

OPEN SKIES

Department of Surgery Newsletter

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Team Broken Earth Saskatoon Mission to Haiti 2016

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UNIVERSITY OF
SASKATCHEWAN



Regina Qu'Appelle
HEALTH REGION

CHAIRMAN'S MESSAGE



The Gap of inequality in the world is a daily reality for millions of people that face war, famine and natural disasters with the poor and marginalized being affected to a greater degree. Although we are aware of all these issues as we are constantly exposed to them in the media, they are peripheral to us and remain on the television set or the newspaper print and have no real impact on our lives. Why should we care? Do we need to care? I believe that not only we should care but that we have a personal responsibility to do something about it. It is clear that we are not ignorant about the dire straits of the poor and their situation; it is just that they are below our radar screen of action.

We live in a society where our basic needs of food, shelter, personal safety, education and health care are met. Furthermore, we have the tremendous privilege to have the opportunity to realize our potential as individuals and build a future for ourselves and our families based on our talents and effort. Can an individual make a difference? One may appropriately ask. After all, world inequality has existed forever and one may think that this task belongs to the realm of world politics, national governments or international organizations and agencies. This issue of OPEN SKIES features the work of a multidisciplinary team of 28 volunteers from our institution that provided medical care, education and completed approximately forty surgeries during a mission to Haiti.

The Department has made the surgical humanities a pillar of our mission and we are committed to our social responsibility encouraging sustainable surgical outreach undertakings regionally, nationally as well as globally.

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

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SASKATOON'S FIRST MISSION TO HAITI

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Team Broken Earth is a volunteer task force composed of physicians, nurses, physiotherapists and allied health professionals from across Canada. The program is intended as a relief effort in response to the devastating 2010 earthquake in Haiti that left thousands of people in dire need of medical help. It was initiated through the efforts of Dr Andrew Furey and Dr Art Rideout from St John's, Newfoundland.

This relief effort has continued over the last several years through the work of Canadian medical volunteers who have travelled to Haiti to provide care and work in conjunction with the local Haitian medical staff. Teaching and sustainability are an essential part of the program.

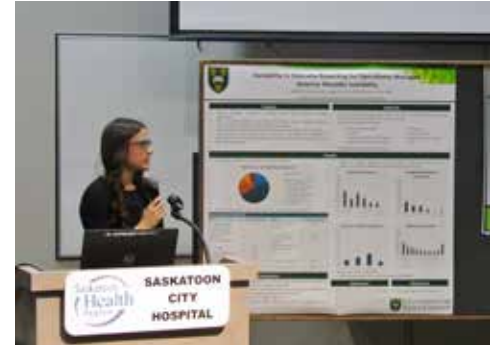
Team Broken Earth Saskatoon was assembled to join the Broken Earth effort in Haiti. Our first mission to Haiti was in March of 2016. Our twenty-eight member team provided care and teaching in emergency medicine, nursing, physiotherapy, internal medicine, and pathology. Together with our team anesthetists, we also provided orthopedic, general, and plastic surgical services and teaching. We completed approximately forty surgeries during our week in Haiti. We spent many hours with local staff caring for patients, and there was an excellent mutually beneficial exchange of knowledge and information.

We plan to continue to work with Broken Earth through our liaison with staff at the Bernard Mevs Hospital in Port au Prince. It was a pleasure to work with the friendly, knowledgeable, and dedicated local Haitian healthcare professionals, and we are very much looking forward to our return. There is a great deal of work still to be done.

If you would like to become involved with Broken Earth, please email rees.h@shaw.ca.



(Photography credit to Travis Horn, Thorn Images and Productions)



Dr. Suzie Hariman (General Surgery) Top Image: Dr. Laura Sims (Orthopedic Surgery)

The Department of Surgery has continued to expand its research activities at all levels. New research opportunities are available for our faculty, residents and students.

