronto Essentials of clinical examination handbook. 2013.
- Napoli C, Paolisso G, Casamassimi A, Al-Omran M, Barbieri M, Sommesse L, Infante T, Ignarro LJ.** Effects of Nitric Oxide on Cell Proliferation: Novel Insights. *J Am Coll Cardiol (JACC)*. 2013 Jul; 62(2): 89-95.
- Owens M, Mohan H, Roche-Nagle G, Moloney T, Baker J, Sheehen S, Mehigan D, Barry M.** Patient knowledge of peripheral arterial vascular disease in an outpatient setting: an Achilles heel? *Ir Med J*. 2013 Apr; 106(4): 116-8.
- Pedlow H, Cormier A, Provost M, Bailey S, Balboul G, Agnello A, Coleman J, Fox P, Moloney MA, Nixon S.** Patient perspective on information needs for amputation secondary to vascular surgery: What, when, why, and how much? *Journal of Vascular Nursing*. 2014.
- Taccone FS, Crimi E, Anstey J, Infante T, Donadello K, Scolletta S, Al-Omran M, Napoli C.** Endothelium and Regulatory Inflammatory Mechanisms During Organ Rejection. *Angiology*. 2014 May; 65(5): 379-87.
- Wheatcroft M, Lindsay T, Lossing A.** Two cases of arteriovenous fistula formation between the external iliac vessels following endovenous laser therapy. *Vascular*. 2014 Feb 24.
- Woodley-Cook J, Prabhudesai V, Moloney T.** Use of embolic protection devices in treating acute arterial occlusions: an interventional radiology and vascular surgery collaborative learning experience. *BMJ*. 2013 April 10.
- Yanagawa B, Singh K, Quan A, Wang R, Garg A, Khan R, Pan Y, Lovren F, Teoh H, Wheatcroft M, Verma S.** Autophagy Gene Fingerprint in Human Ischemia and Reperfusion. *Journal of Thoracic and Cardiovascular Surgery*. 2014 Mar; 147(3): 1065-1072.

Research and Investigations

TAC-CALL: Thoracic Aortic Care – Comprehensive Aortic Care on-line from acute presentation to long-term follow-up. AHSC AFP Innovation Fund. Moloney A, Peterson M. (\$81,984.00 2012 – 2014)



Sunnybrook Health Sciences Centre

Dr. Avery Nathens,
Surgeon-in-Chief

Heads of Divisions

Dr. G. Cohen	Cardiac Surgery
Dr. A. Dueck	Vascular Surgery
Dr. T. Mainprize	Neurosurgery
Dr. H. Kreder	Orthopaedic Surgery
Dr. Binhammer	Plastic and Reconstructive Surgery
Dr. R. Kodama	Urology
Dr. Natalie Coburn	General Surgery

The 2013-14 academic year within the Department of Surgery at Sunnybrook has been one of academic growth and broader integration through the development of relationships with community partners and stronger alignment with Sunnybrook Research Institute. Specifically, we have consolidated our Division of Vascular Surgery with that of North York General and Mackenzie Health and we anticipate greater integration with Mackenzie Health in other areas over the coming year. Relationships with the Toronto East General Hospital, particularly in the area of urologic oncology continue to advantage patients at both sites through a shared robotic program. There has been an increasing focus on quality and patient safety through more structured morbidity and mortality rounds across several divisions and directed initiatives focusing on both surgical site infections and operating room efficiency. Additionally, Sunnybrook has joined the National Surgical Quality Improvement Program to ensure our patients are receiving the highest level of surgical care. Together, these initiatives will ensure we provide the best possible care when it matters most.

Recruitment

Dr. Victor Yang was recruited to the Division of Neurosurgery as a surgeon scientist with a clinical focus of endovascular neurosurgery. As an engineer, he also holds a position as a scientist at Sunnybrook Research Institute (Physical Sciences platform) where he focuses on applying technologies to improve surgical navigation

Dr. Nicole Look Hong was recruited to the Division of General Surgery as a surgeon investigator with a clinical focus on surgical oncology, breast cancer and melanoma. Dr. Look Hong holds a position as an Associate Scientist at Sunnybrook Research Institute (Evaluative Clinical Sciences platform), where she focuses her work on improving cancer care efficiency through economic analyses and systematic evaluation of new technologies.

Dr. Junaid Bhatti was recruited as a scientist at Sunnybrook Research Institute (Evaluative Clinical



Sciences platform) with a focus on injury epidemiology, particularly the relationship between obesity and injury.

Departures

None

Division Reports

Cardiac surgery

Dr. Steve Femes passed on the baton as division head to **Dr. Gideon Cohen**. Dr. Femes was recognized for his leadership of the Division of Cardiac Surgery and subsequently the combined division of cardiac and vascular surgery since 2000. He was also recognized for 25 years of service to Sunnybrook. The Division continued to build upon the excellence in structural heart disease through further growth in the Transcatheter Aortic Valve Implantation (TAVI) and MitraClip programs. Dr. Cohen was featured by CTV News for “Operation Tweet: Toronto hospital live tweets heart bypass surgery” to teach the public about heart disease during Heart Health Month. **Dr. Fuad Moussa** was a recipient of the Peters-Boyd Academy Clerkship Teaching Award.

Neurosurgery

Dr. Todd Mainprize was appointed as the division head, taking over **Dr. Michael Schwartz’s** position. Dr. Schwartz leadership of the division over 15 years along and his service to Sunnybrook over a 35-year period were recognized. Dr. Mainprize was the recipient of the Marvin Tile Distinguished Service Award for his contributions both locally and regionally in advancing the goals of the division and the hospital. **Dr. Leo Da Costa** and his team were the only Canadian research group to be awarded a grant from a partnership between the National Football League and General Electric to support research in mild TBI. Through an initiative led by **Dr. Victor Yang**, the Division focused efforts to improve the quality of care of patients with ischemic stroke through the development of an interventional stroke pathway to reduce the time interval between stroke and clot extraction. Dr. Yang’s work in improving spinal navigation systems using biophotonics was featured by CBC News.

General Surgery

Dr. Sherif Hanna embarked on sabbatical in Egypt to develop a surgical residency program. Additionally, he received a special award at the Harrison Dinner for his longstanding service to the Department of Surgery. He was also the recipient of the Leo Stevens Excellence in Leadership award for his contributions as head of surgical oncology and Division Head, General Surgery.

Dr. Ted Ross was recognized for 35 years of service. Division members demonstrated success at Gallie day, with **Dr. Darlene Fenech** receiving the Brue Tovee Award for excellence in undergraduate education and **Dr. Avery Nathens** the Charles Tator Surgeon Scientist Mentoring Award. Dr. Nathens was also the recipient of the Peters-Boyd Academy Clerkship Teaching Award. Dr. Nathens leadership in policy development led to him being awarded the University of Toronto's Carolyn Tuohy Impact on Public Policy Award. Dr. Nathens was also named the de Souza Chair for Clinical Trauma Research. Dr. Calvin Law was promoted to full professor and was named Program Chief, Odette Cancer Centre and Cancer Care Ontario Regional Vice President, Toronto Central Regional Cancer Program. **Dr. Frances Wright** was appointed the Head, Breast Cancer & Melanoma Surgery, Temerty Breast Cancer Centre. **Dr. Andy Smith** assumed the position of Executive Vice President and Chief Medical Executive at Sunnybrook.

Plastic and Reconstructive Surgery

The Division, with its focus on breast and facial reconstruction following breast cancer and trauma, respectively has had a productive year. As part of a medical needs assessment team, **Dr. Oleh Antonyshyn** traveled to the Ukraine through the Canadian Ukrainian Foundation to determine priorities for training, the treatment of patients, medical equipment and capacity building in response to the recent crisis. **Dr. Manuel Gomez**, Scientist at SRI and St. John's Rehabilitation Institute was promoted to Associate Professor. **Dr. Marc Jeschke** led the Burn Program through a successful verification visit by the American Burn Association.

Urology

The Division has two primary areas of focus - reconstructive urology and prostate cancer and the Division members have demonstrated significant academic achievements in these areas over the past year. **Dr. Ron Kodama** received the University Award for Excellence in Postgraduate Medical Education and a Peters-Boyd Academy Clerkship Teaching Award. **Dr. Laurence Klotz** won the Lister Prize at Gallie Day, recognizing his outstanding and continuing research productivity of international stature. Dr. Klotz also received the Society of Urologic Oncology Medal from the American Urological Association (AUA) for significant achievements in the field. **Dr. Sender Herschorn** received the F. Brantley Scott Award from the AUA and was recognized for 35 years of service to Sunnybrook.

Orthopaedic Surgery

The Division of Orthopaedic Surgery continues its focus on arthroplasty and trauma at the Holland and Bayview sites, respectively. **Dr. Veronica Wadey** was promoted to Associate Professor and **Dr. Albert Yee** to Full Professor. Sunnybrook hosted the Inaugural Tile Lecture in Trauma, recognizing **Dr. Marvin Tile's** contributions to care of the injured patient. **Dr. Hans Kreder, Dr. David Stephen,** and **Dr. Richard Jenkinson** were awarded the Orthopaedic Trauma Association Bovill Award for best paper.

Vascular Surgery

Dr. Andrew Dueck assumed the position as Division Head with the creation of two separate Divisions from the Division of Cardiac and Vascular Surgery. Dr. Dueck was also awarded the Undergraduate Teaching Award within the Department of Surgery at Sunnybrook. Through the efforts of the Division, Sunnybrook has also become the site for training Vascular surgery residents citywide in the interpretation of non-invasive vascular studies, leading to Registered Physician in Vascular Interpretation (RPVI) credentialing. The RPVI credentialing demonstrates the highest standard in vascular ultrasound interpretation.

Education-Institutional

With further investment in the Sunnybrook simulation centre, Sunnybrook held a grand opening of its minimally invasive surgical skills simulation laboratory. With these new resources, **Dr. Shady Ashamalla** hosted TORSO-tech, a one day teaching and simulation-based course featuring live surgery and simulation in order to transfer knowledge to practicing surgeons. This educational endeavour was sufficiently novel that CTV News featured this event as a model for knowledge transfer to practicing surgeons.

As part of faculty development, the Department also hosted a leadership day focusing on the The Art of Conflict Resolution, led by expert mediator Gary Furlong. The event was very well received and served as an excellent model for improving communication and teamwork within the Department.

Division of Cardiac Surgery

Dr. G. Christakis Professor
 Dr. G. Cohen Associate Professor
 Dr. S. Fremes Professor (Division Head)

Dr. B.S. Goldman Professor
 Dr. F. Moussa Assistant Professor

Publications

- Deb S, Wijesundera H, Ko DT, Tsubota H, Hill S, Fremes SE.** Coronary artery bypass graft surgery vs. percutaneous interventions in coronary revascularization: a systematic review. *Journal of the American Medical Association.* 2013 Nov 20; 310(19): 2086-95.
- Gawad N, Moussa F, Christakis G, Rutka JT.** Planting the “SEAD” : Early comprehensive exposure to surgery for medical students. *J Surg Educ.* 2013 Jul; 70(4): 487-494.
- Goldman BS, Diamond J.** Mending Hearts and Building Bridges: The Story of Save a Childs Heart. May, 2014
- Holman WL, Davies JE, Lin JY, Wang Y, Goldman B, Bakaeen FG, Kelly R, Fremes SE, Lee KK, Wagner TH, Sethi GK; VA CSP 474 Investigators.** Consequences of radial artery harvest: results of a prospective, randomized, multicenter trial. *Journal of American Medical Association.* 2013 Nov; 148(11): 1020-3.
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- Verma S, Lovren F, Pan Y, Yanagawa B, Deb S, Karkhanis R, Quan A, Teoh H, Feder-Elituv R, Moussa F, Souza DS, Fremes SE.** Pedicled no-touch saphenous vein graft harvest limits vascular smooth muscle cell activation: the PATENT saphenous vein graft study. *European Journal of Cardiothoracic Surgeons.* 2014 Apr; 45(4): 717-25.
- Verma S, Lovren F, Yanagawa B, Fremes SE.** Coronary artery bypass graft, No-touch, Saphenous vein. *European Journal Cardio-Thoracic Surgery.* 2014 Apr 6. PMID: 24711505.
- Wong SS, Hockmann E, Moussa F, Bertram S.** Bullet Embolization From the Right Internal Jugular Vein to the Right Ventricle. *J Cardiothorac Vasc Anesth.* 2013 Aug; 4(27): 45-46.
- Yanagawa B, Algarni KD, Singh SK, Deb S, Vincent J, Elituv R, Desai ND, Rajamani K, McManus BM, Liu PP, Cohen EA, Radhakrishnan S, Dubbin JD, Schwartz L, Fremes SE.** Clinical, biochemical, and genetic predictors of coronary artery bypass graft failure. *Journal of Cardiothoracic Surgeon.* 2013 Dec 8; pii: S0022-5223(13): 01232-4.

Invited Visits

- Cohen G:** Canadian Association of Cardiac Rehabilitation, Montreal, Quebec, Canada, 18 Oct 2013. Speaker: “Clinical Updates: New and emerging trends in cardiology and cardiac surgery – what every rehabilitation specialist needs to know”.
- Fremes S:** Tokyo, Japan, 8 Jul 2013. Invited Speaker: TAVI Update from Surgical Perspective.
- Fremes S:** 18th Annual Meeting of the Japanese Association for Coronary Artery, Fukuoka, Japan, 12 Jul 2013. Invited Speaker: Long term results of Radial Artery Bypass.
- Fremes S:** Canadian Cardiovascular Society, Montreal, Ontario, Oct 2013. Speaker:TAVI.
- Fremes S:** American Heart Association, Dallas, Texas, 19 Nov 2013. Speaker: The Radial Artery Graft: How Best to Use It?
- Goldman B:** Association of Pediatric and Congenital Cardiology, Helsinki, Finland, May 21-24, 2014. Speaker: Surgical Management of Chronic Rheumatic Mitral Valve Disease in the Young: Single Centre Experience.
- Goldman B:** Heart Valve Society, New York, NY, May 10, 2014. Speaker: Fifteen Year Outcomes of the Toronto Stentless Porcine Valve.
- Moussa F:** Excellence in Interventional Cardiology, Whistler, British Columbia, Canada, 5 Dec 2013. Invited Speaker: The Acquisition of Technical Skills in Medicine The use of Simulation inthe Acquisition of Technical Skills.

Research and Investigations

Blood conservation in cardiac surgery using a noel transfusion algorithm based on point-of-care testing: a stepped-wedge cluster randomized controlled trial. Karkhouti K, Moussa F. (2013).

CABG Off or On Pump Revascularization Study (CORONARY). *Canadian Institutes of Health Research (CIHR)*. Lamy A, Yusuf S, Taggart D, Murkin J, Fremes SE. (\$6,580,411.00, Mar 2007 - Sep 2014).

CORONARY (On-Pump or Off-Pump Coronary Artery Bypass Grafting at 30 Days). *Canadian Institutes of Health Research (CIHR)*. Lamy A, Moussa F, The CORONARY Investigators. (2010 - present).

Developing and Evaluating a Simulation-Based Program for Teaching Off-Pump Coronary Artery Bypass Surgery. *Sunnybrook Education Research and Scholarship*. Moussa F, Dubrowski A, Ajjawi R. (\$10,000.00 CAD, Mar 2013 - Mar 2014).

Epicor Multicentre Trial. *Sunnybrook Health Sciences Centre*. Cohen G. (2007 - present).

GRIIP (Graft Imaging to Improve Patency). *Heart and Stroke Foundation of Canada (HSFC)*. Fremes S, Moussa F. (2009 - present).

Improving the assessment and treatment of severe aortic stenosis by evaluating care gaps and advancing risk predictions. *Canadian Institutes of Health Research (CIHR)*. Ko D, Fremes S. (\$331,058.00, Jul 2012 - Jun 2015).

Left Atrial Appendage Occlusion Study III (LAAOS III). *Canadian Institutes of Health Research (CIHR)*. Whitlock R, Fremes S. (\$146,205.00, Oct 2012 - Apr 2015).

Magna Ease Multicentre Trial. *Sunnybrook Health Sciences Centre*. Cohen G. (2007 - present).

MyCardic Recovery: A Clinical Application for Post Cardiac Surgery Patients. Cohen G. (Jul 2013 - Jun 2014).

SIRS (Phase IV Study of Perioperative Steroid's Effect on Death or MI in High Risk Patients Undergoing Cardiac Surgery Requiring Cardiopulmonary Bypass). *CIHR*. Yusuf S, Moussa F. (2010 - present).

SodiUm SeleniTe Administration IN Cardiac Surgery (SUSTAIN CSX®-trial). *Canadian Institutes of Health Research (CIHR)*. Heyland DK, Fremes S. (\$232,415.00, Jan 2014 - Jan 2016).

Steroids in cardiac surgery trial (SIRS). *Canadian Institute of Health Research (CIHR)*. Whitlock R, Fremes SE, Quantz M, Ross D, Singal R, Legare J, Brown C, Kieser T, Lamontagne F, Huang K. (\$4,915,889.00, Sep 2010 - Feb 2015).

SUPERIOR SVG (A comparison of conventional to no touch pedicle techniques for saphenous vein graft harvesting). Moussa F. (2010 - present).

Transfusion Requirements in Cardiac Surgery (TRICSII). *Canadian Institutes of Health Research (CIHR)*. Mazer D, Fremes S. (\$356,466.00, Jul 2011 - Jun 2014).

Transfusion Requirements in Cardiac Surgery (TRICS III). *Canadian Institutes of Health Research (CIHR)*. Shehata N, Fremes S. (\$3,323,110.00, Sep 2013 - Mar 2018).

Honours Received

Cohen G: Bernie Goldman Award for Excellence in Teaching, University of Toronto, Cardiac Surgery, Dept of Surgery, Faculty of Medicine, Toronto, Ontario, Canada. Dec 2013

Moussa F: Sunnybrook Moment of Service Excellence, Sunnybrook Health Sciences Centre, Ontario, Canada. 2013.

Division of General Surgery

Dr. S. Ashamalla	Assistant Professor	Dr. C. Law	Associate Professor
Dr. F. Brenneman	Associate Professor	Dr. N.J.L. Hong	Assistant Professor
Dr. P. Chu	Associate Professor	Dr. B. Nascimento	Assistant Professor
Dr. N. Coburn	Assistant Professor (Division Head)	Dr. A.B. Nathens	Professor
Dr. D. Fenech	Assistant Professor	Dr. T. Ross	Associate Professor
Dr. S. Hanna	Associate Professor	Dr. A. Smith	Professor
Dr. C. Holloway	Associate Professor	Dr. H. Tien	Associate Professor
Dr. P. Karanicolas	Assistant Professor	Dr. L. Tremblay	Assistant Professor
		Dr. F. Wright	Associate Professor

Publications

Adamina M, Rodger C, Ross T, Guenin M, Burnstein M, Cohen Z. Anal fistula plug: a prospective evaluation of success, continence and quality of life in the treatment of complex fistulas. *Colorectal Disease*. 2014 Jul;16(7):547-54.

Alali AS, Fowler RA, Mainprize TG, Scales DC, Kiss A, de Mestral C, Ray JG, Nathens AB. Intracranial Pressure Monitoring in Severe Traumatic Brain Injury: Results from the American College of Surgeons Trauma Quality Improvement Program. *J Neurotrauma*. 2013 Oct 15;30(20):1737-46.

Alali AS, McCredie VA, Golan E, Shah PS, Nathens AB. Beta Blockers for Acute Traumatic Brain Injury: A Systematic Review and Meta-analysis. *Neurocrit Care*. 2013 Sep 6.

Alali AS, Scales DC, Fowler RA, Mainprize TG, Ray JG, Kiss A, de Mestral C, Nathens AB. Tracheostomy timing in traumatic brain injury: A propensity-matched cohort study. *J Trauma Acute Care Surg*. 2014 Jan;76(1):70-8.

Ali A, Fergus K, Wright FC, Pritchard KI, Kiss A, Warner E. The impact of a breast cancer diagnosis in young women on their relationship with their mothers. *Breast*. 2014 Feb; 23(1): 50-5.

Arno AI, Amini-Nik S, Blit PH, Al-Shehab M, Belo C, Herer E, Tien Col H, Jeschke MG. Human Wharton's jelly-mesenchymal stem cells promote skin wound healing through paracrine signaling. *Stem Cell Res Ther*. 2014 Feb; 5(1): 28.

Beckett A, Tien HC. What has Changed in Operative Trauma Surgery in the Last Ten Years? *Current Opin in Crit Care*. 2013 Jul; 19: 599-604.

Behman R, McHardy P, Sawyer J, Lam-McCulloch J, Karanicolas P. Medial Open Transversus Abdominis Plane (MOTAP) Catheter Analgesia - A Simple, Safe, Effective Technique Following Open Liver Resection. *Journal of The American College of Surgeons*. 2013 Dec 30.

Bischof DA, Kim Y, Dodson R, Carolina Jimenez M, Behman R, Cocieru A, Blazer DG 3rd, Fisher SB, Squires MH 3rd, Kooby DA, Maithel SK, Groeschl RT, Clark Gamblin T, Bauer TW, Karanicolas PJ, Law CHL, Quereshy FA, Pawlik TM. Open Versus Minimally Invasive Resection of Gastric GIST: A Multi-Institutional Analysis of Short- and Long-Term Outcomes. *Annals of Surgical Oncology*. 2014 Apr 24. PMID: 24763984. AID: 10.1245/s10434-014-3733-3 [doi]. epub ahead of print .

Boscarino C, Tien H, Acker J, Callum J, Hansen AL, Engels P, Glassberg E, Nathens A, Beckett A. Feasibility and Transport of Packed Red Blood Cells into Special Forces Operational Conditions. *Journal of Trauma and Acute Care Surg*. 2014 Apr; 76(4): 1013-19.

Brar S, Law C, McLeod R, Helyer L, Swallow C, Paszat L, Seevaratnam R, Cardoso R, Dixon M, Mahar A, Lourenco LG, Yohanathan L, Bocicariu A, Bekaii-Saab T, Chau I, Church N, Coit D, Crane CH, Earle C, Mansfield P, Marcon N, Miner T, Noh SH, Porter G, Posner MC, Prachand V, Sano T, van de Velde C, Wong S, Coburn N. Defining Surgical Quality in Gastric Cancer: A RAND/UCLA Appropriateness Study. *Journal of the American College of Surgeons*. 2013 Aug; 217(2): 347-357.

Brar S, Look Hong N, Wright F. Multidisciplinary Cancer Care – Does it Improve Outcomes? *Journal of Surgical Oncology*. 2014 Jun.

Brar SS, Mahar AL, Helyer LK, Swallow C, Law C, Paszat L, Seevaratnam R, Cardoso R, McLeod R, Dixon M, Yohanathan L, Lourenco LG, Bocicariu A, Bekaii-Saab T, Chau I, Church N, Coit D, Crane CH, Earle C, Mansfield P, Marcon N, Miner T, Noh SH, Porter G, Posner MC, Prachand V, Sano T, van de Velde C, Wong S, Coburn NG. Processes of Care in the Multidisciplinary Treatment of Gastric Cancer: Results of a RAND/UCLA Expert Panel. *JAMA Surgery*. 2014 Jan; 154(5): 1100-9.

- Brar SS, Provvidenza C, Hunter A, Irish J, MacLeod RS, Wright FC.** Improving Multidisciplinary Cancer Conferences: A Population-Based Intervention. *Annals of Surgical Oncology*. 2014 Jan; 21(1): 16-21.
- Cil T, Wright F, Holloway CMB.** Surgical Resident Experience in Breast Diseases -- A National Study. *World Journal of Surgery*. 2014. DOI:10.1007/s00268-013-2414-x.
- Coburn N, Ravindran N, Vasilevksa-Ristovska J, Mahar A, Zhang Y, Gunraj N, Sutradhar R, Law C, Tinmouth J.** Location, Size, and Distance - Criteria for Quality in Esophagogastroduodenoscopy (EGD) Reporting for Pre-Operative Gastric Cancer Evaluation. *Surgical Endoscopy*. 2014 May; 28(5): 1660-7.
- Coburn N, Seevaratnam R, Paszat L, Helyer L, Law C, Swallow C, Cardoso R, Mahar A, Lourenco LG, Dixon M, Bekaii-Saab T, Chau I, Church N, Coit D, Crane CH, Earle C, Mansfield P, Marcon N, Miner T, Noh SH, Porter G, Posner MC, Prachand V, Sano T, van de Velde C, Wong S, McLeod R.** Optimal Management of Gastric Cancer: Results From an International RAND/UCLA Expert Panel. *Annals of Surgery*. 2014 Jan 1; 259(1): 102-8.
- Daine P, Stilos K, Moura S, Fitch M, McAndrew A, Gill A, Wright F.** Nurses' experiences caring for patients and families dealing with malignant bowel obstruction. *International Journal of Palliative Nursing*. 2013 Dec 20; 19(12): 593-8.
- Danjoux C, Law CHL.** A tribute to Dr. Larry Librach. *Hot Spot*. 2013 Nov; 15(4): 5.
- Dehghan N, de Mestral C, McKee MD, Schemitsch EH, Nathens A.** Flail chest injuries: a review of outcomes and treatment practices from the National Trauma Data Bank. *J Trauma Acute Care Surg*. 2014 Feb;76(2):462-8.
- de Mestral C, Laupacis A, Rotstein OD, Hoch JS, Haas B, Gomez D, Zagorski B, Nathens AB.** Early cholecystectomy for acute cholecystitis: a population-based retrospective cohort study of variation in practice. *CMAJ Open*. 2013;1:E62-E67.
- de Mestral C, Nathens AB.** Prevention, diagnosis, and management of surgical site infections: relevant considerations for critical care medicine. *Crit Care Clin*. 2013 Oct;29(4):887-94.
- de Mestral C, Rotstein OD, Laupacis A, Hoch JS, Zagorski B, Alali AS, Nathens AB.** Comparative Operative Outcomes of Early and Delayed Cholecystectomy for Acute Cholecystitis: A Population-Based Propensity Score Analysis. *Ann Surg*. 2014 Jan;259(1):16-7.
- Dixon M, Cardoso R, Tinmouth J, Helyer L, Law CHL, Swallow C, Paszat L, McLeod R, Seevaratnam R, Mahar A, Coburn NG; The Gastric Cancer Processes of Care Expert Panel.** What studies are appropriate and necessary for staging gastric adenocarcinoma? Results of an international RAND/UCLA expert panel. *Gastric Cancer*. 2014 Apr; 17(2): 377-82.
- Dixon M, Chung W, Coburn N.** Gastric Cancer Staging In: D'Annibale A, Pende V, Monsellato I, eds. *Gastric Cancer: From Staging to Surgical Treatment Procedures, Complications and Oncological Results*. In: 2013; Vol. Chapter 2: 37-66.
- Dixon M, El-Sedfy A, Coburn N.** Gastric Cancer Staging Gastric Cancer: Risk Factors, Treatment and Clinical Outcomes. In: 2013. United States: Nova Publishers.
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- Ebrahimi M, Siegler P, Holloway CMB, Plewes DB, Martel AL.** Evaluating thin-plate spline registration of the breast. *Phys Med Biol*. 2014 Feb.
- El-Sedfy A, Brar SS, Dixon M, Cannon JG, Coburn NG.** Role of Laparoscopic Resection in Gastric Cancer Treatment laparoscopy, Procedures, pain management and postoperative complications. In: Nova Publishers (eds), 2014.
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- Hallet J, Zih FS, Lemke M, Milot L, Smith AJ, Wong CS.** Neo-adjuvant chemoradiotherapy and multivisceral resection to optimize R0 resection of locally recurrent adherent colon cancer. *European Journal of Surgical Oncology*. 2014 Jun; 40(6): 706-12.
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- Ko Y, Law CHL.** Gastrointestinal stromal tumours (GIST). *Hot Spot*. 2013 Nov; 15(4): i-1.
- Korenkov M, Look Hong N, Raut C.** Individual Surgery for Gastric Gastrointestinal Stromal Tumors. *Surgical Technology International*. 2014 Apr.
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- Law C:** A Better Kinder Chemo: Dr. Calvin Law's Team Aims to Re-Invent the Front-Line Weapon Against Cancer. *Sunnybrook: Saving Lives, One Innovation at a Time*. 2013 Sep: 12-17. Canada. URL: http://lifeonplanetword.files.wordpress.com/2014/01/sunnybrook_fall_2013_lr.pdf.
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- Nascimento B, Callum J, Tien H, Rubinfeld G, Pinto R, Lin Y, Rizoli S.** Effect of a fixed-ratio (1:1:1) transfusion protocol versus laboratory-results-guided transfusion in patients with severe trauma: a randomized feasibility trial. *CMAJ.* 2013 Jul 15. [Epub ahead of print].
- Palter VN, Grantcharov TP, Ahmed N, Ryzynski A, Smith AJ, Ashamalla SM.** Development of an evidence-based technical skills and cognitive knowledge curriculum. *Canadian Journal of Surgery.* 2013 Jul.
- Palter VN, Grantcharov T, Ahmed N, Ryzynski A, Smith AJ, Ashamalla SM.** Development of an evidence-based and cognitive knowledge curriculum for colorectal surgery: Lessons Learned from Implementation. *Journal of Medical Education.* 2014 May.
- Passo E, Engels PE, Ball CG, Faidi S, Nathens AB, Tien HC, for the Canadian Trauma Trials Collaborative.** Tourniquet Use for Peripheral Vascular Injuries in the Civilian Setting. *Injury.* 2014 Mar; 45: 573-7.
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- Prummel MV, Done SJ, Muradali D, Majpruz V, Brown P, Jiang H, Shumak RS, Yaffe MJ, Holloway CMB, Chiarelli AM.** Digital compared to screen-film mammography: Breast cancer prognostic features in an organized screening program. *Radiology.* 2014 Feb 3. 232(1):197-204.
- Racz JA, Look Hong N, Latosinsky S.** In search of a gold standard scoring system for the subjective evaluation of cosmetic outcomes following breast-conserving therapy. *The Breast Journal.* 2014 Jun.
- Ravindran NC, Vasilevska-Ristovksa J, Coburn NG, Mahar A, Zhang Y, Gunraj N, Sutradhar R, Law CH, Tinmouth J.** Location, size and distance: criteria for quality in esophagogastroduodenoscopy reporting for pre-operative gastric cancer evaluation. *Surg Endosc.* 2014 Jan 23. Epub.
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- Schlachta CM, Ashamalla S, Smith AJ, Members of the MIS in the Management of Colon and Rectal Cancer Consensus Group.** MIS in the management of colon and rectal cancer: Consensus meeting of the Colorectal Cancer Association of Canada. *Surgical Endoscopy.* 2013 Nov; 27(11): 3981-9.
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Sharma S, Gomez D, Demestral C, Hsiao M, Rutka J, Nathens AB. Emergency access to neurosurgical care for patients with traumatic brain injury. *J Am Coll Surg.* 2014 Jan;218(1):51-7.

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Singh S, Wang J, Law CHL. Association between time to disease progression end points and overall survival in patients with neuroendocrine tumors. *Gastrointestinal Cancer: Targets and Therapy.* 2014 Apr.

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Tan J, Muir J, Coburn N, Singh S, Hodgson D, Saskin R, Kiss A, Paszat L, El-Sedfy A, Grunfeld E, Earle C, Law C. Surveillance patterns after curative-intent colorectal cancer surgery in Ontario, Canada. *Canadian Journal of Gastroenterology and Hepatology.* 2014.

Yang S, Alibhai S, Kennedy E, El-Sedfy A, Dixon M, Coburn NG, Kiss A, Law CHL. Optimal management of colorectal liver metastases in older patients: a decision analysis. *HPB.* 2014 Apr.

Zago TM, Pereira BM, Nascimento B, Alves MS, Calderan TR, Fraga GP. Hepatic trauma: a 21-year experience. *Rev Col Bras Cir.* 2013 Jul; 40(4): 318-22.

Invited Visits

Ashamalla S: Canadian Surgical Forum, Canada, Sep 2013. Invited Speaker: 1/ Current Surgical Management of Diverticulitis. 2/ Intracorporeal Side to Side Anastomosis - How I Do It.

Ashamalla S: Northern Ontario GI Gut Club, Barrie, Ontario, Canada, Mar 2014. Invited Speaker: Transanal Minimally Invasive Surgery (TAMIS).

Ashamalla S: Canadian Community Oncology Conference, Collingwood, Ontario, Canada, Jun 2014. Invited Lecturer: Rectal Cancer - A surgical perspective.

Holloway C: Canada, 4 Nov 2013. Presenter: Evaluation of a Novel Technique for More Accurate Pathologic Evaluation of Breast Lumpectomy Specimens.

Holloway C: Universite de Montreal, Montreal, Quebec, Canada, 10 Jan 2014. 1/ Invited Speaker: Preoperative MRI Staging in Breast Cancer: The Ontario Perspective. 2/ Chair: Management of the Axilla in 2014.

Karanicolas PJ: Global News, Toronto, Ontario, Canada, 15 Jul 2013. Speaker: Doctors at Sunnybrook Hospital unveil focused approach to fighting liver cancer.

Karanicolas PJ: CTV News, Toronto, Ontario, Canada, 21 Jul 2013. Speaker: Pump offers hope for patients with advanced colorectal cancer.

Karanicolas PJ: Ottawa Hospital Research Program - Multi-Centre Trials, Toronto, Ontario, Canada, 27 Nov 2013. Presenter: Periop-01 Protocol.

Karanicolas PJ: Canadian General Surgery Review Program, Toronto, Ontario, Canada, 28 Mar 2014. Invited Speaker: Liver Masses.

Law C: Canadian Surgery Forum, 2013. Presenter: Impact of epidural analgesia and fluid resuscitation on major adverse events following pancreaticoduodenectomy.

Law C: CSSO, Ottawa, Ontario, Canada, 19 Sep 2013. Presenter: The gall bladder The laparoscopic approach to the oncologic patient: the options and evidence.

- Law C:** Saskatchewan Cancer Agency, Saskatoon, Saskatchewan, Canada, 20 Sep 2013. Invited Speaker: Surgical Management of Advanced Neuroendocrine Tumours: Provincial Neuroendocrine Tumour Guideline Meeting.
- Law C:** The 17th ECCO – 38th ESMO – 32nd ESTRO European Cancer Congress, Amsterdam, Netherlands, 28 Sep 2013. Presenter: Surgical Topics in mCRC.
- Law C:** Colorectal Cancer Association of Canada-Personalized Medicine in the Management of Colorectal Cancer, Montreal, Quebec, Canada, 6 Nov 2013. Invited Speaker: Treatment of Metastatic Disease and Novel Pharmacologic Approaches. .
- Law C:** Canadian Colorectal Association of Canada, Vaughan, Ontario, Canada, 8 Nov 2013. Keynote Speaker.
- Law C:** Thunder Bay, Ontario, Canada, 12 Nov 2013. Invited Speaker: Optimizing Care of Patients with Metastatic Colorectal Cancer – Multidisciplinary Management of Patients with Colorectal Liver Metastases.
- Law C:** GIST NET GOLDS, Helsinki, Finland, 15 Nov 2013. Global Opinion Leader: Summit (GOLS) on GIST/NET GIST/NET GOLDS: Connecting Evolving Paradigms.
- Law C:** Royal College, Vancouver, British Columbia, Canada, 17 Nov 2013. Inaugural Meeting: Group Lead-Patient Communication and Information: Royal College’s Innovation and Technology Task Force.
- Law C:** Carcinoid NeuroEndocrine Tumour Society Canada, Ottawa, Canada, 10 May 2014. Speaker: Surgical Options and Challenges for NET Patients.
- Law C:** Nanjing First Hospital, Nanjing, China, 20 May 2014. Invited Speaker: 1/ Laparoscopic Distal Pancreatectomy. Lateral Approach. 2/ Multi-model Therapy for CRC - Cased Examples.
- Look Hong NJ:** Society of Surgical Oncology, Phoenix, American Samoa, United States, Mar 2014. Speaker: Cost-effectiveness Analysis of Staging Strategies in Patients with Regionally Metastatic Melanoma.
- Nascimento B:** Brazilian Trauma Conference, Bahia, Brazil, Aug 2013. Invited International Speaker: Massive Transfusion Protocols in Trauma.
- Nascimento B:** Clotwork Meeting, Innsbruck, Austria, 8 Nov 2013. Invited Speaker: Effect of a 1:1:1 (RBC:FP:PLT) Transfusion Ratio vs a Lab-guided Transfusion in Trauma: A Randomized Controlled Trial.
- Nascimento B:** Salzburg Weill Cornell/ MUW Seminar, Severe Bleeding Management, Salzburg, Austria, 20 Feb 2014. Speaker: Case Presentation: Massive Bleeding in a Pregnant Trauma Patient.
- Nathens AB:** American Association for the Surgery of Trauma. San Francisco, California, United States, 2013 Sep. Presenter: Are all deaths recorded equally? The impact of hospice care on to risk adjusted mortality.
- Nathens AB:** Washington-Alaska-Montana- Idaho (WAMI) Trauma Conference, University of Washington. Seattle, Washington, United States, 2013 Sep. **Keynote Speaker.** Trauma Systems.
- Nathens AB:** 2013 Sep 19. Media. Urgent Surgery: A forgotten wait time. Healthy Debate, <http://healthydebate.ca/2013/09/topic/wait-times-access-to-care/wait-times-for-urgent-surgery>. Ontario, Canada.
- Nathens AB:** First National Injury Research Methodology Course supported by CIHR Team Grant (Nathens). Montreal, Quebec, Canada, 2013 Nov. Presenter: Data Sources for Injury Research.
- Nathens AB:** Advances in Trauma Care: American College of Surgeons Committee on Trauma. Kansas City, Missouri, United States, 2013 Dec. **Keynote Speaker:** 1/ American College of Surgeons Trauma Quality Improvement Program. 2/ Managing competing priorities in trauma.
- Nathens AB:** Academic Surgical Congress. San Diego, California, United States, 2014 Feb. Presenter: The Trauma Center Organizational Culture Survey: Initial Studies on Survey Validation and Assessment of Trauma Centers.
- Nathens AB:** Royal Australasian College of Surgeons. Singapore City, Singapore, 2014 May. **Keynote Speaker:** 1/ Resuscitation and Management of the Elderly Injured Patient. 2/ High Impact Trauma Research. 3/ Lessons learned from the American College of Surgeons Trauma Quality Improvement Program.
- Smith AJ:** Peterborough Regional HSC Women’s Leadership Networking Group, Peterborough, Ontario, Canada, 27 Jan 2014. Invited Speaker: Reflections on Our Health Care System, Leadership & Women.
- Smith AJ:** Ontario Hospital Association/Critical Care Services Ontario, Toronto, Ontario, Canada, 31 Mar 2014. Panel Member: From Silo to System: Getting There.
- Smith AJ:** Cancer Quality Council of Ontario, Toronto, Ontario, Canada, 23 Jun 2014. Invited Speaker: Transitions of Care: key issues viewed through the lens of a Practitioner/Administrator.

Wright F: Durham Regional Cancer Centre Melanoma Disease Site Group, Oshawa, Ontario, Canada, 23 Apr 2014. Invited Speaker: Update on Melanoma Surgery.

Wright F: Ontario, Canada, 28 May 2014. Quoted in Globe and Mail article: Skin cancer - rising incidence and death rates.

Research and Investigations

Accelerated Diffusion of Strategic Quality Initiatives for Diagnosis and Treatment of Cancer. *Canadian Partnership Against Cancer.* Cancer Care Ontario. Holloway C, Kaan M, Padewski S, Sarsfield L, Matheson G. (\$865,000.00 CAD, Apr 2014 - Mar 2016).

Accurate and early detection of metastatic colorectal cancer with contrast-enhanced magnetic resonance imaging. *CHRP.* Cheung H, Karanicolas PJ. (CAD, 2014 - 2016).

Advanced Minimally Invasive Surgery Simulation-Based training to Learners of all Levels. *Johnson and Johnson.* Ashamalla S, Law C, Tepper J, Rynziski A, Tarshis J. (\$150,000.00 CAD, Apr 2013 - Apr 2014).

An innovative programme for teaching faculty an advanced minimally invasive surgical technique. *Adjudication Committee.* Ashamalla S. (\$9,391.00 CAD, Mar 2014 - Mar 2015).

A novel radiofrequency coil device for ablation of breast tumours: Development and testing of an immobilization and localization system for accurate coil deployment in breast tissue. *Sunnybrook Health Sciences Centre, General Surgery Academic Enrichment Fund.* McCann C, Look Hong N, Sherar M, Pignol JP, Wright FC. (\$10,000.00 CAD, 2013 - 2013).

A Patient-Centred Approach Toward Surgical Wait Times. *Sunnybrook General Surgery Associates Academic Enrichment Fund.* Holloway C, Coburn NG, Cordeiro E. (\$10,000.00 CAD, Jul 2013 - Jun 2014).

A Pilot Randomized Control Trial comparing Fibrinogen Concentrate Vs Placebo in Bleeding Trauma Patients. *Canadian Forces.* Nascimento B, Tien H, Karanicolas P, Nathens AB. (\$490,000 Oct 2013 – Sep 2016).

A population-based outcome and economic evaluation of interventions for gastric cancer. *CIHR.* Coburn N, Early C, Johnson A, Karanicolas P, Kiss A, Krahn M, Law C, Mahar A, Paszat L, Wright F, Irish J, Mcleod R, Brar S, Dixon M, Dobrow M. (\$28,133.00 CAD, Oct 2012 - Sep 2015).

A Virtual Education Tool to Empower Patients and Families for Safe and Effective Transition from Acute to Home Care. *AHSC, AHSC AFP INNOVATION FUND.* Karanicolas PJ. (\$100,000.00 CAD, Apr 2014 - Mar 2016).

Breast Ablation Therapy (BAT). A novel treatment paradigm for early breast cancer. *Tiffen Foundation.* McCann C, Look Hong N, Sherar M, Pignol JP, Wright FC. (\$70,000.00 CAD, 2014 - 2014).

Bridging the gap: Implementing a complex intervention to improve communication and collaboration between surgeons and intensivists. *Sunnybrook Health Sciences Centre and Ministry of Health and Long Term Care.* Cuthbertson B, Coburn N, Nathens AB. (\$92,126 2013 Apr - 2015 Mar).

Bringing evidence to the bedside: implementing an evidence-based clinical pathway for patients undergoing pancreatic cancer surgery. *Canadian Cancer Society Research Institute.* Wei A, Gallinger S, Urbach D, Karanicolas P. (\$100,000.00 CAD, Aug 2013 - Jul 2015).

Canadian Colorectal Cancer Consortium (C4): Clinical and Molecular Screening in Patients with Colorectal Cancer and their Family Members. *Terry Fox Research Institute (TFRI).* Gallinger S, Batist G, Hsieh E, Pollett A, Baxter N, Gryfe R, Ferguson S, Hart T, Smith AJ. (\$1,263,831.00 CAD, 2012 - 2014).

Coagulopathy in Trauma: A Comparative Study between ROTEM® and TEG®. *Defense Research and Development Canada, Canadian Department of National Defence.* Nascimento B. (\$154,976.00 CAD, Jul 2012 - present).

COMA Study – Catecholamines in Isolated Traumatic Brain Injury. *Physicians Services Incorporated Foundation (The) (PSI).* Rizoli S, Nascimento B. (\$75,000.00 CAD, 2012 - present).

Developing a Patient and Family-Centred Approach for Measuring the Quality of Trauma Care. *Canadian Institutes of Health Research (CIHR).* Stelfox T, Nathens AB. (\$628,692 CAD Jul 2011 – Jul 2015).

Development and Implementation of an Educational Intervention to Optimize Communication and Care of Patients with Resectable Pancreatic Cancer from Diagnosis to Treatment. *Pancreatic Cancer Canada.* Karanicolas P, Harth T, Gotlib Conn L, Wei A, Jayaraman S, Coburn N, Ellis J. (\$91,400.00 CAD, 2014 - 2016).

Electronic Care Plan: A Personalized, Patient-Centred Approach to Colorectal Cancer Care. *Canadian Institutes of Health Research (CIHR)*. Harth T, Stein B, Karanicolas PJ. (\$96,950.00 CAD, Mar 2014 - Feb 2015).

Evaluating quality improvement in colorectal cancer surgery in Ontario. *Canadian Institutes of Health Research (CIHR)*. Simunovic M, Baxter N, Forbes S, Urbach D, Brouwers M, Earle C, Stukel T Smith AJ. (\$619,014.00 CAD, Jan 2012 - Jan 2015).

Evaluating the effectiveness of organized breast assessment among women screened in the Ontario Breast Screening Program. *Canadian Institutes of Health Research*. Chiarelli A, Mirea L, Muradali D, O'Malley FP, Quan ML, Holloway C. (\$463,733.00 CAD, Jul 2013 - Jul 2016).

Fibrinogen in the Initial Resuscitation of Severe Trauma: a randomized feasibility trial. *Canadian Forces Health Services & CSL Behring Can.* Nascimento B. (\$540,262.40 CAD, Apr 2014 - present).

Hepatic Artery Infusional Pump Chemotherapy for Unresectable Colorectal Liver Metastases: A Feasibility Study. *Canadian Cancer Society*. Karanicolas P, Milot L, Yoo YJ. (\$100,000.00 CAD, Jan 2013 - Dec 2013).

Hepatopancreaticobiliary Community of Surgical Oncologists: Clinical, Evaluative, and Prospective Trails Teams (HPB CONCEPT Team). *CIHR*. Karanicolas P, Guyatt G, Barkun J, Dixon E, Porter G, Wei A. (\$24,900.00 CAD, Mar 2013 - Mar 2014).

HL-10-006 Toronto Regional Coordinating Center; Clinical Research Consortium to Improve Resuscitation Outcomes. National Institutes of Health (NIH) (USA). Morrison LJ, Dorian P, Cheskes S, Slutsky A, Nathens AB. (\$1,110,780 CAD Jul 2010 – Jun 2015).

Identifying Risk Factors for Blood Loss and Blood Transfusion in Patients Undergoing Major Liver Resection. *Sunnybrook Health Sciences Centre*. Karanicolas PJ. (\$8,500.00 CAD, Apr 2013 - Apr 2014).

Implementation and assessment of a novel multidisciplinary e-discharge summary to improve efficiency, satisfaction and safety of transfer of care for complex patients. *Sunnybrook AFP Association*. Tremblay L, Etchells E, Chan K, Farquharson L. (\$71,342.00 CAD, Jul 2011 - present).

Implementation of a Remote Thromboelastometry-guided Transfusion Algorithm to Improve Transfusion Decisions in Trauma. *Ontario AHSC AFP Innovation Fund*. Rizoli S, Nascimento B. (\$98,000.00, Sep 2012 - present).

Improving Cancer Symptom Management Through Knowledge Translation. *Canadian Cancer Society Research Institute (CCSRI)*. Bryant-Lukosius D, Cummings, G, Farrelly L, Fitch M, Forbes M, Green E, Greenberg A, Manii D, Martelli-Reid L, Miller P, Molloy S, Pond G, Seow H, Smith AJ, Snider A, Watson L, Wiernikowski J. (\$100,000.00 CAD, Jul 2012 - Jun 2014).

Innovation in abdominal wall reconstruction for complex ventral hernias using a new porcine biologic tissue matrix. *AHSC AFP, Innovation Fund*. Brenneman F, Smith AJ, Tien H, Sawyer J, Spencer F. (\$95,000.00 CAD, Mar 2012 - Mar 2014).

Magnetic resonance-guided focused ultrasound for recurrent rectal cancer-a pilot study. *Canadian Cancer Society*. Chu W, Hynynen K, Czarnota G, Wong S, Milot L, Chan K, Chopra R, Smith AJ. (\$132,000.00 CAD, Aug 2011 - Jun 2014).

Making surgery better: Developing an Enhanced Recovery after Surgery (ERAS) program undergoing pancreaticoduodenectomy. *Pancreatic Cancer Canada*. Wei AC, Karanicolas P. (\$100,000.00 CAD, 2014 - 2016).

Multicentre Evaluation of a Novel Technique of Analgesia Following Open Liver Resection: Midline Open Transversus Abdominis Plane (MOTAP) Catheters. *Sunnybrook Health Sciences Centre (Toronto, ON), AFP Innovation Fund*. Karanicolas P, Wei A, McHardy P, Sawyer J, Law C, Coburn N, Cleary S, McCluskey S, Kiss A, Behman R, Lam-McCulloch J. (\$98,562.00 CAD, Apr 2013 - Mar 2015).

Multicentre Evaluation of a Novel Technique of Analgesia Following Open Liver Resection: Midline Open Transversus Abdominis Plane (MOTAP) Catheters. *University Health Network, UHN Alternative Funding Plan Innovation Fund*. Clarke H, Karanicolas P, Wei A, McCluskey S, Ko R, Cleary S, McHardy P, Katz J, Ladak S, Sawyer J, Kiss A. (\$126,949.40 CAD, Apr 2013 - Mar 2015).

Operative versus Non-operative Treatment of Acute Unstable Chest Wall Injuries: A Multi Centered Randomized Controlled Trial. McKee M, Dehghan N, Nathens A, Baker A, Rizoli S, Tien H, Kreder H, Stephen D, Nousiainen M, Jenkinson R. (CAD, May 2012 - present).

Optimizing Inter-professional communication between Surgical Nurses and House Staff: An Exploratory Study. Coburn N. (\$99,986.00 CAD, Mar 2014 - May 2016).

Optimizing surgeon-patient communication following pancreatic cancer resection: a qualitative needs assessment. *Sunnybrook Education Advisory Council.* Karanicolas P, Wright F, Gottlieb Conn L, Harth T, Blakely K. (\$8,400.00 CAD, Mar 2014 - Feb 2015).

Optimizing surgeon-patient communication following pancreatic cancer resection: A qualitative needs assessment. *Sunnybrook AEF.* Karanicolas P. (\$10,000.00 CAD, May 2014 - Apr 2015).

Population based analysis of neuroendocrine tumours: Epidemiology, Processes of Care and Outcomes in Ontario. *University of Toronto, The Dean's Fund.* Singh S, Law CHL. (\$10,000.00 CAD, Jul 2009 - Jun 2014).

Potentiating antiangiogenic cancer therapy with the antivasular effects of ultrasound stimulated microbubbles. *Canadian Institutes of Health (CIHR).* Goertz D, Hynynen K, Law C, Kerbel R. (\$314,396.00 CAD, Apr 2014 - Mar 2017).

Pre-operative radiological staging modalities in the treatment of gastric cancer. How accurate are we? *AEF.* Law C, Coburn N. (\$99,000.00 CAD, Mar 2014 - Mar 2015).

Prospective Observational Prehospital and Hospital Registry for Trauma (PROPHET). Rizoli S, Baker A, Tien H, Tremblay L. (CAD, May 2012 - present).

Prospective, Randomized Optimal Platelet and Plasma Ratios (PROPR) Study. *Canadian Forces Health Services and Defence Research Development Canada.* Rizoli S, Callum J, Tien H. (\$1,200,000.00, Jul 2011 - Jun 2015).

Rapid Genetic Testing for BRCA1 and BRCA2 in newly diagnosed breast cancer patients. *Canadian Institutes of Health Research (CIHR).* Metcalfe KA, Narod S, Eisen A, Akbari M, Kiss A, Chun K, Cil T, McCready D, McGillis Hall L, Wright FC. (\$321,439.00 CAD, Jul 2013 - Jul 2018).

Screen-Net Ontario: The Ontario Cancer Screening Research Network. *Cancer Care Ontario.* Paszat L, Rakovitch E, Seth A, Hanna W, Murphy J, Kupets R, Baxter N, Tinmouth J, Hsieh E, Fleshner N, Chiarelli A, Auberger Z, vanBallegooijen M, Lansdorp-Vogelaar I, Andrulis I, Knight J, Holloway C. (\$1,180,000.00 CAD, Jul 2011 - Jun 2016).

Surveillance after curative-intent resection of colorectal cancer in Ontario: are we misallocating scarce resources. *Colon Cancer Canada.* Law C, Muir J. (\$50,000.00 CAD, Jan 2013 - Jan 2015).

Survival, Treatment Patterns and Identifying predictors of receipt of adjuvant therapy for curative pancreatic adenocarcinoma: a population-based analysis. *Cancer Research Society (The).* Coburn N, Mittmann N, Earle C, Barbera L. (\$120,000.00 CAD, Sep 2013 - Sep 2015).

The impact of an institutional multidisciplinary tracheostomy team on patient care and clinical outcomes: An observational before and after cohort study. *Sunnybrook AFP Association.* Chu P, Chapman M, Tien H, Tremblay L. (\$10,000.00 CAD, May 2012 - present).

The impact of an institutional multidisciplinary tracheostomy team on patient care and clinical outcomes: An observational before and after cohort study. *Sunnybrook General Surgery AEF Grant.* Chu P, Chapman M, Tien H, Tremblay L. (\$9,750.00 CAD, Apr 2014 - present).

The METS (Measurement of Exercise Tolerance before Surgery) study: An international multicentre prospective cohort study of cardiopulmonary exercise testing for improving preoperative risk stratification for major non-cardiac surgery. *Canadian Institutes of Health Research (CIHR).* Wijeyesundera DN, Cuthbertson B, Beattie W, Chan V, Croal B, Granton J, Hoch J, Mamdani M, Mazer D, McCartney C, Oh P, Pearse R, Thorpe K, Wijeyesundera H, Smith AJ. (\$967,068.00 CAD, Jan 2012 - Jan 2016).

The use of extended perioperative low molecular weight heparin to improve cancer specific survival following surgical resection of colon cancer: A randomized controlled trial. *Canadian Institutes of Health Research (CIHR).* Auer R, Carrier M, Smith AJ, Allan D, Jonker D, Mamazza J, Tagalakis V, Wells P. (\$800,000.00 CAD, Jul 2010 - Jun 2014).

Tranexamic Acid Versus Placebo to Reduce Perioperative Blood Transfusion in Patients Undergoing Major Liver Resection: A Pilot Randomized Controlled Trial. *Canadian Institutes of Health Research (CIHR).* Karanicolas P, Chaudhury P, Guyatt G, Barkun J, Dixon E, Lin Y, McCluskey S, Porter G, Tarshis J, Wei A. (\$248,319.00 CAD, Apr 2014 - Mar 2016).

