

DEPARTMENT OF Surgery Newsletter

Spring | Summer 2017



Chair's Column

#ILOOGLIKEASURGEON. SEE PAGE 3 FOR DETAILS.



I am pleased to have this opportunity to describe an exciting new initiative in the Department of Surgery that demonstrates how we value excellence in research and education.

During the course of this past academic year, the Financial

Management Committee and the Surgery Executive Committee have discussed at length the academic remuneration components of our Practice Plan. Although in the past, there was a "merit-based" remuneration competition, I heard clearly that the complexity and onerous nature of the reporting did not serve the intended purpose to reward and recognize those who have made significant contributions to the success of the Department.

With this in mind, I am delighted that

a new academic merit award competition will be launched this fall in conjunction with the annual Career Development Planning (CDP) process. This will include a simple form to be completed by the member and submitted to the Division Chair/Chief. Each Division Chair/Chief will have the opportunity to nominate individuals for outstanding work over the past year in either research or education, which have surpassed expectations as outlined in their Academic Role Category document. The nomination pool will be considered by the FMC and a total of ten full-time clinical academic faculty will receive up to a \$10,000 award of excellence. This competition will be supported in 2017 through Alternative Funding Plan surplus funding received from AMOSO. In future years, the FMC and the Surgery Executive have approved a slight reduction to the academic remuneration of Associate and Full Professors in order to fund the merit

awards. Further details will be distributed over the summer and I welcome your feedback as we launch the inaugural competition.

I believe it is essential that we encourage and celebrate the significant achievements of our members as a part of our academic mission. I hope that this open competition will incentivize performance in research and in education – at any stage of one's career – and will give us an opportunity to showcase our strengths on a global scale.

As the warm weather approaches, I would like to wish everyone a happy and safe summer.

Sincerely,

Emil H. Schemitsch, MD, FRCS
Richard Ivey Professor
Chair/Chief, Department of Surgery
Schulich School of Medicine & Dentistry
Western University

Surgery News

MAGEC growing rod treatment for managing scoliosis



DR. PARHAM RASOULINEJAD EXPLAINS SCOLIOSIS AND ITS TREATMENT, IN A VIDEO FOR LONDON HEALTH SCIENCES CENTRE.

In 2015, Dr. Parham Rasoulinejad, Assistant Professor, Division of Orthopaedic Surgery, and Dr. Tim Carey, Associate Professor, Divisions of Orthopaedic Surgery and Paediatric Surgery, surgically inserted a MAGEC Growing Rod into the spine of a young patient suffering from early onset scoliosis.

Early onset scoliosis means that the curve in the spine will keep progressing during the teen growth period and it can cause serious disability, even death in some cases. It also becomes harder to correct as it progresses.

The traditional treatment is for surgeons to implant two growing rods, one along each side of the spine. The growing rods have spacers mid rod, and every six months the patient undergoes surgery to lengthen the growing rods by adjusting the spacers to align with their growth.

“There is an emotional toll with multiple surgeries for the child. Typically the first and second surgeries are fine, but then the patient becomes more and more anxious as they anticipate the upcoming surgeries,” said Dr. Rasoulinejad.

The MAGEC system, consists of magnetically-driven adjustable spinal rods and a non-invasive, external remote control device. Using the external remote control to lengthen the rods in the patient eliminates the traditional repeat surgeries for lengthening the spinal rods.

In November 2015, a team of specialists including Dr. Rasoulinejad and Dr. Carey implanted the MAGEC Growing Rod into Ontario’s first patient.

Full story available in the spring 2017 issue of *InsideLHSC* or at: inside.lhsc.on.ca/article/spring-2017/magic-growing-rods

Cardiac team first in Ontario to implant Neovasc Tiara transcatheter device

The cardiac team at London Health Sciences Centre (LHSC) is the first in Ontario to implant the Canadian made Neovasc Tiara transcatheter device to correct a leaky mitral valve.

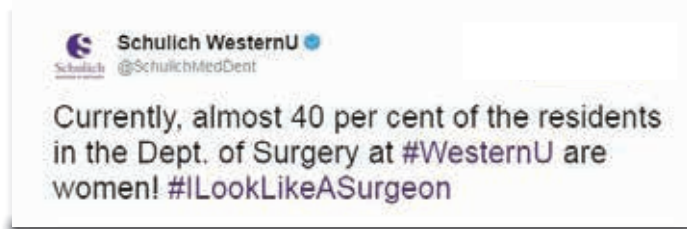
Tiara is implanted in the heart using a minimally-invasive transcatheter approach and is designed to replace the diseased native mitral valve without the need for open heart surgery or use of a cardiac bypass machine.

