OPEN SKIES Department of Surgery Newsletter Vol.6 No.3 October 2019



WHATS INSIDE

- Chairman's Message
- Surgical Robotics
- Saskatchewan Cochlear Implant
- Retirement in Surgery

- New Faculty in Surgery
- Surgical Humanities Day
- Neurosurgery Resident Research

Saskatchewan

Health Authority

New Appointment in Surgery



PAGE

DEPARTMENT OF SURGERY QUARTERLY NEWSLETTER

02 CHAIRMAN'S MESSAGE



"The opening of the Jim Pattison Children Hospital of Saskatchewan marks a milestone in the integration of pediatric surgical care in the Province."

The opening of the Jim Pattison Children Hospital of Saskatchewan (JPCH) marks a milestone in the integration of pediatric surgical care in the Province. The leadership of the Department of Surgery and specially the pediatric surgeons have worked tirelessly to build a vibrant multidisciplinary service encompassing all pediatric surgical specialties. The JPCH boasts state-of-the-art surgical infrastructure with intelligent and fully integrated operating rooms and the most advanced surgical equipment. Careful consideration was given to the acquisition of complex intraoperative imaging systems, surgical navigation stations, computerized microscopes and endoscopic towers. This equipment will provide our surgeons the necessary tools to offer the best surgical care to the children of Saskatchewan.

Over the past 3 years the Department has recruited an additional 8 pediatric surgeons to build the surgical capacity in Saskatchewan that will allow us to treat children in their own home Province. These new faculty have strengthen our clinical and academic programs and enhance surgical service delivery at a Provincial level. The consolidation of one single Saskatchewan Health Authority has facilitated this integration and the goal of providing the highest quality of surgical care to all Saskatchewan children regardless of their geographical location is at hand.

Technological innovations such as remote presence robotic systems pioneered by the Department of Surgery and pediatric intensivists will bring clinical expertise to children living in remote communities in real-time. These technologies are particularly focused on Aboriginal communities that traditionally have high children demographics.

The opening of the JPCH is indeed cause of celebration in Saskatchewan and our Department is fully committed to its success.

Sincerely,

Ivar Mendez, MD, PhD, FRCSC, FACS, FCAHS F.H. Wigmore Professor of Surgery & Saskatchewan Provincial Head of Surgery OPEN SKIES newsletter is a publication of the Department of Surgery at the College of Medicine, University of Saskatchewan.

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.

Would you prefer an e-mail only version of this newletter? Email open.skies@usask.ca with "SUBSCRIBE" in the subject line and future issues will be emailed to you.

OPEN SKIES Credits

<u>Contributors</u>

Dr. Ivar Mendez Dr. Varun Bathini Saskatchewan Cochlear Implant Team Dr. Francis Christian Dr. Taylor Bereti Dr. Tanner Dunlop Dr. Sarah Miller Dr. Laura Simms Dr. Turker Dalkilic Dr. Lissa Peeling Dr. Daryl Fourney

> Design/Digital Production Department of Surgery Communications

> DEPARTMENT OF SURGERY College of Medicine University of Saskatchewan

107 Wiggins Road, Suite B419 Health Sciences Building Saskatoon, SK S7N 5E5

TEL: 306.966.7323 FAX: 306.966.8026 Email: open.skies@usask.ca www.medicine.usask.ca/surgery

SURGICAL ROBOTICS 03



Dr. Varun Bathini testing the Surgical Robot

Saskatchewan is on the brink of introducing new and innovative medical technology to the province. We are well on the way to establishing a surgical robotics program in the province, as we will soon have a da Vinci robot at St. Paul's hospital in Saskatoon. Access to this technology will allow our center to become one of the leaders in minimally invasive surgery in Canada, and on par with major surgical centers internationally.

Over the past year we have completed a comprehensive cost analysis using data from our own center and learning from the experience of other Canadian sites using the da Vinici system. Our surgeons and OR managers have conducted site visits to learn from established robotics programs, and we have even had the opportunity to bring in a robot simulator to facilitate some hands-on exposure for our staff. We have also consulted with engineers to ensure that the robot will be compatible with our current ORs, without requiring any additional upgrades or equipment. Now that funding for the da Vinci robot is almost secured, the SHA has fully approved this exciting new advancement to laparoscopic surgery.

Thank you to the St. Paul's Hospital foundation for agreeing to fundraise to acquire a da Vinci robot for use by several of the surgical departments, most notably urology, ENT, general surgery, and thoracic surgery. Once fully implemented, the da Vinci robot will help us to provide minimally invasive surgery, decreasing post-operative length of stay, and morbidity, and overall provide even higher level care for the people of this province.

