

OPEN SKIES

Department of Surgery Newsletter

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2014 Graduating Class

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UNIVERSITY OF
SASKATCHEWAN



 Regina Qu'Appelle
HEALTH REGION

CHAIRMAN'S MESSAGE



My first year in Saskatoon has been tremendously positive, I am grateful for the support of all the members of the Department that have helped to expand my knowledge of the Department, the College of Medicine and the Health Region. I have learned a lot this past year and this awareness of the issues, challenges and aspirations of our members will be crucial as we construct, together, a road map of the future.

Enhancing research has been a priority and with the opening of the Surgery Clinical Research Center on the 2nd floor of the A-wing in the hospital, the Department has for the first time dedicated space for clinical research. We have also held the first competition for seed funding aimed at supporting the research endeavors of our young faculty. Six surgeons each received 20,000 dollars in seed grants to help them kick start their research programs. The Department Research Day was very successful and will continue to support resident research across the Department.

Significant achievements in the creation of unique and innovative programs such as the Surgical Humanities Program and the Remote Presence Robotic Program. Our Department continues its unprecedented expansion; we have recruited 12 new surgeons in the past year alone to strengthen most surgical divisions. Our graduates have achieved 100% pass rate in the Royal College Exams and plans are underway to start fellowship programs in several specialties.

We have accomplished a lot during the past 12 months and we look at the future with optimism. I want to thank again all our faculty, residents, clerical and support personnel for your contributions in making this past year a success.

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

ON THE COVER: 2014 Graduating Class
(left to right): Ian Lutz (Ortho), Peter Graham (General), Blair Ogle (Ortho), Jordan Buchko (Ortho), Lygia Perron (General), Deirdre Nunan (Ortho)
Missing: Deng Mapiour (General)

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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.



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DEPARTMENT OF SURGERY SPRING 2014 AWARD RECIPIENTS



L-R: James Ardell, Nick Baniak, Marilyn Baniak

A convocation, from the Latin *convocare* meaning “to call or come together”, a translation of the Greek *ekklēsia* is a group of people formally assembled for a special purpose.

On June 6th, 2014 the College of Medicine Class of 2014 were formally assembled for convocation, a date set aside to celebrate hard work and accomplishment for many undergraduate medical students. The Department of Surgery annually presents two undergraduate students with the Professors’ Prize in Surgery and the Dr. Hugh MacLean Silver Medal and Prize in Surgery.

Congratulations to James Ardell, winner of the Professors’ Prize in Surgery. This award recognizes the undergraduate student in the

graduating class that has shown the greatest promise as a future clinical surgeon.

Congratulations to Nick Baniak, winner of the Dr. Hugh MacLean Silver Medal and Prize in Surgery. This award is given annually to the undergraduate student who shows the highest proficiency in surgery. Named for Dr. Hugh MacLean of Regina, MacLean has been described as the “*spiritual godfather*” of both the University of Saskatchewan Medical School and the University Hospital for his work in Medical Health Service.

Awards were presented by Marilyn Baniak, the Department of Surgery Undergraduate Education Coordinator. Also presented at this year’s convocation was a Special Recognition

The best preparation for tomorrow is to do today’s work superbly well.

- William Osler

Award, given to Marilyn Baniak, on behalf of the College of Medicine Class of 2014 Graduation Committee. The award was given in recognition of the exceptional work and kindness she shows to the medical students.



Marilyn Baniak

MEET OUR NEW FACULTY



Dr. GAVIN BECK
General Surgery

Dr. Beck is from Halifax, Nova Scotia where he attended St. Mary's University. He graduated with a Bachelor of Science degree with honors in chemistry and major in biology. Dr. Beck obtained his medical degree from Dalhousie University graduating in 2007. From there he spent five years at the University of Saskatchewan completing his General Surgery residency training and achieved FRCSC certification in General Surgery June 2012. Saskatoon became home to him and his wife, Amy, and their three children, Reece, Keelin and Heidi. They are all looking forward to returning home.