“Our first procedure was performed successfully and we are delighted to have access to another tool that will improve the health and quality of the life of our patients who otherwise would have no other options,” said Dr. Bob Kiaii, Chair/Chief and Professor, Division of Cardiac Surgery.

Full story available on the LHSC website at: www.lhsc.on.ca/About_Us/LHSC/Publications/Homepage/FirstCdnMitralValve.htm



Surgery faculty and trainees join #ILookLikeASurgeon



On the Cover:

First photo (clockwise from the bottom):
Dr. Elaine Tang (resident), Dr. Nathalie Carey (resident), Dr. Tina Mele, Dr. Jennifer Koichopolos (resident), Dr. Esther Lau (resident), Dr. Sarah Knowles (resident), Dr. Julie Ann Van Koughnett, Dr. Nathalie Sela (resident).
Photo credit: Crystal Mackay

Middle photo (clockwise from the bottom):
Dr. Marie-Eve LeBel, Dr. Muriel Brackstone, Dr. Leslie Scott and Dr. Eman Khayat (fellow).
Photo credit: Crystal Mackay

Third photo (clockwise from bottom):
Dr. Oonagh Scallan (resident), Dr. Robin Ralph-Edwards (resident), Dr. Moska Hamidi (resident), Dr. Tanya Kuper (resident), Dr. Jessica Coffey (resident), Dr. Sarah Jones, Dr. Andreana Bütter, Dr. Erin Donohoe (resident), Dr. Supriya Singh (resident) Dr. Audra Duncan, Dr. Debra Bartley, Dr. Megan Cashin.
Photo credit: Rena Panchyshyn

BY CRYSTAL MACKAY, SCHULICH COMMUNICATIONS

Female surgeons and trainees from the Schulich School of Medicine & Dentistry gathered in operating rooms at London Health Sciences Centre's University Hospital, Victoria Hospital and St. Joseph's Health Care London this week to add their voices to a global rallying cry for women surgeons. They did so by taking a photo and sharing it for the world to see.

The *New Yorker* posted an illustration on its cover on April 3 depicting four female surgeons peering down below an operating light. Since then, female surgeons around the globe have been replicating the magazine cover and sharing their photos on social media using the hashtag #ILookLikeASurgeon. The hope is to shed light on the growing number of women entering this once male-dominated profession.

Dr. Audra Duncan said it was important to her to be involved. "I showed my daughter a photo of the packed audience when I delivered a podium presentation at the Society for Vascular Surgery last year, and she said 'where are the girls?' Well, here we are!"



The photos represent the pride that these women take in the work that they do for patients in London.

"The *New Yorker* cover and our photos have made such an impact – they show how far medicine and Surgery have come," said Dr. Julie Ann Van Koughnett. "It is so important for students and our patients so see the various faces of surgeons, including ours. I feel such pride in all our residents, but especially the female residents for being strong, empathetic, and technically excellent surgeons and role models." At Schulich Medicine & Dentistry, there are currently 35 female residents of 92 in the Department of Surgery – that makes up almost 40 per cent of the cohort.

"For me it was important to be part of the photo to showcase our profession, to break stereotypes and most importantly to support each other and our residents and fellows," said Dr. Debra Bartley.

Dr. Marie-Eve LeBel was interviewed by Wei Chen of *CBC's Ontario Morning* about the #ILookLikeASurgeon movement. To listen to the interview, visit the *Ontario Morning* website (www.cbc.ca/radio/podcasts/ontario/ontario-morning/) and click on the podcast for May 2, 2017.

Surgery News

Bringing minimally invasive kidney stone removal to Haiti



DR. DENSTEDT WITH TWO SURGEONS AND AN ANESTHETIST FROM THE UNITED STATES WHO ASSISTED IN HIS CASES.

Dr. John Denstedt, Professor, Division of Urology, spent a week in Haiti at St. Francis de Sales Hospital in the centre of Port-au-Prince, one of several hospitals impacted by the earthquake in 2010.

“St. Francis was destroyed and has only been up and running for two years,” explained Dr. Denstedt. “The main city general hospital was leveled and is still not rebuilt. St. Francis is in the fortunate position to have a new building and operating rooms. The new structure is certainly a blessing for the medical staff that care for thousands of patients but one major difficulty continues to be lack of equipment. Most of what they use is second-hand as affordability is a significant issue.”

Invited by Project Haiti, a non-profit organization dedicated to medical care and education, Dr. Denstedt taught non-invasive surgical techniques to local surgeons and successfully completed 16 endourology cases. Through the support of Cook Medical, approximately \$15,000 worth of medical equipment were donated, Dr. Denstedt performed the first ever percutaneous renal stone removal done in Haiti.

