# OPEN SKIES Department of Surgery Newsletter



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Saskatchewan Health Authority

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DEPARTMENT OF SURGERY QUARTERLY NEWSLETTER

# 02 CHAIRMAN'S MESSAGE



"The ultimate goal is that no matter where the patient lives in the Province he or she will receive the highest quality of surgical care."

With the amalgamation of 12 Saskatchewan health regions into one Health Authority in December of 2017, a great opportunity was created to establish a coordinate approach to the delivery of surgical service to the entire population of the province.

Over the past year, a provincial surgical leadership structure has been put in place with the appointment of a Provincial Head of Surgery and seven Area Leads representing all the geographical regions of Saskatchewan. The surgical leaders (page 5 of OPEN skies) constitute a Provincial Surgical Council that meets regularly to address surgical issues at a provincial level.

This coordinated provincial approach will open the door for the standardization of surgical services across the province. For the first time, we will have the opportunity to establish province-wide quality improvement programs, manpower needs and projections, standardization of equipment and services and to effectively advocate for the needs of the different regions.

The establishment of the Provincial Surgical Council has started to bear fruits, the improved communication among the surgical leaders has provided insight into the realities of the different regions and their needs. We have learned a lot from each other, sharing of best practices and approaches to common problems has already benefited all of us. We are optimistic that working together we will be able to build a united framework to provide the best surgical care to the citizens of Saskatchewan. The ultimate goal is that no matter where the patient lives in the Province he or she will receive the highest quality of surgical care.

Sincerely,

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

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# OPENING SOON ... 03



Jim Pattison Children's Hospital, Saskatoon, SK

### HUMBOLDT BRONCOS MEMORIAL TRAUMA LECTURE



Dr. Tarek Razek is the inagural Humboldt Broncos Trauma Lacturer. Dr. Razek is a Trauma/General Surgeon and Intensivist who is the current Chief of the Adult Trauma Program at the McGill University Health Centre (MUHC).

He completed his surgical training at McGill University and his Trauma Surgery/ICU fellowship at the University of Pennsylvania in Philadelphia. He is a co-director of the Centre for Global Surgery at the MUHC. He actively participates in global surgical and trauma development programs.

He has worked on the medical teams of the Vancouver 2010 Winter Olympics, the Euro Soccer Championships of 2012 in Ukraine and is also an assistant physician for the Montreal Canadians Hockey Club.

He holds several executive positions with local, regional and national trauma associations – including the American College of Surgeons (Governor, ATLS regional chair), the International Association for Trauma Surgery and Intensive Care, and the Trauma Association of Canada.

Dr. Tarek Razek







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# 04 RUH CARDIOVASCULAR SURGERY



Saskatoon Cardiovascular Team

The Division of Cardiac Surgery at the University of Saskatchewan and the Royal University Hospital (RUH) has been providing cardiac surgical care to patients in Northern and Central Saskatchewan for decades. The center has traditionally offered routine and emergency cardiac surgical care with excellent reported outcomes. However, complex patients requiring super-specialized management with attendant supporting infrastructure have generally been sent to higher-volume centers outside the province where such care is readily provided. A new vision for the future has projected the creation of an expanded tertiary Cardiac Sciences Centre at the RUH in Saskatoon, thereby offering a wider range of Cardiac services in the province. This vision for the future is reflected in the new appointments within the divisions of cardiac surgery and cardiology at RUH. Ultimately, we envision the capability to offer almost all cardiac surgical interventions and procedures at RUH, except for heart transplantation in the near future.

Recently appointed to the division of Cardiac Surgery, Dr. Khani-Hanjani underwent additional training in the performance of complex cardiac surgical procedures such as valve sparing aortic root replacement, ascending aorta and arch repair, heart valve and structural heart disease procedures, surgical MAZE and heart failure surgeries for patients with poor left and/or right ventricular function. Dr. Khani-Hanjani's fellowship in aortic surgeries and heart failure, more specifically heart/lung transplant and Mechanical Circulatory Support (MCS), at the Cleveland Clinic brings in a new perspective and treatment approach for the patients at the RUH. Consequently, he can now offer more complex surgeries to patients with higher risk that may require short term MCS; previously, these patients would have been sent to larger centers such as Edmonton or Calgary in Alberta.

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Dr. Khani-Hanjani also has been instrumental in expanding and strengthening the existing collaboration with cardiologist colleagues to approach complex cardiac disease as a "Cardiac Team"; with the new addition of Dr. A. Zhai and Dr. S. Parent to our Cardiology division, RUH now have a team of specialists in cardiac sciences that are capable of not only surgical treatment of patients with heart failure but also postoperative care and follow ups through a newly established Heart Failure Clinic. Soon, we will also be offering TAVI and Mitral Valve Clip procedures at the RUH as collaborative procedures. Our longer term goal remains to be ultimately providing a full range of cardiac surgical procedures, including transplant, within the province i.e. in closer proximity to our patients' homes and families.

