2010 Annual Report The Department of Surgery Connections

















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Dr. John Denstedt Chair/Chief, Department of Surgery

More than ever before, surgeons are connectors, locally and globally. The radical development of information and communication technologies that has swept the globe in the past decade has had a profound effect on the way people connect and interact with and learn about the world; in the way scientists and physicians do research; and the way in which corporations do business. We are moving toward the age of a single global economy and a connected global scientific endeavour.

Surgeons in all areas of specialty actively work to connect with patients, specialists, scientists, peers in the engineering and health science faculties, rural providers and increasingly, with international partners to create new opportunities in research, teaching and patient care.

The Department of Surgery has been making progress in our strategic plan that was initiated in 2009. One key strategic direction in the plan was to increase our international profile. Surgical expertise is growing around the world and in order to remain innovative, we need to go where the developing talent is located and leverage

Report from the Chair/Chief, Department of Surgery

that talent through strategic collaboration.

For many years, the department has fostered international exchange opportunities with countries around the world; has welcomed fellows each year from all corners of the globe; worked collaboratively with research colleagues from institutions both here and abroad; and our faculty members have been invited professors to a long list of international institutions.

We have formed strong connections not only in Ontario and North America, but also, on a global scale. In the past 4 years, over 20 faculty members have developed our global connections, travelling to more than 18 countries, including China, Israel, Thailand, Australia, Japan, South Africa, Saudi Arabia, India, Mexico, and various countries throughout Europe. Our surgeons are travelling worldwide to universities and major medical conferences to disseminate our research work and our findings as part of guest professorships or visiting lectures. We serve as scientific experts and national reviewers; set standards as a part of accrediting bodies; serve as members of editorial boards of journals; review grants on national and international panels; and participate in a wide array of local, provincial. national, and international committees. These are the traditional means by which new medical discoveries are disseminated around the world; standards are raised; and innovation is brought to the forefront of surgical education, research, and patient care.

We have formed strong connections not only in Ontario and North America, but also, on a global scale.

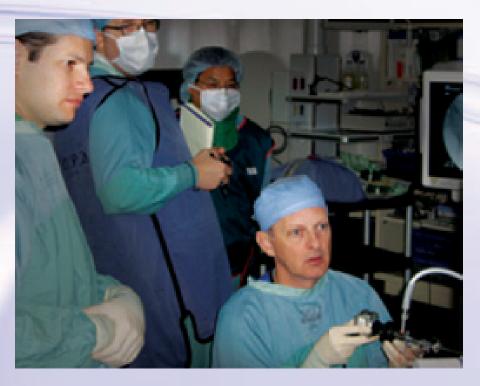
Our most recent international endeavour was signing a Memorandum of Understanding (MoU) with the West China School of Medicine (WCSM) in Chengdu, China to advance our international footprint even further. Of note, the WCSM is one of the top 10 medical centres in China. Canadian Surgical Technologies & Advanced Robotics (CSTAR), a program of London Health Sciences Centre, is leading the way and providing support for many of the initiatives. Going forward, an exchange program will provide trainees and faculty from both countries the opportunity to be involved with a different case mix and be exposed to a new culture while building rapport between our medical schools. In addition, an MoU was signed between Sichuan University in Chengdu, China and The University of Western Ontario to allow students to pursue a joint PhD program. These are outstanding examples of training on a global scale that impact teaching, research and patient care.

In March 2010, a team comprised of surgeons and other senior leaders travelled to Chengdu, China to explore a number of new initiatives including medical and surgical education; research collaborations and exchanges; future faculty exchanges; and business opportunities.

With all the advancements both in technology and the sheer amount of medical knowledge that is required by today's surgeons, we are extremely reliant on the connections we make with others. It is important to emphasize that surgeons are only one part of the complex matrix of care provision required to manage the spectrum of surgical cases. We would be unable to provide the care we do without the expertise of many other clinicians in Anesthesia, Pathology, Medical Imaging, Critical Care, Internal Medicine; bioengineers and allied health personnel.

The Department of Surgery also receives outstanding support from the Robarts Research Institute and Lawson Health Research Institute – and reciprocally surgeons are fundamental contributors to clinical and basic research endeavours. We also have an excellent working relationship with our colleagues in Windsor and others in southwestern Ontario as they have been instrumental in furthering surgical care and education in that region.

We are also very fortunate to receive the active support of our fundraising priorities, across the Academic Health Science Centre, for which we are extremely grateful. We are appreciative of Foundation Western, London Health Sciences Foundation, St. Joseph's Health



Care Foundation, and the Children's Health Foundation for their collaboration and expertise in pursuit of our goals. Most importantly, we are thankful to our generous benefactors from our community – and beyond – who recognize the importance of academic medicine and how it is fundamentally linked to the advancement of teaching, research, and patient care.

As well, the activity generated by surgical care provided at SJHC and LHSC represents a powerful economic driver for the City of London and its businesses, both in the medical and non-medical industries.

For example, CSTAR has been called

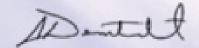
"London's innovation centre" for the development, testing and training of leading-edge medical devices. As part of London Health Sciences Centre, and recognized the world over as a leader in medical device innovation, CSTAR's 23,000 square foot facility supports researchers, health care professionals, industry and government in their collaborative pursuit of advancing patient care. Comprising three floors in the new Lindros Legacy Research Building, CSTAR advances medical device innovation through its research, laboratory and simulation training facilities.

The activity generated by surgical care provided at SJHC and LHSC represents a powerful economic driver for the City of London and its businesses, both in the medical and non-medical industries.

Technology we use to deliver patient care is changing very rapidly. These changes affect what we do on a day-to-day basis and how we interact and communicate with team members in providing patient care. Simulated learning resources provide opportunities to maintain and acquire new skill sets, enabling staff to keep pace with ever-changing clinical technology.

Last year was also a year of leadership changes within the Schulich School of Medicine and Dentistry and our teaching hospitals. We welcomed Dr. Michael Strong as the new Dean of the Schulich School of Medicine & Dentistry; Ms. Bonnie Adamson was named the new CEO of London Health Sciences Centre; and Dr. Gillian Kernaghan was appointed CEO of St. Joseph's Health Care, London. The Department looks forward to continued collaboration and innovation going forward.

Sincerely,



John D. Denstedt, MD, FRCSC, FACS Richard Ivey Professor and Chair/Chief Department of Surgery Schulich School of Medicine & Denistry the University of Western Ontario



Dr. Bob Kiaii, Chair/Chief, Division of Cardiac Surgery

While new technology is continually developed and applied to treat cardiac patients, what remains unchanged are the strong connections between Cardiac Surgery, Cardiology, Cardiac Anesthesia, OR Nursing and Perfusion, Cardiac Recovery and CSTAR. With the speed of change, these connections are more important now than ever before.

The Cardiac Surgery program dates back to the 1970s and has expanded its focus from the first successful heart transplant program in 1981 and innovative arrhythmia surgery to now include cutting edge minimally invasive and robotic surgery.

Connecting with programs like CSTAR and working as a strong multi-disciplinary team on both clinical excellence and research is positioning the cardiac surgery division as one of Canada's most progressive academic centres, attracting the best students to its world renowned residency program.

"Cardiac surgery is a field where new procedures are literally being invented on a weekly basis," says Dr. Bob Kiaii, Chair/Chief, Division of Cardiac Surgery. "Maintaining and developing ongoing professional and educational relationships is critical to the global advancement of medicine."

In the past when a discovery was made,

The Division of Cardiac Surgery

the surgeon or researcher would publish an article and the information would be disseminated throughout the medical community. Today, with the use of the Internet and other telecommunication tools, those leading-edge discoveries are shared instantaneously, perhaps saving a life.

"And now, with the ability to do tele-surgery, anything that is learned internally can be applied outside our department, to other departments across the country or around the world," says Dr. Kiaii. "The Internet, real time video and robotics have completely changed not only our lives, but also the way we practice medicine."

Last year, 35 medical students and MSc Clinical Anatomy graduate students from the Department of Anatomy had the opportunity to observe and interact with Dr. Kiaii as he performed a robotic coronary artery bypass surgery. The students were able to 'virtually' participate in the surgery through CSTAR's multi-media theatre. The theatre provides real-time camera access to the cardiovascular hybrid operating suite of London Health Sciences Centre in addition to the five operating suites at St. Joseph's Health Centre, London.

According to Professor Marjorie Johnson, of the Department of Anatomy, "CSTAR and its surgeons provide our students with an entirely unique learning experience. Rarely do our students have live access to observe both the human anatomy and also leading-edge surgical interventions. It also opens up opportunities for cross-department collaboration and learning which we find invaluable," says Johnson.

Dr. Kiaii, Canada's leading robotic cardiac surgeon, very much enjoys these learning opportunities. "CSTAR plays an important role in connecting students and learners from a variety of disciplines and professions to provide much sought after learning experiences. Based on the questions and comments of the anatomy students, this session was clearly a winner for them," says Kiaii.

"And now, with the ability to do tele-surgery, anything that is learned internally can be applied to other departments across the country or around the world."

When help is needed abroad, the Division of Cardiac Surgery responds. A cardiac surgery team comprised of surgeons, anesthetists, residents, nurses and perfusionists once again travelled to Peru to perform cardiac surgery on patients in need of complex care. The team of more than 20 people made the trip to Arequipa, Peru in March to help local doctors, and lend support to a small orphanage in the city. This is the third year the group has made the trip, and the 16th year that perfusionist Peter Allen has completed this type of mission. Dr. Michael Chu, cardiac surgeon, and Dr. Cory Adams, cardiac surgery resident made the trip from the Division of Cardiac Surgery. Each year

the team brings a cardiac surgery resident on the trip to expose them to cases not typically seen in the OR here. It is also an excellent opportunity to gain international experience.

"I think what allows you to get up and go to work each day is the satisfaction you get when a patient does well," says Dr. Kiaii. "You know that you have provided the knowledge that you have accumulated over the years to improve an individual's quality of life. That is the number one reward of being a surgeon."

Awards and Achievements

Dr. Neil McKenzie won the Annual Achievement Award of the Canadian Cardiovascular Society created in recognition of Canadians who have made outstanding contributions in their career within the cardiovascular field. The award was presented at the Canadian Cardiovascular Congress in Edmonton in October.

Dr. Richard Novick was appointed Head Examiner of the Royal College Cardiac Surgery Examination Board. Appointed to a five-year term, Dr. Novick will oversee the creation of both the written and oral cardiac surgery exams, in both French and English, and will be responsible for a full report afterwards. The exam board consists of 14 members from academic and community health centres from across the country.

After an international search, **Dr. Bob Kiali** has been selected as Chair/Chief, Division of Cardiac Surgery, The University of Western Ontario and LHSC for a five-year term, effective July 1, 2010 until June 30, 2015. Before joining our staff in 2003, Dr. Kiaii completed

a fellowship in heart transplantation here as well as a fellowship in minimally invasive/ robotic cardiac surgery in Leipzig, Germany. He succeeds Dr. Richard Novick who led the Division of Cardiac Surgery for the past ten years.

Publications

Al Gethamy H, Young GB, Nicolle D, Novick RJ, Saito A. Anterior visual pathway vascular lesions producing blindness with cardiac surgery. Arch Ophthalmol (in press, October 2009).

Azimian H., Breetzke J., Trejos A.L., Patel R.V., Naish M.D., Kiaii B. Preoperative Planning of Robotics-Assisted Minimally Invasive Coronary Artery Bypass Grafting IEEE International Conference on Robotics and Automation (ICRA 201), Anchorage, Alaska, May 3–8, 2010. Published in Conference Proceedings, pp. 1548–1553, May 2010.

Chen KJ, Teefy P, Kiaii B, Vezina WC, Chu MWA. Robotic Coronary Artery Bypass for Aberrant Right Coronary Artery Stenosis. Submitted to Can J Cardiol, positive review, revisions submitted March 2010, Accepted, In Press.

Cheng DCH, Martin J, Novick RJ. OPCAB versus on-pump surgery: the beat goes on. Innovations 2010;5:67-9.

Chu MWA, Adams C, Torres P. Ascendingto-Descending Aortic Bypass and Aortic Valve Replacement for Concomitant Severe Aortic Coarctation and Aortic Stenosis. Submitted to International J Cardiol, May 2010. Chu MWA, Borger MA, Mohr FW, Walther T. Transcatheter Heart-Valve Replacement: Update. CMAJ 2010; 182:791-5. Epub 2010 Mar 8.

Fernandes P., MacDonald J., Cleland A., Fox S., Mayer R., Walsh G., Kiaii B. The Use of a Mini-Bypass Circuit for Minimally Invasive Mitral Valve Surgery. Perfusion 24(3):163–168. Published online September 15, 2009. DOI:10.1177/0267659109346662.

Fortin AJ, Evans HB, Chu MWA. The Cardiac Implications of Breast Reconstruction using the Internal Mammary Artery as the Recipient Vessel. Submitted to Canadian Journal of Plastic Surgery, April 2010, Accepted, In Press.

John Murkin, Bryan Young, MD, FRCPC, Jeff Granton, MD, FRCPC, Florian Falter, MD, FRCA, Michael W. Chu, MD, FRCSC. International Anesthesia Research Society.

Lang P, Seslija P, Habets DF, Chu MWA, Holdsworth DD, Peters TM. Three-Dimensional Ultrasound Probe Pose Estimation from Single-Perspective X-rays for Image-Guided Interventions. Submitted to MICCAI, March 2010.

Martin M. Goldbach Heart Surgery In Canada Memoirs, Anecdotes, History and Perspective In Bernard S. Goldman and Susan Belanger (Eds.). Heart Surgery In London Victoria Hospital (176-179). United States: Xlibris Corporation, 2009.

McClure RS, Higgins J, Swinamer SA, Rayman R, Dobkowski WB, Kostuk WJ, Kiaii B. Bivalirudin as an Anticoagulant for Simultaneous Integrated Coronary Artery Revascularization – A Novel Approach to an Inherent Concern. Can J Cardiol 25(7): 425-427, Jul 2009.

McKay C, Allen P, Jones P, Chu MWA. Aortic Arch Replacement and Elephant Trunk Procedure: An interdisciplinary approach to surgical reconstruction, perfusion strategies and blood management. Submitted to Perfusion Feb 2010, In Press.

Moore J.T., Wiles A.D., Wedlake C., Bainbridge D., Kiaii B., Trejos A.L., Patel R., Peters T.M. Integration of Trans-esophageal Echocardiography with Magnetic Tracking Technology for Cardiac Interventions. Published in Conference Proceedings of SPIE Vol 7625:76252Y, Feb 2010.

Murkin JM, Falter F, Granton J, Young B, Burt C, Chu M. High-dose Transexamic Acid is associated with nonischemic clinical seizures in cardiac surgery patients. Anesth Analg 2010;110:350-3.

Ramlawi B, Otu H, Novick RJ, Bianchi C, Sellke FW. Aprotinin attenuates genomic expression variability following cardiac surgery. J Card Surg (in press, July 2009).

Taneja R, Marwaha G, Sinha P, Quantz M, Stitt L, Gao R, Subramanian S, Schaus M, Keeney M, Chin-Yee I, Murkin J. Elevated activated partial thromboplastin time does not correlate with heparin rebound following cardiac surgery. Can J Anesth 2009 Jul;56(7):489-96.

Trejos A.L., Ross I., Scalesse C., Patel R.V., Naish M.D., Kiaii B. Preoperative Evaluation of Patient Anatomy to Increase the Success of Robotics-Assisted Bypass Surgery. Innovations: Technology and Techniques in Cardiothoracic and Vascular Surgery 2010;5:335–340.





Dr. Ward Davies, Chair/Chief, Division of General Surgery

The Division of General Surgery at UWO

has had a challenging year with the untimely loss of Dr. Murray Girotti, who passed away suddenly over the Christmas Holiday. Dr. Girotti was the Director of the Trauma Program at LHSC and was a leader in General Surgery in Canada. His optimism and energy were boundless and will be missed. He was a mentor to many of the current faculty members and residents in the Division of General Surgery. Dr. Girotti was the Vice President of Medical Affairs at LHSC and held a number of key administrative positions throughout his career. Murray was active nationally in the Trauma Association of Canada and played a key role in the development of minimally invasive surgery in London when general surgical MIS was evolving in North America.

The creation of the acute surgical "ACCESS program" at Victoria Hospital has been a positive development within our division. The program began in July of 2010 and has been widely viewed as a success within the LHSC organization. This program initiative was spearheaded by Dr. Ken Leslie, the general surgeons at Victoria hospital and the surgical administrative leadership at LHSC. The program has enhanced the delivery of acute surgical services at the VH site and is viewed as an

The Division of General Surgery

innovative development by faculty and our general surgery residents. Patient wait times for referral from the ER to the operating room or admission to the hospital has improved and we believe the overall quality of the delivery of surgical care has been enhanced.

This year the Division of General Surgery developed a Breast Assessment Centre at St. Joseph's Health Care London. This collaborative initiative with General Surgery, Plastic Surgery and Radiology will enhance the treatment of breast cancer in the region. All of the general surgeons who deal with breast cancer now run clinics at the Breast Assessment Centre. Dr. Muriel Brackstone has been appointed Director of the unit which has been functioning since September of 2010. The program is currently housed in a temporary location on the fourth floor at St. Joseph's Hospital, with plans to consolidate the clinic along with breast imaging in the space currently occupied by women's health at St. Joseph's Hospital. The plan is to have the new space ready by the fall of 2011.

In the fall of 2011 the Canadian Surgical Forum will be held in London. This is the national annual meeting for General Surgery in Canada and would typically attract 600-700 attendees. The local organizing committee and all of the general surgeons involved in the planning of the meeting have been working hard to put together an outstanding program.

This past year CSTAR once again hosted the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) international training course at CSTAR. This is the only SAGES training course offered outside of the United States of America, and was the second year the course was held at UWO. The faculty was made up of prominent surgeons from throughout North America. Residents were selected to attend surgical training programs throughout the continent and had the opportunity to develop advanced laparoscopic skills during the course. Many thanks to Dr. Christopher Schlachta for organizing the course and participating as an instructor in the program.

"Combat surgery has taught us to rapidly transport patients to hospital, resuscitating them along the way, to expedite life and limb-saving surgery..."

The Division of General Surgery would like to acknowledge the effort and sacrifice made by Dr. Vivian McAlister this year. Dr. McAlister, along with the members of the Canadian Field Hospital, were deployed to Haiti soon after the natural disaster hit. Dr. McAlister and the Canadian unit were in Haiti providing surgical services to victims of the disaster in the early stages of the relief effort and were on site for approximately six weeks. This humanitarian mission by the Canadian Government was widely viewed as an important early initiative

following the disaster that helped lead the humanitarian effort during this difficult time.

Dr. McAlister has served three tours of duty at the Canadian-run military hospital in Kandahar, Afghanistan. He spent two months working at the Kandahar hospital in 2007 as a civilian surgeon before joining the Canadian Forces Medical Service in 2008 and subsequently completing a third tour at the hospital this past winter. Dr. McAlister believes lessons learned could help surgeons in Canada prepare for civilian disasters. War surgeons have



developed ways to deal with situations where many severely injured patients are brought to hospital at the same time; information McAlister says would be very useful in Canadian hospitals when dealing with catastrophes such as a bus crash on the 401 or a roof collapse in a school. He prepared a course in catastrophic surgery that was offered in September at the Canadian Surgery Forum in Victoria, British Columbia, so military surgeons can share these skills with their civilian colleagues.

"Combat surgery has taught us to rapidly transport patients to hospital, resuscitating them along the way, to expedite life and limb-saving surgery, but then to send patients to the intensive care until their normal physiological status returns before attempting to complete surgery," says McAlister.

Awards and Achievements

Dr. Hao Wang received the International Basic Science Mentor Award from The Transplantation Society. This award recognizes the efforts of scientists, who have advanced our understanding of transplant science/immunobiology and/or treatment of transplant recipients, as well as supervised young investigators in furthering the basic science of transplantation. Only 20 from a total of more than 3,000 applicants have been awarded based on the scientific excellence of the work.

Dr. Steven Latosinsky began his appointment in the Division as a General Surgeon at LHSC's Victoria Hospital with an office within the London Regional Cancer Program. He specializes in colorectal and breast cancer, melanoma, and sarcoma (soft-tissue tumours).

Dr. Elizabeth Saettler began her appointment in the Division as a General Surgeon at LHSC's Victoria Hospital with an office within the London Regional Cancer Program. She specializes in breast cancer and melanoma and has an interest in physician-patient communication and knowledge transfer as they relate to multidisciplinary treatment of these diseases.

