Global Health



Center for Global Health Year in Review 2023

Driven by the belief that everyone, everywhere has a right to good health

Dear colleagues and friends of the Massachusetts General Hospital Center for Global Health,

I am delighted to share the 2023 annual report highlighting accomplishments and the ongoing work of the MGH Center for Global Health. As global crises continue and conflict, migration, and climate change contribute to the challenges facing the world's health, our role as a hub of expertise and support to make global health initiatives across Mass General more effective and efficient remains critically important.

Three years into our strategic plan, this past year marked continued significant advances in all five strategic areas. Our Global Nursing program trained hundreds of nurses globally and is an asset for nursing across Mass General, helping to attract and retain exceptional nurses throughout the hospital. Our Global Disaster Response and Humanitarian Action team expanded crisis care through increased partnerships in regions where we deploy, as well as new remote trainings in critical care and emergency response that have already trained hundreds of healthcare workers in Liberia, Malawi, Uganda and Ukraine, and are being adapted for numerous other settings.

The MGH Global Education program accelerated collaboration, mentorship, research and training bringing together global health practitioners throughout Mass General to support new clinical education programs and innovations in global clinical care. Both new and longstanding partnerships in Mexico, Nigeria, Uganda, Sierra Leone, Haiti, and the Indian Health Service, among many others, have undergirded our efforts to expand care and research in global oncology, maternal health care, palliative care, gastroenterology, infectious diseases, and more.

This report covers just a portion of the incredible work to advance global health at Mass General. Almost every department, center and institute at the hospital is engaged in some way in this important work, and we are thrilled to convene, support and amplify these efforts. As I survey the past year and also look ahead, I am grateful for the members of our community — nurses, physicians, researchers, administrators, and countless others — who bring scholarship, education and service to all that we do together to advance global health equity. To all our supporters both inside and outside Mass General, thank you for your steadfast belief in the importance of this work — we could not do it without you.

Best wishes,

Louise Ivers, MD, MPH Executive Director Center for Global Health



Who we are

The Center for Global Health (CGH) serves as a hub for the Mass General global health community, channeling their work into a greater force for positive global health change. Driven by the belief that everyone, everywhere has a right to good health, we partner with diverse communities to exchange lifesaving ideas, catalyze scientific discoveries, deliver compassionate care and train the next generation of leaders in global health.

The Center for Global Health focuses on global settings with underdeveloped healthcare systems, where partnership with an academic medical center can have the greatest impact. We have five strategic priorities — as pictured on the previous page — that work together to advance our mission.





For a quick video about our mission and work, scan the QR code to watch "CGH in a Minute."

We are proud to support

56

Global Nursing alumni working to provide bidirectional nursing education and advance nursing leadership; 358 nurses, midwives, students, and leaders educated in 2023; more than 2000 people educated since the program's inception

306

Trained disaster response roster members, ready to deploy alongside our partners on the ground when disaster strikes 35

Faculty researchers working together to advance science in low- and middle-income countries through \$65 million in research grants

48

Countries with global partnerships in the areas of clinical education, research and innovation, nursing, and through our disaster response and humanitarian initiatives

150

Faculty, nurses, trainees, and other providers actively advancing global health equity across all Mass General departments

75

Global educators working to mentor and exchange clinical knowledge in topics such as internal medicine, palliative care, pediatric and adult oncology, nursing, dermatology and many others

Nursing



Nursing is the cornerstone of healthcare delivery worldwide, with nurses playing a critical role in the clinical care of patients. The MGH Center for Global Health Nursing Program began in response to our partners' call for advanced nursing training and focuses on peer-driven education and mentorship tailored to each community's unique needs. Our program staff has worked diligently this year to advance nursing education and nursing leadership internationally to build lifesaving capacity during a global nursing shortage.

Our Global Nursing Fellowship Program advanced global nursing education with eight global nursing fellows supporting teaching and training on-location at our three partner sites: Mbarara University of Science and Technology (MUST) and Mbarara Regional Referral Hospital (MRRH) in Mbarara, Uganda and the School of Midwifery in Makeni, Sierra Leone. In response to each partner's requests, the fellows provided 325 nurses, nurse midwives, and nursing students with focused training in critical care, pediatrics, trauma, midwifery, mental

health, and research. As part of the program, Global Nursing provided scholarships for students enrolled in the advanced nursing education courses. Our two nurse research scientist fellows promoted research advancement for all nursing students in the Master of Nursing program at MUST, in collaboration with the MGH Munn Nursing Research Center. In addition, the fellowship program supported the development of three new MUST Master of Nursing tracks in pediatrics, mental health, and midwifery.