Dr. Khani-Hanjani holds an Associate Clinical Professor appointment in the Department of Surgery at the University of Saskatchewan. His principle research interests focus upon quality control studies through which he believes that the divisions can further improve their performance and patient care by studying and researching their own data. Quality data will not only help the Cardiac Sciences to improve the services offered to our patients but will also give us opportunities to collaborate with our colleagues at national and international level and put Cardiac Sciences in Saskatchewan on the map. Since appointment in September 2018, Dr. Khani-Hanjani has played an integral role in leading preliminary discussions to establish a province-wide cardiac sciences database involving the collaboration of the Department of Surgery and the Department of Medicine. Dr. Khani-Hanjani hopes to secure funding in order to establish and sustain this essential province-wide database.

## SASKATCHEWAN SURGERY LEADERSHIP



Dr. I. Mendez, Provincial Head of Surgery



Dr. O. Mabadeje, Area Lead Prince Albert



Dr. J. Tsang, Area Lead Regina



Dr. N. Wanis, Area Lead Yorkton



Dr. F. Garcia, Area Lead Swift Current/Moose Jaw



Dr. M. Retief, Area Lead North Battleford



Dr. B. Ulmer, Area Lead Saskatoon



Dr. J. Wheat-Hozack, Area Lead Lloydminster

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# 06 GLOBAL NEUROSURGEON IN REGINA



Dr. Chris Ekong, Regina, Saskatchewan

Dr. Chris Ekong moved to Regina in 1983 after his Residency training in Neurosurgery, and Neurotrauma Fellowship in Toronto. He is a Fellow of the Royal College of Surgeons of Canada, a Fellow of the American College of Surgeons, and a Fellow of the International College of Surgeons. He is also a Certified Canadian Physician Executive (CCPE).

He has a deep interest in Technology. He prides himself as being the first physician in Regina to own a personal computer. (Mind you, it was an Apple lle with two 128k floppy drives. In 1984, that was a big deal.). In an attempt to learn more about technology, and integrate it into his work as a neurosurgeon, he attended most of the annual meetings of Comdex in Las Vegas between 1985 and 2001. After Comdex "morphed" into CES (Consumer Electronic Show), he continued to feed his appetite for technology by attending most CES annual meetings up to this day. He learned a lot about how the people in the tech world use technology to communicate with each other and make improvements in their business.

Dr. Ekong and Nse Ekong started Medi-Fax Live Internet Neurosurgery Rounds in 2001. This initially involved selecting interesting Neurosurgery cases and posting them on the medi-fax.com\rounds website. At a prearranged time, Neurosurgeons and Residents in various cities would gather in their conference rooms and look at the cases on the website and discuss them using teleconference calls. The initial centers were Canadian and US. They included Regina, Saskatoon, Toronto, Halifax, Winnipeg, Calgary, Edmonton, Phoenix, St. Louis, and Stanford. With advances in technology, they were able to eliminate the cost of teleconference calls by using Skype. By 2005, they added Medi-Fax Email Rounds. This involved obtaining interesting subspecialty neurosurgical cases from participating centers. Experts in the subspecialties were consulted. The cases and the expert opinions were posted on the website every week or so. An email was sent to participating neurosurgeons and Residents after each posting for comments. They also established a compendium of interesting neurosurgery cases and their management at medi-fax. com\atlas. (Medi-Fax Atlas "died" in 2009 after Google entered the game)

All other aspects of the Medi-Fax Live International Internet Neurosurgery Rounds have continued to evolve with changing pace in technology. The group is now using Google Hangout which is a free videoconferencing application from Google. The 90-minute Live Rounds are held every 3 months. Participants in the most recent Rounds were from nine centers in Canada, Indonesia, and Malaysia. Cases are now presented using power point with slides and videos. Some adjustments to time difference have become necessary. The Live Rounds on Wednesday January 30, 2019 was at 5 am Vancouver, 7 am Regina and Saskatoon, 8 pm Jogja (Indonesia), 9 pm Palu (Indonesia), 9 pm Kuala Lumpur (Malaysia), and 10 pm Jarapuya (Papua, Indonesia).

The Division of Neurosurgery in Regina is now formally twinned with the Division of Neurosurgery at Dr. Sardjito Hospital, Universitas Gadja Mada, Yogyakarta, Indonesia. Dr. Ekong has been there as a visiting Professor.

