

OPEN SKIES

Department of Surgery Newsletter

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Saskatoon Trauma Team
CODE Orange

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CHAIRMAN'S MESSAGE

It has been almost 10 years since I started my first term as Head of the Department of Surgery. As I look to the past decade, I am gratified to see that our department has thrived and became the first Provincial Department in Canada. The value of a provincial surgical department was evident during the COVID-19 pandemic and enabled a rapid and cohesive response to the challenges of surgical service delivery provincewide. Over the past



decade, we have recruited 136 new surgeons, more than doubling the number of surgeons practicing in Saskatchewan in 2013. We have more faculty engaged in basic and clinical research than ever in the history of the department. Our research productivity measured by the number of peer-reviewed publications and funding has increased fourfold and the department delivers 14,000 undergraduate teaching hours every year.

This issue of OPEN SKIES features the Trauma Program that has had exceptional performances in four unprecedented Trauma Code Orange mass casualty situations in Saskatchewan since the program was established 7 years ago. The creation of the Trauma Program was one of the highlights of my tenure and I want to thank its members for their professionalism and outstanding care including the most recent tragedy at the James Smith Cree Nation and Weldon, SK.

This past academic year has seen the culmination of major initiatives such as the establishment of Saskatchewan Robotic Program with the deployment of a state-of-the-art surgical robotic system at St. Paul's Hospital. We have also built a technologically advanced Surgical Skills Laboratory. This facility will be a provincial resource and a key infrastructure for surgical skills training at the undergraduate residency and fellowship levels and it will also maintain and enhance the skills of practicing surgeons across Saskatchewan.

As I finish my second term as the Fred H. Wigmore Professor and Provincial Head of Surgery, I am optimistic about the future. I feel the Department has reached a stage in clinical services and academic performance that will allow it to face the challenges and opportunities of the future with confidence. I want to thank all the members of the Department for their hard work, resilience, compassion, and exemplary patient care demonstrated during this past decade. I am proud of the department's accomplishments and all its members.

Sincerely,

Ivar Mendez, MD, PhD, FRCSC, FACS, FCAHS
F.H. Wigmore Professor & Provincial Head
Department of Surgery

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SASKATCHEWAN SURGICAL ROBOTICS



Preparing for the da Vinci Surgical Robotic Procedure

I am happy to report that Saskatchewan's first Surgical Robotics program has officially launched. Our first case was performed on September 12th at St. Paul's Hospital. There have been an additional 25 robotic cases performed within the first 8 weeks since that time, with an additional 3 to 4 cases scheduled per week moving forward. The program currently consists of four urologists trained on the da Vinci robotic system. Most of the cases performed to date are radical prostatectomies, but we have also performed robotic radical nephrectomies, partial nephrectomies and pyeloplasties.

In December, we will begin the gynecologic oncology phase of the roll out. This will be led by two of our colleagues from the Division of Oncology and Department of Gynecology, who will begin regularly operating at St. Paul's hospital. Our colleagues in thoracic surgery have initiated the da Vinci training pathway and will be scheduling their first case sometime in early February. We hope that our otolaryngological head and neck surgeons will follow shortly after.

This program's success thus far is also largely attributed to our excellent OR teams and administrators. Our OR nurses have become quickly familiar with the apparatus and the new procedures. Their commitment to making this a successful program launch cannot go without mention. In addition, our colleagues from anaesthesia have continued to provide excellent support and patient care.

Varun Bathini, MD, FRCSC
Assistant Professor, Department of Surgery, University of Saskatchewan
Lead, Saskatchewan Surgical Robotics Program



2022 Resident Research Day, presentation of Dr. Vincent Biron

On November 17th, our Resident Research day was held in-person at RUH Mall Lecture Theatre for the first time since the start of the pandemic. Each and every year, we continue to be impressed by the quality of the studies presented from all across our Department. This outstanding effort from our residents made the task of our judges (Dr. A. Hall, Dr. A. Khani-Hanjani, Dr. Y. Luo, Dr. J. Radic and Dr. V. Biron) quite challenging.