“The medical teams in Haiti have never been taught these procedures first hand. The goal of my time with them was to begin to introduce these techniques, work through their specific equipment and health care system challenges and have them utilize the techniques by using what they have,” said Dr. Denstedt.

Dr. Denstedt continues to be in touch with the group,

Spring | Summer 2017



DR. DENSTEDT PERFORMS HAITI'S FIRST KIDNEY STONE REMOVAL USING A MINIMALLY-INVASIVE METHOD.

answering questions through email and creating a “pathway forward” document to keep the hospital’s momentum going. With a plan to use televideo in the future, which would allow Dr. Denstedt to proctor into live surgeries in Haiti, he hopes to further guide their progress.

Full story available on the St. Joseph’s Health Care London website: www.sjhc.london.on.ca/our-stories/masterful-hands-guide-their-way



DR. DENSTEDT WITH THE OPERATING ROOM CHARGE NURSE FROM ST. FRANCIS DE SALES.



DR. DENSTEDT WITH CLINICIANS IN HAITI. ALTOGETHER FOUR URETEROSCOPIES AND 12 PERCUTANEOUS NEPHROLITHOTOMIES WERE PERFORMED.

SURGICAL QUALITY COUNCIL

Council Chair Dr. Patrick Colquhoun is pleased to introduce the Surgical Quality Council members:

- Dr. Emil Schemitsch**, Department of Surgery Chair/Chief
- Dr. Mackenzie Quantz**, Cardiac Surgery
- Dr. Steven Latosinsky**, General Surgery
- Dr. Ted Vasarhelyi**, Orthopaedic Surgery
- Dr. Leslie Scott**, Paediatric Surgery
- Dr. Aaron Grant**, Plastic & Reconstructive Surgery
- Dr. Richard Malthaner**, Thoracic Surgery
- Dr. Nicholas Power**, Urology
- Dr. Luc Dubois**, Vascular Surgery

Key member responsibilities are the reviewing and reporting of clinical outcome measures that reflect the quality of surgical care, and sharing and reporting on quality improvement projects to foster collaboration and adherence to quality improvement initiatives. The first council meeting was February 2017 and the council's next meeting is June 19. The introductory meeting focused on council goals and an introduction to American College of Surgeons National Surgical Quality Improvement Program (NSQIP) data.

NSQIP hospital participants comprise over 30 hospitals in Ontario, more than 20 in British Columbia, among others in Canada, as well as hundreds of US hospitals, and a few international. To date 1522 cases have been entered from University Hospital into NSQIP.



The cases the NSQIP data shows LHSC-UH perform better than participant hospital average and perform

“exemplary” on, for the data period March 2016 through September 2016, are: cardiac pneumonia, orthopedic readmission, and mortality. Some of the cases the NSQIP data shows we perform worse than the participant hospital average and “need improvement” on, for the data period March 2016 through September 2016, are: surgical site infections and urinary tract infections.

First Quality Improvement initiative at UH:

Informed by NSQIP data, our first Surgical Quality Improvement Plan (SQIP) and pilot aims to improve the timing and administration of antibiotic prophylaxis before surgery. A complete analysis of the patient journey from patient assessment to discharge led to the engagement of an interdisciplinary team of UH staff - IP and OP nurses, SWAT, pharmacists, surgeons, and LHSC NSQIP staff. Specific obstacles have been examined and the pilot will expand in the near future.

2017 Robert Zhong Department of Surgery Research Day Friday, June 23, 2017 at St. Joseph's Hospital:

Join us for the Keynote speaker Dr. Clifford Ko, Director of the Division of Research and Optimal Patient Care at the American College of Surgeons (ACS). Dr. Ko oversees many quality improvement programs, including the Bariatric Surgery Accreditation Program, the Cancer Accreditation program, the Trauma Verification program, the new Surgeon Specific Registry, and the ACS National Surgical Quality Improvement Program (NSQIP).



Dr. Ko's work focuses on surgical quality of care, including quality measurement, process improvement, and quality maintenance. Clinically, Dr. Ko is a double board-certified surgeon with a practice focusing on patients with colorectal cancer. At UCLA, he is the Robert and Kelly Day Professor of Surgery and has won the Faculty Teaching Award three times. He is also professor of health services at the UCLA School of Public Health.