Dr. Varunkumar Bathini Assistant Professor, Department of Surgery, Division of Urology University of Saskatchewan & Saskatchewan Health Authority

da Vinci Surgical Robot

PAGE

04 SASKATCHEWAN COCHLEAR IMPLANT PROGRAM



Lynn Brewster & pediatric patient

Pediatric patient & parent

Cochlear implants are the most successful example of neuromodulation in medicine, with nearly 500,000 patients implanted since the 1980s. Cochlear implants are indicated for people of all ages with severe sensorineural hearing loss. The device has two parts: an internal device which includes a fine electrode that is implanted into the cochlea; and an external device (that looks like a hearing aid) that senses sound, codes it, and transmits signals to the internal device which then stimulates the auditory nerve. The coding algorithm takes into account the acoustic properties of sound and the sensory organization of the cochlea, which codes high frequencies at one end and low-frequencies at the other. The technology is constantly improving.

Among deaf children implanted at an early age, cochlear implants (and post-operative therapy) can result in verbal speech and language abilities that are indistinguishable from normal hearing peers. The importance of early identification and treatment of hearing loss cannot be overstated, since auditory and language processing capabilities develop most rapidly at young ages when the brain is most plastic.

Adults who have severe hearing loss and no longer benefit from hearing aids are also candidates. Hearing loss interferes with communication and is associated with social isolation, depression and cognitive decline. For many, it affects their ability to work and participate in leisure activities. Cochlear implants have been shown to significantly improve quality of life in properly selected candidates.

The Saskatchewan Cochlear Implant Program was established in 1993 with most patients initially traveling out of

province for surgery. We are a multidisciplinary team based in Saskatoon, and are pleased to welcome Dr. Paul Mick to lead the program. Dr. Mick's arrival allows Saskatchewan residents to be fully evaluated for cochlear implant candidacy and receive cochlear implant surgery and follow-up medical care within the province.

Patients with known or suspected severe to profound hearing loss should be referred for evaluation. Referrals can be made directly to the Saskatchewan Cochlear Implant Program. Clinicians may call 306-655-0989 for further information.





Cochlear Implant Team

Retirement in Surgery

Dr. Anil Kumar, early in his career, spent time at King's College Hospital and Guy's Hospital where he learned the art of neurosurgery under the guidance of Dr. C. Polkey, Dr. J. J. Maccabe, and Dr. A. J. Strong who respectfully specialize in their own field of epilepsy surgery, transsphenoidal pituitary surgery, and aneurysm surgery. He became a Fellow of the Royal College of Physicians & Surgeons of Glasgow United Kingdom.

In 2006 Dr. Kumar came to Regina after his residency training in Neurosurgery and Neurotrauma Fellowship in Toronto and became a Fellow of the Royal College of Physicians and Surgeons of Canada. He cowrote a chapter in "Management of Traumatic Brain Injury" Chapter 36 with Andrew J. Baker, and Judith Bellapart which was published in Clinical Critical Care Medicine (Mosby Elsevier) 2006. His interest and subspecialty involve Neurotrauma &



Dr. Anil Kumar, Neurosurgery (Regina)

Neurointensive care involving Head & Spine, but he also started Expanded Endoscopic Endonasal Excision of Pituitary Tumors which is done only in a few centers across the nation.

He gained interest in pain management surgery and DBS from Dr. K. Kumar who he trained under in 2013. Most recently Dr. Kumar presented the project "Do patients with spinal cord stimulators for treatment of chronic pain syndrome demonstrate neuroplasticity: A retrospective review" at the 2019 International Neuromodulation Society Congress in Sydney, Australia. It was in collaboration with R. Munson, T. Wiest, J. Norton, J. Buwembo, Saskatchewan Health Authority, and University of Saskatchewan.

06 NEW FACULTY IN SURGERY



Dr. Taylor Bereti, General Surgery

Dr. Taylor Bereti is a new general surgeon starting practice in Regina. He was born and raised in Saskatchewan spending most of his life between Regina and Saskatoon, having completed his MD at the University of Saskatchewan as well as his Surgical Residency in Saskatoon. Dr. Bereti currently has a broad surgical practice including interests in colorectal, breast, laparoscopic and trauma surgery. He is involved with the trauma program in Regina and is an ATLS instructor. He has a passion for resident and undergraduate education as well as patient education and health improvement.

He is happily married and is excited to return to his hometown to begin his surgical career.