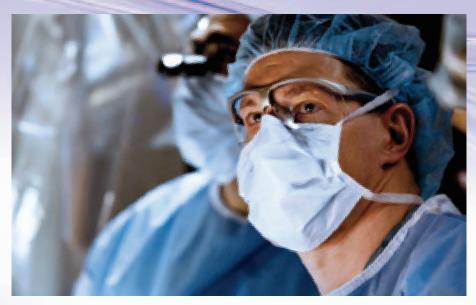
Dr. Neil Merritt began his appointment in the Divisions of Paediatric General Surgery and the Division of General Surgery. He specializes in Paediatric General Surgery and Paediatric Critical Care and Trauma. His research interests include Paediatric focused abdominal sonography for trauma and avoidance of radiation risk associated with more conventional forms of imaging in children.

Dr. Michael Ott was awarded an Education Fellowship from the Centre for Education Research and Innovation at the Schulich School of Medicine & Dentistry.

Dr. Ken Leslie was awarded a Certificate of Merit from the Canadian Association for Medical Education.

Dr. Ward Davies received the St. Joseph's Hospital MAC award for leadership for 2010.

Dr. Chellappa Rajgopal was awarded the Most Outstanding Faculty Teacher in the Department of Surgery by the clinical clerks for the 2009-2010 academic year.



Dr. Robert Hernandez was chosen by the Class of Meds 2011 as the Undergraduate Teacher of the Year for Surgery.

Dr. Brian Taylor took on an expanded role as the Associate Director of Surgical Education – Undergraduate Education (UGE). A long-standing and esteemed role model and contributor, Dr. Taylor was also appointed the McLachlin Professor of Surgery in 2010 and is recognized as a leader at the forefront of surgical education.

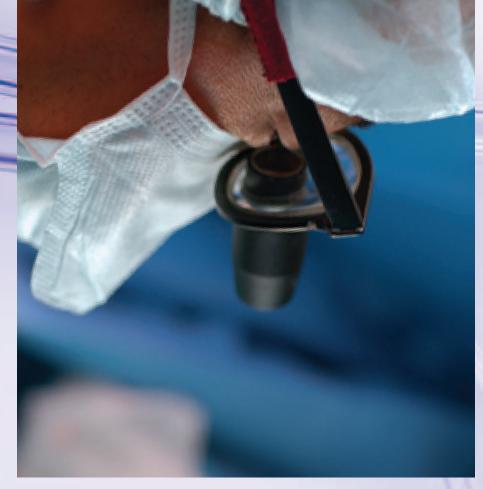
Dr. Daryl Gray was appointed Acting Director of Trauma Services in January 2011 and the Neuroendocrine Site Chief, Victoria Hospital in July 2010.

Dr. Neil Parry was appointed the Medical Director of Critical Care Trauma Centre in July 2009.

Resident Achievements

Dr. Ken Foster completed his general surgery training at UWO graduating in 1988. Dr. Foster is a gifted surgeon who has been creating a valuable and respected legacy of surgical training and medical education in Afghanistan for the better part of two decades. "The fun and fulfilment of work here is countered by many frustrations, but the net balance is tipped by the sense of being part of something bigger," said Dr. Foster, the 2011 recipient of the Royal College's Teasdale-Corti Humanitarian Award.

Dr. Kris Croome was awarded the CAGS 2010 Best Paper at the Canadian Surgical Forum in Vancouver, BC for Clinical Research. Kris completed this research while doing his Masters in Clinical



Epidemiology at the Harvard School of Medicine. Kris is currently in his fifth year of residency and will begin a liver transplant fellowship here at the University of Western Ontario in July 2011.

Dr. Jennifer Racz received the CAGS 2010
Best Poster Award in the Oncology Category.
Jennifer is currently in her third year of residency and has taken a year away from surgical residency to pursue her Masters of Business Administration at the Ivey School of Business.

Dr. Kelly Vogt successfully completed her Masters of Epidemiology at McMaster University in her third year of residency.

Dr. JulieAnn Van Koughnett successfully completed her Masters of Education through the OISE program at the University of Toronto in her third year of residency.

Publications

A. Andrew Ray MD Msc, Edward T Davies MD, Mordechai Duvdevani MD, Hassan Razvi MD, and John D. Denstedt MD. The Management of Treatment-Resistent Biliary Calculi Using Percutaneous Endourologic Techniques. Can J Surg Vol 52, No.5 Oct 2009, 374-378.

Alharbi O, Rabeneck L, Paszat LF, Wijeysundera DN, Sutradhar R, Yun L, Vinden CM, Tinmouth J. A population-based analysis of outpatient colonoscopy in adults assisted by an anesthesiologist. Anaesthesiology. 2009 Oct;111(4):697-8.

Ansell MJ, Breeze J, McAlister VC, Williams MD. Management of devastating ocular trauma—experience of maxillofacial surgeons deployed to a forward field hospital. J R Army Med Corps. 2010 Jun;156(2):106–9.

Chan G, Taqi A, Marotta P, Levstik M, McAlister V, Wall W, Quan D. Long-term outcomes of emergency liver transplantation for acute liver failure. Liver Transpl. 2009 Dec;15(12):1696-702.

Chan K, Liu G, Miller L, Ma C, Xu W, Schlachta CM, Darling G. Lack of Correlation between a Self-administered Subjective GERD Questionnaire and Pathologic GERD Diagnosed by 24-hour Esophageal pH Monitoring. Journal of Gastrointestinal Surgery 14(3):427-36.

Coughlin SM, Karanicolas PJ, Emmerton-Coughlin HM, Kanbur B, Kanbur S, Colquhoun PH. Better late than never? Impact of local analgesia timing on postoperative pain in laparoscopic surgery: a systematic review and metaanalysis. Surg Endosc. 2010 May 20.

Croome K, Jayaraman S, Schlachta CM. Perioperative Staging in Cancer of the Pancreatic Head: Is there Room for Improvement? Canadian Journal of Surgery 53(3):171-4.

DeJean, P., Brackstone, M., Feenster, A. An intraoperative 3D ultrasound system for tumor margin determination in breast cancer surgery. Med Phys.

Geddes CR, McAlister VC. A surgical review of the priority claims attributed to Abraham Groves (1847-1935). Can J Surg. 2009 Oct;52(5):E126-30.

George Virch, Ward Davies. A massive left paraduodenal fossa hernia as an unusual cause of small bowel obstruction. Ann R. Coll Surg Engl 2010, 92

Hernandez-Alejandro R, Caumartin Y, Chent C, Levstik MA, Quan D, Muirhead N, House AA, McAlister V, Jevnikar AM, Luke PP, Wall W. Kidney and liver transplants from donors after cardiac death: initial experience at the London Health Sciences Centre. Canadian Journal of Surgery. J. Racz, J. Shum, W. Davies. Severe stricturing crohn's disease of the duodenum: A case report and review of surgical options. American Journal of Gastroenterology.

Jayaraman S, Davies W, Schlachta CM. Getting started with robotics in general surgery with cholecystectomy: The Canadian experience. Canadian Journal of Surgery. 52(5):374–8, 2009 Oct.

Jayaraman S, Schlachta CM. Transgastric and transperineal NOTES (Natural Orifice Translumenal Endoscopic Surgery) in an appendectomy test bed. Surgical Innovation. 16(3):223–7, 2009.

Jayaraman, S, Khakhar A, Bainbridge D, Quan D. The association between central venous pressure, pneumoperitoneum, and venous carbon dioxide embolism in laparoscopic hepatectomy.

Jayaraman, S, Quan, D, Al-Ghamdi, I, El-Deen, F, Schlachta, C. Does robotic assistance improve efficiency in performing complex minimally invasive surgical procedures?

Jayaryman S, Quan S, Davies W. Laparoscopic Hepatic Resection in a Porcine Model.

Karanicolas PJ, Dubois L, Colquhoun PH, Swallow CJ, Walter SD, Guyatt GH. The more the better?: the impact of surgeon and hospital volume on in-hospital mortality following colorectal resection. Ann Surg. 2009 Jun;249(6):954-9.

KNVogt, SE Smith, R Etemad-Rezai, S Jayaraan, W Davies An Unusual Case of Free Air Can J Surg 2009, Aug;52(4) E95-E96.

Latosinsky S, Thirlby R, Urbach D, Baxter NN, Brasel KJ, Brown CJ, Chaudhury P, Cutter CS, Divino C, Dixon E, Dubois L, Fitzgerald GW, Henteleff HJ, Kirkpatrick AW, Latosinsky S, MacLean A, Mastracci TM, McLeod RS, Morris A, Neumayer LA, Temple

LR, McKenz CAGS and ACS evidence based reviews in surgery. 32: Use of a surgical safety checklist to reduce morbidity and mortality. Can J Surg. 2010 Feb;53(1):64-6.

Martins AJ, Colquhoun P, Reid G, Kim SO. Reduced expression of basal and probiotic-inducible G-CSF in intestinal mononuclear cells is associated with inflammatory bowel disease. Inflamm Bowel Dis. 2009 Apr;15(4):515-25.

McAlister V, Burns KE, Znajda T, Church B. Hypertonic saline for peri-operative fluid management. Cochrane Database Syst Rev. 2010 Jan 20;(1):CD005576.

McAlister VC. H1N1-related SIRS? CMAJ. 2009 Oct 27;181(9):616-7.

McGarr GW, Sanders DW, Gray DK, Parry NF, Badhwar A. The molecular mechanisms of compartment syndrome. Canadian Orthopaedic Association Annual Meeting, Whister BC, 2009.

McKnight L, Chandok N, Hernandez-Alejandro R. Clinical decision Making in Acute Budd Chiari Syndrome. Annals of Hepatology.

McLeod RS, Wolff BG, Ross S, Parkes R, McKenzie M, Taylor B et al. Recurrence of Crohn's disease after Ileocolic resection is not affected by anastomotic type: Results of a multicentre randomized controlled trial. Dis Colon Rectum 52:919–927, 2009.

Mele T., Madrenas, J. TLR2 Signalling: At the Cross-roads of Commensalism, Invasive Infections and Toxic Shock Syndrome by Staphylococcus Aureus International Journal of Biochemistry and Cell Biology 42 (2010), pp. 1066–1071.

Nekhlyudov L, Latosinsky S. The interface of primary and oncology specialty care: from symptoms to diagnosis. J Natl Cancer Inst Monogr. 2010;2010(40):11-7.

O'Neill C, Colquhoun P, Schlachta CM, Etemad-Rezai R, Jayaraman S. Gastric outlet obstruction secondary to biliary calculi: 2 cases of Bouveret syndrome. Can J Surg. 2009 Feb;52(1):E16-8.

Pina JS, Moghadam S, Cushner HM, Beilman GJ, McAlister VC. In-theater peritoneal dialysis for combat-related renal failure. J Trauma. 2010 May;68(5):1253-6.

Rose J, Jayaraman S, Colquhoun P, Taylor B. Minimal abdominal adhesions after Sepramesh repair of a parastomal hernia. Can J Surg. 2009 Oct;52(5):E211-2.

Schlachta CM, Lefebvre KL, Sorsdahl AK, Jayaraman S. Mentoring and telementoring leads to effective incorporation of laparoscopic colon surgery. Surgical Endoscopy, 2010; 24(4):841-4.

Jayaraman S, MD FRCSC, Davies W, MD FRCSC, Schlachta CM, MD CM, FRCSC, FACS. Getting started with robotics in general surgery with cholecystectomy: The Canadian experience. Can J Surg Vol. 52: 374–79, Oct 2009.

Shum, J, Mele T. A retrospective review of nonagenarians admitted to the ICU McMaster University and University of Western Ontario Annual Critical Care Research Day.

Singh H, De Coster C, Shu E, Fradette K, Latosinsky S, Pitz M, Cheang M, Turner D. Wait times from presentation to treatment for colorectal cancer: a population-based study. Can J Gastroenterol. 2010 Jan;24(1):33-9.

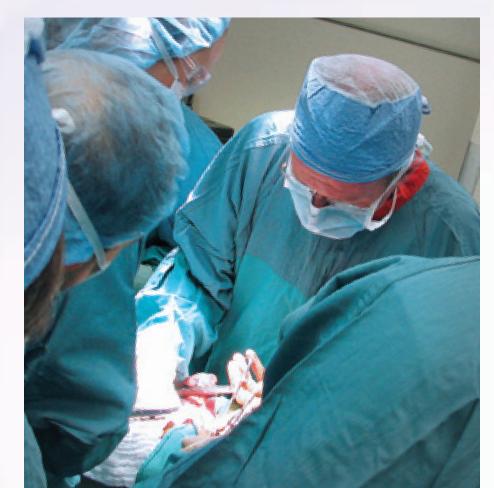
Thakur V, Schlachta CM, Jayaraman S. Minilaparoscopic versus Conventional Laparoscopic Cholecystectomy: A Systematic Review Annals of Surgery.

Trejos AL, Jayaraman S, Naish MD, Patel RV, Schlachta CM. Force Sensing in Natural Orifice Transluminal Endoscopic Surgery. Surgical Endoscopy.

Trejos AL, Patel RV, Naish MD, Lyle A, Schlachta CM. A Sensorized Instrument for Skills Assessment and

Training in Minimally Invasive Surgery. Journal of Medical Devices, 2009: 3: 041002-1-12

Vinden C.The demise of Phosho-Soda and the rise of Pico-Salax. The Cutting Edge, Ontario Association of General Surgeons Newsletter, Summer 2009.





Dr. James Roth, Chair/Chief, Division of Orthopaedic Surgery

Established in 1960, the Division of Orthopaedic Surgery has grown significantly to become the largest division in the Department of Surgery, with surgeons located at London Health Sciences Centre's Victoria and University Hospitals and St. Joseph's Health Care, London. There are six clinical teaching units including sports medicine and adult reconstruction at University Hospital; hand and limb at St. Joseph's Hospital; and trauma, spine and paediatric orthopaedics at Victoria Hospital.

For Dr. Jim Roth, Chair/Chief, Division of Orthopaedic Surgery, the idea of practicing complex surgical procedures prior to actually performing them is the next evolution in medical teaching. Just like the airplane simulator that can be programmed for any airport and any type of plane, surgical simulation can allow residents to learn new techniques outside of the operating room.

In June, the new state-of-the-art Rorabeck Bourne Joint Replacement Clinic opened at University Hospital with the support of orthopaedic surgeons Dr. Robert Bourne and Dr. Cecil Rorabeck. Approximately 1,300 joint replacements are performed in London each year. The Clinic houses new exam rooms, an additional procedure room, state-of-the-art equipment and computer systems and a new waiting room with

The Division of Orthopaedic Surgery

furniture that eases patient comfort.

Dr. Rorabeck is one of the world's leading experts on hip and knee replacement surgery. Dr. Bourne is actively involved with both clinical and basic science research. His primary interests are clinical trials, musculoskeletal imaging, wear studies, retrieval analyses and analysis of large data sets (i.e. Canadian Joint Replacement Registry).

"Just like the airplane simulator that can be programmed for any airport and any type of plane, surgical simulation can allow residents to learn new techniques outside of the operating room."

In October 2010, the Lindros Legacy Research building opened. This state-of-the-art research facility will help transform orthopaedic and sport medicine research and education. It houses the Canadian Surgical Technologies & Advanced Robotics (CSTAR) program, The Kelman Centre, a simulation training facility for surgical teams, and the The Dr. Sandy Kirkley Centre, which consolidates research and clinical trials related to bone and joint disease.

Awards and Achievements

Dr. Bob Litchfield, from the Division of Orthopaedic Surgery was one of eight winners for a ground-breaking study of patients with arthritic knees, proving that arthroscopic knee surgery provided no extra value over physiotherapy and patient education. The Canadian Institutes of Health Research (CIHR) and the Canadian Medical Association Journal (CMAJ) honoured eight outstanding Canadian individuals and teams with the first ever CIHR-CMAJ Top Canadian Achievements in Health Research Awards, which recognize and celebrate Canadian health research and innovation excellence.

Dr. Mark MacLeod was named as the new OMA President in May 2010. Dr. MacLeod is an orthopaedic surgeon at Victoria Hospital and has held an academic appointment with the University of Western Ontario since 1996. Dr. MacLeod completed medical school and orthopaedic residency at The University of Western Ontario. He then completed fellowships in Vancouver (1995, Orthopaedic Trauma), Pittsburgh (1996, Adult Reconstruction, Pelvic and Acetabular Surgery), and Lecco, Italy (Ilizarov techniques). His surgical practice includes orthopaedic trauma, foot and ankle surgery, and adult deformity surgery.

Orthopaedic surgeon **Dr. David Sanders** and colleagues from McMaster University, The University of Toronto, Boston University, and the University of Minnesota recently won the prestigious Kappa Delta Orthopaedic Research and Education Foundation (OREF) Award at the Annual Meeting of the American Academy

of Orthopaedic Surgeons. The research awards are given to scientists who are helping to close the gap between basic research and clinical medicine. Award winners are all working toward new treatment for various areas of musculoskeletal health and offering new insights for the treatment of both open and closed tibial fractures.

Dr. Graham King was awarded the Dean's
Award of Excellence for Research in May 2010. Dr.
King is a prototype model of a successful surgeonscientist. He developed the HULC Bioengineering
Laboratory from a dream in 1992 to the nationally
and internationally recognized lab of excellence
that it is today. Dr. King is so respected by his
colleagues that the Hand and Upper Limb
surgeons have completed the fundraising to
establish the Graham King Research Chair at
the Schulich School of Medicine & Dentistry.

The Division also welcomed back **Dr. Peter Fowler**, who returned to the Division of Orthopaedic Surgery after three years in Qatar. He will be looking after the Mustang Sports teams and patients in the Fowler-Kennedy Sports Medicine Clinic.

Publications

Abaalkhail F, Castonguay M, Driman DK, Parfitt J, Marotta P. Lobular capillary hemangioma of the liver – a first report. Hepatobiliary and Pancreatic Diseases International; 2009:8:323–325.

Akindolire J, Willits K, Shelton W, Giffin R, Bryant D, Kirkley A. The effect of surgical timing meniscal reparability during ACL reconstruction. Submitted to: Arthroscopy.

Alsaleh K, Ho D, Rosas Arellano P, Bailey S, Gurr K, Bailey CS. CT and MRI for assessment of degenerative lumbar spinal stenosis: IS MR superior to CT? Canadian Spine Society 10th annual meeting Published in Canadian Journal of Surgery 53 (suppl): S30, 2010.

Athwal GS, Hoxie S, Rispoli DM, Steinmann SP. Pre-Contoured Parallel Plate Fixation of AO/OTA Type C Distal Humerus Fractures Journal of Orthopaedic Trauma. 23(8):575–580, September 2009.

Athwal GS, King GJ. Management of Displaced Radial Head Fractures: Evidence Based Medicine Review Journal of Hand Surgery [Am].

Athwal GS, McGill RJ, Rispoli DM. Isolated Avulsion of the Medial Head of the Triceps Tendon: An Anatomic Study and Arthroscopic Repair in 2 Cases. Arthroscopy. 2009 Sep;25(9):983-988.

Athwal GS, Ramsey MR, Steinmann SP, Wolf JM. Fracture/Dislocations of the Elbow: A return to the basics. Instructional Course Lectures #60. American Academy of Orthopedic Surgeons, 2010.

Athwal GS. Fractures of the Distal Humerus. In: Bucholz RW, Heckman JD, Court-Brown C, and Tornetta P, Eds. Rockwood and Green's Fractures in Adults, 7th edition. Lippincott Williams & Wilkins, Philadelphia, PA, 2010.

Athwal GS. Total Elbow Arthroplasty for Tumors of the Elbow and Distal Humerus. In: Morrey BF, Ed. Total Joint Arthroplasty, 4th edition. Elsevier, Philadelphia, PA, 2010.

Athwal G, MacDermid JC, Goel D. Metaversion can reliably predict humeral head version: A computed tomography-based validated study. Journal of Shoulder and Elbow Surgery, E pub Aug 11, 2010.

Austman R.L., Milner JS, Holdsworth DW, Dunning CE. Development of a customized density-modulus relationship for use in subject-specific finite element models of the ulna. Proc Inst Mech Eng H. 2009 Aug;223(6):787-94.

Bailey CS, Dvorak MF, Thomas KC, Boyd MC, Paquett S, Kwon B, France J, Gurr KR, Bailey SI, Fisher CG. TLSO versus no orthosis for the treatment of thoracolumbar burst fractures: Interim analysis of a multi-centered randomized clinical equivalence trial. Journal of Neurosurgery Spine 11:295–303, 2009.

Bailey CS, Sjovold SG, Dvorak MF, Fisher CG, Oxland TR. The strength profile of the thoracolumbar endplate reflects the sagittal contours of the spine. Spine.

