

**Summary of current McMaster Global Surgery activities:**

The McMaster International Surgery Desk (ISD) and its Director are supported by the Department of Surgery with a mandate to: *promote the Development of partnerships, include Education in all projects, encourage Service to low and middle-income countries, and contribute to Knowledge generation.*

The ISD is currently focused on development of educational partnerships with Guyana and Uganda, which have included resident and faculty exchanges, research collaborations, and development of training courses.

Educational activities include an annual Global Surgery lecture, an annual ISD travel scholarship for a surgical resident elective, and lectures to graduate students in the Global Health program. We also collaborate with an online journal club for residents training through the College of Surgeons of East, Central and South Africa

Many individual faculty are involved in global surgery service projects and international professional collaborations, as well as a leading a number of multi-institutional clinical studies including collaborators in LMICs.

ISD global surgery research projects have been supported by the McMaster Surgical Associates, with presentations at numerous international surgical conferences over the past 5 years. In 2015, the ISD co-authored 8 publications and 4 posters. In 2014 we hosted the Bethune Round Table on International Surgery in Hamilton.

The ISD collaborates locally with the McMaster Global Health Office, the St. Joseph's International Outreach Program, and the Departments of Anesthesia and Obstetrics & Gynecology.

Nationally we are members of the Canadian Network for International Surgery, the Canadian Coalition for Global Health Research, and we are part of the international GlobalSurg collaboration.

The ISD website <http://fhs.mcmaster.ca/surgery/isd/index.html> has copies of our newsletters and annual reports.

MacOrtho has a webpage featuring their Global Outreach:

[http://fhs.mcmaster.ca/macortho/our\\_global\\_outreach.html](http://fhs.mcmaster.ca/macortho/our_global_outreach.html).

## **DEVELOPMENT OF SUSTAINABLE PARTNERSHIPS:**

### **GUYANA:**

McMaster's Department of Surgery has collaborated in the development and delivery of a Postgraduate Diploma in Surgery program in Guyana since 2006. This activity was summarized in the lead commentary article in the February 2015 issue of the Canadian Journal of Surgery "Surgical training in Guyana: the next generation" coauthored by Dr. Brian Cameron with Dr. Martin and Dr. Rambaran from Guyana. Trauma Team Training courses have been delivered and evaluated, research projects have been presented by program graduates at international conferences, and clinical programs in plastic surgery, endoscopy and trauma have been developed. The goal of the partnership is to improve surgical care in Guyana, support clinical and educational research, and make training programs more locally sustainable.

A number of Guyanese surgeons have undertaken clinical fellowships through McMaster in both thoracic and general surgery. In June 2015 Dr. Cheetanand Mahadeo completed his Thoracic Surgery Fellowship at St. Joseph's Hospital and has returned to Guyana where he is based at the Georgetown Public Hospital and is building his practice in general and thoracic surgery.

### **UGANDA:**

The longstanding partnership between McMaster, the St. Joseph's International Outreach Program (SJIOP) and the three main medical training centres in Uganda (Makerere, Mbarara and Gulu) has encompassed a number of collaborative efforts with surgical faculty.

McMaster's Division of Orthopaedic Surgery, led by faculty Dr. Brad Petrisor, Dr. Desmond Kwok, and Dr. Jay Moro, continue their annual April team visits to Uganda in collaboration with UBC's Uganda Sustainable Trauma Orthopaedic Program/USTOP. The McMaster team including two surgical residents, OR nurses and a physiotherapist was involved in teaching and clinical work in Kampala. They provided basic and advanced saw-bones bioskills courses, a perioperative nursing safe surgery course, and impromptu teaching during ward rounds. In 2015, the group presented the MacOrtho for the first time.

