

OPEN SKIES

Department of Surgery Newsletter

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UNIVERSITY OF
SASKATCHEWAN



Saskatchewan
Health Authority

CHAIRMAN'S MESSAGE



“Surgical Quality and patient Safety must be the highest priorities of the Department of Surgery”

Surgical Quality and patient safety must be the highest priorities of the Department of Surgery. As surgeons, we must be the leaders in the creation of a culture of quality that strives to provide optimal surgical outcomes, establish a multidisciplinary approach to patient care and enhances research and education.

The creation of an integrated Saskatchewan Health Authority creates an administrative framework to promote current provincial programs and create new ones. It also provides us with an opportunity to establish Quality Improvement (QI) initiatives province-wide. A number of QI initiatives are already underway such as the creation of a QI office supported by an administrative coordinator, the enrolment to the National Surgical Quality Improvement Program (NSQIP). This program is the most recognized and validated QI platform in Surgery. As one health authority, it is our intention to deploy NSQIP to all surgical sites in the Province.

This issue of OPEN SKIES features the innovative proprietary smart phone M&M App that was developed by our Department to facilitate the electronic acquisition of cases for M&M rounds. A confidential encrypted secured centralized database was also created to facilitate the selection of cases to be discussed in M&M rounds. The App is currently deployed and used by all residents and faculty members.

I also want to take this opportunity to thank all the participants of a very successful 2018 Surgery Research Day that showcased the depth and breath of research in the Department of Surgery. Congratulations to all the residents for presenting their research!

Ivar Mendez, MD, PhD, FRCSC, FACS, FCAHS
F.H. Wigmore Professor of Surgery

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It is distributed to all surgical faculty, residents and collaborators of the Department of Surgery, as well as surgical teaching centres in Canada and abroad.

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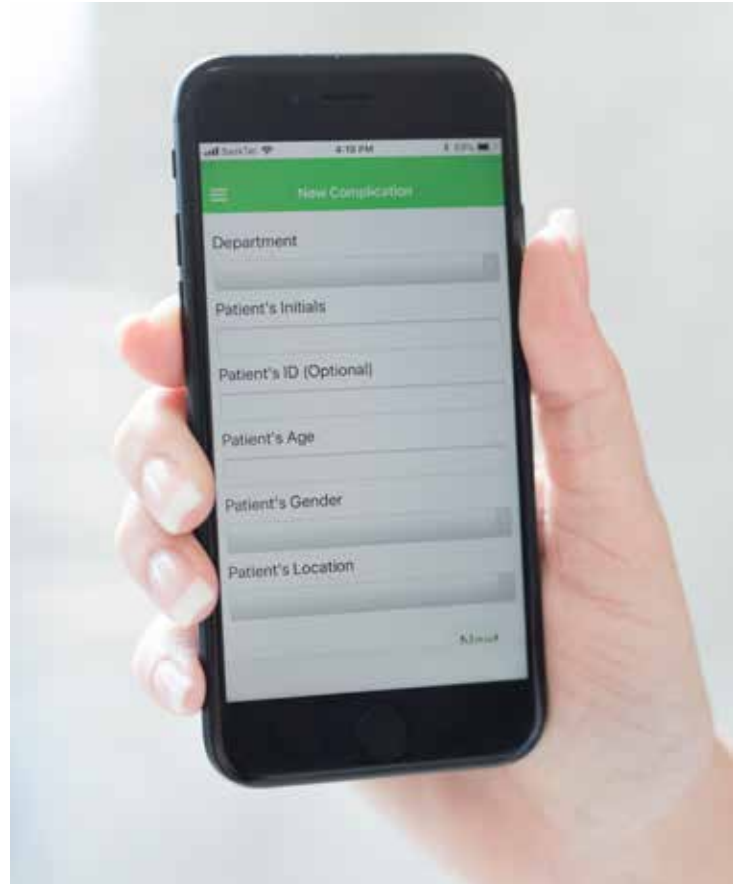
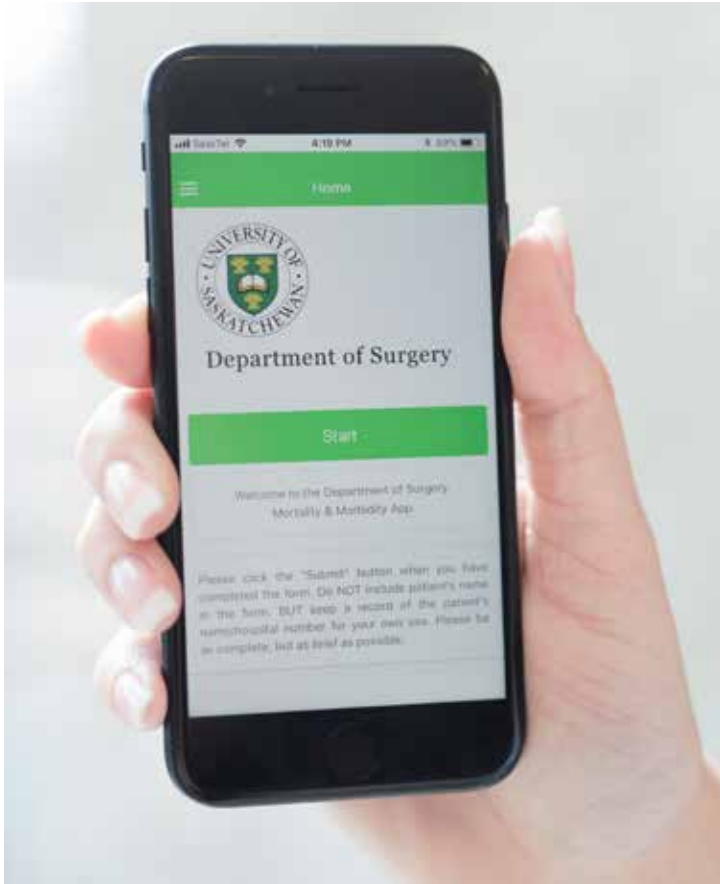
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ADVANCEMENTS IN M&M TRACKING