Over the past 2 years Dr. Beck completed a clinical fellowship in London Ontario at the University of Western Ontario/London Health Science Centre. Dr. Beck attained skills for liver and kidney transplant through the American Society of Transplant Surgeons (ASTS). He also received specialty training in non-transplant hepato-pancreatico-biliary surgery. He will join the Division of General Surgery focusing in renal transplant and HPB and will work to expand our renewed transplant program.



Dr. RAYMOND DEOBALD
General Surgery

Dr. Deobald grew up in Saskatchewan and completed his Bachelor of Science and Medical Degree at the University of Saskatchewan. He completed his General Surgery residency and obtained his FRCSC in 2012.

With his family, he then moved to Toronto to complete a two-year Surgical Oncology Fellowship at the University of Toronto. His clinical interests during his fellowship have focused on the management of sarcoma, melanoma and breast cancer as well as minimally invasive treatments for GI malignancies.

Dr. Deobald will join the Division of General Surgery and will be a key member of the surgical Oncology Program.



Dr. SARAH MUELLER
General Surgery

Dr. Mueller grew up in rural Alberta near the Rocky Mountains. She completed an undergraduate Bachelor of Science degree with Great Distinction in Biochemistry followed by a Medical Doctorate at the University of Saskatchewan. She finished her general surgery residency at the University of Saskatchewan in 2013, training in both Saskatoon and Regina. After obtaining her FRCSC, she procured a one year Acute Care Emergency Surgery and Trauma Fellowship at the University of Alberta in Edmonton. Throughout the year she was exposed to a wide array of complex acute surgical cases, multi-system trauma patients and critical care.

Dr. Mueller is a fellow of the Royal College of Surgeons and member of the Canadian Association of General Surgeons and Trauma Association of Canada. She is highly involved in medical student and resident education as an active instructor in both ATLS and ATOM. She is excited to bring her expertise in acute surgical management and trauma to Saskatoon where there are many opportunities for collaborative team work and education.

In July of 2014, Dr. Mueller will begin her practice with the Division of General Surgery. Go Riders!



Dr. JOHANNES VAN DER MERWE
Orthopaedic Surgery

Dr. Van Der Merwe was raised in South Africa. He successfully completed his medical school at the University of Pretoria, South Africa. He proceeded on to do an internship in Windhoek Central Hospital, Namibia. This was followed by one-year of community service in Potchefstroom Central Hospital, South Africa. His family then emigrated to Canada where he worked as a family physician in La Ronge, Saskatchewan for 3 years. He started his five year residency in Orthopaedic Surgery at the University of Saskatchewan in 2006. This was followed by an Adult Reconstruction fellowship at the University of Saskatchewan for 6 months and a 12-month fellowship in Adult Reconstruction, at the University of British Columbia. During his fellowship he was not only involved in clinical and academic practice but also in resident teaching and research.

He joined the Division of Orthopaedic Surgery at the end of December 2013 and has focused his practice in primary and revision hip and knee arthroplasty.



Dr. VARUNKUMAR BATHINI
Urology

Dr. Bathini is a native of Edmonton, Alberta. After pursuing undergraduate studies in the Department of Pharmacology at the University of Alberta he moved to Saskatoon to obtain his medical degree from the University of Saskatchewan. He then moved to London, Ontario, with his wife, where he completed his residency training in urology at Western University. Most recently, this June Dr. Bathini obtained his FRCSC and in the same week became a first-time father.

Dr. Bathini has interest in robotics and undergraduate teaching, he will join the Division of Urology.



