



GLOBAL EMERGENCY CARE

2018 ANNUAL REPORT



GLOBAL EMERGENCY CARE

Dear Friends and Supporters:

It is hard to believe I am sitting down to prepare another annual report. It makes me think of a quote I heard recently about how the days may seem long, but the years seem short. Looking back over the past 13+ years, it is amazing how much the face of emergency care in Uganda has changed. Looking back, I don't think I could have even imagined or dreamed of this amount of progress.

In 2018, Global Emergency Care continued to contribute to Uganda's remarkable strides in developing emergency care. The second class of six Emergency Care Practitioner students joined our Masaka team in August to join the eight first-year students who all earned their promotion to senior status. Meanwhile, at Nyakibale, we watched our 6th ECP class graduate with a true Ugandan celebration.

In November, our team was thrilled to participate in the 4th African Conference on Emergency Medicine in neighboring Kigali, Rwanda. Thanks to the conference's close proximity, 18 GEC team members were able to attend the three-day event. The highlights of the conference included multiple presentations by GEC ECPs and research staff, as well the excellent networking opportunities making connections with colleagues around Africa.

Uganda's newly appointed Commissioner of Emergency Care Services from the Ministry of Health attended the conference. We met with him and all the stakeholders in emergency care development in Uganda during a pre-conference, day-long meeting where the momentum for future emergency care development was celebrated. Looking back at the conference contingent at the inaugural meeting in 2009, I realized that we actually had more people present at the Uganda meeting alone in 2018, then were present representing the entire continent in 2009. What growth!

While these milestones are important to celebrate, the real story is patient care. The morning I arrived in Masaka I noticed a flurry of activity in the ED. It had turned out that a few hours earlier a woman presented with abdominal pain. No ECP was on shift and the clinician seeing her planned to have her admitted as he was concerned about how she looked. Just prior to her transport to the ward, one of the ECPs started her shift and suggested they use the ultrasound to assess her first. The ECP expertly

identified that the patient had an ectopic (outside the uterus) pregnancy and needed emergent surgery. She contacted the obstetrician and the woman was rushed to the operating room for life saving surgery. This young woman, who had other children at home, would have died if it not for the ECP's care. As the morning went on, and I went about my meetings, a severely injured trauma patient was brought to the ED. The team of ECPs in the ED rapidly assessed him and initiated life-saving treatment. They quickly had the patient stabilized and prepared to go to the operating room. It was humbling to watch them provide world-class emergency care with so few resources available.

None of this work would be possible without the support and generosity of our donors. Your backing strengthens GEC's programs to educate more ECPs and provide additional learning opportunities for the ECPs we have graduated. The difference they make is palpable. As Emergency Care continues to develop in Uganda, the Ministry of Health is increasingly interested in expanding the ECP training program, so more hospitals will be able to provide this life saving care to their patients. Thank you for ongoing generosity—it truly is changing the world!

With our deepest gratitude,
Mark Bisanzo, Stacey Chamberlain, Brad Dreifuss, and Heather Hammerstedt
Board of Directors



OUR MISSION

To make lifesaving medical care available to all Ugandans

2018 BY THE NUMBERS

14,753 PATIENTS TREATED

at Nyakibale + Masaka

3,980 patients with **trauma**

1,896 patients with **pneumonia**

512 patients with **confirmed malaria**

NYAKIBALE

9% reduction in mortality

for children under age 5

42% reduction in pneumonia mortality

from 2017 - 2018

MASAKA

23% reduction in diarrheal mortality

from 2017 to 2018



GLOBAL EMERGENCY CARE





2018 HIGHLIGHTS

ECP DIPLOMA PROGRAM

2018 was an exciting year for the advancement of the Emergency Care Practitioner Diploma Program. The first class of Diploma students completed their 2nd and 3rd semesters, while the second class completed its 1st semester. The Emergency Care Practitioners will receive Diplomas upon completion of their training program from our partner university, Mbarara University of Science and Technology (MUST). This is a landmark accomplishment that will greatly improve the sustainability of emergency care development in Uganda as it truly integrates our training program into the local medical educational system.



MASTER OF MEDICINE IN EMERGENCY MEDICINE

In 2018, GEC continued to partner with MUST to implement the country's first Master of Medicine program in Emergency Medicine for specialist physicians. Currently in its second year, this program trains new specialist emergency physicians, who will work in conjunction with ECPs in national and regional referral EDs, and function as educators and quality supervisors for district ECP staffed EDs.