Trauma System Development in Canada: Overcoming the Challenges of Geography Through an Evaluation of Structure and Process. *Canadian Institutes of Health Research (CIHR).* 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, Nathens AB. (\$2,264,139 CAD Jul 2010 - 2015 Jun).

When is dead “dead”? The problem of case ascertainment in assessing trauma centre performance.
 Sunnybrook Health Sciences Centre General Surgery Associates Research Grant. Tien H, Nathens AB.
 (\$10,000 2013 Sep – Aug 2014).

Honours Received

Ashamalla S: Sunnybrook Education Advisory Award - Teaching Award, Sunnybrook Health Science Centre. Dept of Surgery, Faculty of Medicine. May 2014.

Hanna SS: Leo Steven Excellence in Leadership Award, Sunnybrook Health Sciences Centre, Toronto, Ontario, Canada. Nov 2013.

Holloway C: Quality Award, Cancer Care Ontario, Canada. Jul 2013 - Jun 2014.

Law C: Sunnybrook Moment of Service Excellence Certificate, Sunnybrook, Toronto, Ontario, Canada. Jul 2013

Nascimento B: Fellowship Award. Salzburg Medical Seminars International, Salzburg, Austria. Jan 2014

Nascimento B: ATLS Instructor of the Year 2013, Advance Life Support Educators – Sunnybrook Health Sciences Centre, Emergency Medicine – Humber – Faculty of Medicine, University of Toronto. Jan 2014

Nathens AB: Inducted into Canadian Academy of Health Sciences. 2013

Nathens AB: Charles Tator Surgeon-Scientist Mentoring Award, University of Toronto. 2014 May

Nathens AB: Carolyn Tuohy Impact on Public Policy Award, University of Toronto, Toronto, Ontario, Canada. 2014

Smith AJ: Honorary Member, British Columbia Surgical Society, Vancouver, British Columbia, Canada. 2013 - present.

Tien H: Major Frederick Banting Chair in Military Trauma Research, Canadian Forces/Sunnybrook Health Sciences Centre, Canada. Term Reserach Chair. Jul 2013 - present.

Tien H: Robert Mustard Mentorship Award, University of Toronto. General Surgery, Dept of Surgery, Faculty of Medicine. Jun 2013 - present.

Division of Neurosurgery

Dr. L. da Costa	Assistant Professor	Dr. N. Phan	Assistant Professor
Dr. M. Fazl	Assistant Professor	Dr. F. Pirouzmand	Assistant Professor
Dr. D. Houlden	Assistant Professor	Dr. M. Schwartz	Professor
Dr. T. Mainprize	Assistant Professor (Division Head)	Dr. V. Yang	Associate Professor

Publications

Ahmed N, Devitt KS, Keshet I, Spicer J, Imrie K, Feldman L, Cools-Lartigue J, Kayssi A, Lipsman N, Elmi M, Kulkarni AV, Parshuram C, Mainprize T, Warren RJ, Fata P, Gorman MS, Feinberg S, Rutka J. A Systematic Review of the Affects of Resident Duty Hour Restrictions in Surgery: Impact on Resident Wellness, Training, and Patient Outcomes. *Ann Surg.* 2014 Mar 21.

Alali AS, Fowler RA, Mainprize TG, Scales DC, Kiss A, de Mestral C, Ray JG, Nathens AB. Intracranial pressure monitoring in severe traumatic brain injury: results from the American College of Surgeons Trauma Quality Improvement Program. *J Neurotrauma.* 2013 Oct 15; 30(20): 1737-46.

Alali A, Mainprize T, Scales D, Wilson J, Nathens A. Economic Evaluation of Decompressive Craniectomy versus Barbiturate Coma for Refractory Intracranial Hypertension Following Traumatic Brain Injury. *Critical Care Medicine.* 2014 Mar.

Alali AS, Scales DC, Fowler RA, Mainprize TG, Ray JG, Kiss A, de Mestral C, Nathens AB. Tracheostomy timing in traumatic brain injury: a propensity-matched cohort study. *J Trauma Acute Care Surg.* 2014 Jan; 76(1): 70-6.

Al-Omair A, Soliman H, Xu W, Karotki A, Mainprize T, Phan N, Das S, Keith J, Yeung R, Perry J, Tsao M, Sahgal A. Hypofractionated stereotactic radiotherapy in five daily fractions for post-operative surgical cavities in brain metastases patients with and without prior whole brain radiation. *Technol Cancer Res Treat.* 2013 Dec; 12(6): 493-9.

- Au K, Bilbao J, Mainprize T, Schwartz M, Keith J.** Oligodendrogliomas with abundant refractile eosinophilic granular cells. *Can J Neurol Sci.* 2013 Sep; 40(5): 746-8.
- Botting M, Phan N, Rubenfeld GD, Speke AK, Chapman MG.** Using barriers to refine a novel model of neurocritical care. *Neurocrit Care.* 2014 Feb; 20(1): 5-14.
- da Costa L, Fierstra J, Fisher JA, Mikulis DJ, Han JS, Tymianski M.** BOLD MRI and early impairment of cerebrovascular reserve after aneurysmal subarachnoid hemorrhage. *Journal of Magnetic Resonance Imaging.* 2013 Nov 13. PMID: doi: 10.1002/jmri.24474.
- da Costa L, Fierstra J, Fisher JA, Mikulis DJ, Han JS, Tymianski M.** Early identification of brain tissue at risk for delayed cerebral ischemia after aneurysmal subarachnoid hemorrhage. *Acta Neurochirurgica.* 2013 Aug 12.
- da Costa L, Houlden D, Rubenfeld G, Tymianski M, Fisher J, Fierstra J.** Impaired cerebrovascular reactivity in the early phase of subarachnoid hemorrhage in good grade patients does not predict vasospasm. *Acta Neurochirurgica.* 2013 Aug 13.
- Davoudi B, Morrison M, Bizheva K, Yang VXD, Dinniwel R, Levin W, Vitkin IA.** Optical coherence tomography platform for microvascular imaging and quantification: initial experience in late oral radiation toxicity patients. *Journal of Biomedical Optics.* 2013; 18(7): 076008.
- Di Ieva A, Niamah M, Menezes RJ, Tsao M, Krings T, Cho, YB, Schwartz ML, Cusimano MD.** Computational Fractal-Based Analysis of Brain Arteriovenous Malformation Angioarchitecture. *Neurosurgery.* 2014 Mar.
- Engels PT, Beckett AN, Rubenfeld MD, Kreder H, Finkelstein JA, da Costa L, Papia G, Rizoli SB, Tien HC.** Physical rehabilitation of the critically ill trauma patient in the ICU. *Critical Care Medicine.* 2013 Jul 18: 1790-1801.
- Kumar A, da Costa L.** Transcranial access for embolization of cranial DAVF: bridging the gap. *Neurology India.* 2014 Apr 25; 62(2): 208-210.
- Lee AMD, Ohtani K, MacAulay C, Yang VXD, Lam S, Lane P.** 3D in vivo lung microvasculature imaging using color Doppler optical coherence tomography. *Journal of Biomedical Optics.* 2013; 18(5): 050501.
- Lee KKC, Mariampillai A, Haque M, Standish BA, Yang VXD, Herman PR.** Temperature-compensated fiber-optic 3D shape sensor based on femtosecond laser direct-written Bragg grating waveguides. *Optics Express.* 2013; 21(20): 24076-24086.
- Lipsman N, Mainprize TG, Schwartz ML, Hynynen K, Lozano AM.** Intracranial applications of MR-guided Focused Ultrasound (MRgFUS). *Neurotherapeutics.* 2014 Mar.
- Lu DC, Phan N, Beattie MS, Manley GT.** Concomitant Traumatic Brain Injury and Spinal Cord Injury. In: Fehlings, Vaccaro, Boakye, Rossignol, Ditunno, Jr., Burns (eds), *Essentials of Spinal Cord Injury.* 2013. Thieme Medical Publishers.
- Machnowska M, Taeshineetanakul P, Geibprasert S, Menezes R, Agid R, Terbrugge KG, Andrade-Souza Y, Schwartz ML, Krings T.** Factors determining the clinical complications of radiosurgery for AVM. *Canadian Journal of Neurological Sciences.* 2013 Nov; 40(6): 807 - 813.
- Mahmud MS, Cadotte DW, Vuong B, Sun C, Luk TWH, Mariampillai A, Yang VXD.** Review of speckle and phase variance optical coherence tomography to visualize microvascular networks. *Journal of Biomedical Optics.* 2013; 18(5): 050901.
- Mahmud MS, May GR, Kamal MM, Khwaja AS, Sun C, Vitkin A, Yang VXD.** Imaging pancreatobiliary ductal system with optical coherence tomography: a review. *World Journal of Gastrointestinal Endoscopy.* 2013; 5(11): 540-550.
- Pelz D, Khezri N, Mainprize T, Phan N, Keith J, Bilbao J, Aviv RI, Tsao M, Symons SP.** Multifocal cerebellar liponeurocytoma. *Can J Neurol Sci.* 2013 Nov; 40(6): 870-2.
- Phan N.** Management of Spinal Cord Injury in the Intensive Care Unit. In: Fehlings, Vaccaro, Boakye, Rossignol, Ditunno, Jr., Burns (eds), *Essentials of Spinal Cord Injury.* 2013. Thieme Medical Publishers.
- Sahgal A, Ironside SA, Perry J, Mainprize T, Keith JL, Laperriere N, Tsao M, Paszat L.** Factors influencing overall survival specific to adult low-grade astrocytoma: a population-based study. *Clin Oncol.* 2013 Jul; 25(7): 394-9.
- Sun C, Standish B, Vuong B, Wen XY, Yang VXD.** Digital image correlation-based optical coherence tomography. *Journal of Biomedical Optics.* 2013; 18(12): 12515-1-12515-9.

- Tanboon J, Madden MF, Bilbao J, Mainprize T, Perry A.** Probable IgG4-related pachymeningitis: a case with transverse sinus obliteration. *Clin Neuropathol.* 2013 Jul; 32(4): 291-7.
- Vuong B, Lee AMD, Luk TWH, Sun C, Lam S, Lane P, Yang VXD.** High speed, wide velocity dynamic range Doppler optical coherence tomography (Part IV): split spectrum processing in rotary catheter probes. *Optics Express.* 2014; 22(7): 7399-7415.
- Vuong B, Sun C, Khiel TR, Gardecki JA, Standish BA, da Costa L, de Moraes J, Tearney GJ, Yang VXD.** Feasibility of the assessment of human intracranial aneurysms with optical Fourier domain imaging. *Laser Surgery Medicine.* 2014.
- Wawrzyn K, Demidov V, Vuong B, Harduar MK, C. Sun, Yang VXD, Ozkan D, V. Toronov, Xu Y.** Imaging the electro-kinetic response of biological tissues with optical coherence tomography. *Optics Letters.* 2013; 38(14): 2572-2574.
- Xu J, Ou H, Sun C, Chui PC, Yang VXD, Lam EY, Wong KKY.** Wavelet domain compounding for speckle reduction in optical coherence tomography. *Journal of Biomedical Optics.* 2013; 18(9): 096002.
- Xu J, Ou H, Xu X, Yang VXD, Chui PC, Wong KKY.** Ultra-wideband Raman-pumped wavelength-swept laser for optical coherence tomography application. *Applied Physics Express.* 2013; 6: 062701.

Invited Visits

- da Costa L:** 12th International Conference on Neurovascular Events after Subarachnoid Hemorrhage, Lucerne, Luzern (de), Switzerland, 10 Jul 2013. Presenter: Changes in cerebrovascular reactivity to carbon dioxide early after subarachnoid hemorrhage do not predict vasospasm in good grade patients.
- da Costa L:** North America Brain Injury Society, New Orleans, Mississippi, United States, 20 Sep 2013. Presenter: Risk factors for suicidal ideation after mild traumatic brain injury.
- da Costa L:** Toronto, Ontario, Canada, 27 Oct 2013. Speaker: Emergency delivery.
- da Costa L:** CTV, Toronto, Ontario, Canada, 15 Dec 2013. Speaker: News release.
- da Costa L:** Canadian Sports Concussion Project, Toronto, Ontario, Canada, 11 Jan 2014. Invited Speaker: Imaging on Concussions.
- da Costa L:** International Neurotrauma Society, Budapest, Hungary, 20-21 Mar 2014. Presenter: 1/ Incidence and risk factors for suicidal ideation after mild traumatic brain injury. 2/ Symptoms after mild traumatic brain injury correlate with cerebrovascular reactivity changes in BOLD MRI.
- da Costa L:** AANS Annual Meeting 2014, San Francisco, California, United States, 7 Apr 2014. Presenter: Incidence and risk factors for suicidal ideation after mild traumatic brain injury.
- da Costa L:** Global, Ontario, Canada, 10 May 2014. Speaker: Emergency brain surgery.

Research and Investigations

- Automated medical device manufacturing through coherent imaging funded.** *Natural Sciences and Engineering Research Council of Canada (NSERC).* Yang VXD. (\$435,553.00, 2011 - 2014).
- Biophotonics Experimental Operating Room.** *Canada Foundation for Innovation (CFI).* Yang VXD. (\$966,245.00, 2014 - 2019).
- Biophotonics and Bioengineering.** *Natural Science and Engineering Research Council and Canada Foundation of Innovation.* Yang VXD. (\$817,046.00, 2013 - 2018).
- Controlling femtosecond laser processing: smart fibers, catheters, and lab-on-fiber concepts.** *Natural Sciences and Engineering Research Council of Canada (NSERC).* Herman P, Yang VXD. (\$627,275.00, 2013 - 2016).
- Correlation of BOLD imaging of cerebrovascular reserve with CO₂ in patients with persistent post-concussion symptoms.** *NFL-GE Brain Challenge.* da Costa L, Fisher J, Howard P, MacIntosh B. (\$300,000.00 USD, Jan 2014 - Jan 2016).
- E-consent Project - Evaluation of interactive multimedia technology to enhance informed consent for surgery.** *Sunnybrook Innovation Fund.* da Costa L, Werneck C, Pope M. (\$84,173.00 CAD, Mar 2013 - Mar 2014).
- Enhanced AMA endovascular catheter.** *Ontario Ministry of Research and Innovation (ON).* Yang VXD. (\$150,000.00, 2009 - 2013).

Evaluate the Safety and Feasibility of Blood-Brain Barrier Disruption Using Transcranial MRI-Guided Focused Ultrasound with Intravenous Ultrasound Contrast Agents in the Treatment of Brain Tumors with Doxorubicin. *Focused Ultrasound Surgery Foundation*. Mainprize T, Hynynen K, Perry J, Sahgal A, Tsao M, Symons S, Alkins R. (\$150,000.00 CAD, Sep 2012 - Sep 2013).

High-Resolution OCT Imaging of Bronchial Epithelium. *Canadian Institutes of Health Research (CIHR)*. Yang VXD. (\$266,163.00, 2011 - 2014).

Ideals to Innovation. *Natural Sciences and Engineering Research Council of Canada (NSERC)*. Yang VXD. (\$124,399.00, 2012 - 2013).

Integrated Surgical Lighting and Navigation System. *Canadian Institutes of Health Research (CIHR)*. Yang V. (\$160,000.00, 2013 - 2014).

Intelligent beam control for ultrashort laser manufacturing of photonic and biomedical microsystems. *Natural Sciences and Engineering Research Council of Canada (NSERC)*. Yang VXD. (\$460,000.00, 2010 - 2013).

Interprofessional Head Injury Clinic. Sunnybrook AFP Innovation Fund. Mainprize TG, Feinstein A, Phan N, McCullough S, da Costa L, Chapman M. (\$103,000.00 CAD, Jul 2013 - Jun 2015).

Molecular Targetting of the RHO-GTPase Pathway in Human Astrocytomas. *Canadian Institutes of Health Research (CIHR)*. Rutka J, Hynynen K, Mainprize T. (\$750,000.00 CAD, Jul 2010 - Jun 2015).

Non-Invasive Magnetoencephalography in Aneurysmal Subarachnoid Hemorrhage. *Brain Aneurysm Foundation*. da Costa L, Allison B, Pang E, Taylor M. (\$24,500.00 CAD, Sep 2013 - Sep 2014).

Optical coherence tomography, optical topographical imaging and fluorescence guided surgical laser ablation. *Natural Sciences and Engineering Research Council of Canada (NSERC)*. Yang VXD. (\$175,000.00, 2014 - 2019).

Optical Coherence Tomography for Intraoperative Imaging During Skull Base Neurosurgical Procedures. *Canadian Institutes of Health Research (CIHR)*. Yang VXD, Cusimano M, da Costa L, Standish B. (\$379,765.00, CAD, Jul 2011 - Jun 2014).

Optical imaging guidance for hard and soft tissue ablation. *Canadian Institutes of Health Research (CIHR)*. Yang V. (\$1,012,000.00, 2014 - 2019).

Refined Manufacturing Acceleration Process. *Networks of Centres of Excellence (NCE)*. Yang VXD. (\$236,000.00, 2014 - 2018).

The e-Consent Project: Using mobile technology to enhance patient education. *SHSC, Sunnybrook Education Advisory Committee (SEAC)*. da Costa L, Werneck C, Pope M, Bethune A. (\$9,917.70 CAD, Apr 2013 - Apr 2014).

The e-Consent Project. Using mobile technology to enhance patient education. (Principal Investigator). *AHSC AFP INNOVATION FUND*. da Costa L, Bethune A, Pope M, Werneck C. (\$84,173.00 CAD, Apr 2013 - May 2014).

US & MRI guided OCT imaging. *Natural Sciences and Engineering Research Council of Canada (NSERC)*. Yang VXD. (\$421,250.00, 2010 - 2013).

Natural Sciences and Engineering Research Council of Canada (NSERC). Yang VXD. (\$140,000.00, 2009 - 2013).

Ontario Centre of Excellence. Yang VXD. (\$190,000.00, 2013 - 2014).

Stryker. da Costa L. (\$8,000.00, Oct 2013 - Oct 2013).

Honours Received

Mainprize T: Dr. Tile Distinguished Service Award, Sunnybrook Health Sciences Centre, Dept of Surgery, Faculty of Medicine, Ontario, Canada. May 2014 - May 2015.

Phan N: S.E.A.D Certificate of Appreciation, University of Toronto. Neurosurgery, Dept of Surgery, Faculty of Medicine. 2013

Division of Orthopaedics

Dr. M. Akens	Assistant Professor
Dr. T.S. Axelrod	Professor
Dr. H.U. Cameron	Associate Professor
Dr. J.C. Cameron	Assistant Professor
Dr. J.A. Finkelstein	Associate Professor
Dr. M. Ford	Assistant Professor
Dr. J. Gollish	Assistant Professor
Dr. R. Holtby	Assistant Professor
Dr. R. Jenkinson	Lecturer
Dr. H.J. Kreder	Professor (Division Head)

Dr. B. Maki	Professor
Dr. P. Marks	Associate Professor
Dr. J.J. Murnaghan	Associate Professor
Dr. D. Nam	Assistant Professor
Dr. M. Nousiainen	Assistant Professor
Dr. R.R. Richards	Professor
Dr. D.J.G. Stephen	Associate Professor
Dr. V.M.R. Wadey	Assistant Professor
Dr. C. Whyne	Associate Professor
Dr. C.S. Wright	Assistant Professor
Dr. A. Yee	Associate Professor

Publications

Abdel M, Pascal Acklin Y, Backstein D, Bain G, Barei D, Barg A, Berkes MB, Berry DJ, Kreder HJ, et al. Periprosthetic Fracture Management. Michael Schutz, Carsten Perka (eds), 1st ed. 2014 Jan. Thieme. ISBN 978-3-13-171511-1, e-ISBN 978-3-13-171521-0.

Allison P, Stephens D, Whyne CM, Kreder H. Comparison of 4.0 mm cancellous versus 2.7 mm cortical screw fixation in an oblique medial malleolar fracture model. *Injury*. 2013.

Archibald D, Wadey V, Kraemer W. The impact of a workshop on “Optimizing Learning in Orthopaedic Surgery” on Orthopaedic In-Training Examination Scores. *Journal of Surgical Education*. 2014 May.

Axelrod D, Safran O, Axelrod T, Whyne CM, Lubovsky O. Fractures of the clavicle; which x-ray projection provides the greatest accuracy in determining displacement of the fragments? *Journal of Orthopaedics and Trauma*. 2013; Vol 3.

Bernick J, Wang Y, Sigal IA, Alman BA, Whyne CM, Nam D. Lithium Treatment Parameters are Critical in its Enhancement of Fracture Healing. *JBJS-D-14-00057*. *JBJS Am*. 2014 Jan 17.

Borkhoff C, Hawker GA, Kreder HJ, Glazier RH, Mahomed NN, Wright JG. The influence of patients’ gender on informed decision making regarding total knee arthroplasty: What if your physician doesn’t ask you to dance? *Arthritis Care & Research*. 2013 Aug; 65(8): 1281-90.

Bruinsma WE, Guitton TG, Warner JJP, Ring D, and the Science of Variation Group. Interobserver reliability of classification and characterization of proximal humeral fractures. *The Journal of Bone and Joint Surgery*. 2013 Sep 4; 95: 1600-4.

Buckley R, Leighton R, Sanders D, Poon S, Coles CP, Stephen D, Paolucci EO, Canadian Orthopaedic Trauma Society. Open reduction internal fixation compared with ORIF and primary subtler arthrodesis for treatment of Sanders type IV calcaneal fractures: A randomized multi centre* trial. *The Journal of Orthopaedic Trauma*. 2014 Jun 30. PMID: 24983433. epub ahead of print.

Carrothers A, Jenkinson RJ. Proximal Tibia Fracture, stable prosthesis. In: Carsten Perka, Michael Shuetz (eds), *AO trauma: Periprosthetic Fracture Management*. Thieme. 2013: 360-362.

Carrothers AD, Rodriguez-Elizalde S, Rogers BA, Razmjou H, Murnaghan D, Gollish J, Murnaghan JJ. Reported Compliance with thrombo-prophylaxis using and oral factor Xa inhibitor (Rivaroxaban) following total Hip and total Knee Arthroplasty. *The Journal of Arthroplasty*. 2013.

Cheng KC, Pratt J, Maki BE. Do ageing and dual-tasking impair the capacity to store and retrieve visuospatial information needed to guide perturbation-evoked reach-to-grasp reactions? *PloS ONE*. 2013; 8(11):e79401 (doi:10.1371/journal.pone.0079401).

Choudhari C, Herblum R, Akens MK, Moore S, Hardisty MR, Whyne CM. Ex vivo μ CT based strain analysis is able to represent quasi-static in vivo behaviour of whole vertebrae. *Journal of Biomechanics*. 2014 Apr.

Chow E, Finkelstein JA, Sahgal A, Coleman RE. Metastatic cancer to the bone. In: Devita, VT, Lawrence TS, Rosenberg SA (eds), *Cancer: Principles & Practice of Oncology*. 10th Edition. 2014: Chapter 150. United States: Lippincott Philadelphia.

Crookshank M, Beek M, Singh D, Schemitsch E, Whyne CM. Can a semi-automated surface matching and principal axis-based algorithm accurately quantify femoral shaft fracture alignment in six degree of freedom? *CARS. Med Eng Phys*. 2013 Jul 7;35(7):1028-36.

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- Dwyer T, Glover-Takahashi S, Kennedy-Hynes M, Herold J, Wasserstein D, Nousiainen M, Ferguson P, Wade V, Murnaghan L, Leroux T, Semple J, Hodges B, Ogilvie-Harris D.** How to assess Communication, Professionalism. Collaboration and the other intrinsic CanMEDS Roles in orthopaedic residents: Use of an Objective Structured Clinical Assessment (OSCE). *CJS*. 2013 Oct.
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- Engels PT, Becket AN, Rubinfeld GD, Kreder H, Finkelstein JA, da Costa L, Papia G, Rizoli SB, Tien HC.** Physical rehabilitation of the critically ill trauma patient in the ICU. *Critical Care Medicine*. 2013 Jul; 41(7): 1790-1801.
- Fawaz K, Smith MJ, Cukier M, Smith A, Yee AJ.** Single-stage anterior high sacrectomy for locally recurrent rectal cancer. *Spine*. 2014 Mar 1; 39(5): 443-52.
- Ferguson P, Kraemer W, Nousiainen M, Safiro, Sonnadara R, Alman B, Reznick R.** Three-year experience with an innovative, modular competency-based curriculum for orthopaedic training. *Journal of Bone and Joint Surgery American*. 2013 Nov 6; 95(21): 1661-1666.
- Glynn A, Jenkinson RJ.** Total Hip Arthroplasty In Acetabular Fractures. In: Parvizi, Goyal, Cashman (eds), *The Hip: Preservation, Replacement, and Revision*. 2014. Data Trace Publishing Company.
- Goertz DE, Thind AS, Karshafian R, Ladouceur M, Whyne CM, Stuart Foster F, Strauss BH.** In vivo feasibility study of ultrasound potentiated collagenase therapy of chronic total occlusions. *Ultrasonics*. 2013 Jul 29. 2013. doi:pii: S0041-624X(13)00217-5. 10.1016/j.ultras.2013.07.014. PMID: 23948508
- Henry PDG, Jenkinson RJ, Kreder HJ.** Fractures of the pelvic ring and the acetabulum. In: Marvin Tile, David Helfet, James Kellam, Mark Vrahas (eds), *Outcomes of Pelvic Ring Fractures in Adults*. 2014. AO International.
- Herblum R, Beek M, Whyne CM.** μ FEA successfully exhibits higher stresses and strains in microdamaged regions of whole vertebrae. *J Orthop Res*. 2013 Oct 31;(10): 1653-60
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- Jenkinson RJ, Kreder HJ.** Principles of Internal Fixation of Fractures. In: Peter Papadakos, Marc Gestring (eds), *Encyclopedia of Trauma Care*. 2014. Springer.
- Jenkinson RJ, Kreder HJ.** Distal Femoral Fracture, loose prosthesis. In: Michael Shuetz and Carsten Perka (eds), *AO Trauma: Periprosthetic Fracture Management*. 2013: 335-338.
- Jenkinson RJ, Rubenstein J, Tile M.** Defining the injury: Assessment and principles of management of pelvic ring and the acetabulum. In: Editors: Marvin Tile, David Helfet, James Kellam, Mark Vrahas. (eds), *AO Trauma*. 2014. AO International.
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Nousiainen MT, Brady PA, Tile M. Chapter 2.4 Defining the injury: Assessment and principles of management of acetabular fractures. In: 2014 Jan. *Fractures of the pelvis and the acetabulum - Principles and methods of management*.

Oakden W, Kwiecien JM, O'Reilly MA, Lake EM, Akens MK, Aubert I, Whyne C, Finkelstein J, Hynynen K, Stanisz GJ. A non-surgical model of cervical spinal cord injury induced with focused ultrasound and micro bubbles. *Journal of Neuroscience Methods*. 2014 Jun 23. PMID: 24970578. Epub ahead of print. doi: 10.1016/j.neumeth.2014.06.018.

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- Sahgal A, Whyne CM, Ma L, Larson DA, Fehlings MG.** Vertebral compression fracture after stereotactic body radiotherapy for spinal metastases. *Lancet Oncol.* 2013 Jul; 14(8):e310-20.
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- Sonnadara RR, Garbedian S, Safir O, Mui C, Mironova P, Nousiainen M, Ferguson P, Alman B, Kraemer W, Reznick R.** Toronto Orthopaedic Boot Camp III: Examining the efficacy of student-regulated learning during an intensive, laboratory-based surgical skills course. *Surgery.* 2013 Jul; 154(1): 29-33.
- Sonnadara R, McQueen S, Mironova P, Safir O, Nousiainen M, Ferguson P, Alman B, Kraemer W, Reznick R.** Reflections on current methods for evaluating skills during joint replacement surgery: A scoping review. *Bone and Joint Journal.* 2013 Nov 1; 95B(11): 1445-9.
- Sonnadara R, Mui C, McQueen S, Mironova P, Nousiainen M, Safir O, Kraemer W, Ferguson P, Alman B, Reznick R.** Reflections on competency-based education and training for surgical residents. *Journal of Surgical Education.* 2014 Jan; 71(1): 151-158.
- Thind AS, Strauss BH, Karshafian R, Teitelbaum AA, Ladouceur M, Akbar MA, Rosen B, Bohnen M, Whyne CM, Goertz DE, Foster FS.** The use of ultrasound-stimulated contrast agents as an adjuvant for collagenase therapy in chronic total occlusions. *EuroIntervention.* 2013 Sep 4. doi:pii: 20120809-01. [Epub ahead of print] PubMed PMID: 23999177.
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- Whyne C.** Biomechanics of metastatic disease in the vertebral column. *Neurological Research.* 2013 Oct.
- Whyne C, Lubovsky O, Kreder M, Wright D, Kiss A, Theriault A, Kreder H.** Quantitative measures of damage to subchondral bone are associated with functional outcome following treatment of displaced acetabular fractures. *Journal of Orthopaedic Research.* 2013 Jul.
- Wiesel BB, Richards RR.** Glenohumeral Arthrodesis. In: 2nd. 2013 Dec 1. In: *Operative Techniques in Orthopaedic Surgery.* (Gerald Williams: ed.) Lippincott, Williams & Wilkins.
- Yee AJ.** Synopsis of Canadian Medical Association (CMA) Specialist Forum (SPF). *Spinal Columns.* 2013 Nov; 13(3): 15-17.
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Presentations and Special Lectures

Axelrod TS: AO Trauma Foundation, Sao Paulo, São Paulo, Brazil, 11-13 Sep 2013. Distinguished Speaker: 1/ Distal Radius: Surgical Anatomy and pre-op planning. 2/ Arthrodesis after Distal Radius Fracture. 3/ Distal Radius Fractures in the Elderly. 4/ Approach to the TFCC and DRUJ. 5/ Most common mistakes in distal radius fracture management. 6/ Surgical Model: Volar Locking Plate. 7/ Single Posterior Approach to Elbow Injuries. 8/ Elbow Dislocations: Classification and Management. 9/ Total Elbow Arthroplasty in Trauma. 10/ Treatment of Proximal Humerus Fractures with plate: Tips and Tricks. 11/ Replacement in Proximal Humerus Fractures. 12/ When Treatment Fails, How to deal with it.

Axelrod TS: University of Manitoba, 53rd Annual Manitoba Orthopaedic Symposium, Winnipeg, Manitoba, Canada, 25 Oct 2013. Visiting Professor: 1/ The Distal Radioulnar Joint: Current concepts in injury management Lecture on the current management of wrist injury. 2/ Scaphoid Fractures and Ligament Injuries Current concepts in injury management Lecture on the current management of wrist injury.

Axelrod TS: AO Trauma Foundation, Davos, Graubünden (de), Switzerland, 1-13 Dec 2013. 1/ Invited Lecturer: AOTrauma Hand and Wrist Fracture Management Course. 2/ Invited Lecturer: Intra-articular Osteotomies of the Distal Radius. 3/ Presenter: Simulation: Surgical Exposure of Distal Dorsal Radius, Internal Fixation with plates. 4/ Invited Lecturer: Principles of Management of Articular Fractures. 5/ Invited Lecturer: Malunion of the Distal Radius. 6/ Invited Lecturer: Post-traumatic Stiffness in the Upper Extremity. 7/ Invited Lecturer: Acute Forearm Bone Loss. 8/ Invited Lecturer: Distal Humerus Non-union.

Axelrod TS: AO North America, Las Vegas, Nevada, United States, 25 Jan 2014. Invited Speaker: Anatomy and live dissection of Upper Limb anatomy.

Axelrod TS: AOTrauma North America, San Juan, Puerto Rico, United States, 15-16 Feb 2014. 1/ Presenter: Tips and Tricks for Orthopaedic Surgeons Scaphoid and Perilunate Case Discussions. 2/ Invited Speaker: Tips and Tricks for Orthopaedic Surgeons Humerus Shaft Fractures. 3/ Invited Speaker: Tips and Tricks for Orthopaedic Surgeons Diaphyseal Forearm Fractures.

Axelrod TS: AOTrauma North America, San Diego, California, United States, 10 Apr 2014. 1/ Keynote Speaker: Tips and Tricks in Hand Fracture Management Hand and Wrist Comprehensive Fracture Management Course. 2/ Invited Lecturer: Axelrod Does Metal Type Matter? Implant Surfaces and Metallurgy. Hand and Wrist Comprehensive Fracture Management Course. 3/ Facilitator: Fracture Management Discussion Groups Hand and Wrist Comprehensive Fracture Management Course.

Finkelstein JA: ASIA Meeting, San Antonio, Texas, United States, May 2014. Invited Speaker: 1/ Current surgical practice for central cord syndrome in Canada - RHSCIR. 2/ Time to surgery for traumatic spinal cord injury: Effect on motor recovery - RHSCIR.

Holtby R: CORS, Venice, Venezia, Italy, 14-16 Oct 2013. Presenter: 1/ Predictive Value of Clinical and Surgical Factors in Reparability of Large and Massive Rotator Cuff Tears. 2/ Recovery Following Rotator Cuff Repair in Younger Patients.

Jenkinson R: Ontario Orthopaedic Association, Toronto, Ontario, Canada, 8 Nov 2013. Invited Speaker: Proximal Femoral Fractures: New Devices, Still Problems.

Kreder HJ: American Academy of Orthopaedic Surgeons, Rosemont, Illinois, United States, 31 Oct – Nov 2, 2013. Invited Speaker: 1/ Specific Treatment of Acetabular Fractures: Planning Surgical Treatment Case discussion regarding the management of specific acetabular fractures. 2/ Pelvic Fracture Management: Case Discussions Case discussion regarding the management of complex pelvic fracture cases.

Kreder HJ: AO Trauma, Current Concepts Course on Periprosthetic Fractures, Davos, Graubünden (de), Switzerland, 1-12 Dec 2013. Invited Speaker: 1/ Useful Techniques in the Management of Periprosthetic Fractures: Strut Grafts - Biology, When and How to Apply Lecture aimed at practicing surgeons from around the world to advance understanding and management of periprosthetic fractures of the lower extremity. 2/ Management of Complex Periprosthetic Fractures: Case Discussion Case discussion of complex periprosthetic cases aimed at practicing surgeons from around the world to advance understanding and management of periprosthetic fractures of the lower extremity. 3/ Principles of Management of Proximal Femur Periprosthetic Fractures: When to do What Lecture aimed at practicing surgeons from around the world to advance understanding and management of periprosthetic fractures of the femur. 4/ Useful Techniques in the Management of Periprosthetic Fractures: Strut Grafts - Biology, When and How to Apply Lecture aimed at practicing surgeons from around the world to advance understanding and management of periprosthetic fractures of the lower extremity. 5/ Principles of Management of Proximal Femur Periprosthetic Fractures: When to do What Lecture aimed at practicing surgeons from around the world to advance understanding and management of periprosthetic fractures of the femur. 6/ Management of Complex Periprosthetic Fractures: Case Discussion Case discussion of complex periprosthetic cases aimed at practicing surgeons from around the world to advance understanding and management of periprosthetic fractures of the lower extremity. 7/ Surgical Approaches and Fixation in Acetabular Fractures and Pelvic Ring Injuries Case based review of surgical approaches to the pelvis and acetabulum. 8/ Iliosacral Screw Fixation in Pelvic Ring Injury Advanced concepts in the use of iliosacral screw fixation for pelvic ring injuries. 9/ Acetabular and Pelvic Fracture Management Surgeons participating in this course will learn how to address the severely injured patient in an emergency situation. They will learn how to evaluate, diagnose, and classify pelvic ring and acetabular injuries, and determine appropriate timing and indications for interventions. They will be able to apply knowledge in choosing how to surgically approach specific injuries and how to definitively reconstruct complex fractures. 10/ Decision Making in Pelvic Ring Injury

The learning objectives are to: understand the anatomy of pelvic ring injuries, appropriate emergency, urgent and definitive fixation parameters, techniques and outcome evaluation. 11/ Anatomy, Classification and Emergency Treatment of Pelvic Ring Injuries Moderator of pelvic ring session.

Kreder HJ: AO Trauma: Fellows Cadaver Symposium, Las Vegas, Nevada, United States, 25 Jan 2014. Invited Lecturer: Surgical Approaches to the Elbow and Forearm: The Dorsal Thompson Approach Advanced surgical exposures for trauma fellows.

Kreder HJ: Calgary Trauma Summit, Calgary, Alberta, Canada, 6-7 Feb 2014. Invited Lecturer. 1/ Vancouver type B2 and B3 periprosthetic fractures: Principles of management. A discussion of advanced concepts of identifying and managing patients with periprosthetic fractures. 2/ Locking Compression Plates: The good, the bad and the ugly A lecture on advanced concepts of fracture fixation and how to best use the locking compression plate construct.

Kreder HJ: 15th EFORT Congress, United Kingdom, Jun 2014. A prospective randomized trial investigating the effect of the reamer irrigator-aspirator (RIA) on the volume of embolic load and respiratory functions during intramedullary nailing of femoral shaft fractures.

Maki BE: International Conference on Fall Protection and Prevention, Tokyo, Japan, Oct 2013. Age-related effects of varying step geometry and biomechanical falls risk during stair descent.

Maki BE: American Association for Geriatric Psychiatry Annual Meeting, Orlando, Florida, March 2014. The effect of depression on outcome of fear of falling in a falls prevention program.

Maki BE: Ontario Biomechanics Conference, Barrie, Ontario, March 2014. Two different methods of evoking balance loss in young adults in dynamic conditions: A pilot study.

Nam D: 2013 Orthopaedic Trauma Association Annual Meeting, Basic Science Forum, Scottsdale, Arizona, United States, Oct 2013. Presenter: T-lymphocyte Immune Modulation in Fracture Healing: The role of IL-17F in a Novel GSK3- β -Catenin.

Nam D: 3rd Annual JOINTS Canada 2014 Shoulder Course, University of Ottawa, Ottawa, Ontario, Canada, 30 Jan 2014. Invited Speaker: Proximal humerus fractures.

Nam D: Orthopaedic Research Society Annual Meeting 2014, New Orleans, Louisiana, United States, 16 Mar 2014. Presenter: A Preclinical Assessment of Lithium to Enhance Fracture Healing.

Nousiainen M: Northern Ontario School of Medicine, Thunder Bay, Ontario, Canada, 14 Sep 2013. Invited Speaker: An Update on the Competency Based Curriculum in the Division of Orthopaedic Surgery at the University of Toronto and Developing Assessment Tools for the Evaluation of Trainee Competencies presentation during a 2-hour faculty development retreat on Competency-Based Residency Training.

Nousiainen M: International Medical Education Leaders Forum 2013, Calgary, Alberta, Canada, 25 Sep 2013. Invited Lecturer: An Update on the University of Toronto's Orthopaedic Competency Based Curriculum Plenary Session Presentation.

Nousiainen M: Dewar Orthopaedic Society, Stowe, Vermont, United States, 27 Sep 2013. Invited Lecturer: The Management of Periprosthetic Femur Fractures Around a Well-Fixed TKA: Nail versus Plate.

Nousiainen M: American Academy of Orthopaedic Surgeons Orthopaedic Simulation Summit II, Rosemont, Illinois, United States, 22 Nov 2013. Invited Lecturer: 1/ The Development and Validation of Relevant Performance Metrics in Surgery. 2/ Financial and Practical Considerations -- the Toronto Experience.

Nousiainen M: Department of Orthopaedic Surgery, University of California, Irvine, Orange, California, United States, 6 Mar 2014. Visiting Professor: Am I a Competent Surgeon? Competency Based Medical Education & an Update on U of T's CBC Program.

Nousiainen M: American Academy of Orthopaedic Surgeons, New Orleans, Louisiana, United States, 13 Mar 2014. Invited Lecturer: The Management of Periprosthetic Femur Fractures Around a Well-Fixed TKA: Nail versus Plate.

Nousiainen M: Department of Anesthesia, University of Ottawa, Ottawa, Ontario, Canada, 26 Mar 2014. Visiting Professor: 1/ Am I a Competent Surgeon? Competency Based Medical Education & an Update on U of T's CBC Program. 2/ Fellowship Education: where are we at and is improvement required?

Nousiainen M: Canadian Orthopaedic Association, Montreal, Quebec, Canada, 19 Jun 2014. Invited Lecturer: The Management of Periprosthetic Femur Fractures Around a Well-Fixed TKA: Nail versus Plate Instructional Course Lecture.

Stephen DJG: 15th Annual Chicago Trauma Symposium, Chicago, Illinois, United States, 2-3 Aug 2013. 1/ Invited Speaker: Tibial non union/malunion - Gaining union and alignment. 2/ Debate: Short metaphyseal segments in the tibia - Plates vs rods. 3/ Invited Speaker: Resuscitation and damage control in polytrauma. 4/

Lab Session: Distal femur periprosthetic fractures.

Stephen DJG: AO Trauma Course - Acetabular and Fracture Management, Davos, Switzerland, Dec 2013. Invited Speaker: Approaches and fixation options - sacroiliac joint dislocations and fracture dislocations.

Stephen DJG: AO North America, Las Vegas, Nevada, United States, 24-26 Jan 2014. Invited Speaker: 1/ Foot Cadaveric Dissection; Foot Exploration, Ankle/Pilon Cadaveric Dissection; Ankle /Pilon Exploration. 2/ Hip/anterior acetabulum cadaveric dissection; hip/anterior acetabulum reduction techniques. 3/ Shoulder Cadaveric Dissection; Shoulder Reduction Techniques; Arm/Elbow Cadaveric Dissection; Arm/Elbow Reduction Techniques; Elbow/Forearm case presentation; Elbow/Forearm Cadaveric Dissection and reduction Techniques; Hip cadaveric dissection and hip reduction techniques.

Stephen DJG: American Academy of Orthopaedic Surgeons (AAOS) 2014, Las Vegas, Nevada, United States, 14 Mar 2014. Invited Speaker: Talus and calcaneus fractures: Current treatment.

Stephen DJG: AO North America, Miami, Florida, United States, 24-25 Apr 2014. Invited Speaker: 1/ Malunions proximal femoral malunion AOTNA Trauma Solutions Course. 2/ Osteoporotic fractures proximal tibia AOTNA Trauma Solutions Course.

Stephen DJG: Canadian Orthopaedic Foot and Ankle 2014 Annual Symposium, Toronto, Ontario, Canada, 12 Apr 2014. Invited Speaker: 1/ Lisfranc joint injury - when to fix and when to fuse? 2/ Advancements in managing the pilon fracture.

Yee A: University of California Irvine, New Port Beach, California, California, United States, 29 Aug 2013. Invited Lecturer: Lessons Learnt in Spine Oncology: Clinical Perspectives and Translational Research Opportunities for the Future.

Yee A: AO North America and AOSpine North America, Toronto, Ontario, Canada, 1 Nov 2013. Invited Lecturer: Thoracolumbar Spine Trauma Classification and Management AONeuro Course - Management of Traumatic Brain and Spinal Cord Injuries -- presentation of didactic lecture on thoracolumbar spine trauma and also participating as faculty in case based discussion amongst course participants.

Yee A: Canada and The United States Bone and Joint Decade: Young Investigators Initiative. Toronto, Ontario, 8-10 Nov 2013. Faculty Mentor: Faculty Mentor and Canadian Course Representative for Fall 2014 Workshop.

Yee A: Ministry of Health, Province of Ontario, Innovation Fund Provincial Oversight Committee, Toronto, Canada, 28 Nov 2013. Panel Participant and Presenter: Panel Discussant and Presenter on Panel: System Coordination for Improved Outcomes Presenter from 2010: UT-SpineLINK Revisited Innovation Fund Showcase 2013 - From Innovation to Practice.

Yee A: Canadian Spine Society, Lake Louise, Alberta, Canada, 27 Feb 2014. Speaker: Co-Chairs: Chaired Spine Surgery Fellowship Education Curriculum Development Session - Modified Delphi Expert Consensus Approach.

Yee A: Canada and The United States Bone and Joint Decade: Young Investigators Initiative, Chicago, Illinois, United States, 17-18 May 2014. Faculty Mentor: Faculty Mentor and Canadian Course Representative for Spring 2014 Workshop.

Research and Investigations

All Arthroscopic or Mini-open Repair of a Rotator Cuff Tear. *Canadian Institutes of Health Research (CIHR).* MacDermid JC, Holtby R, Razmjou H, JOINTS Canada. (\$608,555.00 CAD, Jan 2007 - present).

Assessment and implementation of an essential “entrustable professional act” in orthopaedic surgery”. *Sunnybrook Health Sciences Centre, SEARC ERC Education Research.* Nousiainen M, Archibald D, Wade V. (\$5,064.26 CAD, 2013 - 2014).

CIHR team for the development, testing and knowledge transation 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, Hihailidis A, Perry S, Popovic M, Pratt J. (\$1,499,982 Jul 2008 – Mar 2016).

Comparative impact resistance of titanium mesh, polymethyl methacrylate (PMMA), and polyether ether ketone (PEEK) in an in vitro model of custom, patient-specific cranioplasty. *AO Foundation.* Sunderland I, Antonyshyn O, Mainprize J, Whyne CM. (\$53,900.00 CHF, Jul 2012 - Jun 2014).

Developing Optimised Vertebroplasty Treatments for Vertebral Fractures in Multiple Myeloma. *Engineering and Physical Sciences Research Council (EPSRC) (UK), Clinical Engineering.* Hall R, Ashcroft A, Timothy J, Cook G, Kapur N, Whyne CM, Arthrocare UK Ltd. (\$591,281.00 GBP, Mar 2010 - Feb 2014).

Development of a novel device & method for stabilizing traumatic craniofacial injuries. *The Ontario Centres of Excellence (OCE) – MaRS Innovation (MI) Competitive Institutional Proof of Principle Program (CIPoP).* Whyne CM, Yee A, Fialkov J, Santerre P, Pilliar R. (\$42,500.00 CAD, Oct 2012 - Dec 2013).

Do Transcortical Screws in a Locking Plate Construct Improve the Stiffness in the Fixation of Vancouver B1 Periprosthetic Femur Fractures? A Biomechanical Analysis of Three Different Plating Constructs. *DePuy Synthes.* Jenkinson R, Schemitsch E, Carrothers A, Nousiainen M. (\$31,983.00 CAD, Oct 2013 - present).

Evaluating the 48-hour benchmark for surgery: The Canadian collaborative study of hip fractures. *CIHR,* Sobolev BG, Kreder HJ. (Jan 2014 - Jul 2014).

Finding the complex patient in patient-centred care: an institutional ethnography of chronic pain management in family medicine. *Canadian Institutes of Health Research (CIHR).* Webster F, Yee A. (\$238,578.00 CAD, 2014 - 2016).

Fixation Using Alternatives for the Treatment of Hip Fractures (FAITH-2) : A Multi-Centre 2x2 Factorial Randomized Trial Comparing Sliding Hip Screws versus Cancellous Screws AND Vitamin D versus Placebo on Patient Important Outcomes and Quality of Life in the Treatment of Young Adult Femoral Neck Fractures. *CIHR.* Jenkinson R, Bhandari M, Slobogean G, Faith-2 Investigators. (\$198,226.00, Oct 2013 - Sep 2015).

FLEX FiRST Wire – A novel devince to facilitate long bone fracture. *MaRS Innovation (MI) Proof of Principle Program (PoP).* Yee A, Ebrahimi H, Whyne C. (\$10,000.00 CAD, Jul 2012 - Dec 2013).

Fluid Lavage of Open Wounds. Bhandar M, Jenkinson R. (Jul 2009 - Jan 2014).

Hip Fracture Accelerated Surgical Treatment and Care Track (Hip ATTACK) Trial. *AO Foundation.* Kreder HJK, Devereaux P, Bhandari M, Jenkinson RJ, Stephen DJG, Petrisor B. (\$114,960.28 USD, Jun 2014 - Jun 2016).

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. *Canadian Institutes of Health Research (CIHR).* Mohit B, Page R, Beaupre L, Coles C, Devereaux P, Einhorn T, Guyatt G, Kreder H, et al. (\$1,434,636.00 CAD, Jan 2013 - present).

Identifying barriers and facilitators to prescribing immediate weight-bearing after hip fracture surgery among Canadian orthopaedic surgeons. *Knowledge Translation (KT) Canada.* Jaglal S, Jenkinson R, Carlin L, Frank C, Kontos P, Kreder H, Sibley K. (\$30,000.00 CAD, Jun 2012 - Jun 2014).

Immediate weight-bearing versus non-weightbearing and immobilization after ORIF of unstable ankle fractures. *Canadian Orthopaedic Trauma Society (COTS).* Dehghan N, Jenkinson RJ. (\$6,000.00 CAD, Jan 2012 - Jan 2014).

Implications of pathologic changes to bone material properties on the skeletal stability of the metastatic spine. *Canadian Institutes of Health Research.* Whyne CM, Yee A, Willett T, Akens M, Barzda V, Boyd D, Grynepas M, Kiss A, Niebur G, Sone E. (\$100,000.00 CAD, Oct 2012 - Sep 2013).

Implications of pathological changes to bone material properties on the skeletal stability of metastatic spine. *Canadian Institutes of Health Research (CIHR).* Whyne CM; Yee AJ, Willett T. (\$720,465.00 CAD, Apr 2013 - Mar 2018).

Improving quality of care for Canadians at high risk for fractures: A knowledge to action approach. *Canadian Institutes of Health Research (CIHR).* Jaglal S, Hawker G, Majumdar S, Cadarette S, Straus S, Brookman C, Jiwa F, Canavan J, McGlasson R, Jenkinson R, Kastner M, Konto P, Kreder H, McGilton K, Meadows L, Mihailidis A, Perreault S, Salbach N, Sale J, Sibley K, Funnell L, French S, Raman-Wilms, L, Ramanan D, Kulic D, Theriault. (\$2,469,271.00 CAD, Apr 2012 - Mar 2017).

Instrumental activities of daily living and social roles following hip and knee replacement: Understanding why people's engagement doesn't change. *Arthritis Society (The).* Davis A, Jenkinson RJ. (\$360,000.00 CAD, Jul 2011 - Jun 2014).

Laying the Groundwork for a tool to improve communication between surgeons and radiologic technologists in the trauma operating room: an ethnographic approach. *Sunnybrook Education, Research Advisory Council .* Jenkinson R, Sernik J, Webster F. (\$9,700.00 CAD, Mar 2013 - Mar 2014).

Molecular Mechanisms in Fracture and Wound Healing. *Canadian Institutes of Health Research (CIHR).* Alman B, Nam D. (\$903,804.00 CAD, Apr 2013 - Mar 2018).

Multi-physics modeling and validation of the couple dynamic response of whiplash trauma and head restraint. *Qatar National Research Fund (QNRF)*. Meguid S, Finkelstein JA, Whyne C. (\$800,000.00 USD, Dec 2013 - Dec 2016).

Multi-resolution modeling of thin bone structures in the human skeleton. *NSERC*. Whyne C. (\$245,000.00 CAD, Apr 2011 - Mar 2015).

Novel Radio Frequency Ablation Technology for Treatment of Solid Tumours in Bone. *MaRS Innovation (MI)*, Competitive Institutional Proof-of- Principle (CIPoPP). Sherar M, Murphy K, Whyne C, Yee A, McCann C. (\$199,900.00 CAD, Oct 2011 - Oct 2013).

Optimizing Pain and Rehabilitation after Knee Arthroplasty (OPRA) Study. *PSI (Physicians' Services Incorporated) Foundation*. McCartney C, Choi S, Kreder H, Gollish J, Rodriguez-Elizalde S, Katz J, Mamdani M, Thorpe K, Stratford P. (\$141,000.00 CAD, Jul 2012 - Jul 2014).

Orthopaedic Personal Research Funding. Whyne CM, McLaughlin S. (\$45,000.00 CAD, 2013 - 2015).

Patient donation to Dr. V. Wadey Foundation Funds at Sunnybrook Hospital for research. Wadey V. (\$15,000.00 CAD, Jun 2014).

Patient Specific Craniofacial Implant Generation: Improving workflow, Reducing Cost and Facilitating Expansion. *Ontario Centres of Excellence (OCE)*. Whyne C. (\$45,000.00 CAD, Apr 2014 - Oct 2014).

Physicians Services Incorporated: Impact of Autologous Platelet Rich Plasma on Enhancing Repair of Rotator Cuff Tendons: A Multicentre Randomized Controlled Trial. *PSI*. Holtby R, Razmjou H, Christakis M, Woodhouse L, MacDermid JC, Faber K, Athwal G. (\$156,300.00 CAD, Sep 2012 - Dec 2013).

Preclinical Assessment of Lithium to Enhance Fracture Repair. *AO Foundation (Switzerland)*. Nam D, Whyne C, Alman B. (\$119,260.00 CHF, Oct 2013 - Oct 2015).

Preclinical assessment of lithium to enhance fracture repair. *AO Foundation*. Nam D, Whyne CM, Alman B. (\$116,803.00 CHF, Aug 2012 - Aug 2014).

Preventing falls on stairs: step geometry and the biomechanical risk factors in older adults with and without mobility impairment. *Canadian Institutes for Health Research*. Fernie GR, Maki BE, McIlroy WE, Miyasike-DaSilva V. (\$308,895 Oct 2013 – Sep 2016).

Rates of Re-operation and the Risk of Total Hip Replacement after Acetabular Fracture Fixation in a Large Population Cohort. *AO Trauma North America*. Jenkinson R, Park S. (\$7,250.00 USD, Jan 2014 - Jan 2015).

Reaching Consensus on a Core Set of Balance Measures for Research and Practice. *Canadian Institutes for Health Research*. Sibley KM, Berg K, Jaglal SB, Maki BE. (\$24,507 Apr 2014 – Mar 2015)

Selecting Fellows: A Qualitative Study. *Royal College of Physicians and Surgeons of Canada (The)*. Murnaghan L, Hanson M, Yee A, Nousiainen M, Martimianakis MA, Moulton CA. (\$15,910.00 CAD, 2012 - present).

The Canadian Bone Metastasis Network (CaBONET). *Canadian Institute of Health Research*. Clemons M, Addison C, Amir E, Basik M, Whyne CM, Amaout A, Booth C, Brundage M, Chi K, Chow E, Cole D, Dinniwel R, Done S, Goss G, Leigh N, Saad F, Paterson A, Schweitzer M, Siegel P, Siemens R, Singh G, Yee A, Vieth R. (\$745,650.00 CAD, Sep 2012 - Sep 2014).

