

# OPEN SKIES

## Department of Surgery Newsletter



New Health Sciences Centre



## Chairman's Message

*My vision for the Department of Surgery is to grow and establish its position as a premier center for world-class patient care, excellence in research, innovation and surgical education.*



Welcome to the first issue of Open Skies! It is a great honor and privilege for me to assume the responsibility as Fred H. Wigmore Professor and Unified Head of the Department of Surgery at the University of Saskatchewan and Saskatoon Health Region in a time when Saskatchewan is undergoing a transformational change. Saskatchewan is considered to have the strongest provincial economy in Canada with record low unemployment, and population growth higher than that of any other province. The two major cities in the Province, Saskatoon and Regina, are the fastest growing cities in Canada.

The University, Health Regions and Provincial Government are committed to deliver the best surgical care to the population of Saskatchewan. Major investments, such as the Saskatchewan Surgical Initiative, are well underway to achieve its target of access to surgery by all citizens of the Province within three months. The new 300 million dollar Health Sciences building, the largest capital project in the history of the University, is a clear proof of this commitment. It is in this promising environment of unprecedented growth that the Department will face, with confidence, the challenges of today and the future.

*Ivar Mendez, MD, PhD, FRCSC, FACS  
Fred H. Wigmore Professor of Surgery*

**Vol. 1 No. 1**  
September 2013

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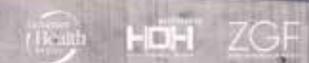
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## CHILDREN'S HOSPITAL of Saskatchewan



On April 30, 2013, Ministry of Health announced its approval of Saskatoon Health Region's design development report for Children's Hospital of Saskatchewan. This approval marks the end of the design phase for the new maternal and children's hospital. Construction is scheduled to start in early 2014 with completion by late 2016.



## MEET OUR NEW FACULTY

### *The Department of Surgery welcomes 12 new faculty members*

The Department of Surgery has experienced an unprecedented growth over the past few months. Twelve new faculty members have joined the ranks of six surgical Divisions significantly expanding the departmental service and academic capabilities. With a population growth higher than any other Province in Canada, Saskatchewan demands for surgical services will increase exponentially and it is our mission to respond to that demand with exemplary surgical care and innovation. Our new faculty will be the catalyst for the continued development of surgical services of the highest standards.

The Department is committed to provide the fertile environment to help these new faculty members to achieve their potential as clinicians, teachers and researchers. We are entering a new and exciting of expansion and technological innovation within our Department and are confident that our newest recruits will play a key role in achieving our goals of excellency in clinical service, research and education.



## SURGICAL IMAGING: 3T MRI & PET/CT



Surgical imaging has received a boost in the past year. Under the leadership of Dr. Paul Babyn the Department of Medical Imaging has commissioned a new 3T MRI and a PET/CT. The PotashCorp PET/CT Centre began operations in May 2013 at Royal University Hospital. Six million dollars in funding was secured through a partnership between the Province of Saskatchewan and Royal University Hospital Foundation with matching funding from PotashCorp. The University of Saskatchewan will be acquiring a cyclotron to support PET/CT scanner, which will be installed at Royal University Hospital.



**Dr. RICK JAGGI**  
***ENT Surgery***

Originally from Halifax, Nova Scotia, Dr. Jaggi completed medical school and residency training in Otolaryngology – Head & Neck Surgery at Dalhousie University and a fellowship in Head & Neck oncology, microvascular reconstruction, facial plastics and endocrine surgery at Auckland City Hospital in New Zealand. Under the guidance of several head and neck surgeons including Dr. John Chaplin, a world renowned microvascular and endocrine surgeon, Dr. Jaggi gained skills in the reconstruction of complex defects of the face, jaw, tongue, throat and neck following cancer surgery or trauma.

Spending a year in New Zealand allowed him the opportunity to hone his skills in thyroid and parathyroid surgery, salivary gland surgery, and management of advanced skin cancer and melanoma of the head and neck.

