Approximately 5 billion of the world’s 7 billion people have no access to safe and affordable surgical and anesthesia care. This reality results in more deaths and disability than HIV/AIDS, tuberculosis, and malaria combined. Unfortunately, misconceptions as to the cost, required supplies, expert knowledge, and scope often serve as obstacles to offering surgical relief to many patients in low-resource areas (regardless of the income status of the country). Addressing surgical disparities and issues surrounding access to care is of paramount importance and urgency, as untreated disability caused by degeneration, non-communicable diseases, or trauma is often a death sentence to individuals in these environments.

The Center for Global Surgery within the Institute for Global Health houses and strengthens the multidisciplinary initiatives in global surgery at Northwestern and funded through grants, donations, and non-governmental organizations (NGOs).

With the leadership of Director Mamta Swaroop, MD, FACS, the center is working to improve access to essential surgical care by addressing barriers to care. Access issues are being tackled through the establishment of multidisciplinary and bidirectional partnerships that flow to and from our partnering countries, and through innovation, research, education, policy, and advocacy. Importantly, the Center for Global Surgery is passionate about training the next generation of global health leaders and building sustainable capacity in regions with health inequities.

Leading programs within the Center for Global Surgery

Global Surgery Fellowship Program

The Global Surgery Fellowship cultivates physicians with not only experience in research, programmatic development, policy and advocacy, but also the ambition and compassion needed to reduce the burden of untreated surgical disease in resource-limited areas. Our fellows are encouraged to seek diverse collaborations in both low- and high-resource settings to facilitate the understanding and elimination of socioeconomic, cultural, and environmental barriers to surgical access.

Northwestern Trauma and Surgical Initiative

Since 2010, medical students, residents, fellows, and young faculty have joined the Northwestern Trauma and Surgical Initiative (NTSI) to build sustainable access to surgical care through education and research in low-resource settings. The NTSI creates an academic pathway for those interested in becoming academic global surgeons. Initiatives include the Bolivia Trauma Initiative, Peru Trauma Initiative, Cambodia Trauma Initiative, TRUE (Trauma Responders Unify to Empower) Communities, South Asia Injury Prevention Initiative, International Rotation, Indian Health Initiative, and Bidirectional Exchange.

TRUE (Trauma Responders Unify to Empower) Communities

As part of the Northwestern Trauma and Surgical Initiative, the TRUE (Trauma Responders Unify to Empower) Communities Course is giving members of the Chicago general public the confidence, knowledge, and skills they need to provide rapid and effective care to trauma victims. This program is being offered within the Chicago Public Schools system and throughout the city. The south side of Chicago has one of the highest homicide rates in the country at 52.7 per 100,000 in the Chicago’s Greater Grand Crossing community area, as compared to approximately 5 per 100,000 people across the nation. (continued on side 2)

“At the Center for Global Surgery, we aim to establish the next generation of leaders in academic global surgery. Academic global surgery involves the application of research, education, and evidence-based advocacy toward clinical surgical care in regions of health inequities. The primary goal is infrastructure development with the delivery of high-quality surgical care to all in urban and rural locations, whether in high-, middle- or low-income countries.”

Mamta Swaroop, MD, Director, Center for Global Surgery, and Associate Professor of Surgery (Trauma, Emergency General and Critical Care Surgery)
Bystanders are present at between 60-97% of all trauma cases and are more likely to provide assistance and higher quality care when they have some first aid training. Although first responder courses exist for military and medical professionals, none are tailored to train bystanders to help without requiring additional supplies. The TRUE Communities course is addressing this unmet need.

**Obstetric Fistula Repair**

Due to obstructed labor, or attempts to relieve obstructed labor via cesarean section, fistulas cause devastating injuries for women, such as total urinary and/or fecal incontinence. Women are often ostracized from their families and communities and unable to access safe, affordable surgical care. Since 2012, Northwestern has worked twice a year in Kigali, Rwanda, at Kibagabaga Hospital to repair obstetric fistulas for women with the International Organization for Women and Development. The team works closely with the Rwandan Ministry of Health, local staff at the Kibagabaga Hospital, and Rwandan surgeons and trains Rwandan medical students and residents.

**Project BURST: Building Urologic Research and Surgical Training**

This program provided the basic infrastructure to integrate urology education into the surgical residency curriculum at the John F. Kennedy Hospital in Monrovia, Liberia. The program includes a bidirectional educational exchange and research. The hospital has been sent biomedical equipment, surgical instruments, and educational materials. Through the collaboration and guidance of the Northwestern team, the surgery department at John F. Kennedy Hospital achieved regional accreditation by the West African College of Surgeons for their surgical residency training program.

**RISE (Recognition of Injustice and Social Empowerment) Initiative**

As a part of the RISE Initiative, the Gender Pathway Program takes a multidisciplinary approach to provide self-empowering and self-affirming psychological, medical, and complex reconstructive care to the transgender, gender-expansive, and victims of female genital cutting community. Female genital cutting, a traditional, non-religious or cultural practice harmful to young girls and women, is currently increasing in high-income countries while it is decreasing in low-income countries. Northwestern’s team strives to create a secure, safe atmosphere for patients and aims to advocate for gender and sexual minorities and victims of female genital cutting.

**Pediatric Global Surgery Program**

Building surgical capacity and evaluating the quality of care in Sub-Saharan Africa are the two focuses of this Northwestern partnership with Korle Bu Teaching Hospital in Accra, Ghana. On a recent trip to Accra, the Pediatric Global Surgery team taught the Fundamentals of Laparoscopic Surgery over two days to a group of surgeons from three different countries with standing room only. These efforts to train local surgeons have the potential to expand access to surgical care multifold in under-resourced areas.