Bashardoust Tajali S, MacDermid JC, Houghton P, Grewal R. Effects of low power laser irradiation on bone healing in animlas: A meta-analysis. Journal of Orthopaedic Surgery 5(1):1, 2010.

Bell TH, Berta D, Ralley F, MacDonald SJ, McCalden RW, Bourne RB, Rorabeck CH, Naudie DD. Factors affecting perioperative blood loss and transfusion rates in primary total joint arthroplasty: a prospective analysis of 1642 patients. Canadian Journal of Surgery; 2009 Aug;52(4):295–301.

Bell TH, Ferreira LM, McDonald CP, Johnson JA, King GJ. Contribution of the olecranon to elbow stability: an in vitro biomechanical study. J Bone Joint Surg Am. 2010 Apr;92(4):949–57.

Benson E, Athwal GS, King GJ. Clinical Assessment of the Elbow In: Stanley and Trail, Eds. Operative Elbow Surgery, Elsevier, Philadelphia, PA, 2009.

Benson E, Faber KJ, Athwal GS. An evidence-based approach to glenoid component fixation in total shoulder arthroplasty. In: Bhandari M, Ed. Evidence-

Based Orthopaedics. BMJ Books, 2010.

Benson EC, Drosdowech DS. Metastatic breast carcinoma of the coracoid process: two case reports. J Orthop Surg Res. 2010 Mar 26;5:22.

Benson EC, MacDermid JC, Drosdowech DS, Athwal GS. The Incidence of Early Metallic Suture Anchor Pull-Out After Arthroscopic Rotator Cuff Repair. Arthroscopy 26 (3),310-315, 2010.

Bhandari M, Sprague S, Schemitsch EH, Naudie D. International Hip Fracture Research Collaborative. Resolving controversies in hip fracture care: the need for large collaborative trials in hip fractures. J Orthop Trauma. (6):479-84.

Bourne RB, Chesworth B, Davis A, Mahomed N, Charron K. Comparing patient outcomes after THA and TKA: Is there a difference? Clinical Orthopaedics and Related Research; 2010 Feb;468(2):542–546.

Bourne RB, Chesworth BM, David AM, Mahomed NN, Charron K. DJ Patient Satisfaction after total knee arthroplasty: Who is satisfied and who is not? Clinical Orthopaedics and Related Research;2010 Jan: 468,No. 1:57-63.

Bourne RB, Corten K. Cemented versus cementless stems: A verdict is in. CCJR-9 Accepted for publication to JBJS May 2010.

Brandt JM, Medley JB, MacDonald SJ, Bourne RB: Delamination wear on two retrieved polyethylene inserts after gamma sterilization in nitrogen. The Knee, 2010 10.1016.j.knee.2010.03.003.

Breger Stanton DE, Lazaro R, MacDermid JC. A systematic review of contrast baths. Journal of Hand Therapy 22(1):57-70, 2009.

Bryant D, Sanders D, Coles C, Petrisor B, Jeray K,





Laflamme G. Selection of Outcome Measures for Patients with Hip Fractures. Journal of Orthopaedic Trauma July 2009:23(6): 434–441.

Burnell C, Brandt JM, Petrak M, Bourne RB. Posterior condyle surface damage on retrieved femoral knee components. Submitted to Journal of Arthroplasty Apr 2010.

Carlesso L, MacDermid JC, Santiguina L. Definition of adverse events in physical therapy - using manipulation as an exemplar. The Journal of Orthopaedic Physical Therapy, Epub May 13, 40(8):455–463, 2010.

Chung KC, Jong JW, Shauver MJ. WRIST study group: A Guide on Organizing a Multicenter Clinical Trial: the WRIST study group. Plastic and Reconstructive Surgery 2010 Apr. 1. [Epub ahead of print], 2010.

Colquhoun H, Letts L, Law M, MacDermid JC, Edwards M. Routine administration of the Canadian Occupational Performance Measure: Effect on functional outcome Australian Occupational Therapy Journal 57:111-17, 2010.

Colquhoun H, Letts L, Law M, MacDermid JC, Edwards M. Feasibility of the Canadian Occupational Performance Measure for routine use. British Journal of Occupational Therapy 73(2): 48–54, 2010.

Corten K, Au K, Bourne RB. Acetabular options: notes from the other side. Orthopaedics; 2009 Sep;32(9).

Corten K, Bourne RB.The Uncemented Tapered Femoral Components: Designs/Indications/ Results/Technique Surgery of the Hip. Berry B and Lieberman J.

Corten K, MacDonald SJ. Hip Resurfacing Data from National Registries: What do they tell us? What do they not tell us? Clin Orthop Relat Res 468:351-357, 2010.

D.R. Naudie, T. H. Bell, J.P. McAuley, M Bonnin, NA Amendola, J Bellemans, SJ MacDonald, J Menetrey. Technique of Revision Total Knee Arthroplasty: The Patella. The Knee Joint: Surgical techniques and strategies. Springer, Paris, France. 2010. Book Chapter 2010.

Damiani M, King GJ. Coronoid and Radial Head Reconstruction in Chronic Post-Traumatic Elbow Subluxation Instructional Course Lectures Vol 58.Azar FM and O'Connor MI (ed). American Academy of Orthopaedic Surgeons, pg 481-493, 2009.

Daneshvar P, Brikeet Y, Bailey CS, Wai E. Cervical spine fracture with spinal cord injuries in the elderly: Factors affecting mortality Canadian Spine Society 10th annual meeting Published in Canadian Journal of Surgery 53 (suppl): S27, 2010.

Daraz L, MacDermid JC, Wilkins S, Gibson J, Shaw L. Health information from the Web-assessing its quality: A KET intervention. IEEE Xplore. Science & Technology for Humanity (TIC-STH), . ISBN: 978-1-4244-3877-8 IEEE Toronto International Conference (Peer-reviewed proceedings). Pages: 244-251, 2009.

Daraz L, MacDermid JC, Wilkins S, Shaw L. Tools to Evaluate the Quality of Web Health Information: A Structured Review of Content and Usability. The International Journal of Knowledge and Society 5:(10 pages) 2009.

Deslauriers V, Rouleau D, Alami G, MacDermid JC. Translation of the patient scar assessment scale (PSAS) to French-Canadian, with cross-cultural adaptation, reliability evaluation and validation. Canadian Journal of Plastic Surgery 52(6):E259-63, 2009.

Erak S, Rajgopal V, MacDonald SJ, McCalden RW, Bourne RB. Ten-year results of an inset biconvex patellar prosthesis in primary knee arthroplasty. Clinical Orthopaedics and Related Research 467(7):1781-1792. 2009.

Faber KJ, Iordache S, Grewal R. Magnetic resonance imaging for ulnar sided wrist pain. J Hand Surg Am. 2010; 35(2):303-7.

Ferreira LM, Stacpoole RA, Johnson JA, King GJ. Cementless fixation of radial head implants is affected by implant stem geometry: an in vitro study. Clin Biomech (Bristol, Avon). 2010 Jun;25(5):422-6. Forhan M,Vrkljan B, MacDermid J. A systematic review of the quality of psychometric evidence supporting the use of an obesity-specific quality of life measure for use with persons who have class III obesity. Obesity reviews, (Epub June 2, 2009)11:222–228,2010.

Frank SG, Grewal R, Johnson J, Faber KJ, King GW, Athwal GS. Determination of Correct Implant Size in Radial Head Arthroplasty to Avoid Overlengthening. J Bone Joint Surg Am. 2009;91:1738–1746.

Goel DP, Drosdowech DS, Turner RG, Lawendy AR, Garvin G. Periarticular neurofibroma of the shoulder: a case report. J Bone Joint Surg Am. 2010 Mar,92(3): 715-20.

Goel DP, Pike JM, Athwal GS. Open reduction and internal fixation of distal humerus fractures. Operative Techniques in Orthopaedics. 2010. Mar:20(1):24–33.

Grewal R, Boyd KU, MacDermid JC, McMurtry RY. A qualitative evaluation of scaphoid remodeling in bone grafted scaphoid non-unions. Hand 2010;5(4):430-433.

Grewal R, Faber KJ, Graham TJ, Rettig, LA. Hand and Wrist Injuries. Orthopedic Knowledge Update 4: Sports Medicine. Kibler WB. American Orthopedic Association. 69–80, 2009.

Grewal R, King GJW. Kapandji Pinning of Distal Radius Fractures. Fractures and Injuries of the Distal Radius and Carpus. Slutsky DJ, Osterman AL. Saunders Elsevier. Philidelphia. 187 – 193, 2009.

Grewal R, MacDermid JC, Shah P, King GJ. Functional outcome of arthroscopic extensor carpi radialis brevis tendon release in chronic lateral epicondylitis. J Hand Surg Am 2009;34(5):849-57.

Grewal R, MacDermid JC. Randomized Trials Reporting Checklists. Clinical Research for Surgeons: Advanced Concepts in Clinical Research.

Grewal R. Acute Scaphoid Fractures. BMJ – Evidence Based Orthopedics. Wiley-Blackwell.

Grewal R. Distal Radius Fractures – Treatment Effectiveness. BMJ – Evidence Based Orthopedics. Wiley-Blackwell.

Hamilton W, McAuley JP, Dennis DA, Murphy JA, Blumenfeld TJ, Politi J. Total Hip Arthroplasty with Delta Ceramic on Ceramic – Results of a Multicenter Investigational Device Exemption Trial. Clin Orthop Relat Res. 468: 358–366, February 2010. Clin Orthop Relat Res. 2010 Feb;468(2):358–66. Epub 2009 Sep 19. Erratum in: Clin Orthop Relat Res. 2010 Mar;468(3):909.

Hashmi JA, Yashpal K, Holdsworth DW, Henry JL. Sensory and vascular changes in a rat monoarthritis model: prophylactic and therapeutic effects of meloxicam. Inflamm Res. 2010 Aug;59(8):667-78.

Howlett CJ, Tweedie ET, Driman DK. Use of an Elastic Stain to Demonstrate Venous Invasion in Colorectal Carcinoma – a Simple Technique for Detecting an Important Prognostic Factor. J Clin Pathol. 2009;62:1021–1025.

Hundt H, Fleming JC, Lawendy A, Gurr KR, Bailey SI, Sanders D, Mcgarr G, Bihari A, Badhwar A, Bailey CS. Assessment of Hepatic Inflammation After Spinal Cord Injury Using Intravital Microscopy NASS annual meeting Published in The Spine Journal 9 (10) (suppl): 92S, 2009.

Hunt MA, Birmingham TB, Jones IC, Vandervoot AA, Giffin JR. Effect of tibial re-alignment surgery on



single leg standing balance in patients with knee osteoarthritis. Clinical Biomechanics. 2009 Oct; 24(8):693-6. Epub 2009 June 13.

Ignatiuk A, Bailey CS, Katsimihas M, RosasArellano P, Fleming J, Issa K, Bailey S, Gurr K. Subsidence of the Charite total disc arthroplasty and predisposing factors: A prospective clinical and radiographic trial with average five year follow-up. Canadian Spine Society 10th annual meeting Published in Canadian Journal of Surgery 53 (suppl): S35, 2010.

Jenkyn TR, Shultz R, Giffin JR, Birmingham TB. A comparison of subtalar joint motion during anticipated medial cutting turns and level walking using a multi-segment foot model Gait and Posture. 2010 Feb;31(2):153-158. Epub 2009 Nov 8.

John M, Angst F, Friedemann A, King GJ, MacDermid JC, Beat S. The American Shoulder and Elbow Surgeons Elbow questionnaire (ASES-e): Cross-cultural adaptation into German and evaluation of its psychometric properties. The Journal of Hand Therapy Epub June 14, 2010.

John M, Angst F, Awiszus F, Pap G, MacDermid JC, Simmen BR: The patient-rated wrist evaluation (PRWE): cross-cultural adaptation into German and evaluation of its psychometric properties. Clinical Experimental Rheumatology; 26:1047–1058, 2009.

Karanicolas P, Bhandari M, Walter S, Heels-Ansdell D, Sanders D, Schemitsch E, Guyatt G. Interobserver Reliability of Classification Systems to Rate the Quality of Femoral Neck Fracture Reduction. Journal of Orthopaedic Trauma July 2009:23(6): 408-412.

Katsimihas M, Bailey CS. Ignatiuk A, Rosas-Arellano MP, Bailey SI, Issa K, Gurr KR. Subsidence of the CHARITÉ III total disc arthroplasty and predisposing factors. Canadian Orthopaedic Association 64th annual meeting.

Katsimihas M, Bailey CS, Issa K, Bailey SI, Fleming J, Rosas-Arellano MP, Gurr KR. Prospective clinical and radiographic results of the CHARITÉ III total disc replacement: Average 5 year follow-up. Canadian Orthopaedic Association 64th annual meeting.



Katsimihas M, Bailey CS, Issa K, Bailey SI, Fleming J, RosasArellano P, Gurr KR. Prospective clinical and radiographic results of the CHARITÉ III total disc replacement: Average 5 year follow-up British Association of Spine Surgeons annual meeting Published in Journal of Bone and Joint Surgery British Volume 92-B (suppl): 380, 2010.

King GJW, McMurtry RY. Ulnar Impingement Syndrome in The Wrist: Diagnosis and Operative Treatment. Cooney WP (ed). Kluwer/Lippincott, Philidelphia, 1003 – 1011, 2010.

Krych AJ, Howard JL, Trousdale RT, Cabanella ME, Berry DJ. Total Hip Arthroplasty With Shortening Subtrochanteric Osteotomy in Crowe type-IV Developmental Dysplasia JBJS A 2W9 91: 2213–2221.

Little NJ, Busch CA, Gallagher JA, Rorabeck CH, Bourne RB. Acetabular Polyethylene wear and acetabular inclincation and femoral offset. Clinical Orthopaedics and Related Research. 2009 Nov;467(11):2895-900.

Logerstedt DS, Snyder-Mackler L, Ritter RC, Axe MJ, Altman RD, Chu C, Delitto A, Dewitt J, Ferland A, Fearon H, Fitzgerald GK, MacDermid JC, Matheson JW, McClure P, Shekelle P, Smith AR, Torburn L. Knee pain and mobility impairments: meniscal and articular cartilage lesions. Journal of Orthopaedic Sports Physical Therapy. 40(6): A1-A35, 2010.

Longino D, Clerk N, Fowler PJ, Giffin JR. Technique in ACL Reconstruction: Hamstring Reconstruction. In Bonnin M, Amendola A, MacDonald S, Bellemans J, Menetray J, (eds) Knee Surgery. Paris: Springer-Verlag.

Longino D, Giffin JR. Single Bundle PCL Reconstruction: Transtibial Technique. In Fu FH (ed) Masters Technique in Orthopaedic Surgery - Sports Medicine. Philadelphia: Lippincott, Williams & Wilkins.

Loughead J, OConnor P, Charron K, Rorabeck CH, Bourne RB. Twenty three year outcome of the porous coated anatomic total hip replacement, a concise followup of a previous report Submitted to JBJS June 2010.

MacDermid JC, Fruere J, Grewal R. Finger and Thumb Pathology. Neck and Arm Pain Syndromes: Evidence-Informed Screening, Diagnosis, and Management in Physical Therapy.

MacDermid JH, Roth, JH. Wrist Outcome Assessment Second Edition Chapter 8 PP 192-204 Wolters Kluwer/Lippincott Williams & Williams New York, NY. MacDermid JC, Wojkowski S, Marley M, Stevenson E. Hand Therapist Management of the Lateral Epicondylosis: A Survey of Expert Opinion and Practice Patterns. (American Society of Hand Therapists). Journal of Hand Therapy. Epub Dec 1, 2009.

MacDermid JC, Walton D, Avery S, Blanchard A, Etruw E, McAlpine C, Goldsmith C. Measurement properties of the neck disability index: A systematic review. Journal of Orthopaedic and Sports Physical Therapy 39(5):400-417, 2009.

MacDermid JC, Graham I. Introduction to Knowledge Translation. Hand Clinics 25(1):125-143, 2009.

MacDermid JC, Grewal R, McIntyre N. Using evidence-based approach to measure outcomes in clinical practice. Hand Clinic 25(1):97-111, 2009.

MacDermid JC, Walton D, Law M. Critical Appraisal of Clinical Research Evidence for its validity and usefulness. Hand Clinics 25(1):29–42, 2009.

MacDonald SJ, Rosenzweig S, Guerin JS, McCalden RW, Bohm ER, Bourne RB, Rorabeck CH, Barrack RL. Proximally versus fully porous-coated femoral stems. A multicenter randomized trial. Clin Orthop Relat Res 468:424-432, 2010.

MacIntyre NJ, Wessel J, MacDermid JC, Galea V. Assessment of strength of individual digits in persons with osteoarthritis of the hand. Hand Therapy, 15 (2): 39-44, 2010.

Manjoo A, Sanders D, Tieszer C, MacLeod M. Functional and Radiographical Results of Patients with Syndesmotic Screw Fixation: Implications for Screw Removal. Journal of Orthopaedic Trauma January 2010: 24(1): 2-6.

Marsh J, Bryant D, MacDonald SJ. Older patients

can accurately recall their preoperative health status six weeks following THA. J Bone Joint Surg (Am) 91(12):827-837, 2009.

Marsh JD, Somerville L, Bryant D, Giffin JR. Multiligament Knee Injury: Acute Versus Delayed Surgical Reconstruction: In: Wright JG, (ed), Evidence– Based Orthopaedics. Philadelphia: Saunders Elsevier, 2009:648-658.

Mathew P, Athwal GS, King GJ. Terrible Triad Injuries of the Elbow. Operative Techniques in Orthopedic Trauma. Elsevier, 2010.

McAuley JP, Huang W. Fully Coated Cementless Femoral Stems in Total Hip Arthroplasty Invited Chapter in Surgical Treatment of Hip Arthritis, Reconstruction, Replacement, Revision. W. Hozack editor, Elsevier, Philadelphia, PA. Invited book chapter, 2009.

McAuley JP, Tammachote N. Revision of Failed Unicompartmental Knee Arthroplasty Invited chapter in: Total Knee Replacement. W.N. Scott, A. Hanssen Eds. Elsevier. Philadelphia, PA. pages 289-297. Book Cahpter, 2009.

McAuley JP, Turk J. Bone Defect Classification Invited Chapter for: Revision Total Hip and Knee Arthroplasty. D. Berry, R. Trousdale, D. Dennis and W. Paprosky Eds. Lippincott, Williams and Wilkins. Book Chapter, 2009.

McCalden RW, Charron KD, Yuan X, Naudie D, Mac-Donald SJ, Bourne RB. A Randomized Controlled Trial Comparing Early Migration of Two Collarless Polished Cemented Stems Using RSA. Journal of Bone and Joint Surgery Br. 2010 92 (7).935-40.

McCalden RW, MacDonald SJ, Bourne RB, Marr JT. A randomized controlled trial comparing "hi-flex"

versus "standard" posterior cruciate substituting polyethylene tibial inserts in total knee arthroplasty. J Arthroplasty 24(6,Suppl 1):33-38, 2009.

McCalden RW, MacDonald SJ, Charron K, Bourne RB, Naudie DD. The role of polyethylene design on postoperative RKA flexion: An analysis of 1534 cases. Clinical Orthopaedics and Releated Research; 2010 Jan:468,No. 1:108-114.

McDonald CP, Johnson JA, Peters TM, King GJ. Image-based navigation improves the positioning of the humeral component in total elbow arthroplasty. J Shoulder Elbow Surg. 2010 Jun;19(4):533-43.

McLachlin SC, Beaton BJB, Sabo MT, Gurr KR, Bailey SI, Bailey CS, Dunning CE. Comparing the fixation of a novel hollow screw versus a conventional solid screw in human sacra under cyclic loading Spine 33: pg 1970 – 1975, 2008.

McMurtry RY, King GJW. Chapter 49 "Ulnar Impingement Syndrome" in The Wrist: Diagnosis and Operative Treatment, Cooney III, William P.; 2nd. Edition, 1003–11, Lippincott William & Wilkins, Publishers, Rochester, Minn. USA, 2010.

McMurtry RY, Boyd KU, Grewal R, MacDermid JC. A Qualitative Evaluation of Scaphoid Remodeling in Bone Grafted Non-Unions, published in the Journal of Hand Surgery, 2010.

Mehta S, MacDermid JC, Carlesso L, McPhee. Concurrent Validation of the DASH and the QuickDASH in Comparison to Neck-specific Scales in Patients with Neck Pain. Spine Epub May 5, 2010.

