OPEN SKIES

Department of Surgery Newsletter

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CHAIRMAN'S MESSAGE



"The provincial surgical leaders and their teams performed exceptionally well to maintain the highest quality of surgical care at the height of the pandemic."

Although the number of COVID-19 cases, hospitalization and deaths is decreasing in Saskatchewan thanks to high vaccination rates, we are not out of the woods yet and cannot let our guard down. The Delta variant and lower vaccine uptake in the North will continue to challenge us.

Our surgical teams across the province have worked very hard during the pandemic to provide the best surgical care possible to the people of Saskatchewan while facing limitations in surgical capacity due to the influx of COVID-19 patients in our hospitals. This resulted in a significant backlog of surgical cases that were postponed because of the pandemic. The Department is embarked on a pathway to deal with the surgical backlog that will fully engage us for the foreseeable future.

I want to take this opportunity to thank Drs. Brian Ulmer, John Shaw, and Richard Bigsby for their leadership during my COVID humanitarian mission in Bolivia. Their work on behalf of the Department of Surgery, the Saskatchewan Health Authority and the College of Medicine was exemplary. Their dedication is sincerely appreciated.

I am also thankful to our provincial surgical leaders that together with their teams performed exceptionally well to maintain the highest quality of surgical care across Saskatchewan while facing extremely challenging circumstances at the height of the pandemic.

As the Province implements its reopening plan and the COVID-19 public health orders are lifted, there is optimism about the future and a prompt return to normal life. I want to wish all the members of the department a well-deserved restful and enjoyable summer.

Sincerely,

Ivar Mendez, MD, PhD, FRCSC, FACS, FCAHS

F.H. Wigmore Professor of Surgery
Saskatchewan Provincial Head of Surgery

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SACRAL NEUROMODULATION

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Dr. Garson Chan, Division of Urology

Saskatchewan Sacral Neuromodulation Program for LUTS

The newly developed Sacral Neuromodulation (SNM) Program is the first of its kind in the province for the treatment of refractory lower urinary tract symptoms (LUTS). This procedure is approved to treat chronic functional disorders of the pelvis, lower urinary and intestinal tract. Patients that have failed treatment for urinary urge incontinence, urinary urgency-frequency, and urinary retention may be candidates for this procedure. In more recent years, SNM therapy has also been approved for the treatment of fecal incontinence.

We are proud to become one of only two centres in western Canada to offer this specialized treatment. Currently, Edmonton is the only such program in all of Western Canada and west of Toronto. We are thankful for the exceptional assistance from the previously established neuromodulation program, the Divisions of Neurosurgery and Urology in the Department of Surgery, and continued support from Dr. Mendez to establish this provincial program. Previously, patients that would have had to travel to Toronto or Edmonton can have this treatment closer to home.

Dr. Garson Chan has performed the first sacral neuromodulation for lower urinary tract dysfunction in Saskatchewan. He completed medical school at the University of Saskatchewan and his urological surgery training at Western University. He did additional clinical training in Melbourne, Australia implanting these devices with great success.

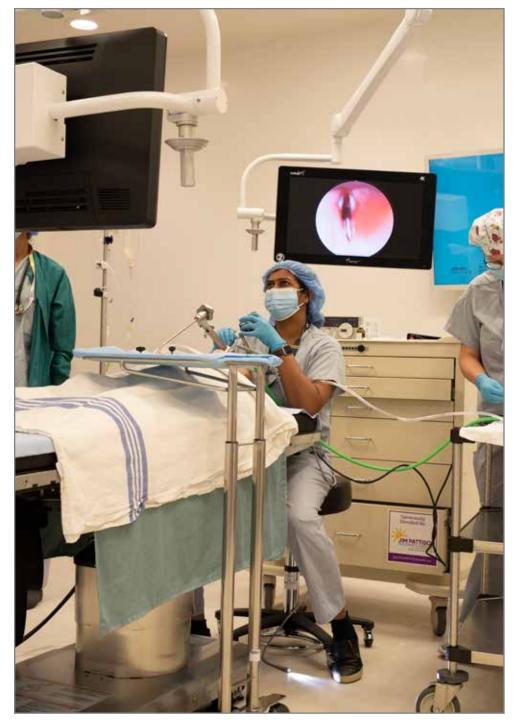
The continually improving technology in SNM provides patients with an attractive option for diseases often refractory to the first-line treatments. Key advances include new patient and physician programmers, transition to percutaneous/minimally invasive implantation and development of smaller devices. Newer changes on the horizon include fully MRI compatible devices and long lasting rechargeable devices.

(FOOTNOTE): The authors report no competing personal or financial interests related to this work.



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PEDIATRIC OTOLARYNGOLOGY



Dr. Lalenthra Naidoo, Division of Otolaryngology

Dr. Lalenthra Naidoo is the newest member to the division of Otolaryngology and Head and Neck Surgery. She is the first and only fellowship trained Pediatric Otolaryngologist and female Otolaryngologist in Saskatchewan.