The first class of five assiduous physicians completed half of their three-year training in 2018; in addition, the second class of six physicians began their training in 2018. When they graduate, they will become the first Uganda-trained emergency physicians. GEC is honored to be an active collaborator, participant, and funder of this program. Coupled with GEC's development of both the Diploma in Emergency Care, this essential program will contribute to the advancement of a viable emergency care system and set the stage for emergency care development across Uganda.





2018 HIGHLIGHTS

BREAKING BARRIERS IN EMERGENCY MEDICINE EDUCATION

Our team was thrilled to participate in the 4th African Conference on Emergency Medicine in November in Kigali, Rwanda. Thanks to the conference's close proximity to Uganda, 18 GEC team members were able to attend the three-day event, from Emergency Care Practitioners, researchers and students, in addition to U.S.-based board members, staff, and volunteers.

Nyakibale Research Coordinator, Adrine Kusasira, and Research Associate, Charles Ndyamwijuka, did an excellent job in their first presentation. They worked with GEC volunteer, Ashley Pickering, to present on factors contributing to delays in emergency medical care at Nyakibale Hospital in rural Uganda.

GEC board member, Mark Bisanzo, presented on management of acute heart failure in low-resource settings, while Stacey Chamberlain, also a board member, presented on global partnerships

in emergency care. GEC volunteer, Greg Gaskin, presented his paper on Information Technology Supporting Emergency Care in Sub-Saharan Africa: A Scoping Review and Commentary.

Our team also participated in a full day stakeholder meeting with the Emergency Medicine Uganda community. It's an exciting time for emergency medicine in Uganda as partners continue to develop relationships and build coalitions that drive the growth of emergency medicine by Ugandans for Ugandans.

We're newly energized from learning about other innovative programs and models in emergency medicine across Africa. The GEC team returned to Uganda excited to implement new ideas, foster relationships with new friends, all the while working hard to move emergency medicine development forward across Uganda.





2018 HIGHLIGHTS

ULTRASOUND IN ACTION

GEC has been teaching the use of point-of-care ultrasound to ECPs since 2009. In the low-resource emergency departments of Uganda, bedside ultrasound is the most important diagnostic tool available to emergency practitioners. ECPs heavily utilize this critical technology to diagnose traumatic injuries, ectopic pregnancies, pericardial effusions, pneumonia, and a whole host of other emergent conditions. Ultrasound helps ECPs be effective frontline emergency providers and save lives. The technology, itself, is critical for emergency care because it allows ECPs to make emergent diagnoses, perform safe procedures, and train the next generation of emergency practitioners in Uganda.

The eFAST exam is the most widely adopted ultrasound examination for use in the emergency department. This exam looks at six locations on the body and can identify blood in the abdomen, blood around the heart, and a collapsed lung. It takes two minutes to perform. In the United States it is routinely done immediately after the initial evaluation of a patient who has had trauma, such as a car accident or other injury.

The ECPs have learned this exam and with very little else available to them for imaging internal organs in trauma patients. It is one of their favorite scans to do. One reason why is it makes their job simple and it helps them do the right thing for each patient.

Take for example a young boy who was in the emergency department the last time I visited. He was 8 years old and had fallen from a motorcycle (boda). He was tachycardic, slightly hypotensive, and he had severe abdominal pain and a peritoneal abdomen. The ECPs did a FAST exam and found free-fluid in his abdomen. The ECPs consulted the physician, who was initially hesitant, but after seeing the ultrasound images, felt it was appropriate to take the boy to the operating room. In the operating room, his spleen was removed

and he was discharged from the hospital in a just a few days. A life was saved thanks to the quick thinking of the ECPs and their skillful application of ultrasound to confirm the diagnosis.

This case highlights what an incredible resource the ECPs are for Uganda. It is amazing how much they have learned from their training and how well they apply it to patient care to save lives. In this case, the ECP was able to evaluate the boy, make the correct diagnosis, send him to emergency surgery, and save his young life.

— Lori Stolz, MD, RDMS, FACEP
GEC Ultrasound Director





2018 HIGHLIGHTS

TIMELY TRAINING – MASS CASUALTY EVENT

Over the past 15 years I've worked in a variety of global health settings around the world; what GEC has been doing over the past 10 years is certainly unique. Recognizing the huge physician shortage in Uganda and throughout Africa, GEC is training nurses and clinical officers to provide quality emergency care appropriate to the settings where they practice.