The Effect of Computer-Assisted Surgery Training In The Placement Of Iliosacral Screws. *Orthopaedic Research and Education Foundation*. Hubbard E, Nousiainen M, Zura R. (\$5,000.00 USD, Jul 2013 - Jun 2014).

The Immune Mediation of Fracture Repair. *University of Toronto, Dean's Fund New Staff Grant*. Whyne C, Anderson M, Alman B, Nam D. (\$10,000.00 CAD, Jul 2010 - Jun 2015).

The Novel Characterization of IL-17F in Fracture Repair. Nam D, Anderson M, Whyne C. (\$100,000.00 CAD, Oct 2013 - Oct 2014).

The novel characterization of IL-17F activation in fracture repair. *Canadian Institutes of Health Research (CIHR)*. Nam D, Anderson M. (\$569,278.00 CAD, Sep 2013 - Aug 2017).

Therapeutics and imaging for the injured spinal cord: MRI guided focused ultrasound and viral delivery across the blood spinal cord barrier - A pilot study. *Centre for Spinal Trauma*. Whyne C, Aubert I, Chopra R, Stanisz G, Hynynen K, Finkelstein J, Yee A. (\$40,000.00 CAD, Jul 2011 - Dec 2013).

The therapeutic functional importance of Th17 cells in fracture repair. *Physicians Services Incorporated Foundation (The) (PSI)*. Whyne C. (\$252,784.00 CAD, Mar 2013 - Mar 2015).

Training Tibial Nail Distal Locking Screw Insertion Skills to Surgical Trainees: Sureshot Technology Versus Conventional Fluoroscopic Technique. *Smith and Nephew Inc. (Memphis, TN, USA).* Nousiainen M. (\$45,000.00 CAD, 2012 - present).

Validity and Reliability of Clinical Tests in Diagnosing Reparability of Large and Massive Rotator Cuff Tears. *Sunnybrook Holland Centre Orthopaedic Surgeons Academic Enrichment Fund.* Holtby R, Razmjou H, Dwyer T. (\$20,000.00 CAD, Jan 2013 - Jan 2014).

Honours Received

Cameron JC: Thomas R. Loudon Award, University of Toronto. Honouring Outstanding Services in the Advancement of Athletics. Jun 2014.

Nam D: Clinician Investigators Award in the Holland Musculoskeletal (HMSK) program, Toronto, Ontario, Canada. 2014 - 2017.

Nousiainen M: Ivan Silver Innovation Award, Continuing Professional Development, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada. Mar 2014.

Division of Plastic and Reconstructive Surgery

Dr. O.M. Antonyshyn	Associate Professor	Dr. M. Gomez	Associate Professor
Dr. P. Binhammer	Assistant Professor (Division Head)	Dr. M.G. Jeschke	Associate Professor
Dr. R. Cartotto	Associate Professor	Dr. J.E. Lipa	Associate Professor
Dr. M. Dibildox	Lecturer	Dr. S. Shahrokhi	Lecturer
Dr. J.A. Fialkov	Assistant Professor	Dr. L. Snell	Assistant Professor

Publications

Abdullahi A, Amini-Nik S, Jeschke MG. Animal models in burn research. *Cell Mol Life Sci.* 2014 Apr. [Epub ahead of print].

Abdullahi A, Jeschke MG. Nutrition and Anabolic Pharmacotherapies in the Care of Burn Patients. *Nutr Clin Pract.* 2014 May 14. pii: 0884533614533129. [Epub ahead of print].

Amini-Nik S, Jeschke MG. What's New in Shock? *Shock.* 2013 Dec; 40(6):441-3.

Arno AI, Amini-Nik S, Blit PH, Al-Shehab M, Belo C, Herer E, Tien CH, Jeschke MG. Human Wharton's jelly-mesenchymal stem cells promote skin wound healing through paracrine signaling. *Stem Cell Res Ther.* 2014 Feb 24;5(1):28.

Arno AI, Gauglitz GG, Barret JP, Jeschke MG. New molecular medicine-based scar management strategies. *Burns.* 2014 Jan 14. pii: S0305-4179(13)00369-0. doi: 10.1016/j.burns.2013.11.010. [Epub ahead of print].

Arno AI, Gauglitz GG, Barret JP, Jeschke MG. Up-to-date approach to manage keloids and hypertrophic scars: A useful guide. *Burns.* 2014 Apr 22. pii: S0305-4179(14)00071-0. doi: 10.1016/j.burns.2014.02.011. [Epub ahead of print].

Arno A, Jeschke MG. The use of dermal substitutes in burn surgery: acute phase. In: Kamolz LP, Lumenta DB (eds), *Dermal Replacements in General, Burn, and Plastic Surgery.* 2013; Vol. 1. Springer. 193-210.

Austin RE, Merchant N, Shahrokhi S, Jeschke MG. Can You Save Both Money and Time? A comparison of Biobrane™ and Cadaveric Allograft in Acute Burn Management. *Burns.* 2014 Mar.

Austin R, Shahrokhi S, Bolourani S, Jeschke MG. Peripherally Inserted Central Venous Catheters In Burn Care: Are They As Safe As We Think? *Journal of Burn Care and Research.* 2014 Jun.

Baltzer H, Binhammer PA. Cost-effectiveness in the management of Dupuytren's contracture. A Canadian cost-utility analysis of current and future management strategies. *Bone Joint J.* 2013 Aug; 95-B(8): 1094-100.

Blit P, Arno A, Jeschke MG. Stem Cells and Tissue Engineering In Wounds and Burns. In: Stewart Sell (eds), *Stem Cells Handbook.* 2nd ed. 2013: 399-411. Humana Press.

Cartotto R, Bueno EM, Cicuto BJ, Kiwanuka HN, Pohamac B. Common Post-Burn Deformities and Their Correction. *Surgical Clinics of North America.* 2014.

Cartotto R, Yeo C, Camacho F, Callum J. Does the storage age of transfused blood affect outcome in burn patients? *J Burn Care Res.* 2014 Mar; 35(2): 186-97.

- Diao L, Marshall AH, Dai X, Bogdanovic E, Abdullahi A, Amini-Nik S, Jeschke MG.** Burn Plus Lipopolysaccharide Augments Endoplasmic Reticulum Stress and NLRP3 Inflammasome Activation and Reduces PGC-1 in Liver. *Shock*. 2014 Feb. Feb;41(2):138-44.
- Grigorovich A, Gomez M, Leach L, Fish JS.** Impact of Posttraumatic Stress Disorder and Depression on Neuropsychological Functioning in Electrical Injury Survivors. *Journal of Burn Care and Research*. 2013 Nov 12; 34(6): 659-665.
- Hiyama Y, Marshall AH, Kraft R, Arno A, Jeschke MG.** Fenofibrate does not affect burn-induced hepatic endoplasmic reticulum stress. *J Surg Res*. 2013 Jul 4. doi:pii: S0022-4804(13)00659-8. 10.1016/j.jss.2013.06.029. [Epub ahead of print].
- Jeschke MG.** Clinical review: Glucose control in severely burned patients - current best practice. *Crit Care*. 2013 Jul 25;17(4):232.
- Jeschke MG, Branski LK.** Wound coverage technologies in burn care-established and novel approaches. In: Kamolz LP, Lumenta DB (eds), *Dermal Replacements in General, Burn, and Plastic Surgery*. 2013; Vol. 1. Springer. 97-120.
- Jeschke MG, Finnerty CC, Emdad F, Rivero HG, Kraft R, Williams FN, Gamelli RL, Gibran NS, Klein MB, Arnoldo BD, Tompkins RG, Herndon DN.** Mild Obesity Is Protective After Severe Burn Injury. *Ann Surg*. 2013 Jul 19. [Epub ahead of print].
- Jeschke MG, Finnerty CC, Harrison RA, Herndon DN.** Nutrition in Burn Injury. In: Ross CA, Caballero B, Cousins RJ, Tucker KL, Ziegler TR (eds), *Modern Nutrition in Health and Disease*. Eleventh. 2013; 1289-1298.
- Jeschke MG, Finnerty CC, Kulp GA, Kraft R, Herndon DN.** Can we use C-reactive protein levels to predict severe infection or sepsis in severely burned patients? *Int J Burns Trauma*. 2013 Jul 8;3(3):137-43.
- Jeschke MG, Finnerty CC, Shahrokhi S, Branski LK, Dibildox M; The ABA Organization & Delivery of Burn Care Committee.** Wound Coverage Technologies in Burn Care: Novel Techniques. *J Burn Care Res*. 2013 Nov-Dec;34(6):612-20.
- Jeschke MG, Herndon DN.** Burns in children: standard and new treatments. *Lancet*. 2013 Sep. *Lancet*. 2013 Sep 10. doi:pii: S0140-6736(13)61093-4. 10.1016/S0140-6736(13)61093-4. [Epub ahead of print].
- Jeschke MG, Kamolz LP, Shahrokhi S.** *Burn Care and Treatment. A Practical Guide*. Springer Verlag. 2013.
- Jeschke MG, Pinto R, Herndon DN, Finnerty CC, Kraft R.** Hypoglycemia Is Associated With Increased Postburn Morbidity and Mortality in Pediatric Patients. *Critical Care Medicine*. 2013 Dec 23. [Epub ahead of print].
- Kamolz LP, Herndon DN, Jeschke MG.** (eds). *Verbrennungen: Diagnose, Therapie und Rehabilitation des thermischen Traumas*. 2013. Springer Verlag, Vienna.
- Klein MB, Gorman J, Hayden DL, Fagan SP, McDonald-Smith GP, Alexander AK, Gamelli RL, Gibran NS, Finnerty CC, Jeschke MG, Arnoldo B, Herndon DN, Tompkins RG.** Inflammation and Host Response to Injury, and Large-Scale Collaborative Research Program. Benchmarking outcomes in the critically injured burn patient. *Ann Surg*. 2014 May;259(5):833-41.
- Kraft R, Herndon DN, Branski LK, Finnerty CC, Leonard KR, Jeschke MG.** Optimized fluid management improves outcomes of pediatric burn patients. *Journal of Surgical Research*. 2013 May 1;181(1):121-8.
- Kraft R, Herndon DN, Finnerty CC, Hiyama Y, Jeschke MG.** Association of Postburn Fatty Acids and Triglycerides with Clinical Outcome in Severely Burned Children. *J Clin Endocrinol Metab*. 2013 Jan;98(1):314-21.
- Kraft R, Herndon DN, Mlcak RP, Finnerty CC, Cox RA, Williams FN, Jeschke MG.** Bacterial respiratory tract infections are promoted by systemic hyperglycemia after severe burn injury in pediatric patients. *Burns*. 2013 Sep 25. doi:pii: S0305-4179(13)00229-5. 10.1016/j.burns.2013.07.007. [Epub ahead of print].
- Maloul A, Fialkov J, Wagner D, Whyne CM.** Characterization of craniofacial sutures using the finite element method. *Journal of Biomechanics*. 2014 Jan; Vol 47(Issue 1): p. 245.
- Maloul A, Fialkov J, Whyne CM.** Characterization of the bending strength of craniofacial sutures. *Journal of Biomechanics*. 2013; 46: 912-917.
- Mansfield E, Stergiou-Kita M, Bayley M, Colantonio A, Gomez M, Jeschke M, Kirsh B, Kristman V, Moody J, Vartanian O, Cassidy D.** Return to work challenges following a work-related mild TBI: The injured worker perspective. *Brain Injury*. 2014 May 31.

- Melinyshyn A, Callum J, Jeschke M, Cartotto R.** Albumin Supplementation for Hypoalbuminemia Following Burns: Unnecessary and Costly! *Journal Burn Care Research*. 2013 Jan;34(1):8-17.
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- Shahrokhi S, Arno A, Jeschke MG.** The use of dermal substitutes in burn surgery: Acute phase. *Wound Repair Regen*. 2014 Jan;22(1):14-22.
- Shahrokhi S, Jeschke MG.** infections in Burns. In: *Oxford Specialist Handbook in Surgery - Burns*. 2013.
- Shahrokhi S, Jeschke MG.** Management of Thermal Injury. In: *Oxford Textbook of Critical Care*. 2013.
- Simpson JS, Baltzer H, McMillan C, Boileau JF, Wright F, Lipa JE, Snell L, Holloway C.** Multidisciplinary assessment for immediate breast reconstruction: a new approach. *Surgical Practice*. 2014.
- Stanojcic M, Chen P, Harrison RA, Wang V, Antonyshyn J, Zúñiga-Pflücker JC, Jeschke MG.** Leukocyte Infiltration and Activation of the NLRP3 Inflammasome in White Adipose Tissue Following Thermal Injury. *Crit Care Med*. 2014 Feb 26. [Epub ahead of print].
- Stergiou-Kita M, Grigorovich A, Gomez M.** Development of an Inter-professional Clinical Practice Guideline for Vocational Evaluation Following Burn Injuries. *Burns*. 2014 Feb 15. United Kingdom: Elsevier Ltd. PMID: 24548735. AID: doi: 10.1016/j.burns.2014.01.001.
- Stergiou-Kita M, Mansfield E, Bayley M, Colantonio A, Gomez M, Jeschke MG, Kirsh B, Kristman V, Moody J, Vartanian O, Cassidy D.** Returning to Work Following Electrical Injuries: Workers' Perspectives and Advice to Others. *Journal of Burn Care & Research*. 2014 May 16.
- Sudenis T, Hall K, Cartotto R.** What the Dietician Prescribes Isn't What the Burn Patient Gets! *Journal of Burn Care and Research*. 2013 Dec.
- Szwedowski TD, Fialkov J, Pakdel A, Whyne CM.** An optimized process flow for rapid segmentation of cortical bones of the craniofacial skeleton using the level-set method. *Dentomaxillofacial Radiology*. 2013; 42(4): 20120208.
- Xiu F, Jeschke MG.** Perturbed mononuclear phagocyte system in severely burned and septic patients. *Shock*. 2013 Aug;40(2):81-8.
- Xiu F, Stanojcic M, Diao L, Jeschke MG.** Stress Hyperglycemia, Insulin Treatment, and Innate Immune Cells. *Int J Endocrinol*. 2014 May 8;2014:486403. Epub

Invited Visits

- Antonyshyn OM:** University of Ottawa, Ottawa, Ontario, Canada, 2013. Visiting Professor: Resident Day.
- Antonyshyn OM:** Jackson Hole, Wyoming, United States, 12 Sep 2013. Presenter: Patient-specific orbital implants: Development and implementation of technology for more accurate orbital reconstruction.
- Antonyshyn OM:** Northwest Society of Plastic Surgery, Sun Peaks, British Columbia, Canada, 18 Feb 2014. Presenter: Titanium Cranioplasty.
- Antonyshyn OM:** University of Manitoba, Winnipeg, Manitoba, Canada, 2 Apr 2014. Visiting Professor: 1/ From Surgical Innovation to Commercial Venture Grand Surgical Rounds. 2/ Orbital Trauma and Reconstruction Resident Rounds. 3/ Saddle Nose Deformity: Classification and Surgical Treatment Plastic Surgery Resident Day. 4/ Genioplasty: Planning, Technique and Morphological Outcomes Plastic Surgery Resident Day.

Antonyshyn OM: AO CMF Faculty, Las Vegas, Nevada, United States, 25-26 Apr 2014. Invited Lecturer: 1/ Surgical Approaches to the Orbital Floor/Rim Invited Lecture. AO CMF. Craniomaxillofacial Surgery: Orbital Approaches and Fundamentals. 2/ Problems in Secondary Orbital Reconstruction Invited lecture. AO CMF. Craniomaxillofacial Surgery: Orbital Approaches and Fundamentals.

Antonyshyn OM: AO CMF, Montreal, Quebec, Canada, 24 Jun 2014. Invited Lecturer: Complications of Mandibular Fractures and Their Treatment AO CMF Principles of Operative Treatment of Craniomaxillofacial Trauma and Reconstruction.

Binhammer P: Association des spécialistes en chirurgie plastique et esthétique du Québec, Estrimont, Quebec, Canada, 22 Feb 2014. Invited Speaker: 1/ Baron Dupuytren and the Battle of Three Armies. 2/ Locking Plates in the Hand.

Cartotto R: American Burn Association Annual Meeting, Boston, Massachusetts, United States, 23-25 Mar 2014. Invited Speaker: 1/ Wound and Scar Complications. 2/ Albumin is required for burn resuscitation.

Cartotto R: Canadian Society of Plastic Surgeons, Montreal, Quebec, Canada, 28 Jun 2014. Invited Speaker: Burn Care in Canada - An Update.

Fialkov JA: International congress of the International Society of Craniofacial Surgeons, Jackson Hole, Wyoming, United States, 11 Sep 2013. 1/ Presenter: Development of a patient reported outcome measure in adult cleft lip and palate patients. 2/ Invited Lecturer: Development of a patient reported outcome measure in adult cleft lip and palate patients.

Gomez M: Lideres Colombianos que Inspiran - Colombian Consulate, Toronto, Ontario, Canada, 15 Mar 2014. Invited Speaker: My Personal Experience as a Physician in Canada.

Gomez M: Primera Semana Latinoamericana de la Salud - Colombian Consulate, Toronto, Ontario, Canada, 20 Oct 2013. Invited Speaker: Estrategias para una vida mas saludable y evitar las enfermedades cronicas.

Jeschke MG: European Burn Association, Vienna, Austria, Aug 2013. Invited Lecturer: 1/ Anabolic agents in burns. 2/ Novel technologies to improve outcomes in burn patients.

Jeschke MG: Centre hospitalier de l'University de Montreal, Montreal, Quebec, Canada, Nov 2013. Keynote Speaker: State of the Art and New Therapies in Burn Care.

Jeschke MG: Sainte-Justine Hospital, Montreal, Quebec, Canada, Nov 2013. Invited Lecturer: Pulmonary management in the pediatric burn patient including inhalation injury and intoxication.

Jeschke MG: American Society for Parenteral and Enteral Nutrition, Georgia, United States, Feb 2014. Distinguished Speaker: Nutrition in Burns.

Jeschke MG: 46 th Annual Meeting of the American Burn Association, Boston, Massachusetts, United States, Mar 2014. Presenter: 1/ Hyperglycemia differentially regulates various cytokine production from macrophages. 2/ Can you save both money and time? A comparison of a biosynthetic dressing and cadaveric allograft in acute burn management. 3/ Peripherally inserted central venous catheters in the burn unit: are they as safe as we think? 4/ Healthcare costs of burn patients from homes without fire sprinklers. 5/ Deficient recruitment of progenitor cells into the skin of old mice contributes to delayed cutaneous healing post thermal injury.

Snell L: Canadian Society of Plastic Surgeons Educational Foundation, Montreal, Quebec, Canada, 25 Jun 2014. Presenter: Using patient reported outcomes to improve results and patient satisfaction in breast reconstruction.

Grants, Contracts and Clinical Trials

Burn-associated hypermetabolism and hepatic dysfunction are triggered and augmented by adipose tissue inflammation. CIHR, Operating Grant. Jeschke M. (\$688,380.00 CAD, Apr 2013 - Mar 2017).

Catecholamines as primary mediators of post-burn hypermetabolism: A clinical prospective trial. *Canadian Institute for Health Research (CIHR)*. Jeschke M, Rubinfeld G, Boehning D. (\$851,939.00, Oct 2012 - Sep 2017).

Characterization of burn induced hepatic dysfunction. *National Institutes of Health (NIH) (USA)*. Jeschke M. (Jul 2010 - Jun 2015).

Development of a Novel Device and Method for Stabilizing Traumatic Craniofacial Injuries. *Ontario Centres of Excellence/MaRS*. Whyne C, Fialkov JA. (\$57,500.00 CAD, 2012 - 2013).

DIAP Flap Breast Reconstruction: Postoperative Guidelines. *Sunnybrook Patient Family Education Committee*. Snell L, Lipa J, Plauntz L, McMillan C. (\$854.00 CAD, Jan 2014 - Mar 2014).

Health-related quality of life and cosmesis differences in women requiring post-mastectomy radiation. *Sunnybrook General Surgery Associates.* Wright F, Scheer A, McMillan C, Vesprini D, Snell L, Lipa J. (\$7,500.00 CAD, Mar 2013 - Mar 2014).

Leader's Opportunity Fund. *Canada Foundation for Innovation (CFI).* Jeschke MG. (\$1,100,000.00 CAD, 2010 - 2015).

Multicentre Transfusion Trigger Study. *University of California (Davis, CA), US Army Department of Defense/American Burn Association.* Palmieri T, Cartotto R. (USD, Jan 2011 - Jan 2014).

Post-operative guidelines for breast reconstruction: tissue expander/implants. *Sunnybrook Patient Family Education Committee.* Lipa J, Snell L, Plauntz L, McMillan C. (\$973.50 CAD, Jan 2014 - Mar 2014).

Preoperative imaging in DIEP flap breast reconstruction: a randomized controlled trial evaluating cost and patient-reported outcomes. *Canadian Breast Cancer Foundation, Ontario.* Lipa J, Snell L, Pugash R, David E, McMillan C. (\$300,029.00 CAD, Jul 2012 - Jun 2015).

Promoting Employment Success Through Workplace Accommodation Following Traumatic Brain Injury and Electrical Injury. *Canadian Institutes of Health Research (CIHR).* Colantonio A, Stergiou-Kita M, Bayley M, Cassidy JD, Gomez M, Jeschke M, Kirsh B, Kristman V, Vartanian O. (\$100,000.00 CAD, Oct 2012 - Sep 2013).

Screening Outpatients for Psychological Distress, Access to Psychological Services, Functional Capacity and Insurance Coverage Following Traumatic Injury. *Sunnybrook Health Sciences Centre.* Gardner PJ, Knittel-Keren D, Shaffer J, Gomez M. (\$6,000.00 CAD, Dec 2013 - Nov 2015).

Surviving Sepsis after Burns Campaign (SSABC). "Multi-center Trials in Burns to Improve Combat Casualties". *US Army, Department of Defense / American Burn Association, US Army Department of Defense/American Burn Association.* Cartotto R. (\$20,000.00 USD, 2014 - present).

Honours and Awards

Gomez M: Chief Public Safety Officer's Special Recognition Award, Electrical Safety Authority, Mississauga, Ontario, Canada. Sep 2013.

Jeschke MG: Best doctor in Toronto, Toronto Life Magazine. Mar 2014.

Division of Urology

Dr. L.K. Carr	Associate Professor	Dr. R.T. Kodama	Professor
Dr. S. Herschorn	Professor	Dr. R.K. Nam	Associate Professor (Division Head)
Dr. L. Klotz	Professor	Dr. V. Venkateswaran	Associate Professor

Publications

Akbari MR, Anderson LN, Buchanan DD, Clendenning M, Jenkins MA, Win AK, Hopper JL, Giles GG, Nam R, Narod S, Gallinger S, Cleary SP. Germline HOXB13 p.Gly84Glu mutation and risk of colorectal cancer. *Cancer Epidemiol.* 2013 Aug;37(4):424-7.

Albertsen PC, Klotz L, Tombal B, Grady J, Olesen TK, Nilsson J. Cardiovascular morbidity associated with gonadotropin releasing hormone agonists and an antagonist. *Eur Urol.* 2014 Mar; 65(3): 565-73.

Azad AA, Beardsley EK, Hotte SJ, Ellard SL, Klotz L, Chin J, Kollmannsberger C, Mukherjee SD, Chi KN. A randomized phase II efficacy and safety study of vandetanib (ZD6474) in combination with bicalutamide versus bicalutamide alone in patients with chemotherapy naïve castration-resistant prostate cancer. *Invest New Drugs.* 2014 Mar 28; Epub ahead of print.

Besla R, Venier N, Colquhoun A, Fleshner NE, Klotz LH, Venkateswaran V. Dutrasteride and metformin reduce growth of prostate cancer cells in culture and alter the SREBP-1 pathway. *The Open Prostate Cancer Journal.* 2013; 6: 10-15.

Chiang AS, Loblaw DA, Jethava V, Sethukavalan P, Zhang L, Vesprini D, Mamedov A, Nam R, Klotz L. Utility of 5-alpha-reductase inhibitors in active surveillance for favourable risk prostate cancer. *Can Urol Assoc J.* 2013 Nov; 7(11-12).

- Crawford ED, Shore ND, Moul JW, Tombal B, Schröder FH, Miller K, Boccon-Gibod L, Malmberg A, Olesen TK, Persson BE, Klotz L. Long-term tolerability and efficacy of degarelix: 5-year results from a phase III extension trial with a 1-arm crossover from leuprolide to degarelix. *Urology*. 2014 May; 83(5): 1122-8.
- Klotz L. Conservative management for low-risk prostate cancer improves quality-adjusted life expectancy at lower cost compared with initial treatment. *Evid Based Med*. 2014 Feb; 19(1): 40.
- Klotz L. Prostate cancer: Intermittent ADT--tales from a 27-year odyssey. *Nat Rev Urol*. 2013 Jul 10; 10(7): 372-4.
- Klotz L, Emberton M. Management of low risk prostate cancer: active surveillance and focal therapy. *Current Opinion Urology*. 2014 Jun 20; 24(3): 270-9.
- Klotz L, Miller K, Crawford ED, Shore N, Tombal B, Karup C, Malmberg A, Persson BE. Disease Control Outcomes from Analysis of Pooled Individual Patient Data from Five Comparative Randomised Clinical Trials of Degarelix Versus Luteinising Hormone-releasing Hormone Agonists. *Eur Urol*. 2014 Jan 9; (13): 01491-7.
- Liebman B, Klotz L. Prostate Cancer: Which ones matter? *Nutrition Action Health Letter*. 2013 Sep 6
- Long Q, Xu J, Osunkoya AO, Sannigrahi S, Johnson BA, Zhou W, Gillespie T, Park JY, Nam RK, Sugar L, Stanimirovic A, Seth AK, Petros JA, Moreno CS. Global transcriptome analysis of formalin-fixed prostate cancer specimens identifies biomarkers of disease recurrence. *Cancer Res*. 2014 Jun 15; 74(12): 3228-37.
- Margel D, Klotz L. Intestinal Segments in Urology. In: S. Leslie (eds), *Urology Board Review*. 4th. 2013 Jul: 209-240.
- Moore CM, Kasivisvanathan V, Eggener S, Emberton M, Fütterer JJ, Gill IS, Grubb Iii RL, Hadaschik B, Klotz L, Margolis DJ, Marks LS, Melamed J, Oto A, Palmer SL, Pinto P, Puech P, Punwani S, Rosenkrantz AB, Schoots IG, Simon R, Taneja SS, Turkbey B, Ukimura O, van der Meulen J, Villers A, Watanabe Y. Standards of reporting for MRI-targeted biopsy studies (START) of the prostate: recommendations from an International Working Group. *Eur Urol*. 2013 Oct; 64(4): 544-52.
- Mora BC, Fleshner NE, Klotz LH, Venkateswaran V. The Effects of Serum from Prostate Cancer Patients with Elevated Body Mass Index on Prostate Cancer Cells In Vitro. *Journal of Urology*. 2014.
- Nam RK, Cheung P, Herschorn S, Saskin R, Su J, Klotz LH, Chang M, Kulkarni GS, Lee Y, Kodama RT, Narod SA. Incidence of complications other than urinary incontinence or erectile dysfunction after radical prostatectomy or radiotherapy for prostate cancer: a population-based cohort study. *Lancet Oncol*. 2014 Feb 1; 15(2): 223-31.
- Peters KM, Dmochowski RR, Carr LK, Robert M, Kaufman MR, Sirls LT, Herschorn S, Birch C, Kultgen PL, Chancellor MB. Autologous Muscle Derived Cells for Treatment of Stress Urinary Incontinence in Women. *Journal of Urology*. 2014 Feb 25.
- Ramsay E, Mougenot C, Köhler M, Bronskill M, Klotz L, Haider MA, Chopra R. MR thermometry in the human prostate gland at 3.0T for transurethral ultrasound therapy. *J Magn Reson Imaging*. 2013 Dec; 38(6): 1564-71.
- Robinson K, Creed J, Reguly B, Powell C, Wittock R, Klein D, Maggrah A, Klotz L, Parr RL, Dakubo GD. Accurate prediction of repeat prostate biopsy outcomes by a mitochondrial DNA deletion assay. *Prostate Cancer Prostatic Dis*. 2013 Dec 1; 16(4): 398-404.
- Rove KO, Crawford ED, Perachino M, Morote J, Klotz L, Lange PH, Andriole GL, Matsumoto AM, Taneja SS, Eisenberger MA, Reis LO. Maximal testosterone suppression in prostate cancer--free vs total testosterone. *Urology*. 2014 Jun 16; 83(6): 1217-22.
- Sasaki H, Klotz LH, Zisis S, Dalla Nora S, Sugar LM, Kiss A, Venkateswaran V. A combination of desmopressin (DDAVP) and docetaxel inhibit prostate cancer proliferation and invasion mediated by urokinase-type plasminogen activator (uPA). *Cancer Research*. 2014.
- Thomsen FB, Brasso K, Klotz LH, Røder MA, Berg KD, Iversen P. Active surveillance for clinically localized prostate cancer--a systematic review. *J Surgical Oncology*. 2014 Jun 22; 109(8): 830-5.
- Toren PM, Venkateswaran V. Diet, Obesity and Cancer progression: Are Adipocytes the Link? *Lipid Insights*. 2013; 6: 37-45.
- Toren P, Venkateswaran V. Periprostatic adipose tissue and prostate cancer progression: new insights into the tumour microenvironment - Review. *Clinical Genitourinary Cancer*. 2014; 12(1): 21-26.
- Uemura H, Nelson C, Schalken J, Klotz L. Personalized Cancer therapy for Urological Cancers: From Bench to Bedside and Back: An overview. In: *Advances in Urology*. 2013 Jul.

Vandersluis A, Kiss A, Fleshner NE, Klotz LH, Venkateswaran V. The Role of Physical Activity and other Lifestyle Factors on Prostate Cancer Progression in the Active Surveillance Cohort. *Journal of Urology*. 2014.

Vandersluis AD, Venier NA, Colquhoun AJ, Sugar L, Pollak M, Kiss A, Fleshner NE, Klotz LH, Venkateswaran V. Exercise does not counteract the effects of a “westernized” diet on prostate cancer xenografts. *Prostate*. 2013 Aug; 73(11): 1223-32.

Venier N, Colquhoun A, Fleshner NE, Klotz LH, Venkateswaran V. Lycopene enhances the anti-proliferative and pro-apoptotic effects of capsaicin in prostate cancer in vitro. *Journal of Cancer Therapeutics and Research*. 2013; 1: 30-39.

Venier A, Colquhoun A, Sasaki H, Kiss A, Sugar M, Adomat H, Klotz LH, Fleshner NE, Venkateswaran V. Capsaicin: A novel radio-sensitizing agent for prostate cancer. *The Prostate*. 2014.

Venier N, Klotz LH, Fleshner NE, Venkateswaran V. Capsaicin: A Targeted Chemopreventive Agent for Prostate Cancer - Review. *Prostate Cancer Prostatic Disease*. 2013.

Zlotta AR, Egawa S, Pushkar D, Govorov A, Kimura T, Kido M, Takahashi H, Kuk C, Kovylyna M, Aldaoud N, Fleshner N, Finelli A, Klotz L, Sykes J, Lockwood G, van der Kwast TH. Prevalence of prostate cancer on autopsy: cross-sectional study on unscreened Caucasian and Asian men. 2013 Jul 17; 105(14): 1050-8.

Presentations and Special Lectures

Carr LK: University of Western Ontario, London, Ontario, Canada, 25 Mar 2014. Visiting Professor: Regenerative Medicine in Urology and New Pharmacotherapy for Overactive Bladder.

Carr LK: Canadian Urological Association, St. John’s, Newfoundland and Labrador, Canada, 28 Jun 2014. Lecturer: Botox Symposium at the CUA Meeting.

Nam RK: American Urological Association Annual Meeting, Orlando, Florida, United States, 10 May 2014. Presenter: Complications of Surgery and Radiation for Prostate Cancer.

Nam RK: Singapore General Hospital, Department of Urology, Singapore, 16 Mar 2014. Invited Speaker: Complications of Treatment for Prostate Cancer.

Grants, Contracts and Clinical Trials

Active Surveillance Magnetic Resonance Imaging Study. *Ontario Institute for Cancer Research (OICR)*. Klotz L, Loblaw A, Haider M. (\$2,450,343.00 CAD, Oct 2010 - Dec 2015).

A Phase 2, Randomized Controlled Study of a Novel Anti-Inflammatory for Interstitial Cystitis/Bladder Pain Syndrome. *Aquinox*. Carr LK. (\$25,000.00 CAD, Jul 2013 - Jun 2014).

A phase III, randomized, multicentre efficacy and safety study comparing 10 months versus 4 months of degarelix therapy in prolonging the off treatment interval in men with non-metastatic prostate cancer receiving intermittent androgen deprivation therapy for biochemical progression. *Ferring Pharmaceuticals Inc*. Klotz L. (\$1,262,636.00 CAD, Nov 2011 - Dec 2016).

Metformin: A radio- and chemo- sensitizer in prostate cancer. *Canadian Institutes of Health Research (CIHR)*. Venkateswaran V, Klotz L, Bristow R, Fleshner N, Sugar L, Kiss A. (\$50,000.00 CAD, May 2014 - Apr 2015).

Microchip-based devices for the analysis of circulating prostate cancer markers. *Canadian Institutes of Health Research (CIHR)*. O’Kelley S, Sargent E, Wheeler A. (\$1,735,400.00 CAD, Jul 2011 - Jun 2015).

MicroRNAs and Prostate Cancer Progression. *Edmond Odette Foundation*. Nam R, Arun S. (\$250,000.00 CAD, Apr 2012 - Apr 2014).

Honours and Awards

Klotz L: SUO Medal, Society of Urological Oncology (SUO). 2014.

Klotz L: Lister Prize, Department of Surgery, University of Toronto. May 2014 - Jul 2014.

Division of Vascular Surgery

Dr. A. Dueck
Dr. D. Kucey

Assistant Professor (Division Head)
Assistant Professor

Dr. R. Maggisano
Dr. G. Papia

Associate Professor
Assistant Professor

Publications

Engels PT, Beckett AN, Rubenfeld GD, Kreder H, Finkelstein JA, da Costa L, Papia G, Rizoli SB, Tien HC. Physical rehabilitation of the critically ill trauma patient in the ICU. *Crit Care Med.* 2013 Jul; 41(7): 1790-801.

Papia G. Multiple Organ. In: J Ali (eds), *Surgical Critical Care Handbook* 1st Edition. 2014. Chapter 26.

Papia G. Postoperative Management. In: *Rutherford's Vascular Surgery*. 8th. 2014 Jun.

Papia G. Diabetic foot: Disease, complication or syndrome? *Diabetic Foot Canada.* 2013; 1.

Invited Visits

Papia G: National Capital Vascular Symposium, Ottawa, Ontario, Canada, 10 May 2014. Invited Speaker: Debate - Conservative Treatment should always be the first option in the treatment of intermittent claudication.

Papia G: SFA Workshop, Ontario, Canada, 2014. Co-Chair and Organizer: 1/ Approaches and Options.

Research and Investigations

Curcumin to Prevent Perioperative Complications After Elective Abdominal Aortic Aneurysm Repair: a Randomized Controlled Trial. *Canadian Institutes of Health Research (CIHR).* Tobe S, Hladunewich M, Sheldon T, Papia G. (\$322,419.00 CAD, Nov 2011 - Dec 2015).

MR-Guided Revascularization of Occlusive Peripheral Arterial Disease. *CIHR.* Wright G, Dueck A, Strauss B. (\$562,215.00 CAD, Sep 2012 - Aug 2017).



Toronto East General Hospital

Carmine Simone,
Surgeon-in-Chief

Our Department vision is simple: We want Toronto East General Hospital (TEGH) *to be the best place for our patients, friends and family to get excellent surgical care. If we are unable to provide the best care, we will seek out partnerships that will ensure our patients get the care they need and deserve. We want TEGH to be the best place for a community surgeon to work and the best place for learners to obtain surgical training in Toronto.*

The Department of Surgery at TEGH has 4 core divisions and this past year has been a very active year for all divisions.

The Division of Urology continues to expand its robotic prostate surgery program with a partnership with Sunnybrook Health Sciences Centre. **Dr. Rajiv Singal** and **Dr. John Kell** helped orchestrate a unique surgical partnership that will undoubtedly serve as a template for future inter-hospital collaborations within Ontario. Dr. S. Herschorn and Dr. L. Klotz - staff urologists from Sunnybrook Health Sciences Centre - are cross-appointed at TEGH and perform robotic prostatectomies at our organization. **Dr. Ryan Groll** has helped develop the electronic medical record for cystoscopy as part of a provincial initiative. Dr. Singal continues to advance the use of social media in education in urology and has for the first-time ever enlisted American urologists to the TEGH Movember Team. Dr. Singal was promoted to Assistant Professor at the University of Toronto this academic year.

The Division of General Surgery is recognized as a leader in education at the University of Toronto. **Dr. Paul Bernick** is the Head of the Division and continues to support the strong education mandate of the Division. Once again, the Division of General Surgery at TEGH has been recognized as a leader in education of surgical and family medicine residents by the University of Toronto. **Dr. Jamie Cyriac** and **Dr. Mary-Anne Aarts** have been instrumental in the maintenance of our bariatric surgery program. Mary-Anne is our site lead for launching the Enhanced Recovery after Surgery (ERAS) initiative at TEGH.

Under the leadership of **Dr. Robert Zeldin** our Level I thoracic surgery program continues to grow providing services at multiple sites - the Odette Cancer Centre at Sunnybrook Health Sciences Centre, North York General Hospital and Royal Victoria Hospital in Barrie – the only program in the province able to deliver Level I care to such a large geographic area. **Dr. Najib Safieddine** is completing the University of Toronto New and Emerging Academic Leaders (NEAL) Program – the first for our Department.



The Division of Plastic and Reconstructive Surgery under the leadership of **Dr. Linda Dvali** continues to develop a hand surgery and peripheral nerve program unique to a community hospital. **Dr. Brett Beber** is the Resident Wellness Director at the University of Toronto and is cross-appointed at Women's College Hospital. **Dr. Laura Tate** (along with Dr. Karen Devon at Women's College Hospital) has launched the University of Toronto Book Club, featuring educational and inspirational readings for all members of the University program.

The Division of Orthopedic Surgery continues to demonstrate leadership in education and value for service. **Dr. Peter Weiler** and his Division have been able to realize a 40% reduction in LOS in our joint replacement patients as part of the QBP initiative set out by the MOH. **Dr. Frank Mastrogiacomo** and **Dr. Paul Wong** are once again recognized as outstanding resident and fellow teachers.

The TEGH Department of Surgery is still one of the most popular destinations for surgical learners at the University of Toronto. The Department accepts medical students, surgical residents, family medicine residents, internal medicine residents, and surgical fellows from within Canada and internationally. The Department teaching effectiveness score (TES) for residents for 2013 was 17.19 (University mean = 16.90). Of note, the Division of Orthopedics was the highest ranked division by orthopedic surgery trainees at the University of Toronto. **Dr. J. Cyriac** was the highest ranked teacher in our Department with a TES of 18.60 (7th in the University of Toronto Department of Surgery program). A total of 22 of the 24 active staff in our department have university appointments and 18 of the 24 report that teaching residents occurs *daily* within their practice.



Figure 1: We have been able to offer a very unique training experience with our robotic simulator in OR 7, which can be used by residents at any time – even if OR 7 is being used for patient care.

Dr. Robert Zeldin has developed a core PGY3 general surgery rotation for University of Toronto learners as a pilot project in 2012-2013. It has been extremely popular and has now been extended. TEGH Department of Anesthesia has established a core thoracic anesthesia rotation for PGY5 anesthesia residents that serves as an example of the collaborative spirit of our Health Service members.

Dr. Jamie Cyriac sits on the Postgraduate Education Committee for General Surgery, **Dr. Paul Wong** sits on the Postgraduate Resident Committee for Orthopedics and **Dr. Najib Safieddine** sits on the Postgraduate Education Committee for Thoracic Surgery.

We have met, and exceeded, our target for volume of lung and esophageal cancer cases. We have noted a reduction in the number of colon cancer and breast cancer cases. As a result, the Department of Surgery, Department of Medicine (Division of Medical Oncology and Gastroenterology), Departments of DI and Pathology and senior administration collaborated to realize the *Colon Diagnostic Assessment Program* and the *Breast Diagnostic Clinic*. *Our surgical oncology program continues to be a major focus for our Department.*

The Thoracic Surgery program continues to be a major oncology focus for the organization. With strong collaborations with our Division of Medical Oncology and Respiriology, and our partnerships with Odette Cancer Centre, North York General Hospital, Royal Victoria Hospital and the University of Toronto Division of Thoracic Surgery, the TEGH Thoracic Program is recognized as a shining example of collaborative, multidisciplinary, inter-hospital care providing exceptional service to the largest geographic area in the province.

Our Department’s focus is in-line with the hospital core vision of *setting a new standard in quality and value*. We have re-located the endoscopy suite, bronchoscopy suite and recovery rooms, cystoscopy and minor surgery to a separate physical space creating a self-contained “surgicentre”. As a result we have been able to maximize efficiency in staff and equipment thereby driving down our costs and making a “one-stop shop” for patients in our community. Our efforts were recognized by the MOH as “innovative and ground breaking”.

Challenges for 2014: We are working in challenging times. Our Department and our organization are both prepared and well positioned to meet these challenges. We are looking forward to working with our administrative partners and the University of Toronto to once again deliver a balanced budget without compromising service to our community or educational opportunities to our learners.

General Surgery

Dr. M.A. Aarts	Assistant Professor
Dr. P.E. Bernick	Assistant Professor (Division Head)
Dr. J. Cyriac	Lecturer
Dr. J. Dickie	Lecturer
Dr. T. Gilas	Assistant Professor

Dr. N. Safieddine	Lecturer
Dr. H. Sawires	Lecturer
Dr. C. Simone	Lecturer
Dr. R. Zeldin	Assistant Professor

Orthopaedic Surgery

Dr. M. Catre, Jr.	Lecturer
Dr. J.W. Kraemer	Assistant Professor
Dr. G. Maistrelli	Associate Professor

Dr. F. Mastrogiacomo	Lecturer
Dr. P. Weiler	Assistant Professor (Division Head)
Dr. P. Wong	Assistant Professor

Publications

Alman BA, Ferguson P, Kraemer W, Nousiainen M, Reznick RR. Competency-Based Education: A New Model for Teaching Orthopaedics. In: Instructional Course Lectures Volume 62. (Pagnano, MW; Hart, RA: eds.) American Academy of Orthopaedic Surgeons, Chicago, 2013: pp 565-9.

Ferguson P, Kraemer W, Sonnadara RR, Safir O, Nousiainen M, Alman B, Reznick R. Three year experience with an innovative modular competency-based curriculum for orthopaedic training. *Journal of Bone and Joint Surgery*: 2013; 95: pp 1661-6.

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Research and Investigations

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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

Urology

Dr. R. Groll	Lecturer
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Dr. R.K. Singal	Assistant Professor
Dr. P. Vlaovic	Lecturer

Publications

Singal V. Chapter in Patient Education Book. Surgical Treatment of Kidney Stones. Canadian Urological Association . Published June 2013

Research and Investigations

Multicentered, Randomized, Placbo controlled, Double Blind, Phase three trial of Single Dose Intravesical Eoquin as a Surgical Adjuvant Instilled in the Early Postoperative period in Patients Undergoing transurethral Resection for Noninvasive Bladder cancer. *Spectrum Pharmaceuticals*. Singal V. (2008-Present)

Randomized Control Double Blind trial comparing Dutasteride vs Placebo in Patients with early Prostate Cancer undergoing watchful waiting. *AVO Study*. Singal V. (2006-Present)



University Health Network

Shaf Keshavjee MD,
Surgeon-In-Chief



HEADS OF DIVISIONS

Vivek Rao	Cardiac Surgery
Allan Okrainec	General Surgery
Michael Tymianski MD	Neurosurgery
Nizar Mahomed MD	Orthopedic Surgery
Stefan Hofer MD	Plastic Surgery
Tom Waddell MD	Thoracic Surgery
Neil Fleshner MD	Urology
Thomas Lindsay MD	Vascular Surgery

Division Of Cardiac Surgery

S. Brister, MD	R. Weisel, MD
A. Ralph-Edwards, MD	C. Feindel, MD
R.J. Cusimano, MD	T. Yau, MD
V. Rao, MD	M. Ouzounian, MD
T. David, MD	

The Division of Cardiovascular Surgery at the Peter Munk Cardiac Center continues to enjoy strong growth in its clinical and academic programs. The recruitment of Dr. Maral Ouzounian in July 2013 strengthened our multidisciplinary approach to thoracic aortic disease. In 2014, we look forward to the addition of two new surgical recruits. Dr. William Stansfield is a graduate of the University of North Carolina surgical training program and will augment our advanced heart failure team and participate in our minimally invasive surgery program. He is appointed as a Surgical-Scientist and his research interests focus on the molecular changes that occur in cardiac tissue during certain types of ventricular remodeling. Dr. Mitesh Badiwala is a graduate of our training program and recently completed an advanced fellowship in valvular repair under Dr. Patrick McCarthy at Northwestern University in Chicago. He will assume a leadership role in our cardiac transplant program and expand our current efforts into minimally invasive mitral and aortic valve surgery. His appointment as a Surgeon-Investigator will allow him to develop ex-vivo cardiac perfusion for cardiac transplant. The Advanced Heart Failure and LVAD team continues to enjoy international recognition and were selected as one of 8 worldwide sites to participate in the launch of the new HeartMate 3 left ventricular assist device. The Division's basic science efforts are strongly represented by Drs. Ren Ke Li, Richard Weisel and Terry Yau in the field of regenerative medicine and a new initiative in the epigenetics of acquired

and hereditary aortic disease under the leadership of Drs. Tirone David and Maral Ouzounian. Dr Richard Weisel has been appointed Editor in Chief of the premier journal in cardiothoracic surgery - Journal of Thoracic and Cardiovascular Surgery. Several members of the Division serve in key administrative roles including the Provincial Chair of Cardiac Surgery for the Cardiovascular Care Network (Dr. Chris Feindel), Chair of the Physician Payment Review Board (Dr. Vivek Rao) and a director of the Trillium Gift of Life Network (Dr. Vivek Rao). Dr. Hugh Scully serves as a Canadian representative on the Board of Governors for the American College of Surgeons. Members of the Division continue to be frequent invited lecturers around the world, further enhancing our reputation as an innovative and world-class institution for the treatment of acquired and congenital heart disease.

Division Of General Surgery

M. Cattral, MD	A. Ghanekar, MD
I. McGilvray, MD	M. Reedijk, MD
T. Cil, MD	D. Grant, MD
C. Moulton, MD	L. Rotstein, MD
S. Cleary, MD	P. Greig, MD
C. O'Brien, MD	M. Selzner, MD
K. Devon, MD	T. Jackson, MD
A. Okrainec, MD	B. Taylor, MD
J. Escallon, MD	W. Leong, MD
T. Penner, MD	D. Urbach, MD
S. Gallinger, MD	D. McCreedy, MD
F. Quereshy, MD	A. Wei, MD

It has been a very successful year from a clinical, teaching, and research perspective in the Division of General Surgery with several notable accomplishments. A number of Faculty members were recipients of prestigious awards; Paul Greig received the Francis Moore Excellence in Mentorship in the Field of Transplantation Surgery Award by the American Society of Transplant Surgeons. Fayez Quereshy and Michael Reedijk were both recipients of a Wightman-Berris Academy Individual Teaching Excellence Award. Timothy Jackson received the Frank Mills Award for Excellence in Teaching by a General Surgery Faculty Member. Catherine O'Brien received the Associated

Medical Services Recognition Award for Exemplary End of Life Care. Lorne Rotstein was honoured by the Division after serving more than nine years as Division Head. Allan Okrainec was appointed as the new Head of the Division of General Surgery and Peter Crossgrove Chair.

The Division of General Surgery hosted 2 named Lectures in the past academic year. Dr. Scot Helton from Virginia Mason Medical Center in Seattle delivered the Division of General Surgery and Canadian Association of General Surgeons Langer Lecturer in September, 2013. The Peter Crossgrove Lecture was presented by Dr. Charles Balch from the University of Texas Southwestern Medical Center in June 2014.

Sean Cleary was promoted to Associate Professor. Anand Ghanekar was appointed as co-Director of the UHN Kidney Transplant Program. Steve Gallinger was appointed by the Ontario Institute for Cancer Research as the Leader of the PanCuRx Translational Research Initiative (TRI). Alice Wei was appointed Vice-President, and Timothy Jackson Secretary of the Ontario Association of General Surgeons. Sean Cleary, Tulin Cil, and Todd Penner were appointed as General Surgery Postgraduate Education Site Coordinators for the Toronto General, Princess Margaret, and Toronto Western sites respectively.

Faculty members were very successful with grant capture. Notably, those successful in obtaining CIHR Operating Grants include David Urbach for his project on “The inference from observational research methods (INFORM) Project”, and Ian McGilvray for his project on “Nanoparticle targeting of the liver”. Other research highlights include Catherine O’Brien’s publication in Nature Medicine titled “Self-renewal as a therapeutic target in human colorectal cancer”, David Urbach’s publication in the New England Journal of Medicine titled “Introduction of surgical safety checklists in Ontario, Canada”, and Carol-Anne Moulton and Steve Gallinger’s publication in JAMA titled “Effect of PET before liver resection on surgical management”.

Several new clinical initiatives were started. An Acute Care Surgical Service was created at the Toronto General Hospital. The colorectal cancer program saw the launch of our Rapid Diagnostic Assessment Program developed by Fayeze Quereshy. Timothy Jackson completed full implementation of the National Surgical Quality Improvement Program (NSQIP) across all sites.

Division Of Neurosurgery

M. Bernstein, MD	C. Tator, MD
E. Massicotte, MD	S. Kalia, MD
M. Fehlings, MD	M. Tymianski, MD
I. Radovanovic, MD	P. Kongkham, MD
F. Gentili, MD	T. Valiante, MD
M. Shamji, MD	A. Lozano, MD
M. Hodaie, MD	G. Zadeh, MD

In the past academic year, members of the Division of Neurosurgery at UHN has published in excess of 160 academic papers in peer review journals, have been

awarded several peer review grants totalling in excess of \$6 Million and have hosted several visiting professors, including Juan C. Fernandez-Miranda, University of Pittsburgh; Sebastien Froelich, Hôpital Lariboisière, Paris; Franco De Monte, MD Anderson Cancer Center.

Among the highlights of key accomplishments by individual faculty (alphabetically):

Dr. Mark Bernstein was honoured in the Senate of Canada on March 26, 2014 in recognition of his humanitarian work helping those less fortunate in developing countries”

Dr. Karen Davis was awarded the Mel Silverman Mentorship Award by the Institute of Medical Science (IMS) at the University of Toronto.

Dr. Michael Fehlings was appointed as Vice Chair Research in the Department of Surgery at the University of Toronto. He was also elected as a Fellow of the Royal Society of Canada and to the Canadian Academy of Health Sciences (CAHS) due to his exceptional academic achievements.

Dr. Fred Gentili was appointed as the Alan and Susan Hudson Chair in Neuro-Oncology at the University Health Network.

Dr. Mojgan Hodaie became the Canadian lead of the Genetics of Trigeminal Neuralgia, a multicenter study spearheaded by OHSU, Oregon Health and Science University.

Dr. Suneil Kalia was welcomed as the newest member of the Neurosurgical Faculty at Toronto Western Hospital as of September 1, 2013.

Dr. Andres Lozano was appointed to the rank of University Professor, the most prestigious and distinguished rank at the University of Toronto. He was also identified by Thomson Reuters Essential Science Indicators as the most highly cited neurosurgeon in the world for the decade spanning 2002 to 2012. He was awarded the 2013 Margolese National Prize in Brain Disorders, awarded to a Canadian who has transformed care in heart and brain diseases and the 2014 Canadian College of Neuropsychopharmacology (CCNP) Innovations Award.

Dr. Mohammed Shamji received the Canadian Pain Society Early Career Investigator Research Grant, was advanced to the Canadian Spine Society executive board and Lumbar Spine Research Society education committee, and joined the PLOS One Editorial Board

Dr. Charles Tator delivered the inaugural Charles Tator Honorary Lectureship on Spinal Trauma at the Annual Scientific meeting of the American Association of Neurological Surgeons (AANS) in San Francisco. The Marion and Gerald Soloway Chair in Brain Injury and Concussion Research at Toronto

Western Hospital/University Health Network was announced by Charles Tator at a special event on May 28, 2014.

Dr. Michael Tymianski’s FRONTIER trial, a pivotal multi-center Phase 3 trial evaluating NA-1 for the treatment of acute ischemic stroke received approval

to proceed by Health Canada and the FDA. He was 14th Annual Rosomoff Visiting Professor, Dept. of Neurological Surgery, University of Miami School of Medicine, among 17 other invited lectures worldwide.

Dr. Taufik Valiante was promoted to the rank of Associate Professor, UofT.

Dr. Gelareh Zadeh was appointed to the new role of Director of Academic Affairs for the University of Toronto Division of Neurosurgery effective March 1, 2014, and the new Chair of the Neuro-oncology Committee for World Federation of Neurological Surgeons. She was the recipient of the 2014 Bernard Langer Surgeon-Scientist Award, the Wightman-Berris Academy Postgraduate Education Teaching Excellence Award, The Ross Fleming Surgical Teaching Award and was promoted to the rank of Associate Professor at U of T.

Division Of Orthopedic Surgery

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| R. Davey, MD | S. Lewis, MD |
| W. Marshall, MD | K. Syed, MD |
| R. Gandhi, MD | N. Mahomed, MD |
| D. Ogilvie-Harris, MD | C. Veillette, MD |
| J. Lau, MD | A. Veljkovic, MD |
| R. Rampersaud, MD | |

Last year was a very successful year for the Division of Orthopaedic Surgery. We recruited Dr. Andrea Veljkovic, a new foot and ankle surgeon who will focus on complex minimally invasive foot and ankle procedures. We recruited Dr. Mohit Kapoor a basic scientist whose research focuses on cartilage biology. Mohit joined our new Buchan Arthritis Centre in the Krembil Discovery Tower that opened last fall. Under the leadership of Dr. Raj Rampersaud, the ISEAC (Interdisciplinary Spine Assessment Centre) project showed that the new model of care for spine patients was delivering excellent care with improved access. Dr. Christian Veillette has developed and implemented the point of care patient outcomes IT infrastructure across the Division and is currently integrating it with the Rheumatology databases. Dr. Johnny Lau co-developed a new ankle replacement system that was introduced clinically across North America last year. We also successfully hosted our second annual Academic Advisory Board meeting (Fall 2013) and the Industry Advisory Forum (Spring 2014). Finally, the Division successfully reached the target of raising \$35 million in the Campaign to Cure Arthritis. In the following year we will work towards initiating Canada's first stem cell trial for the treatment of osteoarthritis.