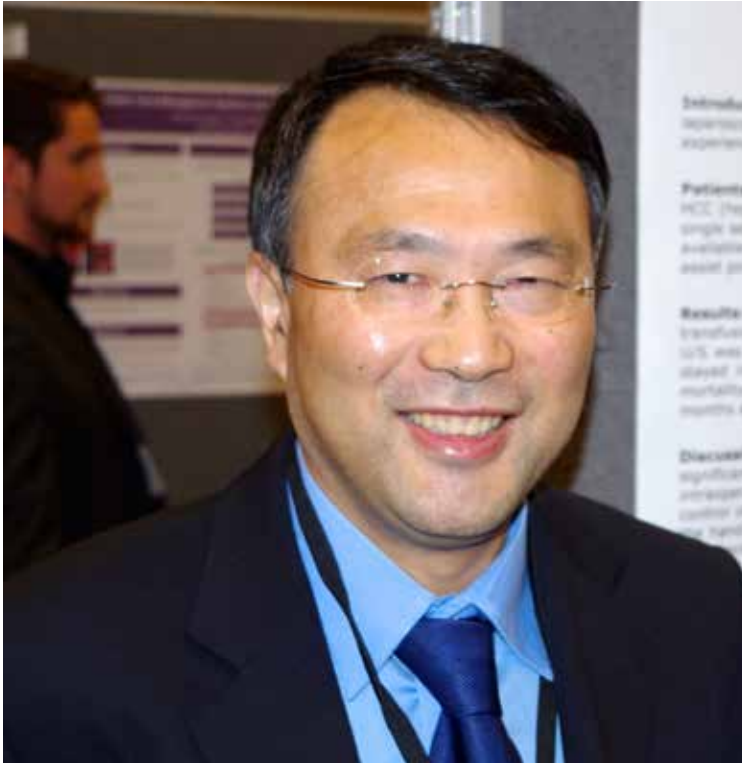
Major achievements in the past year have been the appointment of Karen Mosier as the Department's first research navigator and the hiring of a dedicated statistician to support research in the Department. We have established the first series of research workshops and seminars on research themes aimed at enhancing knowledge for grant writing and submission of research proposals by our residents and faculty.

Our Research Director Nael Shoman and the Research Committee have put together a comprehensive strategy to enhance research productivity in the Department by facilitating seed funding for projects and support for publication of papers and presentations at national and international meetings. This strategy is already bearing fruits as the Department had one of the highest number of successful applications for the recent College of Medicine Research Awards (CoMRAD). Our success rate on funding awards from regional and national research agencies is also steadily increasing which is a direct reflection of the Departmental emphasis and support of research.

Our invited guest lecturer was Dr. Michael Chu, a cardiovascular surgeon from Western University in London, Ontario and an alumnus of our College of Medicine presenting *Embracing Minimally Invasive and Transcatheter Techniques - Lessons from Cardiac Surgery*. The award recipients for 2016 Resident Research Day are as follows Suzie, Harriman, Orthopedic Surgery (Excellence in Research), Amanda Hall, General Surgery (First Place - Platform Presentations), Jeffrey Gu, General Surgery (Special Judges Award), Laura Sims, Orthopedic Surgery (First Place - Poster Presentations) and Kayleen Wingert and Reed Gillanders, Undergraduate Medical Education (Joint winners of Dash & Reed Research Award). The program including abstracts for research day can be found on our website at <http://medicine.usask.ca/department/clinical/surgery-pages/research.php>.

FIGHTING KIDNEY DISEASE

05



DR. YIGANG LUO

Division of General Surgery,
Clinical Professor, Department of Surgery

New Perfusion Technique to Preserve, Assess & Repair Donor Kidneys Before Transplantation

Kidney transplants has been very successful in the treatment of end-stage kidney failure patients with more than 80% of patients surviving for more than 10 years with a good quality of life. Currently, over 3300 Canadians are waiting a kidney transplant. Sadly, due to the shortage of kidney donors, typically one third of patients die while on the waiting list.