The students are trained as ECPs. In the US, they would be called nurse practitioners or physician assistants. ECPs can be trained in 2 years, whereas it would take several more years and a much greater cost to train physicians to do the same tasks. Patients dying in Uganda do not have time to wait.

I was in Uganda for six months assisting the ECP trainers with teaching and curriculum development. I was impressed with the knowledge and skill levels of the trainers and students. The students are energetic and eager to learn practical skills and put them to use.

For example, two weeks ago we had a simulation of a mass casualty incident where multiple critical patients come to the Emergency Department (ED) at the same time. The students were taught to triage and prioritize care, and to organize and lead others involved. Approximately an hour after this teaching session, a student found me in the lecture room and hurriedly exclaimed "there's a mass casualty." I couldn't believe it.

I walked to the ED and learned that a truck had turned over. Multiple patients were brought in at once. Just as had been simulated, the patients were kept close together with supplies in the middle. An entire team was working together with the group being coordinated by one of the ECP trainers, Alfinsi.

The students quickly and calmly assessed the patients in a stepwise approach and addressed their critical needs. The scenario went just as practiced and all the care was provided by the ECPs. I did not join in, because I did not need to. Giving Ugandans the skills, the tools, and the knowledge to take care of Ugandans is what GEC does, and does well. I have seen it in action.

— Randall Ellis, MD, MBA, MPH
GEC Global Health Fellow





ECP SPOTLIGHT

KIIRE TEDDY

Teddy truly captures what it means to be an ECP and the positive impact it has on the community. Being an ECP gives Teddy the confidence and ability to quickly identify and treat patients with life threatening conditions. Before her training, she would have to wait for orders on what to do in such time critical medical situations that could've led to grave outcomes. Teddy now feels equipped to assess a patient and provide the right treatment. These skills go a long way in developing a relationship with a community and giving people the reassurance that their lives do matter, especially in time sensitive emergencies.

"I have the knowledge, skills, and determination to take care of emergencies, not like most nurses who wait for orders on what to do. It's also exciting because I know what to do, and a big thanks to the GEC board and all those who shared knowledge with us. I love being an ECP and I don't regret taking the training."



KAMUGISHA JOHN BOSCO

Being an ECP means a great deal to father of three, JB, a man who has saved countless lives in his ten-year career with Global Emergency Care. Being an ECP can be hard, JB said, but with the profoundly important goal of saving lives in his community, he is proud to do the work.

As an ECP, JB has also found inspiration in the way that his training of junior ECPs has direct and visible effects on the regional mortality rate. Seeing the people he has trained now managing patients of their own has been very rewarding, he said. Beyond his day-to-day work, though, JB said he is also excited about the new opportunities being an ECP has afforded him. Conducting medical research, doing clinical work, and attending workshops in other countries continues to motivate and inspire JB to excel as one of our most senior ECPs.



KANSIIME GLORIOUS

Glorious has been an ECP since 2016. She says, "I'm proud of being an ECP because I feel confident in taking care of critical patients and knowing how to treat them first". Being an ECP has changed her life because she has gained so much knowledge about medical emergency management, and she feels confident in performing certain procedures that save lives.





FINANCES

In 2018, Global Emergency Care's revenue decreased 25% from 2017, while the expenses increased by 22%.

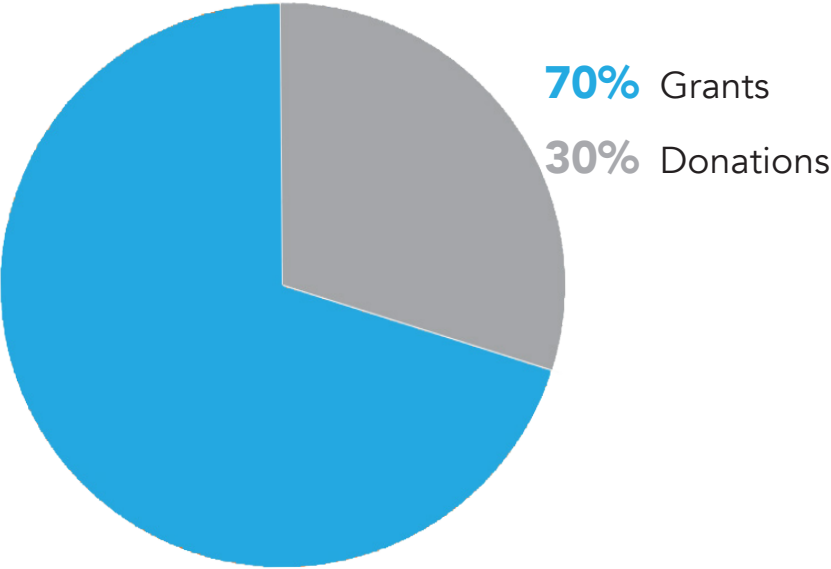
Our grant revenue remained steady in 2018, while our fundraising revenue decreased by 35%. We continue to work to expand our donor base and overall donation revenue.