Division Of Plastic Surgery

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| J. Ahmad, MD | H. Von Schroeder, MD |
| S. McCabe, MD | B. Graham, MD |
| D. Anastakis, MD | T. Zhong, MD |
| A. O'Neill, MD | S. Hofer, MD |
| P. Bray, MD | |

A Breast Reconstruction Clinical Nurse Coordinator – Agnes Wisniewski has joined the team. She will play a key role in day-to-day clinical contact with patients, liaise

between the various surgeons, educate patients through workshops and group sessions, and recruit patients for research studies. Dr. Bryan Chung, MD, PhD joined the Hand Program at the Toronto Western Hospital in July 2014. He has a PhD in Medical Science (Joint Injury and Arthritis) from the University of Calgary where he also completed Medical School. [The 12th Annual Ralph T. Manktelow Hand Symposium was held in October 2013 at the Toronto Western Hospital.](#) Dr. Hofer attended Breast Reconstruction Awareness (BRA) evening which was held in October 2013 at Roy Thomson Hall and Dr. Zhong presented at the Breast Reconstruction Awareness (BRA) event, “An Evening of Education and Empowerment”. The University of Toronto Resident Research Day was held in February 2014 at the Peter Gilgan Centre for Research and Learning, Hospital for Sick Children. Dr. Zhong hosted a patient panel on the Realities of Reconstruction: A complex choice, The Scar Project in April 2014 an event for the Rethink Breast Cancer Breast Fest. The Division has initiated a new basic science collaboration under direction of Dr. Anne O'Neill investigating adipose derived stem cell interactions with the Keating Lab, Cell Therapy Program at the Princess Margaret Cancer Centre. Dr. Zhong was appointed by Cancer Care Ontario as the Provincial Clinical Lead to establish Standardized Provincial Post mastectomy Breast Reconstruction (PMBR) Clinical Guidelines. Dr. Zhong was nominated for the Gerald Kirsh Humanitarian Award, Princess Margaret Cancer Centre. Dr. William Townley and Dr. Donald Buck successfully completed the Microsurgical Fellowship. Dr. Udi Arad and Tatiana Cypel successfully completed the Breast Reconstruction Surgery Fellowship Program. During the 2013 – 2014 academic year, division members and trainees have published [20] peer-reviewed papers, presented [24] scientific papers and participated in [12] invited lectures at the following International Meetings: The Barcelona Breast Meeting, Spain; the World Society for Reconstructive Microsurgery Biannual Meeting in Chicago, US; the Dusseldorf Breast Meeting, Germany; The American Society of Plastic Surgeons (ASPS); The American Society for Reconstructive Microsurgery (ASRM) Annual Meeting in Kauai, Hawaii.

Division Of Thoracic Surgery

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| M. Cypel, MD | M. de Perrot, MD |
| A. Pierre, MD | K. Yasufuku, MD |
| G. Darling, MD | S. Keshavjee, MD |
| T. Waddell, MD | |

Dr. Kazuhiro Yasufuku has led the development of a new program to improve the efficiency of management of one of the most common problems in Thoracic Surgery, malignant pleural effusion. This multi-disciplinary program involves respirology, thoracic surgery and nursing and has produced dramatic reduction in in-patient stay for Princess Margaret patients. Drs. Cypel and Keshavjee have achieved stable Ministry of Health funding for the Extra-Corporeal Life Support (ECLS) program, a joint effort with Critical Care and Cardiovascular Surgery to truly create a provincial resource for patients with advanced heart and lung failure. Dr. Marc de Perrot,

along with radiation oncology colleague, Dr. John Cho, have pioneered the use of neoadjuvant radiation in mesothelioma prior to extrapleural pneumonectomy. Dr. Marcelo Cypel was awarded a Premier's Early Research Award. Notably, Dr. Cypel led the development of a hands-on course in ECLS technology at the Annual Meeting of the American Association for Thoracic Surgery. Dr. Tom Waddell was appointed to the Council of the newly inaugurated Ontario Institute of Regenerative Medicine. Dr. Yasufuku again led the annual EBUS Training Course who also created a Robotic Thoracic surgery hands on course for the AATS and the development of the first pan-Canadian Boot Camp in advanced Thoracic Surgery technology open to any new resident in Thoracic Surgery in Canada. These three training course all occurred in the space of 3 months. Dr. Yasufuku also was recognized at the American Association of Bronchology and Interventional Pulmonology, Fall Scientific Symposium, 2013 in Chicago where he received the Geoffrey McLennan Memorial Award, and had a paper receive the "Most Intriguing" Award.

Teaching awards were awarded to Dr. Gail Darling (Gail E. Darling Award for

Excellence in Undergraduate Teaching and Tom Waddell (Robert J. Ginsberg Award for Excellence in Postgraduate Teaching). Dr. Pedro Reck dos Santos won the F. Griffith Pearson Award for Best Resident/Fellow Teacher.

Visiting Professors for 2013-14 academic year were: Benjamin Kozower (University of Virginia, Charlottesville, Virginia) and Dr Gunda Leschber (Berlin Chest Hospital, Berlin, Germany). Another highly successful Toronto Thoracic Surgery Refresher Course was held in June 2014 and included the following Visiting Faculty: Paul De Leyn (University Hospital, Leuven, Belgium), Thierry Le Chevalier (Institute Gustav Roussy, Paris, France), Steve Cassivi (Mayo Clinic, Rochester, Minnesota), and Michael Humer (Kelowna General Hospital, Kelowna, BC).

The academic year concluded with Pearson Day, an annual celebration of clinical and laboratory research by trainees in our Division. The Pearson Day Visiting Professor was Dr. Bryan Meyers from Washington University in St. Louis. Dr. Tiago Machuca won the Award for Best Clinical Research paper and Dr. Jonathan Yeung won the Best Basic Science Research Award.

Division Of Urology

D. Elterman, MD	S. Radomski, MD
M. Jewett, MD	M. Hassouna, MD
A. Finelli, MD	M. Robinette, MD
G. Kulkarni, MD	R. Hamilton, MD
N. Fleshner, MD	J. Trachtenberg, MD

The Division of Urology had a banner year in terms of academic achievement. Our clinical programs continue to grow particularly in the realms of preventative care, survivorship and innovative surgery. The DaVinci surgical robot has now been expanded to kidney and bladder cancer surgery. Dr Dean Elterman joined our faculty.

Based at the Toronto Western Site, Dr Elterman will lead our novel Men's Health program and has a clinical and academic interest in men's health, incontinence and neuromodulation. In total over, 60 peer reviewed publications and 7 peer-reviewed grants were procured by our group. Our visiting professors were world class and included: Drs Dean Assimos, John Denstedt, Jack Baniel and Joel Nelson . Our annual Princess Margaret Uro-Oncology Dialogue meeting in Niagara-on-the-Lake was a roaring success with almost 100 Ontario-based guests and has emerged as one of Canada's premiere Uro-Oncology meetings. Finally Dr Yona Krakowsky , one of our residents was awarded with a Sopman award for his commitment to ethical and humanistic patient care.

Division Of Vascular Surgery

W. Johnston, MD	G. Oreopoulos, MD
B. Rubin, MD	D. Wooster, MD
T. Lindsay, MD	G. Roche-Nagle, MD
L. Tse, MD	

Vascular surgery has had another successful academic year. Highlights include Dr. George Oreopoulos winning the Surgical Skills Centre Distinguished Educator Award at Gallie Day 2014. The Division registered its thousandth case in the US based SVS VQI quality project and successfully leveraged this data to improve length of stay in standard EVAR cases. Two new vascular surgeons have been recruited Drs. Forbes and Byrne who are due to start in fall 2014. Dr. Lindsay has competed an eleven year term as the University Division chair and will be replaced by Dr. Forbes. The CSVS Gore Research Award was won by Dr. Roche-Nagle for a project titled "The therapeutic and prognostic value of perfusion angiography with indocyanine green fluorescence in patients with critical ischemia." Two student supervised by Dr. Roche-Nagle were awarded 2013 CSVS National Student Research Awards: Oliver Alying "Peripheral nerve blocks after lower limb amputations" and Nicholas Bowers. "Using a multimedia presentation to improve patient understanding and satisfaction with informed consent for minimally invasive vascular procedures: a prospective randomized trial".

Division of Cardiac Surgery

Dr. S. Brister	Associate Professor
Dr. R. Cusimano	Associate Professor
Dr. T. David	Professor
Dr. C. Feindel	Professor
Dr. R.K. Li	Professor

Dr. M. Ouzounian	Assistant Professor
Dr. A. Ralph-Edwards	Lecturer
Dr. V. Rao	Professor (Division Head)
Dr. R. Weisel	Professor
Dr. T. Yau	Professor

Publications

Alba C, Rao V, Ross H, Billia P, Rigobon A, McDonald M, Delgado D, Yau T. Clinical Differences between Continuous Flow Ventricular Assist Devices: A comparison between HeartMate II and HeartWare HVAD. *Journal of Cardiac Surgery.* 2013 Sep; 28(5): 604-10.

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Cusimano R, Yau T, Rao V, Yanagawa B. Initial Experience with Intraventricular Repair Using CorMatrix Extracellular Matrix. *Innovations: Technology and Techniques in Cardiothoracic and Vascular Surgery.* 2013 Sep 8.

David TE. Annuloaortic ectasia. In: Laiser LR, Kron IL, Spray TL (eds), *Mastery of Cardiothoracic Surgery.* 3rd edition. 2014; 556-562. Philadelphia, United States: Lippincott Williams and Wilkins.

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Karkouti K, Callum J, Crowther MA, McCluskey SA, Pendergrast J, Tait G, Yau TM, Beattie S. The Relationship Between Fibrinogen Levels After Cardiopulmonary Bypass and Large-volume Red Cell Transfusion in Cardiac Surgery: An Observational Study. *Anesthesia and Analgesia.* 2013 Jul; 117(1): 14-22. 2013.

Karkouti K, Wijeyesundera DN, Beattie WS, Yau TM, Tait G, Stukel TA. Red blood cell transfusion increases risk of acute kidney injury in cardiac surgical patients with moderate perioperative anemia: an observational study. *Anesthesiology.* 2013.

Kato H, Fu YY, Zhu J, Wang L, Aafaqi S, Rahkonen O, Slorach C, Traister A, Leung CH, Chiasson D, Mertens L, Benson L, Weisel RD, Hinz B, Maynes JT, Coles JG, Caldarone CA. Pulmonary vein stenosis and the pathophysiology of “upstream” pulmonary veins. *J Thorac Cardiovasc Surg.* 2013 Sep 28. PMID: 24084286. AID: 10.1016/j.jtcvs.2013.08.046.

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Yanagawa B, Rao V, Yau TM, Cusimano RJ. Initial experience with intraventricular repair using CorMatrix extracellular matrix. *Innovations (Phila).* 2013 Sept-Oct;8(5):348-52.

Yanagawa B, Rao V, Yau T, Cusimano RJ. Potential Myocardial Regeneration with CorMatrix ECM: A Case Report. *The Journal of Thoracic and Cardiovascular Surgery.* 2014 Apr; 147(4): 41-3.

Zhang L, Chen X, Sharma P, Moon M, Sheftel AD, Dawood F, Nghiem MP, Wu J, Li RK, Gramolini AO, Sorensen PH, Penninger JM, Brumell JH, Liu PP. HACE1-dependent protein degradation provides cardiac protection in response to haemodynamic stress. *Nature Communications.* 2014 Mar 11; 5: 3430.

Invited Visits

Cusimano RJ: 1st Affiliated Hospital, Weihui City, Xinjiang, China, 2013 Sep 16-17. Invited Lecturer: 1/ Cardiac reconstruction-lessons learned from cardiac tumors. 2/ Medical School Curriculum learning in Canada

David TE: 61st Annual Scientific Meeting of the Cardiac Society of Australia and New Zealand, Gold Coast, Queensland, Australia, 9-10 Aug 2013. 1/ Speaker: The Ross procedure: when should it be done if ever. 2/ Victor Chang Memorial Lecturer: Surgical management of aortic valve disease. 3/ Lecturer: Long term outcomes of myxomatous mitral valve repair.

David TE: American College of Cardiology and American Association for Thoracic Surgery, Chicago, Illinois, United States, 26-27 Sep 2013. 1/ Invited Speaker: Complications Associated with Mitral Valve Disease. 2/ Keynote Speaker: Reconstructive Heart Valve Surgery.

David TE: American Heart Association, Dallas, United States, 18 Nov 2013. Invited Speaker: Median sternotomy: the safest and best way.

David TE: Leipzig Heart Center, Leipzig, Germany, 9 Dec 2013. Surgical demonstrator: Aortic valve sparing operation. Live demonstration of aortic valve sparing operation for aortic root aneurysm in a patient with Marfan syndrome.

David TE: Society of Thoracic Surgeons, Orlando, FL, United States, 26 Jan 2014. Chair: The rapidly changing world of thoracic aortic vascular surgery – Advancements in branch endograft design, aortic valve repair and the potential impact on current practice patterns.

David TE: St George's Healthcare – NHS Trust, London, United Kingdom, 31 Jan 2014. Invited Speaker: 1/ Aortic valve repair and preserving procedure. 2/ Future of valve therapy.

David TE: Piedmont Heart Institute, Atlanta, GA, United States, 5 Feb 2014. Mark E. Silverman Visiting Professor : Creativity in Medicine.

David TE: University of Pittsburgh - Florida Valve International, Miami, Florida, United States, 8 Mar 2014. Presenter: Debate: All functional tricuspid regurgitation must be repaired at the time of mitral surgery.

David TE: Loyola University Medical Center, Chicago, IL, United States, 13 Mar 2014. Visiting Professor: Matching the patient to the type and size of prosthetic valve for aortic aortic valve replacement.

David TE: The American Association for Thoracic Surgery - Aortic Symposium 2014, New York, NY, United States, 23-24 Apr 2014. Speaker: Principles of Aortic Root Repair & Long Term Follow-up.

David TE: 94th Annual Meeting of the American Association for Thoracic Surgery, Toronto, Ontario, United States, 28-30 Apr 2014. Speaker: 1/ A quarter of century experience with aortic valve sparing operations. 2/ Video presentation: aortic valve sparing root replacement.

David TE: London Core Review Course Cardiothoracic Surgery 2014 - Royal Academy of Medicine, London, United Kingdom, 11 May 2014. Speaker: 1/ Functional anatomy of the mitral valve; 2/ Mitral valve repair: techniques and late outcomes.

David TE: University of Ottawa Heart Institute, Ottawa, Ontario, Canada, 2 Jun 2014. Visiting Professor: Aortic valve sparing operations to treat aortic root aneurysm.

David TE: Northwestern University, Chicago, IL, United States, 27 Jun 2014. Visiting Professor: Treatment of aortic root aneurysms: when to intervene, what to do and what to expect as outcome.

Li RK: European Society of Cardiology Congress 2013, Amsterdam, Netherlands, 2 Sep 2013. Invited Speaker: Heart and bone marrow, a two-way relationship.

Li RK: International Academy of Cardiovascular Sciences, University of Manitoba and Hungarian Cardiology Society, University of Pecs: International Symposium for Myocardial Cytoprotection – From Basic S, Pecs, Hungary, 27 Sep 2013. Invited Speaker: Rejuvenated stem cells for cardiac tissue engineering.

Li RK: RUSSIA - NATO Advanced Research Workshop on “Prevention of Free Radical Mediated Cardiovascular Injuries due to Radiation, Chemical and Biological Agents, St. Petersburg, Russian Federation, 3 Oct 2013. 1/ Invited Speaker: Cardiac rejuvenation. 2/ Chair: Symposium session.

Li RK: 2013 International Forum on Sports Science Industry, Taipei, Taiwan, Province Of China, 2 Nov 2013. Invited Speaker: Aging and biological rejuvenation: a new frontier in the management of heart failure.

Li RK: The Institute of Biomedical Sciences, Academia Sinica, Taipei, Taiwan, Province Of China, 5 Nov 2013. Visiting Professor: Cell therapy for cardiac regeneration: past, present and future.

Li RK: Huazhong University of Science and Technology, Wuhan, China, 12-15 Nov 2013. Visiting Professor: Stem cell and regenerative medicine (10 hour course).

Li RK: International Stem Cell and Regenerative Medicine Forum, Shanxi Medical University, Taiyuan, China, 16-17 Nov 2013. Invited Speaker: Cell therapy for cardiac regeneration: past, present and future.

Li RK: Physiology Graduate Program Seminar Series – Department of Biomedical and Molecular Sciences, Queen’s University, Kingston, Ontario, Canada, 28 Jan 2014. Invited Speaker: Cardiac Rejuvenation: A new frontier in the management of heart failure.

Li RK: BOAO Forum for Asia, China, 9-11 Apr 2014. Discussion Leader: The Development of Green Ecological City and Life Health Industry Roundtable Summit.

Li RK: University of Wesern Ontario, London, Ontario, Canada, 15 May 2014. Invited Speaker: Cardiac Rejuvenation: A new topic for heart regeneration in Aged Patients.

Weisel R: International Society for Heart Research, San Diego, California, United States, 4 Jul 2013. Presenter: Clinical application of pluripotent stem cells to reverse heart failure.

Yau TM: University of Sao Paulo - University of Toronto Cardiology Symposium, São Paulo, Brazil, 5 Jul 2013. Speaker: 1/ Heart Transplantation and the VAD program at PMCC. 2/ Stem Cell Therapy for Myocardial Repair.

Yau TM: International Society for Heart and Lung Transplantation, San Diego, California, United States, 10 Jan 2014. Invited Lecturer: Dilated Tricuspid Valve Annulus Vs. Tricuspid Regurgitation as a Predictor of Right Ventricular Failure After Left Ventricular Assist Device Implant.

Research and Investigations

Acadesine to reduce perioperative ischemic injury, the RED-CABG Trial. (Executive and Publications Committee). *Schering-Plough Research*. Yau TM, Weisel R. (\$20,000.00 CAD, 2009 - 2013).

An RCT of women’s adherence to women-only, home-based and traditional cardiac rehabilitation (CR4HER). *Heart and Stroke Foundation of Canada (HSFC)*. Grace SL, Pilote L, Arthur HM, Stewart DE, Oh P, Melvin K, Sternberg L, Brister SJ. (\$369,204.00 CAD, 2009 - 2013).

Aortic and Valve Laboratory. *Rossy Foundation*. David T, Li RK, Weisel R. (\$250,000.00 CAD, Apr 2012 - Mar 2018).

Cardiac Regeneration - The Next Generation of Cell Therapy. *Innovation Fund*. Yau TM. (\$90,000.00 CAD, Oct 2012 - Jun 2014).

Clinical Trial of Cardiac Stem Cells. *PMCC Innovation Fund*. Yau T, Li RK, Weisel R. (\$200,000.00 CAD, Jan 2013 - Dec 2015).

Harnessing the immune system to achieve cardiac restoration by allogeneic cell transplantation. *Canadian Institutes of Health Research (CIHR)*. Li RK. (\$698,984.00 CAD, Apr 2010 - Mar 2015).

Improving the Assessment and Treatment of Severe Aortic Stenosis by Evaluating Care Gaps and Advancing Risk Predictions. *Heart and Stroke Foundation of Ontario (The) (HSFO)*. Tu J, Austin P, Stukel T, Alter D, Natarajan M, Ruel M, Fremes S, Strauss B, Cheema A, Chu M, Cantor W, Wijeyesundera H, Peterson M, Feindel C, Kingsbury K. (\$331,058.00 CAD, Jul 2012 - present).

NanoMed Fab: a nanofabrication centre for personalized medicine. *Canada Foundation for Innovation (CFI)*. Zheng G, Allen C, Chan W, Garipey J, Jaffrey D, Li R-K, Liu M, Rottapel R, Walker G, Wilson B. (\$2,486,515.00 CAD, Jul 2009 - Jun 2014).

Regenerative Medicine and Nanomedicine, Nanotechnology - enabled image - guided interventions (NanoIGI) in vascular and lung diseases. *Canadian Institutes of Health Research (CIHR)*. Zheng G, Li R-K, Chang W, Wilson B, Yasufufu K. (\$2,317,260.00 CAD, Apr 2011 - Mar 2016).

Safety and Efficacy of the Medtronic CoreValve System in the Treatment of Severe, Symptomatic Aortic Stenosis in Intermediate Risk Subjects who Need Aortic Valve Replacement (SURTAVI). *Medtronic Corporation*. Horlick E, Feindel C. (\$250,000.00 CAD, Jul 2012 - present).

Screening for dysphagia in patients following prolonged intubation: Validation of the Toronto bedside swallowing screening test. *Canadian Institutes of Health Research (CIHR)*. Martino R, Granton J, Ivanov J, Yau TM. (\$212,077.00 CAD, Jul 2011 - Jun 2014).

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. *Canadian Institutes of Health Research (CIHR)*. Yau TM. (\$160,000.00 CAD, Sep 2012 - Aug 2013).

Ultrasound-targeted gene delivery to enhance cell engraftment in the aged heart after ischemic injury. (Co-Investigator). *Canadian Institutes of Health Research (CIHR)*. Li RK, Weisel R. (\$291,680.00 CAD, Apr 2012 - Mar 2015).

Honours Received

David TE: Honourary member, Society for Cardiothoracic Surgery in Great Britain and Ireland. 2013

David TE: Honourary member, Society of Cardiology of State of Rio de Janeiro. 2013

Division of General Surgery

Dr. M.S. Cattral	Professor	Dr. D. McCready	Professor
Dr. S.P. Cleary	Assistant Professor	Dr. I. McGilvray	Associate Professor
Dr. J. Escallon	Associate Professor	Dr. C.A.E. Moulton	Assistant Professor
Dr. A. Gagliardi	Associate Professor	Dr. A. Okrainec	Assistant Professor (Division Head)
Dr. S. Gallinger	Professor	Dr. T. Penner	Assistant Professor
Dr. A. Ghanekar	Assistant Professor	Dr. F.A. Quereshey	Assistant Professor
Dr. D. Grant	Professor	Dr. M. Reedijk	Associate Professor
Dr. P. Grieg	Professor	Dr. L.E. Rotstein	Professor
Dr. T. Jackson	Assistant Professor	Dr. M. Selzner	Assistant Professor
Dr. W.L. Leong	Assistant Professor	Dr. R.D. Urbach	Professor
		Dr. A. Wei	Assistant Professor

Publications

Ahmed SU, Zair M, Chen K, He F, Iu M, Adeyi O, Cleary SP, Ghanekar A. Generation of subcutaneous and intrahepatic human hepatocellular carcinoma xenografts in immunodeficient mice. *Journal of Visualized Experiments*. 2013 Sep; 79: doi: 10.3791/50544.

Ahsan H, Halpern J, Kibriya MG, Pierce BL, Tong L, Gamazon ER, McGuire V, Felberg A, Shi J, Jasmine F, Roy S, Paul-Brutus R, Argos M, Melkonian S, Chang-Claude J, Andrulis IL, Hopper JL, John EM, Malone KE, Ursin G, Gammon MD, Thomas DC, Seminara D, Casey G, Knight JA, Southey MC, Giles GG, Santella RM, Lee E, Conti DV, Duggan D, Gallinger S, Haile RW, Jenkins MA, Lindor NM, Newcomb PA, Michailidou K, Apicella C, Park DJ, Peto J, Fletcher O, Dos Santos Silva I, Lathrop M, Hunter DJ, Chanock SJ, Meindl A, Schmutzler RK, Muller-Myhsok B, Lochmann M, Beckmann M, Hein R, Makalic E, Schmidt DF, Bui QM, Stone J, Flesch-Janys D, Dahmen N, Nevanlinna H, Aittomäki K, Blomqvist C, Hall P, Czene K, Irwanto A, Liu J, Rahman N, Turnbull C, Dunning AM, Pharoah PD, Waisfisz Q, Meijers-Heijboer HE, Uitterlinden AG, Rivadeneira F, Nicolae D, Easton DF, Cox NJ, Whittemore AS. A Genome-wide Association Study of Early-onset Breast Cancer Identifies PFKM as a Novel Breast Cancer Gene and Supports a Common Genetic Spectrum for Breast Cancer at Any Age. *Cancer Epidemiol Biomarkers*. 2014 Feb 3; E-pub.

Akbari MR, Anderson LN, Buchanan DD, Clandenning M, Jenkins MA, Win AK, Hopper JL, Giles GG, Nam R, Narod S, Gallinger S, Cleary SP. Germline HOXB13 p.Gly84Glu mutation and risk of colorectal cancer. *Cancer Epidemiology*. 2013 Aug; 37(4): 424-7.

Al Abbasi T, Saleh F, Jackson TD, Okrainec A, Quereshy FA. Preoperative re-endoscopy in colorectal cancer patients: an institutional experience and analysis of influencing factors. *Surgical Endoscopy*. 2014 May 23. PMID: 24853842. AID: 10.1007/s00464-014-3549-z.

Albrecht E, Kirkham KR, Endersby RV, Chan VW, Jackson T, Okrainec A, Penner T, Jin R, Brull R. Ultrasound-guided transversus abdominis plane (TAP) block for laparoscopic gastric-bypass surgery: a prospective randomized controlled double-blinded trial. *Obesity Surgery*. 2013 Aug 1; 23(8): 1309-14.

Austin PC, Urbach DR. Using G-computation to estimate the effect of regionalization of surgical services on the absolute reduction in the occurrence of adverse patient outcomes. *Medical care*. 2013 Sep 1; 51(9): 797-805.

Azin A, Racz JM, Carolina Jimenez M, Sunil S, Porwit A, Jackson T, Okrainec A, Quereshy F. Relapse of acute myeloid leukemia manifested by cholecystitis: A case report and review of the literature. *Int J Surg Case Rep*. 2014 Jan 1; 5(6): 302-5.

Bakry D, Aronson M, Durno C, Rimawi H, Farah R, Alharbi QK, Alharbi M, Shamvil A, Ben-Shachar S, Mistry M, Constantini S, Dvir R, Qaddoumi I, Gallinger S, Lerner-Ellis J, Pollett A, Stephens D, Kelies S, Chao E, Malkin D, Bouffet E, Hawkins C, Tabori U. Genetic and clinical determinants of constitutional mismatch repair deficiency syndrome: Report from the constitutional mismatch repair deficiency consortium. *Eur J Cancer*. 2014 Feb; 50(5): 987-996.

Bharati R, Jenkins MA, Lindor NM, Le Marchand L, Gallinger S, Haile RW, Newcomb PA, Hopper JL, Win AK. Does risk of endometrial cancer for women without a germline mutation in a DNA mismatch repair gene depend on family history of endometrial cancer or colorectal cancer? *Gynecol Oncol*. 2014 May 1; 133(2): 287-292.

Bischof DA, Kim Y, Blazer DG, Behman R, Karanicolas PJ, Law CH, Quereshy FA, Maithel SK, Gamblin TC, Bauer TW, Pawlik TM. Surgical Management of Advanced Gastrointestinal Stromal Tumors: An International Multi-Institutional Analysis of 158 Patients. *Journal of the American College of Surgeons*. 2014 May 22. AID: 10.1016/j.jamcollsurg.2014.02.037.

Bischof DA, Kim Y, Dodson R, Jimenez MC, Behman R, Cocieru A, Blazer DG 3rd, Fisher SB, Squires MH 3rd, Kooby DA, Maithel SK, Groeschl RT, Clark Gamblin T, Bauer TW, Karanicolas PJ, Law C, Quereshy FA, Pawlik TM. Open Versus Minimally Invasive Resection of Gastric GIST: A Multi-Institutional Analysis of Short- and Long-Term Outcomes. *Ann Surg Oncol*. 2014 Apr 24. PMID: 24763984. AID: 10.1245/s10434-014-3733-3. [Epub ahead of print].

Bischof DA, Kim Y, Dodson R, Jimenez MC, Behman R, Cocieru A, Fisher SB, Groeschl RT, Squires MH, Maithel SK, Blazer DG, Kooby DA, Gamblin TC, Bauer TW, Quereshy FA, Karanicolas PJ, Law C, Pawlik TM. Conditional Disease-free Survival after Surgical Resection of GIST: A Multi-Institutional Analysis of 502 Patients. *JAMA Surgery*. 2014 Jun.

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Cheng TH, Gorman M, Martin L, Barclay E, Casey G, Colon Cancer Family Registry, CGEMS, Saunders B, Thomas H, Clark S, Tomlinson I. Common colorectal cancer risk alleles contribute to the multiple colorectal adenoma phenotype, but do not influence colonic polyposis in FAP. *Eur J Hum Genet*. 2014 May 7; E-Pub. PMID: 24801760. AID: 10.1038/ejhg.2014.74.

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Cocks M, Moulton CA, Luu S, Cil T. What surgeons can learn from athletes: Mental practice in sports and surgery. *Journal of Surgical Education*. 2014; 71(2): 262-269.

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Elnahas A, Urbach D, Okrainec A, Queresy F, Jackson TD. Is next-day discharge following laparoscopic Roux-en-Y gastric bypass safe in select patients? Analysis of short-term outcomes. *Surg Endosc.* 2014 May 2. PMID: 24789135. AID: 10.1007/s00464-014-3546-2. [Epub ahead of print].

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Presentations and Special Lectures

Cleary SP: General Surgery Research Night. University of Saskatchewan. Oct 2013. Speaker: Genetic and Clinical Predictors of Outcomes in Hepatocellular Carcinoma.

Cleary SP: University Rounds. University of Saskatchewan, Oct 2013. Speaker: Multi-modality imaging in HPB Surgery.

Cleary SP: Canadian Association for the Study of Liver Disease. Hepatocellular Carcinoma Meeting: Consensus, Controversies and Future Directions, Feb 2014. Speaker: Surgical Resection for Hepatocellular Carcinoma.

Cleary SP: 14th Annual Americas Hepato-Pancreato-Biliary Congress, Miami. Feb 2014. 1/ Debater: Radiofrequency Ablation for Colorectal Liver Metastases - Routine or Second Line? 2/ Speaker: Humanitarian Medical Outreach Teams: Supporting Local Chapters with Capacity Building.

Cleary SP: University of Manitoba General Surgery Research Day, Apr 2014. Invited Speaker: Minimally Invasive Liver and Pancreatic Surgery.

Cleary SP: ANZGOSA and ANZHPBA fellows weekend. Melbourne, Australia, Sep 2013. Speaker: Laparoscopic Liver and Pancreas Surgery.

Cleary SP: Australian Gastrointestinal Week 2013. Melbourne, Australia, Sep 2013. Speaker: 1/ Hepatocellular Carcinoma: Resection vs. Transplantation. 2/ Synchronous rectal cancer liver metastases: who and when.

Gallinger S: Colorectal Cancer Association of Canada (CCAC) “Personalized Medicine in the Management of Colorectal Cancer”, Montreal, Quebec, Canada, 5 Nov 2013. Moderator: Hereditary Colorectal Cancer Syndromes, Registries, and Screening.

Grant D: Canadian Liver Transplant Network, Montreal, Quebec, Canada, 2013 Oct 26. Invited Lecturer: Living Donor Liver Transplantation: The University of Toronto Perspective.

Grant D: Addenbrooke’s Hospital, Cambridge, United Kingdom, 2013 Dec 9. Visiting Professor: Living Donor Liver Transplantation: The University of Toronto Perspective.

Greig P: The Newmarket Gut Club, Newmarket, Canada, 16 Oct 2013. Invited Speaker: Transplantation for Cancer: Hepatoma and cholangiocarcinoma.

Greig P: Washington University, St. Louis, Missouri, United States, 28 Oct 2013. Distinguished Speaker: Anderson-Newton Lectureship - Living Donor Liver Transplantation.

Greig P: 84 Argentine Congress, Buenos Aires, Argentina, 4-7 Nov 2013. Invited Lecturer: 1/ Colorectal Cancer Liver Metastasis. 2/ Management of Cholangio CA. 3/ Multidisciplinary Management of HCC.

Greig P: Uruguay Congress of Surgery, Montevideo, Uruguay, 26 Nov 2013. Invited Speaker: 1/ What the general surgeon needs to know about a transplant patient. 2/ Hilar cholangiocarcinoma - staging and management. 3/ Multidisciplinary care of hepatocellular carcinoma.

Greig P: AHPBA, San Francisco, California, United States, 15 Jan 2014. Invited Speaker: Multidisciplinary treatment of bile duct cancer.

Greig P: 13th Congress of the AHPBA, Miami, Florida, United States, 20-23 Feb 2014. Invited Speaker: 1/ Should we limit the number of HPB Fellowships? - Con. 2/ LDLT Should be offered to all wait-listed patients - Pro.

Greig P: IHPBA World Congress, Seoul Teugbyeolsi [Seoul-T’ukpyolshi], Korea, Republic Of, 26 Mar 2014. Invited Speaker: Should we do adult LDLT for acute or chronic liver failure? Western perspective.

Greig P: Mayo Clinic College of Medicine, Rochester, Minnesota, United States, 16 Apr 2014. Distinguished Speaker: 19th Oliver H. Beahrs Visiting Professor of Surgery. Preparing the Next Generation of Surgeons: Fellowships & Mentorships.

Jackson T: Canadian Surgery Forum, Ottawa, Ontario, Canada, 19-20 Sep 2013. 1/ Presenter: High rates of gastric band removal in Ontario: a population - based analysis. 2/ Symposium Participant: Adjustable Gastric Band Revision. 3/ Speaker: Complications of Bariatric Surgery for the General Surgeon. 4/ Postgrad Course Instructor: PEG Tube Placement.

McCready D: 39th National Congress of Surgery - Asociacion Colombiana De Cirugia, Bogota D.C., Colombia, Aug 2013. Invited Speaker: MRI of the breast: The surgeon’s perspective.

McCready D: Amman Breast Cancer Conference 2013 - 3rd EURAMA Congress, Jordan, Oct 2013. Invited Speaker: 1/ Impact of neoadjuvant systemic treatment on surgical management of primary breast cancer. 2/ Risk reduction: Surgical options. p

Moulton CA: Royal Australasian College of Surgeons (RACS) Annual Scientific Congress (ASC), Singapore, 6-8 May 2014. Invited Speaker: 1/ Resection of synchronous liver disease first? 2/ A Better Balance: Gender and the Surgical Stereotype Women in Surgery Session. 3/ Peeking behind the curtain: Surgical judgment beyond cognition Hamilton Russell Memorial Lecture. 4/ Teaching the slowing down moments of operative judgment. 5/ Slowing down when you should: The keys to expert surgical judgment and decision making.

Moulton CA: University of Alberta, Faculty of Medicine Grand Rounds, Edmonton, Alberta, Canada, 6 Jun 2014. Speaker: 1/ Peeking Behind the Curtain: Surgical Judgment Beyond Cognition. 2/ Pressures to Measure Up in Surgical Training and Transition into Practice.

Moulton CA: 7th Annual Canadian Perioperative Anesthesia Medicine Meeting, Toronto, Ontario, Canada, 31 May 2014. Invited Speaker: Behind the Curtain: Surgical Judgment Beyond Cognition.

Penner T: DaVita, Syracuse, New York, United States, 13 Sep 2013. Invited Speaker: Everything you wanted to Know about PD Access surgery.

Quereshy FA: Ontario Association of Gastroenterology, Canada, Nov 2013. Invited Speaker: Colorectal Cancer Update.

Quereshy FA: Kuwait Cancer Control Centre, Kuwait, May 2014. Invited Speaker: 1/ Resection of Primary Stage 4 Colorectal Cancer. 2/ Enhanced Recovery After Surgery. 3/ Surgical Management of Locally Advanced Rectal Cancer. 4/ Quality Improvement in Surgical Services.

Wei A: Canadian Surgery Forum, Ottawa, Ontario, Canada, 20 Sep 2013. Presenter: Implementing an evidence based clinical pathway for patients undergoing pancreaticoduodenectomy – Outcomes of a pilot project.

Wei A: Ontario Medical Association, Ontario, Canada, May 2014. Invited Speaker: Balancing Patient Care and Physician Health – perspectives from psychiatry, pediatrics and surgical oncology.

Research And Investigations

ACOSOG Z5041. Phase II study of preoperative gemcitabine and erlotinib plus pancreatectomy for patients with operative pancreatic adenocarcinoma. ACOSOG. Pisters P, Wei AC, Moore M. (\$150,000.00 USD, 2010 - 2014).

Adapting Psychological Skills to Surgery: A Response to Physician Stress and Burnout. *The Canadian Physician Health Institute.* Moulton CA, Sonnadara R, Cil T, Deshauer S, Mutabdzic, D. (\$36,290.00 CAD, May 2014 - May 2015).

Adult-to-adult living liver transplantation (A2ALL). National Institutes of Health (NIH) (USA). Levy G, Clarke H, Abbey S, Holtzman S, Grant D. (\$1,500,000 USD 2009 Jan - 2014 Dec

A Multi-Institutional Phase II Study of Neoadjuvant Gemcitabine and Oxaliplatin with Radiation Therapy in Patients with Pancreatic Cancer. *Sanofi Aventis, Industry sponsor.* Zalupski Z, Dawson L, Wei AC, Ringash J. (2008 - present).

A Phase II study of Perioperative Chemotherapy plus Panitumumab in Patients with Colorectal Cancer Liver metastases. *Amgen Canada Inc (Mississauga, ON).* Welch S, Moore M, Cleary SP. (Sep 2010 - present).

Barriers to the Uptake of Surgical Telementoring: The Perspectives of Canadian General Surgeons. *University of Toronto.* Okrainec A, Sockalingham S, Jackson T, Quereshy F. (\$4,698.00 CAD, Jan 2013 - Jan 2014).

Biliary Complications after Paediatric Liver Transplantation: Incidence, Impact and Opportunities for Improvement. *Ashley's Angels Foundation, Liver Transplant Research.* Ghanekar A, Kamath B. (\$8,616.00 CAD, 2012 - 2013).

Breast cancer risk assessment using optical transillumination spectroscopy. *Canadian Institutes of Health Research (CIHR).* Lothar L, McCready DR. (\$661,302.00 CAD, Oct 2009 - Sep 2014).

Bringing evidence to the bedside: Implementing an evidence based clinical pathway for patients undergoing pancreatic cancer surgery. *CCSRI, Knowledge Translation.* Wei A. (\$100,000.00 CAD, Aug 2013 - Jul 2015).

Canadian National Transplant Research Program: Increasing Donation and Improving Transplantation Outcomes. Canadian Institutes of Health Research (CIHR). West L, Caulfield T, Hebert MJ, Humar A, Knoll G, Levings M, Mital S, Roy DC, Schultz K, Shapiro J, Grant D. (\$14,270,000 CAD 2013 Apr - 2018 Mar).

Cholangiocyte differentiation from stem cells: biliary disease in a dish. *Hospital for Sick Children, SickKids Research Institute.* Kamath B, Keller G, Ghanekar A. (\$56,000.00 CAD, Dec 2012 - Dec 2013).

Clinical Validation of PRODIGI, a New Handheld Optical Imaging Technology for Real-time Intraoperative-guidance of Breast Tumour Resection. *Canadian Institutes of Health Research (CIHR).* DaCosta R, Wilson B, Done S, Easson A. (\$160,000.00 CAD, Jul 2011 - Jul 2013).

Coaching Surgeons: The Pursuit of Surgical Excellence. *The Canadian Medical Protective Association.* Moulton CA, Mutabdzic D. (\$24,400.00 CAD, Jan 2014 - Jun 2015).

- Colon Cancer Family Registry Cohort (CCFRC) - Phase IV.** *National Institutes of Health (NIH) (USA).* Gallinger S. (\$350,000.00 CAD, Jul 2013 - Jul 2018).
- CREMS Summer Program.** (*Canadian Institutes of Health Research (CIHR).*) Glatt D, Moulton CA. (\$2,750.00 CAD, May 2013 - Sep 2013).
- Developing a model for coaching in surgery.** *Royal College of Physicians and Surgeons of Canada (The).* Mutabdzic D, Moulton CA. (\$45,000.00 CAD, Jul 2013 - Jun 2014).
- Development and Implementation of an Educational Intervention to Optimize Communication and Care of Patients with Resectable Pancreatic Cancer from Diagnosis to Treatment.** *Pancreas Cancer Canada.* Wei A. (May 2014).
- Early Researcher Award.** *Ministry of Research and Innovation (MRI) (Ontario).* Moulton CA. (\$140,000.00 CAD, Jul 2011 - Jun 2016).
- Enhancing inter-professional collaborative care for cancer: Evaluation of diagnostic assessment programs.** *Canadian Breast Cancer Foundation (CBCF).* Gagliardi AR, Stuart-McEwan T, Gilbert J, Dobrow M, Hoch J, Wright FC, Brouwers MC, Meertens E, Kaan M, Campbell B, McCready DR, Waddell T, McKnight S, Lacourciere J, McFadyen C, Berry M, Kaune S, Doiron G. (\$431,306.00 CAD, Jul 2012 - Jun 2015).
- Establishing TRB3 as a therapeutic target in breast cancer.** *Canadian Breast Cancer Foundation – Ontario Region.* Reedijk M. (\$389,694.00 CAD, Jul 2013 - Jun 2016).
- Evaluating quality improvement interventions in colorectal cancer surgery in Ontario.** *Canadian Institutes of Health Research (CIHR).* Simunovic M, Baxter N, Brouwers M, Earle C, Forbes S, Smith A, Stukel T, Urbach D. (\$619,014.00 CAD, Apr 2012 - Mar 2015).
- Evaluation of Breast Cancer Surgical Margin Assessment with Optical Coherence Tomography (OCT) - intra-operative study.** *Perimeter Medical Imaging, Inc.* Leong W, Done S, Wilson B. (\$600,000.00 CAD, Jun 2014 - May 2016).
- Exome sequencing of familial colorectal cancer type X.** *Canadian Cancer Society Research Institute (CCSRI).* McPherson J, Woods M, Gallinger S. (\$419,240.00 CAD, Jul 2011 - Jun 2014).
- Ex Vivo Human Liver Perfusion: Assessment and Repair of Marginal Liver Grafts for Transplantation.** Roche Organ Transplantation Research Foundation. Selzner M, Levy G, Grant D. (300,000 CHF 2010 Jul - 2013 Jul)
- Expansion of the Gattuso Rapid Clinic for Breast Cancer.** *Slaight and Gattuso Family Foundation and Princess Margaret Hospital Foundation.* McCready DR. (\$2,000,000.00 CAD, 2009 - 2018).
- fgl2/FGL2 and heart transplantation.** Ontario Heart and Stroke Foundation. Levy HR, Grant D. (\$188,000 CAD 2011 Jul - 2013 Jul).
- fgl2/FGL2 and heart transplantation.** Ontario Heart and Stroke Foundation. Grant D, Levy G, Ross H. (\$298,287 CAD 2013 Jul - 2016 Jul).
- Formation and Evaluation of a Rapid Diagnostic Clinic for Breast Cancer.** *Slaight and Gattuso Family Foundation.* McCready DR. (\$12,500,000.00 CAD, 2008 - 2018).
- Generation of De Novo molecular targets for optical imaging-guided surgical interventions in breast cancer.** *Cancer Care Ontario, Cancer Imaging Network of Ontario.* DaCosta R, Sidhu S, Easson A, Done SJ. (\$70,000.00 CAD, Jul 2011 - Jul 2013).
- Hallmarks and Therapeutic Implications of “BRCAness” in Pancreatic Cancer.** *Canadian Cancer Society Research Institute (CCSRI).* Gallinger S, Zogopoulos G, Hedley D, Bristow R, Serra S, Akbari MR, Dhani N. (\$1,229,505.00 CAD, Feb 2014 - Jan 2019).
- Hepatopancreaticobiliary Community of Surgical Oncologists: Clinical, Evaluative, and Prospective Trials Team (HPB CONCEPT Team).** *Canadian Institutes of Health Research (CIHR).* Karanicolas P, Henry G, Barjun J, Dixon E, Porter G, Wei A. (\$24,900.00 CAD, Mar 2013 - Feb 2014).
- High resolution genetic analysis of genetic loci implicated in colorectal cancer.** *Canadian Institutes of Health Research (CIHR).* Hudson T, Gallinger S, Lemire M, Peltekova V. (\$798,539.00 CAD, Jul 2010 - Jun 2015).
- Identification and Characterization of Tumour-Initiating Cells in Primary Human Hepatocellular Carcinoma.** *Cancer Research Society.* Ghanekar A, Dick J. (\$118,580.00 CAD, Sep 2012 - Aug 2014).
- Identifying Inherited Pancreas Cancer Genes.** *W. Garfield Weston Foundation.* Gallinger S. (\$600,000.00 CAD, Mar 2012 - Mar 2015).

- Implementing an evidence based clinical pathway for patients undergoing pancreatic cancer surgery.** *Canadian Cancer Society Research Institute (CCSRI)*. Wei A, Gallinger S, Karanicolas P, Urbach D. (\$100,000.00 CAD, Aug 2013 - Jul 2015).
- Implementation and evaluation of a comprehensive surgical quality improvement program in an Ontario academic hospital.** *Ontario Ministry of Health and Long-Term Care*. Jackson T, Urbach D, Rotstein L, Okrainec A. (\$192,840.00 CAD, Jul 2011 - Jul 2013).
- Implementing an Enhanced Recovery after Surgery Guideline to Optimize Outcomes following Colorectal Surgery.** *Council of Academic Hospitals of Ontario (CAHO)*. McLeod R, Okrainec A, Aarts MA, Gotlib L, McKenzie M, Saddiqui NT. (\$1,241,361.33 CAD, Jan 2013 - Dec 2014).
- Initiating a national quality agenda in hepato-pancreato-biliary surgery: How should we improve surgical care?** *Canadian Institutes for Health Research*. Cleary S, Wei A. (\$24,617.00 CAD, Jul 2013 - Jul 2014).
- Intestinal Microbiota in Non-Alcoholic Fatty Liver Disease Associated with Morbid Obesity.** *Canadian Institutes of Health Research (CIHR)*. Allard JP, Comelli E, Gloor G, Jackson TD, Okrainec A, Lou W. (\$522,169.00 CAD, Jan 2013 - Jun 2016).
- Investigation of Dendritic Cell De-Differentiation in Cancer.** *Canadian Institutes of Health Research (CIHR)*. Catral M. (\$673,345.00 CAD, Oct 2013 - Sep 2018).
- Long-term Physical and Psychological Outcomes in Colorectal Cancer Survivors.** *Canadian Institutes of Health Research*. Hart S, Baxter N, Cotterchio M, Gallinger S. (\$144,487.00 CAD, Jul 2012 - Jun 2014).
- Metformin use and prostate cancer incidence and mortality: A novel approach to prostate cancer prevention.** *Canadian Cancer Society Research Institute*. Fleshner N, Bell C, Lipscombe L, Urbach DR. (\$160,782.00 CAD, 2011 - 2013).
- Multicentre Evaluation of a Novel Technique of Analgesia Following Open Liver Resection: Midline Open Transversus Abdominis Plane (MOTAP) Catheters.** (Co-Investigator). *University Health Network, Sunnybrook Health Sciences Centre*. Cleary SP, Wei A. (\$225,511.00 CAD, 2013 - 2015).
- Multimodal Optical Imaging of Breast Tumor Receptors for Diagnosis and Interventional Guidance In Vivo.** *Canadian Breast Cancer Foundation (CBCF)*. DaCosta R, Wilson B, Foster S, Zheng G, Sidhu S, Leong WL. (\$437,000.00 CAD, Jun 2013 - Jun 2016).
- NCIC PA.6 Trial: Randomized multicenter phase III comparison of adjuvant chemotherapy with gemcitabine versus a combination of 5-fluorouracil, leucovorin, irinotecan and oxaliplatin (mFOLFIRINOX) in patients with resected pancreatic adenocarcinoma.** *National Cancer Institute of Canada (NCIC)*. Wei AC, Biagi J, NCIC GI site group. (Aug 2012 - present).
- Normothermic ex vivo liver perfusion as a novel strategy to assess and repair marginal grafts.** Selzner M. *Roche Organ Transplant Research Foundation (ROTRF)*. (\$300,000.00 CAD, 2010 - 2013).
- Optimizing care in liver surgery: developing an evidence-based clinical pathway for hepatectomy.** (Principal Investigator). *Physician's Services Incorporated (PSI), Health Research Grant*. Wei A, Karanicolas P, Urbach D, Gallinger S. (Sep 2013 - Aug 2015).
- Pan-Canadian Colorectal Cancer Consortium (C4) - Phase I.** *Terry Fox Research Institute*. Gallinger S, Batist G, Gryfe R, Pollett A, Baster N. (\$671,616.00 CAD, Oct 2012 - Oct 2014).
- Pan-Canadian Colorectal Cancer Consortium (C4) - Phase II.** *Terry Fox Research Institute (TFRI)*. Gallinger S, Batist G, Gryfe R, Pollett A, Baxter N. (\$1,163,047.00 CAD, Apr 2014 - Sep 2017).
- Personalized Medicine with Targeted and Genome-Wide Sequencing.** *Cancer Care Ontario*. Neel B, Siu L, Onetto N, Ghai S, Murphy K, Haider M, Jaffray D, Shaw P, Asa S, Tsao M, Kamel-Reid S, McPherson J, Stein L, Jurisica I, Moore M, Oza A, Shepherd F, Leighl N, Liu G, Reedijk M, Chen E, Hedley D, Tsao M, Bedard P, Minden M, Stambolic V. (\$1,182,500.00 CAD, Jul 2011 - Jun 2016).
- Pluripotent stem cell modeling of human bile duct development and disease.** *Astellas/Multi-Organ Transplant Program*. Ghanekar A, Kamath B. (\$49,700.00 CAD, Jul 2013 - Jun 2014).
- Preclinical evaluation of double stranded RNA in human hepatocellular carcinoma.** *MultiCell Technologies Inc.* Ghanekar A. (\$109,480.00 CAD, Sep 2013 - Aug 2014).
- Programmatic Redesign: Realigning Health Resources Using Mathematical Modeling in the UHN Bariatric Multidisciplinary Program.** *Ontario Ministry of Health and Long-Term Care*. Quereshey F, Milner J, Jackson TD, Okrainec A. (\$180,400.00 CAD, Jul 2013 - Jun 2015).
- Randomized clinical trials for breast cancer.** *National Surgical Adjuvant Breast and Bowel Project (NSABP)*. (\$12,730.00 CAD, Jan 2013 - Dec 2013).

- Rapid genetic testing for BRCA1 and BRCA2 in newly diagnosed breast cancer patients.** *Canadian Institutes of Health Research (CIHR)*. Metcalf K, Narod SA, Eisen AF. Collaborators: Akbari M, Kiss A, Wright F, Chun K, McCready DR, Cil T, McGillis Hall L. (\$1,607,195.00 CAD, 2013 - 2018).
- Repeat Colonoscopy Prior to Colorectal Cancer Surgery in Ontario, Canada.** *Colon Cancer Canada*. Queresby F, Jimenez C, Rossos P, Brar S, Jackson T, Okrainec A. (\$60,000.00 CAD, 2013 - 2014).
- Safety of medical devices licensed for use in Canada: A mixed methods study to inform policy for effective post-market surveillance.** *Canadian Institutes of Health Research (CIHR)*. Gagliardi A, Urbach D, Bell C, Lehoux P, Ross S, Ducey A, Easty A, Trbovich P. (\$301,055.00 CAD, Apr 2014 - Mar 2017).
- Sentinel node biopsy following neoadjuvant chemotherapy in biopsy proven node positive breast cancer. A multi-institutional prospective study furthering the treatment of breast cancer.** *Groupe De Recherche En Cancer Du Sein*. (\$4,000.00 CAD, Jul 2011 - Jun 2014).
- Standardizing care for pancreas surgery: Introducing an evidence based clinical pathway.** *Canadian Institutes for Health Research, Dissemination Events*. Wei A, Gallinger S. (Nov 2013 - Oct 2014).
- Stem Cell Models of Alagille Syndrome: Biliary Disease in a Dish.** *National Institutes of Health (NIH)/ National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)*. Ghanekar A, Kamath, B. (\$25,000.00 CAD, 2012 - 2013).
- Stem Cell Models of Alagille Syndrome: Biliary Disease in a Dish.** *Alagille Syndrome Alliance*. Kamath B, Ghanekar A. (\$50,000.00 USD, Feb 2013 - Jan 2015).
- Structures and Processes of Care in Colorectal Cancer Surgery (SPoCCS) Study.** *Canadian Institutes of Health Research (CIHR)*. Urbach DR, Simunovic M, Baxter N, Sutradhar R, Lix LM. (\$1,084,151.00 CAD, 2008 - 2013).
- Telephone-based cognitive behavioural therapy for bariatric surgery patients: A randomized controlled trial.** *Canadian Institutes of Health Research*. Sockalingam S, Cassin SE, Parikh SV, Hawa R, Jackson TD, Urbach DR, Wnuk SM. (\$100,000.00 CAD, Mar 2014 - Feb 2015).
- The association of serum Vitamin D levels, genetic variants in vitamin D metabolism genes and pancreatic cancer risk.** *Canadian Institutes of Health Research*. Cleary S, Cotterchio M, Knight J, Gallinger S. (\$203,350.00 CAD, Sep 2011 - Aug 2013).
- The development of the surgical plan.** *Royal College of Physicians and Surgeons of Canada (The)*. Zilbert N, Moulton CA. (\$45,000.00 CAD, Jan 2013 - Jan 2014).
- The Informed Informed Consent Tool.** *Ruby Linn Foundation*. Hutter MM, Shahian D, Jackson TD. (\$50,000.00 USD, Sep 2013 - Sep 2015).
- The reliability of remote FLS certification using web-based technology.** *Center for Excellence in Surgical Education*. Okrainec A, Vassiliou M, Rittner M, Jackson TD. (\$22,377.00 CAD, Jul 2012 - Jul 2013).
- The Role of Notch in Breast Cancer Microenvironment Crosstalk.** *Susan G. Komen Breast Cancer Foundation (The)*. Reedijk M, Ohashi P. (\$1,000,000.00 CAD, Jul 2013 - Jun 2017).
- The Transitional Pain Service (TPS): An interdisciplinary collaboration between the Departments of Anesthesia, Surgery, and Palliative Care.** *AHSC AFP Innovation Fund*. Clarke H, Downar J, Keshavajee S, Waddell T, Kaya E, Ko R, Katznelson R, Rao V, Oreopolous G, Wei AC, Ladak S, Williams D, Katz J. (\$160,951.88 CAD, Jun 2013 - May 2015).
- The Genetics of Hereditary Upper Gastrointestinal Cancers: Beyond CDH1 Germline Mutations.** *Canadian Institutes of Health Research*. Huntsman D, Gallinger S, Schaefer D, Schrader K, Shah S, Zogopoulos G. (\$932,334.00 CAD, Jul 2012 - Jun 2017).
- Towards an Assessment Tool for Surgical Judgment: Exploring Expert-Trainee Differences in Slowing Down Moments.** *Medical Council of Canada (MCC)*. Moulton CA, Regehr G, Gallinger S, Zilbert N, St-Martin L. (\$34,947.00 CAD, Jul 2013 - Jun 2014).
- Tranexamic Acid Versus Placebo to Reduce Perioperative Blood Transfusion in Patients Undergoing Major Liver Resection: A Pilot Randomized Controlled Trial.** *Canadian Institutes for Health Research*. Wei A. (\$248,319.00 CAD, Apr 2014 - Mar 2016).
- Utilization and effectiveness of existing cardiac rehabilitation programs for patient pre and post bariatric surgery.** *Ontario Ministry of Health*. Alter D, Oh P, Forhan M, Urbach D, Third D, Kmil C, Jackson TD, Sockalingam S. (\$52,200.00 CAD, Jul 2012 - Jul 2013).
- Validation and fine-mapping of pancreatic cancer susceptibility Loci.** *National Institutes of Health (NIH) (USA)*. Klein A, Petersen G, Brennan P, Bracci P, Risch H, Gallinger S et al. (\$761,032.00 USD, Jul 2011 -

Jun 2015).