Surgery News

Dr. Richard Malthaner appointed Chair/Chief, Division of Thoracic Surgery



Dr. Richard Malthaner has been selected unanimously by the Search Committee for the leadership role of Chair/Chief, Division of Thoracic Surgery for a five-year term starting July 1, 2017. Dr. Malthaner follows in the footsteps of Dr. Richard Inculet, an acclaimed leader, educator, researcher, and administrator, who has served continuously as Division Chair/Chief since 1995.

Dr. Malthaner holds cross appointments in the Department of Oncology and the Department of Epidemiology and Biostatistics, Schulich Medicine & Dentistry at Western University. He is the Director of Thoracic Robotic Surgery and Director of Thoracic Surgery Research. A scientist at the Lawson Health Research Institute and a founding member of Canadian Surgical Technologies and Advanced Robotics (CSTAR), Dr. Malthaner's pioneering translational research has led to 12 Canadian firsts and two world firsts involving minimally invasive robotic assisted surgery.

New Appointments: Allison Maciver, Adjunct Professor/MD



Dr. Allison Maciver has joined the Department of Surgery as an Adjunct Professor/MD and Locum in the Division of General Surgery. Dr. Maciver's appointment was effective April 1, 2017.

After receiving her MD from the Schulich School of Medicine & Dentistry at Western University, Dr. Maciver completed her general surgery residency at the University of Alberta. During her residency training, Dr. Maciver was a candidate of the Clinician Investigator Program/Surgeon Scientist Program and graduated with a MSc in Experimental Surgery. Following residency training, she completed a Complex General Surgical Oncology fellowship at the Roswell Park Cancer Institute in Buffalo, New York.

Specializing in general surgical oncology, Dr. Maciver's clinical practice is based at Victoria Hospital, London Health Sciences Centre.

Team at Fowler Kennedy Sport Medicine Clinic are first in Canada to enrol patients in multicentre NeoCart® trial



Dr. Alan Getgood, Assistant Professor in the Division of Orthopaedic Surgery, and the team at Fowler Kennedy Sport Medicine Clinic are the first in Canada to enrol patients in a multi-centre study investigating the efficacy and safety of the tissue implant NeoCart® to treat cartilage defects in the knee.

"It's an amazing opportunity for Canadian patients to be potentially treated with cutting-edge technology that they otherwise would not have access to," said Dr. Getgood.

The Phase III clinical trial will compare the pain and function of patients treated with NeoCart® to those treated with microfracture, the current standard-of-care procedure used to treat articular cartilage defects of the knee.

Full news release available at UWO Media Relations at: mediarelations.uwo.ca/2017/03/31/london-researchers-enrol-first-canadian-patients-trial-tissue-implant-using-patients-cartilage-cells/

Ongoing Research Projects

PERIOP-01 CLINICAL TRIAL

Colorectal cancer is the third most common cause of cancer in Canada. While the majority of patients are amenable to complete surgical resection at the time of diagnosis, approximately 30-40% will develop metastases within the first 3 years following surgery. Pre-clinical studies have demonstrated that the postoperative hypercoagulable state following surgery promotes the development of metastases, an effect that can be decreased by the administration of perioperative Low Molecular Weight Heparin (LMWH). This suggests that the perioperative period may be the best time to influence the development of metastatic disease. It has been suggested that LMWH has anti-metastatic properties but the use of LMWH as an anticancer agent cannot be recommended at the present time due to the lack of level 1 evidence to indicate which cancer patients will benefit.

London is involved in an open-label RCT to determine if thromboprophylaxis using Tinzaparin 4,500 IU daily through the perioperative period and extending for 8 weeks postoperatively, will increase the disease-free survival in patients with resectable colorectal cancer.

Patients will be randomized to either a control (only during hospitalization) or treatment (pre and post operatively) and will be followed for five years.

Currently the Periop-01 Clinical trial, which began in 2011, has randomized 304 patients across Canada with 16 centres participating. London has the largest number of patients enrolled at 104 with the first patient enrolled in July 2015.

Site Principal Investigator: Rebecca Auer, Ottawa
Site Principal Investigator: Muriel Brackstone, LHSC
Site Sub Investigator: Michael Ott, LHSC (pictured right)
Research Coordinator: Karen Dunn, LHSC (pictured right)



THE NEPTUNE TRIAL

Negative pressure wound therapy (NPWT) used to decrease surgical nosocomial events in colorectal resections or the NEPTUNE trial as it is called within General Surgery is a randomized control trial (RCT) which began in January 2015. NEPTUNE is the first RCT to investigate the use of NPWT on primarily closed incisions after colon resections to prevent surgical site infections. This research began a number of years ago as a resident research project by Dr. Sami Chadi who is now a fellowship trained colorectal surgeon working within the University Health Network. It has been carried forward by residents Dr. Patrick Murphy (pictured) and Dr. Sarah Knowles under the supervision of Drs. Ott, Brackstone and Vogt (Victoria Site) and Dr. Van Koughnett (University Site). Staff, resident and nursing support within general surgery has been tremendous and has allowed this project to proceed.

