

DEPARTMENT OF Surgery Newsletter

Winter 2016



Chair's Column

The strength of the Department of Surgery resides in its academic faculty and leaders supported by excellent staff. During the past 14 years, I have been fortunate to participate in the recruitment of 48 surgeons and 10 scientists across eight divisions in the Department of Surgery.

The lifeblood of the Department is being able to add energetic young people who bring innovation, creativity and new skills. Our collective success in recruitment has been transformative in many respects across all clinical sites with more than 40 per cent of our clinical academic faculty now age 45 and younger.

While constraints in the hospital and university sectors have often limited the ability of departments to recruit new faculty beyond straight replacements, we have benefited

from the increased emphasis on work-life balance in our younger demographic which has allowed us to add 25 net new surgeons to our faculty compliment during my term as Chair/Chief. As this group of outstanding faculty gain experience and move toward achieving academic promotion, they represent the future leaders of the Department.

Having a department with the profile to attract successful mid-career faculty from beyond our traditional zones of recruitment is also an encouraging milestone in the progress of Schulich Medicine & Dentistry's Department of Surgery. As such, we are particularly proud to have recently recruited Dr. Audra Duncan from the Mayo Clinic in Rochester, Minnesota to provide leadership as the Chair/Chief, Division of Vascular

Surgery. Dr. Duncan brings a new perspective and an exciting dynamic to the Division of Vascular Surgery and the Department of Surgery.

As I prepare to hand over the reigns of the Department Leadership to Dr. Emil Schemitsch, I would like to thank all those who have provided leadership to divisions and committees during my tenure as Chair/Chief. I believe the Department of Surgery at the Schulich School of Medicine & Dentistry is well positioned for future success.

Sincerely,

John D. Denstedt, MD, FRCSC, FACS, FCAHS
Richard Ivey Professor & Chair/Chief,
Department of Surgery
Schulich School of Medicine & Dentistry
Western University

DR. WILLIAM WALL RECOGNIZED FOR 40 YEARS OF SERVICE



Following his retirement this spring, Dr. William Wall received well-deserved recognition for his 40 years of outstanding contribution to the Liver Transplant Community and 25 years of dedication to the International Liver Transplant Society (ILTS).

On behalf of the ILTS, Dr. Roberto Hernandez-Alejandro gave a speech at the annual meeting in Chicago about Dr. Wall's contribution on organ donation and transplantation.

Dr. Wall retired in 2015 after an impressive 40 year career that included performing London's first successful liver transplant surgery in

1982. Along the way he helped London earn its reputation as the "transplant capital of Canada."

In an interview with the London Free Press, Dr. Wall noted that his work, although often exhausting, was ultimately rewarding and gratifying, especially as he watched his patients recover: "A week later they're having Cheerios and talking about going back to school or their daughter's birthday. In a month they look normal. Nothing compares to that. It's been a privilege to be part of that."

Source: Daneiszewski, H. (2015). *Dr. Bill Wall Performed 1885 Liver Transplants that Helped Put London on World Medical Map*. The London Free Press. Retrieved from <http://www.lfpress.com/2015/04/17/dr-bill-wall-performed-1885-liver-transplants-in-a-stellar-40-year-medical-career-that-helped-put-little-old-london-on-the-world-transplant-map>

ROBERT ZHONG DEPARTMENT OF SURGERY RESEARCH DAY

The 2015 Robert Zhong Department of Surgery Research Day was held on June 22 at St. Joseph's Hospital.

With a goal to bring forward research efforts taking place in the Department and to stimulate collaboration, the event included a poster competition and a paper competition for residents, as well as oral presentations from faculty members and Department scientists.

Topics presented throughout the day ranged from the development and challenges around innovative surgical practice, as well as new developments in orthopaedic surgery and outcomes research, cancer

research and vascular surgery.

Dr. Ivar Mendez, the Fred H. Wigmore Professor and Unified Head of the Department of Surgery at the University of Saskatchewan and Saskatoon Health Region, was the keynote speaker. A surgeon, academic, and expert in functional neurology, robotic neurosurgery and computerized systems in neurosurgical applications, Dr. Mendez presented an interesting talk entitled, "Technologies in the Future: Brain Repair, Neuro Modulation and Remote Presence".