Nadeau M, RosasArellano P, Gurr K, Bailey S, Taylor D, Grewal R, Lawlor K. Bailey CS. The validity of differentiating neurogenic claudication from vascular claudication based on symptomatic presentation. Ca-

nadian Spine Society 10th annual meeting Published in Canadian Journal of Surgery 53 (suppl): \$26, 2010.

Naudie D. Hip Arthroscopy: Its role in the Treatment of FAI. Bulletin of the Canadian Orthopaedic Association Winter edition, 2009.

Nguyen D, Ferreira LM, Brownhill JR, King GJ, Drosdowech DS, Faber KJ, Johnson JA. Improved accuracy of computer assisted glenoid implantation in total shoulder arthroplasty: an in-vitro randomized controlled trial. Journal of Shoulder and Elbow Surg. 2009 Nov-Dec: 18(6):907-14.

Nikolov HN, Pelz DM, Lownie SP, Norley CJ, Khan V, Drangova M, et al. Micro-CT-compatible technique for measuring self-expanding stent forces. J Vasc Interv Radiol. 2010 Apr;21(4):562-70.

Pike JM, Goel D, Grewal R. Carpal Instability – an update on a complex spectrum of injury. Minerva Ortop Traumatol 2009;60(2):105-118.

Pike JM, Grewal R. Fragility fractures of the distal radius Minerva Ortop Traumatol 2009;60(5):461-9.

Ralley FE, Berta D, Binns V, Howard J, Naudie DD. One intraoperative dose of tranexamic acid for patients having primary hip or knee arthrolasty. Clin Orthop Relat Res. 2010 Jul;468(7):1905–11 Epub 2010 Jan 9 Clin Orthop Relat Res 2010 May:468 (5): 1447.

Rasoulinejad P, McLachlin S, Bailey CS, Bailey SI, Gurr KR, Dunning C. Sub-axial cervical spine instability following unilateral facet injury: A biomechanical analysis. Canadian Spine Society 10th annual meeting Published in Canadian Journal of Surgery 53 (suppl): S30, 2010.

Lindros Legacy Research Building

Last year, the Lindros Legacy Research building opened. This is a state-of-the-art facility that helps transform orthopaedic and sport medicine research and education. It is located adjacent to the patient care areas at University Hospital, and named in honour of Eric Lindros who made a generous financial gift when he retired from professional hockey.

This research building is a new, fivestorey centre for translational research. Also known as 'bench-to-bedside' research, translational research bridges the gap between scientific discovery and patient care by identifying significant, current research projects and applying that knowledge to benefit patients. It houses the Canadian Surgical Technologies &

Advanced Robotics (CSTAR) program, The Brent and Marilyn Kelman Centre for Advanced Learning; The Dr. Sandy Kirkley Centre for Musculoskeletal Research; and The Matthew Mailing Centre for Translational Transplant Studies. The Mailing Centre is adjacent to the clinical Multi-Organ Transplant Program unit. It is a state-of-the-art facility that was developed to accelerate knowledge transfer from the basic science researchers to clinical practice. As well, the Centre for Clinical Investigation and Therapeutics (CCIT) will conduct patient-oriented research and Phase 1 and Phase 2 drug studies.



Rosenblatt Y, Young C, MacDermid JC, King GJ. Osteotomy of the head of the radius for partial articular malunion. J Bone Joint Surg Br. 2009 Oct;91(10):1342-46.

Rouleau DM, Faber KJ, Athwal GS. The Proximal Ulna Dorsal Angulation: A Radiographic Study. Journal of Shoulder and Elbow Surgery. 2010Jan-Feb;19(1):26–30.

Rouleau DS, MacDermid JC, Faber KJ. A systematic review of the psychometric properties of shoulder instability scales. Journal of Shoulder and Elbow Surgery 19(8):1121–8, 2010.

Roy JS, Macdermid JC, Goel D, Faber KJ, Athwal GS, Drosdowech DS. What is a Successful Outcome Following Reverse Total Shoulder Arthroplasty? Open Orthop J. 2010 Apr 23;4:157-63.

Roy JS, MacDermid JC, Orton B, Tran T, Faber KJ, Drosdowech D, Athwal GS. The concurrent validity of a hand-held versus a stationary dynamometer in testing isometric shoulder strength. J Hand Ther. 2009 Oct-Dec; 22(4):320-7.

Roy JS, MacDermid JC, Francois. Psychometric properties of presenteeism scales for musculoskeletal work-related upper extremity disorders. Journal of Rehabilitation Medicine. Nov 22 Epub 2010.

Roy JS, Moffet H, McFadyen BJ, MacDermid JC. The kinematics of upper extremity reaching-a reliability study on people with and without shoulder impingement syndrome. Sports Medicine, Arthroscopy, Rehabilitation, Therapy & Technology: 2, 8, 2010.

Roy JS, MacDermid JC, Woodhouse L. A systematic review of the psychometric properties of the Constant score. Journal of Shoulder and Elbow Surgery: (Epub June 24, 2009); 19:157–164,2010.

Roy JS, MacDermid JC, Woodhouse L. A systematic review of four shoulder self-report scales. Arthritis and Rheumatism. 61(5):623-632,2009.

Roy JS, MacDermid JC, Usher Boyd K. Faber KJ, Drosdowech D, Athwal GS. Rotational strength, range of motion, and function in people with unaffected shoulders from various stages of life. Sports Medicine, Arthroscopy, Rehabilitation, Therapy and Technology (SMARTT), 2;1(1):4, 2009.

Sabo MT, Fay K, McDonald CP, Ferreira LM, Johnson JA, King GJ. Effect of coronal shear fractures of the distal humerus on elbow kinematics and stability. J Shoulder Elbow Surg. 2010 Jul;19(5):670-80.

Sabo M, Pollmann ST, Gurr KR, Bailey CS, Holdsworth DW. Use of co-registered high-resolution computed tomography scans before and after screw insertion as a novel technique for bone mineral density determination along screw trajectory. Canadian Orthopaedic Research Society 43rd Annual Meeting.

Sanders, DW. Fractures of the Ankle and Tibial Plafond. In: AAOS Comprehensive Orthopaedic Review AAOS Publishing 2009 (In Print) pp: 659-676.

Sanders DW. "Mangled Extremity: Are Scoring Systems Useful?" In: Evidence Based Orthopaedics - The Best Answers to Clinical Questions Saunders Elsevier 2009 (In Print) pp: 317-321.

Sauder DJ, Athwal GS, Faber KJ, Roth JH. Perilunate Injuries. Hand Clinics 2010 Feb;26(1):145-154.

Schemitsch EH, Bhandari M, Boden SD, Bourne RB, Bozic KJ, Jacobs JJ, Zdero R. The evidence-based approach in bringing new orthopaedic devices to market. The Journal of Bone and Joint Surgery; 2010 Apr:92A, No.4:1030-1037.



Sequiera K, Naudie D. Three Important Musculoskeletal Conditions Involving the Groin and Buttock: Femoroacetbular Impingement, Sports Hernis, and Trochanteric Bursal Pain Syndrome. American Academy of Neuromuscular and Electrodiagnostic Medicine Published Proceedings.

Sharif MR, Lam WW, Ouriadov AV, Holdsworth DW, Santyr GE. Comparison of hyperpolarized (3)He MRI rat lung volume measurement with micro-computed tomography. NMR Biomed. 2010 May;23(4):359-67.

Slagel B, Willits K. Instrumentation and operative set-up for ankle and subtalar arthroscopy. In: Amendola A, StoneJ (eds). AANA Advanced Foot and Ankle Arthroscopy; pp. 18-25.

Smith AS, Driman DK, Spithoff K, Hunter A, McLeod R, Simunovic M, Langer B. Colorectal Cancer Guideline for Optimization of Colorectal Cancer Surgery and Pathology. J Surg Oncol. 2010; 101:5–12.

Snider MG, MacDonald SJ. The influence of the posterior cruciate ligament and component design on joint line position following primary total knee arthroplasty. J of Arthoplasty, 24(7):1093–1098, 2009.

Studer A, Athwal GS. Fractures and Dislocations of the Hand and Carpus Ln: Lin S and Hijjawi J, Eds. Plastic and Reconstructive Surgery. 2nd Edition McGraw-Hill. Studer A, Athwal GS. Rheumatoid Arthritis of the Elbow Hand Clinics 2010.

Suh N, Benson EC, Faber KJ, MacDermid JC, Grewal R. Treatment of Acute Scaphoid Fractures: A systematic review and meta-analysis. Hand. 2010;5(4):345-353.

Suh N, Grewal R. Scaphoid Non-Unions BMJ – Evidence Based Orthopedics. Wiley-Blackwell.

Szabo R, MacDermid JC. Introduction to Evidencebased practice in hand surgery and rehabilitation. Hand Clinics 25 (1)1-14,2009.

Teeter M, Naudie D, Charron KD, Holdsworth D. Three-Dimensional Surface Deviation Maps for Analysis of Retrieved Polyethylene Acetabular Liners Using Micro-computed Tomography. Journal of Arthroplasty. 2010. Feb; 25(2):330–2.

Teeter MG, Naudie DD, Milner JS, Holdsworth DW. Determination of Reference Geometry for Polyethylene Tibial Insert Wear Analysis. J Arthroplasty. 2010. Mar 25 [Epub ahead of print].

Temple CL, Cook EF, Ross DC, Bettger-Hahn M, MacDermid J. Development of a breast reconstruction satisfaction questionnaire (BRECON): Dimensionality and clinical importance of breast symptoms, donor site issues, patient expectations, and relationships. Journal of Surgery Oncology. 2010.

Temple C, Ross D, Kim S, Tse R, Bettger-Hahn M, Gan BS, MacDermid J. Sensibility following innervated free TRAM flap for breast reconstruction: part II. Innervation improves patient-rated quality of life. Plastic and Reconstructive Surgery 24(5):1419-25, 2009.

Thakur Y, Holdsworth DW, Drangova M. Characterization of catheter dynamics during percutaneous transluminal catheter procedures. IEEE Trans Biomed Eng. 2009 Aug; 56(8):2140-3.



Thorne ML, Rankin RN, Steinman DA, Holdsworth DW. In vivo Doppler ultrasound quantification of turbulence intensity using a high-pass frequency filter method. Ultrasound Med Biol. 2010 May;36(5):761-71.

Turner RG, Faber KJ, Athwal of Distal Radius Fractures. Hand Clinics 2010 Feb;26(1):85-96.

Ulici V, Hoenselaar KD, Agoston H, McErlain DD, Umoh J, Chakrabarti S, et al. The role of Akt1 in terminal stages of endochondral bone formation: angiogenesis and ossification. Bone. 2009 Dec;45(6):1133-45.

Vasconcellos DA, Giffin JR, Amendola A. Complications in Osteotomies In Meislin R, Halbrecht J, (eds). Complications in Knee and Shoulder Surgery: Management and Treatment Options for the Sports Medicine Orthopaedist. London: Springer.

Veselka N, McErlain DD, Holdsworth DW, Eger JL, Chhem RK, Mason MJ, et al. A bony connection signals laryngeal echolocation in bats. Nature. 2010 Feb 18;463(7283):939-42.

Walton DM, MacDermid JC, Neilson W. Recovery from acute musculoskeletal injury of the spine: clinical,methodological and philosophical considerations. Disability and Rehabilitation (Epub) Oct 26, 2009; Print 32(10): 864-74, 2010.

Walton D, MacDermid JC, Teasell R. Risk Factors for Persistent Problems Following Whiplash Injury: Results of a Systematic Review and Meta-analysis. Journal of Orthopaedic and Sport Physical Therapy 39(5):334-50,2009.

Waspe AC, McErlain DD, Pitelka V, Holdsworth DW, Lacefield JC, Fenster A. Integration and evalua-

tion of a needle-positioning robot with volumetric microcomputed tomography image guidance for small animal stereotactic interventions. Med Phys. 2010 Apr;37(4):1647-59.

Whitehead TS, Willits K, Bryant D, Giffin JR, Fowler PJ. Impact of medial opening or lateral closing wedge tibial osteotomy on bone resection and posterior cruciate integrity during total knee arthroplasty: A cadaveric study. Journal of Arthroplasty. 2009 Sep; 24(6):979–89. Epub 2008 Sep 26.

Whittaker JP, Charron KD, McCalden RW, Mac-Donald SJ, Bourne RB. Comparison of steady state femoral head penetration rates between 2 highly cross-linked polyethylenes in total hip arthroplasty. Journal of Arthroplasty; 2009 Jul 3.

Whittaker JP, Naudie DR, McAuley JP, McCalden RW, MacDonald SJ, Bourne RB. Does bearing design influence mid term survivorship of unicompartmental arthroplasties? Proceedings of the Knee Society. Clin Orthop Rel Research 468: 73–81. January 2010. Clin Orthop Relat Res. 2010 Jan;468(1):73–81. Epub 2009 Jul 14.

Willits K, Amendola A, Bryant D, Mohtadi N, Giffin R, Keane C, Kirkley A. Operative vs Nonoperative Treatment of Acute Achilles Tendon Ruptures: A Multicentred randomized trial using accelerated functional rehabilitation. Submitted to: AAOS 2009, AANA 2009, COA 2009.

Wolf JM, Athwal GS, Hoang BH, Mehta S, Williams AE, Owens BD. Knowledge of levels of evidence criteria in orthopedic residents. Orthopedics. 2009 Jul;32(7):494.

Wolf JM, Athwal, GS, Dennison D, Shin AY. Acute traumatic injuries to the upper extremity: What to do and when to do it? Instructional Course Lectures #59. American Academy of Orthopedic Surgeons, 2010.

Wood GCA, Naudie D, McAuley JP, McCalden R. Locking Compression Plates for the Treatment of Peri-prosthetic Femoral Fractures around Well-Fixed Total Hip and Knee Implants. Journal of Arthroplasty. J Arthroplasty. 2010 Sep 2.

Wotherspoon DM, Neligan M, Willits KR, Giffin JR, Litchfield RB, Spouge A, Fowler PJ, Bryant D. Prediction of anterior cruciate ligament hamstring autograft size using preoperative magnetic resonance imaging. American Journal of Sports Medicine; 2009.

Wotherspoon S, Willits K, Doherty T, Bryant D. The Relationship of Traction Force, Traction Time and New Conduction Abnormalities During Hip Arthroscopy. Submitted To: Arthroscopy and Related Surgery.

Yeung T, Wessel J, Stratford P, MacDermid JC. Reliability, Validity and Responsiveness of the Lower Extremity Functional Scale for Inpatients of an Orthopaedic Rehabilitation Ward. The Journal of Orthopaedic and Sports Physical Therapy 39(6):468-77,2009.

Yousif MY, Holdsworth DW, Poepping TL. Deriving a blood-mimicking fluid for particle image velocimetry in Sylgard-184 vascular models. Conf Proc IEEE Eng Med Biol Soc. 2009;2009:1412-5.



Dr. Leslie Scott, Chair/Chief, Division of Paediatric Surgery

The youngest Division in the Department

has already become a leader for its expertise in a number of paediatric sub-specialties including general surgery, urology, neurosurgery, orthopaedics, gynaecology, plastic surgery and dentistry. The surgeons also are connected with CSTAR as they investigate new ways to perform minimally invasive fetal surgery.

"Children are resilient and can overcome incredible injuries and handicaps," says Dr. Leslie Scott, Chair/Chief, Division of Paediatric Surgery. "Seeing that, and seeing a child improve, get better and go back to their smiling state, is really very rewarding."

Much of the work in this division is not about the operation, but about trying to avoid having to subject children to invasive surgery. Dr. Scott sees tele-medicine as an emerging technology tool that is increasingly useful in remotely monitoring a patient's progress, addressing any concerns the child's home physicians might have, and allowing specialized care to continue without the burden of long travel for the family, no matter how remotely they may live.

Paediatric surgery requires critical connections with other departments. Medical Imaging has evolved into an important partner.

The Division of Paediatric Surgery

"We work very closely together to decide what is best for the child. The input from radiology over the last five years has increased dramatically. Many procedures are now being planned or performed with assistance of the radiology team using new technologies and it is much better and often less invasive for the child," says Scott.

Over the past year and the coming year, children's programs are moving to the new north tower at London Health Sciences
Centre. These visionary facilities will provide optimal care to children and a welcoming and healing environment for patients and their families. As many children with complex surgical issues require multiple specialists, this environment will also facilitate forming multidisciplinary clinics for assessment and treatment planning, significantly decreasing the number of hospital trips for the child and family.

For children with complex surgical problems, the family's life often revolves around trips to the hospital, waiting rooms and appointments. The new Children's Hospital will significantly impact these families, making the hospital a child friendly place, and improving access to specialized care. This reduces fear and trauma for the child and family.

Children are not just small adults. The Division of Paediatric Surgery is excited about the advances in facilities, technologies and surgical expertise which are consolidating to improve the experience and outcomes for children of Southwestern Ontario and beyond.

Accomplishments and Awards

Dr. Leslie Scott was appointed to the role of Acting Chair/Chief for the Division of Paediatric Surgery. Dr. Scott replaces Dr. David Girvan, who capably led the Division in the Acting Chair/Chief role in 2009-10.

Dr. Neil Merritt was appointed to the role of Director of Paediatric Trauma, Department of Surgery, Children's Hospital of Western Ontario and London Health Sciences Centre, effective July 1, 2010.

Publications

Department of Surgery

Al-Mandil M, Khoury AE, El-Hout Y, Kogon M, Dave S, Farhat WA. Potential complications with the prescrotal approach for the palpable undescended testis? A comparison of single prescrotal incision to the traditional inguinal approach. J Urol. 2008 Aug;180(2):686-9.

Brandt, M.G., Husein, M., Matic, D.B., Leung, A.E., Wehrli, B.M., Welch, I., Ho, D., Kassam, Z. Silver, I., Doyle, P.C. Atrophy among mucosa-only versus muscular mucosa superiorly based pharyngeal flaps: a pilot animal study. Plast Reconstr Surg 1020 Jun;125(6):1679-84.

Dave S, Bägli DJ. A review of the effect of injected dextranomer/hyaluronic Acid copolymer volume on reflux correction following endoscopic injection Adv Urol. 2008.

Dave S, Khoury AE. Diagnostic approach to reflux in 2007 Adv Urol. 2008.

Dave S, Manaboriboon N, Braga LH, Lorenzo AJ, Farhat WA, Bagli DJ, Khoury AE, Salle JL Open versus laparoscopic staged Fowler-Stephens orchiopexy: impact of long loop vas. J Urol 2009 Nov; 182(5): 2435-9.

Dave S, Salle JL. Current status of bladder neck reconstruction Curr Opin Urol. 2008 Jul;18(4):419-24



Matic, D.B. Invited Reply to: Temporal hollowing following coronal incision: A prospective, randomized, controlled trial - Statistics are crucial for drawing adequate conclusions in Plastic Surgery. Plast Reconstr Surg, 124(1):313, July 2009.

Matic, D.B. Invited Reply to: Temporal hollowing following coronal incision: A prospective, randomized, controlled trial -- Statistics are crucial for drawing adequate conclusions in Plastic Surgery. Plast Reconstr Surg 124(1):313, July. 2009.

Power, S.M. and Matic D.B. Gingivoperiosteoplasty following alveolar molding with a Latham appliance versus secondary bone grafting: The effects on bone production and midfacial growth in patients with bilateral clefts Plast Reconstr Surg 124(2):573-82, Aug. 2009.

Suoub M, Dave S, El-Hout Y, Braga LH, Farhat WA. Distal hypospadias repair with or without foreskin reconstruction: A single-surgeon experience. J Pediatr Urol. 2008 Oct;4(5):377-80.

Department of Clinical Neurological Sciences, Paediatric Neurosurgery

DeVries-Rizzo M, Warren D, Delaney G, Levin S, Campbell C, de Ribaupierre S. Intrathecal baclofen and pregnancy: implications for clinical care. Can J Neurosci Nurs. 2009;31(3):21-4.

El Hassani Y, De Ribaupierre S, Sajadi A, Pereira VM, Rilliet B. Hemorrhagic strokes in children: aetiology and management. Rev Med Suisse. 2010 Feb 24;6(237):401-4, 406-7.

Ranger A, Al-Hayek A and Matic D A case of Chiari Type I malformation in an infant with Type 2 Pfeiffer Syndrome: Further evidence of acquired pathogenesis Journal of Craniofacial Surgery 2010 March 21(2): 427-431.

Ranger A, Avery M, Ramsay D, Izawa J, Bauman G. Pilocytic astrocytoma of the conus medullaris with an exophytic cauda equina component: Case report of a rarely encountered spinal intradural tumor in a child. [Child's Nervous System].

