

Global Emergency Medicine Fellowship Program Description

Overview

The Harvard Global Emergency Medicine Fellowship prepares physicians to become leaders in global health, international emergency care systems, and humanitarian response. Fellows develop a broad range of clinical, research, teaching, and administrative skills in humanitarian aid and disaster response, emergency systems development, health program administration and funding, cross-cultural collaboration, international public health, and human rights.

The fellowship program is designed for emergency physicians preparing for a career in academic global emergency medicine and/or medical leadership and research in international health organizations.

Goals

The goal of the fellowship is to train leaders in global emergency medicine who are able to:

- 1. Advance the specialty of emergency medicine worldwide.
- Lead effective humanitarian relief and disaster response efforts in conjunction with international aid organizations and local governments.
- 3. Develop, fund, implement, and evaluate international emergency medicine and health programs.
- 4. Conduct clinical and field research based on solid epidemiologic methods and biostatistics.
- Maintain a working knowledge of international public health issues and government and nongovernmental organizations and infrastructure around the world.
- Understand international humanitarian law and human rights as they relate to conflict, humanitarian crises, and global health.
- Use leadership, teaching, and clinical skills to advance the practice of global emergency medicine.





Fellowship Structure

The fellowship begins July 1 and lasts two years. A fellow who already has an MPH degree may complete a one-year fellowship. Fellows divide their time between international projects and research, Harvard Chan School of Public Health classes, and clinical work in the ED. Fellows are expected to sit for both the written and oral ABEM exam during the first year of fellowship if not already board certified in emergency medicine.

The curriculum is tailored to fellows' individual interests and is divided into six areas outlined below: (1) Global Curriculum, (2) International Field Work, (3) Harvard Chan School of Public Health, (4) Research, (5) Clinical Medicine, and (6) Humanitarian Aid and Disaster Response.

1. Global Curriculum

Fellows take courses at the Harvard Chan School of Public Health and participate in other educational programs that focus on global emergency medicine topics. Fellows prepare grand round presentations and participate in lectures and teaching conferences at Harvard University, affiliated medical centers, and other institutions.

Fellows attend the Health Emergencies in Large Populations (H.E.L.P.) course offered by the International Committee of the Red Cross at 10 locations worldwide. This interactive two-week course is designed to promote professionalism in humanitarian assistance in conflict and disasters. Costs of attending the course are paid by the fellowship program. For more information, visit: https://www.unige.ch/formcont/en/courses/health-emergencies-help.

Fellows also attend the Humanitarian Response Intensive Course offered by the Humanitarian Academy at Harvard in Boston. This two-week course prepares aid workers for international disaster and humanitarian crisis response. The course includes a three-day field simulation of a complex humanitarian emergency. More information is available on the course website: https://hhi.harvard.edu/humanitarian-response-intensive-course.

Fellows also attend the Leadership Essentials Course offered by the International Emergency Department Leadership Institute. This week-long course prepares emergency physicians from around the work to be leaders in the field and provides the skills and knowledge required to operate successful emergency departments in any part of the world. More information is available at this website: http://www.iedli.org/.

2. International Field Work

About three to four months per year are spent working abroad. Overseas projects typically last from two weeks to two months depending on the nature of the project and the fellow's MPH class schedule.

Fieldwork is arranged and coordinated by the fellows under the supervision of the Fellowship Director. Fieldwork encompasses the following core areas:

International emergency systems evaluation, research, and development Humanitarian assistance, disaster response, and refugee health Health and human rights policy development Global public health





Emergency medicine education and residency program development International medical provider training

Field experiences are designed to increase the fellow's knowledge base and provide an opportunity to practice acquired skills. Fellows are expected to take an active leadership role during field placements. Past fellows have responded to provide emergency care in conflicts and disasters around the world, managed infectious disease crises, conducted research in a broad variety of settings, created and led emergency medicine training programs, and worked with multilateral organizations and governments to inform policy. Our program prides itself on a wide range of placements: our fellows have worked in every region of the world with an extensive list of non-governmental organizations, multilateral agencies, and United Nations organizations.

Travel medicine experience is also available through the Department of Emergency Medicine for interested fellows who elect to serve for one month as expedition physicians.

3. Harvard T. H. Chan School of Public Health

The Harvard T. H. Chan School of Public Health provides a world-class education for future leaders in international health. Fellows typically enroll in the Global Health concentration of the Master of Public Health (MPH) program and complete their degree requirements as part-time students over the two-year fellowship period. (A one-year fellowship for applicants with an MPH degree is available).

A minimum of 45 credits is required for the MPH degree. Core requirements of the MPH in Global Health are listed below. In addition, fellows may choose to pursue the Interdisciplinary Concentration in Humanitarian Studies. Further information on the MPH program and courses is available in the MPH Curriculum Guide at https://www.hsph.harvard.edu/office-of-educational-programs/master-of-public-health/mph-program-competencies/mph-curriculum-guides/.