Dr. Jaggi's subspecialty interests include Head & Neck Oncology (i.e. neck lumps, skin cancer, aerodigestive tumors), Facial Plastics & Microvascular Reconstruction and Thyroid & Parathyroid Surgery.

Dr. Jaggi and his family are excited to begin their new lives in Saskatoon in July 2013 and to get to know the community on both, a professional and personal basis.



**Dr. ANIL SHARMA**  
***ENT Surgery***

Dr. Anil Sharma is an Otolaryngologist specializing in the treatment of Head & Neck Endocrine Surgery & Salivary Endoscopy with subspecialty interest in Voice Disorders. His practice is based at St. Paul's Hospital, Royal University Hospital and the Wall Street Otolaryngology Clinic in Saskatoon.

Dr. Sharma graduated from the University of Saskatchewan College of Medicine in 2007. He then completed five years of Residency training in Otolaryngology at the University of British Columbia. While completing his Post-Graduate Clinical Fellowship in Head & Neck Endocrine/Salivary Surgery & Salivary Endoscopy at UBC he was appointed an Associate Medical Staff Member through Providence Health Care in Vancouver, BC. Through the University of British Columbia Otolaryngology Department he has been the recipient of the Glen P. Kong Research Award, Lavell Lesson Academic Award, Burrowing Owl Surgery Award and most recently the UBC Fellowship Teaching Award. He has also recently been accepted to pursue a Laryngology Fellowship at Johns Hopkins University beginning in 2014.



**Dr. LISSA PEELING**  
***Neurosurgery***

Dr. Peeling obtained her Bachelor of Science in Physiology, pursued her Medical Degree and completed her six year residency in Neurosurgery at the University of Saskatchewan. After obtaining her FRCSC, she completed a three year research and clinical fellowship in cerebrovascular and endovascular neurosurgery at Stony Brook University in New York. At Stony Brook University, she held a joint clinical faculty appointment in both, the Department of Neurological Surgery and the Department of Radiology. She had the opportunity to work with the world renowned interventional neuroradiologist, Dr. David Fiorella and endovascular neurosurgeon, Dr. Henry Woo.

Dr. Peeling joins the Division of Neurosurgery, providing advanced imaging, surgical and endovascular treatments for cerebrovascular disease. Her current clinical practice also includes a broad base of general Neurosurgery involving both intracranial and spinal pathologies. Her subspecialty clinical and research interest includes diagnosis and treatment of carotid disease, stroke, aneurysms, and arteriovenous malformations. As both a neurosurgeon and neurointerventionalist, she offers a unique skill set for diagnosing and treating complex neurosurgical conditions.



**Dr. ANNIKA CARD**  
*Plastic Surgery*

Dr. Card grew up in Saskatoon and obtained her Biology degree (Great Distinction) as well as a Doctorate of Veterinary Medicine and a Medical Doctorate (with Distinction) at the University of Saskatchewan. After completing plastic surgery residency training at McMaster University, she undertook three years of subspecialty training in diverse areas: a fellowship in Microsurgery Research at MD Anderson Cancer Center in Houston, Texas; a Burn fellowship in Auckland, New Zealand at the National Burn Centre; and an intensive Clinical Microsurgery Reconstruction of Breast, Lower Limb, and Head & Neck at the University of Manitoba.

Dr. Card is a fellow of the Royal College of Surgeons of Canada and member of both the American and World Societies of Microsurgeons. She has published and presented research on burn treatment and therapy, peripheral nerve repair, and breast and chest microsurgical reconstruction.

Dr. Card is excited to bring her expertise in reconstructive and aesthetic plastic surgery to Saskatoon. Her main clinical interests include complex microsurgical reconstruction of the lower limb, head & neck, and breast, as well as pediatric cleft surgery, breast asymmetry and aesthetics, and body contouring.



