

# DEPARTMENT OF Surgery Newsletter

Winter 2017

**DR. TINA MELE, ASSOCIATE PROFESSOR, DIVISION OF GENERAL SURGERY, IS ONE OF THE RECIPIENTS OF THE CLINICAL TEACHERS ASSOCIATION OF THE UNIVERSITY OF WESTERN ONTARIO FACULTY DEVELOPMENT FUND.**



## Chair's Column

I would like to thank and congratulate Dr. Alp Sener and the Research Committee on the superb effort they have made to craft a Department of Surgery Strategic Plan for Research. They have consulted widely and given thoughtful consideration as to how our complex enterprise will be best served in order to enhance and support our research productivity going forward. There will be more resource investment in research; however, more importantly, the vision mobilizes the unity of research across subspecialties and promotes a culture of research at our Academic Health Sciences Centre and beyond. This long term vision is already on its way to fulfillment with endorsements by the Surgery Executive, the Financial Management Committee, and the Dean of the Schulich School of Medicine & Dentistry.

The Strategic Plan for Research centres around the creation of four "nodes": Big Data/ICES; Surgical Education; Fundamental Sciences & Surgical Innovation; and Patient Centred Research. I encourage all members of the

Department of Surgery to consider how their academic pursuits align with one or more of these nodes. I would also like to ask that members reach out to their basic science and clinical colleagues across disciplines so that we can draw them into our nodes for their expertise and collaboration.

We see these nodes as shaping our academic mission in the Department with implications for research stimulation and productivity among trainees and faculty alike. We were delighted to hear from Dean Strong that he feels the model resonates at all levels with the Schulich School of Medicine & Dentistry's strategic vision for research and education. Dr. Sener has also brought this model



forward to the Chairs of Surgical Research in Canada and it was agreed that Western University will be the pilot in Canada which may inspire others to follow and to see themselves as part of the wider vision. This naturally brings even greater opportunity for cross-Centre collaboration at a national level.

You will hear more about our strategic vision for research this spring leading to The Robert Zhong Department of Surgery Research Day on June 23rd and as funding announcements are made. As we advance in our strategic plan for research, I would also like to ask you to think about how this valuable insight can inform the planning and vision for a refreshed Department of Surgery Strategic Plan over the next year. Please feel free to contact me or Dr. Sener with your feedback or questions.

Sincerely,

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

# Surgery News

## DIVISION HIGHLIGHTS: GENERAL SURGERY



**DR. KEN LESLIE, ASSOCIATE PROFESSOR & CHAIR/CHIEF, DIVISION OF GENERAL SURGERY (RIGHT), AND DR. RICHARD HILSDEN, CLINICAL FELLOW, DIVISION OF GENERAL SURGERY.**

This past summer the Division of General Surgery launched a bold initiative aimed at simultaneously reducing operating room (OR) times for common general surgical procedures, while reducing procedural costs to the hospital. This project was colloquially named RAPSTOR: RAPid STandardized Operating Rooms.

At the core of this project is the concept of standardization. Under the leadership of the division chair Dr. Ken Leslie, inguinal hernias, umbilical hernias, and laparoscopic cholecystectomies were identified as common procedures amenable to standardization. The initial process change was to schedule only a specific type of procedure during a single OR day. This allowed nursing staff and anesthesia staff to benefit from the learning curve offered performing the same operation during a single OR day. Surgeons then selected patients who lacked significant comorbidities and who were therefore appropriately healthy for a rapid turnover as one day stay patients. In addition, highly motivated volunteers from the anesthesia and perioperative medicine department and nursing team were recruited to staff these ORs.

In the later phases of this project laparoscopic cholecystectomy sets, and hernia sets, were paired down to reduce reprocessing time and cost, as well as simplify the counts and setup for the nursing staff. The final change involved a standardization of surgical

technique and pick lists among participating surgeons greatly simplifying the work flow.

The results from the RAPSTOR pilot phase exceeded expectations. Overall there was a 40 percent reduction in the median OR case times when the RAPSTOR strategy was employed. The median laparoscopic cholecystectomy time was reduced by 41 minutes from 103 minutes per case to 62 minutes. This improvement in cycle times came from improvements in all elements of the case including turn over time, procedure time, setup time and OR exit time.

In addition to time saving, significant financial savings to the hospital resulted from the RAPSTOR project. There was a 13 percent reduction in the median cost of disposables used per case, after implementation of the RAPSTOR. When nursing time was factored into the hospital cost, the median hospital cost was reduced by 38 percent per case.