Both in-person and virtual attendance was excellent. Audience participation was exceptional and was facilitated by our moderators (Dr. T. Mick, Dr. R. Murphy, and Dr. E. Barber), as well as the innovative use of audience polling software for those both in the theatre and virtual. Our invited guest was Dr. Vincent Biron, Associate Professor and Surgeon-Scientist, Division of Otolaryngology - Head and Neck Surgery, University of Alberta, who spoke on "Working Toward Precision Medicine in Head and Neck Surgery".

The smooth interaction between the in-person event and virtual format would not have been possible without the efforts of many staff in the Department of Surgery. Luis Bustamante and Joey Deason deserve a special mention for leading the technical aspects of the virtual event logistics. We also wish to thank Karen Mosier and Angie White for developing the program and promotion. Department staff ensured that everything would run smoothly while following COVID precautions in the RUH Mall Lecture Theatre.

The awards banquet followed in the evening at the Sheraton Top of the Inn. Dr. Emily Chan, Division of Orthopedic Surgery received the **1st Place Podium Platform Presentation Award**; Dr. Amit Persad, Division of Neurosurgery received the **2nd Place Podium Platform Presentation Award**; Dr. Eva Liu, Division of Neurosurgery received **3rd Place Podium Platform Presentation Award**; Dr. Eva Liu, Division of Neurosurgery received the **Surgical Foundations Research Award** (Platform Presentation); Dr. Emily Chan, Division of Orthopedic Surgery received the **Henry & Cheryl**

Kloppenburg Award (Platform Presentation); Barzany Ridha, Undergraduate Medical Student received the **Anne Dzus Student Surgical Research Award** (Platform Presentation); Drs. Amit Persad, Division of Neurosurgery and Lauren Ready, Division of Orthopedic Surgery received the **Best Publication Awards**.

Research is a key component in surgery and events like this help to achieve excellence through innovation and collaboration. Resident Research Day gave testimony to all the excellent research that is going on in our Department and the College of Medicine at the University of Saskatchewan.

Daryl Fourney, MD, FRCSC, FACS
Professor & Research Director,
Department of Surgery, University of
Saskatchewan



Dr. Emily Chan, 1st Place Platform Presentation Award



*Dr. Vincent Biron, Keynote Speaker
University of Alberta*



*Dr. Amit Persad, 2nd Place Platform &
Dr. Daryl Fournier, Research Director*



*2022 Resident Research Awards Banquet
Sheraton Top of the Inn*



(left to right): Dr. J. Gaboury (General Surgery), Dr. N. Sothilingam (General Surgery), Dr. G. Groot (General Surgery), Dr. N. Ginther (General Surgery), Dr. K. Adey (General Surgery), Dr. S. Harriman (General Surgey), J. Treadwell (ER Clinical Coordinator), Dr. T. Oliver (Emergency Medicine), Dr. J. Smith (Emergency Medicine) & Dr. K. Stevenson (General Surgery) (missing from the image: Dr. S. Bharadwaj (Thoracic Surgery))

Yet again our Province has suffered another horrific traumatic event which has made national news.

As everyone is aware, on Sunday September 4th, multiple people were killed, and many injured at the James Smith Cree Nation and Weldon, SK. A Code Orange was quickly initiated, and our Trauma Service was mobilized. Many of the survivors were taken to regional hospitals including Prince Albert, Melfort and Nipawin. The response from the transport teams both STARS and ground EMS were swift and precise. Multiple victims were brought to Royal University Hospital (RUH) to be triaged, resuscitated and receive life-saving surgery.