Validation of Germline Copy Number Variants in Colorectal Cancer. *University of Toronto McLaughlin Centre.* Gallinger S. (\$50,000.00 CAD, May 2013 - Mar 2014).

Visual imagery and mental rehearsal in surgery. *Physicians Services Incorporated Foundation (The) (PSI).* Cil T, Moulton CA, Murnaghan L. (\$13,500.00 CAD, Aug 2012 - Aug 2013).

Honours Received

Cleary SP: Nicholas Colapinto Teaching Award. Dept of Surgery, Faculty of Medicine. Jul 2013 - Jun 2014.

Greig P: Francis Moore Excellence in Mentorship in the Field of Transplantation Surgery Award, American Society of Transplant Surgeons (ASTS). 2014

Greig P: SSAT Warshaw Master Educator Award, Society for Surgery of the Alimentary Track (SSAT). 2013

Greig P: 2014 Mentor of the Year - Region 3, Royal College of Physicians and Surgeons of Canada. Mar 2014 - Feb 2015.

Moulton CA: The Fellowship Mentor Award, The Wilson Centre, The Richard Reznick Research Day. Oct 2013.

Queresby FA.: Wightman-Berris Academy Individual Teaching Award, University of Toronto, Dept of Medicine, Faculty of Medicine, Ontario, Canada. May 2014

Reedijk M: Individual Teaching Excellence Award, The Wightman-Berris Academy. Dept of Surgery, Faculty of Medicine. 2013 - 2014.

Division of Neurosurgery

Dr. M.A. Bernstein	Professor
Dr. K.D. Davis	Professor
Dr. J. Eubanks	Professor
Dr. M. Fehlings	Professor
Dr. F. Gentili	Professor
Dr. C. Hamani	Assistant Professor
Dr. M. Hodaie	Associate Professor
Dr. W. Hutchison	Associate Professor
Dr. S.K. Kalia	Assistant Professor

Dr. P. Kongkham	Assistant Professor
Dr. A.M. Lozano	Professor
Dr. E. Massicotte	Associate Professor
Dr. M. Shamji	Assistant Professor
Dr. C.H. Tator	Professor
Dr. M. Tymianski	Professor (Division Head)
Dr. T. Valiante	Assistant Professor
Dr. A. Velumian	Assistant Professor
Dr. G. Zadeh	Assistant Professor

Publications

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Invited Visits

Bernstein M. Redlano Congresso 2013, Cartagena, Colombia, August 2013. Invited Speaker: 1/ Awake craniotomy for resection of brain tumours. 2/ Low grade glioma is the question; what is the answer?

Bernstien M: Aga Khan University Hospital, Nairobi, Kenya, March 2014. Invited Speaker: Challenges in training surgery residents.

Bernstein M. 3rd Annual McMaster Neuroscience Symposium, Hamilton, Ontario May 2014. Invited Speaker: Awake (and outpatient!) craniotomy for tumour.

Bernstein M. Medical University of Warsaw, Warsaw, Poland May 2014. Invited Speaker: Awake (and outpatient!) craniotomy for tumour.

Davis KD: University College London, London Pain Consortium, London, United Kingdom, Jul 2013. Invited Speaker: 1/ If pain is just salience detection then where is the "ouch"? 2/ Imaging central and peripheral abnormalities in chronic pain.

Davis KD: 8th Congress of the European Federation of IASP (International Association for the Study of Pain) chapters (EFIC), Florence, Italy, Oct 2013. Chair: Workshop: Structural Brain Imaging in Chronic Pain: Just an Epiphenomenon?

Davis KD: Israel Pain Association, Eilat, Israel, Nov 2013. Invited Speaker: 1/ Brain imaging technologies and its use to examine different types of acute and chronic pain. 2/ Brain imaging of neuropathic pain.

Davis KD: Pain Research Forum, United States, 16 Dec 2013. Webinar panelist: Picturing Pain in the Brain.

Davis KD: Canadian Sports Concussion Project: 2nd Annual Symposium Research on The Concussion Spectrum of Disorders, Toronto, Ontario, Canada, 11 Jan 2014. Invited Speaker: Initial MRI Findings in the CFL Study.

Davis KD: Brain Matters! Vancouver, Vancouver, British Columbia, Canada, Mar 2014. Invited Speaker and Moderator: The Neuroethics of Pain Diagnostics Using Neuroimaging.

Davis KD: Law & Health Care Program at University of Maryland Carey Law School, University of Maryland School of Dentistry, and the American Association for the Advancement of Science, Baltimore, Maryland, United States, Apr 2014. Invited Panelist: Imaging the Brain, Changing Minds: Chronic Pain Neuroimaging and the Law.

Davis KD: Johns Hopkins Medicine, Department of Anesthesiology and Critical Care Medicine, 12th Benson Lecture on Pain Medicine, Baltimore, Maryland, United States, May 2014. 1/ Distinguished Speaker: Your brain is not my brain: how the brain reflects individual differences in pain sensitivity and coping. 2/ Invited Lecturer: What can brain imaging tell us about neuropathic pains?

Davis KD: 20th Annual Meeting of the Organization for Human Brain Mapping, Hamburg, Germany, Jun 2014. 1/ Chair: A Brave New World? Ethical considerations for individual assessments workshop. 2/ Speaker: Workshop lecture: A need for an ethical framework in which to consider biological, neurophysiological and technical factors that impact sensitivity and specificity of neuroimaging in individual subjects workshop.

Davis KD: Keystone Symposia: The Brain: Adaptation and Maladaptation in Chronic Pain, Keystone, Colorado, United States, Jun 2014. Speaker: Pain-Attention Brain Circuitry Phenotypes: Potential for Personalized Therapeutics?

Fehlings MG: IMAST (20th International Meeting on Advanced Spine Techniques) Vancouver British Columbia - July 10-13, 2013. 1/ Speaker: International Variations in the Clinical Presentation and Management of Cervical Spondylotic Myelopathy: One Year Outcomes of the AOSpine Multicenter Prospective CSM-1 Study. 2/ Speaker: Do Neuroprotective Agents Have a Role in the surgical Treatment of CSM (Steroids, Riluzole)? 3/ Moderator: Multilevel Cervical Spondylosis (greater 3 levels) With Straight Alignment: Laminoplasty vs Posterior Decompression and Instrumented Fusion Laminoplasty. 4/ Speaker: Roundtable Sessions: Cervical Trauma

Fehlings MG: NNS (31st Annual National Neurotrauma Symposium), Nashville, Tennessee, August 4-7, 2013. Speaker: Translation Research Discovering Novel Treatments for Spinal Cord Injury.

Fehlings MG: Asia Pacific Cervical Spine Society (APCSS), Sapporo, Japan, August 20-24, 2013. Invited Speaker: 1/ Advances in the Pathophysiology and Treatment of SCI. 2/ Selection of surgical approach for the treatment of cervical spondylotic myelopathy-anterior vs posterior.

Fehlings MG: Swedish Orthopedic Association, Uppsala, Sweden, August 24-28, 2013. Invited Speaker: 1/ Current concepts in the pathophysiology and management of cervical spondylotic myelopathy. 2/ Management of geriatric odontoid fractures - what have we learned from the AOSpine North America studies? 3/ Dens Fracture in the Elderly. The North American Study, 4/ Spinal Cord Injury - Current State of the Art.

Fehlings MG: Montreal Neurological Institute, McGill University, Montreal Quebec - September 9-10, 2013. Invited Speaker: Pathophysiology and Treatment of Cervical Spondylotic Myelopathy - From Molecule to Man.

Fehlings MG: Society British neurosurgeons (SBNS) – Colchester, UK, September 25 – 27, 2013. 1/ Invited Speaker: The Role of Mentoring in the Development of a Neurosurgeon. 2/ Chair: MRI signal change pre-operatively is associated with baseline neurological status can predict postoperative recovery in cervical spondylotic myelopathy. 3/ Instructor: A Spinal Masterclass. 4/ Guest Lecturer: Professor Sir Geoffrey Jefferson Memorial Lecture – New Developments in Translational Spinal Cord Injury: Research – From Molecule to Man.

Fehlings MG: 2013 Brain Development Conference - September 29- October 1, 2013, Vancouver, BC. Chair: Novel Therapeutics for Treating Neuro Developmental Disorders.

Fehlings MG: 3rd International Forum on Immunoglobulin Research, Baxter Healthcare Corporation, Miami, FL, Oct 5. Examination of the neuroprotective role of immunoglobulins in spinal cord injury.

Fehlings MG: 28th Annual Meeting, North American Spine Society, New Orleans, LA, Oct 9-12. 1/ Co-Moderator - Concurrent Session: Myelopathy. 2/ Invited Talk: Future of stem cells for spinal cord injury.

Fehlings MG: 2013 Annual Meeting, Congress of Neurological Surgeons, San Francisco, CA, Oct 19-23, 2013. 1/ Course Co-Director and Chair, Trauma Update: Spinal Cord Injury Guidelines and Best Practices. 2/ Keynote Speaker: Controversy: Spinal Cord Injury and Steroids: Reality, Data, Guidelines – Now What?

Fehlings MG: Science LiveChat, Science Translational Medicine, Oct 24, 2013. Online video discussion on the topic of spinal cord injury <http://news.sciencemag.org/health/2013/10/live-chat-treating-spinal-cord-injury>

Fehlings MG: 15th Annual Brain Tumor Update and 4th Annual International Symposium on Long-Term Control of Metastases to the Brain and Spine, Cleveland Clinic, Las Vegas, NV, Nov 9-10. Speaker: Surgery for Spine Metastases - Debulking vs En Bloc Resection.

Fehlings MG: 41st Annual Meeting, Cervical Spine Research Society, Los Angeles, CA, Dec 5-7. Moderator: Refractory Axial Neck Pain from DDD – Is it a Surgical Disorder?

Fehlings MG: AOSpine Davos Courses, 2013 – Mastering Complex Spine Cases, Davos, Switzerland, Dec 9-13, 2013. Case Discussant: 1/ Degenerative Scoliosis. 2/ Multiple-Level Degeneration with Single-Level Listhesis. 3/ Solution for Complex Cases-Case from Participants. 4/ Spondylotic Cervical Radiculopathy. 5/ Ossification of Posterior Longitudinal Ligament in the Cervical Spine. 6/ Spondylotic Cervical Myelopathy. 7/ Expert Opinion and Lecture-How do I decide on Anterior or Posterior Decompression? 8/ Update on Treatment of Deformities. 9/ New AOSpine Subaxial Cervical Fracture Classification. 10/ Central Cord Injury-New Concepts in Etiology, Diagnosis and Management. 11/ Multiple-Level Degeneration with Single-Level Listhesis. 12/ Solution for Complex Cases. 13/ Spondylotic Cervical Radiculopathy. 14/ Spondylotic Cervical Myelopathy. 15/ Ossification of Posterior Longitudinal Ligament in the Cervical Spine.

Fehlings MG: Neurosurgery Symposium, Mumbai, India, December 14-15, 2013. Invite Speaker: 1/ Degeneration vs Cervical Spine. 2/ Breakfast Symposium. Neurosurgery Spinal Topics - Mild Cervical Spondylotic with myelopathy: To operate or not.

Fehlings MG: Spine: Base to Summit, Medical Education Resources / Broadwater, Beaver Creek, CO, Jan 17-20, 2014. 1/ Co-Director: Central spinal cord injury. 2/ Moderator: Spine Surgery at the Junctions. 3/ Speaker: Cervical trauma: How I choose timing, approach, levels and stabilization.

Fehlings MG: NeuroDevNet NCE Meeting, NeuroDevNet, Vancouver, BC, Feb 25-27, 2014. Co-Chair: Scientific Advisory Board (SAB) Mock Review Panel.

Fehlings MG: 2014 Combined Spine Conference of the Canadian Spine Society, New Zealand Orthopaedic Society and Spine Society of Australia, Canadian Spine Society, Lake Louise, AB, Feb 28, 2014. Co-Chair: Tumour/SCI.

Fehlings MG: INTS 2014 Symposium, International Neurotrauma Society, Budapest, Hungary, Mar 19-23, 2014. 1/ Co-Chair, Sunrise Seminar SS1/3: Comorbidities, Genomics and Epigenetics. 2/ Speaker: State-of-the-art Lecture on Spinal Cord Injury. 3/ Hypothermia for spinal cord injury.

Fehlings MG: 12th Annual Banff Fellows Forum, AOSpine North America, Banff, AB, Mar 28, 2014. Speaker: Neuroprotection of the injured spinal cord: The RISCIS and CSM Protect Trials.

Fehlings MG: 82nd Annual Scientific Meeting, American Association of Neurological Surgeons, San Francisco, CA, Apr 5-9, 2014. 1/ Co-Director: Update on Spine Trauma Management. 2/ Moderator: Management of Acute Spinal Cord Injury.

Fehlings MG: AONeuro Course - Management of Traumatic Brain and Spinal Cord Injuries, AO Foundation, San Francisco, CA, May 3-4, 2014. 1/ Keynote Speaker: State of the Art – Traumatic Spinal Cord Injury. 2/ Lecturer: Spinal cord injury timing of surgical intervention for acute SCI. 3/ Moderator: Spinal Cord Injury.

Fehlings MG: 36th International Symposium – Sensormotor Rehabilitation: The Crossroad of Basic and Clinical Sciences, Groupe de Recherche sur le Système Nerveux Central, Montreal, QC, May 12-13, 2014. Speaker: Clinical Translational Research in Acute Spine Spinal Cord Injury: Time is Spine.

Fehlings MG: 15th Annual Meeting. Israel Spine Society, Eilat, Israel, May 15-16, 2014. Keynote Lecturer: 1/ Repair and regeneration of the injured spinal cord: From molecule to man. 2/ Novel concepts in the pathophysiology and treatment of degenerative cervical myelopathy.

Fehlings MG: Wings for Life Scientific Meeting 2014, Wings for Life Spinal Cord Research Foundation, Salzburg, Austria, May 21-22, 2014. Speaker: Investigation of induced pluripotent stem cells for repair and regeneration of the injured spinal cord.

Fehlings MG: 2014 ACVIM Forum, American College of Veterinary Internal Medicine, Nashville, TN, Jun 4-7, 2014. Speaker: 1/ Emerging mechanisms and therapies for acute traumatic spinal cord injury. 2/ Cervical spondylotic myelopathy: Current pathobiology and therapies.

Fehlings MG: 2014 NSA Annual Meeting, Neurosurgical Society of America, St. Andrews by the Sea, NB, Jun 8-11, 2014. Speaker: Repair and regeneration of the injured spinal cord – From molecule to man.

Hodaie M: XV WFNS World Congress of Neurosurgery, Seoul Teugbyeolsi [Seoul-T'ukpyolshi], Korea, Republic Of, 13 Sep 2013. Speaker: Functional neurosurgery in the developing world: Strategies to address an ignored necessity.

Hodaie M: Trigeminal Neuralgia Association of Canada, Toronto, Ontario, Canada, 28 Sep 2013. Webinar Speaker: Role of imaging in diagnosis and treatment of trigeminal neuralgia. Webinar.

Hodaie M: The Toronto Star, Toronto, Ontario, Canada, 17 Oct 2013. Interview: Stroke patient to run in Scotiabank Toronto Waterfront Marathon.

Hodaie M: AANS/CNS Section on Pediatric Neurosurgery Practical Course on Epilepsy Surgery, Toronto, Ontario, Canada, 3 Dec 2013. Invited Speaker: Deep brain stimulation for epilepsy.

Hodaie M: EndMS Conference, Multiple Sclerosis Society of Canada, St. Sauveur, Quebec, Canada, 10 Dec 2013. Speaker: Imaging Pain in Multiple Sclerosis.

Hodaie M: Myanmar Medical Association, Yangon, Myanmar, 8 Feb 2014. Invited Speaker: International collaborations in Neurosurgery education.

Hutchison WD: Dr Adriana Lopez Rios. Medellin, Antioquia, Colombia. 2014 Feb. Invited Speaker. Posterior hypothalamus and red nucleus recordings during DBS for aggressivity.

Kalia SK: Division of Neurosurgery Rounds, University of Calgary, Calgary, Alberta, Canada, 2013. Invited Speaker: Neuromodulation to Neurorestoration: Emerging and Future Indications and Techniques in Functional Neurosurgery.

Kalia SK: Division of Neurosurgery Rounds, University of Wisconsin, Madison, Wisconsin, United States, 2013. Invited Speaker: Neuromodulation to Neurorestoration: Emerging and Future Indications and Techniques in Functional Neurosurgery.

Kalia SK: 2014 Canadian Botulinum Toxin Conference, Montreal, Quebec, Canada, 31 Jan-1 Feb 2014. Invited Guest Faculty: DBS for Cervical Dystonia.

Lozano AM: Mexican Society of Neurological Surgeons. Ixtapa-Zihuatanejo, Mexico, 2013 Jul 15. Invited Speaker: 1/ Surgical treatment of Parkinson Disease. State of the Art". 2/ Neuromodulation in the treatment of Alzheimer disease.

- Lozano AM:** Portland International Neuroscience Symposium – 2013, Portland, Oregon, United States, 2013 Jul 20. Invited Lecturer: The future of deep brain stimulation.
- Lozano AM:** Indian Institute for Mental Health, Bangalore, India, 2013 Aug 17. Invited Speaker: 1/ Modulation surgery for epilepsy. 2/ Advances in Functional Neurosurgery.
- Lozano AM:** AD PD symposium, Pisa, Italy, 2013 Sep 6. Invited Speaker: The reality of surgery for Parkinson's disease, the potential of surgery for Alzheimer's disease.
- Lozano AM:** 2013 Sep 10 Invited Speaker. 25 years of STN DBS symposium. Grenoble, France.
- Lozano AM:** Hungarian Academy of Sciences. Budapest, Hungary, 2013 Sep 19. Invited Speaker: Deep brain stimulation to reset dysfunctional circuits in Alzheimer's disease.
- Lozano AM:** World Congress of Neurology. Vienna, Austria, 2013 Sep 24. Invited Speaker: What neurologists need to know about Functional Neurosurgery.
- Lozano AM:** University of Vienna. Vienna, Austria, 2013 Sep 24. Invited Lecturer: Advances in functional neurosurgery.
- Lozano AM:** School of Neurosciences. Cortona, Italy, 2013 Sep 29. Invited Speaker: 1/ Anatomy and Physiology of the basal ganglia – lessons from the operating room. 2/ Neurosurgical treatment of basal ganglia disorders.
- Lozano AM:** 3rd World Parkinson Congress. Montreal, Canada, 2013 Oct 1. Invited Lecturer: Surgical therapy.
- Lozano AM:** Institute of Mental Health Research (IMHR). Open Minds Symposium 2013. Ottawa, Canada, 2013 Oct 4. Invited Speaker: Stimulating areas deep in the brain may alter its activity and ultimately alleviate refractory depression.
- Lozano AM:** 72nd Annual Meeting of the Japan Neurosurgical Society. Yokohama, Japan, 2013 Oct 16. Keynote Speaker: Potential of DBS to treat Alzheimer's Disease.
- Lozano AM:** Research Update in Neuroscience for Neurosurgeons (RUNN) Course. Woods Hole, United States, 2013 Oct 28. Invited Lecturer: Adjusting the activity in human brain circuits.
- Lozano AM:** III CONGRESO DE LA SOCIEDAD ESPAÑOLA DE NEUROCIRUGÍA FUNCIONAL Y ESTEREOTÁCTICA. Barcelona, Spain, 2013 Nov 14. Invited Speaker: 1/ What treatments are there to treat movement Disorders; 2/ DBS. Fornix Area; 3/ Chair of Session “Current Status of Psychosurgery in Spain.
- Lozano AM:** Research Canada's Health Research Caucus Luncheon. Ottawa, Canada, 2013 Nov 27. Invited Speaker.
- Lozano AM:** University of British Columbia. Vancouver, Canada, 2013 Nov 29. Invited Speaker: Adjusting brain circuits.
- Lozano AM:** Brain and Mind Institute, Brain day, University of Ottawa. Ottawa, Canada, 2013 Dec 4. Keynote Speaker: Improving the function of the Human Brain.
- Lozano AM:** Comprehensive Clinical Neurosurgery Review Course. Krakow, Poland, 2013 Dec 6. Invited Speaker: 1/ Introduction to Surgical anatomy and physiology for the functional neurosurgeon; 2/ Surgical management of movement disorders and stereotactic surgery; 3/ Surgical management of pain and spasticity.
- Lozano AM:** XX World Congress on Parkinson's Disease and Related Disorders. Geneva, Switzerland, 2013 Dec 11. Invited Speaker: DBS New Targets.
- Lozano AM:** William Feindel Lecture, McGill University, Montreal, Canada, 2013 Dec 13. Invited Lecturer: Following in the footsteps of Dr. Penfield: Unraveling the secrets of the human brain with electrical stimulation.
- Lozano AM:** Royal Society of Medicine Conference – From Neurology to Psychiatry and back. London, City of, United Kingdom, 2014 Jan 14. **Invited Speaker:** The role of deep brain stimulation in mental disorders: New insights and hopefully new treatments.
- Lozano AM:** Neurosurgical Society of the Virginias. White Sulfur Springs, West Virginia, United States, 2014 Jan 24. Invited Lecturer: 1/ Resetting dysfunctional brain circuits; 2/ The evolution of psychiatric neurosurgery.
- Lozano AM:** 1st International Freezing of Gait Congress. Dead Sea, Israel, 2014 Feb 7. Invited Lecturer: Is PPN stimulation the cure for freezing of gait?
- Lozano AM:** Hospital San Vicente Fundacion. Colombia, 2014 Feb 17. Invited Lecturer: DBS in Alzheimer and psychiatric illness.

Lozano AM: University of British Columbia, Vancouver, 2014 Mar 5. Invited Lecturer: 1/ PD Moyes Lecture: “The neurosurgery of psychiatric disorders: past, future prospects.” 2/ Neuroscience Grand Rounds: “Deep brain stimulation for misbehaving brain circuits.”

Lozano AM: 30th International Congress of Neurophysiology. Berlin, Germany, 2014 Mar 19. Invited Lecturer: 1/ Emergent indications of DBS; 2/ MR-Guided focused ultrasound lesioning.

Lozano AM: 2° World Congress on Brain, Behavior and Emotions. Montreal, 2014 Apr 7. Speaker: 1/ The potential of deep brain stimulation for Alzheimer’s disease. 2/ Deep brain stimulation: Overview and potential applications.

Lozano AM: 2nd Annual Minnesota Neuromodulation Symposium. Minneapolis, Minnesota, United States, 2014 Apr 10. Invited Lecturer: Adjusting malfunctioning brain circuits with deep brain stimulation.

Lozano AM: University of Cincinnati. Cincinnati, Ohio, United States, 2014 May 30. 33rd Mayfield Lecturer: 1/ Adjusting Malfunctioning Brain Circuits. 2/ The importance of serendipity and audacity in neurosurgery.

Lozano AM: Brazilian Congress of Functional Neurosurgery. São Paulo, Brazil, 2014 May 10. Invited Speaker. 1/ Surgery for movement disorders: where we are; where we will go; 2/ DBS for secondary dystonia: indications and results; 3/ Neuromodulation for dementia.

Lozano AM: Hospital de Clinicas de Porto Alegre. Porto Alegre, Brazil, 2014 May 7. Visiting Professor: 1/ Improving the activity of malfunctioning brain circuits; 2/ Advances in surgery for movement disorders.

Lozano AM: American Society for Stereotactic and Functional Neurosurgery 2014 Biennial Meeting. Washington, United States, 2014 Jun 2 Honored Guest.

Lozano AM: NeuroFutures Summit: University of Washington. Seattle, 2014 Jun 17. Invited Speaker: Closing the Loop between Brain Mapping, Neuromodulation, and Brain Computer Interfaces.

Lozano AM: Canadian Congress of Neuropsychopharmacology. Banff, Alberta, Canada, 2014 Jun 20. Distinguished Speaker: Innovations Award Lecture: “Deep brain stimulation for treatment-resistant depression”.

Shamji M: Congress of Neurological Surgeons, United States, Oct 2013. 1/ Moderator: Spine Surgery Scientific Session. 2/ Speaker: Management of Thoracolumbar Trauma.

Shamji M: AO Neurotrauma, United States, Nov 2013. 1/ Presenter: MIS Management of Thoracolumbar Trauma. 2/ Webinar: Surgical Management of Cervical Spondylotic Myelopathy.

Shamji M: Canadian Spine Surgery Motion Preservation Society, Canada, Nov 2013. Lecturer: Review: Disc Arthroplasty vs. Fusion.

Shamji M: Canadian Leg and Back Pain 2nd meeting, Canada, Dec 2013. Discussant: Neuromodulation.

Shamji M: AO Spine Perspective on CSM, United States, Jan 2014. Speaker: Cervical Spondylotic Myelopathy Study.

Shamji M: Ottawa Neurosurgery Review Course, Ottawa, Ontario, Canada, Feb 2014. 1/ Examiner: OSCE Examiner. 2/ Speaker: Overview of Thoracolumbar Trauma.

Shamji M: AO Spine NA Fellows Forum, Mar 2014. 1/ Moderator: Fireside Case Discussion. 2/ Invited Lecturer: Young Investigator Research Grant Award Lecture.

Shamji M: AANS/CNS Section on Disorders of the Spine and Peripheral Nerve, Mar 2014. Invited Speaker: Iliac Bolt and Bone Graft Harvest.

Shamji M: VuMedi Webinar, Apr 2014. Presenter: Classification of Sacral Fractures.

Shamji M: Canadian Neurological Sciences Federation, Canada, Jun 2014. Chair: Neuropathic Pain SIG.

Tymianski M: Cedars Sinai Hospital, Los Angeles, California, United States, 18 Jul 2013. Invited Lecturer: From bench to bedside: translation of PSD95 inhibitors for the treatment of acute Stroke.

Tymianski M: Cambridge University, Dept of Neuroscience, Cambridge, Cambridgeshire, United Kingdom, 15 Sep 2013. Invited Speaker: Role of TRPM7 channels in ischemic cell death.

Tymianski M: Lenox Hill Hospital, Office of Continuing Medical education, New York, New York, United States, 4 Oct 2013. Invited Speaker: International Perspectives in neurovascular disease: past, present and future.

Tymianski M: Weill Cornell University, New York, New York, United States, 6 Feb 2014. Invited Speaker: Treatment of stroke and related disorders with PSD95 inhibitors: Bench to bedside and beyond.

Tymianski M: International Stroke Conference, American Heart + Stroke, San Diego, California, United States, 13 Feb 2014. 1/ Co-moderator: Aneurysm oral abstracts. 2/ Invited Speaker: The path to a successful stroke career-basic scientist.

Tymianski M: UBC Dept of Neuroscience, Vancouver, British Columbia, Canada, 4 Apr 2014. Invited Speaker: Development of PSD95 inhibitors for the treatment of acute ischemic stroke.

Tymianski M: CSN Knowledge Mobilization 2014-Emerging concepts in stroke and neuroprotection, Vancouver, British Columbia, Canada, 6-8 Mar 2014. Invited Speaker: 1/ Translation of PSD95 inhibitors from target discovery to Phase 3 clinical trials. 2/ Stroke: Researching Channels and Delivering Therapies Cafe Scientique.

Tymianski M: University of Calgary Dept of Neurosciences, Calgary, Alberta, Canada, 9 Apr 2014. Invited Speaker: 1/ A safety, efficacy and cost analysis of minimally invasive surgery vs endovascular treatment of unruptured anterior circulation brain aneurysms. 2/ Translation of PSD95 inhibitors from Bench to Clinical trials.

Tymianski M: Dept. of Medicine, University of Miami, Miami, Florida, United States, 3 May 2014. Visiting Rosomoff Professor: 1/ Treatment of ischemic brain damage with PSD95 inhibitors: from bench to phase 3 clinical trials. 2/ Management of unruptured anterior circulation aneurysms by mini craniotomy or endovascular means: a comparison of outcomes, costs and success rates.

Tymianski M: 40th Annual Barrow Neurological Institute Neurosurgery Symposium, Phoenix, Arizona, United States, 14 May 2014. Invited Speaker: Agony and Ecstasy: case review and lessons learned.

Tymianski M: 34th Annual Meeting of Japanese Congress of Neurological surgeons, Ôsaka, Japan, 17 May 2014. Keynote Speaker: Translation research in stroke prevention-neurosurgeon's perspective.

Tymianski M: BC Resuscitation outcomes consortium Educational Conference, Vancouver, British Columbia, Canada, 24 Jun 2014. Invited Speaker: FRONTIER pre-hospital neuroprotector/placebo. • What it is and why it is important.

Valiante T: Human Brain Project, Amsterdam, Netherlands, 25 Mar 2014. Invited Speaker: InVitroRecordingsOfHumanNeocorticalOscillations.

Valiante T: American Association of Stereotactic and Functional Neurosurgery, Washington, District of Columbia, United States, 2 Jun 2014. Invited Speaker: The Promise and Pitfalls of Optogenetic Strategies for Seizure Control.

Zadeh G: Minnesota Second Symposium on Brain Tumors, Minneapolis, Minnesota, United States, Sep 2013. Invited Speaker: Brain Tumor Angiogenesis.

Zadeh G: World Federation of Neurological Surgeons (WFNS), Seoul, Korea, Republic Of, Sep 2013. Invited Speaker: Management of Brain Metastases.

Zadeh, Gelareh: Canadian Neurological Sciences Federation, Banff, Alberta, Canada, Jun 2014. 1/ Invited Speaker: Angiogenesis in Glioblastoma. 2/ Chair: Brain Tumor Biology.

Research and Investigations

Antidepressant effects of chronic deep brain stimulation in rats: Neurogenesis dependent and independent mechanisms. *Ontario Mental Health Foundation.* Hamani C. (\$150,000.00 CAD, Apr 2012 - Mar 2014).

Antidepressant effects of deep brain stimulation and the serotonergic system. *Canadian Institutes of Health Research (CIHR).* Hamani C. (\$580,586.00 CAD, Mar 2011 - Jun 2015).

Antidepressant-like effects of deep brain stimulation in rats and the hypothalamic, pituitary, adrenal axis. *FAPESP (Foundation to Support Research in the State of São Paulo, Brazil)/University of Toronto.* Hamani C. (\$10,680.00 CAD, Apr 2012 - Mar 2014).

AOSpine North America Fellowship Program, 2-year merit award. *AOSpine North America.* Massicotte EM, Rampersaud YR, Lewis S, Fehlings M. (\$150,000.00 CAD, 2011 - 2013).

Brain stimulation to induce plasticity and enhance recovery in animal models of stroke. *Canadian Institutes of Health Research (CIHR).* Lozano A. (\$225,000.00 CAD, 2011 - 2014).

Cerebrovascular reactivity (CVR) in patients with mesial temporal lobe epilepsy (mTLE). *Ontario Brain Institute.* Valiante T, Carlen PL, Bardakjian BL. (\$250,000.00 CAD, Jul 2013 - Jul 2018).

Childhood Cerebral Palsy Integrated Discover Network "CP-NET". *Ontario Brain Institute.* Fehlings D, deVerber G, Fehlings MG, Menon R, Rosenbaum P, Scherer S, et al (32 others). (\$7,500,000.00 CAD, Jul 2013 - Jun 2018).



Coagulation system effectors as regulators of tumour dormancy and therapeutic targets. *Canadian Institute of Health Research.* Zadeh G, Rak J. (2014 - 2019).

Deep Brain Stimulation in animal models of Alzheimer's Disease. *W. Garfield Weston Foundation.* Lozano AM. (\$150,000.00, 2013 - 2014).

Deep brain stimulation in different targets in animal models of depression. *St Jude Medical.* Hamani C. (\$42,377.00 USD, Sep 2012 - Aug 2014).

Deep Brain Stimulation for Alzheimer's disease. *FedDev Technology Development Program for Southern Ontario/Ontario Brain Institute (OBI).* Lozano A. (\$520,439.00 CAD, 2011 - 2014).

Deep Brain Stimulation for the Treatment of Refractory Anorexia Nervosa. *Klarman Family Foundation.* Lozano A. (\$150,000.00 USD, 2012 - 2013).

Deep Brain Stimulation for Alzheimer's Disease. *National Institutes of Health (NIH) (USA).* Lozano A, Lyketsos K, Anderson WS, Giacobbe P, Leoutsakos JM, Marano CM, McAndrews MP, Munro C, Sacktor N, Smith G, Strafella A, Tang-Wai D. (\$3,390,034.00 USD, Jul 2012 - 2017).

Department of Surgery Commitment Funds. Zadeh G. (\$400,000.00, 2012 - 2013).

Describing pathophysiology to promote a focal therapy for the treatment of schizophrenia – an animal experimental study. *Neuron ERA NET- Canadian Institutes of Health Research.* Hamani C. (\$143,000.00 CAD, Feb 2011 - Jan 2015).

Development of a perfusion MRI technique to investigate longitudinal effects of chronic pain on brain function. *Canadian Institutes of Health Research (CIHR).* St. Lawrence K, Clarke C, MacIntosh B, Morley-Forster P, Moulin D, Davis KD. (\$451,668.00 CAD, Jul 2012 - Jun 2016).

Diffusion tensor imaging as an in vivo brain imaging technique to study the effects of chronic pain and its treatment. *Canadian Institutes of Health Research (CIHR).* Hodaie M, Davis K, Crawley A, Mikulis D. (\$651,814.00 CAD, Oct 2013 - Sep 2018).

Dopamine and synaptic plasticity in human substantia nigra pars reticulata. *Canadian Institutes of Health Research (CIHR).* Hutchison WD, Dostrovsky JO, Hodaie M, Lozano AM, Moro E. (\$490,745.00, Jul 2009 - Jun 2014).

Enhancing recovery following cervical spinal cord injury by modulating inflammation with IgG. *Physicians Services Incorporated Foundation (The) (PSI).* Fehlings MG. (\$167,000.00, Jul 2012 - Jun 2014).

Health Applications of Cell Signaling in Mucosal Inflammation & Pain. *Canadian Institutes of Health Research (CIHR).* McCulloch ER, Brumell J, Cvitkovitch D, 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, Davis KD. (\$1,950,000.00 CAD, Jul 2009 - Jun 2015).

Hypofractionated and Adaptive Stereotactic Radiotherapy (HFA-SRT) for Large-Volume Brain Metastases. *University Health Network.* Menard C, Zadeh G. (2009 - present).

Imaging and tractography of cranial nerves surrounding posterior fossa tumours and application in radiosurgery. *MITACS - Precision X-ray/Elektta Industry partners. Techna Guided Therapeutics Cluster.* Jaffray D, Hodaie M, Lindsay P, Weersnik R, Cho YB. (\$306,666.59 CAD, 2013 - 2015).

Inhibition of MMPs in Malignant Meningiomas. *Adam Coules Research Grant.* Zadeh G. (\$50,000.00 CAD, 2014 - 2014).

Intravenous infusion of human umbilical cord matrix cells to treat spinal cord injury. *Stem Cell Network.* Fehlings MG. (\$71,400.00 CAD, Nov 2013 - Oct 2014).

Investigating Mechanisms of Tumor Neo-vascularization. *Terry Fox Foundation (The).* Zadeh G. (\$600,000.00 CAD, 2013 - 2016).

Investigation and treatment of traumatic axonal dysfunction after spinal cord injury. *Canadian Institutes of Health Research (CIHR).* Fehlings MG. (\$718,604.00 CAD, Oct 2012 - Sep 2017).

Investigation of human piggyBac induced pluripotent stem cells for repair and regeneration of the injured cervical spinal cord. *Wings for Life Spinal Cord Research Foundation.* Fehlings MG. (\$199,770.00 EUR, Jul 2011 - Jun 2014).

Lacosamide Anticonvulsant Actions on Epileptic Tissue. *UCB Pharma.* Carlen PL, Valiante TA. (\$198,800.00 CAD, Mar 2012 - Feb 2014).

- Long-term stability of local field potentials recorded from the subthalamic nucleus and effects of deep brain stimulation.** *Canadian Institutes of Health Research*. Chen R, Fasano A, Hodaie M, Jog M, Kalia S, Lozano A. (\$270,228.00 CAD, 2014 - 2017).
- Manager Ontario Spinal Cord Injury Research Network.** *Ontario Neurotrauma Foundation (ONF)*. Fehlings MG. (\$120,000.00 CAD, Jan 2013 - Dec 2014).
- Modulation of circuit dysfunction in Alzheimer's disease.** *Krembil Foundation (The)*. Lozano A. (\$225,000.00 CAD, 2012 - 2014).
- Molecular Mechanisms Underlying the Development of Neuropathic Pain in Mouse Model of Disc Herniation Radiculopathy.** Shamji M. (\$50,000.00, 2014 - 2015).
- Motor cortex Stimulation in chronic neuropathic pain.** *St Jude Medical, Brazil*. Hamani C. (\$98,240.00 USD, Aug 2012 - Jul 2015).
- Multimodal investigation in epileptogenesis focusing on new models and experimental tools.** *FAPESP-Fundação de Amparo a Pesquisa do Estado de São Paulo, Brazil (Foundation to Support Research in the State of Sao Paulo)*. Cendes I, Hamani C. (\$178,000.00 USD, Apr 2012 - Mar 2016).
- Myelin-axon interactions in ischemia: the role of unmasked K channels in axonal dysfunction.** *Heart and Stroke Foundation of Ontario (The) (HSFO)*. Fehlings MG, Velumian AA. (\$70,000.00 CAD, Jul 2013 - Jun 2014).
- Neural Development and Repair Network (NeuroDevNet).** *Networks of Centres of Excellence (NCE)*. Goldowitz D, Fehlings MG, et al (over 70 names). (\$19,572,000.00 CAD, May 2010 - Mar 2015).
- “NeuroCare” as Innovation in Intervention: A Neurophysiological Approach to Determine Readiness for Return to Activity.** *Canadian Institutes of Health Research (CIHR)*. Keightley M, Adams K, Barlow K, Chau T, Fait P, Gagnon I, Hung R, Mihalidis A, Mrazik M, Prito A, Reed N, Rumny P, Strother S, Tator C, Shomas S, Wright V, Zobjek K, Davis KD. (\$1,065,730.00 CAD, Oct 2013 - Sep 2018).
- Neuroimaging correlates of pain in Multiple Sclerosis.** *Multiple Sclerosis Society of Canada*. Hodaie M, Davis KD, O'Connor P. (\$295,302.00 CAD, 2013 - 2016).
- Non-invasive treatment of pediatric neurological disorders using MR-focused ultrasound (MRgFUS).** *Brain Canada/The W. Garfield Weston Foundation Multi-Investigator Research Initiative (MIRI)*. Drake J, Hodaie M, Looi T, Waspe A, Donner E, deVeber G, Tam E, Pichardo S. (\$1,500,000.00 CAD, 2013 - Jan 2016).
- North American Clinical Trials Network for the Treatment of Spinal Cord Injury.** *Christopher and Dana Reeve Foundation*. Fehlings MG, Tator C. (\$90,000.00 USD, Jan 2014 - Dec 2014).
- North American Clinical Trials Network for the Treatment of Spinal Cord Injury.** *Christopher and Dana Reeve Foundation*. Fehlings MG, Tator C. (\$30,000.00 USD, Jan 2013 - Dec 2013).
- Optical control of state transitions in epileptogenic cortex.** *Ontario Brain Institute*. Valiante T, Carlen PL, Bardakjian BL. (\$250,000.00 CAD, Jul 2013 - Jul 2018).
- Pain-Attention Interactions and the Descending Pain Modulation System.** *Canadian Institutes of Health Research (CIHR)*. Davis KD. (\$626,420.00 CAD, Jul 2010 - Jun 2015).
- Pathophysiology of Parkinson's Disease.** *Canadian Institutes of Health Research (CIHR)*. Chen R, Hodaie M, Lozano A, Moro E. (\$949,900.00, Jul 2009 - Jun 2014).
- Pathophysiology of Parkinson's Disease.** *Canadian Institutes of Health Research (CIHR)*. Chen R, Kalia S, Fasano A, Hodaie M, Lozano A. (\$1,225,285.00 CAD, Mar 2014 - Mar 2014).
- Pathomechanisms in the Development of Pain Hypersensitivity in Disc-Herniation Radiculopathy.** (Co-Principal Investigator). *AO Spine North America*. Shamji MF, Salter MW. (\$30,000.00 USD, Mar 2013 - Feb 2014).
- Pathophysiological mechanisms of dystonia: insights from deep brain stimulation and brain plasticity.** *Canadian Institute of Health Research*. Chen R, Hodaie M, Moro E, Wong A, Jog M, Neagu B, Lozano AM, Udupa K. (\$1,047,605.00 CAD, 2012 - 2017).
- Phase II Trial of Deep Brain Stimulation of the Subcallosal Cingulum for Treatment-Refractory Anorexia Nervosa.** *Klarman Family Foundation*. Lozano A. (\$200,000.00 USD, 2013 - 2014).
- Preclinical Evaluation of Azole in Regulating GBM Metabolism.** *Adam Coules Research Grant*. Zadeh G. (\$50,000.00 CAD, 2013 - 2013).

- Preclinical studies on neurological function after spinal cord injury exploring cell transplantation as a potential therapy.** *Create Cord Blood Bank Inc.* Fehlings MG. (\$365,829.00 CAD, 2011 - 2014).
- Prediction model for treatment response in Vestibular Schwannoma Treated by Radiosurgery (GK).** *Department of Surgery, University Health Network.* Zadeh G. (2009 - present).
- Prediction model for treatment response in AVM Treated by Radiosurgery (GK).** Zadeh G. (2009 - present).
- Pre-existing patient factors associated with sensorimotor recovery, chronic pain, and brain plasticity following surgical repair of peripheral nerve injuries.** *Workplace Safety and Insurance Board (WSIB).* Anastakis DJ, Katz J, Davis KD. (\$348,273.00 CAD, Jul 2011 - Jun 2015).
- Prognostic pathway-centric signatures in glioblastoma multiforme.** *Canadian Cancer Society Research Institute (CCSRI).* Zadeh G. (\$184,980.00 CAD, 2013 - 2014).
- Prospective Randomized Control Trial Surgery vs Radiosurgery for Single Brain Metastases.** *National Cancer Institute Canada (NCIC) and Canadian Brain Tumour Foundation.* Zadeh G. (2009 - 2013).
- Rick Hansen Spinal Cord Injury Registry (RHSCIR).** *Rick Hansen Institute.* Fehlings MG. (\$13,083.00 CAD, Mar 2012 - Mar 2014).
- Role of the basal ganglia in inhibiting and promoting voluntary movements.** *Canadian Institutes of Health Research (CIHR), China-Canada Joint Health Research Initiative.* Chen R, Zhuang P, Hodaie M, Lozano M. (\$225,000.00 CAD, 2012 - 2017).
- Role of Bone Marrow Derived Progenitor Cells in Brain Tumor Neovascularization.** *Canadian Institute of Health Research.* Zadeh G, Hill R. (\$385,251.00 CAD, 2012 - 2015).
- Role of HK2 in Regulating Brain Tumor Metabolism and Angiogenesis.** *Canadian Institute of Health Research.* Zadeh G, Hawkins C. (\$560,636.00 CAD, 2012 - 2016).
- Role of Nilotinib on inhibiting growth of vestibular schwannoma.** *Ontario Institute for Cancer Research and Novartis.* Zadeh G, Laperriere N. (\$538,000.00 CAD, 2010 - 2014).
- Simultaneous optical imaging of oxygenation and blood flow for chronic monitoring of stroke and seizure activity.** *NSERC + CIHR.* Levy O, Carlen P, Stefanovic B, Chaudoir M, Chau T, Valiante T. (\$612,000.00 CAD, Jul 2012 - Jun 2015).
- Spinal cord injury new emerging team regenerative medicine project.** *Krembil Foundation (The).* Morshead C, Nagy A, Shoichet M, Stanisz G, Tator C, van der Kooy D, Fehlings MG. (\$1,500,000.00 CAD, Jun 2011 - May 2014).
- The living myelin sheath: functional organization and role in dynamic modulation of axonal function in CNS.** *Natural Sciences and Engineering Research Council of Canada (NSERC).* Velumian AA, Fehlings MG. (\$125,000.00 CAD, Apr 2008 - Mar 2014).
- The Mammalian Sirtuin SIRT3: A Novel Neuroprotective Factor?** *Heart and Stroke Foundation of Ontario (The) (HSFO).* Mills LR, Nash J, Eubanks J. (\$148,074 CAD 2012 Jul - 2015 Jun).
- Therapeutic approaches to protect against ischemia/reperfusion injury following surgical decompression for cervical spondylotic myelopathy: A potential solution to attenuate perioperative neurological complication following decompressive surgery.** *Cervical Spine Research Society.* Fehlings MG. (\$75,000.00 USD, Jan 2014 - Dec 2014).
- Tier 1 Canada Research Chair in Neuroscience.** Lozano AM. (\$1,200,000.00, 2012 - 2018).
- “Time is Spine”: Streamlining the pre-hospital transport of patients with acute traumatic spinal cord injury in Ontario.** *Ontario Neurotrauma Foundation (ONF).* Fehlings MG. (\$150,000.00 CAD, Jan 2013 - Mar 2016).
- Towards the Correction of Rett-Like Behaviour in MeCP2-Deficient Mice.** *Canadian Institutes of Health Research (CIHR).* Burnham WM, Snead OC, Josselyn S, Zhang L, Eubanks J. (\$746,825 CAD 2010 Oct - 2015 Sep).
- Transitional states of seizures: mechanisms and modulation.** *Canadian Institutes of Health Research (CIHR).* Carlen PL, Valiante TA. (\$705,670.00 CAD, Jul 2012 - Jul 2017).
- Translational Stroke Research.** *Canadian Research Chair-Tier 1.* Tymianski M. (\$1,120,000.00 CAD, Oct 2010 - Oct 2017).
- TRPM7 Inhibitors for the treatment of stroke and myocardial ischemia.** *Ministry of Research and Innovation (MRI) (Ontario).* Tymianski M. (\$1,474,417.00 CAD, Jul 2011 - Jun 2016).

Honours Received

Davis KD: Institute of Medical Science Mel Silverman Mentorship Award, University of Toronto. May 2014.

Davis KD: Mayday Fellow: Mayday Pain & Society Fellowship Program: A Media and Policy Initiative. Sep 2013 - present.

Kalia SK: Travel Grant, Movement Disorders Society. 2013

Lozano AM: Margolese National Brain Disorders Prize, The University of British Columbia.

Lozano AM: Innovations Award, Canadian College of Neuropsychopharmacology, Canada. 2014

Lozano AM: Cloward Award, Western Neurosurgical Society. 2014.

Lozano AM: Tasker Award, World Society for Stereotactic and Functional Neurosurgery. 2013.

Lozano AM: Innovation in Neurosurgery Award, University of Iowa. 2013.

Lozano AM: Honoured Guest, Annual meeting of the Neurosurgical Society of the Virginias. 2014.

Shamji M: Top Basic Science Award, Lumbar Spine Research Society. 2013

Shamji M: Young Investigator Research Grant, AOSpine North America. 2013

Tator CH: Dr. Charles Tator Lecture, The American Association of Neurological Surgeons (AANS) / Congress of Neurosurgeons (CNS) Joint Section on Neurotrauma and Critical Care, United States. Apr 2014

Tymianski M: Paul Morley Mentorship Award, Canadian Stroke Network, Toronto, Ontario, Canada. Sep 2012 - Sep 2013.

Zadeh G: Ross Fleming Surgical Educator Award, University of Toronto. Neurosurgery, Dept of Surgery, Faculty of Medicine. 2014.

Zadeh G: Wightman-Berris Academy Individual Teaching Excellence Award, University of Toronto. Neurosurgery, Dept of Surgery, Faculty of Medicine. 2014.

Zadeh G: Langer Surgeon Scientist Award, University of Toronto. Neurosurgery, Dept of Surgery, Faculty of Medicine. 2014.

Division of Orthopaedics

Dr. R.S. Bell	Professor	Dr. N.N. Mahomed	Professor (Division Head)
Dr. J.R. Davey	Associate Professor	Dr. K.W. Marshall	Assistant Professor
Dr. W.M. Erwin	Assistant Professor	Dr. D.J. Ogilvie-Harris	Associate Professor
Dr. R. Gandhi	Assistant Professor	Dr. Y.R. Rampersaud	Associate Professor
Dr. J. Lau	Assistant Professor	Dr. K. Syed	Lecturer
Dr. S. Lewis	Assistant Professor	Dr. C. Veillette	Assistant Professor

Publications

Aleem IS, Rampersaud YR. Elderly patients have similar outcomes compared to younger patients after minimally invasive surgery for spinal stenosis. Clin Orthop Relat Res. 2013 Dec 4.

Al-Omair A, Masucci L, Masson-Cote L, Campbell M, Atenafu EG, Parent A, Letourneau D, Yu E, Rampersaud R, Massicotte E, Lewis S, Yee A, Thibault I, Fehlings MG, Sahgal A. Surgical resection of epidural disease improves local control following postoperative spine stereotactic body radiotherapy. Neuro Oncol. 2013 Oct; (15(10)): 1413-9.

Ammendolia C, Stuber K, Tomkins-Lane C, Schneider M, Rampersaud YR, Furlan AD, Kennedy CA. What interventions improve walking ability in neurogenic claudication with lumbar spinal stenosis? A systematic review. Eur Spine J. 2014 Jun 23; (23(6)): 1282-301.

Ayeni OR, Chan K, Whelan DB, Gandhi R, Williams D, Harish S, Choudur, Chiarvaras MM, Karlsson J, Bhandari M. Diagnosing Femoroacetabular Impingement from Plain Radiographs: Do Radiologists and Orthopaedic Surgeons Differ? The Orthopaedic Journal of Sports Medicine. 2014 Apr.

Baghdadi YM, Veillette CJ, Malone AA, Morrey BF, Sanchez-Sotelo J. Total elbow arthroplasty in obese patients. J Bone Joint Surg Am. 2014 May 7; 7(96):9.