The nurses participating in the RAPSTOR project were surveyed regarding their experience in these high-efficiency operating rooms. The feedback on these surveys was overwhelmingly positive. Eighty nine percent of nurses thought their work day experience was the same or better being in a RAPSTOR OR as compared to a conventional OR. When asked about OR efficiency 86 percent of OR staff felt that RAPSTOR rooms made an improvement in efficiency, and 82 percent of OR staff felt that the stress level of a RAPSTOR operating room was the same or better when compared to a conventional operating room.

With the success of this initial RAPSTOR pilot project there has been tremendous enthusiasm to continue with these ORs going forward. Future steps for this project include a comprehensive assessment of patient outcomes. In addition to seeing ongoing cost savings, we hope to see similar, or better, patient outcomes for those being treated in a RAPSTOR room.

## SURGERY QUALITY COUNCIL

London Health Sciences Centre (LHSC) has initiated participation in Health Quality Ontario's Ontario Surgical Quality Improvement Network. We are one of 34 hospitals taking part across the province. Participation is facilitated through enrollment in the American College of Surgeons' National Surgical Quality Improvement Program (ACS – NSQIP). Two individuals have been trained by and certified by the ACS as Surgical Clinical Reviewers (SCR).

Celia Dann is an alumna of Western University (BScN). She has worked at LHSC since 2011. She brings extensive clinical experience in nursing in medicine and surgery. She most recently has been working as a clinical auditor. Joanna Gaebel is a graduate of Sir Sanford Fleming College. She has worked at LHSC since 1988. She brings extensive clinical experience in surgery having worked in the operating room from 1990-2014. She too has recently been working as a clinical auditor.

Dann and Gaebel's talents and prior clinical experience make both individuals ideal candidates for their positions.

Data entry started March 29, 2016. This process has been limited to University Hospital. Administration has committed to participation at Victoria Hospital as well. The Department of Surgery is working with administration to arrive at firm dates for initiation of NSQIP at that site.

So far 878 cases have been entered from University Hospital into NSQIP. The network should be a valuable resource throughout the province with 34 hospitals already having entered data on more than 28,000 patients to date.

NSQIP will allow understanding of our local data, and more importantly, allow for benchmarking of our clinical performance against our counterparts across the province. Raw data allows

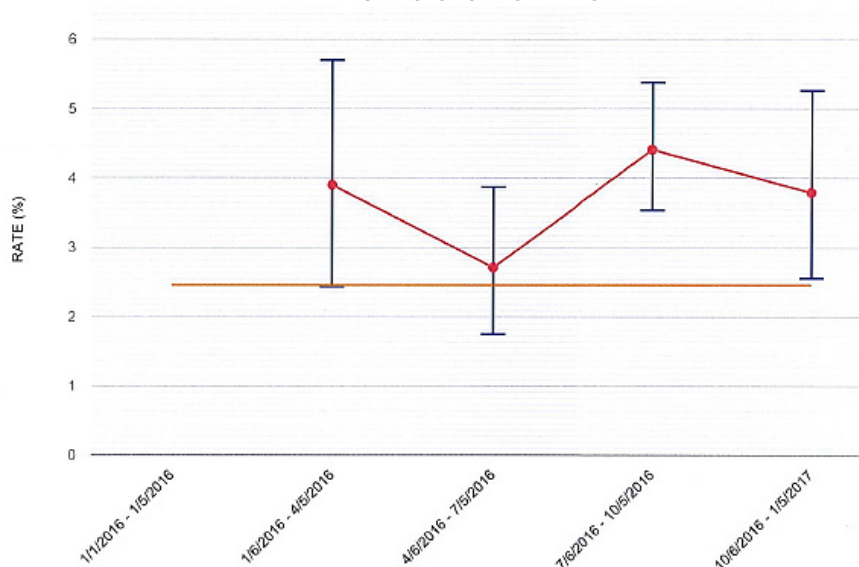
**DR. PATRICK COLQUHOUN AND MS. JOANNA GAEBEL PARTICIPATE IN A Q&A AFTER DR. COLQUHOUN'S GRAND ROUNDS PRESENTATION ON NOVEMBER 30, 2016 AT LHSC'S VICTORIA HOSPITAL.**



for real time assessment of performance with the more important risk adjusted data reported by the American College of Surgeons in the form of a semiannual report (SAR) in January and June of each year. The first semiannual report is available. Data will be shared with the Department of Surgery members through the regular Department of Surgery meeting, Divisional representatives participating in the Department of Surgery's Quality Council and at the University Hospital Perioperative Committee.