Dr. KRIS MILBRANDT
Pediatric Surgery

Dr. Milbrandt grew up on a small farm near Yorkton, Saskatchewan. He finished his medical school and general surgery residency training at the University of Saskatchewan in 2007. He then did his Pediatric Surgery Fellowship in Calgary finishing in 2009. Dr. Milbrandt has worked the past five years at the Children's Hospital in Winnipeg. For the past three years, he has been the Surgical Undergraduate Director with the College of Medicine and has revamped the Surgical Undergraduate Clerkship Program. He is currently working on his Masters of Education through the University of Dundee with an interest in student and faculty evaluation processes. He has helped develop and lead the ECMO program at the Children's hospital and, as well, has a special interest and expertise in chest wall deformities.

Dr. Milbrandt will be a key member of our Pediatric General Surgery Program. He brings with him his wife Shanna, who is a family doctor, and their three children. He is a pilot and loves flying, scuba diving, golf, and wine.

CARDIOVASCULAR RESEARCH

- DR. ERICK MCNAIR



The overarching focus of this research program is to enhance clinical outcomes of the elderly population undergoing cardiac surgery. Data gathered from the Division of Cardiac Surgery, Department of Surgery, at the Royal University Hospital shows that up to 40% of the patients undergoing heart surgery are seniors. The postoperative mortality of patients' undergoing cardiac bypass grafting surgery under 65 years of age is 5% or less. However, the postoperative morbidity and mortality of patients undergoing the same procedure increases with age. The reason for the higher mortality in symptomatic elderly patients is due to their greater proportion of pre-existing conditions such as: diabetes, stroke, previous myocardial infarction, renal failure, and hypertension which lead to poor short-term outcomes resulting in delayed recovery, prolonged hospital stays, and increased medical care costs.

Our research proposes that earlier intervention through the

development of novel biomarker data can prevent these conditions from causing complications following cardiac surgery.

The hypothesis of my research program is: Biomarkers of organ function are predictors of clinical outcomes of the elderly undergoing cardiovascular surgery. The research project subsets designed to address this hypothesis are: (1) To investigate the serum levels of advanced glycation end products (AGEs), and the soluble receptor for advanced glycation end products (sRAGE) pre, peri, and postoperatively in relationship to diabetes-induced organ dysfunction; (2) Use of biomarkers to assess the impact of differing methods of blood filtration after cardiopulmonary bypass on clinical outcomes over the postoperative period (3) Use of biomarkers in cardiac surgery to assess administration of inhaled agents that are postulated to reduce valve related pulmonary hypertension pre, peri and postoperatively; (4) use of s-100B protein to assess neurocognitive

dysfunction (stroke: pump head); and (5) use of surfactant protein-D as a marker for lung injury (pump-lung). The goal is to decrease the risk of complications through the use of biochemical markers for organ damage.

My doctorate studies in pathology with a focus on cardiac biomarkers, combined with a clinical position as a perfusionist has placed me in a unique position to access the proposed study population and to recruit a dedicated team of health care professionals to collaborate with on this program of research.

This collaborative team consists of cardiovascular surgeons; a neurologist; an endocrinologist; perfusionists; anesthesiologists; a clinical chemist; intensive care physicians; a statistician; and a research nurse. I will also mentor surgical residents and graduate students.

Our recent publication in peer-reviewed literature has already demonstrated that the information gained from biomarker technology is useful in enhancing clinical outcomes over the post-operative period of cardiac surgical patients. This study led to an increased awareness and supports the vision of biomarker discovery.

Elderly patients undergoing cardiothoracic surgery will gain from this program of research because it will impact their incidence of postoperative complications, resulting in decreased hospital stay, and decreased medical costs.

DIVISION OF ORTHOPAEDICS RESIDENT RESEARCH DAY



Division of Orthopaedic Surgery Research Day was held on Friday, May 23rd, 2014 at the Health Sciences Building at the University of Saskatchewan. The event started off with opening remarks by Dr. Elliot Pally, Research Director for the Division of Orthopaedic Surgery, Department of Surgery, University of Saskatchewan.