I would like to take this opportunity to thank everyone from around the province for their dedication and work that day. From the amazing care and treatment provided by our regional centres to the countless volunteers who gave up their Sunday on a long weekend to come to work. Congratulations to Drs. Joanna Smith (ED Lead, Saskatoon) and Kaitlin Adey (ACS/Trauma Surgeon) for running a very smooth and efficient Code Orange. With an already full complement of patients that day, the RUH ER was able to clear the resuscitation bays and mobilize additional staff for the event. I also want to thank the numerous OR staff, surgeons, and anaesthesiologist who ran four operating rooms simultaneously to save the lives of the victims.

This province has seen four Trauma Code Orange situations in the last six years. Every time I am proud of how our health care system is able to provide timely and appropriate care to the patients.

Under the leadership of the Head of Surgery, Dr. Ivar Mendez, the Trauma Program was established in 2015. Since that time, we have made great improvements in local and provincial trauma care in Saskatchewan. Like many

programs, we have been stalled by the pandemic over the last two years but going forward, the goal is to make more provincial changes to trauma care. With our partners in Regina, the Saskatchewan Trauma Program will collaborate with regional centres and develop pathways to better service this province in trauma care.

This starts by collecting trauma data from hospitals throughout the province to better understand the needs and deficiencies that exist. We aim to build strong partnerships with organizations such as STARS and rural EMS to work on effective transport of our patients given the unique geography of our province. We continue to teach learners at all levels. This including a dedicated teaching curriculum, Provincial Trauma Rounds, in-situ simulation training, American College of Surgeons approved course such as ATLS and introducing RTTDC (Rural Trauma Team Development Course). RTTDC will enable trauma physicians from Saskatoon and Regina to visit rural hospitals throughout Saskatchewan and better develop their response to local traumas.

Now, more than ever given this most recent tragedy, it is imperative that this program be properly staffed and funded to carry out our provincial agenda. It will take time to accomplish, however I am confident in our organization and its members to achieve Provincial Trauma Accreditation.

Niroshan Sothilingam, MD, FRCSC, FACS
Assistant Professor, Department of Surgery,
University of Saskatchewan
Medical Director, Trauma Program



(left to right): Drs. Kaitlyn Adey & Joanna Smith, Trauma Team Leaders



Saskatchewan Trauma Manual, 2nd Edition (2021)

08 TEACHING AWARDS

On September 21st, 2022, the Department of Surgery hosted our first in-person Teaching Awards Banquet since the start of the pandemic in 2019. The banquet is an opportunity to recognize the Department's most outstanding teachers by presenting awards to six deserving individuals. The award recipients were selected by an awards committee based on multiple criteria, including teaching contributions, evaluations and nominations from learners.

The Silver Shovel Award, recognizing the surgery faculty member with the most outstanding contribution to surgical education, was awarded to Dr. Ray Deobald, General Surgery.

The Bronze Shovel Award, recognizing the surgery resident with the most outstanding contribution to surgical education, was awarded to Dr. Nolan Hunka, General Surgery.

The Surgical Foundations Award, chosen by the residents in the program and recognizing the surgery faculty member with the most outstanding contribution to surgical foundations teaching, was awarded to Dr. Bill Dust, Orthopedic Surgery.

The Gold Scalpel Awards, recognizing individuals that demonstrate the highest level of teaching excellence to the different phases of the surgical education curriculum, were awarded to Dr. Elke Mau, Urology (Pre-clerkship), Dr. Dilip Gill, General SurgPry (Clerkship) and to Dr. Lauren Allen, Orthopedic Surgery (Postgraduate).

Dr. Anne Dzus, Orthopedic Surgery was recognized with a Lifetime Achievement Award for her outstanding contribution to surgical education over the years.