As part of our focus on continually strengthening nursing leadership and elevating the nursing profession, we taught three nursing leadership courses this year, training a total of 25 nurses, including three MUST faculty members from Uganda and 22 experienced midwives from Sierra Leone. The MUST faculty participants developed and presented two advocacy projects: 1) Rational Antimicrobial Use: Strengthening Uganda Nurse Capacity at Lower Primary Care Facilities and 2) Increase Staffing in the Department of Nursing, Mbarara University.

"The Global Health Nursing Fellowship strengthened my assessment and nursing diagnosis skills, which has enhanced my ability to care for patients. Additionally, this Fellowship provided training and research methods allowing me to carry out a successful research project."

- Master of Nursing Graduate

Humanitarian Action



CGH Global Disaster Response and Humanitarian Action (GDRHA) continues to be a center of excellence in disaster response and humanitarian action through cross-disciplinary crisis response trainings in areas of gender-based violence, trauma and critical care, and humanitarian systems. In April, we partnered with the MGH Center for Disaster Medicine and Harvard Humanitarian Initiative to conduct a field training for health professionals on acute care and effective leadership in resource-constrained environments.

The GDRHA team's decision to deploy depends on whether or not we can have a positive impact without diminishing valuable local resources. With this in mind, we worked with MGH partner Health Tech Without Borders on remote training projects in Ukraine and Pakistan. Following the earthquake in Turkey-Syria, our team leveraged our resources and partnerships to coordinate and facilitate support efforts by Mass General staff from disaster-affected areas.

GDRHA maintains its commitment to long-term humanitarian response through support of asylumseeker, refugee, and migrant populations abroad and in

the U.S. We partner locally in Mexico to send our trained and vetted volunteers to support the crucial clinical and public health services they provide. To deepen our commitment, our **Durant Fellow, Juliana Morris, MD** (pictured right), has been focusing on clinical care for asylum seekers and migrants, partnership building, strengthening of our volunteer program,

and advocacy work both at the border and locally. The **MGH Durant Fellowship in Refugee Medicine** supports

healthcare professionals to serve refugee populations and victims of complex humanitarian disasters.

After successfully implementing a novel trauma nursing course in Ukraine, GDRHA expanded its collaboration with CGH Global Nursing to build new relationships with local partners in areas where GDRHA deploys and to develop nursing curricula aligned with the World Health Organization's (WHO) strategic directions for nursing and midwifery. These courses are expanding critical care at Partners in Health hospitals in Sierra Leone, Malawi, and Liberia, and have increased nursing capacity in emergency response in Ukraine and Uganda; they will be adapted to other settings as an important tool to address the need for emergency response nursing in specific crisis areas.

At a glance:

2 Deployments for **23** days total, in-country at the U.S./Mexico border

11 Volunteers deployed

23 New volunteers onboarded from nine MGB-wide info sessions

16 MGH departments represented

The MGH Asylum Clinic

The MGH Asylum Clinic provides forensic medical and psychological evaluations to survivors of persecution seeking asylum in the U.S. and educates, advocates, and conducts research on the health of refugees and people seeking asylum. Through funding from the Peter L. Slavin, MD, Fund for Mitigating Barriers to Health we provided 70 applicants and their families with direct emergency funds to support social needs. We contributed to scholarship and education locally by delivering Grand Rounds in Internal Medicine, Obstetrics and Gynecology, and Pediatrics; nationally with contributions to the Asylum Medicine Training Initiative; and internationally with presentations at the 2023 North American Refugee Health Conference. In collabortion with the MGH Center for Immigrant Health, we established a joint Community Advisory Board and supported resource coordination for new migrant arrivals.

Education



MGH Global Health Education and Clinical Innovation works to advance the shared goals of clinicians and educators engaged in global health across the hospital and to synergize global health education and innovation activities. We empower caregivers, scientists, nurses, and researchers to build knowledge and community in global health through frontline service and bidirectional learning. This past year, we worked to advance the CGH education goals in collaboration with other leaders at CGH and across Mass General. The Director of Clinical Innovation and Education also serves as an important resource for Mass General clinical faculty and providers in the global health education and clinical innovation track, in alignment with Harvard Medical School career paths in global health.