As a part of our participation in this endeavor, Health Quality Ontario requires us to identify key areas for quality improvement and initiate a Surgical Quality Improvement Plan (SCIP). The first SCIP will focus on Surgical Site Infections (SSI's – See figure 1). The focus will be on the timing and dosing of appropriate antibiotic prophylaxis in elective surgery.

**FIGURE 1. SURGICAL SITE INFECTION RATE UNIVERSITY HOSPITAL "ALL CASES" ON DEMAND RISK ADJUSTED SMOOTHED RATES REPORT QUARTERLY INTERVALS MARCH 2016 - JANUARY 2017**



Red dots and Confidence intervals depict UH performance

Orange line depicts performance of NSQIP hospitals overall



# Surgery News

## DR. JAMES HOWARD AND DR. BRENT LANTING RECEIVE PRESIDENT'S AWARD FOR INNOVATION

Congratulations to Drs. Brent Lanting and James Howard of the Division of Orthopaedic Surgery on receiving the President's Award for Innovation.

The President's Award for Innovation recognizes Drs. Howard and Lanting's collaborative approach in developing the framework for the innovative anterior approach surgical technique.

The anterior approach technique for hip replacement results in faster and more effective recovery for patients as it uses one small incision on the front of the hip. Often patients are able to return home following only an overnight stay in hospital, or in some cases, the same day.

Further information about the London Health Sciences Centre President's Awards program is available at [www.lhsc.on.ca](http://www.lhsc.on.ca)

**DR. JAMES HOWARD RECEIVES HIS AWARD FROM MURRAY GLENDINING, PRESIDENT AND CHIEF EXECUTIVE OFFICER, LONDON HEALTH SCIENCES CENTRE.**  
PHOTO BY LHSC CORPORATE COMMUNICATIONS & PUBLIC RELATIONS



**DR. BRENT LANTING RECEIVES HIS AWARD FROM MURRAY GLENDINING, PRESIDENT AND CHIEF EXECUTIVE OFFICER, LONDON HEALTH SCIENCES CENTRE.**  
PHOTO BY LHSC CORPORATE COMMUNICATIONS & PUBLIC RELATIONS



## CSTAR SIMULATION PROGRAM AWARDED ACCREDITATION FROM THE ROYAL COLLEGE OF PHYSICIANS & SURGEONS OF CANADA

The Royal College of Physicians & Surgeons of Canada has awarded accreditation to Canadian Surgical Technologies & Advanced Robotics (CSTAR), making CSTAR the first simulation centre in Southwestern Ontario to be accredited by the Royal College.

"This recognition is validation of LHSC's commitment to improving patient outcomes through the quality of service that its institutional simulation program, CSTAR, provides," said Dr. Christopher Schlachta, Professor, Division of General Surgery, and Medical Director of CSTAR.

SOURCE: LHSC Corporate Communications & Public Relations. CSTAR's simulation program awarded national accreditation. The Page. 2016 Nov 15.

**DR. CHRIS SCHLACHTA AND PHIL HUNT, DIRECTOR OF CSTAR, RECEIVE THE SIMULATION ACCREDITATION CERTIFICATE AT THE ROYAL COLLEGE'S 2016 SIMULATION SUMMIT IN OCTOBER.**



## JOINT MEDICAL ADVISORY COMMITTEE (MAC) AWARD WINNERS ANNOUNCED



Congratulations to Dr. Graham King (pictured above with Dr. Sarah Jarmain, Chair St. Joseph's MAC) on receiving the St. Joseph's MAC Award, for demonstrating qualities of leadership and providing outstanding contributions to the success of initiatives aligning with the strategic directions of St. Joseph's.

Congratulations to Dr. Mark MacLeod (pictured below with Dr. Sarah Jarmain, Chair St. Joseph's MAC and Dr. Andrea Lum, Chair London Health Sciences Centre MAC) on receiving the Joint MAC Chairs' Award, in recognition of his contributions to the recent success and best practices of the MAC.



PHOTOS BY COMMUNICATION AND PUBLIC AFFAIRS, ST. JOSEPH'S HEALTH CARE LONDON

## ORTHOPAEDIC SURGERY MEMBERS RECEIVE HONOURS FROM ASES, OTA, AND AOSSM



The paper "A Rapid Detection Method for Propionibacterium acnes from Surgical Biopsies of the Shoulder" by Mr. Scott Holmes, Ms. Ana Pena Diaz, Dr. George Athwal, Dr. Kenneth Faber, and Dr. David O'Gorman has been selected for the American Shoulder and Elbow Surgeons (ASES) Charles S. Neer Award in the Clinical Science category.