Compared to laparoscopic surgery, open colorectal surgery carries a significantly higher wound infection rate, upwards of 20-25%. Despite many interventions to reduce this rate, it remains high. Pilot work at London Health Sciences Centre has confirmed this rate within our patient population. NPWT has demonstrated a reduction in wound infections in many other surgical specialties, but only using retrospective data in colorectal surgery.

The exact mechanism of NPWT in both closed and open wounds is multifactorial. Increased tissue vascularity, reduction in fluid stasis, improved oxygen flow in addition to longer concealment from healthcare providers all likely contribute to the previously demonstrated reductions in wound infections. Wound infection severity ranges from a single infection requiring oral antibiotics to sepsis and wound dehiscence. Patients can, and

do suffer a reduction in quality of life from wound infections and experience longer hospital stays and more frequent emergency room visits. Wound infections are also a significant cost to the healthcare system and the ubiquity of colorectal operations suggest significant cost savings may be found if wound infection rates can be reduced. This cost savings can be used to justify the infrastructure needed to provide NPWT for patients undergoing open colorectal operations.

The full study protocol is available via Open Access at <https://trialsjournal.biomedcentral.com/articles/10.1186/s13063-015-0817-8> and finished recruitment this past February.



Awards

Dr. George Athwal receives J. Édouard Samson Award

Congratulations to Dr. George Athwal, Associate Professor, Division of Orthopaedic Surgery on being selected for the 2016 J. Édouard Samson Award, the premier award for orthopaedic research in Canada, in recognition of his outstanding research contributions. Dr. Athwal will present his research at the 2017 Canadian Orthopaedic Association's Annual General Meeting.

Dr. Jim Johnson Receives Engineering Award for Excellence in Research

Congratulations to Dr. Jim Johnson, Professor and Affiliated Institute Scientist, Division of Orthopaedic Surgery, on receiving this year's Engineering Award for Excellence in Research. Dr. Johnson has been a faculty member at Western since 1998 and has made significant contributions to the Departments of Mechanical & Materials Engineering and the Department of Surgery. The award is in recognition of Dr. Johnson's outstanding international reputation for his contributions to research.

Dr. Douglas Ross receives Canadian Society of Plastic Surgeons President's Medal

Congratulations to Dr. Douglas Ross, Associate Professor and Chair/Chief, Division of Plastic & Reconstructive Surgery, on being announced as the recipient of the fourth annual Canadian Society of Plastic Surgeons (CSPS) President's Medal. The President's Medal recognizes Dr. Ross's extraordinary contribution to the betterment of the field of Plastic Surgery. Dr. Ross will receive his award at the 71st Annual Meeting of the CSPS in June.

Dr. Emil Schemitsch receives Canadian Orthopaedic Research Legacy (CORL) grant

Congratulations to Dr. Emil Schemitsch, Professor and Chair/Chief, Department of Surgery, on receiving the CORL grant from the Canadian Orthopaedic Foundation toward his project, "DECIPHER: Determinants of Clinically Important Outcomes following Proximal Humerus Fractures in the Elder Population: A National Cohort" which was selected from among 20 applications.

Dr. Schemitsch's funding application for his project, "Outcomes in Distal Radius Fractures: A Multicenter Prospective Cohort Study" was also approved, and he will receive \$79,050 from the Orthopaedic Trauma Association and Smith and Nephew.

UPCOMING EVENTS:

Robert Zhong Department of Surgery Research Day, June 23, 2017

Registration available at: www.schulich.uwo.ca/surgery/research/research_day_registration_form.html

Resident and MSc in Surgery Student Celebration Dinner, June 23, 2017

Registration available at: www.schulich.uwo.ca/surgery/education/celebration_dinner.html

The Western Surgery
Newsletter is produced by:

The Department of Surgery
Room E3-117
Schulich School of Medicine &
Dentistry, Western University
St. Joseph's Health Care London
268 Grosvenor Street
London, ON N6A 4V2

 519.663.3349

 519.646.6347

 schulich.uwo.ca/surgery

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**

Moving? Know someone else who would like to receive this newsletter? Please let us know.

If you require information in an alternate format to make this publication accessible, please let us know.

The Department of Surgery is committed to your privacy. We do not rent, sell, or trade our mailing lists. If you no longer wish to receive this publication, please let us know.