Dr. Susan Reid (Chair, Department of Surgery, McMaster University) visited Makerere, Mbarara and Gulu with leaders of the SJIOP in April to meet with Ugandan surgical leaders to establish partnership priorities. In September, Dr. Brian Cameron and general surgeon Dr. Margherita Cadeddu attended the Global Partners in Anesthesia Conference and taught a basic laparoscopy course for surgical residents in Kampala.

McMaster continues to welcome Ugandan surgeons as observers or trainees: pediatric surgeon Dr. Phyllis Kisa visited in 2015, and Dr. Edward Kironde will undertake six months of orthopaedic training at McMaster in April 2016 through the SJIOP. A number of McMaster surgical residents have also completed international electives in Uganda.

### **HAITI:**

The Hamilton based St. Joseph's International Outreach Program has an active partnership with Haiti, and surgical faculty including orthopedic and plastic surgeons have visited Haiti.

### **EDUCATION IN INTERNATIONAL SURGERY**

The 2015 ISD Resident Scholarship was awarded to Dr. Matt MacLeod (PGY4 Ortho) who joined the MacOrtho team for their annual teaching and clinical visit to Uganda. He helped deliver the first international MacOrtho Acute Musculoskeletal Trauma Limb Support (AMTLS) course to Ugandan surgeons.

Dr. Jessica Westerholm Kwapis (FRCS 2011) presented surgical rounds in December about her several years of mission work in Nepal. Dr. Cameron gives an annual lecture to students in the MSc Global Health program about the Global Burden of Surgical Disease.

Dr. Cameron collaborates with colleagues in Toronto, Ireland, and East Africa in online evidence-based journal club – Surgery in Africa, for surgical residents training through the College of Surgeons of East, Central and South Africa.

### **SERVICE TO THOSE IN NEED IN LOW AND MIDDLE INCOME COUNTRIES**

Guatemala and Ukraine: Plastic surgeon Dr. Carolyn Levis visits Guatemala regularly, often with a McMaster resident, to provide surgical services and education for children with congenital, traumatic and burn injuries, as part of a medical mission team with the Guatemala Healing Hands Foundation. Recently she presented an Award of Merit from Ukrainian President, Peter Poroshenko, for her work with the Canada-Ukraine Foundation medical mission.

Angola: Dr. Stephen Foster, a graduate of McMaster's first MD class and a member of the Department of Surgery's adjunct faculty, has spent his career as a surgeon and educator in Angola. He has welcomed and taught numerous McMaster and other Canadian medical students and residents completing international electives, and was awarded the Teasdale-Corti Humanitarian Award by the Royal College of Physicians and Surgeons of Canada in 2010.

Bolivia: Ophthalmologists Dr. Gloria Isaza and Dr. John Harvey provide medical and surgical eye care services to the poor in Bolivia through Medical Ministry International.

Armenia: Plastic surgeon Dr. Nasimul Huq's efforts with Operation Rainbow focused on the provision of surgical services to Armenian patients as well as teaching local residents.

Saudi Arabia: Dr. Achilleas Thoma (Plastic Surgery) and the SOURCE group at McMaster coordinate annual Evidence-Based Surgery Workshops in Saudi Arabia.

China: Dr. Anil Kapoor (Urology) represented the CUA Norman Bethune Urological Society in a November teaching visit to Changsha and Wuhan cities in China and spoke at a urology symposium about advanced robotic renal surgery.

Libya: Dr. Samir Faidi (General Surgery/Trauma) has provided Advanced Trauma Course sessions in Libya.

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**KNOWLEDGE: RESEARCH AND DISSEMINATION**

Surgical faculty continue to be involved in numerous ongoing research endeavours and trials that involve large, multi-centre international collaborations. Examples include:

**Cardiac surgery:**

Steroids in Cardiac Surgery (SIRS) trial (Dr. R. Whitlock)

Left Atrial Appendage Occlusion Study III (Dr. R. Whitlock)

CABG Off or On Pump Revascularization Study (CORONARY; Dr. A. Lamy).