**Dr. GEETHAN CHANDRAN**  
*Plastic Surgery*

Dr. Chandran grew up in Saskatoon and enrolled at the University of Saskatchewan in 1994. He completed his Bachelor of Science degree in Chemistry followed by a Medical Doctorate at the University of Saskatchewan, graduating in 2001. He finished his plastic surgery residency at Dalhousie University in Halifax, Nova Scotia in 2010. Upon obtaining his FRCSC, he obtained a fellowship in Reconstructive Microsurgery including breast, head & neck and upper/lower limb reconstruction at the University of Manitoba. Other postgraduate training included a research year at the University of Alberta Burn Unit in burn and wound healing, general surgery residency at the University of Saskatchewan, anesthesia residency at Memorial University in St. John's, Newfoundland.

Dr. Chandran has practiced as a plastic surgeon in the Regina/Qu'Appelle Health Region for the past 3 years and moved his practice to Saskatoon in July 2013. His main clinical interests include breast reconstruction, complex microsurgical reconstruction, hand surgery, skin cancer, complex wound management, body contouring and aesthetic surgery. He also has interests in medical education and clinical research.



**Dr. IAN SUNDERLAND**  
*Plastic Surgery*

Dr. Sunderland grew up in Winnipeg, Manitoba and completed his undergraduate education in Human Biology at the University of Toronto (Trinity College), graduating with highest distinction. He received his medical degree from Washington University in St. Louis, graduating at the top of his class. Dr. Sunderland then went on to complete a residency program in plastic surgery at the University of Washington in Seattle, one of the foremost training programs in the United States. Following this, he completed a one-year fellowship in reconstructive and aesthetic craniomaxillofacial surgery at Sunnybrook Hospital, University of Toronto.

Dr. Sunderland has been the recipient of numerous awards and honors, has published in prominent plastic surgery journals, and has presented at national and international meetings. He is fully certified as a specialist in plastic surgery and is a fellow of the Royal College of Surgeons of Canada.

He comes to Saskatoon with his wife, Briana, who is a registered nurse. Together they enjoy windsurfing, running, and hiking.



**Dr. LEE KOLLA**  
***Orthopedic Surgery***

Born and raised in Saskatoon, Dr. Kolla graduated medical school (2007) and completed Orthopedic Residency Training at the University of Saskatchewan.

Dr. Kolla is currently finishing a Foot and Ankle Fellowship at the University of British Columbia. During his fellowship, Dr. Kolla was exposed to a wide array of foot and ankle pathology, and will focus his practice on adult foot and ankle sports medicine, reconstruction and trauma.

Dr. Kolla is excited to be coming home and looking forward serving the people of Saskatchewan as well as being a part of the orthopedic community, both clinically and academically.

Dr. Kolla will be joining the Division of Orthopedic Surgery and starting his practice in Saskatoon in early September 2013.



**Dr. TREVOR LOBACK**  
***Orthopedic Surgery***

Dr. Trevor Loback completed the undergraduate education and medical school in 2006, followed by residency training in Orthopedic Surgery at the University of Saskatchewan, graduating in 2011.

Dr. Loback completed his fellowship training in adult lower extremity reconstruction/arthroplasty at the Mount Sinai Hospital in Toronto, Ontario. Apart from arthroplasty, he has a special interest in musculoskeletal oncology and trauma.

In October 2012 he returned to Saskatoon and started his practice with the Division of Orthopedic Surgery. He is happy to be home near family and friends and is excited to be involved in the medical community and the Orthopedic training program, now in a teaching capacity.



**Dr. MICHAEL SPIESS**  
***Orthopedic Surgery***

Dr. Michael Spiess is an Orthopedic Surgeon who graduated medical school at the University of Calgary in 2007, followed by a successful completion of Orthopedic Surgery Residency at the University of Saskatchewan in 2012. He recently completed a combined Orthopedic/ Neurosurgery Spine Fellowship in the University of Calgary's Spine Program.

Dr. Spiess' extensive experience covers numerous aspects of spine care, including trauma, deformity, degenerative and tumor surgery. Additional exposure to minimally invasive surgery, cervical & lumbar disc replacements and anterior and lateral lumbar fusions helped enrich his overall knowledge and skill base.