“Data, data, data ... I can’t make bricks without clay”

- Sherlock Holmes

A key impediment to meaningful M&M (Morbidity and Mortality) rounds is the difficulties encountered in contemporaneous collection of important M&M data that can then be readily retrieved for the rounds. Traditionally, M&M data was entered into unwieldy, time-consuming, bulky and multiply distributed paper ledgers which were not secure. In the twenty-first century, additional and practical challenges arose from the clear preference of younger surgeons and residents for digital devices and electronic means of communication.

The Department of Surgery has developed an M&M App for both iPhone and Android/blackberry platforms which directly addresses these challenges and greatly facilitates M&M data entry as well as secure storage and retrieval of data in time for M&M rounds. Working in close collaboration with the University of Saskatchewan’s Computer Science Department, we designed the App for simplicity and ease of use, “always available” data entry capability, secure data storage and rapid, accurate retrieval of M&M data.

The Department of Surgery’s M&M App works on both wifi and LTE/3G networks and allows M&M cases to be entered contemporaneously with each entry taking only 1-2 minutes to complete. Drop-down menus minimize typing and once the individual entry is complete, it is sent to a multiply encrypted server in the Computer Science Department. Whenever authorized surgeons request M&M data, the data can then be easily and securely retrieved and made available in pdf format.

The M&M App has been in regular use by our Department’s surgeons and residents and hundreds of cases have been entered and retrieved using its intuitive interface. In turn, we believe our goals of continuous quality improvement and patient safety have been materially and consequentially advanced.

taTME SURGERY IN SASKATCHEWAN



left to right: Drs. Nathan Ginther and Dilip Gill performing the first taTME case in Saskatchewan

There are not many instances in a surgeon's career where they would have an opportunity to be at the forefront of a revolutionary technique in the management of a condition. With the support of the Department of Surgery and the RUH Hospital Foundation, we are proud to say that we now have such an opportunity. Over recent decades, total mesorectal excision (TME) has become the standard technique for the surgical treatment of rectal cancer. Over time, to achieve a minimally invasive surgical treatment, TME has shifted from an open approach to a laparoscopic technique. Many international trials have shown benefits for laparoscopic surgery in terms of short-term and long-term outcomes. However, the utility of this is limited in patients with low rectal cancer, who require surgeons with experience in sphincter-saving laparoscopic surgery. In addition, narrow pelvic anatomy, male gender and high body mass index are also unfavourable patient characteristics for either an open or laparoscopic approach. In order to overcome these challenges, alternative techniques for treatment of rectal cancer such as transanal TME (taTME) have been developed. This novel technique utilizes state-of-the-art equipment and a "down-to-up" approach and is now at the forefront of rectal cancer surgery and research. It is currently being performed at major centres across the world and is now available to the people of Saskatchewan.