Ranger A, Chaudhary N, Matic D. Craniosynostosis involving the squamous temporal sutures: two cases of a rare and possibly unreported aetiology for cranial vault asymmetry. Journal of Craniofacial Surgery

Ranger A, Chaudhary N, Rau J, Matic D, Goobie S. A Canadian case of coronal craniosynostosis syndrome (Meunke syndrome): the value of genetic testing versus clinical diagnosis. Journal of Craniofacial Surgery.

Ranger A, Grigenas O, DeSilva C. Polytetrafluoroethylene (Gore-Tex®) surgical membrane placement may accelerate re-tethering after repair of spinal dysraphism: A series of five paediatric cases. Paediatric Neurosurgery.

Ranger A, Szymczak A, Fraser D, Salvadori M, Jardine L. Bilateral decompressive craniectomy for refractory intracranial hypertension in a child with severe ITP-related intracerebral hemorrhage. Paediatric Neurosurgery Pediatr Neurosurg 2009;45:390-395 (DOI: 10.1159/000260910).

Ranger A, Szymczak A. Do intracranial neoplasms differ in Ollier's disease and Maffucci's syndrome? An in-depth analysis of the literature. Neurosurgery 2009; December 65(5): 1106-15.

Ranger A., Al-Hayel, A., Matic D. Chiari type 1 malformation in an infant with Type 2 Pfeiffer syndrome: further evidence of acquired pathogenesis. J Cranofacial Surg 1020 Mar;21(2):427-31.

Rilliet B, Pittet B, Montandon D, Narata AP, de Ribaupierre S, Schils F, Boscherini D, Di Rocco C, Ducrey N. Orbitotemporal facial involvement in type 1 neurofibromatosis (NF1). Neurochirurgie. 2010 Mar 18.

Department of Ophthalmology, Paediatric Ophthalmology

Sharan S, Swamy B, Taranath DA, Jamieson R, Yu T, Wargon O, Grigg JR. Port wine vascular malformations and risk of glaucoma in Sturge Weber syndrome. JAAPOS 2009 August; 13 (4): 374–8.

Sharan S, Dupois A, Hebert D, Levin AV. The effect of oral acetazolamide on growth in children. CanJ Ophthalmol 2010 Feb; 45(1): 41-5.

Sharan S, Dupois A, Hevert D, Levin AV The effect of oral acetazolamide on growth in children. The Paediatric Glaucoma and Cataract Family Association (PGCFA). Vol XVII - Issue 2.





Dr. Doug Ross, Chair/Chief, Division of Plastic and Reconstructive Surgery

Unlike other surgical specialties, plastic surgery does not have a defined anatomic area and this is reflected in the sub-specialty expertise of divisional members including hand and upper limb surgery, reconstructive microsurgery, reconstructive breast surgery, adult and paediatric craniofacial surgery, burn care, peripheral nerve surgery, aesthetic surgery, wound healing and cutaneous malignancies. Members of the Division work in close collaboration with the Divisions of General Surgery, and Orthopaedic Surgery as well as the Departments of Neurosurgery and Otolaryngology - Head and Neck Surgery.

The Division maintains connections with other medical professionals in the hospital and across the city. "It is the nature of plastic surgery to have a lot of connections with other Departments and specialties," says Dr. Doug Ross, Chair/Chief, Division of Plastic and Reconstructive Surgery. "We are involved at all three sites working closely with other surgical and non-surgical specialties. In addition, several members of our Division hold significant roles within the Royal College of Physicians and Surgeons of Canada."

Dr. Doug Ross thrives on the challenges and rewards of surgery and has served as the Department of Surgery's Director of Surgical Education since 2008. "I think every surgeon loves to be in the operating room," says Ross.

The Division of Plastic and Reconstructive Surgery

"Every surgeon, and most people in medicine, at some point during their training fell in love with being in the operating room, working in a team with people, and the whole surgical life. Being in an academic institution and working with successive generations of surgical residents is sometimes very challenging and occasionally, frustrating. But it is also very satisfying to watch them acquire the skills and knowledge necessary to become a safe and effective surgeon.

"It is the nature of plastic surgery to have a lot of connections with other Departments and specialties."

The track record of our trainees at the Royal College examinations, from all Divisions in the Department over the past few years, has been outstanding and reflects the quality of our residents and our teachers."

Outside of the operating room, surgeons are continually advancing research, procedures, and patient care. "Learning about new research, new techniques, and how to do things better is something that everyone is always trying to do. Finding a good solution where you didn't think a solution existed for a specific surgery or case; that certainly is something that keeps me going."

The Division has grown steadily, focusing on a large number of very complex reconstructive procedures. "The Department as a whole,

externally and certainly internally, under the leadership of Dr. John Denstedt continues to grow and become much more connected; we have a very good relationship with other Departments and the medical students."

Awards and Achievements

Dr. Douglas Ross was successful in his application to the Provincial Innovation Fund competition for his project, "Utilization of Surgical Simulation to Enhance Patient Safety Via Development and Assessment of Team-Based Training and Non-technical Skills of Surgical Teams." He formed an interest group of faculty with advanced degrees in education and was instrumental in the recruitment of our first PhD Education Researcher, Dr. Sayra Cristancho.

Dr. Claire Temple received full approval from the Board of the Institute of Clinical Evaluative Sciences (ICES) to begin an installation of a satellite facility at The University of Western Ontario. This project received over \$1M in funding from the Academic Medical Organization of Southwestern Ontario. Dr. Temple is the project lead and is working closely with Dr. Amit Garg (Medicine). The satellite facility will be supporting and promoting the ability of Western's scientific community to improve our population's health via access to and analysis of a rich and ever-growing number of databases. Such research will have an important impact on health policy and delivery of care.

Publications

Bezuhly M, Temple CL, Sigurdson LJ, Davis RB, Flowerdew G, Cook EF Jr. Immediate postmastectomy reconstruction is associated with improved breast cancer-specific survival: evidence and new challenges from the Surveillance, Epidemiology, and End Results database. Cancer. 2009, 115(20):4648-54.

Bhavsar S, Nimigan A, Hackam DG, O'Gorman DB, Gan BS, Spence JD. Keloid scarring, but not Duputren's contracture, is associated with unexplained atherosclerosis. Clinical and Investigative Medicine 2009: 1;32(2): E95-102.

Boyd KU, Henderson C, Joseph M, Yardley N, Temple CL. Obtaining high cure rates in challenging facial malignancies: a new method for producing rapid, accurate, high-quality frozen sections. Can J Plast Surg.

Boyd KU, Temple CLF, Ross DC. Factors affecting surgical wait times for breast reconstruction. Can J Plast Surg. 2010; 18(3): 107-111.

Brandt MG, Husein M, Matic DB, Leung AE, Wehrli BM, Welch I, Ho D, Kassam Z, Silver I, Doyle PC. Atrophy among mucosa-only versus muscular mucosa superiorly based pharyngeal flaps: a pilot animal study. Plast Reconstr Surg 2010; 125(6):1679-84.

Temple CL. A primer in meta-analysis for the plastic surgeon. Ann Plast Surg. 2010; 64(4): 505–509.

Temple CL, Ross DC, Kim S, Tse R, Bettger-Hahn M, Gan B, MacDermid J. Sensibility following innervated free TRAM flap for breast reconstruction: Part II. Innervation improves patient-rated quality of life. Plast Reconstr Surg 2009; 124(5): 1419-1425.

De Young LX, Bella AJ, O'Gorman DB, Gan BS, Lim KB, Brock GB. Protein biomarker analysis of primary Peyronie's disease cells. J Sex Med. 2010; 7(1 Pt 1):99–106. Epub 2009 Nov 3.

Faber KJ, Burry A, Drosdowech D, Gan BS, O'Gorman DB. Extra-cellular matrix protein expression in Frozen Shoulder Syndrome.

Gan BS. CIM: Beyond a new start. Clinical and Investigative Medicine 2009: 32(6): E224.

Gan BS, O'Gorman DB. Molecular mechanisms and treatment strategies for Dupuytren's Contracture Therapeutics and Clinical Risk Management 2010: 6: pp 383–390.

Grant A, O'Gorman DB, Gan BS. Needle aponeurotomy in DD: Clinical experience at the Hand and Upper Limb Centre In: Proceedings of the International Dupuytren's Symposium. Springer Verlag.

Hassa A, Temple CLF, Ross DC. Perspectives on Hand Transplantation: Knowledge and Attitudes of an Expert Group.

Macaluso S, Miller TA, Ross DC. Spinal accessory nerve palsy following MVA, and the disability of scapular winging proceedings, Canadian Association for Physical Medicine and Rehabilitation Annual Scientific Meeting.

Martinez, Lim, Scilley, Williams Lu, Brock, Chin Sural Nerve graft in prostate cancer. Canadian Urological Association June 2010 Charlottetown PEI.

Matic, D.B. Invited Reply to:Temporal hollowing following coronal incision: A prospective, randomized, controlled trial - Statistics are crucial for drawing adequate conclusions in Plastic Surgery Plast Reconstr Surg, 124(1):313, July 2009.

McLean K, Wu Y, Gan BS, O'Gorman DB A simple method for assessing kinase activity using streptavidin-biotinylated peptide substrates and SELDI-TOF-MS. Clinical and Investigative Medicine 2009: 132(2) pp E84-94.

Methot J, Chinchalkar SJ, Richards RS. Contribution of the ulnar digits to grip strength. Can J Plast Surg online edition Spring 2010 Volume 18 Number 1 e10.

Miller TA, Ross DC. The Diagnosis and Management of Piriformis Syndrome: Myths and Facts. Monograph, American Association of Neuromuscular and Electrodiagnostic Medicine.

Ng WKY, Brock GB, Rosenblatt Y, O'Gorman DB, Gan BS PDE-5 inhibitors in vascular ischemia: A case report and review of their use in ischemic conditions. Canadian Journal of Plastic Surgery 2010: 18(1): pp e5-9.

O'Gorman DB, Crawford J, Wu Y, Gould A, Dagnino L, Gan BS. POSTN mRNA is expressed in the basal epithelium of hypertrophic scars and keloid scars. Journal of Cutaneous Pathology 2010.

O'Gorman DB, Wu Y, Gan BS Primary Dupuytren's Disease cell interactions with the extracellular environment: A link to disease progression? In: Proceedings of the International Dupuytren's Symposium. Springer Verlag.

Piggott, J, Yazdani A. Bilateral Pulmonary Emboli after Bilateral Mastectomy in a 15 year old Boy with Hypogonadism: A Case Report Canadian Journal of Plastic Surgery.

Plant, Scilley. Speechley single stage breast reconstruction using skin sparing incision and definitive saline implants compared to 2 stage reconstruction using tissue expansion plus implant. Canadian Journal of Plastic Surgery, Winter 2009 vol. 17 issue 4.

Power, S.M. and Matic D.B. Gingivoperiosteoplasty following alveolar molding with a Latham appliance versus secondary bone grafting: The effects on bone production and midfacial growth in patients with bilateral clefts. Plast Reconstr Surg 124(2):573-82, Aug. 2009.

Ranger A, Al-Hayel A, Matic D. Chiari type 1 malformation in an infant with Type 2 Pfeiffer syndrome:

further evidence of acquired pathogenesis J Cranofacial Surg 1020 Mar;21(2):427-31.

Raykha C, Crawford J, Gan BS, O'Gorman DB Insulin-like Growth Factor Binding Protein (IGFBP)-6: A mediator of fibroblast differentiation in Dupuytren's





Disease In: Proceedings of the International Dupuytren's Symposium. Springer Verlag.

Ross DC, Gan BS. Acquired diseases of the Hand In:Textbook of Plastic Surgery (Ed: Siemionow M) Springer New York 2010: pp 583-597.

Ross DC, McFarlane RM Dupuytren's Disease In: Plastic Surgery Secrets. J Weinzig (ed), Elsevier, New York.

Ross DC, Miller TA. Evaluation and Surgical Treatment of Neurologic Injuries Around the Hip. Monograph, American Association of Neuromuscular and Electrodiagnostic Medicine.

Ross DC, Miller TA, Rosenblatt Y. Nerve Transfer for Treatment of Peroneal Nerve Palsy: A Feasibility Study. Proceedings, American Society for Reconstructive Microsurgery Annual Scientific Meeting.

Ross DC. New Technologies and Surgical Education Invited Presentation, Canadian Society of Plastic Surgery Educational Foundation Symposium on Emerging Technologies in Plastic Surgery.

Singh H, Miller TA, Ross DC. Neurogenic Thoracic Outlet Syndrome: Results from a Case Series. Proceedings, Canadian Association for Physical Medicine and Rehabilitation Annual Meeting.

Temple CL, Cook EF, Ross DC, Bettger-Hahn M, MacDermid J. Development of a breast reconstruction satisfaction questionnaire (BRECON): dimensionality and clinical importance of breast symptoms, donor site issues, patient expectations, and relationships. J Surg Oncol. 2010 Mar 1;101(3):209-16.

Temple CL, Ross DC, Kim S, Tse R, Bettger-Hahn M, Gan BS, MacDermid J. Sensibility following innervated free TRAM flap for breast reconstruction: Part II. Innervation improves patient-rated quality of life. Plast Reconstr Surg. 2009 Nov;124(5):1419-25.

Temple CLF, Ross DC. A Curriculum for Acquiring Critical Appraisal Skills in a Plastic Surgery Residency Training Program.

Temple CLF, Ross DC. Acquisition of Evidence-Based Surgery Skills in Plastic Surgery Residency Training Proceedings, Canadian Society of Plastic Surgery, Annual Scientific Meeting.

Vi L, Feng L, Zhu RD, Wu Y, Satish L, Gan BS, O'Gorman DB. Periostin differentially induces proliferation, contraction and apoptosis of primary Dupuytren's disease and adjacent palmar fascia cells. Exp Cell Res. 2009 Dec 10;315(20):3574-86. Epub 2009 Jul 18.

Vi L, Gan BS, O'Gorman DB. The potential roles of cell migration and extra-cellular matrix interactions in Dupuytren's disease progression and recurrence. Med Hypotheses. 2010 Mar;74(3):510-2. Epub 2009 Nov 5.

Vi L, Njarlangattil, A Wu Y, Gan BS, O'Gorman DB. Type-1 collagen differentially alters b-catenin accumulation in primary Dupuytren's Disease cord and adjacent palmar fascia cells. BMC Musculoskeletal Disorders 2009: Jun 19: 10(1): 72.

Vi L, O'Gorman DB, Gan BS. Update on the management of Dupuytren's contracture. Journal of Orthopedic Research and Reviews 2010: 2: pp 35-43.

Visscher K, Boyd K, Ross DC, Amann J, Temple C. Refining Perforator Selection for DIEP Breast Reconstruction Using Transit Time Flow Volume Measurements. J Reconstr Microsurg. 2010; 26(5), 285-290.



Dr. Richard Inculet, Chair/Chief, Division of Thoracic Surgery

The Division of Thoracic Surgery provides consultation and surgical treatment to patients of southwestern Ontario with benign and malignant diseases of the thorax and foregut. London Health Sciences Centre is designated by Cancer Care Ontario as a Level 1 Thoracic Surgery Centre, based on its expertise and volumes. Approximately seventy per cent of a thoracic surgeon's practice is oncology. Lung cancer remains the leading cause of cancer deaths.

The Division, officially created in 1992, has led Canada in the adaptation of minimally invasive surgery to the specialty. There is an ongoing strong collaboration with the London Regional Cancer Centre, the Department of Otolaryngology - Head and Neck Surgery, the Lawson Health Research Institute, and CSTAR.

The Division of Thoracic Surgery recently was the first Canadian centre to successfully enrol a patient in an international trial looking at a novel treatment of lung cancer in patients with poor lung function. In a collaborative effort between thoracic surgery and radiation oncology, a small lung cancer was wedge-resected from a patient's lung. A mesh containing radioactive brachytherapy seeds was then applied

The Division of Thoracic Surgery

"The Division, officially created in 1992, has led Canada in the adaptation of minimally invasive surgery to the specialty."

and sutured to the resection margins in an attempt to reduce the risk of local recurrence.

The annual VATS course held in June 2010 successfully attracted several international registrants. The theme of the course was VATS lobectomy and the role of ultrasound in thoracic surgery.

The Division is pleased to welcome Dr. Jiaxin Min, a visiting Professor of Thoracic Surgery from China, who has come to LHSC for a one-year sabbatical.

Awards and Achievements

In partnership with the London Regional Cancer Program, the Division participated in the organization and chairing of the annual Ontario Thoracic Conference held in April at Niagara on the Lake.

Dr. R. Inculet was appointed vice president of the Canadian Association of Thoracic Surgeons, at the annual meeting held last year in Quebec City. London will be hosting the meeting in September 2011.

Dr. Dalilah Fortin was appointed the Victoria Hospital /UWO Critical Care Site Education

Director. In addition, she became a member of the RCPSC Critical Care Examination Committee. She currently holds the position of Thoracic Surgery Program Director.

The UWO Divisions of Thoracic Surgery and Respirology have developed a Cancer Care Ontario sponsored "Diagnostic Assessment Pathway" for the investigation of a suspicious lung mass. The pathway will be applied to patients with a newly recognized lung lesion, who are referred to specialists in our LHIN. Similar diagnostic pathways are being produced and utilized in each LHIN across the province.

Dr. Richard Malthaner, as part of a CCO committee, was instrumental in the development of "mediastinoscopy guidelines" to be followed in all thoracic surgery centres across the province.

Publications

Falkson CB, Bezjak A, Darling G, Gregg R, Malthaner RA, Maziak DE, Yu E, Smith CA, McNair S, Ung YC, Evans WK. The management of thymoma: a systematic review and practice guideline Journal of Thoracic Oncology 2009;4(7):911-919.



Malthaner RA, Wong RK, Spithoff K. Preoperative or postoperative therapy for resectable oesophageal cancer: an updated practice guideline. Clinical Oncology 2010;22(4):250-256.

Maziak DE, Darling GE, Inculet RI, Gulenchyn KY, Driedger AA, Ung YC, Miller JD, Gu CS, Cline KJ, Evans WK, Levine MN. Positron emission tomography in staging early lung cancer: a randomized trial. Ann Intern Med. 2009 Aug 18;151(4):221–8, W-48. Epub 2009 Jul 6.

Menezes A, Sowerby L, Malthaner RA, Parry NG. "Gastric Bascule": An Unusual Form of Gastric Volvulus. Ann Thorac Surg. 2010 Mar;89(3):e15-e16.

Perri MT, Trejos AL, Naish MD, Patel RV, Malthaner RA. New tactile sensing system for minimally invasive surgical tumour localization. International Journal of Medical Robotics 2010;6(2):211-220.

Scott WJ, Allen MS, Darling G, Meyers B, Decker PA, Putnam JB, McKenna RW, Landrenau RJ, Jones DR, Inculet RI, Malthaner RA. Video-assisted thoracic surgery versus open lobectomy for lung cancer: a secondary analysis of data from the American College of Surgeons Oncology Group Z0030 randomized clinical trial. J Thorac Cardiovasc Surg. 2010 Apr;139(4):976–81; discussion 981-3. Epub 2010 Feb 20.

Ung YC, Yu E, Malthaner RA, Burkes R, Ellis P, Goss G, Solow H, Irvine S, Laffan S. Meeting Report on The 4th Annual Ontario Thoracic Cancer Conference at Niagara-on-the-Lake. Current Oncology 2009; 16(5):363-371.

Wong RK, Malthaner RA. Combined chemotherapy and radiotherapy (without surgery) compared with radiotherapy alone in localized carcinoma of the esophagus. Cochrane Database Syst Rev. 2006;(1):CD002092.

Yamashita CM, Langridge J, Hergott CA, Inculet RI, Malthaner RA, Lefcoe MS, Mehta S, Mahon JL, Lee TY, McCormack DG. Predicting postoperative FEV1 using spiral computed tomography. Acad Radiol. 2010 May;17(5):607–13. Epub 2010 Feb 26.

Yu E, Tai P, Younus J, Malthaner R, Truong P, Stitt L, Rodrigues G, Ash R, Dar R, Yaremko B, Tomiak A, Dingle B, Sanatani M, Vincent M, Kocha W, Fortin D, Inculet R. Postoperative extended-volume external-beam radiation therapy in high-risk esophageal cancer patients: a prospective experience. Curr Oncol. 2009 Aug;16(4):48-54.





Dr. Hassan Razvi, Chair/Chief, Division of Urology

It may be one of the youngest academic urology programs in the country, but with extensive sub-specialties in transplantation, surgical oncology, stone disease/endourology, andrology, and probiotics, the division is making leaps and bounds as one of the most diverse in the country.

"Every single member of my division is involved in academic pursuits over and above their clinical duties, and that is what makes the division and department so strong."