Study Competencies: MPH in Global Health:

- 1. Evaluate and apply qualitative and quantitative research methods for analyzing a wide variety of global health challenges and settings
- 2. Design and evaluate global health interventions under different circumstances with different objectives, including their relationship with health system reform
- 3. Develop public health policies to reflect technical, normative, and political considerations
- 4. Design communication and implementation strategies, including leadership capacities for influencing public health action
- 5. Describe various ethical perspectives for understanding the values and consequences of public health policies and decisions; and analyze the ethical dimensions of public health problems, policies, and systems according to these perspectives

Fellowship candidates must apply separately to the Harvard T. H. Chan School of Public Health MPH program by the December 1 deadline. Costs of required textbooks (up to \$1,000), tuition, and fees are paid by the fellowship program. Admissions information and the online application are available at www.hsph.harvard.edu/admissions/.





4. Research

Fellows are required to complete at least one global emergency medicine research project of publishable quality during the fellowship. Fellows may participate in ongoing Harvard faculty projects or develop their own projects with the Fellowship Director. Potential topics include:

- Emergency health systems
- Epidemiology
- Humanitarian assistance
- Educational initiatives
- Disaster response
- Public Health

In addition, fellows are strongly encouraged to complete at least one grant proposal during the fellowship. The Fellowship Director and the Emergency Department's grants administrator are available to guide fellows through the process.

Fellows are also affiliates of the Harvard Humanitarian Initiative (HHI), a program developed to encourage university-wide collaboration among Harvard faculty promoting research, training, and policy development in humanitarian assistance and conflict studies. HHI provides an excellent resource for field projects and research. Visit www.hhi.harvard.edu for more information.

5. Clinical Medicine

Brigham and Women's Hospital (BWH) is a leader in tertiary care, a Level I Trauma and Burn Center, and a founding member of the Mass General Brigham integrated health care system. As attending physicians, fellows supervise residents in the BWH emergency department. The 81-bed ED serves over 60,000 patients per year. The Harvard Affiliated Emergency Medicine Residency (http://haemr.org/) is a PGY 1-4 program with 60 residents, many of whom have a strong interest in global health. Fellows also work clinically at the Brigham and Women's Faulkner Hospital, a busy community emergency department in Jamaica Plain.

Fellows receive clinical appointments at Brigham and Women's Hospital, Brigham and Women's Faulkner Hospital, and an academic appointment at Harvard Medical School. Fellows are expected to participate in academic activities and are encouraged to attend Emergency Department faculty meetings as their schedules allow. Fellows provide clinical coverage equal to 0.6 FTE each year and typically work eight or nine nine-hour shifts per month when they are not traveling overseas. Fellows spend 70% of their clinical time at the Brigham and 30% at the Faulkner Hospital.

6. Humanitarian Aid and Disaster Response

The emergency medicine family of the Division of Global Emergency Care and Humanitarian Studies at Brigham and Women's Hospital (https://www.brighamandwomens.org/emergency-medicine/international-emergency-medicine-and-humanitarian-programs) is actively involved in humanitarian emergency response. The Division supports hospital-wide disaster response and planning and sends faculty and fellows into disaster areas as the need arises. The fellowship provides substantive field experiences and excellent learning opportunities for fellows through collaborations with a number of international aid organizations, including the Harvard Humanitarian Initiative.





Strong support from the emergency medicine faculty provides ED schedule flexibility that allows last- minute fellow deployment to disaster areas. Throughout the fellowship, fellows are generally expected to be prepared to travel for up to two months with as little as 48 hours' notice.

Evaluations

Fellows meet with the Fellowship Director regularly and receive a formal written evaluation every six months. The Chair of Emergency Medicine reviews fellows' clinical performance. International fieldwork is evaluated by field personnel and fellowship faculty. The fellowship curriculum is reviewed every six months by the Fellowship Director to ensure relevance to fellowship goals. The fellow will review clinical, academic, and field experiences regularly with the Fellowship Director.

Global Emergency Medicine Faculty

Harvard is rich with international experts and leaders in many areas relevant to the fellowship. Fellows have access to a wealth of resources including faculty at Harvard Medical School, the Harvard T.H. Chan School of Public Health, the John F. Kennedy School of Government, Harvard Business School, the Harvard Faculty of Arts and Sciences, and more. Current global emergency medicine faculty in the Department of Emergency Medicine at Brigham and Women's Hospital include the following:

Morgan Broccoli, MD, MPH, MSc

Director, Global Emergency Medicine Fellowship Division of Global Emergency Care and Humanitarian Studies Faculty, Harvard Humanitarian Initiative Instructor of Emergency Medicine, Harvard Medical School

Philip Anderson, MD

Director for Global Partnerships, Mass General Brigham Global Advisory Course Director, International Emergency Department Leadership Institute Assistant Professor of Emergency Medicine, Harvard Medical School