- Borkhoff CM, Hawker GA, Kreder HJ, Glazier RH, Mahomed NN, Wright JG.** Influence of patients' gender on informed decision making regarding total knee arthroplasty. *Arthritis Care Res (Hoboken)*. 2013 Aug; 65(8): 1281-90.
- Busse JW, Rampersaud YR, White LM, Feasby TE.** Recommendations for management of low-back pain misleading. *CMAJ*. 2014 Jun 10; (186(9)): 696.
- Busse JW, Riva JJ, Rampersaud R, Goytan MJ, Feasby TE, Reed M, You JJ.** Spine surgeons' requirements for imaging at the time of referral: A survey of Canadian spine surgeons. *Can J Surg*. 2014 Apr; 57(2): E25-30.
- Byck, BA, Zywiell M, Mahomed A, Gandhi R, Perruccio AV, Mahomed NN.** Clinical Factors and Patient Expectations in Orthopaedic Surgery. *Expert Review of Medical Devices*. 2014 Apr.
- Choi S, Rampersaud YR, Chan VW, Persaud O, Koshkin A, Tumber P, Brull R.** The addition of epidural local anesthetic to systemic multimodal analgesia following lumbar spinal fusion: A randomized controlled trial. *Can J Anaesth*. 2014 Apr 6; 61(4): 330-9.
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- Collaud S, Waddell TK, Yasufuku K, Pierre AF, Darling GE, Cypel M, Rampersaud YR, Lewis SJ, Shepherd FA, Leigh NB, Cho J, Bezjak A, Tsao MS, Keshavjee S, de Perrot M.** Long-term outcome after en bloc resection of non-small-cell lung cancer invading the pulmonary sulcus and spine. *J Thorac Oncol*. 2013 Dec 8; 8(12): 1538-44.
- Cretu D, Prassas I, Saraon P, Batruch I, Gandhi R, Diamandis EP, Chandran V.** Identification of Psoriatic Arthritis Mediators in Synovial Fluid By Quantitative Mass Spectrometry. *Clinical Proteomics*. 2014 May.
- de Kleuver M, Lewis SJ, Germschied NM, Kamper SJ, Alanay A, Berven SH, Cheung KM, Ito M, Lenke LG, Polly DW, Qiu Y, van Tulder M, Shaffrey C.** Optimal Surgical Care for Adolescent Idiopathic Scoliosis: and International Consensus. *European Spine Journal*. 2014 Jun 24.
- Dwyer T, Takahashi SG, Hynes MK, Herold J, Wasserstein D, Nousiainen M, Ferguson MP, Wadey V, Murnaghan L, Leroux T, Semple J, Ogilvie-Harris D.** How to assess Communication, Professionalism, Collaboration and the other Intrinsic CanMEDs Roles in orthopaedic residents: Use of an Objective Structured Clinical Assessment (OSCE). *Canadian Journal of Surgery*. 2013 Oct 7.
- Dwyer T, Theodoropoulos JS, Herold J, Henry P, Wasserstein D, Murnaghan ML, Wadey V, Hodges B, Semple J, Ogilvie-Harris D.** Assessing competence of orthopaedic residents: the reliability and validity of an objective structured clinical examination after a sports medicine rotation. *Journal of Bone & Joint Surgery - American Volume*. 2013 Nov 20; 95(22): 177.
- Dwyer T, Wasserstein D, Khosbin A, Dold A, Chahal J, Nauth A, Murnaghan D, Ogilvie-Harris DJ, Whelan DB, Theodoropoulos J.** The sizing of hamstring grafts for anterior cruciate ligament reconstruction: Intra- and inter observer reliability. *Knee Surg Sports Traumatol Arthrosc*. 2014 Mar 24.
- Dwyer T, Whelan DB, Khosbin A, Wasserstein D, Dold A, Chahal J, Nauth A, Murnaghan ML, Ogilvie-Harris DJ, Theodoropoulos JS.** The sizing of hamstring grafts for anterior cruciate reconstruction: intra- and inter-observer reliability. *Knee Surg Sports Traumatol Arthrosc*. 2014 Mar 23; epub.
- Frank JM, Chahal J, Cole BJ, Verma NN, Romeo AA.** The role of acromioplasty for rotator cuff problems. *Advances in Orthopaedics*. 2014 Apr.
- Frank RM, Chahal J, Van Thiel GS, Cole BJ.** Chapter: Complex problems. In: *Knee Articular Cartilage in Surgical Techniques of the Shoulder, Elbow, and Knee in Sports Medicine*. 2013.
- Frank RM, Chahal J, Verma NN.** Chapter: Partial Thickness Rotator Cuff Tears. In: Giuseppe Milano (eds), *Shoulder Arthroscopy: Principles and Practice*. 2013. Springer.
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- Gilbody J, HS Dhotar, AV Perruccio, JR Davey.** Topical Tranexamic Acid Reduces Transfusion Rates in Total Hip and Knee Arthroplasty. *Journal of Arthroplasty*. 2013 Oct 13.
- Goldstein CL, Macwan K, Sundararajan K, Rampersaud YR.** Comparative outcomes of minimally invasive surgery for posterior lumbar fusion: A systematic review. *Clin Orthop Relat Res*. 2014 Jun; (472(6)): 1727-37.
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- Latham W, Lau J.** HIntegra Prosthesis: Design Issues and Implantation Techniques that lead to Revision Surgery. In: Haddad, S. (eds), *AAOS Monograph Series: Total Ankle Arthroplasty*. 1st Edition. 2014. Rosemont, United States: AAOS.
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- Leroux T, Wasserstein D, Veillette C, Khoshbin A, Henry P, Chahal J, Austin P, Mahomed N, Ogilvie-Harris D.** Epidemiology of primary anterior shoulder dislocation requiring closed reduction in Ontario, Canada. *Am J Sports Med*. 2014 Feb; 42(2): 442-50.

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- Lewis SJ, Goldstein S, Bodrogi A, Dear T, Keshen SGN, Shihata S, Lewis NDH, Magana S.** Comparison of Pedicle Subtraction and Smith-Peterson Psteotomies in Correcting Thoracic Kyphosis When Closed with a Central Hook-Rod Construct. *Spine Deformity*. 2014 Jun 10;39(15):1217-1224.
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- Perruccio AV, Gandhi R, Rampersaud YR, The Arthritis Program.** Heterogeneity in health status and the influence of patient characteristics among patients seeking orthopaedic care. *BMC Musculoskeletal Disord*. 2013 Mar 7; 14:83.
- Perruccio AV, Mahomed NN, Chandran V, Gandhi R.** Multiple Symptomatic Joint Involvement and Plasma Levels of Adipokines in Hip and Knee Osteoarthritis. *Journal Of Rheumatology*; 2014 Feb; 41(2): 334-337.
- Perruccio AV, Mahomed NN, Chandran V, Gandhi R.** Plasma adipokine levels and their association with overall burden of painful joints among individuals with hip and knee osteoarthritis. *J Rheumatol*. 2014 Feb;41(2):334-7.
- Perruccio AV, Mahomed NN, Veillette CJH, Gandhi R.** Association between extent of symptomatic joint involvement in osteoarthritis and comorbid lung disease: a cross-sectional study. *Arthritis Research & Therapy*. 2013 Jul.
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- Rampersaud YR, Lewis SJ, Davey JR, Gandhi R, Mahomed NN.** Comparative outcomes and cost-utility after surgical treatment of focal lumbar spinal stenosis compared with osteoarthritis of the hip or knee. Part 1: Long-term change in health-related quality of life. *Spine J*. 2014 Feb 1; (12(2)): 234-43.



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Venkataramanan V, Gignac MA, Dunbar M, Garbuz D, Gollish J, Gross A, Hedden D, MacDonald SJ, Mahomed NN, Schemitsch E, Davis AM. The importance of perceived helplessness and emotional health in understanding the relationship among pain, function, and satisfaction following revision knee replacement surgery. *Osteoarthritis Cartilage.* 2013 Jul;21(7):911-7.

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Wasserstein D, Farlinger C, Brull R, Mahomed N, Gandhi R. Advanced age, obesity and continuous femoral nerve blockade are independent risk factors for inpatient falls after primary total knee arthroplasty. *J Arthroplasty.* 2013 Aug;28(7):1121-4.

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Wolfstadt J, Cole BJ, Ogilvie-Harris DJ, Viswanathan S, Chahal J. Current concepts: the role of mesenchymal stem cells in the management of knee osteoarthritis. *Sports Health.* 2013.

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Zywiol M, Perruccio AV, Prabhu A, Gandhi R. The influence of anaesthesia and pain management strategies on cognitive dysfunction after elective joint arthroplasty. *Clinical Orthopaedics and Related Research.* 2013.

Invited Visits

Davey JR: 2013 Latin America Orthopaedic Symposium, Cancun, Mexico, 29-31 Aug 2013. 1/ Moderator: Case Reviews: My Worst Case. 2/ Invited Lecturer: Ultra Porous Technology has Surpassed Allograft Techniques. 3/ Invited Lecturer: The advantages and disadvantages of Modular Femoral Revisions. 4/ Invited Lecturer: Indications for a Varus-Valgus Constrained Knee. 5/ Invited Lecturer: Direct Lateral Surgical

Approach to the hip. 6/ Invited Lecturer: Techniques to Reduce Blood Loss in Total Joint Arthroplasty. 7/ Panel Member: Primary total hip arthroplasty. Ask The Expert Surgeon Panel. 8/ Panel Member: Ask The Expert Surgeon Panel: Primary TKA. 9/ Invited Lecturer: Oops! I Cut the Patella Tendon!

Davey JR: The Knee: A New Era has Arrived – International Sports Medicine & Knee Arthroplasty Meeting 2013, Prague, Czech Republic 11 - 14 Sep, 2013. 1/ Discussant: Management of Early Infection. Treatment of early infection in total knee arthroplasty. 2/ Moderator: Breakfast seminar to resident attendees. 3/ Invited Lecturer: Rehabilitation following total knee. Upgrading Rehabilitation Following TKA.

Davey JR: Advances in Hip, Knee and Shoulder Arthroplasty: Emerging Trends & Technologies in Joint Replacement Scottsdale, AZ, September 26-27, 2013, Scottsdale, Arizona, United States, 26-27 Sep 2013. 1/ Instructor: Arcos Modular Femoral Revision System Cadaver Lab. 2/ Invited Lecturer: J. Rod Davey. Blood Management in THA Discussed blood management in total joint replacement. 3/ Invited Lecturer: Offset Reconstruction.

Davey JR: Advances in Hip and Knee Arthroplasty Instructional Course Atlanta, Georgia October 18, 2013, Atlanta, Georgia, United States. Invited Lecturer: 1/ Femoral Offset Gave lecture on the importance of femoral offset. 2/ Arcos Revision THA Case Studies Presented case studies using the Arcos revision system. 3/ Instructor: Arcos Modular revision system.

Davey JR: The 2nd Annual Meeting of the Canadian Arthroplasty Society, Montreal, Quebec, Canada, 22 Nov 2013. Presenter: Efficacy of Topical Tranexamic Acid on Blood Loss and Transfusion in Bilateral Simultaneous Total Knee Arthroplasty.

Gandhi R: McMaster University, Grand Rounds Invited Speaker, Hamilton, Ontario, Canada, Apr 2014. Speaker: Biological Considerations in clinical outcomes research: Understanding the role of Inflammation and OA phenotypes.

Gandhi R: Combined Meeting of the American Orthopaedic Association and Canadian Orthopaedic Association, Montreal, Quebec, Canada, Jun 2014. Speaker: Depression and overall burden of symptomatic joints: an examination among individuals undergoing hip and knee replacement for osteoarthritis.

Lau J: Zimmer Institute, Las Vegas, Nevada, United States, 2 Aug 2013. Invited Lecturer: Zimmer Trabecular Metal Ankle Replacement.

Lau J: Canadian Orthopaedic Nurses Association, Toronto, Ontario, Canada, 24 Oct 2013. Keynote Speaker: Ankle Replacement vs. Ankle Fusion: The Debate.

Lau J: Zimmer Institute, Parsippany, New Jersey, United States, 25 Oct 2013. Invited Lecturer: Zimmer Trabecular Metal Ankle Replacement.

Lau J: Canadian Orthopaedic Resident Review in Reconstructive Surgery, Mississauga, Ontario, Canada, 16 Jan 2014. Invited Lecturer: Foot and Ankle Cases.

Lau J: Zimmer Institute, Etobicoke, Ontario, Canada, 13 Feb 2014. Invited Lecturer: Zimmer Total Ankle Arthroplasty: Etobicoke General Hospital.

Lau J: Zimmer Institute, Vancouver, British Columbia, Canada, 20 Feb 2014. Invited Lecturer: Zimmer Total Ankle Arthroplasty.

Lau J: University of Alberta, Edmonton, Alberta, Canada, 4 Apr 2014. Invited Lecturer: Zimmer Total Ankle Arthroplasty.

Lau J: Calgary Orthopaedic Residents Forum, Calgary, Ontario, Canada, 6 Apr 2014. Invited Lecturer: Foot and Ankle Cases.

Lau J: 11th Biennial Canadian Orthopaedic Foot and Ankle Symposium, Toronto, Ontario, Canada, 10-12 Apr 2014. 1/ Invited Speaker: Failed Bunion and Forefoot Reconstruction: How Do I Salvage It? 2/ Chair. 3/ Invited Lecturer: Professor's Rounds: Forefoot. 4/ Invited Lecturer: Surgical Skills Lab: Pes Planus Reconstruction - medial displacement calcaneal osteotomy vs. lateral column lengthening.

Lau J: Zimmer Institute, Burr Ridge, Illinois, United States, 9 May 2014. Invited Lecturer: Zimmer Total Ankle Arthroplasty.

Lau J: 2014 American Orthopaedic Association/Canadian Orthopaedic Association Combined Meeting, Montreal, Quebec, Canada, 20 Jun 2014. Invited Lecturer: Instructional Course - Tendon Problems Around the Ankle - Accessory Navicular and Posterior Tibial Tendon Pathology.

Lewis S: Medtronic. Vancouver, British Columbia, Canada, 2013 Jul 9. Visiting Professor: Spinal Deformity Advisory Board Meeting.

Lewis S: Scoliosis Research Society: 20th International Meeting on Advance Spine Techniques. Vancouver, British Columbia, Canada, 2013 Jul 12. 1/ Invited Lecturer: Posterior Three Column Spinal Osteotomies for Severe Pediatric Deformities: Comparison Between Revision and Primaries. 2/ Moderator: Concurrent Abstract and Debate Session (A-C). 3/ Invited Lecturer: My Worst Complication and Strategies to Prevent/ Manage. 4/ Moderator: Adult Deformity II: Surgical Planning & Techniques.

Lewis S: Sagittal Deformity Correction - Indications and techniques. Stryker. Detroit, Michigan, United States, 2013 Jul 18. 1/ Visiting Professor: Spinal Deformity Advisory Board Meeting. 2/ Invited Lecturer: Deformity Case Presentation.

Lewis S: Washington University Spine Fellows Reunion. Beaver Creek, United States, 2013 Aug 10. Panelist: Adult Thoracolumbar Case Discussions.

Lewis S: 48th Annual Meeting and Course. Lyon, France, 2013 18-19 Sep. 1/ Invited Lecturer: Sagittal Plane Deformity Corrective Techniques: Pedicular Subtraction Osteotomy. 2/ Moderator: Case Presentation Adults Thoraco-Lumbar, Lumbar Sagittal Deformities. 3/ Lecturer: Pedicle Subtraction Osteotomy: Technical Aspects. 4/ Lecturer: Sagittal Plane Deformity Corrective Techniques. 5/ Debater: The Treatment of Spinal Disease in the Adult Stroke Patient: Indications for Surgery. 6/ Moderator: Case Discussion Program: Cervical. 7/ Speaker: How Patients Decide: Randomization Versus Surgery Versus non-Surgical Treatment for Symptomatic Adult Lumbar Scoliosis. 8/ Speaker: Comparing Prospective to Retrospective Acute Neurologic Complication Rates in Complex Adult Spinal Deformity Procedures: Is There a Difference? 9/ Speaker: Patient Outcomes in the Operative and Non-Operative Management of High-Grade Spondylolisthesis in Children.

Lewis S: Fall Deformity Symposium. Stryker. Las Vegas, Nevada, United States, 2013 Oct 25-26. Chair: 1/ Biomechanics for The Spine Surgeon: Material Selection. 2/ Classification: AIS: EOS, Lenke, Classification & Fusion Level Selection. 3/ Case Review. 4/ PSO/SPO/BCR: Indications, Planning and Resection, Closing the defect, Interbody Selection, Mechanics. 5/ Lumbar Pedicle Screws.

Lewis S: Medtronic. Singapore, 2013 Nov 23-24. Chair: 1/ Biomechanics for the Spine Surgeon. 2/ Advanced Procedural Solutions for Correcting Spinal Deformities. 3/ Pedicle Anatomy and Start Points. 4/ Neuromonitoring in Deformity Corrections.

Lewis S: Spinal Deformity Complications and Revisions: Lessons Learned. Medtronic. Dublin, Ireland, 2014 Mar 6. Invited Speaker. Spinal Deformity Symposium.

Lewis S: POSNA. Hollywood, California, United States, 2014 May 2. 1/ Invited Lecturer: Selective Fusion Remains Treatment of Choice. 2/ Presenter: Case Presentations/ Panel Discussion.

Lewis S: Advanced Techniques in Complex Pediatric Spine Surgery. AOSpine North America Education Committee. Tampa, United States, 2014 May. Invited Lecturer: Severe Deformity, Duchene Muscular Dystrophy, Scheuermann's Kyphosis with Myelopathy, Marfan Scoliosis and Hot Topic in Spine Deformity Talk - VCR Use.

Mahomed NN: Combined Meeting of the American Orthopedic Association and Canadian Orthopaedic Association, Montreal, Quebec, Canada, 18 Jun 2014. Speaker: 1/ Overall burden of painful joints and their association with serum adipokine levels among individuals undergoing hip and knee TJR for OA. 2/ The influence of obesity and low education on health-related quality of life: A contrast between individuals with foot/ankle and knee OA. 3/ Multi-joint Arthritis is Associated With Increased Health Resource Utilization For Patients Undergoing TKA. 4/ Multi-joint osteoarthritis is associated with increased in-hospital resource utilization for patients undergoing total hip arthroplasty. 5/ Symptomatic joint counts predict depression in a hip and knee replacement osteoarthritis cohort.

Marshall KW: Altum Health, University Health Network, Woodbridge, Ontario, Canada, 28 May 2014. Invited Speaker: Treatment Strategies for Osteoarthritis.

Marshall KW: Altum Health, University Health Network, Cambridge, Ontario, Canada, 10 Jun 2014. Invited Speaker: Treatment Strategies for Osteoarthritis.

Rampersaud YR: North American Spine Society (NASS), New Orleans, Louisiana, United States, 10 Oct 2013. Presenter: 1/ Section on MIS: Controversies in the adoption of minimally invasive lumbar fusion. 2/ Comparison of the lifetime incremental cost-utility of surgery relative to failed medical management for the treatment of hip, knee and spine osteoarthritis modeled using five-year post-surgical values. 3/ Value comparative outcomes and cost-utility following surgical treatment of focal lumbar spinal stenosis compared with osteoarthritis of the hip or knee: Part 1. Long-term change in health-related quality of life; Part 2. Estimated lifetime incremental cost-utility ratios.

Rampersaud YR: IV WCMIST Paris, Paris, France, 11-13 Jun 2014. 1/ Moderator: Concurrent Session 2: Cutting Edge. 2/ Moderator: MIS Management of Lumbar Deformity. 3/ Moderator: Screw placement - Tips and Tricks. 4/ Moderator: TLIF / Spondylolisthesis reduction. 5/ Moderator: Focal approach - Single-level fusion. 6/ Presenter: Comparative Clinical And Economic Outcomes Of Minimally Invasive Surgery For Posterior Lumbar Fusion: A Systematic Review And Meta-Analysis.

Rampersaud YR: 2014 AOA/COA Combined Meeting, Montreal, Ontario, Canada, 19-20 Jun 2014. Invited Speaker: 1/ Low-Back Pain Management for the General Orthopaedic Surgeon: From Conservative Treatment to the Decision to Perform Surgery. 2/ Post-Consultation Predictors of Willingness to Undergo Orthopaedic Surgery. 3/ Comparative Outcomes and Cost-Utility Following Surgical Treatment of Focal Lumbar Spinal Stenosis Compared with Osteoarthritis of the Hip or Knee: Long-Term Change in Health-Related Quality of Life and Lifetime Incremental Cost-Utility.

Syed K: Canadian Orthopedic Association (COA), Winnipeg, Manitoba, Canada, Nov 2013. Presenter. Factors Determining Wait-Time and Patient Satisfaction at an Orthopaedic Follow-up Clinic.

Veillette C: American Academy of Orthopaedic Surgery - Electronic Skills Pavilion, New Orleans, Louisiana, United States, 12-13 Mar 2014. Presenter: 1/ Search Engine Marketing for Orthopaedic Surgeons. 2/ Social Media for the Orthopaedic Surgeon. 3/ Managing Your Internet Reputation for Orthopaedic Surgeons.

Research and Investigations

A comparison of platelet-rich-plasma (PRP) and hyaluronic acid (HA) with and without physiotherapy in isolated patellofemoral osteoarthritis, a triple-blinded factorial randomized controlled trial. *Physicians Services Incorporated Foundation (The) (PSI)*. Sheth U, Wasserstein D, Lum G, Marks P, Chahal J. (2013 - 2013).

A multi center randomized controlled study on Vanguard Regenerex tibial tray in total knee arthroplasty. *Biomet Canada*. Syed K, Mahomed N, Gandhi R, Davey JR. (\$360,000.00, Jul 2013 - Jul 2015).

Assessing knowledge translation in orthopaedic surgery: A time-series analysis of midshaft clavicle fracture fixation in Ontario, Canada. *Orthopaedic Trauma Association (The) (OTA)*. Veillette C, Leroux T, Henry P, Wasserstein D. (\$20,000.00 USD, May 2013 - Apr 2014).

A Systematic Review of Spine-related Imaging Guidelines. *Ontario Chiropractic Association*. Rampersaud YR, Busse JW. (\$45,000.00 CAD, Aug 2013 - Aug 2014).

Characterizing the 5-year natural history following total joint replacement for osteoarthritis-Assessing the links with later revision surgery and poorer patient-reported outcomes. *Canadian Arthritis Network*. Perruccio, AV, Gandhi R, Davis A, Badley E, Mahomed N. (\$50,000.00 CAD, Jan 2012 - Jan 2014).

Determining Good Outcome Following Total Knee Replacement. *Canadian Institutes of Health Research (CIHR)*. Davis A, Perruccio A, Hogg-Johnson S, Mahomed NN, Gandhi R. (\$301,711.00 CAD, Mar 2012 - Mar 2015).

Development of Anti-TGF- Therapy in Reducing Post-surgical Adhesion Formation in Flexor Tendon Graft. *PSI*. von Schroeder H, Veillette CJH, Juneja S. (\$124,000.00, Mar 2013 - Feb 2015).

Inflammation and Painful Joint Burden in Osteoarthritis, as a matter of SeXX. *The Arthritis Foundation and Autoimmunity Research Centre*. Gandhi R, Perruccio AV, Chandran V. (\$35,000.00 CAD, Feb 2013 - Jan 2015).

Inter-professional Spine Assessment and Education Clinic (ISAEC) Pilot. *Ontario Ministry of Health and Long-Term Care*. Rampersaud YR. (\$2,800,000.00 CAD, May 2012 - Mar 2014).

Knee Surgery Triage Tool. *NRC Industrial Research Assistance Program*. Cook D, Gandhi R, Brean M, Mahomed N. (\$5,893.00 CAD, 2012 - 2013).

Metabolic Syndrome: An inflammatory osteoarthritis phenotype. *The Krembil Foundation*. Gandhi R, Gilbert P, Mahomed NN. (\$466,000.00 CAD, 2013 - 2015).

Multijoint Disease in Osteoarthritis and its Relationship With Cardiovascular Disease, Diabetes, and Lung Disease. *The Arthritis Society*. Perruccio A, Davis A, Gandhi R, Rampersaud R, Badley E, Jaglal S, Mahomed N. (\$69,642.00 CAD, Jul 2013 - Jun 2014).

Multiple Painful Joints in Osteoarthritis and the Relationship with Comorbidity. *Physician's Services Incorporated Foundation*. Gandhi R, Perruccio AV, Davis A, Badley EM, Chandran V, Jaglal S, Rampersaud YR. (\$65,409.00 CAD, Jun 2014 - May 2015).

Quantifying and Understanding a “Good” Outcome following Total Knee Replacement. *The Arthritis Society*. Davis A, Mahomed NN, Perruccio AV, Chesworth R, Gandhi R, Hogg-Johnson S, Waddell RV. (\$329,832.00 CAD, Oct 2013 - Sep 2016).

Reliability and Validity of a Generic Error Rating Framework for Arthroscopic Surgery. *Arthroscopy Association of North America*. Veillette C, Dedy N, Grantcharov T. (\$5,500.00 USD, Jun 2014 - Jul 2015).

Self-management to Improve Walking Ability in Degenerative Lumbar Spinal Steosis: The Evaluation of Four Novel Strategies. *Arthritis Society (The)*. Ammendolia C, Rampersaud YR. (\$359,358.00 CAD, Sep 2013 - Sep 2016).

Sex specific associations between inflammatory mediators and pain in knee OA. A Pilot Investigation. *Arthritis Program*. Gandhi R, Perruccio AV, Chandran V, Venkatraghavan L. (\$25,000.00 CAD, Jun 2014 - Jun 2015).

Stem Cell-Based Gene Therapy for Healing and Repair of Tendon Defects. *PSI*. Veillette CJH, Li R, Ogilvie-Harris D. (\$168,500.00 CAD, Jan 2013 - Dec 2014).

Stem Cell-Based Gene Therapy for the Repair and Regeneration of Collagenase-Induced Tendon Injury. *Arthritis Program, University Health Network*. Veillette CJH, Li R, von Shroeder H. (\$30,000.00 CAD, Jan 2013 - Dec 2013).

The Effect of Knee Flexion Angle for Graft Fixation During Single-Bundle Anterior Cruciate Ligament Reconstruction – A Multicentre, Patient and Assessor Blinded, Stratified, Two-arm Parallel Group Superiority Trial. *Arthroscopy Association of North America*. Chahal J, Whelan D, Dwyer T, Ogilvie-Harris D, Marks P, Theodoropoulos J. (\$20,500.00 CAD, Mar 2014).

The Minimal Clinically Important Difference (MCID) and Patient Acceptable Symptomatic State (PASS) for the KOOS and IKDC in patients undergoing surgery for articular cartilage defects of the knee. *Arthroscopy Association of North America (AANA)*. Cole BJ, Chahal J. (\$12,250.00, Jul 2012 - present).

Treatment Therapy for Surgically-induced Instability Rat Model of Osteoarthritis (OA) Knee with Ex Vivo Expanded Human Bone Marrow MSCs in the Presence of FGF2. *Arthritis Program, University Health Network*. Veillette CJH, Juneja S, Mahomed, N. (\$130,000.00 CAD, Jan 2013 - Dec 2013).

Honours Received

Bell RS: Dr. Robert S. Bell Chair in Health Research, Toronto General & Western Hospital Foundation, Toronto. May 2014.

Gandhi R: The Spine Journal & NASS Outstanding Paper Award. Jul 2013 - Jul 2013.

Mahomed NN: 2013 Outstanding Paper Award: Value (Health Economics, North American Spine Society and The Spine Journal. 2013.

Rampersaud YR: 2013 Outstanding Paper Award: Value (Health Economics), North American Spine Society and The Spine Journal. 2013.

Veillette C: 2013 MSTs Annual Meeting Best Poster Award, Musculoskeletal Tumor Society. For Comprehensive Online Orthopaedic Oncology Surgery Textbook created on OrthopaedicsOne Collaborative Publishing Platform. Oct 2013

Veillette C: Bovill Award for most outstanding OTA Annual Meeting scientific paper, Orthopaedic Trauma Association, United States. Sep 2013

Division of Plastic and Reconstructive Surgery

Dr. D.J. Anastakis	Professor
Dr. P. Bray	Assistant Professor
Dr. B. Graham	Assistant Professor
Dr. S. Hofer	Associate Professor (Division Head)

Dr. S.J. McCabe	Associate Professor
Dr. C.B. Novak	Associate Professor
Dr. A.C. O'Neill	Assistant Professor
Dr. H.P. von Schroeder	Associate Professor
Dr. T. Zhong	Assistant Professor

Publications

Arad E, Zhong T. Comparison of surgical complications between immediate breast reconstruction and mastectomy: The impact on delivery of chemotherapy. In: BREAST RECONSTRUCTION. 2014 Jun 15. United States: SPRINGER.



Badalamente M, Coffelt L, Elfar J, Gaston G, Hammert W, Hunag J, Lattenza L, Macdermid J, Merrell G, Netscher D, Panthaki Z, Rafijah G, Trczinski D, Graham B. Measurement scales in clinical research of the upper extremity, Part 1: General principles, measures of general health, pain and satisfaction. *Journal of Hand Surgery.* 2013;38(2): 401-406.

Badalamente M, Coffelt L, Elfar J, Gaston G, Hammert W, Hunag J, Lattenza L, Macdermid J, Merrell G, Netscher D, Panthaki Z, Rafijah G, Trczinski D, Graham B. Measurement scales in clinical research of the upper extremity, Part 2: Outcome measures in studies of the hand/wrist and shoulder/elbow. *Journal of Hand Surgery.* 2013; 38(2): 407-412.

Borschel GH, Hadlock T, Novak CB. Facial Paralysis. In: Mackinnon SE (eds), *Peripheral Nerve Surgery.* 2013. New York: Thieme Medical Publishers.

Damen TH, Morrirt AN, Zhong T, Ahmad J, Hofer SO. Improving outcomes in microsurgical breast reconstruction: lessons learnt from 406 consecutive DIEP/TRAM flaps performed by a single surgeon. *J Plast Reconstr Aesthet Surg.* 2013 Aug 1; 66(8): 1032-8.

Davidge KM, Raghuram K, Hofer SO, Ferguson PC, Wunder JS, Swallow CJ, Zhong T. Impact of flap reconstruction on perineal wound complications following ablative surgery for advanced and recurrent rectal cancers. *Ann Surg Oncol.* 2014 Jun 1; 21(6): 2068-73.

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Gullane PJ, Novak CB. Pharyngoesophageal Reconstruction, Ch 53. In: Blondeel PN, Morris SF, Hallock GG, Neligan PC (eds), *Perforator Flaps: Anatomy, Technique & Clinical Applications.* 2nd Edition. 2013: 925-934. St Louis: Quality Medical Publishing.

Hammert WC, Kramer RC, Graham B, Keith MW. AAOS Appropriate Use Criteria: Treatment of distal radius fractures. *Journal of the American Academy of Orthopedic Surgeons.* 2013; 21(B); 506-509.

Haykal S, Salna M, Zhou Y, Marcus P, Fatehi M, Frost G, Machuca T, Hofer SO, Waddell TK. Double-Chamber Rotating Bioreactor for Dynamic Perfusion Cell Seeding of Large-Segment Tracheal Allografts: Comparison to Conventional Static Methods. *Tissue Eng Part C Methods.* 2014 Mar 5. PMID: 24392662. AID: 10.1089/ten.TEC.2013.0627.

Haykal S, Zhou Y, Marcus P, Salna M, Machuca T, Hofer SO, Waddell TK. The effect of decellularization of tracheal allografts on leukocyte infiltration and of recellularization on regulatory T cell recruitment. *Biomaterials.* 2013 Jul 1; 34(23): 5821-32.

Haykal S, Zhou Y, Marcus P, Salna M, Machuca T, Hofer SO, Waddell TK. Determining the In Vitro and In Vivo Immune Response towards Decellularized and Recellularized Porcine Tracheal Allografts for Airway Transplantation. *Plastic Reconstructive Surgery.* 2013; 131(55): 74.

Israelowitz M, Weyand B, Leiterer C, Mu oz-Sanjose V, Martinez-Tomas C, Herraiz-Llacer M, Slowik I, Beleites C, Fritzsche W, Krafft C, Henkel T, Reuter M, Rizvi SWH, Gille C, Reimers K, Vogt P, von Schroeder HP. Biomimetic-inspired infrared sensors from microwires: Study of their photoconductivity and infrared spectrum properties. *New Journal of Science.* 2014 May; 2014, Article ID 524042, 9 pages. doi: 10.1155/2014/524042.

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Knox ADC, Gilardino MS, Kasten SJ, Warren RJ, Anastakis DJ. Competency Based Medical Education for Plastic Surgery: Where do we begin? *Plastic and Reconstructive Surgery.* 2014 Apr 30; 133(5): 701-710.

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and Nerve Injuries. 3e. 2014 Mar 14. United States: Elsevier.

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Zhong T, Oberle-Temple C, Hofer SOP, Beber B, Semple J, Brown M, Macadam S, Lennox P, Panzarella T, McCarthy C, Baxter NN, For the MCCAT Study Group. The Multi-Center Canadian Acellular dermal matrix Trial (The MCCAT Study): A randomized controlled trial in implant-based breast reconstruction. *Trials.* 2013 Oct 28; 14(1):356.

Zhong T, Ojha M, Bagher S, Butler K, O'Neill AC, McCluskey SA, Clarke H, Hofer SO, Srinivas C. Transversus abdominis plane block following abdominally based breast reconstruction: study protocol for a randomized controlled trial. *Trials.* 2013 Dec 10; 14(1): 424.

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Zhong T, Ojha M, Bagher S, Butler K, Srinivas C, McCluskey S, Clarke H, O'Neill A, Novak CB, Hofer SOP. The Analgesic Efficacy of the Transversus Abdominis Plane (TAP) Block on the Abdominal Donor Site Following Autologous Tissue Breast Reconstruction: A Double-Blinded, Placebo-Controlled Randomized Trial. *Plastic & Reconstructive Surgery.* 2014 May.

Invited Visits

Anastakis D: AAME, Prague, Czech Republic, 24 Aug 2013. Speaker: Continuing Professional Development - The Importance of having Influence and Power Outline of past and present levels of influence and power held by CPD both at the Faculty of Medicine/UofT and provincial levels.

Anastakis D: Southern Illinois University, Faculty of Medicine, Department of Surgery, Springfield, Illinois, United States, 3-5 Sep 2013. 1/ Distinguished Speaker: Clinician Educators - The Four D Model for Career Success. 2/ Visiting Professor: Restoring Form and Function: The impact of our work on the central nervous system Overview of cortical plasticity research - the impact of peripheral nerve injury, reconstruction and rehabilitation on the human CNS. 3/ Visiting Professor: Plastic and Reconstructive Surgery - Resident and Fellow Case Presentations.

Anastakis D: American College of Surgeons, Surgeons as Educators, Atlanta, Georgia, United States, 10 Sep 2013. 1/ Course Instructor: Week-Long Case. 2/ Course Instructor: Leadership Competencies Overview of leadership competencies required in health professions education. 3/ Course Instructor: Personal and Career Goal Development The four D model for career development. 4/ Facilitator: Microteaching. 5/ Facilitator: Due Process and the Failing Student.

Anastakis D: South Western Academic Health Network - Simulation Consortium, London, Ontario, Canada, 21 Sep 2013. Invited Speaker: SIM-one Ontario's Simulation Network - Positioning Ontario as a global leader in health professions simulation.

Anastakis D: Council of Health Sciences Education Subcommittee, Toronto, Ontario, Canada, 20 Dec 2013. Invited Speaker: Meta Leadership Overview of meta leadership principles.

Anastakis D: State University of New York at Stony Brook, School of Medicine, Stony Brook, New York, United States, 11-12 Mar 2014. 1/ Visiting Professor: Cortical Plasticity - what you need to know when training surgeons. 2/ Facilitator: Surgery Education Retreat and Strategic Planning Facilitate education planning session. (1) Innovating the curriculum (2) Teaching Excellence; (3) Educational Technology; (4) Structure and Governance and (5) Scholarly training. 3/ Visiting Professor: Trends and the future of surgical

education. Three main trends: (1) competency based curriculum; (2) simulation and (3) eLearning.

Hofer S: Plastic Surgery The Meeting 2013, San Diego, California, Oct 2013. Presenter: The Influence of Dispositional Optimism on Decision Regret to Undergo Major Breast Reconstructive Surgery.

Hofer S: American Society for Reconstructive Microsurgery Annual Meeting, Kauai, Hawaii, 13 Jan 2014. 1/ Presenter: Decision Regret Following Breast Reconstruction: The Role of Self-Efficacy and Satisfaction with Information in the Preoperative Period. 2/ Chair: Extremity Sarcoma 101. How To Achieve Excellence In Diagnosis, Management, Reconstruction And Outcomes.

Hofer S: Barcelona Breast Meeting, Barcelona, Spain, 6 Mar 2014. 1/ Moderator: Live Surgery Session. 2/ Invited Speaker: 5' of surgical tricks for avoiding problems - SGAP/IGAP. 3/ Invited Speaker: Management of partial flap necrosis in autologous tissue breast reconstruction. 4/ Autologous tissue breast reconstruction with insufficient tissue: Algorithms for bipediced abdominal flaps and implant enhancement. 5/ Invited Speaker: Limiting complications in implant based breast reconstruction: What do we need to know?

Hofer S: 2nd International Breast Symposium, Dusseldorf, Germany, 5 Apr 2014. Invited Speaker: Mastectomy with immediate reconstruction - Autogenous.

Hofer S: American Association of Plastic Surgeons, Miami Beach, Florida, United States, 6 Apr 2014. Presenter: A Single Pre-operative Antibiotic Dose is Effective in Implant-Based Breast Reconstruction.

Hofer S: The 7th Congress of the World Society for Reconstructive Microsurgery, Chicago, Illinois, United States, 12-14 Jul 2013. 1/ Invited Lecturer: Approach to Management of Partial Flap Loss in Autologous Breast Reconstruction. 2/ Invited Lecturer: Optimal Management of Composite Extremity Defects Following Sarcoma Excision. 3/ Moderator: Achieving "Normal" in Autologous Reconstruction of the Breast. 4/ Moderator: Achieving "Normal" In A Complex Reconstruction.

Novak CB: American Society for Surgery of the Hand, 68th Annual Meeting, San Francisco, California, United States, 2-3 Oct 2013. 1/ Chair: Prescribing Hand Therapy After Tendon Repair: Considering Anatomy, Surgery and the Patient. 2/ Invited Speaker: Measuring Outcomes. 3/ Presenter: Evaluation of Cold Sensitivity, Pain and Quality of Life after Upper Extremity Nerve Injury.

Novak CB: American Society of Hand Therapists, Annual Meeting, Chicago, Illinois, United States, 26-27 Oct 2013. 1/ Invited Speaker: 100 & Counting. The Glamorous Life of a Clinical Researcher: Practical Applications. 2/ Presenter: Management of Peripheral Nerve Injuries.

Novak CB: X International Congress of Surgery and Therapy of the Hand, IX Mission Guatemala Healing Hands Foundation, Guatemala City, Guatemala, 6 Dec 2013. Invited Speaker: Therapy after Brachial Plexus Surgery.

Novak CB: American Association for Hand Surgery, American Society for Peripheral Nerve & American Society for Reconstructive Microsurgery, Annual Meeting, Kauai, Hawaii, United States, 10-11 Jan 2014. 1/ Faculty: Nerve Transfers for Ulnar and Radial Nerve Injury. 2/ Invited Speaker: Radial Nerve Transfer vs. Tendon Transfer: What's Best When, What's The Evidence.

Novak, CB: 2014 Electives in Hand Surgery, American Society for Surgery of the Hand & American Society of Hand Therapists, New Orleans, Louisiana, United States, 8 Feb 2014. Invited Speaker: 1/ Nerve Injury and Healing. 2/ Therapeutic Management Following Nerve Transfer.

Novak CB: Surgery and Rehabilitation of the Hand With Emphasis on Tendon & Nerve, Philadelphia, Pennsylvania, United States, 22-23 Mar 2014. Invited Speaker: 1/ Sensory Re-Education and Desensitization. 2/ Sensibility Examination. 3/ Sensibility Assessment: A Systemative Approach.

Novak, CB: Selected Topics in Hand Therapy, Columbia University, New York, New York, United States, 27 Apr 2014. Invited Speaker: 1/ Surgery & Therapy Outreach: The Why's and How's The Guatemala Experience. 2/ Using Outcome Measures to Select Goals and Measure Patient Change: Nerve Problems. 3/ Nerve Transfers Following Peripheral Nerve Injury: Therapy.

Novak CB: 15th Annual Wisconsin Hand Experience Brain to Hand: Progressive Approaches to Pain, Impairment and Function, Milwaukee, Wisconsin, United States, 15 May 2014. Invited Speaker: 1/ The Brain and Nerve Injury. 2/ Sensory Relearning.

Novak CB: Rehabilitative and Regenerative Medicine for Minority Health and Health Disparities: Frontiers Advanced Training Course, Atlanta, Georgia, United States, 24 Jun 2014. Invited Speaker: Advances in Nerve Transfer Surgery.

O'Neill AC: 39th Congress of the Colombian Surgical Association, Bogota, Colombia, Aug 2013. Speaker: 1/ Timing of breast reconstruction: immediate versus delayed. 2/ Radiation after breast reconstruction. 3/ Complex reconstruction of the perineum.

von Schroeder HP: 29th Annual International Wrist Investigators Workshop, San Francisco, California, United States, 2 Oct 2013. Midcarpal Instability: Biomechanical and Clinical Outcomes.

von Schroeder HP: 15th EFORT Congress, 2014. Speaker: Surgical Plication for Midcarpal Instability - Biomechanical and Clinical Outcomes.

Zhong T: Flare Magazine/Beauty/Health, Toronto, Ontario, Canada, 27 Jul 2013. Quoted Expert: Carol Toller. After Cancer: Carol Toller's Choice on Breast Reconstruction Breast reconstruction should offer a happy ending, but the reality is messy.

Zhong T: Canadian Breast Cancer Foundation (CBCF) - Ontario Region/ Canadian International Bank of Commerce (CIBC), Toronto, Ontario, Canada, 20 Sep 2013. Invited Speaker: Breast Reconstruction Surgery.

Zhong T: Hosted by Willow Breast Cancer Support Canada, Toronto, Ontario, Canada, 16 Oct 2013. Invited Speaker: Timing of Breast Reconstruction In Recognition of the Third Annual Breast Reconstruction Awareness Day

Zhong T: ASRM Annual Meeting, Kauai, Hawaii, United States, 14 Jan 2014. Moderator: Scientific Paper Session "Outcome Studies".

Zhong T: Plastic Surgery Research Council, New York, New York, United States, 7 Mar 2014. Presenter: The Analgesic Efficacy of the Transversus Abdominis Plane (TAP) Block on the Abdominal Donor Site Following Autologous Tissue Breast Reconstruction: A Double-Blind, Placebo-Controlled Randomized Trial.

Zhong T: Rethink Breast Cancer/ Breast Fest, Toronto, Ontario, Canada, 1 Apr 2014. Chair: The Realities of Reconstruction: A Complex Choice.

Zhong T: American Association of Plastic Surgeons, Miami Beach, Florida, United States, 7 Apr 2014. Presenter: The Analgesic Efficacy of the Transversus Abdominis Plane (TAP) Block on the Abdominal Donor Site Following Autologous Tissue Breast Reconstruction: A Double-Blinded, Placebo-Controlled Randomized Trial.

Zhong T: CSPS, Montreal, Ontario, Canada, 25-28 Jun 2014. 1/ Invited Speaker: Ten Year Results from the Natrelle 410 Anatomical Form Stable Silicone Breast Implant Core Study. 2/ Invited Speaker: Psychological Assessment & Education of Breast Reconstruction Patients Pre-operatively. 3/ Panelist: Who Should Do What? Is Oncoplastic Surgery the Future?

Research and Investigations

Actionable Patient Reported Outcome using Cellular Technology: A-PRO-Cell - A Humanitarian Burn Reconstruction Mission in Rural Bangladesh. *Grand Challenges/Rising Stars.* Zhong T. (\$100,000.00 CAD, Oct 2013 - Sep 2014).

Breast reconstruction decision workshop pilot RCT. *Physician Services Incorporated Foundation.* Platt J, Zhong T. (\$18,557.48 CAD, Nov 2012 - Oct 2013).

Development of a Decision-Support Tool in Post-Mastectomy Breast Reconstruction Surgery. *Canadian Institutes of Health Research (CIHR).* Hofer SOP, Metcalfe K, Zhong T, McCready D, McGillion M. (\$143,000.00 CAD, Jul 2012 - Jun 2014).

Effect of Forearm Warming Compared to Hand Warming for Cold Intolerance Following Upper Extremity Trauma. *American Foundation for Surgery of the Hand.* Novak C, Anastakis DJ, Fernie G, Von Schroeder HP. (\$20,000.00 USD, Oct 2012 - Sep 2014).

Pre-existing patient factors associated with sensorimotor recovery, chronic pain, and brain plasticity following surgical repair of peripheral nerve injuries. *Workers Safety and Insurance Board.* Davis KD, Anastakis DJ, Katz JD. (\$348,273.00 CAD, Jan 2012 - Jan 2015).

The Use of Acellular Dermal Matrix in One-Stage Implant Reconstruction: A Multicenter, Randomized Controlled Trial. *Canadian Breast Cancer Foundation (CBCF).* Zhong T, Baxter N, Hofer SOP, Semple J, Brown M, Beber B, Macadam S, Hoch J, Lennox P, Devins J. (\$368,449.00 CAD, Jul 2012 - Jun 2015).

Utilization of Breast Reconstruction in the Treatment of the Breast Cancer in Ontario: A Population-Based Study. *Canadian Breast Cancer Foundation (CBCF), Ontario Region.* Zhong T, Urbach D, Baxter N, Musgrave M, Hofer SOP, Sutradhar R. (\$257,474.00 CAD, Jul 2011 - Jun 2014).

Honours and Awards

Zhong T: Gerald Kirsh Humanitarian Award, Princess Margaret Cancer Centre.

Division of Thoracic Surgery

Dr. M. Cypel Assistant Professor
 Dr. G.E. Darling Professor
 Dr. S. Keshavjee Professor

Dr. M. Liu Professor
 Dr. A. Pierre Associate Professor
 Dr. T.K. Waddell Professor (Division Head)
 Dr. K.Yasufuku Assistant Professor

Publications

Anayama T, Nakajima T, Dunne M, Zheng J, Allen C, Driscoll B, Vines D, Keshavjee S, Jaffray D, Yasufuku K. A Novel Minimally Invasive Technique to create a Rabbit VX2 Lung Tumour model for Nano-sized image contrast and interventional studies. *PLoS One* 2013 Aug.

Bojko B, Gorynski K, Gomez-Rios GA, Knaak JM, Machuca T, Spetzler VN, Cudjoe E, Hsin M, Cypel M, Selzner M, Liu M, Keshavjee S, Pawlisygn J. Solid phase microextraction fills the gap in tissue sampling protocols. *Anal Chim Acta.* 2013 Nov 25; 803: 75-81.

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Collaud S, Waddell TK, Yasufuku K, Pierre AF, Darling GE, Cypel M, Rampersaud YR, Lewis SJ, Shepherd FA, Leighl NB, Cho J, Bezjak A, Tsao MS, Keshavjee S, de Perrot M. Long-term outcome after en bloc resection of non-small-cell lung cancer invading the pulmonary sulcus and spine. *J Thorac Oncol.* 2013 Dec; 12(8): 1538-44.

Collaud S, Waddell TK, Yasufuku K, Oreopoulos G, Rampersaud R, Rubin B, Roche-Nagle G, Keshavjee S, de Perrot M. Thoracic aortic endografting facilitates the resection of tumors infiltrating the aorta. *J Thorac Cardiovasc Surg.* 2014 Apr; 4(147): 1178-82.

Cypel M, Keshavjee S. Strategies for safe donor expansion: donor management, donations after cardiac death, ex-vivo lung perfusion. *Curr Opin Organ Transplant.* 2013 Oct; 18(No 5): 513-517.

Darling GE. Current Status of Mediastinal Lymph Node Dissection Versus Sampling in Non-Small Cell Lung Cancer. In: Deslauriers J, Pearson FG, Shamji FM (eds), *Lung Cancer, Part I: Surgery and Adjuvant Therapies.* 2013 Aug; Vol. 23 (3): 349. Elsevier. Thoracic Surgery Clinics.

Darling GE. Quality of Life in Patients with Esophageal Cancer. In: Hofstetter WL (eds), *Evolving Therapies in Esophageal Carcinoma.* 2013 Nov; Vol. 23 (4): 569-577. Elsevier.

de Perrot M, Uy K, Anraku M, Tsao MS, Darling G, Waddell T, Pierre A, Johnston M. Pattern of lymph nodes metastasis and role of mediastinoscopy in potentially resectable malignant pleural mesothelioma. *Journal of Thoracic and Cardiovascular Surgery.* 2014 Feb; 147(2): 747-753.

Dos Santos PR, Iskender I, Machuca T, Hwang D, Deperrot M, Liu M, Keshavjee S, Waddell TK, Cypel M. Modified in vivo lung perfusion allows for prolonged perfusion without acute lung injury. *J Thorac Cardiovasc Surg.* 2014 Feb; 147(2):774-782.

D'Ovidio F, Kaneda H, Chaparro C, Mura M, Lederer D, Di Angelo S, Takahashi H, Gutierrez C, Hutcheon M, Singer LG, Waddell TK, Floros J, Liu M, Keshavjee S. Pilot Study exploring lung allograft surfactant protein A (SP-A) expression in association with lung transplant outcome. *Am J Transplant.* 2013 Oct 13; 13(10): 2722-9.

Foell K, Finelli A, Yasufuku K, Bernardini MQ, Waddell TK, Pace KT, Honey RJ, Lee JY. Robotic surgery basic skills training: Evaluation of a pilot multidisciplinary simulation-based curriculum. *Can Urol Assoc J.* 2013 Nov; 11-12(7): 430-4.

Gagliardi AR, Stuart-McEwan T, Gilbert J, Wright FC, Hoch J, Brouwers MC, Dobrow MJ, Waddell TK, McCready DR. How can diagnostic assessment programs be implemented to enhance inter-professional collaborative care for cancer? *Implement Sci.* 2014 Jan 3; (9): 4.

Gilpin SE, Lung K, de Couto GT, Cypel M, Sato M, Singer LG, Keshavjee S, Waddell TK. Bone Marrow-derived progenitor cells in end-stage lung disease patients. *BMC Pulm Med.* 2013 Aug. Aug 3:13-48.

Hanna WC, de Valence M, Atenafu EG, Cypel M, Waddell TK, Yasufuku K, Pierre A, De Perrot M, Keshavjee S, Darling GE. Is video-assisted lobectomy for non-small-cell lung cancer oncologically equivalent to open lobectomy? *Eur J Cardiothorac Surg.* 2013; 43(6): 1121-1125.

- Hanna WC, Keshavjee S.** How to Follow Patients after Curative Resection of Lung Cancer. *Seminars in Thoracic and Cardiovascular Surgery*. 2013 July; 25(3):213-7.
- Hanna WC, Paul NS, Darling GE, Moshonov H, Allison F, Waddell TK, Cypel M, de Perrot ME, Yasufuku K, Keshavjee S, Pierre AF.** Minimal-dose computed tomography is superior to chest x-ray for the follow-up and treatment of patients with resected lung cancer. *J Thorac Cardiovasc Surg*. 2014 Jan; 147(1):30-33.
- Haykal S, Salna M, Zhou Y, Marcus P, Fatehi M, Frost G, Machuca T, Hofer S, Waddell TK.** Double-Chamber Rotating Bioreactor for Dynamic Perfusion Cell Seeding of Large Segment Tracheal Allografts: Comparison to Conventional Static Methods. *Tissue Eng Part C Methods*. 2014 Jan 7; [Epub ahead of print].
- Haykal S, Zhou Y, Marcus P, Salna M, Machuca T, Hofer SO, Waddell TK.** The effect of decellularization of tracheal allografts on leukocyte infiltration and of recellularization on regulatory T cell recruitment. *Biomaterials*. 2013 Jul; 34(23): 5821-32.
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- Nakajima T, Yasufuku K.** Early Lung Cancer: Methods for Detection. *Clin Chest Med*. 2013 Sep; 34(3): 373-83.
- Nakajima T, Yasufuku K, Yoshino I.** Current status and perspective of EBUS-TBNA. *Gen Thorac Cardiovasc Surg*. 2013 Jul; 61(7): 390-6.

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Saito T, Liu M, Binnie M, Sato M, Hwang D, Azad S, Machuca TN, Zamel R, Waddell TK, Cypel M, Keshavjee S. Distinct Expression Patterns of Alveolar “Alarmins” in Subtypes of Chronic Lung Allograft Dysfunction. *Am J Transplant.* 2014 May 1. PMID: 24787265. AID: 10.1111/ajt.12718.

Saito T, Takahashi H, Kaneda H, Binnie M, Azad S, Sato M, Waddell TK, Cypel M, Liu M, Keshavjee S. Impact of cytokine expression in the pre-implanted donor lung on the development of chronic lung allograft dysfunction subtypes. *Am J Transplant.* 2013 Dec; 12(13): 3192-201.

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Yasufuku K, Nakajima T, Waddell T, Keshavjee S, Yoshino I. Endobronchial ultrasound-guided transbronchial needle aspiration for differentiating N0 versus N1 lung cancer. *Ann Thorac Surg.* 2013 Nov; 96(5):1756-60.

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You JJ, Wong RKS, Darling GE, Gulenchyn K, Urbain JL, Evans WK. Clinical Utility of 18F-Fluorodeoxyglucose Positron Emission Tomography/Computed Tomography in the Staging of Patients with Potentially Resectable Esophageal Cancer. *Journal of Thoracic Oncology.* 2013 Dec; 8(12): 1563-4569.

Zhao Y, Peng J, Lu C, Hsin M, Mura M, Wu L, Chu L, Zamel R, Machuca T, Waddell T, Liu M, Keshavjee S, Granton J, de Perrot M. Metabolomic heterogeneity of pulmonary arterial hypertension. *PLoS One.* 2014 Feb 12; 2(9): e88727.

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Invited Visits

Cypel M: Canadian Society of Transplantation Annual Meeting, Lake Louise, Alberta, Canada, 2013. Speaker: Ten years experience with extra corporeal life support for adult respiratory failure: evolution of indications, techniques and outcomes.

Cypel M: American Association for Thoracic Surgery Annual Meeting, Minneapolis, Minnesota, United States, 2013. Speaker: Years experience with extra corporeal life support for adult respiratory failure: evolution of indications, techniques and outcomes.

Cypel M: United States, Apr 2014. Invited Speaker. DCD Lungs: The Canadian Experience.



Darling GE: 12th OESO World Congress, Paris, France, 29-30 Aug 2013. Invited Speaker: 1/ Her-2 Status in EAC: Is it important? 2/ Does Eradication of *H. pylori* increase the incidence of Esophageal Cancer? 3/ Adenocarcinoma of the Gastroesophageal Junction: Gastric or esophageal origin. How does the surgeon tell?

Darling GE: IASLC, Sydney, Australia, Oct 2013. Invited Speaker: Quality Indicators in Thoracic Surgery: The Importance of process indicators in Lung Cancer.

Darling GE: AATS, American Association for Thoracic Surgery, Boston, Massachusetts, United States, 15-16 Nov 2013. 1/ Panelist: Discussion. 2/ Presenter: Management of peptic esophageal strictures. 3/ Invited Lecturer: Impact of Clinical Trials: Current and Future.

Darling GE: General Thoracic Surgical Club, Arizona, United States, 13 Mar 2014. Invited Lecturer: Clinical trials proposal SBRT versus surgery for multiple lung cancers.

Darling GE: Health Sciences North Hospital, Sudbury, Ontario, Canada, 29 Mar 2014. Speaker: Lung cancer screening.

Darling GE: John Hopkins Hospital, Baltimore, Maryland, United States, 5 Jun 2014. Invited Speaker: Esophageal Cancer: Evolution in Care.

Darling GE: ESTS, 22nd European Conference on General Thoracic Surgery, Copenhagen, Denmark, 16 Jun 2014. Invited Speaker: Patients with Stage IIIA(N2) NSCLC selected for neoadjuvant chemoradiation and surgery have improved survival compared to patients treated with definitive chemoradiation.

Keshavjee S: Columbia Presbyterian Hospital, College of Physicians and Surgeons of Columbia, Columbia University, New York, United States, 18 Jul 2013. Invited Lecturer: The Future of Ex vivo Lung Perfusion.