A strong focus on minimally invasive laparoscopic and robotic surgery and paediatric urology is helping this division earn a reputation as one of the most academically productive in the country, with its members also in leadership positions with the Canadian and American Urological Associations, surgery and clinical trials.

The Division of Urology

The Division of Urology is well known both nationally and internationally for its research and clinical care. This has enabled it to attract high quality faculty who have been able to further advance the division's mission in many areas. A perfect example of this is the recently confirmed recruitment of Dr. Blayne Welk, an expert in the field of urinary incontinence and neuro-urology who will be joining our faculty in 2011. Supportive departmental leadership and high quality clinical and academic resources were strong factors in securing Dr. Welk's recruitment.

"Academic surgery is more than simply seeing patients and performing operations," says Dr. Hassan Razvi, Chair/Chief, Division of Urology. The surgeons in urology, just like the other divisions, are involved in advancing the field of surgery in various domains, not just for the benefit of patients and trainees in Canada, but around the world as well."

"Academic medicine means more than just looking after patients. Every single member of my division is involved in academic pursuits over and above their clinical duties, and that is what makes the division and department so strong. In our division we have young and energetic faculty that are willing to push existing boundaries, and are committed to improving the educational experience of our trainees while providing state-of-the-art care to our patients."

Awards and Achievements

Dr. Alp Sener was selected as the recipient of the 2010 Robert J. Krane Urology Research Success Award from the American Urological Association. This award will help support Dr. Sener's research efforts in the fields of T-cell mediated graft rejection and in developing methods of mitigating organ ischemia-reperfusion injury. Dr. Sener was also awarded an AMOSO Opportunities Fund Award in 2010. Dr. Sener was recruited to the Departments of Surgery and Microbiology & Immunology as a Schulich Clinician-Scientist in 2009 and has since joined the Matthew Mailing Centre for Translational Transplant Studies.

Urologist and transplant surgeon

Dr. Patrick Luke was selected as the 2010 recipient for the American Urological Association's prestigious Gold Cystoscope Award. This award is presented annually to urologists distinguished by outstanding contributions to the profession within 13 years of completing residency training.

Dr. Joseph Chin was recently awarded the Order of Ontario. He was cited for his pioneering clinical and research work in urological oncology and as a leader in the prevention of prostate cancer.

Dr. Gregor Reid, a scientist from the Division of Urology, and a Lawson Health Research Institute member, has received Western's highest honour for researchers: the Hellmuth Prize for Achievement in Research. Established in 1996, the prize is named for Bishop Isaac Hellmuth. Dr. Reid has been studying probiotics since 1982 when he arrived in Canada after completing his

PhD in New Zealand. Since then he has become a leading advocate for the role of 'good bacteria' in human health. This past year, he was appointed the first research chair in Human Microbiology and Probiotics at Lawson thanks to a \$7 million donation from international yogurt maker Danone Group. Reid's research applies microbiology to areas of clinical importance in urology, gastroenterology, and obstetrics & gynaecology.

Dr. Hassan Razvi has agreed to serve a second term as Chair/Chief, Division of Urology, at The University of Western Ontario, London Health Sciences Centre & St. Joseph's Health Care, London, effective July 1, 2010 to June 30, 2015. Dr. Razvi also was recently appointed President-elect of the Northeastern Section of the American Urological Association.

Following a successful external review,

The Department of Surgery and the Division of Urology welcomed **Dr. Elspeth McDougall** while on sabbatical from the University of California, Irvine. Dr. McDougall is presently the Director of Education for the American Urological Association.

Dr. John Lewis has received a Cancer Research Award. Three London scientists are receiving new funding from the Canadian Cancer Society for their work in cancer research. Dr. John Lewis at the Lawson Health Research Institute is investigating a protein called CD151, which plays a key role in the ability of cancer cells to spread, or metastasize, to other parts of the body. Through studying the molecular basis of this protein and others involved in the spread of cancer, he hopes that this research could lead to new therapies that prevent cancer from



metastasizing. Dr. Lewis is receiving \$389,667 for the project. In London, 150 cancer patients have been involved in the project, having donated their tissue to be screened for the CD151 protein.

Publications

Al-Bareeq RJ, Ray AA, Nott L, Pautler SE, Razvi H. Dong Quai (angelica sinensis) in the treatment of hot flashes for men on androgen deprivation therapy: results of a randomized double-blind placebo controlled trial. Can Urol Assoc J 2010;4(1):49-53.

Al-Shaiji TF, Brock GB. Peyronie's disease: evolving surgical management and the role of phosphodiesterase 5 inhibitors. Scientific World Journal 2009;9:822-45.

Al-Shaiji TF, Brock GB. Surgery: Centers of excellence for penile prosthesis: yes or no? Nat Rev Urol 2009;6(7):352-4.

Anukam KC, Reid G. In vitro evaluation of the viability of vaginal cells (VK2/E6E7) and probiotic Lactobacillus species in lemon juice. Sexual Health 2009;6:67-74.

Anukam KC, Reid G. African traditional fermented foods and probiotics. J Medicinal Food 2009;12(6):1177-84.

Anukam KC, Duru MU, Eze CC, Egharevba J, Aiyebelehin A, Bruce AW, Reid G. Oral use of probiotics as an adjunctive therapy to fluconazole in the treatment of yeast vaginitis: a

study of Nigerian women in an outdoor clinic. Microbial Ecol Health Dis 2009;21:72-77.

Brock GB, Bénard F, Casey R, Elliott SL, Gajewski JB, Lee JC. Canadian male sexual health council survey to assess prevalence and treatment of premature ejaculation in Canada. J Sex Med 2009;6(8):2115–23.

Cadieux PA, Chew BH, Nott L, Seney S, Elwood CN, Wignall GR, Goneau LW, Denstedt JD. Use of triclosan-eluting ureteral stents in patients with long-term stents. J Endourol 2009;23(7):1187-94.

Cadieux PA, Burton J, Devillard E, Reid G. Lactobacillus by-products inhibit the growth and virulence of uropathogenic Escherichia coli. J Physiol Pharmacol 2009;60:Suppl 6:13-8.

Chalasani V, Izawa JI. Surgical Anatomy of the Pelvis Pearls of Wisdom, Urology Board Review, 3rd ed. McGraw Hill, Chapter 4, pp. 61-72, 2009. Cheung CL, Wedlake C, Moore J, Pautler SE, Peters T. Fused Video and ultrasound images for minimally invasive partial nephrectomy: a phantom study. Med Image Comput Comput Assist Interv 2010;13 (Pt 3):408-15.

Chew BH, Davoudi H, Li J, Denstedt JD. An in vivo porcine evaluation of the safety, bioavailability and tissue penetration of a ketorolac drug-eluting ureteral stent designed to improve comfort. J Endourol 2010;24(6):1023–29.

Chin JL, Srigley J, Mayhew LA, Rumble RB, Crossley C, Hunter A, Fleshner N, Bora B, McLeod R, McNair S, Langer B, Evans A. Guideline for optimization of surgical and pathological quality performance for radical prostatectomy in prostate cancer management: evidentiary base. Can Urol Assoc J 2010;4(1):13-25.

Chin JL. Measuring quality of life after radical prostatectomy from the patient's perspective. Can Urol Assoc J 2009;3(6):453.

Chin JL. Residents' training and evaluation: a personal reflection. Can Urol Assoc J 2010;4(3):155-8.

Chin JL. In search of the perfect crystal ball for Taurothelial cancer. Eur Urol 2010;57(1):21–2.

Cool DW, Connolly MJ, Sherebrin S, Eagleson R, Izawa JI, Amann J, Romagnoli C, Romano WM, Fenster A. Repeat prostate biopsy accuracy: simulator-based comparison of two-and three-dimensional transrectal us modalities. Radiology 2010;254:587-94.

Cool DW, Gardi L, Romagnoli C, Saikaly M, Izawa JI, Fenster A. Temporal-based needle segmentation algorithm for transrectal ultrasound prostate biopsy procedures. Med Phys 2010;37(4):1660–73.

Dave S, Manaboriboon N, Braga LH, Lorenzo AJ, Farhat WA, Bagli DJ, Khoury AE, Salle JL. Open versus laparoscopic staged Fowler-Stephens orchiopexy: impact of long loop vas. J Urol 2009;182(5):2435-9.

Elwood CN, Lange D, Nadeau R, Seney S, Summers K, Chew BH, Denstedt JD, Cadieux PA. Novel in vitro model for studying ureteral stent-induced cell injury. BJU Int 2010;105(9):1318-23.

Fritsche HM, Burger M, Svatek RS, Jeldres C, Karakiewicz PI, Novara G, Skinner E, Denzinger S, Fradet Y, Isbarn H, Bastian PJ, Volkmer BG, Montorsi F, Kassouf W, Tilki D, Otto W, Capitanio U, Izawa JI, Ficarra V, Lerner S, Sagalowsky AI, Schoenberg M, Kamat A, Dinney CP, Lotan Y, Shariat SF. Characteristics and outcomes of patients with clinical T1 grade 3 urothelial carcinoma treated with radical cystectomy: results from an international cohort. Eur Urol 2010;57(2):300-9.

Honey RJD'A, Schuler TD, Ghiculete D, Pace KT, Canadian Endourology Group. A randomized, double-blind trial to compare shock wave frequencies of 60 and 120 shocks per minute for upper ureteral stones. J Urol 2009;182:1418-23.

Hotte SJ, Mayhew LA, Jewett M, Chin J, Winquist E. Management of stage I non-seminomatous testicular cancer: a systematic review and meta-analysis. Genitourinary Cancer Disease Site Group of the Cancer Care Ontario Program in Evidence-based Care. Clin Oncol (R Coll Radiol). 2010;22(1):17-26.

Hummelen R, Hemsworth J, Reid G. Micronutrients, N-acetyl cysteine, probiotics and prebiotics, a review of effectiveness in reducing HIV progression. Nutrients. 2010;2:626-51.

Iverson P, McLeod DG, See WA, Morris T, Armstrong J, Wirth MP on behalf of the Casodex Early Prostate Cancer Trialists' Group. Antiandrogen monotherapy in patients with localized advanced prostate cancer: final results from the bicalutamide early prostate cancer programme at a medium follow-up of 9.7 years. BJU Int 2010;105:1074-81.

Jass J, Reid G. The effect of reconstituted cranberry juice on urinary bacterial adhesion and vaginal microbiota. Can J Urol 2009;16(6):4901-7.

Kassouf W, Kamat AM, Zlotta A, Bochner BH, Moore R, So A, Izawa J, Rendon RA, Lacombe L, Aprikian AG. Canadian guidelines for treatment of non-muscle invasive bladder cancer: a focus on intravesical therapy. Can Urol Assoc J 2010;4(3):168–73.

Knudsen BE, Chew BH, Tan AH, Beiko DT, Denstedt JD, Pautler SE. Assessment of hydrodissection, holmium:yag laser and both combined to facilitate laparoscopic partial nephrectomy in a porcine model. Urology 2010;75(5):1209-12.

Ko R, Tan AH, Chew BH, Rowe PE, Razvi H. Comparison of the thermal and histopathological effects of bipolar and monopolar electrosurgical resection of the prostate in a canine model. BJU Int 2010;105:1314–7.

Krambeck AE, Walsh RS, Denstedt JD, Preminger GM, Li J, Evans JC, Lingeman JE, The Lexington Trial Study Group A novel drug eluting ureteral stent: A prospective, randomized, multicentre clinical trial to evaluate the safety and effectiveness of a Ketorolacloaded ureteral stent. J Urol 2010;183:1037-42.

Lau P, Chin JL, Pautler SE, Razvi H, Izawa JI. NMP22 is predictive of recurrence in high risk superficial bladder cancer patients. Can Urol Assoc J 2009;3(6):454-8.



Lewis J, Brunel F, Lewis JD, Destito G, Steinmetz NF, Manchester MA, Stuhlmann H, Dawson P. Hydrazone ligation strategy to assemble multifunctional viral nanoparticles for cell imaging and tumor targeting. Nano Letters 2010;10:1093–97.

Lewis JA, Cho GA, Lewis CF, Luyt JD. A fast, reproducible and low-cost method for sequence deconvolution of "on-bead" peptides via "on-target" maldi-tof/tof spectrometry. Journal of Mass Spectrometry 2010;45:241-51.

Lewis J, Zhang Y, Schulte W, Pink D, Zijlstra A, Lewis JD, Waisman DM. Sensitivity of cancer cells to truncated diptheria toxin. PLoS ONE 5 2010; e10498.

Lim D, Izawa JI, Middlebrook P, Chin JL. Bladder perforation after immediate postoperative intravesi-

cal instillation of mitomycin C Can Urol Assoc J 2010;4(1):E1-3.

Martinez C, Dave S, Izawa JI. Wilms'Tumour advances in experimental medicine and biology, Vol 685; Diseases of DNA Repair, Chapter 18: pp. 196-209. Ed. Shamim I. Ahmad http://www.landesbioscience.com/curie/chapter/4539/

Martinez CH, Chalasani V, Lim D, Nott L, Al Bareeq R, Wignall GR, Stitt L, Pautler SE. Effect of prostate gland size on the learning curve for robot assisted laparoscopic radical prostatectomy: does size matter initially? J Endourol 2010;24(2):261-6.

Martinez CH, Dave S, Izawa J. Wilms' Tumor. Adv Exp Med Biol 2010;685:196-209.

Mehanna N. Reid G. Effect of meswak, middle eastern

tree bark on oral pathogens, and potential for probiotic applications. J. Medicinal Food 2010;13(3):729–32.

Méndez-Probst CE, Denstedt JD, Razvi H. Preoperative indications for percutaneous nephrolithotripsy in 2009. J Endourol 2009;23(10):1557-61.

Méndez-Probst CE, Pautler SE. Fusion of the seminal vesicles discovered at the time of robot-assisted laparoscopic radical prostatectomy. Journal of Robotic Surgery 2010;4(1):45–7.

Near J, Romagnoli C, Curtis AT, Klassen LM, Izawa J, Chin J, Bartha R. High-field MRSI of the prostate using a transmit/receive endorectal coil and gradient modulated adiabatic localization. J Magn Reson Imaging 2009;30(2):335-43.

Novara G, Svatek RS, Karakiewicz PI, Skinner E, Ficarra V, Fradet Y, Lotan Y, Isbarn H, Capitanio U, Bastian PJ, Kassouf W, Fritsche HM, Izawa JI, Tilki D, Dinney CP, Lerner SP, Schoenberg M, Volkmer BG, Sagalowsky AI, Shariat SF. Soft tissue surgical margin status is a powerful predictor of outcomes after radical cystectomy: a multicenter study of more than 4,400 patients. J Urol 2010;183(6):2165–70.

Pechey A, Elwood CN, Wignall GR, Dalsin JL, Lee BP, Vanjecek M, Welch I, Ko R, Razvi H, Cadieux P. Anti-Adhesive coating and clearance of device associated uropathogenic escherichia coli cystitis. J Urol 2009;182(4):1628-36.

Pisters LL, Leibovici D, Blute M, Zincke H, Sebo TJ, Slezak JM, Izawa J, Ward JF, Scott SM, Madsen L, Spiess PE, Leibovich BC. Locally recurrent prostate



cancer after initial radiation therapy: a comparision of salvage radical prostatectomy versus cryotherapy. J Urol 2009;182(2):517–25.

Ray AA, Davies ET, Duvdevani M, Razvi H, Denstedt JD: The management of treatment-resistant bilary calculi using percutaneous endourologic techniques. Can J Surg 2009;52(5):407–12.

Razvi, H. Metabolic testing of the first-time calcium oxalate stone former: is it indicated? No. Can Urol Assoc J 2010;4(3):211-2.

Reid G, Bruce AW. How probiotics Lactobacillus GR-1 and RC-14 improve urogenital health in women. Old Herborn University Seminar Monographh 2009:22:105-15.

Reid G, Gaudier E, Guarner F, Huffnagle GB, Macklaim J, Murcia Munoz A, Martini M, Ringel-Kulka T, Sartor B, Unal RR, Verbeke K, Walter J. Responders and non-responders to probiotic interventions: how can we improve the odds? Gut Microbes 2010;1:200-4.

Reid G, Dols J, Miller W. Targeting the vaginal microbiota with probiotics as a means to counteract infections. Current Opin Clin Nutr Metabolic Care 2009;12(6):583-7.

Roehrborn CG, Siami P, Barkin J, Damião R, Major-Walker K, Nandy I, Morrill BB, Gagnier RP, Montorsi F; on behalf of the CombAT Study Group. The effects of combination therapy with dutasteride and tamsulosin on clinical outcomes in men with symptomatic benign prostatic hyperplasia: 4-year results from the combat study. Eur Urol 2010;57(1):123-31.

Rubio-Aurioles E, Sand M, Terrein-Roccatti N, Dean J, Longworth J, Eardley I, Brock G, Lee J, de Montis IA, Rampazzo-Bonaldo C. Female assessment of male erectile dysfunction detection scale (FAME): development and validation. J Sex Med. 2009;6(8):2255-70.

Sadovsky R, Brock GB, Gutkin SW, Sorsaburu S. Toward a new 'EPOCH': optimising treatment outcomes with phosphodiesterase type 5 inhibitors for erectile dysfunction. Int J Clin Pract. 2009;63(8):1214–30.

Sener A, Tang AL, Farber DL. Memory T-cell predominance following T-cell depletional therapy derives from homeostatic expansion of naïve T-cell. American Journal of Transplantation, 2009;9(11):2615-23.

Sener A, Uberoi V, Bartlett ST, Phelan MW. Living donor renal transplantation of allografts with incidental renal masses is acceptable following ex-vivo partial nephrectomy. BJU Int 2009;104(11);1655-60.

Shariat SF, Svatek RS, Tilki D, Skinner E, Karakiewicz PI, Capitanio U, Bastian PJ, Volkmer BG, Kassouf W, Novara G, Fritsche HM, Izawa JI, Ficarra V, Lerner SP, Sagalowsky AI, Schoenberg MP, Kamat AM, Dinney CP, Lotan Y, Marberger MJ, Fradet Y. International validation of the prognostic value of lymphovascular invasion in patients treated with radical cystectomy. BJU Int. 2010;105(10):1402–12.

Smith MR, Egerdie B, Hernández Toriz N, Feldman R, Tammela TL, Saad F, Heracek J, Szwedowski M, Ke C, Kupic A, Leder BZ, Goessl C; Denosumab, HALT Prostate Cancer Study Group. Denosumab in men receiving androgen-deprivation therapy for prostate cancer. N Engl J Med. 2009;361(8):745-55.

Soucy F, Ko R, Duvdevani M, Nott L, Denstedt JD, Razvi H. Percutaneous nephrolithotomy for staghorn calculi: A single center's experience over 15 years. J Endourol 2009:23(10):1669-73.

Tilki D, Reich O, Svatek RS, Karakiewicz PI, Kassouf W, Novara G, Ficarra V, Chade DC, Fritsche HM, Gerwens N, Izawa JI, Lerner SP, Schoenberg M, Stief CG, Skinner E, Lotan Y, Sagalowsky AI, Shariat SF. Characteristics and outcomes of patients with clinical carcinoma in situ only treated with radical cystectomy: an international study of 243 patients. J Urol 2010;183(5):1757-63.

Tilki D, Svatek RS, Karakiewicz PI, Isbarn H, Reich O, Kassouf W, Fradet Y, Novara G, Fritsche HM, Bastian PJ, Izawa JI, Stief CG, Ficarra V, Lerner SP, Schoenberg M, Dinney CP, Skinner E, Lotan Y, Sagalowsky AI, Shariat SF. Characteristics and outcomes of patients with pT4 urothelial carcinoma at radical cystectomy: a retrospective international study of 583 patients. J Urol 2010;183(1):87-93.

Touma N, Izawa JI, Abdelhady M, Moussa M, Chin JL. Ureteral frozen sections at the time of radical cystectomy: reliability and clinical implications. Can Urol Assoc J 2010;4(1):28–32.

Williams AK, Martínez CH, Chalasani V, Chin J. High-intensity focused ultrasound: where are we and where to from here? Expert Rev Anticancer Ther 2010;10(1):33–40.

Xia X, Zhang X, Huang X, Ichim TE, Li M, Luke P, Min W. Anti-CD(45)RB monoclonal antibody induces immunologic toleration by suppressing dendritic cells. Transpl Immunol 2009;21(3):136-9.

Xuan JW, Bygrave M, Valiyeva F, Moussa M, Izawa JI, Bauman GS, Klibanov A, Wang F, Greenberg NM, Fenster A. Molecular targeted enhanced ultrasound imaging of flk1 reveals diagnosis and prognosis potential in a genetically engineered mouse prostate cancer model. Mol Imaging 2009;8(4):209-20.