Dr Naidoo was born in South Africa and completed her residency in Otolaryngology at the University of Witwatersrand. She took a keen interest in pediatric ENT, especially airway surgery, early on in her career and performed the first long segment tracheal reconstruction in collaboration with cardiothoracic surgery in SA. She relocated to Canada in 2012 and completed her Fellowship at UBC in 2013.

Since arriving to Saskatoon in March 2020, Dr Naidoo has been instrumental in setting up a pediatric otolaryngology outpatient clinic, acquiring equipment for the OR critical to a pediatric practice and performed many procedures that are "firsts" for Saskatchewan. To date she has performed 4 supraglottoplasties, 1 posterior laryngeal cleft repair, excisions of congenital airway lesions, a few pediatric tracheotomies and numerous rigid laryngoscopies bronchoscopies. She been instrumental in performing numerous bedside assessments with flexible laryngoscopy aiding in early diagnosis and management of of patients that would have had to travel out of province for definitive pediatric ENT treatment.

Dr Naidoo works collaboratively with the pediatric staff, especially peds respirology, the PICU team, peds anaesthesia, nursing staff and other members of the division of otolaryngology to ensure safe management of her patients.

As part of her academic responsibilities, Dr Naidoo is working with a team to set up a surgical simulation laboratory for the University of Saskatchewan. Lalenthra is very grateful for her opportunity to practice in Saskatchewan and during her spare time enjoys exploring the Saskatchewan outdoors, culinary experiences, gardening, long walks and cross-country skiing.

WEARABLE VIRTUAL CARE TECHNOLOGY

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Rachel Johnson, Clinical Virtual Care Coordinator

State of the art wearable virtual care technology

For years the Remote Presence Robotics program has been focused on breaking down barriers to health care using remote presence technologies. We have a network of robots across Saskatchewan, from Indigenous Communities in the north to long term care facilities and secondary and tertiary hospitals in Saskatoon, Regina, and Prince Albert. We have pioneered the use of telerobotic ultrasonography to provide remote ultrasound services in three northern communities.

Throughout the pandemic, our program was ready and able to respond to the rapidly changing environment of providing high quality virtual care. Bringing the care to patients meant that they did not have to travel to receive necessary health care services, keeping them and the providers safer.

With the evolving role and scope of the program, it has recently been renamed the Virtual Care and Robotics Program. Our program is recognized as a national leader in the application of remote presence robotic technology for virtual care. We have developed a rigorous protocol for testing and evaluating new virtual care technologies and solutions to validate their effectiveness and appropriateness for clinical use.

We are now currently testing new wearable devices that will allow healthcare workers to have their hands free while attending to a patient. The expert provider can be "remotely presence" in real-time and see the patient from the perspective of the remote healthcare worker and offer guidance and support at the point of care. These devices have great potential to be used for real-time surgical mentoring.



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SURGICAL RESEARCH REPORT

The Research Committee has been very busy over these last few months. Despite the pandemic, the number of peer-reviewed publications in our Department is at an all-time high.

We had an exciting Virtual Faculty Research Day in May 2021. Our invited guest, Dr. Andrew Seely, commented on the high-quality nature of the projects. In his lecture, it was fascinating to see what the Department of Surgery at the University of Ottawa has accomplished with a model of programs-based research. After meeting with him and others in the Canadian Association of Chairs of Surgical Research, I think the time is right to look at each of our Divisions to develop more sustainable research programs.

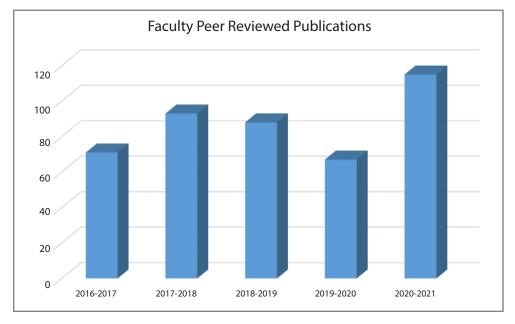
If you look broadly across departments in Canada, there is a decline in research funding for surgery, while other challenges increasingly affect research productivity: clinical demands, unpredictable surgical schedules due to limited operating room resources, administrative demands, and an aging population with more complex clinical needs. Although many of us have "done our best" to promote research, institutional change is required to develop sustainable research programs.

In order to advocate institutional change, we need to start with cultural change in our Department. Research needs to be included as a key component of our deliverables to the community and to surgery as a whole. Research should not be viewed as an activity driven by a few dedicated individuals, but rather an integral part of the health system, from administration, to surgeons, nurses, allied health workers and support staff. We need to better integrate research programs into the responsibilities of each Division.

In the coming months I with be reaching out to Division Heads and supportive members to develop plans for sustainable Division-based research programs. While there are some Departmental resources that can help support this, we need to look both internally and externally to make these programs sustainable in the long term.