On an academic front, he has been highly involved in resident education over the past year, as well as being one of ten candidates selected to present original research at the AO Spine's Annual Fellows' Forum and winning second-place at the Annual Fellows Research Symposium at the University of Calgary. He is eager to return to Saskatoon and continue developing his career, while acting as a significant contributor to the community, both clinically and academically. He plans to begin his practice in mid- August 2013.



**Dr. STEVEN BHARADWAJ**  
*Thoracic Surgery*

Dr. Steven Bharadwaj was born and raised in Saskatoon, Saskatchewan.

Dr. Bharadwaj completed his undergraduate and graduate studies in the Department of Anatomy and Cell Biology at the University of Saskatchewan followed by medical school. After completing his residency training in General Surgery at the University of Saskatchewan, Dr. Bharadwaj headed to Winnipeg, Manitoba with his family in tow, to pursue Thoracic Surgery training. Their next stop was Seattle, Washington, USA where Dr. Bharadwaj completed his fellowship in Advanced Minimally Invasive Thoracic Surgery.

Dr. Bharadwaj, with his wonderful supportive wife and four amazing children, returned in the summer of 2012 when Dr. Bharadwaj joined the Division of Thoracic Surgery and started his practice in Saskatoon.



**Dr. YIGANG LUO**  
*Transplant Surgery*

Dr. Luo graduated from West China University of Medical Sciences, Chengdu, China. He was trained in hepato-pancreato-biliary surgery and transplant surgery. He completed his Canadian fellowship training at London, Ontario in 2002.

His major interests are in the field of hepato-pancreato-biliary surgical oncology and organ transplantation.

His research experience includes xenotransplantation, ex vivo organ perfusion, extra-corporeal organ perfusion, clinical liver transplantation, hepatic and pancreatic cancer treatment.

Dr. Luo has more than seventy publications, including two book chapters.



**Dr. JONATHAN NORTON**  
*Neurophysiologist*

Dr. Jonathan Norton was brought up in southern England and attended university in London, University College London. He completed his PhD and training as a Clinical Scientist in Clinical Neurophysiology. After a brief fellowship at the Institute of Neurology (Queen Square), he completed fellowships at the University of Alberta and became the head of the Intraoperative Neuromonitoring Program in Edmonton, AB.

Dr. Norton's research (with current or previous funding from CIHR, NIH, Wellcome Trust, Action Research, Christopher Reeve Foundation) explores issues of neuroprotection, and the restoration and control of movement through physiologically based neural prostheses.

In April 2013, Dr. Norton assumed the headship of the Intraoperative Neurophysiology Programme for the Saskatoon Health Region and was appointed Assistant Professor in the Department of Surgery.

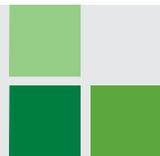


## Saskatchewan Spine Pathway (SPP) for lower back pain

*Saskatchewan is ahead of the curve having the first and only comprehensive provincial pathway for lower back pain in Canada.*

The need to deliver higher value in low back pain (LBP) care is evident. MRI is widely over-utilized. Canada has long waiting lists to see a spine surgeon, but 80% of patients are not candidates for surgery and would be better served by seeing a non-surgeon specialist. Solutions will not evolve from doing more of the same. Innovative care models are developing in several jurisdictions in Canada, the US and the UK to better meet the needs of the population. This is an area where we are ahead of the curve: Saskatchewan has the first and only comprehensive provincial pathway for lower back pain in Canada.

The SSP clinics opened in Saskatoon and Regina in 2011, but implementation started a year earlier with live and online courses. Currently 59% of the family physicians, 72% of the chiropractors and 67% of the nurse practitioners in the Province have taken the courses. The goal of the pathway was to streamline care to improve quality and the overall patient experience.