Drs Nathan Ginther and Dilip Gill have recently performed the first cases of taTME in the province. They have followed international recommendations for the safe, step-wise introduction of this technique by utilizing their fellowship training, attending international conferences and training workshops, developing a robust Transanal Endoscopic Microsurgery (TEM) practice, and performing this surgery for benign conditions prior to its implementation for rectal cancer. It has shown promising results in pathological quality, sphincter preservation with the avoidance of a permanent colostomy, and short- and mid-term outcomes. Oncologic outcomes is the most important aspect of rectal cancer surgery, with sphincter preservation and a minimally invasive technique as important secondary goals. International research is currently underway to show that taTME provides the best opportunity to achieve all of these goals safely.

Rectal cancer ranks as one of the most common types of cancer; the management of which is complex and requires a multidisciplinary approach. The introduction of taTME, the establishment of Multidisciplinary Rectal Cancer rounds, and the ongoing development of a comprehensive Colorectal Health Centre will place Saskatchewan amongst the national leaders in world-class colorectal care and improve the patient experience and clinical outcomes.

ADVANCED AORTIC INTERVENTIONS



left to right: Drs. Nicolette Sinclair, Randy Moore, Nicholas Peti and Susan Shaw (not pictured: Dr. Kylie Kvinlaug & Richard Tetrault)

Saskatoon's first custom fenestrated endovascular aneurysm repair was performed this past October 2017, in collaboration between the Division of Vascular Surgery and Department of Radiology.

Saskatoon has a well established endovascular aortic program, which performed over 80 endovascular aneurysm repairs in 2017 (EVAR). A thoracic endovascular program (TEVAR) is also now well established, and most recently, several iliac branched complex endovascular cases have been performed using "off-the-shelf" technology, through collaboration between interventional radiology and vascular surgery.

Dr. Nicholas Peti, Assistant Professor, Division of Vascular Surgery, had brought back experience with advanced aortic interventions, during fellowship training in Calgary. The ability to perform "custom" fenestrated cases, was a natural extension of a well established endovascular program. The custom device required working closely with Liva Nova to custom build and test a device, specifically built around the patient's anatomy, with covered, or water proof stents extending from the graft into the renal arteries. This allowed an endovascular repair, rather than complex open thoraco-abdominal repair. The case was planned, and executed in close collaboration with Dr. Nicolette Sinclair, Assistant Professor, Department of Medical Imaging as well as Dr. Kylie Kvinlaug, Assistant Professor, Division of Vascular Surgery. We also benefited from the expert anesthetic care of Dr. Susan Shaw, Department of Anesthesiology, Chief Medical Officer. Finally, Dr. Randy Moore, Associate Clinical Professor, Calgary Health Region was involved in the planning of this case and acted as a proctor during the case.

The Division of Vascular Surgery looks to continue to expand its advanced aortic interventions and is happy to say the patient has since been seen in follow up and is doing well. He will be on dual antiplatelet therapy for life, but otherwise has only percutaneous groin incisions and has fully recovered from a major, yet minimally invasive surgery. We hope that as we plan to build a hybrid endovascular operating suite, more advanced collaborative aortic cases can be performed locally. Speeding patient recovery and decreasing perioperative morbidity and mortality.

2018 RESIDENT RESEARCH DAY



Dr. Hadi Seikaly, Keynote Speaker



Resident Research Day Presentations

The joint Surgery, Pathology, Ophthalmology Resident Research Day occurred on May 10, 2018 at the Asher Auditorium, Saskatoon City Hospital. The judges for this event were Dr. Hadi Seikaly, Professor of Surgery & Director of the Division of Otolaryngology, University of Alberta; Dr. Gary Linassi, Associate Professor and Provincial Head of Physical Medicine, University of Saskatchewan; Dr. Lissa Peeling, Assistant Professor and Director, Neurosurgery Residency Program, University of Saskatchewan; Dr. Silvana Papagerakis, Associate Professor, Cancer Cluster, University of Saskatchewan; Dr. Rajni Chibbar, Associate Professor, Department of Pathology, University of Saskatchewan; and Dr. Vikas Sharma, Assistant Professor, Department of Ophthalmology, University of Saskatchewan. Twenty-seven papers were presented.

The Keynote Speaker was Dr. Hadi Seikaly, Professor of Surgery and Director of the Division of Otolaryngology Head and Neck Surgery from the University of Alberta, the title of his talk was **"Leading Change in a Canadian Health Care System: Building a Head and Neck Surgical Oncology Program"**.