The winner for the Best Resident Paper was Dr. Irfan Abdulla for his paper "An In-vitro study of the Effect

of Humeral Cop Constraint in Reverse Shoulder Athroplasty:

The winners for Best Resident Poster Presentation were: Dr. Matthew Valdis for his poster, "Randomized Controlled Evaluation of Robotic Cardiac Surgery Training Modalities" and Dr. Sohrab Ali for his paper "Fluorescent Imaging of the Drosophila Melanogaster Model of Human Nephrolithiasis".

Save the date for the 2016 Robert Zhong Department of Surgery Research Day, which will be held on **June 24** at St. Joseph's Hospital.

DR. EMIL SCHEMITSCH APPOINTED NEW CHAIR/CHIEF

We are pleased to announce that Dr. Emil Schemitsch has been appointed as Chair/Chief of the Department of Surgery, Schulich School of Medicine & Dentistry, Western University and Chief of the Department of Surgery for London Health Sciences Centre and St. Joseph's Health Care London, effective January 1, 2016

Dr. Schemitsch graduated from the University of Toronto's School of Medicine in 1984 and completed his Orthopaedic Surgery residency at the University of Toronto in 1991. He completed fellowships in Orthopaedic Traumatology, Research in Blood Flow and Biomechanics at the University of Washington in Seattle, Washington, and in Adult Joint Reconstruction at Harvard Medical School in Boston, Massachusetts.

In 1993, he joined St. Michael's Hospital and the University of Toronto, and served as Head of Orthopaedic Surgery at St. Michael's Hospital from 2000 to 2012.

Dr. Schemitsch was a Professor of Surgery and was cross-appointed as Professor in the Institute of Biomaterials and Biomedical Engineering at the University of Toronto and is a Scientist at the Keenan Research Centre of the Li Ka Shing Knowledge Institute at St. Michael's Hospital.

In 2013, Dr. Schemitsch was appointed the University of Toronto St. Michael's Hospital Term Chair in Fracture Care Research.

Dr. Schemitsch is Past-President of the Canadian Orthopaedic Association and is currently the President of the Canadian Arthroplasty Society.

Dr. Schemitsch's research has focused upon the care of patients with musculoskeletal injuries and arthritis.



His wide range of musculoskeletal interests has led to the investigation of the systemic response to trauma, gene therapies, biomechanics, bone substitutes, and the stimulation of fracture healing. His work spans the testing of devices (e.g. plates, surgical techniques) or treatments in randomized controlled trials, to developing and testing outcome measures and their statistical modeling while placing a strong emphasis on the application of the results in clinical practice and health policy.

Dr. Schemitsch has received international recognition for his research efforts including the Edouard J. Samson Award for a Canadian orthopaedic surgeon with

the greatest impact on research in the past five years and the Lister Prize, the top award in the Department of Surgery at the University of Toronto for sustained research.

Dr. Schemitsch's program of research in musculoskeletal trauma and arthritis has led to more than 400 publications in top journals, numerous grants and hundreds of guest lectures around the world. He has received numerous awards for his contributions to orthopaedics from the Canadian Orthopaedic Research Society, the Canadian Orthopaedic Association, the Orthopaedic Trauma Association, the American Shoulder and Elbow Surgeons and the International Society for Fracture Repair.

MEET OUR NEW FACULTY MEMBERS



**Dr. Audra Duncan, Professor, Chair/
Chief, Division of Vascular Surgery**

Dr. Audra Duncan joined the Department of Surgery in January 2016, as a professor and Chair/Chief in the Division of Vascular Surgery. Dr. Duncan received her BS in Chemistry from MIT and her MD from New Jersey Medical School, University of Medicine and Dentistry of New Jersey. She completed her residency there as well, serving as Chief Resident. She was a fellow in the Division of Vascular Surgery at the Mayo Clinic College of Medicine.

Dr. Duncan has served as a member of more than 20 professional or community societies and services, including her recent service as the Chair of the American Board of Surgery Vascular Surgery In-Training Examination Committee.