Creating Community Across Our Global Health Network

The MGH Global Health Education and Clinical Innovation Collaborative (MGHGlobalEd) is a diverse network of global health educators and leaders that spans all Mass General departments, centers, divisions and institutes. This past year, we successfully connected 75 members from across the hospital who are involved in global education, health care delivery, clinical mentorship, and innovation in 36 countries around the globe. We held our first two quarterly, collaborative virtual symposia on global health education and clinical innovation topics, specifically on community building and on global health and the Harvard Medical School (HMS) promotions process.

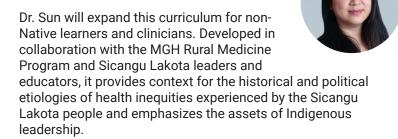
Global Health Grand Rounds is a collaboration between the MGH Center for Global Health and Brigham and Women's Hospital Division of Global Health Equity. The series brings together a multidisciplinary community of global health practitioners dedicated to learning and sharing ongoing efforts for global health equity and allows for presentation and discussion of recent advances and best practices in global health related to clinical care, nursing, research, and medical education. Topics covered this past year included: social medicine & equity, cholera resurgence in Haiti, embedding equity in global health fellowship training, patents and patients, and improving quality of maternal health in resource-limited settings.

Catalyzing Global Education and Clinical Innovation

CGH Medical Education and Innovation Development Awards support early-to-mid career healthcare practitioners who are involved in global education, health care delivery and innovation. Projects are grounded in a robust, local partnership that advance clinical or educational capacity-building priorities of the local community and demonstrate the candidate's commitment to global health as a component of their career.

2023 Award Recipients

Stephanie Sun, MD, MPH Understanding Settler Colonialism: an Indigenous Health Curriculum (The Sicangu Lakota Oyate and Rosebud IHS)





World Gastroenterology Organization-Lagos University Teaching Hospital: Developing a sustainable gastroenterology training program

Dr. Asombang was granted a renewal of the CGH Medical Education and Innovation Development Award to continue developing a sustainable gastroenterology training program in Lagos, Nigeria.



"With this Award, I was able to build a partnership with the World Gastroenterology Organization training center in Lagos, Nigeria and hosted programs to enhance understanding and skills for management of both benign and malignant GI disorders. In one year, we have served over 400 attendees, and performed more than 80 endoscopic procedures on more than 60 patients. In addition, CGH has supported the expansion of GI training at other institutions in Nigeria with potential for impact across Africa."

- Akwi Asombang, MD, MPH

Research & Innovation



To advance interdisciplinary science in the pursuit of global health equity, the MGH Center for Global Health is focused on accelerating, supporting and mentoring researchers through research collaboration, administrative support and fostering of innovative global health research.

The Global Health Research Collaborative, established in 2020, is a collaboration of global health research groups and global health faculty across departments, centers and institutes at MGH and including several global health partners. The Collaborative exists to advance interdisciplinary global health research and to foster innovative bench, clinical and population health research partnerships to further global health equity while generating knowledge that will positively influence the health of underserved populations globally.

At a glance:

103 Total new publications

29 First author (lead author) publications

74 Last author (key mentor/PI) publications

An NIH grant will increase research training in global non-communicable diseases:

The CGH Research Collaborative identified a need for research training in global non-communicable diseases (NCDs). CGH Research secured a grant from the National Heart, Lung, and Blood Institute to establish a **Global Non-Communicable Diseases Research Training Program** (T32HL166133, PI: Jessica Haberer) that includes engagement with the Mass General Divisions of Cardiology, Endocrinology, Pulmonology, and Hematology. Our goal is to help launch the research careers of early-stage investigators. The program provides salary support (typically two years), a career development mentor and a research mentor for each trainee, seminars on global health research practice and career development, research methodology training through coursework at the Harvard T.H. Chan School of Public Health, and a community of practice within the program and with other global health fellows. Training also emphasizes the role of allyship and equity in global health research.

Research Development Awards help early career investigators to catalyze their global health research.

2023 Award Recipient

Dr. David Roach

Development of an inexpensive, portable assay to rapidly profile carbapenem-resistant K. pneumoniae [antibiotic-resistant infections] in Peru



The largest study of its kind, this will strengthen local research capacity, result in several publications based on this work, and serve as key preliminary data for a National Institutes of Health application.