Dr. Yigang Luo, a clinician-researcher from General Surgery, in the College of Medicine is hoping to change these disheartening statistics. Together with his team members, Mark Rosin, Barbara Ambros, Tamalina Banerjee, Ahmed Shoker, Mike Moser, Aaron Daters, Evan Barber, Reed Gillanders, Rahul Mainra, and Raelene Petracek, they received funding from the Saskatchewan Health Research Foundation, Medtronic Canada and Sorin Group Canada to assess a new perfusion technique that they designed to prevent injury to a donor kidney by perfusing it with blood to keep it at normal body temperature until it can be transplanted into the recipient. Injury can occur when the organ has a restricted blood supply to its tissues causing a shortage of oxygen and glucose needed to keep the tissue alive. This simple method will warm the kidney by circulating blood through it blood vessels.

The advantage of this perfusion technique is that it will allow clinicians valuable time for assessment and repair of the kidney before implantation. Assessment of kidney function before implantation is not standard practice due to worry of further injury to the donor kidney. This new technology has the potential to significantly reduce the number of kidney transplant complications and/or failures. Furthermore, it is a little known fact that unfortunately one out of every 6 of donor kidneys are discarded each year due to questionable kidney function. Dr. Luo and his team's research has the potential to rescue previously un-useable donor kidneys and preserve, assess, and repair them under close-to-normal physiological conditions and ensure their functionality before implantation. This perfusion technique is also applicable for use in other types of organ transplant surgeries.



DR. FRANCISCO GARCIA

Division of Urology, Clinical Assistant Professor, Department of Surgery
Swift Current, Saskatchewan

Functional Urology and Andrology in the Southwest

Surgical expertise doesn't always gravitate towards large urban centres, and this is the case in Swift Current as the Cypress Region brought in Dr. Francisco Garcia to not only fill a void in Urological services, but to expand the program to serve those beyond their borders. Dr. Francisco Garcia trained in London, Ontario to achieve his Urology designation, and then completed a fellowship in Andrology and Sexual Medicine under a globally recognized leader in the field. He is a member of the Sexual Medicine Society of North America, and is currently pursuing accreditation through the International Society for the Study of Women's Sexual Health.

He has a passion for the quality of life aspects of medical care, and constantly asks the question, "what do we do now?". This has led him to a field where he can spend time trying to return patients to their baseline function whether that be after a disease or treatment. He has publications in penile curvature correction and prostate cancer rehabilitation. "After a patient has lost their baseline function as a result of us treating their cancer, it is our duty to return them as close as we can back to that baseline," says Dr. Garcia, "too often the patient is living with fixable complications because they do not want to seem ungrateful to their surgeon or oncologist."

Currently, Dr. Garcia has been receiving referrals from the Saskatchewan Cancer Agency for some of these patients, and has had great success. He offers services for correction of erectile dysfunction, penile curvature reconstruction, urinary incontinence and prosthetic urologic surgery including artificial sphincters and penile prosthetic devices. He emphasizes that this is one population that can be better served with post-treatment intervention, and other populations can also be assisted, such as those after radical colorectal and gynecologic surgery, or those suffering consequences from hormone therapies.

ADVANCEMENTS IN NEUROSURGERY

07



CAUTION: INVESTIGATIONAL DEVICE (LIMITED BY UNITED STATES AND CANADIAN LAW TO INVESTIGATIONAL USE)

Cerebral brain aneurysms are relatively common affecting 2-5% of the population. Treatment options involve open surgical clipping or endovascular repair.

Ongoing advances in the endovascular repair of brain aneurysm now allows more complex aneurysms to be treated. One new option for wide neck bifurcation aneurysm repair is the use of the WEB device which is placed within the aneurysm. This device allows for treatment of more complex aneurysms.

Dr. Lissa Peeling performed the first implantation of the WEB device in Canada in the spring of 2016. This was done under the context of a health Canada clinical trial. Two patients were treated successfully with the device.