Dr. Duncan's research interests and areas of expertise include: Ruptured aneurysms, open management outcomes of paravisceral aortic aneurysms, gender differences in vascular surgery outcomes, thoracic outlet syndrome in adolescents, complex aortic reconstructions for aneurysms and comparison to endovascular techniques, and mentoring of clinical research for the vascular surgery fellows and interested general surgical residents. She has given more than 130 presentations, nationally and internationally, on these and other related topics. She has also authored more than 100 papers published in peer reviewed journals and contributed to more than 30 book chapters.



**Dr. Rob Leeper, Assistant Professor,
General Surgery**

Dr. Rob Leeper joined the Division of General Surgery in August 2015 as an Assistant Professor and is appointed to London Health Sciences Centre Victoria Hospital.

Dr. Leeper was born and raised in London Ontario. After graduating from Queen's University with a BSc (distinction) in Life Sciences, Dr. Leeper received his medical degree and general surgery residency training at the Schulich School of Medicine & Dentistry, Western University.

Dr. Leeper continued his training at Schulich Medicine & Dentistry, completing a Critical Care Fellowship. He also completed a Trauma and

Acute Care Fellowship at Johns Hopkins in Baltimore.

Dr. Leeper has presented both nationally and internationally and contributed to multiple book chapters and peer reviewed journals.

His clinical research interests include trauma and acute care, and medical education in the field of simulation.

Research News

RESEARCH FUNDING AWARDS

Congratulations to all faculty members and residents whose research applications were approved and funded:

CANADIAN ORTHOPAEDIC FOUNDATION RESEARCH LEGACY GRANT

Dr. George Athwal, Division of Orthopaedic Surgery, "The Effects of Propionibacterium Acnes Infection on the Integration of Primary Human Cells into 3D Models of Shoulder Tissue Repair," \$20,000

AMOSO INNOVATION FUND

Dr. Andreana Bütter and **Dr. Neil Merritt**, Division of Paediatric Surgery, "A Multicentre, Open-Label, Non-Inferiority, Randomized Controlled Trial Comparing Appendectomy Versus Non-Operative Treatment for Acute Uncomplicated Appendicitis in Children (APPY Trial)" \$116,500

Dr. Stephen Paulter and **Dr. Nicholas Power**, Division of Urology, "Liquid Biopsies for Improved Prostate Cancer Risk Stratification and Patient Monitoring" \$246,920

Dr. Blayne Welk, Division of Urology, "The Clinical Health Informatics Program (CHIP) at ICES, Western University" \$113,650

LAWSON INTERNAL RESEARCH FUND SPRING 2015

Dr. Tina Mele, Division of General Surgery, "Gastrointestinal Lavage for the Treatment of Severe C. Dif" \$15,000

Dr. Alp Sener, Division of Urology, "The Effect of Hyrdogent Sulfide Treatment on preserving renal function following chronic ureteral obstruction" \$15,000

Dr. Kelly Vogt, Division of General Surgery, "A Pilot Study Towards a National Prospective Acute Care Surgery Database" \$14,163

Dr. Jeremy Burton, Division of Urology, "The Impact of Gut and Renal Microbiota on the Drosophila Melanogaster Model of Human Nephrolithiasis" \$15,000

Dr. Louis Ferreira, Division of Orthopaedic Surgery "Development and Validation of Computational Models for Glenohumeral Joint Simulations" \$14,984

Dr. Eric Frechette, Division of Thoracic Surgery "MAPLE TOP: Malignant Pleural Effusion Thoracoscopic Outpatient Pleurodesis, A Feasibility Trial" \$15,000

PSI FOUNDATION RESIDENT RESEARCH AWARD

Dr. Patrick Luke, Division of Urology, "Immunological Impact of Carbon Monoxide Releasing Molecule in Renal Transplantation" \$168,509

Dr. Jonathan Izawa, Division of Urology, "A Window of Opportunity Study to Evaluate the Role of Combination of Metformin and Simvastatin as a Neoadjuvant Therapy in Invasive Bladder Cancer" \$20,000