Dr. Thomas Forbes, Chair/Chief, Division of Vascular Surgery

Recognized as a Centre of Excellence and viewed as a leader in the country, vascular surgeons are advancing the treatment of complex vascular disease in southwestern Ontario by connecting more closely with expertise from other specialists in Cardiac Surgery, Internal Medicine, Interventional Radiology, and Anesthesia to help diagnose and care for their patients.

While some things change rapidly, sometimes it's best to learn those things that stay the same. "I tell medical students, 'don't be an expert in an operation, be an expert in the disease," says Dr. Thomas Forbes, Chair/Chief, Vascular Surgery.

"Surgical innovation is often – but not always – technology based. Therapy changes and we are entering the era of genetic based and personalized therapy and medicine. In ten years, we will not be performing and teaching operations the way we are now. Vascular therapies will likely change to something that we cannot even fathom right now. Be an expert in the disease, and the disease process, and know everything there is to know about it." Dr. Forbes and the rest of the Division work closely with medical students and

The Division of Vascular Surgery

continuously challenge them to think down the road and how they will navigate their careers. He has seen changes first hand himself, and still envisions changes that need to be done.

"For a long time, hospitals and training programs have been divided along physician lines, and this doesn't always serve patients well. More and more, we're starting to develop alliances and connections along patient and disease terms."

Forbes asserts that the necessary skills and expertise do not have to rest within a single individual, but may be team based expertise. "The Division of Vascular Surgery strives to provide expertise in all aspects of vascular therapy. Going forward, we need to recruit people who bring something new to the Division, individuals who are better than those of us already here."

"There are a lot of exciting things going on such as the internationalization of the Department with our connection in China and linking a lot of partners in health care, education and industry."

Awards and Achievements

Vascular surgeon **Dr. Jeremy Harris** joined the Department in 2009 as the newest member of the vascular team. He recently returned from Arizona after completing an endovascular fellowship at the Arizona Heart Institute.

In 2010, **Dr. Thomas Forbes**, Chair/Chief, Vascular Surgery was named the 2011 Canadian traveller by The James IV Association of Surgeons, a group of surgeons from the UK, Canada and the United States formed in the 1950s to foster international collaboration. Each year a surgeon from each of these countries is chosen to travel and visit other centres throughout the world. One surgeon from Canada, the US and UK is nominated yearly and Dr. Forbes was selected as the Canadian recipient for 2011. He follows in the footsteps of other department recipients including Drs. Ken Harris, Vivian McAlister, Neil McKenzie, Dave Grant, Rich Finley, John Duff and Angus McLachlin. Dr. McLachlin was the first Canadian recipient in 1962.

Publications

Adams C, Nagpal D, Forbes TL, Lawlor DK, Chu MWA. Spontaneous aortic arch thrombus presenting as acute critical limb ischemia. Vasc Endovasc Surg 2010;44(4):309–11.

Adams C, Tong MZ, Lawlor DK, DeRose G, Forbes TL. Recurrent aortic aneurysms in Behcet's Disease. Vascular 2010;18(5):299-302.

Chagpar RB, Harris JR, Lawlor DK, DeRose G, Forbes TL. Early mortality following endovascular versus open repair of ruptured abdominal aortic aneurysms. Vasc Endovasc Surg 2010;44(8):645-9.

Forbes TL, Harris JR, Lawlor DK, DeRose G. Aortic dilatation following endovascular repair of blunt traumatic thoracic aortic injuries. J Vasc Surg 2010;52:45–8.

Forbes TL, Harris JR, Lawlor DK, DeRose G. Midterm results of the Zenith endograft in relation to neck length. Ann Vasc Surg 2010;24(7):859-62.

Forbes TL, Ricco JB. Commentary regarding, "Trans-Atlantic Debate – Is a randomized trial necessary to determine whether endovascular repair is the preferred management strategy in patients with ruptured abdominal aortic aneurysms?". JVasc Surg 2010;52(4):1093.

Forbes TL, Ricco JB. Commentary regarding, "Trans-Atlantic Debate – Is carotid artery disease responsible for perioperative strokes after coronary artery bypass surgery?". JVasc Surg 2010;52:1721-2.

Forbes TL, Ricco JB. Commentary regarding, "Trans-Atlantic Debate – Is carotid artery disease responsible for perioperative strokes after coronary artery bypass surgery?". Eur JVasc Endovasc Surg 2010;40:695.

Forbes TL. Clinical Trials Update – Preliminary results of CREST. J Vasc Surg 2010;51:1300-1.

Forbes TL. Commentary regarding, "Clincal trials update – The ECAR Trial". JVasc Surg 2010;51:270.

Forbes TL. Commentary regarding, "Debate – open versus endovascular repair of popliteal artery aneurysms". JVasc Surg 2010;51:276.

Forbes TL. Commentary regarding, "Debate – open versus endovascular repair of blunt traumatic thoracic aortic injuries". JVasc Surg 2010;51:769–70.

Forbes TL. Commentary regarding, "Trans-Atlantic Debate – Asymptomatic carotid artery stenosis: medical therapy alone versus medical therapy plus carotid endarterectomy or stenting". JVasc Surg 2010;52:507.

Forbes TL. Informed consent – what level of risk to disclose with carotid artery endarterectomy. JVasc Surg 2010;51:1548-9.

Frank JR, Snell LS, Cate OT, Holmboe ES, Carraccio C, Swing SR, Harris P, Glasgow NJ, Campbell C, Dath D, Harden RM, Iobst W, Long DM, Mungroo R, Richardson DL, Sherbino J, Silver I, Taber S, Talbot M, Harris KA. Competency-based medical education: theory to practice. Med Teach. 2010;32(8):638-45.

Nicolaou G, Forbes TL. Strategies for accurate endograft placement in the proximal thoracic aorta. Semin Cardiothorac Vasc Anesth 2010;14(3):196-200.

Ricco JB, Forbes TL. Commentary regarding, "Trans-Atlantic Debate – Is a randomized trial necessary to determine whether endovascular repair is the preferred management strategy in patients with ruptured abdominal aortic aneurysms?". Eur J Vasc Endovasc Surg 2010;40:427.

Ricco JB, Forbes TL. Transatlantic Debates: A new section in the Journal from the Editors of the European Journal of Vascular and Endovascular Surgery and of the Journal of Vascular Surgery. Eur J Vasc Endovasc Surg 2010;40:273.

Taber S, Frank JR, Harris KA, Glasgow NJ, Iobst W, Talbot M. Identifying the policy implications of competency-based education. Med Teach. 2010;32(8):687-91.

Tong MZ, Koka P, Forbes TL. Economic evaluation of open versus endovascular repair of blunt traumatic thoracic aortic injuries. J Vasc Surg 2010;52:31–8.

Discovering a passion for surgery

Sometimes, an otherwise routine day can become a life changing experience.

Dr. Thomas Forbes, Chief of Vascular Surgery recalled such a day that took place a couple of years ago:

It was a good day, both clinically and also educationally. We were involved with a small group of first year medical students from the Schulich School of Medicine. We invited everyone to join us in the operating room for the day. They need as much clinical experience as possible to make a decision on where they want to focus their careers.

So there was this first year medical student who said, 'Ok, I will come and spend a day with you.' So we had a day where we did a few cases, of open and endovascular aneurysm repair. Then, towards the end of the day, we were finishing one case when an emergency trauma case came up; a car accident. The patient had a partially torn aorta which meant there was a chance for repair if we acted quickly. We opened up the next OR, brought the patient in and went to work.

It was such a blur we forgot the student was there, watching every minute. We completed the surgery; things went well and



at the end of it we all sat down and suddenly, the student spoke up and reminded us all of why we had chosen to be a surgeon so many years ago. He said, "That was fantastic! What an amazing day!" He later asked me if he could complete a summer OR rotation, and he is now interviewing for a surgical position. He is going to become a surgeon. It was a good day from a clinical aspect, and it was a good day in terms of educational impact, because here is a student who has now changed his thought process and developed the same passion for surgery we all share.



Dr. Christopher Schlachta, Medical Director, Canadian Surgical Technologies & Advanced Robotics

Improving patient care through Surgical Innovation, literally introducing something new in surgery, is the long-standing mission of CSTAR. Long before advancements in surgical technology can hit the floor, a great partnership has to emerge. It is the essential connection between the surgeon who says 'I need to be able to...' and the engineer who in turn says 'yeah, we can do that.' CSTAR connects these innovators.

Dr. Christopher Schlachta, Medical Director, Canadian Surgical Technologies and Advanced Robotics (CSTAR), leads the team that is bringing innovation to surgical care through the use of computer-assisted surgical devices.

"One approach we have taken is to focus on making surgery minimally invasive. What many people don't appreciate is that, for most surgery, the incision we make at the start of an operation is truly an unnecessary source of pain and suffering for our patients. We are working on reducing that suffering by developing innovative ways of getting the surgeon's 'eyes' and 'hands' into a patient," says Dr. Schlachta. "Through small holes or the body's natural orifices we can use computer technologies such as x-ray and ultrasound imaging to enhance our vision and robotics to replace our hands and guide us through the surgery."

Canadian Surgical Technologies & Advanced Robotics (CSTAR)

"Through small holes or the body's natural orifices we can use computer technologies such as x-ray and ultrasound imaging to enhance our vision and robotics to replace our hands and guide us through the surgery."

Surgical innovation also carries the responsibility of being able to effectively evaluate these technologies and safely introduce and disseminate them to the front line of care. There is a learning curve to every new procedure. This is where technology assessment and education programs such as simulation training and mentoring become important.

CSTAR clinicians and scientists have led surgical innovation by embracing and evaluating new technologies such as the da Vinci Surgical System. London surgeons continue to lead Canada in clinical robotic surgery by bringing new procedures from the laboratory to the patient while also disseminating minimally invasive techniques to colleagues across the country and around the globe through mentoring and telementoring programs.

CSTAR has made significant recent progress on many of these fronts.

Awards and Achievements

Dr. Ranji Patel, CSTAR's Director of Engineering, led a team of 11 researchers from the Faculty of Engineering and the Schulich School of Medicine and Dentistry at Western that were recently awarded one of NSERC's new Collaborative Research and Training Experience (CREATE) Program grants. The team received \$1.65 million in support for the Computer-Assisted Medical Intervention (CAMI) program. The CAMI program will train graduate students and post-docs for the next generation of engineers and scientists who have the interdisciplinary expertise needed to contribute to Canadian industry in the rapidly advancing field of medical devices and technologies.

Dr. Christopher Schlachta was successful in his application to the Ontario Ministry of Health and Long-term Care's Innovation Fund for his project. "Province-wide Health Technology Assessment of Premarket Medical Devices." Utilizing the resources of CSTAR, his team of surgeon-scientists will undertake health technology assessment of emerging medical device technologies in Ontario, evaluating both cost-effectiveness and learning issues that will impact widespread adoption.

Dr. Terry Peters, of the Robarts Research Institute, led a successful collaboration with CSTAR for a \$6.4 million Canada Foundation for Innovation grant entitled "Image-guided minimally invasive intervention and simulation." This research proposes to develop and test revolutionary minimally invasive surgical



techniques and simulation tools in a range of applications including cardio thoracic and gastrointestinal surgery, neurosurgery and urology.

On the international stage, CSTAR recently announced an expansion of its programs in collaboration with West China Hospital (WCH), one of the world's largest hospital facilities. CSTAR has committed to providing education and expert support to assist WCH with the accreditation process for the American College of Surgeons. West China Hospital is committed to the international standards of patient care quality and safety. CSTAR's simulation training expertise will provide West China Hospital with the means to attain this standard.

CSTAR also announced a collaboration with Canada's Department of Foreign Affairs and

CSTAR

CSTAR (Canadian Surgical Technologies & Advanced Robotics) occupies approximately 22,000 sq. ft. within the Lindros Legacy Research Building at LHSC and has an international reputation for developing and delivering world-class simulated learning programs and services.

CSTAR's curriculum development expertise provides individual and team-based simulated learning programs across a variety of topics including general, gynaecology, otolaryngology, thoracic, plastics, urology and cardiovascular surgery, Anesthesia, nursing, emergency medicine, critical care and interventional cardiology.

CSTAR's simulated learning programming is accredited by the American College of Surgeons. CSTAR's Brent & Marilyn Kelman Centre for Advanced Learning, which was completed in 2010, is an 8,000 sq. ft. state-of-the-art simulated learning facility that augments CSTAR's already impressive simulated learning programming.



International Trade to establish a CSTAR office at West China Hospital. The purpose of this office is to facilitate medical device research, validation and training. CSTAR held its first International Industry Roundtable in Chengdu, China in November 2010.

A new Anesthesia delivery method, expected to revolutionize health care, plans to use CSTAR as a launching pad in entering the North American market. If the new tool catches on, CSTAR could become home for a North American training facility and, potentially, London would be in the running for a new manufacturing facility.

The Zeus, made by German-based Dräger Medical Inc. and already in use in Europe and Asia, would deliver a greater degree of integration and automation, making it easier for anaesthetists to concentrate on the patient – neonatal through adult. John Parker, Director, CSTAR says this closed-loop method of Anesthesia delivery is what is referred to as disruptive technology.

"It's a term used in any high-tech industry

to describe something that fundamentally changes the way things are done," he says. "This technology does have the potential to fundamentally change, and many would argue, improve the quality of care provided to patients that require Anesthesia." Mr. Parker says the machine can follow a patient around the hospital.

London is uniquely positioned to market highly specialized services such as medical device validation and testing because it can provide access to high quality patient care, advanced medical academics and research that is done collaboratively between hospitals and the university.

CSTAR also has a strong link to the Department of Surgery's first PhD Education Researcher, Dr. Sayra Cristancho. Dr. Cristancho joined the Department as an Assistant Professor in September 2010. She is also a member of the Centre for Education Research and Innovation at Schulich with her research focusing on designing

simulation-based curriculums for training complex procedures in adult/paediatric cardiovascular surgery and Anesthesia; developing and validating a new assessment tool for monitoring performance in the operating room and in simulation for orthopaedic surgery; and developing bench-top models to acquire information about the performance of basic surgical skills. Dr. Cristancho is part of an emerging strength in scholarly work in medical education and links our innovative surgical education programs with the technological developments in CSTAR.

Kelman Centre Opens October 2010

CSTAR's state-of-the-art Brent and Marilyn Kelman Centre for Education opened in October 2010. The Kelman Centre is comprised of 8,000 sq. ft. of simulation modules and suites, debriefing and meeting rooms, and other advanced training media. Surgeons and trainees will be able to receive instruction in the latest

minimally invasive surgical technology and robotics. The Kelman Centre fully occupies one of CSTAR's three floors in the Lindros Research Building at London Health Sciences Centre.

Publications

A.L. Trejos, J. Jayender, M.T. Perri, M.D. Naish, R.V. Patel, and R.A. Malthaner. "Robot-assisted tactile sensing for minimally invasive tumor localization," International Journal of Robotics Research — Special Issue on Medical Robotics, vol. 28, no. 9, pp. 1118–1133, 2009.

A.L. Trejos, R.V. Patel and M.D. Naish. "Force Sensing and its Applications in Minimally Invasive Surgery and Therapy: A Survey," Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, Special Issue on Robots and Devices in Surgery, vol. 224, no. 7, pp 1435–1453, 2010.

A.L. Trejos, R.V. Patel, M.D. Naish, and C.M. Schlachta. "A sensorized instrument for skills assessment and training in minimally invasive surgery," ASME Journal of Medical Devices, vol. 3, pp. 041002-1–041002-12, 2009.

A.L. Trejos, S. Jayaraman, R. V. Patel, M.D. Naish, and C.M. Schlachta. "Force sensing in natural orifice transluminal endoscopic surgery," Surg Endosc. 2010 Jun 18. [Epub ahead of print].

C. Kong, A.L. Trejos, M.D. Naish, R.V. Patel and K.K. Leitch. "Suitability of three saws for minimally invasive bone cutting," Surgical Innovation, vol. 17, no. 1, pp. 5–10, March 2010.



H. Bassan, R.V. Patel and M. Moallem. "A novel manipulator for percutaneous needle insertion: Design and experimentation," IEEE/ASME Transactions on Mechatronics, vol. 14, pp. 746-761, 2009.

J. Jayender, R.V. Patel, and S. Nikumb. "Robot-assisted active catheter insertion: algorithms and experiments," International Journal of Robotics Research, — Special Issue on Medical Robotics, vol. 28, no. 9, pp. 1101-1117, 2009.

M.D. Naish, R.V. Patel, A.L. Trejos, M.T. Perri, and R.A. Malthaner. "Robotic Techniques for Minimally Invasive Tumor Localization," in Surgical Robotics Systems, Applications and Visions, J. Rosen, B. Hannaford, and R. Satava (eds.), Springer, 2009.

M.T. Perri, A.L. Trejos, M.D. Naish, R.V. Patel, and R.A. Malthaner. "New Tactile Sensing System for Minimally Invasive Tumor Localization," The Inter-

national Journal of Medical Robotics and Computer Assisted Surgery, vol. 6, pp. 211–220, 2010.

N. Abolhassani and R. V. Patel. "Teleoperated masterslave needle insertion," International Journal of Medical Robotics and Computer Assisted Surgery, vol. 5, pp. 398–405, 2009.

R.V. Patel, H.A. Talebi, J. Jayender, and F. Shadpey. "A Robust Position and Force Control Strategy for 7-DOF Redundant Manipulator," IEEE/ASME Transactions on Mechatronics, vol. 14, no. 5, pp. 575–589, 2009.

S. Jayaraman, D. Quan, I. Al-Ghamdi, F. El-Deen, C.M. Schlachta. "Does robotic assistance improve efficiency in performing complex minimally invasive surgical procedures?" Surgical Endoscopy, vol. 24, no. 3, pp. 584–588, 2010.

S. Jayaraman, C.M. Schlachta. "Transgastric and transperineal NOTES (Natural Orifice Translumenal Endoscopic Surgery) in an appendectomy test bed," Surgical Innovation, Vol. 16, no. 3, pp. 223–227, 2009.

C.M. Schlachta, K.L. Lefebvre, A.K. Sorsdahl, S. Jayaraman. "Mentoring and telementoring leads to effective incorporation of laparoscopic colon surgery," Surgical Endoscopy, vol. 24, no. 4, 841-844, 2010.



Dr. Patrick Luke, Co-Director, Multi-Organ Transplant Program

Every year in Canada, people die waiting for an organ donation to become available. Dr. Patrick Luke, Co-Director of the Multi-Organ Transplant Program (MOTP) at University Hospital stated that the physicians and staff at LHSC are actively addressing this issue. Although London has one of the highest donation rates in Canada, where donation rates are 20-26 donors per million vs. 8-14 per million in Toronto, donation rates across Canada are woefully inadequate. "Organ donation requires a much different approach to improve success," says Dr. Luke. "In 2008, more than 4,000 Canadians were on a waiting list for an organ transplant. Two hundred and fifteen of these individuals died waiting."

In order to address these issues, Dr. Bill Wall and a team with the MOTP created educational material (One life...many gifts) for high school students, which has now been adopted across Ontario with the help of Trillium Gift of Life Network. Now, teens are properly educated about organ donation prior to signing driver's licenses. They talk about it with their families, and they research it on websites. "Anytime we have an opportunity to talk about organ donation, we take it. We simply do not have enough donors for all the recipients we have out there."

Similarly, London has paved the way in Canada with regard to Donation after Cardiac Death (DCD) transplant procedures. This type

Multi-Organ Transplant Program

of organ donation has allowed patients with no chance of neurologic recovery to donate organs in addition to the standard donation procedures with neurologic brain death donors. Dr. Roberto Hernandez-Alejandro presented London's experience with liver and kidney transplants using DCD donors at national and international transplant meetings last year. By December last year, the MOTP had performed 33 liver transplants, and 62 kidney transplants as well as two pancreas transplants using organs from DCD donors. In Ontario, between 15-20% of transplants were DCD transplants over the last two years.

In 2009, a new Canadian Registry that identified incompatible donor/recipient pairs was created to allow exchange of living donor organs. In situations where incompatible blood types and cross matches would have prevented transplants from occurring, two patients with kidney failure could 'swap' donors to facilitate two separate compatible transplants. In some situations, multiple pairs can be identified in which an anonymous or non-directed donor can initiate a sequence or 'chain' of transplants that culminate in a significant number of patients being transplanted. In September 2010, the MOTP participated in the first transplant chain using an anonymous donor to initiate the chain. In conjunction with a transplant hospital in Toronto, four donor/recipient paired transplants were performed during that run.