This pandemic has shown us how important trustworthy clinical evidence is needed to guide our decisions, while simultaneously highlighting the need for more robust sources of evidence. Let's build on that.

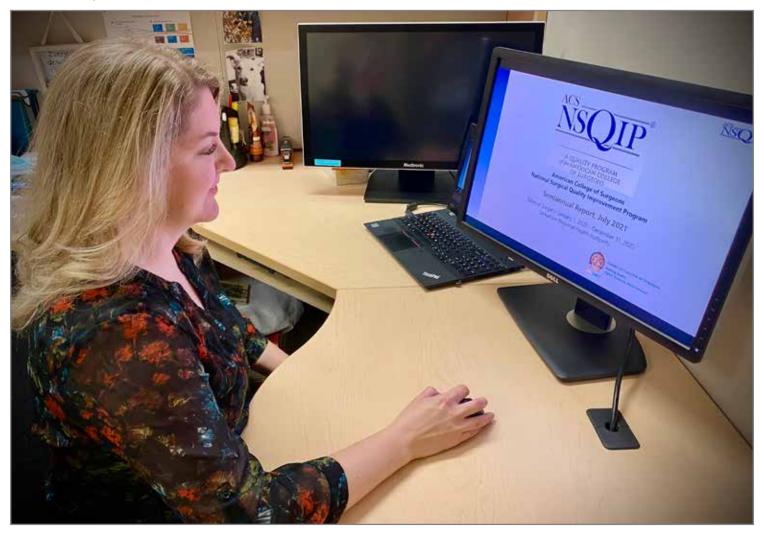
Daryl R. Fourney, MD, FRCSC, FACSDirector of Research, Department of Surgery Professor, College of Medicine, University of Saskatchewan





NSQIP SURGICAL CLINICAL REVIEWER

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Sarah Clark, Surgical Clinical Reviewer (SCR)

In my role as SCR (Surgical Clinical Reviewer), it is my responsibility to select surgical cases to be entered into the NSQIP database. There are forty six 8-day cycles per year, and I enter 40 cases per cycle. There is a case form for each patient that examines the procedure details, demographic information, lab values, and 19 variables surrounding the primary procedure. The patient charts are reviewed both electronically and in person in medical records. This can be an extremely time-consuming task coordinating the inclusion/exclusion and selecting patients for review. NSQIP requires a 30-day follow up process to ensure that we capture any complications or readmissions after surgery. This is done by mailing out a letter to each patient and following up with a phone call if required.

The data that is entered by each site is then evaluated by and included in a semi-annual report each year. The semi-annual report is based on nearly a million cases that are entered into the database from all NSQIP participating hospitals. The report allows us to identify areas that require improvement in order to provide the best surgical care.

To become a SCR, NSQIP provides a certification program that must be completed each year to maintain certification. Currently, we are the only site in Saskatchewan that is involved with NSQIP. There are 96 participating hospitals in Canada and 586 in the United States. There is an annual conference that is held where participants from various sites come together to share and exchange information with each other. This is highly beneficial to network and exchange contact information so that I am able to reach out to other SCR's that work in Canada and across North America.



08 SURGICAL COLLABORATIONS



Moose Jaw Team: (left to right) Drs. Nathan Ginther, Evan Neuls & Dilip Gill

Saskatchewan surgeons continue to expand the limits of collaboration and cooperation in pursuit of the best patient care. Recently, Drs. Dilip Gill and Nathan Ginther travelled to Moose Jaw to perform a challenging rectal cancer operation in collaboration with Dr. Evan Neuls. Due to a unique set of social and medical requirements, a patient was not able to leave his home community for the necessary treatment. Arrangements were made for the two colorectal surgeons to obtain privileges at Dr. F.H. Wigmore Regional Hospital, and the operation was performed successfully.

Rectal cancer treatment is best performed in a multidisciplinary setting with collaboration between multiple specialties being the norm, but this kind of inter-hospital engagement is exceptional. It is encouraging to see this collegiality and teamwork across the Saskatchewan Health Authority.

New Saskatoon Area Department Lead (ADL)

William Dust, MD, FRCSC, FACS was appointed Area Department Lead (ADL) for Saskatoon Area in the Department of Surgery on July 1, 2021. He is a professor in the Division of Orthopedic Surgery. Dr. Dust completed his medical school at the University of Alberta and his residency training in Orthopedic Surgery at McGill University. He did a clinical fellowship in Trauma and Total Joint Reconstruction at the University of Toronto. He is a recognized academic surgeon that has held important leadership positions in the Department of Surgery. He was Head of the Division of Orthopedic Surgery and interim Unified Head of the Department of Surgery. He is an outstanding teacher and was awarded the Department of Surgery Silver Shovel Award, the highest teaching recognition in Surgical Education at the University of Saskatchewan. He has also been recognized nationally for his contributions to orthopedic surgery by being awarded the 2018 Canadian Orthopedic Association Presidential Award for Excellence. We welcome Dr. Dust to this key leadership position in the Department of Surgery.