DEPARTMENT OF SURGERY INTERNAL RESEARCH FUND (\$20,000) AND RESIDENT RESEARCH GRANT (\$5,000) SPRING 2014

Dr. Muriel Brackstone, Division of General Surgery, "Single Dose Perioperative Radiation in Early Breast Cancer - Phase II Pilot"

Dr. Alp Sener, Division of Urology, "The Protective Role of a Novel Mitochondria-Targeted Hydrogen Sulfide Donor Molecule against Ischemia Reperfusion Injury after Cardiac Death Renal Transplantation"

Dr. Michael Chu, Division of Cardiac Surgery, "A Randomized Controlled Trial of Axillary vs. Innominate Artery Cannulation for Antegrade Cerebral Protection in Aortic Surgery: The ACE Randomized Trial"

Dr. Patrick Luke, Division of Urology, "Targeting Toll-Like Receptor 4(TLR4) Signalling to Ameliorate Kidney Ischemia-Reperfusion Injury (IRI)"

Dr. Hassan Razvi, Division of Urology, "Biomarkers of Kidney Injury in a Urological Population"

Dr. Jacob Matz, PGY3, Division of Orthopaedic Surgery, "Does Overstuffing the Patellofemoral Joint Lead to Adverse Outcomes in Total Knee Arthroplasty?"

Dr. Chris Tarola, PGY3, Division of Cardiac Surgery, "Risk Prediction of All-Cause Mortality for Post-Cardiotomy ECMO"

MEDICAL ADVISORY COMMITTEE AWARD

Awarded by London Health Sciences Centre (LHSC) Medical Advisory Committee, for Staff who go "above and beyond the call of duty", demonstrating leadership and making outstanding contributions to the success of LHSC initiatives, to **Dr. Guy De Rose**, acting chair/chief Division of Vascular Surgery and Senior Medical Director Surgery Services LHSC.

JOHN D. BROWN MEMORIAL RESIDENT AWARD

Awarded by Schulich Medicine & Dentistry to **Dr. Heather Emmerton-Coughlin**, fellow, Division of General Surgery.

BEST REVIEWER, JOURNAL OF UROLOGY

In the areas of female urology, incontinence, neurology, urodynamics, awarded by the *Journal of Urology* to **Dr. Blayne Welk**, assistant professor, Division of Urology.

DEPARTMENT OF SURGERY CLINICIAN SCIENTIST AWARD

Awarded by the Department of Surgery to **Dr. Blayne Welk**, Division of Urology.

Research News

SURGERY CLERKSHIP TEACHING AWARDS

Dr. Adam Power, London Surgery Clerkship Faculty Award for Excellence in Surgical Education

Dr. Daniel Pepe, Dr. Murray Girotti Teaching Award for Best Resident Teacher of the Clinical Clerks

Dr. Raj Goel (Urology), Windsor Surgery Clerkship Faculty Award for Excellence in Surgical Education

OVERALL DIVISIONAL AWARD WINNERS

Cardiac Surgery, Resident:
Dr. Hussien Al-Amodi;
Faculty: **Dr. Micheal Chu**

General Surgery, Resident:
Dr. Daniel Pepe; Faculty:
Dr. Stephen Latosinsky

Orthopaedic Surgery, Resident:
Dr. Raghav Raigopal; Faculty:
Dr. Deb Bartley

Paediatric Surgery, Faculty:
Dr. Andreana Bütter

Plastic & Reconstructive Surgery,
Resident: **Dr. Olubukonala (Buki) Ayeni**; Faculty: **Dr. Aaron Grant**

Urology, Resident: **Dr. Golnaz Naderkahni**; Faculty: **Dr. Nicholas Power**

Thoracic Surgery, Faculty:
Dr. Richard Mathaner

Vascular Surgery, Resident:
Dr. Seung-Chan (Kevin) Lee;
Faculty: **Dr. Adam Power**

DR. HON LEONG AWARDED PROSTATE CANCER/MOVEMBER RISING STAR RESEARCH GRANT



Dr. Hon Leong has been awarded a Prostate Cancer Canada/Movember Rising Star Grant for research initiatives in prostate cancer. His project is focused on developing drugs to halt metastatic prostate cancer. Dr. Leong has already surfaced four lead drug candidates that can inhibit prostate cancer spread in pre-clinical models and the goal will be to determine which candidate drug works best across several prostate cancer cell lines.