Keshavjee S: European Respiratory Society Annual Congress, Barcelona, Spain, 9 Sep 2013. Invited Speaker: Ex vivo lung repair: Rebuilding a New Lung.

Keshavjee S: Department of Surgery, Medical University of South Carolina, South Carolina, United States, 14 Oct 2013. Visiting Professor: The Future of Transplantation: Personalized Medicine for the Organ Horace G Smithy Visiting Professor.

Keshavjee S: Wexner Medical Center, Ohio State University, Columbus Ohio, United States, 25 Oct 2013. Lecturer: Klassen Lectureship, Pushing the Envelope...The Next Frontier in Transplantation Klassen Lectureship.

Keshavjee S: 20 Anni di Trapianto Polmonare a Torino, Torino, Italy, 27 Nov 2013. Keynote Speaker: What's New in Lung Transplantation?

Keshavjee S: 20 Ans de Tranplantation Pulmonaire en Suisse Romande, Lausanne, Switzerland, 28 Nov 2013. Keynote Speaker: Ex vivo Lung Perfusion for Lung Transplantation.

Keshavjee S: Society of Chinese Bioscientists in America, Toronto, Ontario, Canada, 31 Jan 2014. Invited Speaker: Engineering "Super Organs" for Transplantation.

Keshavjee S: Toronto Region Board of Trade, Toronto, Canada, 4 Apr 2014. Invited Speaker: Senior Executive Round Table. Research to Riches: Finding and Enhancing Ontario's Med-Tech Talent.

Yasufuku K: 5th Asia-Pacific Congress of Bronchology and Interventional Pulmonology, Seoul, Seoul Teugbyeolsi [Seoul-T'ukpyolshi], Korea, Republic Of, 13-14 Jul 2013. Invited Speaker: 1/ Symposium. Can EBUS-TBNA Replace Mediastinoscopy? 2/ Plenary Session. Genomic Profiling of Lung Cancer by EBUS-TBNA.

Yasufuku K: Surgical Grand Rounds, University Hospital Zurich, Zurich, Zürich (de), Switzerland, 12 Sep 2013. Invited Speaker: Endobronchial Diagnostic and Therapeutic Procedures - Current Standing and Future Developments.

Yasufuku K: The American College of Chest Physicians International Conference 2013, Chicago, Illinois, United States, 26-30 Oct 2013. 1/ Invited Speaker: Panel Discussion: Tissue acquisition in the era of molecular diagnostics and targeted therapy for lung cancer. How to handle small tissue specimen to optimize their value. 2/ Invited Speaker: Panel Discussion: Controversies in Endobronchial Ultrasound. Pro: EBUS should be taught to every trainee in Pulmonary and Thoracic Surgery. 3/ Invited Speaker: Plenary Presentation: Mediastinal nodes/boundaries as assessed by CT scanning, ultrasound and mediastinoscopy. Issues in staging. 4/ Invited Speaker: EBUS-TBNA in the era of personalized cancer therapy. 5/ McLennan Lecture: EBUS- past, present, and future.

Yasufuku K: Respiraory Endoscopy/Thoracic Surgery Rounds, Division of Thoracic Surgery, InCo Heart Institute of the Hospital das Clinicas, University of Sao Paulo Medical School, Sau Paulo, Brazil, 13 Nov 2013. Visiting Professor: Invasive Diagnostic and Therapeutic Strategies in Early Lung Cancer.

Yasufuku K: 15th Pulmonology Congress, Sociedade Paulista de Pneumologia e Fisiologia, Sao Paulo, Brazil, 14-15 Nov 2013. Invited Speaker: 1/ New Endoscopic Staging Methods: EBUS-TBNA. 2/ Invasive Diagnostic Strategies in Early Lung Cancer. 3/ EBUS-TBNA: Equipment and Indications. 4/ Invited Speaker: Current Strategies for Mediastinal Staging: The Toronto Experience.

Yasufuku K: The 54th Annual Meeting of the Japan Lung Cancer Society, Tokyo, Japan, 22 Nov 2013. Invited Speaker: Diagnosis and treatment strategy for clinical N2M0 non-small cell lung cancer.

Yasufuku K: Clinical and Technology Research Grant Symposium, Intuitive Surgical Inc., Sunnyvale, California, United States, 17 Jan 2014. Invited Speaker: Ultra-minimally invasive sentinel lymph node mapping of lung cancer using indocyanine green with SPY Imaging System.

Yasufuku K: JAMSNET Canada, Annual Meeting, Toronto, Ontario, Canada, 22 Jan 2014. Invited Speaker: Image guided minimally invasive surgery for lung cancer.

Yasufuku K: Japan Society for Respiratory Endoscopy - 21st Annual Seminar for Board Qualification, Chiba, Japan, 8 Feb 2014. Invited Speaker: Board certification in Interventional Pulmonology.

Yasufuku K: 18th World Congress for Bronchology and Interventional Pulmonology, Kyoto, Kyôto [Kyoto], Japan, 13-14 Apr 2014. 1/ Invited Speaker: Luncheon Seminar. Linear EBUS: Role in personalized cancer care - Molecular Staging, limited resection and SBRT. 2/ Chair: Symposium - EBUS. 3/ Invited Speaker. Intervention Hand-on Seminar.

Yasufuku K: 94th Annual Meeting of American Association for Thoracic Surgery, Toronto, Ontario, Canada, 28 Apr 2014. Invited Speaker: AATS Surgeon of the Future Functional Lab Presentation. Endobronchial Ultrasound.

Yasufuku K: International Meeting for Minimally Invasive Cardiothoracic Surgery 2014 Annual Meeting, Boston, Massachusetts, United States, 29 May 2014. Invited Speaker: Thoracic Master Class. Bronchoscopy Navigation and Ablation of Peripheral Nodules.

Yasufuku K: American Thoracic Society International Conference 2014, San Diego, California, United States, 17 May 2014. 1/ Invited Speaker: ATS Postgraduate Course 2014: Lung Cancer Staging. 2/ Faculty: ATS Postgraduate Course 2014: EBUS-TBNA Hands-on Teaching.

Research and Investigations

Adjuvant melatonin in the prevention of recurrence and mortality following lung cancer resection (AMPLCaRe): a randomized placebo controlled clinical trial. Yasufuku K. (Jan 2012 - present).

Advanced therapeutics for ex vivo repair of lungs for transplantation. *Canadian Institute of Health Research.* Keshavjee S, Cypel M, Liu M. (\$914,350.00 CAD, Jan 2014 - Dec 2019).

A Phase III Randomized Trial of Lobectomy versus Sublobar Resection for Small (less than or equal to 2 cm) Peripheral Non-Small Cell Lung Cancer (BCR.5). Yasufuku K. (May 2008 - present).

A Randomized Phase III Study of Sublobar Resection (+/- Brachytherapy) versus Stereotactic Body Radiation Therapy in High Risk Patients with Stage I Non-Small Cell Lung Cancer (NSCLC). Yasufuku K. (Jul 2011 - present).

A Retrospective Analysis of Diagnostic Approaches to Mediastinal Pathology at the University Health Network (UHN). Yasufuku K. (Jun 2012 - present).

Canadian Cystic Fibrosis Foundation. Keshavjee S, Singer L. (\$55,881.00 CAD, Apr 2013 - Mar 2014).

Cystic Fibrosis. Keshavjee S, Singer L. (\$55,881.00 CAD, Apr 2014 - Mar 2015).

Development of isolated lung perfusion for the treatment of cancer metastases to the lungs. *Canadian Cancer Society.* Cypel M. (\$200,000.00 CAD, 2014 - 2015).

Early Diagnosis of Pulmonary Nodules Using A Plasma Proteomic Classifier. *Integrated Diagnostics, Inc.* Pierre A, Darling G, Keshavjee S, Waddell T, Yasufuku K, De Perrot M, Cypel M. (\$20,650.00, Jul 2013).

EBUS as the first line investigation for isolated mediastinal lymphadenopathy. Yasufuku K. (2014 - present).

Endobronchial ultrasound-guided transbronchial needle aspiration for lymph node staging in patients with non-small cell lung cancer treated with Stereotactic Body Radiotherapy (SBRT). Yasufuku K. (Feb 2013 - present).

Engineering Improved Tracheal Replacement Tissues. *Natural Sciences and Engineering Research Council of Canada (NSERC) / Canadian Institutes of Health (CIHR).* Waddell TK. (\$447,000.00, 2011 - 2014).

EOLIA ECLS trial. Cypel M. (May 2014 - May 2016).

- Expansion of patient-specific Cystic Fibrosis epithelial cells for drug screening through transient partial reprogramming.** *Centre for Commercialization of Regenerative Medicine (CCRM)*. Waddell TK. (\$300,000.00, 2013 - 2015).
- Feasibility of evaluating gene alteration analysis using samples obtained by EBUS-TBNA in patients with lung cancer.** Yasufuku K. (Aug 2011 - present).
- Feasibility of a novel minimally invasive technique for localization of pulmonary nodules using Spy thoracoscope system.** Yasufuku K. (Feb 2014 - present).
- Generation of induced epithelial progenitor populations using transient reprogramming.** (Principal Investigator). *Canadian Institutes for Health Research*. Nagy A, Waddell TK. (2013 - 2018).
- Genetic profiling of metastatic non-small cell lung cancer using EBUS-TBNA.** *The 2011 OneBreath™ Clinical Research Award in Lung Cancer, The CHEST Foundation Awards*. Yasufuku K. (\$100,000.00 CAD, Aug 2011 - Jul 2013).
- Genomic profiling of lung cancer by EBUS-TBNA: a minimally invasive approach to personalized medicine for non-small cell lung cancer.** *Canadian Cancer Society*. Yasufuku K. (\$450,000.00 CAD, Jul 2011 - Jun 2014).
- Grant-In-Aid Award, Ontario Thoracic Society/Canadian Lung Association*. Singer L, Keshavjee S, Rochorn P, Austin P. (\$50,000.00 CAD, Jul 2012 - Jul 2013).
- GTx OR: Image Guided Intraoperative Tracking and Resection of Small Pulmonary Nodules Using the Integration of Advanced Bronchoscopic Technology, Video-assisted Thoroscopic Surgery (VATS) and Siemnes Zeego.** Yasufuku K. (\$283,500.00 CAD, Jan 2014 - Apr 2018).
- Impact of the Rapid Assessment of Complex Pleural Effusion (RACE) Program on patient quality of life and health care associated costs.** *Lung Cancer Canada*. Yasufuku K. (\$50,000.00 CAD, Apr 2013 - Mar 2014).
- Initiating Grant.** *Astellas Pharma Canada, Inc.* Cypel M. (\$50,000.00 CAD, 2013 - 2014).
- In Situ Laser fenestration of metallic stents (MS).** Yasufuku K. (Feb 2014 - present).
- Interventional bronchology program for minimally invasive management of lung cancer.** *National Sanitarium Association*. Yasufuku K. (\$1,000,000.00, Jan 2014 - Dec 2018).
- In vivo lung perfusion for the treatment of pulmonary metastases.** *American Association for Thoracic Surgery, Michael E. DeBakey Research Scholarship*. Cypel M. (\$160,000.00 USD, 2011 - 2013).
- Lung Progenitor Cell Profiling in the Development of Bronchiolitis Obliterans Syndrome.** *Roche Organ Transplant Research Foundation*. Waddell TK. (\$212,000.00, Jul 2011 - Jun 2014).
- Methods and Compositions for Producing Induced Airway Tissue Progenitor Cells.** *Stem Cell Network*. Waddell TK. (\$100,000.00, 2013 - 2014).
- Minimum Dose Computed Tomography of the Thorax in Patients with resected Lung Carcinoma.** Yasufuku K. (Feb 2005 - present).
- Mitigation of Radiation-Induced Lung Damage.** *Canadian Institutes of Health Research (CIHR)*. Hill R, Waddell TK. (\$500,000.00, 2011 - 2014).
- Molecular Diagnostic Strategies for the Selection of Donor Lungs for Transplantation.** *Roche Organ Transplantation Research Foundation (The) (Switzerland)*. Cypel M. (\$300,000.00, 2009 - 2013).
- Molecular and Genomic Diagnostics to Improve Outcomes in Lung Transplantation.** *Ontario Research Fund (ORF)*. Cypel M. (\$1,750,000.00 CAD, 2010 - 2014).
- Molecular Therapeutic Strategies for Ex Vivo Repair of Lungs for Transplantation.** *Canadian Institutes of Health Research (CIHR)*. Cypel M. (\$883,550.00 CAD, 2008 - 2013).
- New Emerging Team in Regenerative Medicine: Development of Lung Progenitors.** *Canadian Institutes of Health Research (CIHR)*. Bhatia M, Waddell TK. (\$2,500,000.00, Jul 2009 - Jun 2015).
- Non-linear multimodal mircoendoscopy for lung cancer pathology.** *Natural Sciences and Engineering Research Council of Canada (NSERC)*. Barzda V, Yasufuku K. (\$531,000.00 CAD, Apr 2012 - Mar 2015).
- Patient Satisfaction Survey after EBUS-TBNA (Endobronchial Ultrasound Guided Tranbronchial Needle Aspiration) in Outpatient Department (OPD) Settings.** Yasufuku K. (Apr 2014 - present).
- Phase III Chemoprevention Trial of Selenium Supplementation in Persons with Resected Stage 1 Non-small Cell Lung Cancer (NCIC BR.16).** Yasufuku K. (May 2001 - present).



- Pilot Study Using Combined Virtual 4-D EM Tip-Tracked Devices and Endobronchial Ultrasound in the Diagnosis of Peripheral Pulmonary Nodules.** Yasufuku K. (Apr 2013 - present).
- Pilot Study using Combined 4-D EM Tip-tracked Devices and Endobronchial Ultrasound in the Diagnosis of Peripheral Pulmonary Nodules.** Yasufuku K. (\$35,000.00 CAD, Apr 2014 - Mar 2016).
- Porphysome nanoparticle-enabled minimally invasive transbronchial photothermal ablation of lung cancer.** *CIHR.* Zheng G, Yasufuku K. (\$756,699.00 CAD, Apr 2012 - Mar 2017).
- Pre-operative lung nodule microcoil localization: A novel modification of an old technique.** Yasufuku K. (Feb 2014 - present).
- Project Lead, Nanotechnology-enabled image-guided interventions in vascular and lung diseases.** *Canadian Institutes of Health Research (CIHR).* Zheng G, Yasufuku K. (\$2,317,262.00 CAD, Jul 2011 - Jun 2015).
- Prospective Controlled Trial of Mediastinoscopy Compared with Endobronchial Ultrasound Guided Transbronchial Needle Aspiration for the Assessment of the Mediastinum in Lung Cancer.** Yasufuku K. (Jul 2006 - present).
- Pulmonary epithelial repair and regeneration: The role of novel, BM-derived secreted proteins.** *Canadian Institutes of Health Research.* Szazi K, Waddell TK. (\$438,000.00, 2013 - 2016).
- Rapid gene expression and protein profiling for transplantation medicine.** *CIHR- Canadian Institute of Health Research.* Keshavjee S, Kelley S, Liu M. (\$565,800.00 CAD, Apr 2013 - Mar 2016).
- Rapid quantitation of lung tumor cells for lymph node analysis.** *Connaught Innovation Award Program.* Kelley S, Yasufuku K. (\$100,000.00 CAD, Jan 2013 - Dec 2013).
- Reducing the incidence and severity of post-thoracotomy pain syndrome: a randomized, double blind, study comparing a novel intracostal closure technique to the classical pericostal suture closure technique.** *The Physicians' Services Incorporated Foundation.* Clarke H, Yasufuku K. (\$16,000.00 CAD, Jan 2013 - Dec 2014).
- Research in Thoracic Intervention.** *UHN, Olympus Medical Systems Corp.* Yasufuku K. (\$200,000.00 CAD, Jul 2013 - Jun 2014).
- Retrospective Analysis of Lung Transplant Recipients Found to Have Lung Cancer in Explanted Lungs.** Yasufuku K. (Nov 2012 - present).
- Role of rapid on-site cytology during endobronchial ultrasound-guided transbronchial needle aspiration (ENUS-TBNA).** Yasufuku K. (Dec 2013 - present).
- Science Operating Room Extension (ScORE).** *Canada Foundation for Innovation (CFI).* Yasufuku K. (\$1,997,099.00 CAD, 2014 - 2018).
- Sensitivity of Endobronchial Ultrasound (EBUS) sampling for assessing lung cancer biomarker status.** Yasufuku K. (Jun 2012 - present).
- Spectrum Image Analysis of Lymph Nodes During Endobronchial Ultrasound-Guided Transbronchial Needle Aspiration in Patients with Lung Cancer.** Yasufuku K. (May 2013 - present).
- Strategies of optimal lung ventilation in ECMO for ARDS: The SOLVE ARDS study.** *Physicians Services Incorporated Foundation (PSI).* Ferguson N, Fan E, Keshavjee S. (\$57,500.00 CAD, Oct 2013 - Nov 2015).
- Targeting Rejection: Reversal and Prevention of Allograft fibrosis by direct reprogramming of Activated Myofibroblasts.** *Transplantation and Regenerative Medicine Centre, Hospital for Sick Children.* Post M, Rossant J, Waddell TK. (\$250,000.00, 2013 - 2015).
- The Assessment of Genetic Alterations in Samples Obtained by Mediastinoscopy and its Correlation to Clinical Features.** Yasufuku K. (Oct 2011 - present).
- The BioPhotonics in Cancer Interventions Unit: Accelerating the Translation of Discovery to Clinical Cancer Care.** *Cancer Care Ontario, ACRU.* DaCosta R, Yasufuku K. (\$150,000.00 CAD, Jul 2011 - Jun 2015).
- Tier II Canada Research Chair in Lung Transplantation.** *Canada Research Chairs (CRC).* Cypel M. (\$500,000.00 CAD, 2012 - 2017).
- Tissue Engineering of Dynamic Organs.** *Ontario Research Fund (ORF).* Post M, Waddell TK. (\$1,950,000.00, Jul 2011 - Jun 2016).
- Tissue remodelling and the immune response in obliterative bronchiolitis after lung transplantation.** *Canadian Cystic Fibrosis Foundation.* Keshavjee S. (\$331,501.00, Apr 2012 - Mar 2015).

Training Program in Regenerative Medicine. *Canadian Institutes of Health Research (CIHR).* Levy G, Waddell TK. (\$1,950,000.00, Jul 2009 - Jun 2015).

Ultra-minimally invasive sentinel lymph node mapping of lung cancer using indocyanine green with SPY Imaging System. *Intuitive Surgical.* Yasufuku K. (\$50,000.00 CAD, Jan 2013 - Dec 2013).

Ultra-minimally invasive multi-modal image guided photothermal ablation of lung cancer. Canadian Cancer Society, Impact Grant. Yasufuku K. (\$1,250,000.00 CAD, Feb 2013 - Jan 2018).

Ultra-minimally invasive multi-modal image guided therapeutics of lung cancer. *Canadian Cancer Society.* Yasufuku K. (\$1,250,000.00 CAD, Feb 2014 - Jan 2019).

Honours Received

Darling GE: Gail E. Darling Award for Excellence in Undergraduate Teaching. Thoracic Surgery, Dept of Surgery, Faculty of Medicine. 2014

Keshavjee S: Canadian Academy of Health Sciences Fellowship. Jun 2014

Yasufuku K: Geoffrey McLennan Memorial Award, The American Association of Bronchology and Interventional Pulmonology. Oct 2013.

Yasufuku K: AABIP Most Intriguing Award, The American Association of Bronchology and Interventional Pulmonology. Oct 2013.

Division of Urology

Dr. D.S. Elterman	Assistant Professor
Dr. A. Finelli	Associate Professor
Dr. N.E. Fleshner	Professor (Division Head)
Dr. R. Hamilton	Assistant Professor

Dr. M.M. Hassouna	Professor
Dr. M. Jewett	Professor
Dr. G. Kulkarni	Assistant Professor
Dr. S. Radomski	Professor
Dr. J.Trachtenberg	Professor

Publications

AlSannan B, Banakhar M, Hassouna M. The Role of Sacral Nerve Stimulation in Female Pelvic Floor disorders. In: K. Noblett (eds), *Urinary Incontinence and Pelvic Organ Prolapse*. KL Noblett, Section Editor. *Current Obstetrics and Gynecology Reports*. 2013 Aug 13; Vol. 2: 1-12. United States: Springer. AID: e-ISSN 2161-3303. URL: [Curr Obstet Gynecol Rep](#).

Bachir B, Dragomir A, Aprikian A, Tanguay S, Fairey A, Kulkarni GS, Breau RH, Black P, Kassouf W. Contemporary cost-effectiveness analysis comparing sequential BCG and electromotive mitomycin versus BCG alone for patients with high-risk non-muscle invasive bladder cancer. *Cancer*. 2014 Apr 18. PMID: 24752448. AID: 10.1002/cncr.28.

Banakher M, Al-Shaiji T, Hassouna M. Sacral Neuromodulation in the Treatment of Interstitial Cystitis/Painful Bladder Syndrome: Should It Be Off Label? In: *Current Bladder Dysfunction Reports*. 2013 Aug 1. United States. AID: DOI:10.1007/s11884-012-0122-2.

Bhindi B, Fleshner N, Locke J, Alibhai S, Kulkarni G, Margel D, Hamilton R, Finelli A, Trachtenberg J, Zlotta A, Toi A, Hersey K. Dissecting the association between metabolic syndrome and prostate cancer risk: analysis of a large clinical cohort. *European Urology*. 2014 Jan 31.

Bhindi B, Kulkarni GS, Finelli A, Alibhai SM, Hamilton RJ, Toi A, van der Kwast TH, Evans A, Hersey K, Jewett MA, Zlotta AR, Trachtenberg J, Fleshner NE. Obesity Is Associated with Risk of Progression for Low-risk Prostate Cancers Managed Expectantly. *Eur Urol*. 2014 Jun 18; 14. AID: 10.1016/j.eururo.2014.06.005.

Bhindi B, Locke J, Alibhai SM, Kulkarni GS, Margel DS, Hamilton RJ, Finelli A, Trachtenberg J, Zlotta AR, Toi A, Hersey KM, Evans A, van der Kwast TH, Fleshner NE. Dissecting the Association Between Metabolic Syndrome and Prostate Cancer Risk: Analysis of a Large Clinical Cohort. *Eur Urol*. 2014 Feb. Epub ahead of print.

Bhindi B, Mamdani M, Kulkarni GS, Finelli A, Hamilton RJ, Trachtenberg J, Zlotta AR, Toi A, Evans A, Van Der Kwast T, Fleshner NE. Prostate biopsy trends in relation to U.S. preventative task force recommendations against routine PSA-based screening: A time-series analysis. *Journal of Urology*. 2014 Apr; 191(4): 548.

Bhindi B, Margel D, Hamilton RJ, Fernandes KA, Trottier G, Hersey KM, Finelli A, Trachtenberg J, Zlotta A, Kulkarni GS, Toi A, Evans A, van der Kwast TH, Fleshner NE. The impact of Aspirin and other Non-Steroidal Anti-Inflammatory Drug Use on the Risk of Prostate Cancer Detection on Biopsy. *European Urology*. 2014 May 30.

Bhindi B, Margel D, Trottier G, Hamilton RJ, Kulkarni GS, Hersey KM, Finelli A, Trachtenberg J, Zlotta A, Toi A, Evans A, van der Kwast T, Fleshner NE. Obesity is associated with larger prostate volume but not with worse urinary symptoms: analysis of a large multiethnic cohort. *Urology*. 2014 Jan; 83(1): 81-87.

Bhindi B, Yu J, Kuk C, Sridhar SS, Hamilton RJ, Finelli A, Jewett MA, Evans A, Fleshner NE, Zlotta AR, Kulkarni GS. The Importance Of Surgeon Characteristics In Impacting Oncologic Outcomes In Patients Undergoing Radical Cystectomy. *Journal of Urology*. 2014 Mar 1; 14: 351-356.

Bimal B, Yu J, Kuk C, Sridhar S, Hamilton R, Finelli A, Jewett M, Evans A, Fleshner N, Zlotta A, Kulkarni G. The Importance Of Surgeon Characteristics In Impacting Oncologic Outcomes In Patients Undergoing Radical Cystectomy. *The Journal of Urology*. 2014 Mar 1. <http://dx.doi.org/10.1016/j.juro.2014.02.093>.

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Cepek J, Lindner U, Ghai S, Davidson SRH, Trachtenberg J, Fenster A. MRI-guided prostate focal laser ablation therapy using a mechatronic needle guidance system. *SPIE Medical Imaging*. 2014 Mar 12; 9036. AID: 10.1117/12.2042878.

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Di Pierdomenico AA, Radomski SB. Success rates of patients with poor emptying on clean intermittent catheterization. *Canadian Journal Of Urology*. 2014 Apr 1; 21: 7188-7193.

Elterman D. Guys, it's time to man up and make your health a priority. *The Globe and Mail* (eds), *The Globe and Mail*. June 13, 2014. URL: <http://www.theglobeandmail.com/life/health-and-fitness/health-advisor/guys-its-time-to-man-up-and-make-your-health-a-priority/article19162304/>.

Elterman DS, Chughtai B, Kaplan S, Barkin J. Tolteridine for male lower urinary tract symptoms. *Expert Opinion on Pharmacology*. 2013 Oct; 14(14): 1987-91.

Elterman D, Chughtai B, Vertosick E, Maschino A, Sandhu J. Changes in pelvic organ prolapse surgery over the last decade among U. S. urologists. *Journal of Urology*. 2014.

Elterman D, Chughtai B, Vertosick E, Maschino A, Sandhu J. Midurethral sling is the dominant procedure for female stress urinary incontinence: analysis of case logs from certifying American Urologists. *Urology*. 2013 Dec; 82(6): 1267-71.

Elterman D, Coleman J, Bochner B, Sandhu J. Ileal-ureter cystoplasty in radical pelvic surgery. *BJUInt*. 2014.

Elterman DS, Kaplan SA. Lower urinary tract symptoms in a 66-year-old man. *CMAJ*. 2014 Jan 27. PMID: 24468688. AID: 10.1503/cmaj.130449. Epub ahead of print.

Elterman DS, Kaplan SA, Pelman R, Goldenberg SL. How 'male health' fits into the field of urology. *Nature Reviews Urology*. 2013 Jul 30.

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- Hamilton RJ.** Metformin for Castrate-resistant Prostate Cancer: Learning More About an Old Dog's New Tricks. *Eur Urol*. 2014 Jan. AID: <http://dx.doi.org/10.1016/j.eururo.2014.01.013>.
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- Krege S, Hamilton RJ, Daneshmand S, Jewett MAS.** Management of residual tumor following first-line chemotherapy: Chest and Abdomen. In: *EAU-ICUD Consultation on Medical Treatment of Urological Malignancies*. 2014 Jun.
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- Mina DS, Connor MK, Alibhai SM, Toren P, Guglietti C, Matthew AG, Trachtenberg J, Ritvo P.** Exercise effects on adipokines and the IGF axis in men with prostate cancer treated with androgen deprivation: A randomized study. *Canadian Urological Association journal = Journal de l'Association des urologues du Canada*. 2013 Nov 1; 7(11-12): E692-E698.

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- Nam RK, Cheung P, Herschorn S, Saskin R, Su J, Klotz LH, Chang M, Kulkarni GS, Lee Y, Narod SA.** Incidence of Complications Other than Urinary Incontinence or Erectile Dysfunction after Radical Prostatectomy or Radiotherapy for Prostate Cancer: A Population-Based Cohort Study. *Lancet Oncology*. 2014 Feb; 15(2): 223-231.
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Invited Visits

Carr L: Canadian Urological Association. St. John's, Newfoundland and Labrador, Canada, Jun 28, 2014. Lecturer: Botox Symposium.

Carr L: University of Western Ontario. London, Ontario, Canada, 2014 Mar 25. Visiting Professor: Regenerative Medicine in Urology and New Pharmacotherapy for Overactive Bladder.

Elterman DS: The Multiple Sclerosis Society of Canada, Toronto, Canada, Jan 2014. Keynote Speaker: Multiple Sclerosis and overactive bladder.

Finelli A: SIU Congress, Vancouver, Canada, Sep 2013. Invited Lecturer: Robotic surgery for High Risk Prostate Cancer.

Finelli A: World Urologic Oncology Foundation (WUOF), Vancouver, Canada, Sep 2013. Invited Lecturer: The integration of surgery, radiation and ablation in the management of advanced renal cell carcinoma.

Fleshner NE: Canadian Urology Association. Niagara Falls, Ontario, Canada, 2013. Presenter: 1/ The significance of finding no prostate cancer on active surveillance confirmatory biopsy: implications for pathological progression. 2/ The impact of surgeon-related parameters on outcomes for muscle-invasive bladder cancer. 3/ Association of male pattern baldness and risk of cancer and high grade disease among men presenting for prostate biopsy. 4/ Initial results of MR guided laser focal therapy for prostate cancer.

Fleshner NE: American Urology Association. San Diego, California, United States, 2013. Presenter: External diagnostic prostate biopsy in active surveillance: a predictor of re-classification on confirmatory biopsy.

Fleshner NE: American Urology Association. Orlando, Florida, United States, 2014. Presenter: 1/ Quality of life following focal therapy, active surveillance and robotic prostatectomy for localized prostate cancer. 2/ Fine-mapping of the Kallikrein region and its role in prostate cancer aggressiveness: results from a Canadian cohort and the European randomized study for prostate cancer screening. 3/ Magnetic resonance imaging detected prostate evasive anterior tumors: further insights.

Hamilton R: Rogers TV, Toronto, Ontario, Canada, 16 Jan 2014. Speaker: What is Prostate Cancer?

Hamilton R: CTV, Toronto, Ontario, Canada, 15 Apr 2014. Interview: Men's Health: Testis Cancer Awareness.

Hassouna MM: Canadian Neuromodulation Society, Victoria, British Columbia, Canada, 27 Sep 2013. 1/ Presenter: Role of Neurometer as adjunct to screening for sacral Neuromodulation therapy. 2/ Chair.

Hassouna MM: International Spinal Cord Society, Istanbul, Turkey, 28 Oct 2013. Presenter: Comparative study of the efficacy and safety of Muscarinic M3receptors antagonists in the treatment of neurogenic detrusor overactivity.

Jewett MAS: World Urological Oncology Federation, British Columbia, Canada, 8 Sep 2013. Invited Speaker: Personalizing the Care of Early Stage RCC.

Jewett MAS: Societe Internationale D'Urologie, British Columbia, Canada, 10 Sep 2013. 1/ Chair: Biopsy of Small Renal Masses: When, How and in Whom? 2/ Presenter: Role of Active Surveillance in Renal Tumours. 3/ Invited Speaker: Primary RPLND vs. BEP-2 vs Surveillance for Stage 1 NGCT: Will there ever be a consensus?

Jewett MAS: Kidney Cancer Association, Illinois, United States, 5 Oct 2013. Invited Speaker: Collaborating to Improve Survivorship Care.

Jewett MAS: São Paulo, Brazil, 15 Feb 2014. 1/ Invited Speaker: Controversies in Testicular Cancer: Adjuvant Treatment in Testicular Cancer Clinical Stage i (seminoma & non-seminoma) / Favouring Observation. 2/ Tumour Board: Interactive cases: Testicular Cancer Partial Orchiectomy Post chemo residual mass. 3/ Invited Speaker: Rare Testicular Cancers. 4/ Invited Speaker: Controversies in Kidney Cancer: Small Renal Masses: Favouring observation. 5/ Tumour Board: Kidney Cancer Vena Cava Invasion Tumour Cytoreductive Nephrectomy. 6/ Invited Speaker: Metastatic Kidney Cancer: Cytoreductive Nephrectomy and Metastasectomy. 7/ Invited Speaker: Resection of residual masses after chemotherapy for testicular cancer.

Jewett MAS: University of Washington, Department of Urology, FESTSCHRIFT Scientific Lectures, Seattle, Washington, United States, 15 Mar 2014. Invited Lecturer: Lessons Learned from the Natural History of GU Cancer.

Jewett MAS: Urological Society of Australia and New Zealand (USANZ) 67th Annual Scientific Meeting, Brisbane, Australia, 18-19 Mar 2014. Invited Speaker: 1/ Less can be more for testis cancer: Update on partial orchiectomy and surveillance for all stage I. 2/ Debate: Management of small renal mass: Biopsy. 3/ Update on cystic renal cell carcinoma: What we don't know.

Jewett MAS: Kidney Cancer Canada, Ontario, Canada, 29 Mar 2014. Invited Speaker: Research Priorities, Survivorship, Genetics, Quality, and Personalized Medicine.

Jewett MAS: Oxford University Surgical Grand Rounds, United Kingdom, 4 Apr 2014. Invited Lecturer: When not to operate on cancer: observations from management of GU Cancer.

Jewett MAS: Kuwait International Conference on Breast Cancer and Pelvic Malignancies, Kuwait, 5 Apr 2014. Invited Speaker: 1/ Orthotopic neobladder following cystectomy for invasive bladder cancer: indications, limitations and long-term outcome. 2/ Is there a role for bladder preservation in the management of muscle invasive bladder cancer? 3/ Radical prostatectomy versus watchful waiting in early prostate cancer. 4/ IMRT as a standard of care for prostatic radiation: current concepts.

Jewett MAS: Society of Urologic Oncology / American Urological Association, Florida, United States, 17 May 2014. Invited Speaker: 1/ Debate: Renal Biopsy - Is Heterogeneity Clinically Relevant? 2/ Can Follow-up be an Option in the Management of Small Renal Masses?

Kulkarni G: Canadian Urological Association, St. John's, Newfoundland and Labrador, Canada, 27-28 Jun 2014. Invited Lecturer: 1/ The Difficult Radical Prostatectomy (Post-TURP, Median Lobe, etc). 2/ Should We All Be Part of Multidisciplinary Bladder Clinics: Urologist Viewpoint. 3/ MIS Radical Cystectomy: Open radical cystectomy is here to stay.

Radomski SB: Society of Urodynamics, Female Pelvic Medicine and Urogenital Reconstruction Annual meeting, Miami, Florida, United States, 28 Feb 2014. Presenter: AUS erosion in patients after radical prostatectomy with and without salvage radiation.

Research and Investigations

3D Ultrasound-Guided Trans-Perineal Focal Prostate Therapy Platform. *Canadian Institutes of Health Research (CIHR).* Fenster A, Chin J, Haider MA, Trachtenberg J. (\$505,976.00 CAD, Apr 2009 - Mar 2014).

A bio-psychosocial sexual health intervention for prostate cancer survivors and their partners: A feasibility study. *Canadian Cancer Society Research Institute (CCSRI).* Matthew A, Alibhai SM, Davison BJ, Finelli A, Fleshner N, Morales C, Trachtenberg J, Panzarella T, Currie K, Jamnicky L, Hamilton R. (\$137,235.00 CAD, Feb 2013 - Jan 2015).

Active Surveillance for low-risk Prostate Cancer: A population-level analysis of uptake, practice patterns and barriers to adoption. *Prostate Cancer Canada.* Finelli A, Fleshner N, Kulkarni G, Klotz L, Hamilton R, Alibhai S. (\$138,213.00 CAD, Jul 2013 - Jun 2015).

Aldosterone as a novel therapeutic target for renal cell cancer: role of GPER. *Canadian Institutes of Health Research (CIHR).* Kulkarni G. (Sep 2013).

A Multicenter, Randomized, Double-Blind, Placebo-Controlled, Phase III Study of ARN-509 in Men with Non-Metastatic (M0) Castration-Resistant Prostate Cancer (SPARTAN). *Aragon Inc.* Hamilton R. (Feb 2014 - present).

A Multi-Centre, Pilot Randomized Controlled Trial to Examine the Effects of Prehabilitation on Functional Outcomes and Quality of Life after Radical Prostatectomy. *Prostate Cancer Canada.* Matthew AG, Santa Mina D, Clarke H, Alibhai H, Ritvo P, Finelli A, Wijesundera D, Tanguay S, Aprikian A, Gillis C, Trachtenberg J, Carli F. (\$176,068.75 CAD, Sep 2013 - Sep 2015).

Analysis of novel methylation biomarkers distinguishing aggressive from indolent prostate cancer. *Ontario Institute for Cancer Research.* Fleshner NE. (\$619,440 Jul 2011-June 2014).

An integrated multi-faceted knowledge translation intervention to improve bone health in men receiving androgen deprivation therapy for prostate cancer. *Canadian Cancer Society Research Institute (CCSRI).* Jones J, Alibhai S, Cheung A, Catton C, Warde P, Hamilton R, Kitto S. (\$99,920.71 CAD, Jun 2013 - Jun 2015).

A pilot RCT and economic analysis of three exercise delivery methods in men with prostate cancer on ADT. *Prostate Cancer Canada.* Carli F, Matthew AG, Santa Mina D, Culos-Reed N, Krahn M, Tomlinson G,

Ritvo P, Warde P, Trachtenberg J, Alibhai SMH. (\$148,282.00 CAD, Jul 2012 - Jul 2013).

APPLY: Multi-Institutional implementation of image guided focal therapy. OICR. Trachtenberg J, Chin J, Bauman G, Haider M, Romagnoli C, Ward J, Fenster A. (\$651,450.00 CAD, Apr 2012 - Mar 2016).

A randomized, double-blind, parallel, placebo-controlled, phase 4, multicenter study to assess efficacy and safety of VESicare® (solifenacin succinate) to improve urinary continence of subjects after robotic assisted radical prostatectomy. *Astellas Pharma Global Development Inc.* Finelli A. (Jun 2012 - Jul 2013).

A randomized, double-blind, placebo-controlled phase III study to evaluate the efficacy and safety of pazopanib as adjuvant therapy for subjects with localized or locally advanced RCC following nephrectomy. *Glaxosmithkline Inc.* Jewett MA. (\$30,000.00 CAD, Mar 2011 - May 2017).

A randomized controlled trial of renal hypothermia during partial nephrectomy. *Canadian Institutes of Health Research (CIHR).* 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. (\$404,250.00 CAD, Jul 2011 - Jun 2014).

A Randomized trial of conventional versus advanced pelvic floor exercises to treat urinary incontinence following radical prostatectomy. *Prostate Cancer Canada.* Elterman DS, Matthew AG, Santa Mina D, Hilton W, Au D, Stefanyk L. (\$158,291.00 CAD, Jun 2014 - Jun 2016).

ASAP Sexual Health and Rehabilitation Solution: Project #1 The Prostate Cancer Canada Sexual Health and Rehabilitation Practitioner eTraining Program (PCC-SHARP). *Prostate Cancer Canada.* Matthew A, McLeod D, Robinson J, Davison J, Elterman D, Wassersug R, Elliott S, Herschorn S, Gajewski J, Brock G, Stephen J, Finelli A, Ritvo P, Isaac W, Valiquette L, Jarvi K, Jamnicky L. (\$132,521.00, Apr 2014 - Mar 2017).

ASAP Sexual Health and Rehabilitation Solution: Project #2 The Prostate Cancer Canada Sexual Health and Rehabilitation eCLINIC (PCC-SHARE). *Prostate Cancer Canada.* Matthew A, McLeod D, Robinson J, Davison J, Elterman D, Wassersug R, Elliott S, Herschorn S, Gajewski J, Brock G, Stephen J, Finelli A, Ritvo P, Isaac W, Valiquette L, Jarvi K, Jamnicky L. (\$813,392.00, Apr 2014 - Mar 2017).

Biopsy Avoidance in Patients At Risk For Prostate Cancer and in Patients With Low Risk Prostate Cancer: Developing Tools for Personalized Medicine. *Prostate Cancer Canada.* Kulkarni G, Finelli A. (\$300,000.00, Jul 2012 - Jun 2014).

Biopsy Avoidance in Patients At Risk For Prostate Cancer and in Patients With Low Risk Prostate Cancer: Developing Tools for Personalized Medicine. *Canadian Urological Association.* Kulkarni G. (\$40,000.00, Jun 2012 - Jul 2014).

Clinical Significance of NKX3.1 Deletion in Human Prostate Cancer. *Cancer Research Society.* van der Kwast T, Trudel D, Trachtenberg J. (Jul 2012 - Jul 2013).

Developing and Validating the BUSS (Bladder Utility Symptom Scale) – A Disease-Specific Utility Instrument for Bladder Cancer Health-Related Quality of Life. *Canadian Institutes of Health Research (CIHR).* Krahn M, Kulkarni G, Finelli A. (\$359,948.00, Jul 2012 - Jun 2015).

Development of a utility weighting function for the Bladder Utility Symptom Scale (BUSS-U). *Canadian Cancer Society Research Institute (CCSRI).* Kulkarni G, Finelli A. (\$299,900.00 CAD, Feb 2014 - Jan 2016).

Enzalutamide in first line androgen deprivation therapy for metastatic prostate cancer: a randomised phase III trial. *Astellas Pharma Australia.* Finelli A. (Mar 2014 - Mar 2016).

Establishing a biological network strategy for personalizing prognosis in non-muscle invasive bladder cancer. *Canadian Cancer Society Research Institute (CCSRI).* Zlotta A, Wrana J, Kulkarni G. (\$1,249,950.00 CAD, Feb 2014 - Jan 2019).

Estimation of bladder volume from sacral nerve root recordings. *PSI Foundation.* Hassouna M. (\$126,000.00 CAD, Nov 2012 - Jun 2014).

Farquharson Chair in Kidney Cancer Research. *Princess Margaret Hospital Foundation (The).* Jewett MA. (\$5,000,000.00 CAD, 2006 - 2016).

Harnessing the Patient Immune System to Treat Advanced Prostate Cancer. *Prostate Cancer Canada.* Trachtenberg J, Joshua A, Keating A, Major P, Singh G, Tang D, Gosselin J, Bridle B, Kamen A, Viswanathan S, Matsumoto E, Corbett T, Popovic S, Seidltz E, Wootton S, Wood G, De Vries J, Gerritsen W, Shayegan B, Azziz T, Landry C, Romer-Oberdorfer A, Garcia-Sastre A, Palese P, Zamarin D, Gerson D. (\$4,912,269.00 CAD, Mar 2014 - Jul 2014).

Kidney Cancer Research Network of Canada. *Canadian Institutes of Health Research (CIHR).* Jewett M, Finelli A. (\$600,000.00, Jun 2012 - Jul 2015)

Men's Health Fellowship Grant. *American Medical Systems Inc.* Elterman DS. (\$30,000.00 USD, Jan 2013 - Dec 2013).

Molecular characterization and behaviour of tumours arising in patients taking 5-alpha reductase inhibitors. *Canadian Urologic Association Scholarship Fund.* Hamilton R. (\$40,000.00 CAD, Jul 2013 - Jun 2015).

Nano Particle Enhanced Photoacoustic Imaging for Cancer Localization and Therapeutic Guidance. *Canadian Institutes of Health Research (CIHR).* Wilson B, Foster S, Zheng G, DaCosta R, Haider M, Marcon N, Trachtenberg J. (\$2,249,800.00 CAD, Jul 2013 - Jul 2016).

NanoMed Fab: A nanofabrication centre for personalized medicine. *Canadian Foundation of Innovation Infrastructure Grant.* Zheng G, Wilson B, Chan W, Li R-K, Jaffray D, Lu M, Valliant J, Allen C, Rottapel R, Trachtenberg J. (\$6,530,679.00 CAD, Jun 2010 - May 2014).

Novel Window of Opportunity Trial to Evaluate the Impact of Statins to Oppose Prostate Cancer (Win-STOPca). *Ontario Cancer Institute.* Penn L, Fleshner N, Hamilton R. (\$300,000.00 CAD, Jul 2013 - Jun 2015).

Novel Window of Opportunity Trial to Evaluate the Impact of Statins to Oppose Prostate Cancer (Win-STOPca). *PCC/CCSRI.* Hamilton R. (Mar 2014).

Porphyosome-enabled focal laser ablation of prostate cancer. *Prostate Cancer Foundation of Canada.* Zheng G, Wilson B, Trachtenberg J. (\$150,000.00 CAD, Jul 2012 - Sep 2015).

Prehabilitation for Prostate Cancer Surgery. *The University of Guelph-Humber Research Fund.* Santa Mina D, Clarke H, Alibhai SMH, Ritvo P, Carli F, Guglietti C, Stefanyk L, Wijeyesundera D, Trachtenberg J, Matthew AG. (\$21,239.56 CAD, Sep 2013 - Jun 2015).

Prehabilitation to Enhance Functional Outcomes After Radical Prostatectomy: A Multicentre, Pilot Randomized Controlled Trial. *Prostate Cancer Canada.* Carli F, Santa Mina D, Gillis C, Aprikian A, Tanguay S, Finelli A, Matthew AG, Ritvo P, Clarke H, Alibhai SMH, Trachtenberg J. (\$139,266.00 CAD, Jul 2012 - Jul 2013).

Quality of Care for High Risk, Non-Muscle Invasive Bladder Cancer – A Population-based Study. *University of Toronto's Dean Funds.* Kulkarni G. (\$10,000.00 CAD, Jul 2013 - Jun 2014).

Quality of care for high risk, non-muscle invasive bladder cancer - a population based study of clinical stage T1 cancers. *University of Toronto, Dean's Fund.* Jewett MA. (\$10,000.00 CAD, May 2013 - Apr 2014).

Randomized double blind trial of metformin in reducing progression among men on expectant management for low risk prostate cancer: the MAST (Metformin Active Surveillance Trial) study. *Canadian Cancer Society Research Institute.* Joshua A, Alibhai S, Finelli A, Lipscombe L, Saad F, Sweet J, Fleshner NE. (\$1,250,000.00 CAD, Feb 2013 - Jan 2015).

Sexual Health and Rehabilitation Practitioner eTraining Program (SHARP). *Prostate Cancer Canada.* Matthew A, Finelli A. (\$132,521.00 CAD, Apr 2014 - Mar 2017).

Sexual Health and eClinic (SHARE). *Prostate Cancer Canada.* Matthew A, Finelli A. (\$813,392.00 CAD, Apr 2014 - Mar 2017).

SIP-Prostate: Smarter Prostate Imaging and Interventions (SPIRIT). *Ontario Institute for Cancer Research (OICR).* Bauman G, Fenster A, Lee T-Y, Valliant J, Bartha R, Cunningham C, Scholl T, Ward A, van der Kwast T, Trachtenberg J, Chin J, Brock K, Linder U, Lemus JG, Moussa M, Sugar L, Haider M, Pond G, Romagnoli C, Wong E, Bristow R, McKenzie C. (\$2,242,459.00 CAD, Jul 2011 - Jun 2016).

The Influence of Genetic Variation on the Association Between Statin and Metformin Use and Prostate Cancer Risk: Towards Personalized Chemoprevention. *Canadian Cancer Society Research Institute (CCSRI).* Fleshner N, Hamilton R. (\$225,000.00 CAD, Aug 2013 - Jul 2016).

The influence of genetic variation on the association between statin and metformin use and prostate cancer risk: towards discovering personalized chemoprevention. *Prostate Cancer Canada.* Fleshner N, Joshua A, Winegarden N, Stambolic V, Hamilton R. (\$200,000.00 CAD, Jul 2013 - Jun 2015).

The influence of genetic variation on the association between chemopreventive medication use and prostate cancer risk. *Canadian Cancer Society Research Institute (CCSRI).* Hamilton R. (\$225,000.00 CAD, Jul 2013 - Jun 2015).

The use of Electrodes on the Sacral nerves to record changes in the Bladder Volume. *Physician Services Incorporated Foundation (PSIF).* Hassouna M, Popovic I, Zarriffa J. (\$126,000.00 CAD, Jan 2013 - Jan 2015).

Wyeth/Canadian Institutes of Health Research Clinical Research Chair in Oncology. *Canadian Institutes of Health Research (CIHR)*. Jewett MA. (\$1,100,000.00 CAD, 2008 - 2013).

Honours and Awards

Elterman DS: Best Abstract, American Urological Association Annual Meeting. 2013

Finelli A: Faculty Postgraduate Teaching Award Clinical, University of Toronto. Urology, Dept of Surgery, Faculty of Medicine. 2013

Fleshner NE: Queen's Jubilee Award, Government of Canada. July 2013

Jewett MAS: CIHR Partnership Award, CIHR. Kidney Cancer Research Network of Canada. Aug 2013.

Kulkarni G: Faculty Postgraduate Teaching Award, Surgical, University of Toronto. Urology, Dept of Surgery, Faculty of Medicine. Jul 2013 - Jun 2014 **Finelli A:** Faculty Postgraduate Teaching Award Clinical, University of Toronto. Urology, Dept of Surgery, Faculty of Medicine. 2013

Division of Vascular Surgery

Dr. K.W. Johnston	Professor
Dr. T.F. Lindsay	Professor (Division Head)
Dr. G. Oreopoulos	Assistant Professor

Dr. G. Roche-Nagle	Assistant Professor
Dr. B.B. Rubin	Professor
Dr. L. Tse	Assistant Professor
Dr. D.L. Wooster	Professor

Publications

Altoijry A, Al-Omran M, Lindsay TF, Johnston KW, Melo M, Mamdani M. Validity of vascular trauma codes at major trauma centres. *CMAJ* 56:405-408, 2013.

Appoo J, Tse LW, Pozeg ZI, Wong JK, Hutchison SJ, Gregory AJ, Herget EJ. Thoracic Aortic Frontier: Review of current applications and directions of Thoracic Endovascular Aortic Repair (TEVAR). *Canadian Journal of Cardiology*. 2014 Jan; 30(1): 52-63.

Ayling O, Martin A, Roche-Nagle G. Primary repair of a traumatic superficial temporal artery pseudoaneurysm: case report and literature review. 2014 May 1. PMID: 24420058. AID: 10.1177/1538574413519712.

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Roche-Nagle G, Bachynski K, Nathens AB, Angoulvant D, Rubin BB. Regionalization of services improves access to emergency vascular surgical care. *Vascular*. 2013; 21(2): 69-74.

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Invited Visits

Johnston KW: Basis for errors in carotid duplex exam. How wrong can they be. Veith Symposium, New York, November 19-23, 2013. Invited Faculty: Vascular Endovascular Issues techniques horizons.

Johnston KW: Winnipeg Vascular and Endovascular Symposium, Winnipeg, April 11, 2014. Invited Faculty: 1/ Vascular malformations. 2/ Industry involvement creates uncertainty in medical literature.

Lindsay TF: Invited Speaker. Canadian Cardiovascular Society, Montreal, Ontario, Canada, 2013 Oct 18. Presenter Position Statement on the management of thoracic aortic disease.

Lindsay TF: Cook Medical Inc., New York, New York, United States, 23 Nov 2013. Invited Speaker: VEITH Symposium.

Lindsay TF: American Heart Association. Dallas, Texas, United States, 2013 Nov. Presenter: Cyclosporine-A mediated impairment of coronary artery function is rescued by Tert-Butylhydroquinone via activation of the Nrf2 antioxidant pathway.

Lindsay TF: Winnipeg Vascular and Endovascular, Winnipeg, Manitoba, Canada, Apr 2014. Invited Speaker: 1/ Update in AAA screening: Are we treating fewer RAAA? 2/ How many vascular surgeons does Canada actually need: Training and manpower.

Ouzounian M: Trainee Day, Canadian Cardiovascular Congress, Montreal, Quebec, Canada, 18-19 Oct 2013. 1/ Speaker: Finding an International Fellowship. 2/ Workshop chair and speaker: Surgical Management of Thoracic Aortic Disease.

Ouzounian M: Cardiovascular Update in Surgical Procedures, Miami, Florida, United States, 8 Feb 2014.

Presenter: Type A Dissection Debate PRO: More extensive distal repair.

Ouzounian M: American Heart Association, Dallas, Texas, United States, 17 Nov 2013. Speaker: Management of Acute Aortic and Great Vessel Injuries.

Roche-Nagle G: Canadian Society for Vascular Surgery Annual Meeting, Edmonton, Alberta, Canada, Sep 2013. Presenter: 1/ Predictors of Abdominal Aortic Aneurysm Sac Enlargement after Endovascular Repair in the Greater Toronto Area. 2/ The Pedometer and Walking Study (PaWS): a Pilot Project. 3/ Using an iPad Multimedia Presentation to Improve Patient Understanding and Satisfaction with Informed Consent for Minimally Invasive Vascular Procedures: a Pilot Study. 4/ Endovascular Aortic Aneurysm Repair Surgical waste audit. 5/ Patterns of prescribing vascular risk-modifiers among Australian, Canadian, New Zealander, and South African vascular surgeons. 6/ A Population-Based Description of the Indications for Lower Limb Amputation and Associated Outcomes across Canada. 7/ Management of Acute Limb Ischemia in the Pediatric Population. 8/ Infected Grafts.

Research and Investigations

Microsomal prostaglandin E2 synthase-1 in Ly6Clo monocytes regulates left ventricular remodeling after myocardial infarction. *Canadian Institutes of Health Research*. Robbins C, Rubin BB. (\$471,875.00 CAD, Mar 2013 - Feb 2017).

Nicholas Bowers for project - Using a multimedia presentation to improve patient understanding and satisfaction with informed consent for minimally invasive vascular procedures: a prospective randomized trial. *Canadian Vascular Surgery Society (CSVS)*. Roche-Nagle G. (\$2,000.00 CAD, 2013 - 2013).

Oliver Alying for project “Peripheral nerve blocks after lower limb amputations”. *Canadian Vascular Surgery Society (CSVS)*. Roche-Nagle G. (\$2,000.00 CAD, 2013 - 2013).

Project: The therapeutic and prognostic value of perfusion angiography with indocyanine green fluorescence in patients with critical ischemia. *Canadian Vascular Surgery Society (CSVS)*. Roche-Nagle G. (\$5,000.00 CAD, 2013 - 2013).

The Role of PLA2 Pathways in Influenza Immunopathogenesis. *Canadian Institutes of Health Research (CIHR)*. Kelvin D, Rubin BB. (\$700,000.00 CAD, Jul 2011 - Jun 2015).