"The CGH Research Development Award allowed me to collaborate with researchers in Peru — which has a high burden of highly antibiotic resistant bacterial infections — to collect and sequence 500 bacterial isolates from three hospitals. This data will enable us to understand the genetics that drive the resistance and develop new diagnostic tools to detect them. This award has cemented a successful cross-continental collaboration between Peru and Boston that will continue for many projects in the years ahead and will serve as a key plank in my research platform as an independent investigator."

- David Roach, MD

Global Health Finish Line Grants help promote the advancement of junior investigators/trainees from MGH Global Health faculty partner sites, who have a project that is near completion and requires funding to bring the project "over the finish line."

2023 Award Recipients:

Yanga Mdleleni, PhD, University of KwaZulu-Natal, South Africa. Finish Line funding will allow Dr. Mdleleni to complete and publish research aimed at identifying the most effective target to cure persistent human papillomavirus (HPV), the most common STI.



Raymond Bernard Kihumuro, MBBS, Mbarara
University of Science and Technology, Uganda.
The grant allowed Dr. Kihumuro to complete
his research project and manuscript on factors
affecting the quality of informed consent
provided by pregnant women enrolled in clinical
trials at the Mbarara Regional Referral Hospital during
the Placentas, Antibodies, and Child Outcomes (PACO)
observational cohort study.



The MGH Center for Global Health believes that diverse, equitable partnerships are the foundation of transformative global health solutions. CGH serves as a resource to global health practitioners across Mass General to expand formalized relationships with institutions in low-resource settings, to advance health education, clinical initiatives, and research to drive long-term positive change. Guided by the needs of the diverse communities we support, we emphasize bi-directional learning to increase the medical and cultural competency of all participants, and sustainability to build capacity across partners.

In 2023, we focused on evaluating our long-standing partnerships with Mbarara University of Science and Technology (MUST) and Mbarara Regional Referral Hospital (MRRH) in Uganda not only to document the evolution of this relationship, but also to apply findings to refine our approach to global partnerships and develop a framework for partnering, with indicators for measuring progress and impact. This work should be completed by December 2024.

We continued our academic partnership with the **University** of **Global Health Equity (UGHE)**, a global university based in rural northern Rwanda, founded by Partners in Health, which aims to transform global health delivery by reimagining medical education. Six Mass General faculty members volunteered for clinical teaching clerkships — both virtual and in-person — collaborating with UGHE general practitioners and specialists in the Butaro District Hospital (BDH) and contributing to capacity-building.



Global Cancer Care Program

The Mass General Global Cancer Care Program advances initiatives in education, research, and clinical care in global oncology. This year was one of important expansions and efforts coming to fruition for MGH Global Cancer Care Program. Highlights include:

POETIC (Program for Enhanced Training in Cancer)

POETIC added new collaborations in gynecologic oncology, an important factor in increasing cancer care for women. The first University of Rwanda Gynecologic Oncology Fellow spent one month in the MGH Division of Gynecologic Oncology learning more about multi-modality and multi-disciplinary cancer care in our high-resource setting. POETIC will be hosting two to four fellows from Rwanda and Haiti annually, in support of a broad gynecologic oncology capacity building initiative led by the International Gynecologic Cancer Society.

Mass General hosted National Cancer Institute Global Director Satish Gopal, MD, MPH and Queens College Bishal Gyawali, MD, PhD, as part of the Quarterly Global Oncology Seminar Series in collaboration with MD Anderson Cancer Center at University of Texas, Dana-Farber Cancer Institute and University of Pennsylvania. POETIC led the Global Oncology Track at the annual meeting of the American Society of Cancer Oncology, which approved our launch of a global oncology community of practice in 2024. In partnership with Karkinos Healthcare in India, our researchers supported five projects—three of which are already funded, including a trial of a new immunotherapy treatment.

Global Palliative Care Program

The MGH Global Palliative Care Program continued to expand our culturally-responsive palliative care curriculum development, training, and service implementation.

Our team collaborated on trainings for several hundred



clinicians across the Caribbean, Latin America, and in Uganda, in primary palliative care, advanced palliative care, communication skills, and the leadership skills necessary to advance palliative care in low and middle-income countries. This included two Pan American Health Organization-sponsored Project ECHO (Extension for Community Healthcare Outcomes) virtual trainings with over 100 participants.