Dr. Emil Schemitsch's paper, "Simple Decompression vs Anterior Transposition of the Ulnar Nerve for Distal Humerus Fractures Treated with Plate Fixation - A Multi Centre Randomized Controlled Trial" has been selected by the Orthopaedic Trauma Association for the prestigious Bovill Award.



Dr. Alan Getgood has been awarded the prestigious American Orthopaedic Society for Sports Medicine Travelling Fellowship to Asia this coming April.



## Research News



Dr. Tina Mele, Associate Professor, Division of General Surgery, is one of four successful applicants to receive a CTA-UWO Faculty Development Fund for her project, "Enhancing Knowledge Translation in Surgical Research." Rigorous evaluation of health care components via clinical trials is essential but less common within the realm of surgical research as many surgeons lack the necessary research skills to do so. Dr. Mele's research team has initiated a randomized clinical trial to evaluate a new treatment protocol for severe *Clostridium difficile* infections. The CTA Faculty Development Project will assist in obtaining additional clinical research skills that will enhance the ability to successfully conduct this randomized clinical trial.

---



Dr. Chris Bailey, Associate Professor, Division of Orthopaedic Surgery is leading a pilot study to determine the best treatment for degenerative spondylolisthesis, the leading cause for spinal surgery in adults age 65 and older. The study will compare the costs and resulting patient outcomes of two surgical techniques, posterior interbody fusion and posterolateral fusion.

"With an ageing population and growing concerns over the cost and rates of spinal fusions, we need to compile evidence to identify which technique provides optimal patient outcomes while saving costs to the health system," said Dr. Bailey. Once the study is complete, it is hoped that a national, multi-centre clinical trial will be carried out.

SOURCE: LHSC Corporate Communications & Public Relations. New study to evaluate spinal fusion surgeries. The Page. 2016 Oct 1.

---



**DR. JOHN DENSTEDT, DIVISION OF UROLOGY, WITH  
DR. RICHARD NOVICK AT MULTIDISCIPLINARY CITY-  
WIDE PERIOPERATIVE GRAND ROUNDS.**

Dr. Richard Novick, Professor and Cardiac Surgeon, University of Calgary was the guest speaker at Multidisciplinary City-Wide Perioperative Grand Rounds in January 2017. Dr. Novick's presentation, "Trouble in the O.R. - the Call, the Save and the Threat", focused on help-seeking behaviours between surgeons during challenging cases, and the resulting influence on surgical education and patient safety. Working with Dr. Lorelei Lingard and Dr. Sayra Cristancho from the Centre for Education Research & Innovation, Schulich School of Medicine & Dentistry, Dr. Novick conducted a study on the topic which was published in the *Journal of Surgical Education*.

Dr. Novick's presentation was followed by a panel discussion with panel members, Dr. Dalilah Fortin, Division of Thoracic Surgery, Dr. Anita Cave, Department of Anesthesia & Perioperative Medicine, and Ms. Amanda Barr, Perioperative Nurse, University Hospital, London Health Sciences Centre.

## FUNDING COMPETITION RESULTS

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

### AMOSO INNOVATION FUND

**Dr. J. Robert Giffin**, Professor,  
"Development and Implementation of an Innovative E-referral and Knowledge Translation Tool for Total Knee Replacement Patients"  
\$75,000

**Dr. Patrick Luke**, Professor,  
"Evaluation of a Novel Method and Drug Repositioning to Protect ex vivo Kidney for Transplantation"  
\$149,998

### LAWSON HEALTH RESEARCH INSTITUTES - INTERNAL RESEARCH FUND

**Dr. Abdel-Rahman Lawendy**, Associate Professor, "Intra-abdominal Hypertension and Abdominal Compartment Syndrome: Hydrogen Sulphide and Carbon Monoxide as Possible Non-Surgical Therapeutic Intervention"  
\$15,000

**Dr. Nicholas Power**, Assistant Professor, "Development of Surgical Nerve-Sparing Techniques During RPLND for Testis Cancer Using a Novel Pig Model"  
\$15,000

