

Global Surgery Office Newsletter

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Operation Smile

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Most of you are probably aware, on some level, of the important work that Operation Smile, a global children's medical charity headquartered in the United States, conducts in low resource countries. As is evident in their name, they give the gift of a smile by providing free, safe reconstructive surgery for those born with a cleft lip and/or cleft palate. This life saving measure is only made possible through the generosity and selfness of their international volunteer group.

A member of that dedicated group of volunteers is Dr. Ken Wilson, head of the division of plastic surgery at the IWK Health Centre. In 1995, Dr. Wilson completed his first mission with Operation Smile. Since then, he has completed one shy of 40 missions (essentially 2 per year since he first became involved) and has performed surgeries on an astounding 1,000 patients in more than 16 countries, including Bolivia, Peru, Guatemala, Kenya, Madagascar, Vietnam and India.

One of the inspiring experiences that Dr. Wilson recounted to Janice Landry for her article in the Spring 2013 edition of 'Living Healthy in Atlantic Canada' entitled *Bring on the smiles* is as follows:

"This man had two sons. They had walked for four days to get to us. He had sold his house and a cow to get the money to travel with these two kids, without knowing whether he was going to get the surgery for them: it was for opportunity only. [One son had] quite a severe cleft lip and the other was less severe, but certainly a noticeable cleft. We decided we'd do them on the same day, so they could recover and get back home. The father was wearing a New York Mets baseball hat – hard to believe in Madagascar. He had sold everything, and this was clearly a treasured possession, but he offered it to one our group as thank-you. They turned it down."

According to the Operation Smile website, a child is born with a cleft every three minutes, and a child born with such a condition is two times as likely to die before turning one. That is why, since 1982, the organization has performed 220,000 surgeries in over 60 countries. Teams include, but are not limited to, volunteers from a variety of medical professions including surgery, anesthesiology, nursing, speech therapy and dentistry and child life specialists.



Dr. Wilson (far left) with colleagues on one of his missions

Operation Smile not only performs shortterm clinical missions, but has also established your-round medical centres and provides educational programs, training and donates resources to help low and middle income countries become self-sufficient so that more children can be treated by local surgical teams. The organization was one of the first to advocate for access to safe surgery in austere environments and is heavily involved in researching the origin, treatment, prevention and eventual elimination of cleft lips and palates.



An Operation Smile patient

A typical mission with Operation Smile is nine days in duration plus travel time. The first two days are spent assessing patients and one day is spent setting up the hospital with five days of surgery. There is also a "team day" before surgery starts that allows volunteers to see the local sights and experience their surroundings.

Quite simply, the gratification that Dr. Wilson receives from his volunteer work is why he keeps doing it. As he puts it: "You have a group of people working toward one goal. You really feel like you've done something useful with your talents... It renews you. You come back and say, 'Okay, this is why I do medicine.'"

For more information on Operation Smile, visit www.operationsmile.org.



Dr. Wilson (centre) with colleagues on one of his missions.

Updates to the GSO Operational Committee

Please join us in congratulating Dr. Gavin Tansley on his acceptance into the London School of Hygiene and Tropical Medicine where he will be completing his Masters in Public Health. Gavin will be gone for a year and will be returning the fall of 2015.

We are extremely happy to welcome Dr. John LeBlanc (Pediatrics and Dalhousie Global Outreach Office) and Dr. Nikita Hickey (PGY1) to the team.

Dr. Jon Bailey recently transferred to the Department of Anesthesia - he is greatly missed. We wish him all the best in his new role and hope to partner with him on future global health initiatives to continue the valuable work he conducted while part of the GSO.



Tygerberg Trauma Surgery Elective

Dr. Greg Knapp

From June 30th to August 29th I was a member of the Trauma Surgery Team at Tygerberg General Hospital in Cape Town, South Africa. Tygerberg is a large tertiary referral center and teaching hospital affiliated with Stellenbosch University.