The current success adds to Dr. Leong's impressive track record in prostate cancer research in collaboration with urologists in the Division of Urology.

DR. ROBERTO HERNANDEZ-ALEJANDRO RECEIVES DEAN'S RESEARCH INITIATIVE GRANT



Dr. Roberto Hernandez-Alejandro has been awarded the Dean's Research Initiative Grant. His project is focused on studying metastatic colorectal cancer and further defining the pioneering approach he has developed in order to shorten the time interval between the first and second hepatic surgeries.

Receiving this grant further highlights the quality of Dr. Hernandez-Alejandro's work, and will act as a catalyst to further his excellent work in HPB Research.

MATTHEW TEETER, PHD, RECOGNIZED FOR WORK IN JOINT REPLACEMENT

Matthew Teeter, PhD, assistant professor, Division of Orthopaedic Surgery, Department of Surgery, and researcher at Lawson Health Research Institute, is a winner of the 2015 John Charles Polanyi Prize. The \$20,000 award recognizes the excellence of Teeter's research in joint replacement. It was presented at a ceremony in Toronto by the Honourable Reza Moridi, Ontario's Minister of Training, Colleges and Universities.

Teeter's research focuses on the potential of imaging and sensors for better evaluating the repair of diseased joints. Many patients suffering from severe arthritis of the knee, shoulder or hip undergo joint replacement surgery. However, many implants wear out over time or leave the patient unsatisfied. This creates a high demand for revision surgeries.

While new implants have flooded the market in recent years, results have not improved. Teeter wondered if

this may be due to natural anatomical differences between individuals. His research focuses on whether better outcomes can be achieved by selecting a personalized surgical approach for each patient, using implants that are already on the market.

To assist, Teeter is utilizing sensor technologies like those found in mobile phones. These sensors will be used to assess individual patients' gait, perform internal measurements during surgery and also provide feedback on patients' motion and physical therapy. These measurements will help in the selection of the most appropriate implant and determine the best surgical alignment for individual patients. Afterwards, similar measurements will be used to monitor a patient's recovery.

Teeter is pairing sensor measurements with advanced imaging tools to examine the inside of individuals' joints. The study utilizes

state-of-the-art technology at Western University to more fully understand the relationship between implants and bone over long periods of time. This helps determine the appropriate targets for sensor technology measurements.

"I am honoured to be recognized with a 2015 Polanyi Prize," said Teeter. "Using these tools, we are identifying measurable factors that are important to patient outcomes. These findings will provide greater evidence for the role of more patient-specific implant positioning and surgical techniques, further informing surgeons and implant designers."

Teeter is one of five Ontario researchers awarded with the 2015 Polanyi Prize. The Polanyi Prizes were established by the provincial government to honour the achievements of the 1986 Nobel Prize in Chemistry winner, John Charles Polanyi.





CONGRATULATIONS TO THE CLASS OF 2015

Congratulations to the class of 2015 Residents (pictured above). **Back row, left to right:** Tanya Delyzer, Ingrid Radovanovic, Brett Howem Romy Ahluwalia, Kim Bertens, Stephen Preseton, David Paskar. **Front Row, left to right:** Manal Alnaimi, Kristina Lutz, Shaun Coughlin, Heather Emmerton-Coughlin, Joel Philips, Darryl Collings, Adam Maruscak, Kim-Chi Tran, Jeff Armstrong, Marie Dion.



Congratulations to the class of 2015 MSc Program (pictured on the left). **Left to right:** Terry Zwiép, Prateek Goyal, Erin Donohoe, Matthew Valdis. **Not Pictured:** Kevin Perry, Krupal Patel, Hana'a Al-hothi, Moustafa Haddara.

The Department of Surgery Newsletter is produced by:

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All members of the Department are invited to submit story ideas, articles, photos, or comments for the fall issue. Please send them to: Dinah.Frank@lhsc.on.ca, or call 519 633 3349 ext. 32361

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