In addition to finding more organs for transplantation, the MOTP team has been finding ways to keep organs functioning better and longer. Dr. Luke stated that MOTP excellence

can be found on many levels, including bench and translational transplant research. On October 26, 2010, the official opening of the Lindros Legacy Research building took place. This research facility also houses the Matthew Mailing Centre for Translational Transplant Studies on Level 4 adiacent to the clinical MOTP unit. Dr. Anthony Jevnikar, a nephrologist and Co-Director of the MOTP, has developed this state-of-the-art facility to accelerate knowledge transfer from the basic research scientists to clinical practice. In the same way, clinically relevant research will be facilitated through seamless translation between basic scientists and clinicians within this MOTP corridor. "The new facility provides an opportunity to put everyone together, to do a lot of basic science and cellular work. Connecting all of the researchers and clinicians under one roof will result in synergies and opportunities we couldn't have imagined previously."

Awards and Achievements

As usual, the past year was flush with local, national and international awards for the surgical transplant team.

Dr. Wei Ping Min received the 2010 Lawson Innovation Prize for his research related with gene therapy and immune and inflammatory modulation. He has also been granted funding as the Department of Surgery Institute Scientist.

Dr. Hao Wang was selected as the first recipient of the International Basic Science Mentor Award from The Transplantation Society. This new award recognizes the efforts of scientists who have

advanced understanding of transplant science/ immunobiology and/or treatment of transplant recipients, as well as supervised young investigators in furthering the basic science of transplantation.

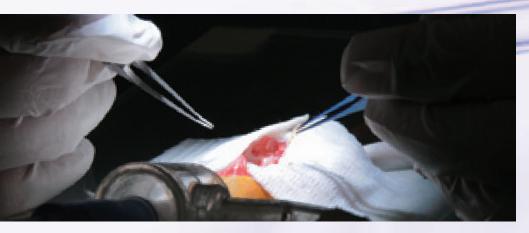
Dr. Roberto Hernandez was selected by the UWO Meds 2011 Class as Undergraduate Teacher of the Year from among the Department of Surgery.

Dr. Alp Sener was selected as the recipient of the 2010 Robert J. Krane Urology Research Success Award from the American Urological Association as well as the 2010 AMOSO Opportunities Fund.

Dr. William Wall received the 2010
Lamp of Learning Award from the Ontario
Secondary School Teachers' Federation.
This is the Federation's most prestigious
award given to a non-member for exemplary
contributions to public education in Ontario.

Dr. Patrick Luke was awarded the Gold Cystoscope Award from the American Urologic Association in 2010. This international award is given yearly to the individual distinguished by outstanding contributions to the profession within 13 years of completing residency training.

In addition to numerous peer reviewed grants awarded to the MOTP group, the scientists and clinicians in the MOTP were also very successful in the CIHR grant competition in 2011. There was an unprecedented 75.0% success rate within the group in an environment that had a 16.5% funding rate in open competition. Congratulations to Drs. Amit Garg, Lakshman Gunaratnam, Zhuxu Zhang, Hao Wang and Anthony Jevnikar for the significant funding that they have brought to the MOTP, London Health Sciences and the University of Western Ontario through their research excellence!



Publications

Ansell MJ, Breeze J, McAlister VC, Williams MD.

Management of devastating ocular trauma—experience of maxillofacial surgeons deployed to a forward field hospital. J R Army Med Corps. 2010 Jun;156(2):106-9.

Basak GW,Yasukawa S,Alfaro A, Min W, Minev B and Carrier E. Human embryonic stem cells hemangioblast express HLA-antigens. J Translational Medicine 2009, 7:27.

Brandsma ME, Diao H, Wang X, Kohalmi SE, Jevnikar AM, Ma S. Plant-derived recombinant human serum transferring demonstrates multiple functions. Plant Biotechnol 2010;8:489-505

Bridle BW, Wilkie BN, Jevnikar AM, Mallard BA. Steering or ally induced deviation of xenogeneic immunity with exogenous cytokines in rats fed porcine proteins. Transplant Immunology 2009;22:32-37

Burger D, Lu x, Lei M, Xiang F, Hammoud L, Jiang M, Wang H, Jones DL, Sims SM, Feng Q. Neuronal Nitric Oxide Synthase Protects Against Myocardial Infarction-Induced Ventricular Arrhythmia and Mortality in Mice. Circulation 2009; 120(14):1345–54.

Chan G, Taqi A, Marotta P, Levstik M, McAlister V, Wall W, Quan D. Long-term outcomes of emergency liver transplantation for acute liver failure. Liver Transpl. 2009 Dec;15(12):1696-702.

Conley AJ, Jevnikar AM, Menassa R, Brandle JE. Temporal and spatial distribution of erythropoietin in transgenic tobacco plants. Transgenic Res 2010;19:291–298.

Conley AJ, Joensuu JJ, Jevnikar AM, Menassa R, Brandle JE. Optimization of elastin-like polypeptide fusions for expression and purification of recombinant proteins in

plants. Biotechnol Bioeng 2009;103:562-573.

Conley AJ, Mohib K, Jevnikar AM, Brandle JE. Plant recombinant erythropoietin attenuates inflammatory kidney cell injury. Plant Biotechnol J 2009;2:183-199.

Deng J, Lian D, Garcia B, Jevnikar A, Wang H, and Luke P. Donor preconditioning with CORM-2 protects against ischemia-reperfusion injury in kidney transplantation. Kidney International 2010 (Submitted, under review).

Feng B, Chen G, Zheng X, Sun H, Zhang X, Zhang ZX, Xiang Y, Ichim TE, Garcia B, Luke P, Jevnikar AM, Min WP. Small interfering RNA targeting Re1B protects against renal ischemia-reperfusion injury. Transplantation 2009:87:1283-1289.

Ge W, Jiang J, Baroja ML, Arp J, Zassoko R, Liu W, Bartholomew A, Garcia B, and Wang H. Infusion of Mesenchymal Stem Cells and Rapamycin Synergize to Attenuate Alloimmune Responses and Promote Cardiac Allograft Tolerance. American Journal of Transplantation 2009; 9(8):1760-1772.

Ge W, Jiang J, Liu W, Saito A, Garcia B, Li XC, and Wang H. Regulatory T cells are Critical to Tolerance Induction in Presensitized Transplant Recipients through Targeting Memory T cells. American Journal of Transplantation 2010; 10: 1760-1773.

Geddes CR, McAlister VC. A surgical review of the priority claims attributed to Abraham Groves (1847–1935). Can J Surg. 2009 Oct;52(5):E126–30.

Han X, Meng X,Yin Z, Rogers A, Zhong J, Rillema P, Jackson JA, Ichim TE, Minev B, Carrier E, Patel AN, Murphy MP, Min W, Riordan NH. Inhibition of intracranial glioma growth by endometrial regenerative cells. Cell Cycle 2009, 8(4):606-10.

Hernandez-Alejandro R, Caumartin Y, Ghent C, Levstik MA, Quan D, Muirhead N, House AA, McAlister V, Jevnikar AM, Luke PP, Wall W. Kidney and liver transplants from donors after cardiac death: initial experience at the London Health Sciences Centre. Can J Surg 2010;53:93–102.

Hizo-Abes P,Young A, Reese PP, McFarlane P,Wright L, Cuerden M, Garg AX. Donor Nephrectomy Outcomes Research (DONOR) Attitudes to sharing personal health information in living kidney donation. Network. Clin J Am Soc Nephrol. 2010 Apr;5(4):717-22. Epub 2010 Mar 18.

Horovitz D, Caumartin Y, Warren J, Sheikh AA, Bloch M, Kapoor A, Jevnikar AM, Luke PP. Outcome of third renal allograft retransplants versus primary transplants from paired donors. Transplantation 2009;87:1214–1220.

Ichim TE, Harman RJ, Min WP, Minev B, Solano F, Rodriguez JP, Alexandrescu DT, De Necochea-Campion R, Hu X, Marleau AM, Riordan NH. Autologous stromal vascular fraction cells: A tool for facilitating tolerance in rheumatic disease. Cell Immunol. 2010, 264(1):7–17.

Johnson JF, Jevnikar AM, Mahon JL, Muirhead N, House AA. Fate of the Mate:The influence of delayed graft function in renal transplantation on the mate recipient. Am J Transplant 2009, June 10 (epub ahead of print).

Lan Z, Zassoko R, Liu W, Garcia B, Sun H, Wang R, and Wang H. Development of techniques for gastroje-junal bypass surgery in obese mice. Microsurgery 2010; 30: 289-95.

McAlister V, Burns KE, Znajda T, Church B. Hypertonic saline for peri-operative fluid management. Cochrane Database Syst Rev. 2010 Jan 20;(1):CD005576.

McAlister VC H1N1-related SIRS? CMAJ. 2009 Oct 27;181(9):616-7.

Pescovitz MD, Nezakatgoo N, Lorber MI, Nashan B, Tedesco-Silva H Jr, Kasiske BL, de la Cruz FJ, Russ G, Campistol J, Keown PA and the International Sirolimus Study Group. Prospective observational study of sirolimus as primary immunosuppression after renal transplantation. Transplantation 2009;88:1010-1018.

Pina JS, Moghadam S, Cushner HM, Beilman GJ, McAlister VC. In-theater peritoneal dialysis for combatrelated renal failure. J Trauma. 2010 May;68(5):1253-6.

Riordan NH, Ichim TE, Min W, Wang H, Solano F, Lara F, Alfaro M, Rodriguez JP, Harman RJ, Patel AN, Murphy MP, Lee RR and Minev B. Non-expanded adipose stromal vascular fraction cell therapy for multiple sclerosis. J Translational Medicine 2009, 7:29.

Sener, A., Cooper, M., Bartlett, S.T. Is there a role for pancreas transplantation in type-2 diabetes mellitus? Transplantation, 90(2): 121-123, 2010.

Sener, A., Nguan, C.Y., Khakhar, A.K., House, A.A., Jevnikar, A.M., Luke, P.P.W Early but not late allograft nephrectomy reduces allosensitization after renal transplant failure. Canadian Urological Association Journal 2011 Mar 1:1-6.

Sener A, Khakhar AK, Nguan CY, House AA, Jevnikar AM, Luke PP. Early but not late allograft nephrectomy reduces allosensitization after transplant failure.

Sener, A., Schweitzer, E.J., Cooper, M., Bartlett, S.T., Philosophe, B., Barth, R.N. Geriatric recipients of deceased donor renal transplants demonstrate equal graft survival to non-geriatric populations. Transplantation, 87(10): 1549-1554, 2009.

Sener, A., Tang, A.L., Farber, D.L. Memory T-cell predominance following T-cell depletional therapy derives



from homeostatic expansion of naïve T-cell. American Journal of Transplantation, 9(11):2615–2623, 2009.

Sener, A., Uberoi, V., Bartlett, S.T., Phelan, M.W Living donor renal transplantation of allografts with incidental renal masses is acceptable following ex-vivo partial nephrectomy. British Journal of Urology International, 104(11), 1655-1660, 2009.

Sickand M, Cuerden MS, Klarenbach SW, Ojo AO, Parikh CR, Boudville N, Garg AX. Donor Nephrectomy Outcomes Research Reimbursing live organ donors for incurred non-medical expenses: a global perspective on policies and programs. Network.Am J Transplant. 2009 Dec;9(12):2825–36. Epub 2009 Sep 25. Review.

Suzuki M, X Zheng, X Zhang, Z-X Zhang, TE Ichim, CVladau, H Sun, Garcia B, and Min W. Allergen-specific cellular therapy using CD40-silenced dendritic cells. Submitted to J Allergy and Clinical Immunology 2010, 125(3):737-43.

Suzuki M, Zheng X, Zhang X, Ichim TE, Beduhn ME, Min W. Oligonucleotide based-strategies for allergy with special reference to siRNA. Expert Opinion Biology Therapy. 2009, 9 (4): 441-450. Oligonucleotide based-strategies for allergy with special reference to siRNA.

Suzuki M, Zheng X, Zhang X, Ichim TE, Sun H, Kubo N, Beduhn M, Shunnar A, Garcia B, Min W. Inhibition of allergic responses by CD40 gene silencing. Allergy 2009, 64: 387–397.

Suzuki M, Zheng X, Zhang X, Zhang Y, Ichim TE, and Min W. Regulation of Allergy with RNA Interference. Critical Rev Immunology 2009; 29(6):443-68.

Touma, N., Sener, A., Nguan, C.Y., Luke, P.P.W.The role of subcapsular versus extracapsular allograft nephrec-

tomy in affecting allosensitization in renal transplant recipients. Canadian Urological Association Journal

Tremblay R, Feng M, Menassa R, Huner NP, Jevnikar AM, Ma S High-yield expression of recombinant soybean agglutinin in plants using transient and stable systems. Transgenic Res 2010, June 18 (epub ahead of print).

Tremblay R, Wang D, Jevnikar AM, Ma S. Tobacco, a highly efficient green bioreactor for production of therapeutic proteins. Biotechnol Adv 2010;28:214–221.

Turner J, Sazonova O, Wang H, Pozzi A, Wagner GF. Induction of the renal stanniocalcin-1 gene in rodents by water deprivation. Molecular and Cellular Endocrinology 2010; 328: 8–15.

Wang H, Ge W, Arp J, Zassoko R, Liu W, Ichim TE, Jiang J, Jevnikar AM, Garcia B. Free bone graft attenuates acute rejection and in combination with cyclosporin leads to indefinite cardiac allograft survival. J Immunol 2009;182:5970-5981.

Wang H. Organ transplant. In: Murray Moo Young, eds. Medical biotechnology and healthcare, Comprehensive Biotechnology: Principles, Applications and Regulations in Industry, Agriculture, Medicine and the Environment. UK: Elsevier, 2010.

Wang H. Small Animal Models of Xenotransplantation. In: Rafael Máñez and Cristina Costa, eds. Methods in Molecular Biology. USA: Humana Press, 2011.

Warren J, da Silva V, Caumartin Y, Luke PP. Robotic Renal Surgery: The future or passing curiosity? Can Urol Assoc J. 2009 Jun;3(3):231–240.

Xia X, Zhang X, Li M, Huang X, Luke P, Ichim TE, and Min W. Anti-CD45RB monoclonal antibody induces immunologic toleration by suppressing dendritic

cells. Transplant Immunology 2009, 21 (3); 136-9.

Yang R.C., Young A, Nevis IF, Lee D, Jain AK, Dominic A, Pullenayegum E, Klarenbach S, Garg AX; Life insurance for living kidney donors: a Canadian undercover investigation. Donor Nephrectomy Outcomes Research (DONOR) Network. Am J Transplant. 2009 Jul;9(7):1585-90. Epub 2009 Jun 10.

Yang W, Zhang Y, Wu F, WP Min, Minev B, Zhang M, Luo X, Ichim TE, Riordan NH and Hu X. Safety evaluation of allogeneic umbilical cord blood mononuclear cell therapy for degenerative conditions. J Translational Medicine. 2010, Impress.

Zhang L, Narayanan N, Brand SR, Nicolette CA, Baroja M, Arp J, Wang H, Moo-Young M and Chou CP. Structural Identification of Recombinant Human CD83 Mutant Variant as a Potent Therapeutic Protein. Protein Expression & Purification 2010; 73(2):140-146.

Zhang X, M Li, Min W. Preventing immune rejection through gene silencing Methods Mol Biol. 2010;623:357-71. Humana Press, USA.

Zhang ZX, Beduhn ME, Zheng X, Min WP, Jevnikar AM. Preventing tissue injury using siRNA. Methods Mol Biol 2010:623:341–355.

Zhang ZX, Shek K, Wang S, Huang X, Lau A, Yin Z, Hun H, Liu W, Garcia B, Rittling S, Jevnikar AM Osteopontin expressed in tubular epithelial cells regulates NK cell-mediated kidney ischemia reperfusion injury J Immunol 2010;185:967-973.

Zhang Z-Xu, ME Beduhn, X Zheng, Min W, AM Jevnikar. Preventing tissue injury using siRNA. Methods Mol Biol. 2010;623:341–55. Humana Press, USA.

Zheng X , CVladau, A Shunner, Min W. siRNA specific delivery system for targeting dendritic cells. Methods

Mol Biol. 2010;623:173-88. Humana Press, USA.

Zheng X, I Popov, M Li, X Zhang, M Suzuki, R Inman and Min W. Inhibition of autoimmune arthritis by vaccination with tolerogenic dendritic cells through gene silencing. J Immunol 2010; 184(11):6457-64.

Zheng X, Lian D, Wong A, Bygrave M, Ichim TE, Khoshniat M, Zhang X, Sun H, DeZordo T, Lacefield JC, Garcia B, Jevnikar AM, Min WP. Novel small interfering RNA-containing solution protecting donor organs in heart transplantation. Circulation 2009;120(12):1099-1107.

Zheng X, Suzuki M, Zhang X, Ichim TE, Zhu F, Ling H, Shunnar A, Wang MH, Garcia B, Inman RD, Min W. RNAi-mediated CD40-CD154 interruption promotes tolerance in autoimmune arthritis. Arthritis Res Ther. 2010; Jan 26;12(1):R13. [Epub ahead of print].

Zheng X,Vladau C, Zhang X, Suzuki M, Ichim TE, Zhang ZX, Li M, Carrier E, Garcia B, Jevnikar AM, Min W.A novel in vivo siRNA delivery system specifically targeting dendritic cells and silencing CD40 genes for immunomodulation. Blood 2009, 113(12):2646-54.

Zhong Z, Patel AN, Ichim TE, Riordan NH, Wang H, Min W, Woods EJ, Reid M, Mansilla, GH Marin, H Drago, MP Murphy, B Minev. Feasibility investigation of allogeneic endometrial regenerative cells. J Translational Medicine. 2009, 7:15.



The Late Dr. Murray Girotti, Director, Trauma Program

Trauma remains a major health care issue

throughout the world. Improved training of physicians and nurses in the management of critically injured adults and children is widely recognized as the way to save lives and contribute to minimizing disability.

This is the department where surgeons must make life and death decisions, often with only the information they have in front of them and years of experience as their guide.

"If you don't want to be in the business where your patient can die on you in three minutes, this isn't for you." That's what Dr. Murray Girotti, Director of Trauma, says he tells students and other individuals considering a career in trauma medicine. "There are a good five per cent of medical students that say, 'yes, I would like to take on those patients. I want to try to make a difference with those patients." Those are the students that Dr. Girotti sees on his surgical rotation.

In trauma surgery it is not an exaggeration to say medical emergencies can happen pretty quickly and time is often not on the doctor's side.

"We kind of look at ourselves as the adrenaline junkies. The medical students are excited by our enthusiasm and the quick nature of the work. Patient turnover is very quick, but I think

Trauma Program

there is a certain segment of the medical and nursing student population that really thrives for the need to make quick decisions."

Dr. Girotti's work doesn't end when he leaves the hospital each day. He and his counterparts at other trauma centres constantly advise industry and media on preventing injuries, whether it is through better product design or more responsible promotion.

"If you don't want to be in the business where your patient can die on you in three minutes, this isn't for you."

"We believe trauma is a preventable illness. When you see some of the things I have seen in 30 years of looking after injured adults and children, some of it is just pure stupidity."

As good as the surgeon is, trauma medicine is about teamwork, and you are only as good as your weakest link.

"That is exactly what it is. It is all about team management. When my pager goes off, I want to know when I hit the floor running that I have the 'A' team with me in terms of nursing, and they are excellent, right down to the person who is reading the CT scans, to the team that is waiting up in the operating room to receive this critically injured patient. I am very fortunate that my colleagues that I work with are the 'A' team."



In the future, training that 'A' team will still be there, but in a much different way.

"We do a lot of education with CSTAR. We are excited about the possibilities of expanding activities in education with both physicians and non-physicians at CSTAR; where we can make our team a better team through team simulation."

CSTAR is complementing its outstanding line-up of educational programming for physicians and nurses with the addition of the Advanced Trauma Life Support (ATLS) program.

The ATLS program is a well-established and highly regarded educational program in London – having been offered for over 20 years. Dr. Girotti was instrumental in implementing the program at London Health Sciences Centre. Over the past two decades he says he has seen a remarkable revolution in the quality of injury care in Canada. He is pleased the training

program is moving under the CSTAR umbrella.

"We know that the demand for trauma training is out there and will always be there, that the ATLS certification will be an ongoing and recurring requirement of health care professionals working in hospitals," says Girotti. "This move to CSTAR will enable us to meet our mandate to provide the very best trauma educational experience training."

Our Academic Health Science Centre lost an esteemed leader, colleague, teacher, and mentor when Dr. Murray Girotti passed away suddenly on December 26, 2010. His influence was far reaching and significant locally, provincially and nationally. It is our privilege to have this interview as his final words of wisdom to share.