The primary objective of the elective was to gain broader exposure to the resuscitation and operative management of the trauma patient with penetrating injuries. The secondary objectives focused on surgical skill development in a low resource/high resident autonomy environment and exposure to trauma team organization and surgical education in a large international tertiary care trauma center

The Hospital's enormous emergency department has a separate trauma unit, with 20 evaluation beds and a separate six-bed resuscitation area. Over 1,000 people were seen in the trauma unit between July and August 2014.

The first month was quite a transition. First and foremost, there are significantly tighter restrictions on imaging and resource utilization. Residents must draw all their own blood work and justification is needed for even the most 'minor' request (i.e. LFTs). The residents also face considerably more autonomy and as such face more responsibility and greater accountability for operative/patient care decisions. At night, the trauma resident is the sole provider of care for the fully ventilated six-bed resuscitation unit, the in-patient trauma ward and all new trauma consultations/ORs.

The first month of call I completed with an in-house junior consultant as I learned the ropes. The second month of 1:4 call I completed alone as the in-house 'trauma registrar'. I logged 41 trauma cases as primary operator, which included 15 trauma laparotomies, one ED thoracotomy and one emergent OR sternotomy. With such a high incidence of penetrating trauma, there is a significant amount of vascular extremity injury. Over two months I logged 16 vascular extremity repairs.

In Halifax, the proportion of penetrating-to-blunt trauma is the opposite of that seen at Tygerberg. However, the management of the unstable patient with penetrating abdominal trauma is the domain of the General Surgeon and is required knowledge for Royal College examination. The elective in Tygerberg provided the exposure to high volume trauma and operative management of the trauma patient that is a potential weakness of our domestic training. The experience highlights several other benefits of international electives, including exposure to: a different healthcare system and organizational structural; resource constraints that require different treatment algorithms and an emphasis on basic physical exam; a different surgical education system with different responsibilities and expectations; new mentors/instructors with new approaches; and a different burden of surgical disease that can complement domestic exposure.

The experience exceeded my expectations and I left after two months content that my objectives had been met. The experience also highlighted the role of international electives in resident training, the benefits of which are increasingly well documented in the literature by partnerships out of UCSF, Columbia and Brigham and Women's Hospital.



Tygerberg General Hospital in Cape Town, South Africa

Team Broken Earth - Haiti

Dr. Chad Coles

Following a very successful trip in November 2013, a second team from Halifax travelled to impoverished Haiti in April 2014 to deliver much needed medical care and education. Team Broken Earth is a Canadian charitable medical organization, initially started in St. John's Newfoundland, which has now expanded to include teams from Alberta, BC, Ontario, and now Nova Scotia. By partnering with this already established humanitarian effort, we have been able to coordinate with the other teams to deliver more organized sub-specialty care and medical education to the local healthcare workers.

This most recent group of 20 physicians and nurses included Department of Surgery Members: Dr. Chad Coles (Orthopaedics) and Dr. John Stein (Plastics), as well as Dr. David McCartney (Ortho fellow) and Dr. Megan Gillis (Ortho resident). We were joined by our colleagues from the Department of Anaesthesia: Drs. Janice Chisholm and Tobias Witter, as well as physicians and nurses from Emergency Medicine, Intensive Care, Paediatrics, and the OR.



Members of the second Halifax Team

On each trip, we have been able to include residents from Surgery and Emergency Medicine in the team. This provides a unique learning opportunity in Global Medicine which is certain to have a lasting impact on these trainees and their future careers. We hope to be able to continue to offer these unique opportunities during future trips.

In addition to providing quality care for the Haitian population, education of the local physicians and nurses remains a priority. This trip we were even more successful in providing organized teaching sessions. In the future, we plan to further expand our educational delivery.



Teaching suturing skills to Haitian medical students

We are currently organizing a team for January 2015, and hopefully another in the spring. For more information on how you can become involved, contact Mr. Marc Butler: Marc.Butler@cdha.nshealth.ca.

For more information about Team Broken Earth, or to contribute to this worthwhile cause, go to www.brokenearth.ca.