The success of the day was seen in the range of topics presented from knee replacements to spine deformities. Attendees learned about the effect of sleep deprivation on the performance of simulated arthroscopic surgical skills and the social determinants of health were also explored.

Dr. Ted Tufescu, Assistant Professor at the University of Manitoba and the Head of Research for the Orthopedic Trauma Group was this year's keynote speaker. He completed his Orthopaedic training at the University of Saskatchewan and obtained specialty fellowship training in Orthopaedic Trauma at Sunnybrook Health Sciences Centre in Toronto, where he also began his practice. Dr. Tufescu currently practices at the

Health Sciences Centre in Winnipeg, MB where he focuses on complex Orthopaedic Trauma and post-traumatic problems.

The winner of the platform presentations was Jordon Bucho, with second place going to Susan Nelson and honourable mention to Shady

Fox, PGY3 for her presentations.

For more information on research in the Division of Orthopaedic Surgery, please go to the website at

<http://www.medicine.usask.ca/surgery/divisions/orthopaedic-surgery/residency-training/resident-research.php>

AWARD WINNERS



Dr. Jordon Bucho, PGY5

Knee Chondrolysis Associated with Bupivacaine / Epinephrine Infusion through an Intra-articular Pain Pump Catheter Post Arthroscopic

1



Dr. Susan Nelson, PGY4

The Pediatric International Knee Documentation Committee Subjective Knee Evaluation (Pedi-IKDC) Form: Normative Data

2

IN MEMORIAM

**Dr. Krishna Kumar
1931 - 2014**

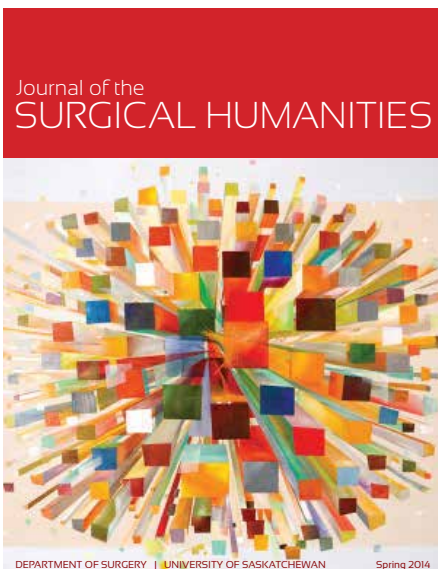
The surgical community in Saskatchewan and Canada received the sad news of the recent passing of a respected and beloved colleague, Dr. Krishna Kumar from Regina, Emeritus Clinical Professor, at the University of Saskatchewan.

Dr. Kumar was a tireless and compassionate neurosurgeon who for 51 years provided exemplary care to the citizens of Regina. His dedication to neurosurgery and his patients was uncompromising and he was an active member of the Division of Neurosurgery at the Regina General Hospital until his passing at the age of 83. Dr. Kumar was an international pioneer in functional neurosurgery and made significant contributions in our

understanding of the effectiveness of neuromodulation therapies for chronic pain. His innovative papers assessing the cost effectiveness of spinal cord stimulation and the effects of waiting times in neuromodulation outcomes for chronic pain will serve as a solid platform for future research in health economics of neurosurgical procedures.

Dr. Kumar received numerous awards and recognitions during his career among them, the Giant in Neuromodulation Award by the International Neuromodulation Society. He was named to the Order of Canada and the Order of Merit of the Province of Saskatchewan and received the Physician of the Year award by the Saskatchewan Medical Association. However, it was the devotion to his community that characterized Dr. Kumar's career which was recognized by naming him citizen of the year in Saskatchewan and even having a street named after him in his beloved Regina. His memory will live in all of us and in his patients who attended, by the hundreds, to his funeral on April 15, 2014.

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F.H. Wigmore Professor of Surgery



Read the first edition of the
Journal of the Surgical Humanities,
a key component of the Surgical Humanities Program at the
University of Saskatchewan.

www.usask.ca/surgery