The neuroendovascular program at Royal University Hospital treats all the patients in Saskatchewan with complex cerebrovascular disorders. The use of new technology, especially in the context of clinical trials, allows the residents of Saskatchewan to have access to the best treatments for their cerebrovascular disorders.



*Dr. Lissa Peeling, Division of Neurosurgery,
Clinical Assistant Professor, Department of Surgery*

SURGICAL HUMANITIES PROGRAM



Guy Few, June 2016 Surgical Grand Rounds Speaker

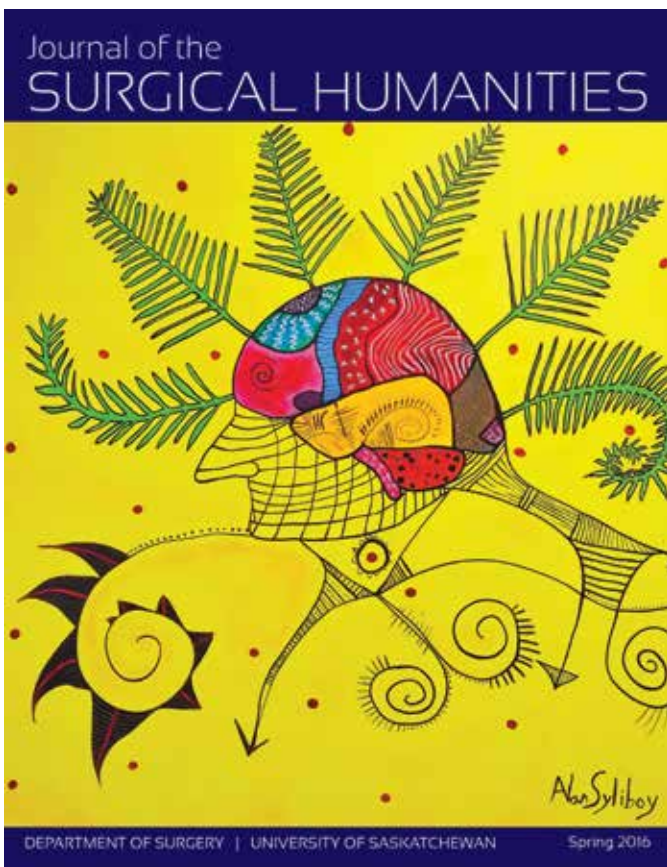
On the 9th of June, the Department of Surgery's Surgical Humanities Program was privileged to play host to national and internationally acclaimed trumpet player and pianist, Guy Few. Guy addressed the surgical faculty, residents and medical students, as well as numerous other guests at Surgical Grand Rounds and his electrifying talk described how he had dealt with and overcome his own challenges after two neurosurgical operations ... and how, each time, he was able to return to his internationally recognized and lauded heights of performance.

At the Department of Surgery, our Surgical Humanities Program seeks to educate, but primarily to engage surgeons, residents and medical students as well as the wider medical community in the humanities. We believe that without a full, rich and satisfying engagement with art, music, history, drama and literature, physicians may become excellent scientific men and women, but perhaps without that experience of the human story - the humanities - which enriches, informs and completes our education and practice as physicians.

The Journal of The Surgical Humanities is published twice a year (Spring and Fall editions) and seeks to fulfill this mandate. We carry articles that showcase the arts, history and literature in a way that provides an enduring channel by which medical and non-medical authors may engage with the humanities and reawaken perhaps, that longing to create something that will make our lives more complete.

The Grand Rounds in the Surgical Humanities contributes importantly to this goal. We also host an Annual Surgical Humanities Day and a monthly program of Readings in The Surgical Humanities.

Contributed by Francis Christian
Director, Surgical Humanities Program



COMING SOON ...

NEW ISSUE OF THE JOURNAL OF THE SURGICAL HUMANITIES