The awards banquet followed in the evening at the Remai Modern Art Gallery of Saskatchewan. Kirsten Jewitt received the **Dash/Reed Award** for her presentation on "Utilization and Impact of an Ambulatory Urology Care Centre in Saskatchewan"; Alexis Brassard received the **Surgical Foundation Research Award 1st Place** for her presentation on "Does Training on a Simulator Improve Percutaneous Tracheostomy Placement Compared to Didactic Training for Medical Students? A Double Blind, Randomized, Controlled Trial"; Haven Roy received the **Surgical Foundation Research 2nd Place Award** for his presentation on "Laparoscopic Heller Myotomy with and without Dor Fundoplication for the Treatment of Achalasia. Do Surgical Outcomes differ?"; Amit Persad received the **Excellence in Research Award** for his presentation on "Limited Duration of Post-Operative Helmet Therapy in Endoscopic



Resident Research Day Banquet, Remai Modern



Dr. Alexis Brassard, recipient of Surgical Foundations Research Award



Dr. Uzair Ahmed, recipient of Judges Special Award in Research



Dr. Laura Sims, recipient of Vice Dean's Prize for Resident Research

Sagittal Craniostyptosis Repair"; Sarah Schmid received the **Best Podium Presentation Award** for her presentation on "Protective Effect of Doxycycline against Warm Ischemic Injury to Donation After Circulatory Death Transplant Kidneys"; and Uzair Ahmed received **The Judges Special Award** for his presentation on "Atrophy of the Hematoma Cavity after Minimally Invasive Evacuation of Intracerebral Hemorrhage". Research Awards in Surgery given prior to the day were as follows: Amit Persad and Laura Sims received the **Best Publication Award** and Jeffrey Gu, Amanda Hall, Laura Sims and Zane Tymchak received the **Vice Dean's Prize for Resident Research in Surgery**. Pathology and Ophthalmology awards given on Resident Research Day were as follows: Alicia Andrews received the **Pathology: Harry Emson Award for Best Publication**; Glenda Wright received the **Pathology: Jack Adolph Award for Best Presentation (Junior Resident)**; Nick Baniak received the **Pathology: Dr. Lorne Massey Award - Best Interdisciplinary or Team Presentation Award**; and Vinay Kansal received the **Ophthalmology: Best Podium Presentation Award**.

The joint Surgery, Pathology, Ophthalmology Resident Research Day gave testimony to all the excellent research that is going on in our Departments and the College of Medicine at the University of Saskatchewan.

NEW APPOINTMENTS IN SURGERY



Dr. Anil Sharma, Head, Division of Otolaryngology

Head, Division of Otolaryngology

Dr. Anil Ratan Sharma MD, FRCSC has been appointed as the Interim Head of the Division of Otolaryngology Head and Neck Surgery.

He grew up in Saskatoon and graduated medical school from the University of Saskatchewan in 2007. He completed his residency and Fellowship training in Head and Neck Endocrine/Salivary Gland & Sialendoscopy Surgery at the University of British Columbia in 2013. On a national level he currently represents Saskatchewan on the Canadian Society Otolaryngology Head and Neck Surgery Council.

Dr. Sharma has been instrumental (along with the SPH Foundation & The Healing Arts Program) in the development of the "Art of the Senses ENT Clinic" raising approximately \$750,000 for ENT ambulatory care services delivered through Saskatchewan Health Authority (SHA). Dr. Sharma is currently working with SHA to hire a nurse navigator to establish a tertiary head and neck cancer pathway, to create a ENT Basic/Clinical Research Team through the Department of Surgery and to hire new sub specialty ENT surgeons in the near future.

Dr. Sharma enjoys tennis, art and poetry in his spare time. He is married with two children and is proud to give back to the people of Saskatchewan.

Director, Neurosurgery Residency Program

Dr. Lissa Peeling has been appointed the new Neurosurgery Program Director. She takes over from Dr. Michael Kelly who has been program director since 2014. She has been a member of the division of Neurosurgery since July 2013. Prior to starting here in 2013, she did a three year fellowship in Cerebrovascular and Endovascular Neurosurgery at Stony Brook University in New York. She is a Saskatchewan native, having grown up in Weyburn, SK and having had the privilege of doing both her undergraduate medical education and post graduate residency training at the University of Saskatchewan.

She has had the opportunity to work with the Saskatoon stroke program to help build the cerebrovascular and stroke program in the province. She has been awarded a number of research grants, including a SHRF establishment grant evaluating aneurysm flow utilizing synchrotron imaging techniques. In addition to recently being appointed the co-director of the Saskatoon Cerebrovascular Center, and continuing to advance cerebrovascular and stroke care in the province, she is keen to grow the Neurosurgery residency program over the coming years, especially with the recent introduction of competency by design by the Royal College. She is leading a Women in Neurosurgery initiative in Canada, starting with the ongoing encouragement and recruitment of women into neurosurgical residencies.



Dr. Lissa Peeling, Director, Neurosurgery Residency Program