Dr. Daryl Fourney, MD, FRCS, FACS  
Professor of Neurosurgery  
Director of Residency Training Program  
Division of Neurosurgery, Department of Surgery  
University of Saskatchewan

Dr. Fourney's research has focused on determining the value of low back pain care models within integrated health care systems. With his coauthors, he published a systematic review of clinical pathways for LBP and introduced the SSP care model.<sup>3</sup> In a subsequent study presented as a platform presentation at the Annual Meeting of the American Association of Neurological Surgeons and the Congress of Neurological Surgeons Section on Disorders of the Spine and Peripheral Nerves (Phoenix, Arizona, March 2013), Dr. Fourney showed that the SSP reduced unnecessary referrals to the spine surgeon by 71.3% and reduced MRI utilization for LBP by 52.9%.

Two other studies were recently presented at the Canadian Neurological Sciences Federation (Montreal, June 2013). One examined the validity of the classification system that is central to the SSP. Leg dominant patterns strongly predicted an indication for surgery. Patients triaged to surgical care in the SSP have more leg dominant conditions, greater disability and poorer mobility scores. Another study showed a significant reduction in wait times. With implementation of the SSP, the wait time for MRI decreased from a mean of 74 days to 30 days. The wait to see the surgeon decreased from a mean of 144 days to 70 days.

Dr. Sara Edwards, a neurosurgery resident, is working with Dr. Fourney and Dr. Wu on a large retrospective study, which will analyze approximately 2500 patients treated at the Saskatoon SSP clinic between May 2011 and April 2013. An ongoing prospective study, funded by a grant from the Royal University Hospital Foundation, is evaluating surgical outcomes of patients treated through the SSP vs. the conventional system. Dr. Wu is the co-Principal Investigator for that grant.

Dr. Fourney would like to thank Dr. Adam Wu, his study coordinator Lucy Liu, summer students Danica Kindrachuk and Chelsea Wilgenbusch as well as the SSP clinical team for all of their work in further research and development of this innovative clinical care strategy.



*In Photo (L-R): Dr. Kishore Visvanathan, Leslie and Irene Dubé, Katherine Daniels (SPH Board Chair)*



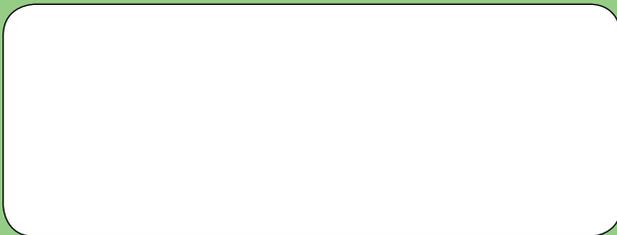
Extensive renovations and \$2.4 million in support from St. Paul's Hospital Foundation, was invested in the development of the Centre which includes the fourth floor Rawlco Radio Surgical Unit, 4B, together with the main floor ambulatory unit, completing the Leslie & Irene Dubé Urology Centre of Health. The new state-of-the-art 18-bed Surgical Unit, which opened in September 2012, was designed based upon current standards for infection control and safety. The unit's extra surgical recovery beds serve as an essential component of the Urology Centre and will increase capacity at St. Paul's Hospital for additional urology, plastics and ear, nose and throat inpatient surgery, putting patients first, by supporting faster access to surgical services.



*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.*

## medicine.usask.ca/surgery

DEPARTMENT OF SURGERY, College of Medicine, University of Saskatchewan  
Royal University Hospital, Suite 2646 - 103 Hospital Drive, Saskatoon, SK S7N 0W8  
Tel (306) 966 7323 | Fax (306) 966 8026 | Email: [open.skies@usask.ca](mailto:open.skies@usask.ca)



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#### Photography

*Page 2:* Children's Hospital Rendering - Children's Hospital of Saskatchewan, Saskatoon Health Region

*Page 2:* 3T MRI & PET CT - RUH Foundation

*Page 8:* SPH Foundation/Electric Umbrella Images

#### Design/Digital Production

Tatjana Vukoja, Department of Surgery Communications

**Editor:** Dr. Ivar Mendez

**Contributor:** Dr. Daryl Fourney