The experiences acquired from the cooperation between Regina and Yogyakarta has strengthened the friendship between the 2 institutions at a personal and academic levels. Indonesia is a country with a population of more than 260 million people in over17000 islands. Lessons learned about establishing a Neurosurgery residency program in such an environment led Dr. Ekong to join with Dr. Wiryawan Manusuroto (Head of Neurosurgery in Dr. Sardjito Hospital, Universitas Gadja Mada, Yogyakarta, Indonesia) to present a paper at the June 2018 meeting of the Canadian Neurosciences Federation meeting in Halifax, Canada. The title of the paper was: Neurosurgery Residency Program at the Faculty of Medicine, Universitas Gadjah Mada, Indonesia: a unique approach and strategy for an archipelago country.

Dr. Ekong's partnership with colleagues in Asia makes neurosurgery meetings in Asia attractive to him. In July 2017, he presented a paper entitled: *Impact* of Technology on the Care of Neurosurgery Patients: A 40 Year *Experience* at the ASEAN Congress Neurological Surgeons of in Balikpapan, Indonesia.

Dr. Ekong's charitable initiatives are many. The Purple Computer Project established in 2010 aims to buy and donate 100,000 computers to community centers in 100 countries over 10 years. His Emmanuel Charitable Foundation, working with Hospitals of Regina Foundation, sponsors international Neurosurgeons and Residents to visit Regina as medical observers. Five Neurosurgeons and Residents from Indonesia and Brazil have so far participated in that program.

The scope of the Neurosurgery education projects in Regina seem to have turned Global when Dr. Ekong was invited to speak at the annual meeting of the Global Economic Institute in Las Palmas, Canary Islands, Spain in November 2018. His topic: Technology: The [Near] Equalizer in Neurosurgery Education between Developina and Developed Countries. Dr. Ekong anticipates that technology cooperation and between neurosurgeons in high-resource countries and neurosurgeons in low-resource countries are going to nearly level the playing field for neurosurgery education.



International Internet Clinical Rounds

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# SURGERY NSQIP PROGRAM



#### Measuring Surgery Quality & Improving Outcomes

The Department of Surgery realizes that measuring surgical quality must be outcomes based, risk adjusted and benchmarked to other surgical departments and hospitals. In addition, the Department believes in the ability of a good surgical quality measurement system to spur quality, data based research, educate residents in quality improvement and provide real cost savings to the healthcare system, with actionable data and excellent return on investment ratios.

Accordingly, we have embarked on an ambitious project to measure surgical quality using the National Surgical Quality Improvement Program - NSQIP - which is the best surgical quality measurement system available and which has been adopted by more than 600 hospitals in North America and by several Canadian provinces. NSQIP uses a robust, validated measurement system and reports outcomes regularly in a manner that makes for accurate and consequential assessment of quality outcomes, risk adjusted and benchmarked to other hospitals. Morbidity definitions are standardized and the trained, Surgical Clinical Reviewer (SCR) uses these definitions in entering clinical data into a workstation - the data is then analyzed and risk adjusted by statisticians at the NSQIP office, before the results are sent back to us. In addition, NSQIP monitors 30 days morbidity and mortality, realizing that in many studies, up to half of all complications occur after the patient's discharge.

The Department of Surgery, Saskatchewan is committed to robust surgical quality measurement and to subsequent real, measurable, quality improvement by following up on the data and fostering a culture of Continuous Quality Improvement (CQI).

#### New Appointment in Surgery Head, Division of Urology, Department of Surgery

Kunal Jana MD, FRCSC has been appointed Head of the Division of Urology. He was born and raised in Saskatoon and graduated from the College of Medicine at the University of Saskatchewan in 2001. He completed his urological fellowship training at the University of Ottawa in 2006. He has been a member of the Division of Urology and Clinical Assistant Professor of Surgery since 2006.

Dr. Jana's clinical areas of interest are minimally invasive surgery and surgical oncology. In addition to his clinical interests, he is active in research and quality improvement. He has published several peer-reviewed journal articles and has been involved with various provincial and regional quality improvement initiatives such as the Prostate Assessment Pathway and uro-oncology surgical care plans. Along with his colleagues, he is passionate about improving access to urological care for the people of Saskatchewan. Improving access and wait time management continues to be at the forefront of the Division's mandate.



Dr. Kunal Jana, Head, Division of Urology

The Division of Urology in Saskatoon has a long history of innovation and Dr. Jana is excited for the opportunity to continue this legacy. They are eager to develop a robotic surgery program in the near future and are currently conducting research on novel ablative techniques for kidney cancer.

Dr. Jana is married and has a beautiful daughter. He loves to eat but admits to no culinary prowess. He is an avid traveler but his favorite part of every trip is coming back to Saskatchewan.