Dr. Sarah Miller, General Surgery

Dr. Sarah Miller completed her medical education and general surgery residency at the University of Saskatchewan. Prior to this, she completed undergraduate degrees in Chemistry and French.

She always wanted to return to practice in Southern Saskatchewan and she is excited to have joined the Plains Surgical Associates Group in Regina where she will have a broad general surgery practice, including trauma.

Dr. Miller has an interest in Global Surgery and looks forward to completing further sustainable work internationally, after having been exposed to projects in Mozambique and Guatemala in training. Finally, she also has a special interest in breast cancer care. She looks forward to working in conjunction with Dr. Pam Meiers, the surgical director of the Leslie and Irene Dubé Breast Health Centre, as well as the division of general surgery in Regina and appropriate stakeholders in Pathology and Radiology in order to help standardize and improve breast cancer care delivery in southern Saskatchewan.



Dr. Laura Sims, Orthopedic Surgery

Dr. Laura Sims is originally from Regina, and completed her Bachelor of Science in Physiology at the University of Saskatchewan. She attended school and Orthopedic medical residency training at the University of Saskatchewan. Throughout residency she showed a strong interest in research, earning her the Samuel Clemens Prize in Orthopedic Research. Following her residency training, and with the support of the Royal University Hospital Foundation, she completed a fellowship at the Roth McFarlane Hand and Upper Limb Centre in London Ontario, where her subspecialty training was focused on upper extremity surgery.

Dr. Sims is pleased to join the Division of Orthopedic Surgery in Saskatoon, a place she proudly calls home. Her clinical interests include hand and wrist surgery. She looks forward to working closely with residents, both in clinical teaching and research mentorship. She also plans to advance her clinical research endeavors, participating in multi-centered studies with the WeCAN and Canadian Peripheral Nerve Society groups.

PAGE

SURGICAL HUMANITIES DAY 07



Evening of Fine Music (left to right: Evan Barber General Surgery), William Dust (Orthopedic Surgery), Sophie McBain (Medical Student)

Surgical Humanities Day 2019 was held on Thursday, September 19th.

The event consisted of a day-long Exhibition of Art - including paintings, sketch work, photography and sculpture. Work was exhibited by surgeons, residents, medical students, nurses and their families.

Surgical Humanities Grand Rounds was held in the Health Sciences Building and presented by Dr. John Graham-Pole, Emeritus Professor of Pediatrics and Palliative Care at the University of Florida. The title of the talk was, "Whatever You Do, Don't Take Up Surgery".

The Rounds was followed by an evening of Fine Music at St. Andrew's Chapel - including Bill Dust (French Horn); Luke Hnenny and Evan Barber (violin); Peter Hedlin (Cello); Elkie Mau (Double Bass); Eric Burge (Viola) and Sophie McBain (piano).



Dr. John Graham-Pole, Grand Rounds Lecturer

PAGE

08 NEUROSURGERY RESIDENCY RESEARCH



Neurosurgery Resident Research Day, University of Saskatchewan & University of Manitoba

The Saskatchewan Neurosurgery residents attended and presented at the Annual Dwight Parkinson Resident Research Day in Winnipeg, MB on June 5. Both Neurosurgery residency programs collaborate weekly, sharing the responsibility of weekly curriculum rounds. Congratulations to Dr. Amit Persad who won first place for his presentation at the research day for his presentation titled "Saskatchewan Experience with Mechanical Thrombectomy Under General Anesthesia". Congratulations to Drs. Ahmed, Kindrachuk, and Mercure-Cyr for their excellent presentations.

New Appointment in Surgery

Daryl Fourney, MD, FRCSC, FACS was appointed Director of Research in the Department of Surgery on July 1, 2019. He is a professor of Neurosurgery and the Director of Research for the Division of Neurosurgery. Dr. Fourney completed his medical school and residency training in Neurosurgery at the University of Saskatchewan in 2001. He did a fellowship in neurosurgical oncology at the University of Texas M.D. Anderson Cancer Center in Houston, Texas 2001-2002. He has a special interest in brain tumors as well as complex spinal disorders including tumors of the spine. He has more than 100 published peer-reviewed articles and book chapters. He directed the residency training program in Neurosurgery at the University of Saskatchewan from 2003-2013. He was President of the Canadian Spine Society from 2007 to 2009. He was Annual Meeting Chair for the American Association of Neurological Surgeons and Congress of Neurological Surgeons Joint Section on Disorders of the Spine and Peripheral Nerves in 2012.



October 2019 | OPEN SKIES