**Orthopedic surgery:**

Fluid Lavage of Open Wounds (FLOW; Dr. Mohit Bhandari)

Fixation Using Alternative Implant for the Treatment of Hip Fractures (FAITH; Dr. Mohit Bhandari)

Hip Fracture Evaluation with Alternatives of Total Hip Arthroplasty versus Hemi-Arthroplasty (HEALTH; Dr. Bhandari);

Indian Orthopaedic Multicenter Study in Fracture Care (INORMUS; Dr. M. Bhandari)

Prophylactic Antibiotic Regimens in Tumor Surgery (PARITY; Dr. M. Ghert)

**Pediatric Surgery:**

Disability Averted by Pediatric Surgery study (Dr. Poenaru and Dr. Cameron, Kenya).

**The McMaster International Surgery Desk was represented with posters or presentations in 2015 at:**

Bethune Round Table on International Surgery. Calgary, Alberta. June 4-7, 2015

Global Partners in Anesthesia and Surgery conference, Entebbe Uganda. September 2015

Canadian Conference on Global Health, Ottawa. October 2015

Guyana Annual Medical Scientific Conference, Georgetown Guyana. November 2015

**ISD research publications, presentations and posters in 2015:**

Poenaru D, Pemberton J, Frankfurter C, Cameron BH. **Quantifying the disability averted through pediatric surgery: a cross-sectional comparison of a pediatric surgical unit in Kenya and Canada.** World Journal of Surgery 2015;39(9): 2198-2206.

Poenaru D, Pemberton J, Cameron BH. **The Burden of Waiting: DALYs Accrued from Delayed Access to Pediatric Surgery in Kenya and Canada.** J Pediatr Surg. 2015; 50(5): 765-770.

Poenaru D, Pemberton J, Frankfurter C, Cameron BH, Stolk E. **Establishing disability weights for congenital paediatric surgical conditions: a prospective, cross-sectional, multi-modal approach.** (submitted)

Margolick J, Kanters DM, Cameron BH. **Procedural skills training for Canadian medical students participating in international electives.** Can Med Ed J. 2015; 6(1): e23-e33.

Livingston H, D'Cruz J, Pemberton J, Ozgediz D, Poenaru D. **Mortality of pediatric surgical conditions in low and middle income countries in Africa.** J Pediatr Surg. 2015; 50(5): 760-764.

Cameron BH, Martin C, Rambaran M. **Surgical training in Guyana: the next generation.** Can J Surg. 2014; 58(1): 7-9.

GlobalSurg Collaborative. **Mortality of emergency abdominal surgery in high, middle and low income countries.** British Journal of Surgery (in press)

Bruni A, Kazmi K, Bailey K, Rambaran N, Rambaran M, Cameron B, Pemberton J. **A Qualitative Assessment of Trauma Care at Georgetown Public Hospital Corporation in Guyana.** (poster at Canadian Conference on Global Health, Ottawa, October 2015, accepted for publication in the West Indian Medical Journal)

Galloro L, Pemberton J, Cameron BH. **Surgical education partnerships: a socially responsible approach to augment surgical capacity.** (presentation at Bethune Round Table on International Surgery. Calgary, Alberta. June 4-7, 2015).

Prashad A, Cameron BH, McConnell M, Rambaran M, Grierson LEM. **A Case Study Exploration of Retention and Capacity Building in Guyana's Surgical Training Program.** (poster at Guyana Medical Conference, November 2015)

Rekman J, Moro E, Greene B, Cameron BH. **Assessing the Needs of the MMed (Surgery) Program in Gulu, Uganda** (poster at Global Partners in Anesthesia and Surgery conference, Entebbe Uganda September 2015)

Pemberton J, Prashad C, Lett R, Cameron BH. **Trauma Team Training: from Uganda to the world.** (poster at Global Partners in Anesthesia and Surgery conference, Entebbe Uganda September 2015)

Respectfully submitted by,  
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