Women's College Hospital

Dr. John Semple, *Surgeon in Chief*

Heads of Divisions:

Plastic Surgery	Dr. John Semple
Orthopedic Surgery	Dr. John Theodoropoulos

Summary - Institutional

Women's College Hospital is a designated facility for academic ambulatory surgery at the University of Toronto and the Toronto Central LHIN. The Surgical Programs are dynamic and innovative and our mandate is to be a leader in academic ambulatory surgery. 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 and innovative models of systems solutions. These innovations include the X OR-WCH to be the incubator for developing processes that move in-patient surgeries to an Ambulatory setting. Women's College continues to develop a hub in a city-wide focus in Orthopedic Sports Medicine and building surgical strength in our core programs of Urology, Orthopedics, Plastic Surgery and General Surgery. Our goal is to become a leader in ambulatory surgery as we continue to work on our strengths: innovation and collaboration

Recruitment

Dr. Tim Dwyer has recently joined WCH in the Division of Orthopedic Surgery. He is enrolled in a PhD Research Program in developing the competency in surgery study project at The Wilson Centre, University of Toronto supervised by the Director of the Wilson Centre Dr. Charlotte Ringsted.

Departures

None

Division Report

Dr. Karen Devon completed the Education Scholars Program at the Center for Faculty Development. She was the recent recipient of The Associated Medical Services Phoenix Fellowship for a proposed Project: Developing Ethics morbidity and mortality rounds. The Thyroid/Endocrinology program continues to grow and develop through the commitment and partnerships with UHN. Education for future practitioners from residents/fellows continues to flourish through journal club and reflective journaling with residents. The Division of



Orthopedic Surgery continues to provide leadership in teaching and instruction using simulation techniques in Sports Orthopedics at Women's College Hospital and activities of the University of Toronto Orthopedic Sports Medicine. Enhancement of future health care practitioners through the U of T Orthopedic Sports Medicine Program (UTOSM) at WCH has integrated a teaching curriculum and research program for fellows and residents. This includes 3 month rotations at a junior and senior level, assessment at the end of the rotation and intense teaching rounds that include a formal bio skills program in the WCH simulation lab. An active teaching program specifically for fellows has been introduced with both evidence based rounds and case presentations with a CME opportunity. In the Division of Plastic Surgery Dr. Mitch Brown chaired the 13th Annual Toronto Breast Surgery Symposium held this past April. Dr. Semple was featured in the Dean's Report for Innovation using Smartphone Technology for the remote monitoring of post-op patients at home. In addition Dr. Semple received the Cause Leadership Award from the Canadian Breast Cancer Foundation in recognition for his Leadership in Breast Reconstruction in Breast Cancer Patients and for his clinical accomplishments and research in this area. Women's College Hospital continues to host international candidates under the Allergan Breast Reconstruction clinical fellowship in the Division of Plastic Surgery.

Education – Institutional

We continue to attract outstanding graduate and post graduate trainees who have been presented with a number of awards and prizes. The Women's College Hospital surgical staff have been very active in all levels of education and have been recognized for their achievements. Dr. Tulin Cil has won two education awards:

1. Education Research Award, September 2013 Canadian Association of General Surgeons, Ottawa, Ontario Canada.
2. Women's College Hospital Education Innovation Award-, November 2013

Dr. Karen Devon and Dr. Tulin Cil have developed a new ambulatory general surgery rotation with introduction of

weekly guided reflective practice. A Simulation Education Centre has been established in a multidisciplinary content, with a primary contribution by Orthopedic Surgery.

The eight core surgeons at Women's College Hospital have 18 active research grants (including CIHR) and 64 publications through 2013-2014. As in previous years they are engaged in a variety of clinical, educational and basic research activities. Several of them supervise residents and fellows in projects and graduate degree programs.

Research – Institutional

Division of General Surgery

Dr. T. Cil	Assistant Professor
Dr. K.M. Devon	Assistant Professor

Publications

Abdallah F, Morgan PJ, Cil T, McNaught A, Escallon J, Semple J, Wu W, Chan V. Paravertebral Blocks for Ambulatory Breast Tumor Resection: Effects of an Inhalational Gas- and Opioid-free Anesthetic on the Quality of Recovery. A Randomized Controlled Trial. *Anesthesiology*. 2014 Mar; 120(3): 703-13.

Cil T, Wright F, Holloway C. Surgical Resident Experience in Breast Disease: A National Study. *World Journal of Surgery*. 2014 Jun; 38(6): 1416-1422.

Cordeiro E, Jackson T, Elnahas A, Cil T. Is Breast Surgery for Metastatic Breast Cancer Safe? An analysis of the NSQIP database. *Annals of Surgical Oncology*. 2014 Apr 4. [Epub ahead of print]

Devon KM. Clinical Review: Patient expectations about the effect of chemo. *Evidence Based Reviews in Surgery*. 2014 Jan.

Devon KM. Beyond clogs and white coats. In: Cadbury VC (eds), *A taste for writing: Composition for Culinarisians*. 2014 Jan; 235-237.

Devon KM. Introduction the article entitled "Is radioactive iodine overused in thyroid cancer treatment?" *ASCO Connection*. 2013 Sep.

Devon KM, Ganai S. Online Medical Professionalism. *Annals of Internal Medicine*. 2013 Jul 16.

Devon, KM Lerner-Ellis, JP Ganai, S Angelos, P. Ethics and Genomic Medicine, How to Navigate Decisions in Surgical Oncology. Milas, M (eds), *Journal of Surgical Oncology*. 2014.

Kaplan EL, Devon KM, Grogan RH, Angelos P. Pain, suffocation, sanguination, suppuration, and hysteria: a short history of problems associated with early thyroid surgery with particular reference to the recurrent laryngeal nerve. In: Zeiger MA, Shen WT, Felger, EA (eds), *The Supreme Triumph of the Surgeon's Art. A Narrative History of Endocrine Surgery*. 2013: 1-18. United States: University of California Medical Humanities Press.

Oh S, Lynch N, McCarthy N, Cil T, Lehane E, Reardon M, Redmond H, Corrigan M. An Evaluation of the Accuracy of Peer to Peer Surgical Teaching and the Role of the Peer Review Process. *Pharmacy*. 2014 Jun 5; 2(2): 195-201.

O'Leary P, Cil T, Lehane E, Corrigan M. Chapter 4: E-learning in the 21st Century – The 2.0 Generation. In: *E-Learning: New Technology, Applications and Future Trends*. 2013 Jul 1. United States: Nova Science Publishers, Inc.

Osman F, Saleh F, Corrigan MA, Jackson T, Cil T. Increased Postoperative Complications in Bilateral Mastectomy Patients Compared to Unilateral Mastectomy: An Analysis of NSQIP Data. *Annals of Surgical Oncology*. 2013 Oct; 20(10): 3212-7.

Olszewski M, Luu S, Moulton CA, Cil T. What surgeons can learn from elite athletes: A review of mental practice and visual imagery. *Journal of Surgical Education*. 2014 Mar; 71(2): 262-269.

Suri M, McKneally M, Devon K. Tragic Knowledge: Truth Telling and the Maintenance of Hope in Surgery. *World Journal of Surgery*. 2014 Apr 22; Epub ahead of print.

Invited Visits

Devon KM: World Thyroid Congress, Toronto, Ontario, Canada, 10 Jul 2013. Invited Speaker: Thyroid and Parathyroid Ultrasound.

Devon KM: Canadian Surgery Forum, Ottawa, Ontario, Canada, 20 Sep 2013. Invited Lecturer:

Thyroidectomy using new technology Video presentation.

Devon KM: MacLean Center for Clinical Medical Ethics, Chicago, Illinois, United States, Nov 2013. Invited Lecturer: Photo sharing via social media on medical missions.

Devon KM: Faculty of Medicine, University of Chicago, Chicago, Illinois, United States, 4 Mar 2014. Visiting Professor: Ethics of Health Care and Social Media lecture.

Devon KM: American Association of Thoracic Surgery, Toronto, Ontario, Canada, 26 Apr 2014. 1/ Presenter: Panel on Informed Consent. 2/ Invited Speaker: Ethics of Social Media in Health Care.

Devon KM: Thoracic Cancer Conference, Niagara on the Lake, Ontario, Canada, 27 Apr 2014. Invited Speaker: How does ethics inform social media for health care professionals?

Research and Investigations

ISICA - International Study of Incident Cancer. *LA-SER Centre for Risk Research Inc.* Cil T, Rossignol M, Leong W, George R. (\$93,000.00 CAD, Jul 2011 - Jul 2013).

Rapid Genetic Testing for BRCA1 and BRCA2 in Selected Newly Diagnosed Breast Cancer Patients. *Canadian Institutes of Health Research (CIHR).* Cil T, Metcalfe K, Narod S, Eisen A, McCready DR, Akbari M, Chun K, McGillis Hall L, Wright F, Kiss A. (\$1,221,467.00 CAD, Jul 2013 - Jun 2018).

Smartphones and Patient Care: Exploring the use of text-based messaging for patient related communication. *University of Toronto, CREMS.* Cil T, Goldfarb J, Kayssi A, Devon K, Rossos P. (\$2,750.00 CAD, May 2013 - Sep 2013).

The Effect of Type of Breast Reconstruction on Long-Term Psychosocial Functioning in Women with Bilateral Prophylactic Mastectomy. *University of Toronto, CREMS.* Semple J, Li L, Metcalfe K, Cil T. (\$2,750.00 CAD, May 2013 - Sep 2013).

The Impact of Decision For or Against Immediate Breast Reconstruction on Quality of Life in Women with Breast Cancer. *Canadian Institutes of Health Research (CIHR), Cancer Research.* Metcalfe K, Hofer S, Angus J, Cil T, McCready D, Semple J, Zhong T. (\$453,272.00 CAD, Jul 2013 - Jul 2017).

Visual Imagery and Mental Rehearsal in Surgery. *Physicians Services Incorporated Foundation (The) (PSI).* Cil T, Moulton CA, Munaghan ML, Roberts N. (\$13,500.00 CAD, Aug 2012 - Aug 2013).

Honours Received

Cil T: Education Research Award, Canadian Association of General Surgeons, Ottawa, Ontario, Canada. Sep 2013.

Division of Orthopaedics

Dr. J. Theodoropoulos	Assistant Professor (Division Head)
Dr. L. Murnaghan	Assistant Professor
Dr. J. Chahal	Assistant Professor

Publications

Abouali JA, Hatzantoni K, Holtby R, Veillette C, Theodoropoulos J. Revision arthroscopic Bankart repair. *Arthroscopy Journal.* 2013 Sep 29; 29(9): 1572-8.

Carey JL, Wall EJ, Shea KG, Grimm NL, Anderson AF, Edmonds EW, Chambers HG, Heyworth BE, Kocher MS, Lyon RM, Murnaghan ML, Nissen CW, Polousky J, Weiss J, Wright RW. Reliability of the ROCK Osteochondritis Dissecans Knee Arthroscopy Classification System - Multi-center Validation Study. *Orthopaedic Journal of Sports Medicine.* 2013 Sep;1(4). Volume 1, Issue 4.

De Maio P, White L, Bleakney R, Menezes RJ, Theodoropoulos JS. Diagnostic Accuracy of an iPhone DICOM Viewer for the Interpretation of Magnetic Resonance Imaging of the Knee. *Clinical Journal of Sports Medicine.* 2013 Jul 1; 24(4): 308-314.

Dold AP, Murnaghan ML, Xing J, Abdalla FW, Brull R, Whelan DB. Pre-operative Femoral Nerve Block in Hip Arthroscopy: A Retrospective Review of 108 Consecutive Cases. *American Journal of Sports Medicine.* 2014 Jan;42(1):144-149.

- Dwyer T, Petrera M, Bleakney R, Theodoropoulos JS.** Shoulder Instability in Ice Hockey Players: Incidence, Mechanism and MRI findings. *Clinics in Sports Medicine*. 2013 Oct; 32(4): 803-813.
- Dwyer T, Theodoropoulos JS, Herold J, Henry P, Wasserstein D, Murnaghan ML, Wade V, Hodges B, Semple J, Ogilvie-Harris D.** Assessing competence of orthopaedic residents: the reliability and validity of an objective structured clinical examination after a sports medicine rotation. *Journal of Bone and Joint Surgery - American*. 2013 Nov 20;95(22):e177.
- Dwyer T, Whelan DB, Khoshbin A, Wasserstein D, Dold A, Chahal J, Nauth A, Murnaghan ML, Ogilvie-Harris DJ, Theodoropoulos JS.** The sizing of hamstring grafts for anterior cruciate reconstruction: intra- and inter-observer reliability. *Knee Surgery Sports Traumatology and Arthroscopy*. 2014 Mar 23; Epub ahead of print.
- Dwyer T, Willett TL, Dold AP, Petrera M, Wasserstein D, Whelan DB, Theodoropoulos JS.** Maximum load to failure and tensile displacement of an all-suture glenoid anchor compared with a screw-in glenoid anchor. *Knee Surgery Sports Traumatology and Arthroscopy*. 2013 Nov 8; Epub ahead of print.
- Frank JM, Chahal J, Cole BJ, Verma NN, Romeo AA.** The role of acromioplasty for rotator cuff problems. *Advances in Orthopaedics*. 2014 Apr.
- Frank RM, Chahal J, Van Thiel GS, Cole BJ.** Chapter: Complex problems. In: *Knee Articular Cartilage in Surgical Techniques of the Shoulder, Elbow, and Knee in Sports Medicine*. 2013.
- Frank RM, Chahal J, Verma NN.** Chapter: Partial Thickness Rotator Cuff Tears. In: Giuseppe Milano, editor(s). *Shoulder Arthroscopy: Principles and Practice*. Springer; 2013.
- Gross CE, Haughom B, Chahal J, Holmes GH.** Treatment of talar avascular necrosis – A systematic review. *Foot and Ankle International*. 2014 Mar 30.
- Harris JD, Cyentanovich G, Erickson B, Abrahams G, Chahal J, Gupta A, McCoormick F, Bach BR.** Current status of evidence-based sports medicine. *Arthroscopy*. 2014 Mar 30;3:362-371.
- Heyworth B, Edmonds E, Murnaghan ML, Kocher M.** Drilling Techniques for Osteochondritis Dissecans. *Clinics in Sports Medicine - Osteochondritis Dissecans: Diagnosis and Treatment Options for Athletes*. 2014 Apr;33(2):305-312.
- Khoshbin A, Leroux T, Wasserstein D, Marks P, Theodoropoulos J, Ogilvie-Harris DJ, Gandhi R, Takhar K, Lum G, Chahal J.** The Efficacy of Platelet-Rich Plasma in the Treatment of Symptomatic Knee Osteoarthritis: A Systematic Review with Quantitative Synthesis. *Arthroscopy*. 2013 Dec;29(12):2037-48.
- Leiter JR, Levy BA, Stannard JP, Fanelli GC, Whelan DB, Marx RG, Stuart MJ, Boyd JL and Macdonald PB.** Accuracy and reliability of determining the isometric point of the knee for multiligament knee reconstruction. *Knee Surg Sports Traumatol Arthrosc*. 2014 Sep;22(9):2187-93.
- Leroux T, Bhatti A, Khoshbin A, Wasserstein D, Henry P, Marks P, Takhar K, Veillette C, Theodoropoulos J and Chahal J.** Combined arthroscopic Bankart repair and remplissage for recurrent shoulder instability. *Arthroscopy*. 2013 Oct;29(10):1693-701.
- Leroux T, Ogilvie-Harris D, Dwyer T, Chahal J, Gandhi R, Mahomed N and Wasserstein D.** The risk of knee arthroplasty following cruciate ligament reconstruction: a population-based matched cohort study. *J Bone Joint Surg Am*. 2014 Jan 1;96(1):2-10.
- Leroux T, Wasserstein D, Veillette C, Khoshbin A, Henry P, Chahal J, Austin P, Mahomed N and Ogilvie-Harris D.** Epidemiology of Primary Anterior Shoulder Dislocation Requiring Closed Reduction in Ontario, Canada. *Am J Sports Med*. 2014 Feb;42(2):442-50.
- Moktar J, CA Popkin, A Howard, ML Murnaghan.** Development of a Cast Application Simulator and Evaluation of Objective Measures of Performance. *Journal of Bone and Joint Surgery - American*. *J Bone Joint Surg Am*. 2014 May 7;96(9):e76.
- Mollon B, Kandel R, Chahal J and Theodoropoulos J.** The clinical status of cartilage tissue regeneration in humans. *Osteoarthritis Cartilage*. 2013 Dec;21(12):1824-33.
- Petrera M, Dwyer T, Theodoropoulos JS, Ogilvie-Harris DJ.** Short- to Medium-term Outcomes After a Modified Broström Repair for Lateral Ankle Instability With Immediate Post-Operative Weightbearing. *American Journal of Sports Medicine*. 2014 Apr 25; 42(7): 1542-1548.
- Petrera M, Kandel R, Theodoropoulos JS.** Platelet Rich-Plasma Improves The Formation of Tissue Engineered Cartilage. *Arthroscopy Journal*. 2013 Oct 29; 29(10): 1824-33.
- Popkin CA, Gundry CR, Larson CM, Murnaghan ML.** Remembering our Roots: Eponyms in Sports Medicine. *American Journal of Sports Medicine*. 2013 Jul;41(7):1703-1711.

Ristevski B, Nauth A, Williams DS, Hall JA, Whelan DB, Bhandari M and Schemitsch EH. Systematic review of the treatment of periprosthetic distal femur fractures. *J Orthop Trauma*. 2014 May;28(5):307-12.

Tjong VK, Murnaghan ML, Nyof-Young JM, Ogilvie-Harris DJ. A qualitative investigation of the decision to return to sport after anterior cruciate ligament reconstruction: to play or not to play. *American Journal of Sports Medicine*. 2014 Feb;42(2):336-342.

Invited Visits

Chahal J: ConMed/Linvatec Shoulder Arthroscopy Course, Pan Am Clinic, University of Manitoba. Winnipeg, Manitoba, Canada. (Continuing Education) 2013. Instructor: Shoulder Instability- State of the Art.

Chahal J: 2013 Annual Meeting of the Canadian Orthopaedic Association. Winnipeg, Manitoba, Canada. Sports Medicine Symposium. Presenter: The role of surgery for acute and chronic hamstring injuries.

Chahal J: 9th Biennial International Society of Arthroscopy, Knee Surgery, and Orthopaedic Sports Medicine, Toronto, Ontario, Canada, 2013. Instructional Course Lecturer: Shoulder: Arthroplasty Options- Total Shoulder Arthroplasty, the Only Way to Go.

Chahal J: ConMed/Linvatec Shoulder Arthroscopy Course, Pan Am Clinic, University of Manitoba, Winnipeg, Manitoba, Canada, 2013. Speaker: Shoulder Instability- State of the Art.

Chahal J: 2013 Annual Meeting of the Canadian Orthopaedic Association, Winnipeg, Manitoba, Canada, 2013. Speaker: The role of surgery for acute and chronic hamstring injuries.

Theodoropoulos J: McGill University, Montreal, Quebec, Canada, 15 Nov 2013. Keynote Speaker: Rotator Cuff Repair.

Theodoropoulos J: Combined Meeting of the NHL Team Physicians Society and Professional Hockey Athletic Trainers Society, Orlando, Florida, United States, 23 Jun 2014. Invited Speaker: Foot and Ankle Cases in Professional Hockey Presented Unique and Difficult Cases of Foot and Ankle Injuries in the NHL.

Research and Investigations

Coaching Surgeons: The Pursuit of Surgical Excellence. *Canadian Medical Protective Association (CMPA)*. Murnaghan L. (\$24,400 CAD)

International Competency Based Training for the Application of a Pavlik Harness. *Pediatric Orthopaedic Society of North America*. 2014 POSNA Research Start Up Grant. Kelley S, Murnaghan ML. (\$9,700 USD)

Mental Imagery in Surgery - A Qualitative Study. PSI. Cil T, Murnaghan ML, Moulton CA. (\$13,500 CAD)

Simulation Team Training and Critical Event Checklist use for optimizing the management of critical preoperative events in an ambulatory surgical facility. *CMPA*. Morgan P, Tregunno D, Brydges R, Carnahan H, Kurrek M, Murnaghan ML, Semple J, Bell S, Groff N, Forde D. (\$49,663.46 CAD).

Retro-Articular vs. Trans-Articular Drilling for Stable Juvenile Osteochondritis Dissecans (OCD) of the Knee. *American Orthopaedic Society for Sports Medicine (AOSSM)*. Heyworth B, Murnaghan ML, ROCK Group. (\$40,000 USD)

The Effect of Knee Flexion Angle for Graft Fixation During Single-Bundle Anterior Cruciate Ligament Reconstruction – A Multicentre, Patient and Assessor Blinded, Stratified, Two-arm Parallel Group Superiority Trial. *Arthroscopy Association of North America Research Grant*. Whelan D, Dwyer T, Ogilvie-Harris D, Marks P, Theodoropoulos J. (\$20,500 CAD Mar 2014)

Division of Plastic & Reconstructive Surgery

Dr. M.H. Brown	Associate Professor
Dr. J.L. Semple	Professor (Division Head)

Publications

Abdallah FW, Morgan PJ, Cil T, McNaught A, Escallon JM, Semple JL, Wu W, Chan VW. Ultrasound-guided Multilevel Paravertebral Blocks and Total Intravenous Anesthesia Improve the Quality of recovery after Ambulatory Breast Tumor Resection. *Anesthesiology*. 2014 Mar; 120(3): 703-13.

Baker A, Semple JL, Moore S, Johnston M. Lymphatic function is impaired following irradiation of a single lymph node. *Lymphatic Research Biology*. 2014 Jun; 12(2): 76-88.

Baltzer HL, Alonzo-Proulx O, Mainprize JG, Yaffe MJ, Metcalft KA, Narod SA, Warner E, Semple JL. MRI volumetric analysis of breast fibroglandular tissue to assess risk of the spared nipple in BRCA1 and BRCA2 mutation carriers. *Annals of Surgical Oncology*. 2014 May; 21(5): 1583-8.

Brown MH. Primary breast augmentation clinical trials outcomes stratified by surgical incision, anatomical placement and implant device type. *Journal of Plastic, Reconstructive and Aesthetic Surgery*. 2013 Sep 9; 66(9): 1165-1172.

Brown MH, Morgan P, Semple J. Process of care in autogenous breast reconstruction with pedicled TRAM flaps: Expediting postoperative discharge in an ambulatory setting. *Journal of Plastic and Reconstructive Surgery*. 2013 Sep; 132: 339e-344e.

Cypel T, Brown MH. 12 year delay of a nipple sharing graft: A case report. *Canadian Journal of Plastic Surgery*. 2013 Sep; 21(3): 190-191.

Davidge KM, Brown M, Morgan P, Semple JL. Processes of Care in Autogenous Breast Reconstruction with Pedicled TRAM Flaps: Expediting Postoperative Discharge in an Ambulatory Setting. *Plastic Reconstructive Surgery*. 2013 Sep; 132(3): 339e-44e.

Metcalfe K, Zhong T, Narod S, Quan ML, Holloway C, Hofer S, Bagher S, Semple J. A Prospective Study of Mastectomy Patients with and Without Delayed Breast Reconstruction: Long-Term Psychosocial Functioning in the Breast Cancer Survivorship Period. *Annals of Surgical Oncology*. 2014.

Zhong T, Temple-Oberle C, Hofer S, Beber B, Semple J, Brown M, Macadam S, Lennox P, Panzarella T, McCarthy C, Baxter N. The Multi Centre Canadian Acellular Dermal Matrix Trial (MCCAT): study protocol for a randomized controlled trial in implant-based breast reconstruction. *Trials*. 2013 Nov; 14(1): 356.

Invited Visits

Brown MH: American Society of Plastic Surgeons, San Diego, California, United States, 12-13 Oct 2013. 1/ Panel Moderator: Breast augmentation - Master's panel. 2/ Invited Lecturer: Identifying the beautiful breast: The golden ratio. 3/ Invited Lecturer: Preventing and managing implant malposition. 4/ Panel Moderator: Inframammary fold in breast augmentation.

Brown MH: Seventh European Conference on Reconstructive Surgery of the Breast, Milan, Italy, 5-7 Dec 2013. Invited Speaker: 1/ Options in nipple areola reconstruction. 2/ The use of shaped implants in breast reconstruction. 3/ Augmenting the opposite breast in breast reconstruction. 4/ Breast Reconstruction Awareness Day. 5/ Selection of single stage versus two stage implant based breast reconstruction. 6/

Brown MH: Aesthetic Symposium at the American Association of Plastic Surgeons 93rd Annual Meeting, Miami, Florida, United States, 5 Apr 2014. Keynote Speaker: Shaping the breast with anatomic implants.

Brown MH: American Society of Aesthetic Plastic Surgery, San Francisco, California, United States, 27 Apr 2014. Invited Lecturer: Instructional Course - Director to implant breast reconstruction.

Brown MH: Allergan Academy Canada, Santa Barbara, California, United States, 3 May 2014. Invited Lecturer: Incorporating an injection nurse into your practice.

Brown MH: Rome Breast Surgery Symposium, Rome, Italy, 4-6 Jun 2014. Invited Lecturer: 1/ Defects and restoring the IMF. 2/ Debate: Breast augmentation. The accesses: periareolar fold vs. axilla. 3/ ADM + implant based reconstruction. 4/ ADM and implant reconstruction with RT.

Semple JL: International Institute for Critical Studies in Improvisation (IICSI/ICASP) Meeting, Guelph, Ontario, 2-3 Sep 2013.

Semple JL: International Society of Aesthetic Plastic Surgery (ISAPS), Tôkyô, Japan, 19 Oct 2013. Invited Speaker: Disruption of Lymphatic Function following Lymph Node Excision and Radiation.

Semple JL: Alberta Provincial Breast Tumour Team Meeting, Edmonton, Alberta, Canada, 7-8 Mar 2014. Speaker: Enhanced Recovery with Smartphone Technology.

Semple JL: University of Ottawa Heart Institute, Ottawa, Ontario, Canada, 2 Apr 2014. Lecturer: Remote Monitoring of Post-Operative Patients at Home Using Smart Phone Technology.

Semple JL: Toronto, Ontario, Canada, 24 Apr 2014. Guest Speaker: interviewed by Matt Galloway about his experiences as a physician for a team of climbers on Mount Everest and the dangers of climbing.

Research and Investigations

Impact of Radiation Therapy on the Lymphatic Circulatory System: Relevance to Breast Cancer Related Lymphedema. *Canadian Breast Cancer Foundation, Ontario Regional Chapter*. Semple JL, Johnston M. (\$430,631.00, 2011 - 2014).

The use of human acellular dermal matrix in one-stage implant breast reconstruction: A multicenter randomized, controlled trial. *Canadian Breast Cancer Foundation - Ontario Region.* Zhong T, Baxter N, Hofer S, Brown M, Beber B, Semple J. (\$368,449.00, 2011 - 2014).

Replacing ambulatory clinic follow-up with remote home monitoring using smartphone in breast reconstruction patients: Is it cost-effective? (Principal Investigator). *Canadian Institute of Health Research.* Semple JL, Bhatia RS, Coyte P, Armstrong K. (\$38,042.00 CAD, Mar 2014 - Mar 2015).

Honours Received

Brown MH: Going Above and Beyond. Plastic Surgery, Dept of Surgery, Faculty of Medicine, University of Toronto. 2013.

Semple JL: The Cause Leadership Award, Canadian Breast Cancer Foundation, Ontario, Canada. Apr 2014.

Division of Urology

| Dr. E.D. Grober Assistant Professor

Publications

Grober ED, Karpman E, Fanipour M. Vasectomy Reversal Outcomes Among Patients with Vasal Obstructive Intervals of Greater than 10 Years. *Urology.* 2014 Feb; 83(2):320-3.

Grober ED, Krakowsky Y. Hypo active Sexual Desire Disorder in Men. In: *Sexual Health in the Couple: Management of Sexual Dysfunction in Men and Women.* 2014 Apr.

Karkowsky Y, Grober ED. Testosterone Deficiency – Establishing a Biochemical Diagnosis. *The Journal of the International Federation of Clinical Chemistry and Laboratory Medicine.* 2014 Feb.

Perlis N, Lo K, Grober ED, Spencer L, Jarvi K. Coital frequency and infertility: Which male factors predict less frequent coitus among infertile couples? *Fertility & Sterility.* 2013 Aug; 100 (2):511-5.

Samplski M, Lo K, Grober ED, Jarvi K. Finasteride use in the male infertility population: effects on semen and hormone parameters. *Fertility & Sterility.* 2013 Dec; 100(6):1542-6.

Samplski MK, Lo K, Grober ED, Millar A, Dimitromanoakis A, Jarvi KA. Phenotypic differences in mosaic Klinefelter patients as compared with non-mosaic Klinefelter patients. *Fertility & Sterility.* 2014 Feb; Epub.

Samplski M, Loai Y, Wong K, Lo K, Grober ED, Jarvi K. Testosterone Use in the Male Infertility Population: Prescribing Patterns and Effects on Semen and Hormone Parameters. *Fertility & Sterility.* 2014 Jan; 101(1):64-9.

Samplaski MK, Yu C, Kattan MW, Lo KC, Grober ED, Lau S. Nomograms for Predicting Changes in Semen Parameters in Infertile Men After Varicocele Repair. *Fertility & Sterility.* 2014 Feb.

Satkunasivam R, Ordon M, Hu B, Mullen B, Lo K, Grober ED, Jarvi K. Hormone abnormalities are not related to the Erectile Dysfunction and Decreased Libido Found in Many Men with Infertility. *Fertility & Sterility.* 2014 Feb.

Yuen RK, Merkoulouvitsh A, Macdonald JR, Vlasschaert M, Lo K, Grober ED, Marshall CR, Jarvi KA, Kolomietz E, Scherer SW. Development of a high-resolution Y-chromosome microarray for improved male infertility diagnosis. *Fertility & Sterility.* 2014 Jan; Epub.

Invited Visits

Grober ED: Talk 1010 Radio, Canada, 2013. Vasectomy Reversals.

Grober ED: Men's Health Summit - Canadian Urological Association, Toronto, Ontario, Canada, 18 Jan 2014. Invited Speaker: Testosterone Deficiency - Myths and Realities.

Grober ED: Canadian Urological Association - GP Lecture Series, Toronto, Ontario, Canada, 21 Mar 2014. Invited Speaker: Update - Erectile Dysfunction, Low Testosterone.

Grober ED: American Society of Andrology 2014, Atlanta, Georgia, United States, Apr 2014. Facilitator: Controversies in Testosterone Therapy and Prostate Cancer Symposium Moderator.

Grober ED: Society for the Study of Male Reproduction - AUA Meeting 2014, Orlando, Florida, United States, May 2014. Invited Speaker: If You Do Not Perform Vasoepididymostomy, Should You Perform

Vasectomy Reversal?

Grober ED: American Urological Association Meeting 2014, Orlando, Florida, United States, May 2014. Presenter: Single Incision Vasectomy Reversal.

Grober ED: Canadian Urological Association Meeting 2014, St. John's, Newfoundland and Labrador, Canada, Jun 2014. Chair: Evaluation and Management of Chronic Scrotal Pain.

Grober ED: Canadian Society of Clinical Chemists, Charlottetown, Prince Edward Island, Canada, Jun 2014. Invited Speaker: Testosterone Deficiency and Replacement - Myths and Realities.

Research and Investigations

Canadian Urology Resident Laparoscopic Skills Assessments. *Women's College Hospital AFP.* Grober ED, Lee J, Pace K, Shuler T, Andonian S. (\$17,500.00 CAD, Mar 2013 - Mar 2014).

A Non-Invasive Assay that Enables Non-Invasive Differentiation between Obstructive and Non-Obstructive Azoospermia. *MaRS Innovation.* Grober ED, Jarvi KA, Diamandis E, Lo K. (\$100,000.00 CAD, Jan 2013 - Dec 2013).

Division of Anatomy



Dr. A. Agur	Professor
Dr. B.A. Ballyk	Lecturer
Dr. P.D. Koeberle	Assistant Professor
Dr. J. Laprade	Lecturer
Dr. C. Morshead	Professor (Division Head)
Dr. H.S. Sun	Assistant Professor
Dr. I. Taylor	Professor
Dr. M. Wiley	Professor

Publications

Alibrahim A, Zhao L, Bae CYJ, Barszcyk A, Sun CLF, Wang GL, Sun HS. Neuroprotective effects of volume-regulated anion channel blocker DCPiB on neonatal hypoxic-ischemic injury. *Acta Pharmacologica Sinica (Nature – NPG)*; 2013; 34: 113-118.

Bae CYJ, Sun HS. Current Understanding of TRPM7 Pharmacology and Drug Development for Stroke. *Acta Pharmacologica Sinica (Nature – NPG)*; 2013; 34: 10-16.

Barszcyk A, Sun HS, Quan Y, Zheng W, Charlton MP, Feng ZP. Differential roles of the mevalonate pathway in development and survival of mouse Purkinje cells in culture. *Molecular Neurobiology*; 2014 Jun.

D’Onofrio PM, Koeberle PD. What can we learn about stroke from retinal ischemia models? *Acta Pharmacol Sin*; 2013; 34: 91-103.

Giangregorio LM, MacIntyre NJ, Heinonen A, Cheung AM, Wark JD, Shipp K, McGill S, Ashe MC, Laprade J, Jain R, Keller H, Papaioannou A. Too Fit To Fracture: A consensus on future research priorities in osteoporosis and exercise. *Osteoporos Int*; 2014 May; 25(5): 1465-72.

Giangregorio LM, Papaioannou A, Macintyre NJ, Ashe MC, Heinonen A, Shipp K, Wark J, McGill S, Keller H, Jain R, Laprade J, Cheung AM. Too Fit To Fracture: exercise recommendations for individuals with osteoporosis or osteoporotic vertebral fracture. *Osteoporos Int*; 2014 Mar; 25(3): 821-35.

lv S, Turlova E, Zhao S, Kang H, Han M, Sun HS. Prognostic and clinicopathological significance of survivin expression in bladder cancer patients: a meta-analysis. *Tumour Biol*; 2014 Feb; 35(2): 1565-74.

Siddiqui AM, Sabljic TF, Koeberle PD, Ball AK. Downregulation of BM88 after optic nerve injury. *Investigative Ophthalmology and Visual Science*; 2014; 55(3): 1919-29.

Sun HS, Feng ZP. Neuroprotective Role of ATP Sensitive Potassium Channel in Cerebral Ischemia. *Acta Pharmacologica Sinica (Nature – NPG)*; 2013; 34: 24-32.

Sun HS. Research Highlight in Stroke. *Journal of Sun Yat-Sen University (Medical Sciences)*; 2014 Jan; 35(1): 8-11.

Invited Visits

Laprade J: Ottawa, Ontario, Canada, 19 October 2013. Lead instructor: Bone Fit™ Combined Training Workshop Weekend workshop Instruction.

Laprade J: Barrie, Ontario, Canada, 1 February 2014. Lead instructor: Bone Fit™ Combined Training Workshop Weekend workshop Instruction.

Laprade J: Kitchener-Waterloo, Ontario, Canada, 22 March 2014. Lead instructor: Bone Fit™ Combined Training Workshop Weekend workshop Instruction.

Laprade J: Hamilton, Ontario, Canada, 3 May 2014. Lead instructor: Bone Fit™ Combined Training Workshop Weekend workshop Instruction.

Laprade J: London, Ontario, Canada, 3 May 2014. Lead instructor: Bone Fit™ -VON Training Workshop Weekend workshop Instruction: linked via OTN to Barrie & Belleville.

Laprade J: Canadian Physiotherapy Association National Congress, Edmonton, Alberta, Canada, June 2014. Presenter: Too Fit to Fracture: A follow-up session. Eye-opener session.

Sun HS: University of Sao Paulo, Sao Paulo, Brazil, July 2013. Presenter: Animal Models of Stroke and Hypoxic-Ischemic Injury.

Sun HS: Anhui Medical University, China, 1 November 2013. Invited Speaker: Models for Studying Stroke and Hypoxic-Ischemic Brain Injury.

Sun HS: Henan Chinese Medicine University, China, 4 November 2013. Invited Speaker: Animal models of Stroke and Hypoxic-Ischemic Brain Injury.

Sun HS: ZhongShan School of Medicine, Sun Yat-Sen University, China, 8 November 2013. Invited Speaker: Studying the Mechanism of Stroke and Hypoxic-Ischemic Brain Injury.

Sun HS: Canadian Society of Pharmacology and Therapeutics, Canada, 13 June 2014. Invited Speaker: Neuroprotective role of ATP-sensitive potassium channels in cerebral ischemia 2014 CSPT Scientific Meeting Program In conjunction with the Canadian Student Health Research Forum (CSRHF) Invited symposium speaker in Symposium 1: Spectrum of neurological disturbances in diabetes.

Research and Investigations

CFI Equipment Grant. *Canada Foundation for Innovation (CFI)*. Sun HS. (\$300,000 2011 - 2016).

CIHR China-Canada Joint Health Research Initiative. *Canadian Institutes of Health Research*. Sun HS. (\$225,000 2014 - 2016).

Dean's Fund New Staff Grant. *University of Toronto, Faculty of Medicine*. Sun HS. (\$10,000 2013 - 2014).

Discovery Grant. *Natural Sciences and Engineering Research Council of Canada (NSERC)*. Sun HS. (\$165,000 2011 - 2016).

Focal Adhesion Kinase: A pivotal role in CNS apoptosis and regeneration. *Canadian Institutes of Health Research (CIHR) / CMB*. Koeberle P. (\$554,525 2012 - 2017).

HSFC GIA. *Heart and Stroke Foundation of Canada*. Sun HS. (\$285,950 2013 - 2016).

Molecular Interactions that modulate PI3 Kinase and MAP Kinase pathways during Apoptosis. *Natural Sciences and Engineering Research Council of Canada (NSERC)*. Koeberle P. (\$130,000 2012 - 2017).

Neuroprotective Peptides for the treatment of blindness. *MaRS Innovation, POP*. Koeberle P. (2014 - 2015).

SRCFC. *Scottish Rite Charitable Foundation of Canada*. Sun HS. (\$105,000 2012 - 2015).

University of Toronto and Universidade de Sao Paulo Joint Call for Proposal. *University of Toronto, UofT and Universidade de Sao Paulo Joint Call for Proposal*. Sun HS. (\$20,000 2013 - 2015).

Honours Received

Ballyk BA: Excellence in Undergraduate Teaching in Life Sciences, Faculty of Medicine, University of Toronto. 2013.

Research in Education

Dr. Simon Kitto Assistant Professor
Dr. R.R. Sonnadara Assistant Professor
Dr. Nikki Woods Assistant Professor

Publications

- Baghdady MT, Carnahan H, Lam EW, Woods NN.** Integration of basic sciences and clinical sciences in oralradiology education for dental students. *J Dent Educ*: 2013 Jun; 77(6):757–763.
- Baghdady MT, Carnahan H, Lam EW, Woods NN.** Test-enhanced learning and its effect on comprehension anddiagnostic accuracy. *Medical Education*: 2014;48(2): 181–188.
- Campbell RM, Klei AG, Hodges B, Fisman D, Kitto S.** A comparison of Health Access between permanent residents, undocumented immigrants and refugee claimants in Toronto, Canada. *Journal of Immigrant and Minority Health*: 2014 Feb; 16(1): 165-76.
- Choy I, Kitto S, Adu-Aryee N, Okrainec A.** Barriers to the uptake of laparoscopic surgery at a regional hospital in a lower-middle income country. *Surgical Endoscopy*: 2013 Nov; 27(11): 4009-4015.
- Hall JN, Woods NN, Hanson MD.** Is Social Sciences and Humanities (SSH) Premedical EducationMarginalized in the Medical School Admission Process? A Review andContextualization of the Literature. *Academic Medicine*: 2014 Jul; 89(7): 1075-1086.
- Kitto S.** Special Thematic issue: Workplace learning in Continuing Interprofessional Education. *Journal of Interprofessional Care*: 2014 May; 28(3): 183-281.
- Kitto S, Nordquist J, Peller J, Grant R, Reeves S.** The disconnections between space, place and learning in interprofessional education: An overview of key issues. *Journal of Interprofessional Care*: 2013 Sep; 27(S2): 5-8.
- Kulasegaram KM, Martimianakis MA, Mylopoulos M,Whitehead CR, Woods NN.**Cognition Before Curriculum. *Academic Medicine*: 2013; 88(10): 1578–1585.
- Leslie M, Paradis E, Gropper M, Reeves S, Kitto S.** Applying ethnography to the study of context in healthcare quality and safety. *BMJ Quality & Safety*: 2014 Feb; 23(2): 99-105.
- Lisk, K,Flannery JF, Loh EY, Richardson D, Agur AM,Woods NN.** Determination ofclinically relevant content for a musculoskeletal anatomy curriculum forphysical medicine and rehabilitationresidents. *Anat Sci Educ*: 2014 Mar-Apr; 7(2): 135-43.
- Mylopoulos M,Woods NN.**Preparing medical students for future learning using basic science instruction. *Med Educ*: 2014 Jul; 48(7):667-73.
- Nordquist J, Kitto S, Reeves S.** Introduction: Future learning environments. *Journal of Interprofessional Care*: 2013 Sep; 27(S2): 1-1.
- Paradis E, Leslie M, Gropper MA, Aboumatar HJ, Kitto S, Reeves S.** Interprofessional care in intensive care settings and the factors that impact it: Results from a scoping review of ethnographic studies. *American Journal of Critical Care*: 2013 Dec; 28(6): 1062-7.
- Paradis E, Leslie M, Puntillo K, Gropper M, Aboumatar H, Kitto S, Reeves S.** Delivering interprofessional care in intensive care: A scoping review of Ethnographic studies. *American Journal of Critical Care*: 2014 May; 23: 230-238.
- Peller J, Schwartz B, Kitto S.** Non-clinical core competencies and effects of interprofessional teamwork in disaster and emergency response training and practice: A pilot study. *Disaster Medicine and Public Health Preparedness*: 2013 Aug; 7(4): 395-402.
- Reeves S, Leslie K, Baker L, Egan-Lee E, Legare F, Silver I, Rosenfield J, Hodges B, Curran V, Armson H, Kitto S.** Study protocol for a pilot study to explore the determinants of knowledge use in a medical education context. *Journal of Evaluation in Clinical Practice*: 2013 Oct; 19(5): 829-832.
- Reeves S, Paradis E, Leslie M, Aboumatar HJ, Chesluk B, Clark P, Courtenay M, Franck L, Lamb G, Lyndon A, Mesman J, Puntillo K, Schmitt M, Van Soeren M, Wachter R, Zwarenstein M, Gropper M, Kitto S.** Exploring the nature of interprofessional collaboration and family member involvement in an intensive care context. *Journal of Interprofessional Care*: 2014 Jan; 28(1): 74-75.

- Reeves S, Paradis E, Leslie M, Kitto S, Aboumatar H, Gropper MA. Understanding the nature of interprofessional collaboration and patient family involvement in intensive care settings: A study protocol. *ICU Director*: 2013 Sep; 4(5): 242-247.
- Reeves S, Peller J, Goldman J, Kitto S. Ethnography in Qualitative Educational Research: AMEE Guide No. 80. *Medical Teacher Journal*: 2013 Aug; 35(8): e1365-79.
- Sonnadara RR, Garbedian S, Safir O, Mui C, Mironova P, Nousiainen M, Ferguson P, Kraemer W, Alman B, Reznick R. Orthopaedic Boot Camp III: Examining the efficacy of self-regulated learning during an intensive laboratory-based surgical skills course. *Surgery*: 2013; 154(1): 29-33.
- Sonnadara RR, McQueen S, Safir O, Nousiainen M, Ferguson P, Alman B, Kraemer W, Reznick R. Reflections on current methods for evaluating arthroplasty skills: a scoping review. *The Bone and Joint Journal*: 2013 Jul; 95-B(11): 1445-1449.
- Sonnadara RR, Mui C, McQueen S, Mironova P, Nousiainen M, Safir O, Kraemer W, Ferguson P, Alman B, Reznick R. Reflections on competency-based education and training for surgical residents. *J Surg Educ*: 2014 Jan; 71(1): 151-8.
- Sonnadara RR, Satterthwaite L, MacRae HM. The University of Toronto Surgical Skills Centre: An Accredited Educational Institute. *J Surg Educ*: 2014 Mar; 71(2): 275-7.
- Willems A, Waxman B, Bacon A, Smith J, Kitto S. Interprofessional non-technical skills for surgeons in disaster response: A literature review. *Journal of Interprofessional Care*: 2013 Sep; 27(5): 380-386.
- Wu R, Appel L, Morra D, Lo V, Kitto S, Quan S. Short Message Service or disService: Issues with text messaging in a complex medical environment. *International Journal of Medical Informatics*: 2014 Jan; 83(4): 278-84.
- Yeung E, Woods NN, Dubrowski A, Hodges B, Carnahan H. Establishing assessment criteria for clinical reasoning in orthopedic manual physical therapy: a consensus-building study. *Journal of Manual and Manipulative Therapy*: 2013. doi:10.1179/2042618613Y.0000000051

Invited Visits

- Kitto S:** International Association for Medical Education, Prague, Praha, hlavní mesto, Czech Republic, 25 August 2013. Workshop co-lead and facilitator: Using theory in medical education Research Workshop.
- Kitto S:** BSA Medical Sociology Annual Conference, York, United Kingdom, 13 September 2013. Speaker: Enhancing the quality improvement outcomes of the CCO HPB Community of Practice.
- Kitto S:** Interprofessional Education (IPE), University of Leicester, Leicester, United Kingdom, 16 September 2013. (1) Invited Lecturer: Sociological theories and IPE. (2) Invited Lecturer: Negotiating medical dominance: The social construction of a care coordinator.
- Kitto S:** Continuing Education Leadership Program (CELP), Highlights of current research in CPD – hot topics, University of Toronto, Toronto, Ontario, Canada, 3 October 2013. Invited Speaker: Transforming CPD: The role of educational research.
- Kitto S:** 2013 SAMI Intensive Didactic Course, Toronto, Ontario, Canada, 21 October 2013. Presenter: Qualitative research: Data and research questions. The Social Aetiology of Mental Illness (SAMI).
- Kitto S:** American Nurses Credentialing Center Task Force Meeting, D.C. Washington, United States, 7 February 2014. Workshop lead facilitator: Workshop: Walk in the woods.
- Kitto S:** 11th Annual Canadian Critical Care Conference, Whistler, British Columbia, Canada, 28 February 2014. Interprofessional collaboration and family member involvement in intensive care units: A study protocol.
- Kitto S:** The Hodges Education Scholarship International Symposium (THESIS), Toronto, Ontario, Canada, 20 March 2014. Invited Speaker: Diagnosing the educational concerns within the health care system: Future directions for research.
- Kitto S:** AFMC, CPD research meeting at the 2014 CCME/Ottawa Conference, Ottawa, Ontario, Canada, 26 April 2014. Speaker: Society for Academic Continuing Medical Education (SACME) Terminology Project.
- Kitto S:** SACME 2014 Spring Meeting, Cincinnati, Kentucky, United States, 3 May 2014. (1) Speaker: Breakout session: Research Methods – Terminology and context in continuing education: Efforts to improve appropriate use of interventions in support of education and research. (2) Invited Speaker: Terminology and context in continuing education: Efforts to improve appropriate use of interventions in support of education and research.

Kitto S: 2014 Libretto Consortium Meeting, Chicago, Illinois, United States, 4 June 2014. Invited Speaker: Understanding the nature of team-based care and patient and family involvement in ICU settings: A multi-sited ethnography.

Kitto S: All Together Better Health VII, Pittsburgh, Pennsylvania, United States, 7 June 2014. Speaker: Why hospital clinical staff do not activate the rapid response system (RRS): An analysis of intraprofessional and interprofessional sociocultural factors.

Sonnadara RR: QICC-L4 LHIN4 Colorectal Conference, Hamilton, Ontario, Canada, 15 November 2013. Getting peak performance through feedback.

Sonnadara RR: Summit on Competency-based Training, Toronto, Ontario, Canada, 25 April 2014. Developing evaluation tools for an intensive surgical skills training module.

Research and Investigations

An integrated multi-faceted knowledge translation intervention to improve bone health in men receiving androgen deprivation therapy for prostate cancer. *Canadian Cancer Society*. Jones J, Alibhai S, Kitto S, Catton C, Cheung A, Hamilton R, Warde P. (\$99,919 2013-2015).

Coaching Surgeons: The Pursuit of Surgical Excellence. *Canadian Medical Protective Association*. Sonnadara R, Mutabzic D. (\$24,400 2013).

Development and validation of a novel motion tracking instrument for assessing task performance and skill acquisition. *McMaster University*. Sonnadara R. (\$19,300 2013-2014)

Evaluation research of meta-leadership in health professions education program. *Ontario Simulation Network*. Goldman J. (\$9,950 2013-2014).

Exploring parent-health care provider decision making practices for children with complex health care needs receiving home care services. *The Hospital for Sick Children, Norman Saunders Complex Care Initiative (NSCCI)*. Karen L, Cohen E, Espin S, Gibson B, Kitto S, Nicholas D. (\$26,152 2014).

From Passive to Active: Using peer assessment to improve vicarious learning of surgical skills. Woods NN, Brydges R, Musgrave M. (\$17,928 2013-present).

Improving Implementation: Exploring the uptake of safe surgery checklists. *Faculty of Community Service, Ryerson University*. Espin S, Safir O, Grant R. (\$9,125 2014).

Interprofessional collaboration within the health professions in South Tyrol, Italy: How do the different professions view and evaluate the current status of interprofessional collaboration. *National Agency: Provincia Autonoma di Bolzano Italy*. Reeves S, Mischo-Kelling M, Tappeiner W, Lochner L, Vittadello F, Kitto S. (\$272,625 EUR 2013-2015).

Interprofessional disaster preparedness for Japanese health care students and professions. *Ministry of Health, Japan*. Ohshima N, Bontje P, Oneyama H, Yoshiura T, Reeves S, Kitto S. (\$133,000 JPY 2013-2016).

Peer Education with Intersecting Networks: The SACME Project in South Bronx Public Housing-Implementing the Diabetes Prevention Program among those most at risk and their healthcare providers. *Society for Academic Continuing Medical Education (SACME)*. Morrow, R, Norwood C, Kitto S, Alexis K, Tiburcio J. (\$10,000 2013-2014).

Putting It All Together: Exploring the learning of integrated CanMEDS competencies. *RCPSC/AMS CanMeds*. Woods NN, Borschel T, O'Brien T, Mylopoulos M. (\$21,910 2013-2015).

SACME Terminology Project, Phase 2. *Society for Academic Continuing Medical Education (SACME)*. Van Hoof T, Kitto S. (\$180,000 2013-2014).

Through the eyes of the beholder: Understanding physicians' conceptions of childhood obesity. *University of Toronto Continuing Education & Professional Development*. Woods NN, Mylopoulos M, Sterfors-Heys T. (\$4,418 2013-present).

Understanding the nature of interprofessional teamwork in intensive care units: a multi-institutional ethnographic study. *Gordon & Betty Moore Foundation, California*. Reeves S, Kitto S, Provonost P, Grouper M, Aboumatar H, Wachter B. (\$2,167,937 USD 2012-2015).

Honours Received

Kitto S: 2014 Patient and Family Support Specialty Award for abstract 'Opening the Black Box: A Typology of Patients and Families', Society of Critical Care Medicine. 2013.

Kitto S: Dave Davis Award for Research in Continuing Medical Education, Society for Academic Continuing Medical Education. 2013.

Kitto S: Dave Davis Continuing Education and Professional Development Research Award, University of Toronto. 2013.

Kitto S: Helen P. Batty Faculty Development Award for Innovation in Program Development and Design, The Wilson Centre Qualitative Research Atelier Series. 2013.

Cross Appointments

Dr. A.J. Baker	Anaesthesia	Dr. C. Lumsden	Medicine
Dr. B. Bapat	Laboratory Medicine and Pathobiology	Dr. A. Macdonald	Medicine
Dr. P. Birek	Dentistry	Dr. J. McGlade	Medical Biophysics
Dr. A. Campbell	Medicine	Dr. D.A.G. Mickle	Laboratory Medicine and Pathobiology
Dr. J. Carson	Family and Community Medicine	Dr. M. Milner	Rehabilitation Sciences
Dr. W.A. Cassar-Demajo	Anaesthesia	Dr. W. Montanera	Medical Imaging
Dr. A. Daar	Public Health Sciences	Dr. J. Mullen	Laboratory Medicine and Pathobiology
Dr. A. Damyanovich	Medical Imaging	Dr. A. Narold	Public Health Sciences
Dr. J.E. Davies	Dentistry	Dr. M. Ojha	Rehabilitation Sciences
Dr. A.D. DePetrillo	Obstetric and Gynaecology	Dr. K.P.H. Pritzker	Laboratory Medicine and Pathobiology
Dr. E. Diamandis	Laboratory Medicine and Pathobiology	Dr. P. Ritvo	Public Health Sciences
Dr. R.J. Eby	Medicine	Dr. A. Romaschin	Laboratory Medicine and Pathobiology
Dr. V.L. Fornasier	Laboratory Medicine and Pathobiology	Dr. J. Rutka	Otolaryngology
Dr. A. Fox	Medical Imaging	Dr. A. Sahgal	Radiation Oncology
Dr. J. Freeman	Otolaryngology	Dr. G. Sandor	Dentistry
Dr. R. Gilbert	Otolaryngology	Dr. A. Slutsky	Medicine
Dr. M. Greenberg	Pediatrics	Dr. D. Stewart	Psychiatry
Dr. M.D. Grynpass	Laboratory Medicine and Pathobiology	Dr. G. Tait	Anaesthesia
Dr. P.J. Gullane	Otolaryngology	Dr. R. Talwar	Dentistry
Dr. B. Harvey	Public Health Sciences	Dr. K.G. terBrugge	Medical Imaging
Dr. B. Hinz	Dentistry	Dr. T. van der Kwast	Laboratory Medicine and Pathobiology
Dr. J. Irish	Otolaryngology	Dr. Q. Wan	Physiology
Dr. J. Irvine	Psychiatry	Dr. I. Weller	Public Health Sciences
Dr. G. Jackowski	Laboratory Medicine and Pathobiology	Dr. L. White	Medical Imaging
Dr. M.G. Johnston	Laboratory Medicine and Pathobiology	Dr. R. Willinsky	Medical Imaging
Dr. R. Kandel	Laboratory Medicine and Pathobiology	Dr. L. Wilson-Pauwels	Biomedical Communications
Dr. W. Kucharczyk	Medical Imaging	Dr. I. Witterick	Otolaryngology
Dr. G.A. Levy	Medicine		