The Awards Banquet concluded with an address from our keynote speaker, Dr. Douglas Courtemanche from the University of British Columbia entitled



Dr. Ray Deobald, Division of General Surgery
Silver Shovel Award

The Outcome of Teaching. Dr. Courtemanche is a Clinical Professor in the Division of Plastic Surgery. He was born in Scotland and emigrated to Canada at a young age. He grew up in Vancouver, BC and graduated with his MD from the University of British Columbia. He then completed a rotating internship at Memorial University, followed by his Plastic Surgery Residency and one year Fellowship at University of British Columbia. Dr. Courtemanche followed this with a one year Craniofacial Fellowship at Royal Children's Hospital and his Master of Surgery in Melbourne, Australia.

Since then Dr. Courtemanche has practiced in Vancouver Canada as a Plastic Surgeon for both adults and children. His research interests include craniofacial growth & microvascular circulation, Planetary Health, International Surgical Care and Resilience Software.



*Dr. Douglas Courtemanche, Keynote Speaker
Department of Surgery, University of British Columbia*



*Dr. Nolan Hunka, Division of General Surgery
Bronze Shovel Award*



*Dr. Bill Dust, Division of Orthopedic Surgery
Surgical Foundations Kvinlaug Award*



*Dr. Anne Dzus, Division of Orthopedic Surgery
Lifetime Achievement Award*



*Dr. Elke Mau, Division of Urology
Golden Scalpel Award (Pre-clerkship)*



*Dr. Dilip Gill, Division of General Surgery
Golden Scalpel Award (Clerkship)*



*Dr. Lauren Allen, Division of Orthopedic Surgery
Golden Scalpel Award (Postgraduate)*



Rendering of the final Surgical Skills Laboratory

Our new state-of-the-art Surgical Skills Laboratory will be inaugurated on December 8, 2022. The Surgical Skills Laboratory is closely linked to our mission to train competent clinicians and surgeons and maintain the skills of practicing surgeons. We will be implementing an educational surgical skills curriculum that is tailor-made to the needs of our undergraduate and postgraduate surgical programs and the maintenance of competence of practicing surgeons across Saskatchewan. The implementation of educational surgical skills in controlled and simulated environments has shown to promote improvement on surgical outcomes and patient safety. A major emphasis of the laboratory will be the transference of technical skills from virtual to real environments. The simulated surgical skills learned at the laboratory must complement surgical training in real settings and the goal is for learners to be competent in certain skills before working with patients.

A Grounding Space will be a feature of the new Surgical Skills Laboratory and will be installed in a quiet alcove close to the entrance of the lab. The design of the grounding space has been created with the collaboration of the Indigenous Initiatives and Programming of the School of Medicine. This quiet space will serve as a place of spiritual reflection and respect on the use of human cadavers for surgical skills training.



Grounding Space Artwork



Surgical Skills Laboratory under Construction



Ethiopian Midwife performing a Prenatal Ultrasound

The expertise developed in Saskatchewan on virtual care solutions over the past decade has been applied to an innovative program for prenatal care in Ethiopia. The Remote Presence Robotic Program under the leadership of Dr. I. Mendez has pioneered the use of telerobotic ultrasound technology to provide ultrasonography to underserved communities in Saskatchewan. This has led to the successful deployment of these systems to three northern Indigenous communities. This technology is clinically effective, has a high degree of acceptance and satisfaction among patients and clinicians, is culturally responsive, and cost-efficient.

With the partnership of the Government of Ethiopia, Salele University in Ethiopia and the Canadian NGO Canadian Physicians for Aid and Relief (CPAR), the Saskatchewan team established a rural prenatal ultrasonography program in Ethiopia. Midwives were trained by obstetricians to use a portable digital platform with videoconferencing capabilities. Obstetricians supervised the midwives in performing the ultrasound exams and was available to provide real-time support and ongoing feedback on image acquisition and interpretation through the teleultrasound platform.

The program was received enthusiastically by pregnant women in rural Ethiopia and more than 10,000 exams have been performed to date. We also developed a smart phone app to gather outcome data and is used at the same time the ultrasound scans are obtained. The initial experience with this program has been published in the high impact factor Journal of Telemedicine and Telecare.