- In 2018, Global Emergency Care's revenue was \$94,228 and expenses were \$185,905, although a total of \$74,115 in grant revenue received in previous years was spent down in 2018.
- 99% of our donation income was from individual donors.

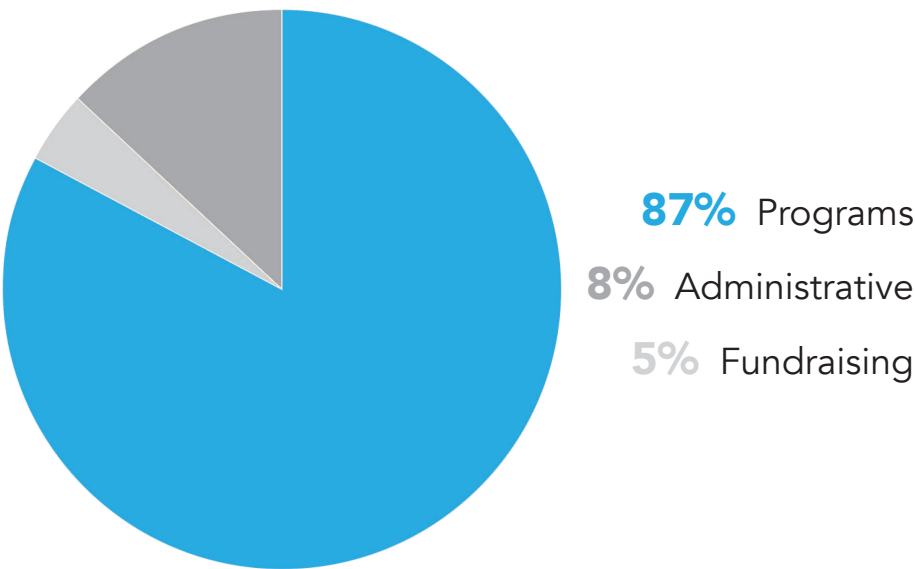
\$1,801,272

in-kind professional services
donated by GEC board, staff, and
volunteers

TOTAL INCOME \$94,228



TOTAL EXPENSES \$185,905





THANK YOU

The accomplishments of 2018 have been a culmination of hard work and dedication from GEC's ever-supportive foundation partners and our tireless and dedicated volunteers. In 2018 alone, GEC volunteers donated over \$1.8 million in in-kind professional services to grow emergency medicine development in Uganda. None of our work or our successes would be possible without the support of these incredible volunteers. Thank you for your generosity, dedication, and continued support!

2018 FUNDING PARTNERS



HOLMES FAMILY FOUNDATION

FREAS FOUNDATION

2018 VOLUNTEERS

NORTH AMERICAN VOLUNTEERS: Lori Stolz, Brian Rice, Mike Schick, Ryan Joseph, Christine McBeth, Payal Modi, Katie Wells, Ben Terry, Gian Brown, Mariel Collela, Carrie Hawthorne

GLOBAL HEALTH FELLOWS: Alex Wang and Randall Ellis

U.S. INTERNS: Sarah Luedke and Laura Siewert

UGANDA VOLUNTEERS: Lori Stolz, Ryan Joseph, Mike Schick, Christine McBeth, Payal Modi, Katie Wells, Ryan Brandt, Ashley Pickering, Alexa Sabedra, Vikas Goswamy, Kelly Gray, Vinay Mikkilineni, Mikala Pacifique, David Barney, Annie-Laurie Auden, Christian Klaucke, Casey Patrick, Jane Yee, Madi Lindauer, Chelsea Williams, Sal Calo, and Greg Gaskin

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