**Dr. Parham Rasoulinejad**, Assistant Professor, "Serum Metal Ion Levels Post Multi-Level Spine Surgery"  
\$15,000

### DEPARTMENT OF SURGERY - INTERNAL RESEARCH FUND

**Dr. Ken Leslie**, Associate Professor, "The Mechanism of Combined Fluoruracil-rapamycin Therapy on Pancreatic Cancer"  
\$19,400

**Dr. Stephen Pautler**, Associate Professor, "Yield of Prostate Cancer Microparticles after Digital Rectal Examination of Prostate Cancer Patients"  
\$18,000

**Dr. Chris Bailey**, Associate Professor, "Importance of Pelvic Parameters and Sagittal Balance on the Surgical Treatment of Lumbar Degenerative Spondylolisthesis"  
\$18,800

### DEPARTMENT OF SURGERY - RESIDENT RESEARCH GRANT

**Dr. Nahid Punjani**, PGY 3, Division of Urology, "Do Common Urologic Procedures Increase the Risk of an Infected Joint Prosthesis?"  
\$5,000

**Dr. Kitty Wu**, PGY 1, Division of Plastic & Reconstructive Surgery, "Effect of Function-Blocking RHAMM Peptides on Adipogenesis in a Bleomycin-Induced Sclerosis Mouse Model"  
\$5,000

**Dr. Alexandra Istl**, PGY 2, Division of General Surgery, "Evaluation of the Effect of Chemotherapeutic Regimens on Pancreatic Adenocarcinoma Spheroids in 3DTC and Correlation of Therapeutic Effect with CA 19-9 Secretion"  
\$4,950

**Dr. Nick Pasic**, PGY 1, Division of Orthopaedic Surgery, "All-Polyethylene Tibial Components in Total Knee Arthroplasty: A Radiostereometric Analysis Comparing Posterior Stabilizing and Condylar Stabilizing Implants"  
\$5,000

**Dr. Jessica Truong**, PGY 2, Division of Plastic & Reconstructive Surgery, "Promotion of Adipogenesis in a Rat

Model of Radiation-Induced Fibrosis of the Mammary Fat"  
\$5,000

**Dr. Esther Lau**, PGY 3, Division of General Surgery, "Impact of Robotic Surgery on the Mental Workload and Cognitive Performance of Surgical Trainees Compared with Laparoscopy"  
\$5,000

**Dr. Roderick Clark**, PGY 2, Division of Urology, "A Prospective Cohort Pilot Study to Compare a Simple Home Bladder Pressure Monitoring System to Invasive Urodynamic Studies in Pediatric Patients with Neurogenic Bladder"  
\$3,800

### LONDON REGIONAL CANCER PROGRAM CATALYST GRANTS

**Dr. Jonathan Izawa**, Professor, "Neoadjuvant Metformin and Simvastatin in Invasive Bladder Cancer"  
\$27,436

**Dr. Nicholas Power**, Assistant Professor, "Development of Surgical Nerve-sparing Techniques During RPLND for Testis Cancer Using a Novel Pig Model"  
\$29,697

### ORTHOPAEDIC TRAUMA ASSOCIATION

**Dr. Emil Schemitsch**, Professor, "Outcomes in Distal Radius Fractures: A Multicenter Prospective Cohort Study"  
\$79,050

### SAVE THE DATE:

**Dr. Robert Zhong Department of Surgery Research Day**  
**Friday, June 23, 2017**



**PICTURED ABOVE: MEMBERS OF THE PROJECT TEAM OFFICIALLY OPEN THE NEW PROSTATE DAP (LEFT TO RIGHT: JANE VAN BILSEN, SOUTH WEST REGIONAL CANCER PROGRAM; DR. HASSAN RAZVI, ST. JOSEPH'S HEALTH CARE LONDON; ANN BORNATH, ST. JOSEPH'S HEALTH CARE LONDON; DON PARK, PATIENT; KAREN PERKIN, ST. JOSEPH'S HEALTH CARE LONDON (SECOND ROW ON RIGHT)).**

On November 29, staff from St. Joseph's Health Care London and London Health Sciences Centre celebrated the official grand opening of the new Prostate Diagnostic Assessment Program (DAP) located at St. Joseph's Hospital.

The Prostate DAP has consolidated all prostate biopsy procedures to St. Joseph's Hospital, supporting an improved system of care across London Middlesex. For the full story, pick up the January/February 2017 issue of *Imprint*.

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](http://schulich.uwo.ca/surgery)

All members of the Department are invited to submit story ideas, articles, photos, or comments for the spring issue. Please send them to: [Dinah.Frank@lhsc.on.ca](mailto: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.