Advancing Palliative Care for Great Plains American Indians

Our community-based participatory research completed Phase 1 talking circles and interviews with Lakota patients, caregivers, tribal leaders and traditional healers, and clinicians caring for AI/AN patients and began Phase 2 work with three Community Advisory Boards of enrolled tribal members to develop a palliative care approach using community health workers and incorporating traditional healing practices.

Two Global GI Mentees Secure Clinical Training Awards:

Dr. Stella-Maris Chinma Egboh was awarded the American College of Gastroenterology International Training grant for rotations in Mass General's Division of Gastroenterology and Cancer Center.



Dr. Evaristus Chukwudike received the American Society of Gastrointestinal Endoscopy Training award for clinical training at our global GI partner Kasturba Medical College, Manipal, India.



Global Gastroenterology Program

Our Global Gastroenterology (GI) program aims to improve diagnosis, treatment and prevention of colorectal cancer by raising awareness, increasing skills in diagnosis through colonoscopy and surgical intervention, and sharing new best-practices in colorectal cancer management. In 2023, with support from her CGH Medical Education and Innovation Development Award, we advanced the program with two core partners in Nigeria:

MGH – World Gastroenterology Organization Lagos Training Center, Lagos, Nigeria

Dr. Asombang traveled to Lagos to lead a week-long colorectal cancer training and to raise awareness of the increased incidence of colorectal cancer in Nigeria and other African countries, especially in younger patients presenting with late-stage cancer. Multidisciplinary workshops involved medical doctors tasked with management of colorectal cancer, trainees and nurses involved with GI endoscopy, and included hands-on clinical cases demonstrating techniques applicable to surgical and endoscopic GI care in Nigeria.

MGH – University of Calabar Teaching Hospital, Calabar, Nigeria

Established in late 2022, this partnership focuses on education and training for medical doctors and nurses, including bilateral exchanges, mentorship, and when possible, research collaborations. Program development in 2023 included review of colorectal cancer screening and surveillance protocols in-country, and participation in an Internal Medicine clinical case conference with case presentation by the GI fellow and pathologist.



See the CGH website for more details.

Mass General Hospital Global Health Leadership

Center for Global Health Leadership

- · Louise Ivers, MD, MPH, Executive Director, Center for Global Health
- Mary Sebert, MPH, MSN, RN, Center for Global Health Associate Director, Global Nursing
- Lindsey Martin, DNP, MSN, RN, AGACNP, Center for Global Health Associate Director, Global Disaster Response and Humanitarian Action
- Esther Freeman, MD, PhD, Center for Global Health Associate Director, Global Education and Clinical Innovation
- Jessica Haberer, MD, MS, Center for Global Health Associate Director, Global Health Research and Innovation
- Vanessa Bradford Kerry, MD, MSC, Center for Global Health Associate Director, Program in Global Public Policy and Social Change
- Peter Olds, MD, MPH, Center for Global Health Assistant Director, Uganda Programs

Global Health Program Leadership

- Stephen Asiimwe, MBCHB, MS, DrPH, Program Director, MGH Global Health Collaborative, Uganda
- Annet Kembabazi, MSC, Senior Program Manager, MGH Global Health Collaborative, Uganda
- Matthew Gartland, MD, Program Director, MGH Asylum Clinic
- Amir Mohareb, MD, Director, Research Program on Humanitarian Action, Global Migration and Infectious Diseases Global Education
- Annekathryn Goodman, MD, MS, MPH, Director, Strength and Serenity Program to End Gender-Based Violence
- · Alex Tsai, MD, PhD, Director, Program on Social Policy and Behavioral Health
- Kris Olson, MD, MPH, Program Director, Consortium for Affordable Medical Technologies (CAMTech)
- Aparna Parikh, MD, Director of Global Cancer Care Program
- Mark Stoltenberg, MD, MPH, MA, Co-Director of Global Palliative Care Program
- Bethany Rose Daubman, MD, Co-Director of Global Palliative Care Program
- Akwi Asombang, MD, MPH, Director of Global Health Programs in Gastroenterology
- · Oyere Onuma, MD, MSc, Director of Global Health Cardiovascular Health Program
- Adeline Boatin, MD, MPH, Co-Director of Global Health OB/GYN Program
- Thomas Randall, MD, Director of Global Gynecologic Oncology Program
- Onyinyechi Eke, MD, MPH, Director of Global Ultrasound Program, Emergency Medicine

To learn more about our programs: globalhealth.massgeneral.org

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