Valerie Dobiesz, MD, MPH

Faculty, Harvard Humanitarian Initiative
Assistant Professor of Emergency Medicine, Harvard Medical School

Tim Erickson, MD, FACMT

Faculty, Harvard Humanitarian Initiative
Chief, Division of Medical Toxicology
Associate Professor of Emergency Medicine, Harvard Medical School

Gregg Greenough, MD, MPH, MS

Division of Global Emergency Care and Humanitarian Studies
Co-Director, Humanitarian Geoanalytics Program, Harvard Humanitarian Initiative
Assistant Professor of Emergency Medicine, Harvard Medical School
Assistant Professor of Global Health and Population, Harvard T.H. Chan School of Public Health

Catalina González Marqués, MD, MPH

Division of Global Emergency Care and Humanitarian Studies
Director, Emergency Health Systems Program, Harvard Humanitarian Initiative





Instructor of Emergency Medicine, Harvard Medical School

Stephanie Kayden, MD, MPH

Retired Deputy Chair, Department of Emergency Medicine

Associate Professor of Emergency Medicine, Harvard Medical School

Associate Professor of Global Health and Population, Harvard T.H. Chan School of Public Health

Sean Kivlehan, MD, MPH

Division of Global Emergency Care and Humanitarian Studies

Director, Lavine Family Humanitarian Studies Initiative, Humanitarian Academy at Harvard

Faculty, Harvard Humanitarian Initiative

Assistant Professor of Emergency Medicine, Harvard Medical School

Assistant Professor of Global Health and Population, Harvard T.H. Chan School of Public Health

Luis Lobón, MD, MS

Vice Chair of Strategic Collaborations, Department of Emergency Medicine

Executive Director of Strategic Partnerships, Mass General Brigham Global Advisory

Course Director, International Emergency Department Leadership Institute

Assistant Professor of Emergency Medicine, Harvard Medical School

Regan Marsh, MD, MPH

Division of Global Emergency Care and Humanitarian Studies

Associate Medical Director for Health Equity, Mass General Brigham

Associate Professor of Emergency Medicine, Harvard Medical School

Luke Messac, MD, PhD

Division of Global Emergency Care and Humanitarian Studies

Instructor of Emergency Medicine, Harvard Medical School

Erica Nelson, MD, PhM, MAS

Division of Global Emergency Care and Humanitarian Studies

Co-Director, Humanitarian Geoanalytics Program, Harvard Humanitarian Initiative

Instructor of Emergency Medicine, Harvard Medical School

Michelle Niescierenko, MD, MPH

Grousbeck-Fazzalari Chair in Global Health, Boston Children's Hospital

Director, Global Health Program at Boston Children's Hospital

Director, Global Pediatric Emergency Medicine Fellowship at Boston Children's Hospital Assistant

Professor of Emergency Medicine and Pediatrics, Harvard Medical School

Eric Nilles, MD, MSc

Division of Global Emergency Care and Humanitarian Studies

Director, Program on Infectious Diseases and Humanitarian Emergencies, Harvard Humanitarian Initiative

Associate Professor of Emergency Medicine, Harvard Medical School

Phuong Pham, PhD, MPH

Division of Global Emergency Care and Humanitarian Studies

Associate Professor of Emergency Medicine, Harvard Medical School

Associate Professor of Global Health and Population, Harvard T.H. Chan School of Public Health

Shada Rouhani, MD, MPH

Division of Global Emergency Care and Humanitarian Studies

Assistant Professor of Emergency Medicine, Harvard Medical School





Hanni Stoklosa, MD, MPH

Division of Global Emergency Care and Humanitarian Studies Associate Professor of Emergency Medicine, Harvard Medical School

Jonathan Strong, MD, MPH

Division of Global Emergency Care and Humanitarian Studies Instructor of Emergency Medicine, Harvard Medical School

Michael VanRooyen, MD, MPH

Chief, Enterprise Emergency Medicine, Mass General Brigham

Chair, Department of Emergency Medicine, Brigham and Women's Hospital

Chair, Department of Emergency Medicine, Massachusetts General Hospital

Director, Harvard Humanitarian Initiative

J. Stephen Bohan Professor of Emergency Medicine, Harvard Medical School

Lavine Family Professor of Global Health and Population, Harvard T.H. Chan School of Public Health

Patrick Vinck, PhD, MSc

Chief, Division of Global Emergency Care and Humanitarian Studies
Associate Professor of Emergency Medicine, Harvard Medical School
Associate Professor of Global Health and Population, Harvard T.H. Chan School of Public Health

Scott Weiner, MD

Division of Health Policy Associate Professor of Emergency Medicine, Harvard Medical School

Current Fellows

Mariame Fofana, MD '23-26 Res: Stanford University MD: Meharry Medical College

Anna Fang, MD '25-27 Res: Boston Medical Center MD: Harvard Medical School

Dana Naamani, MD, MPH '25-27

Res: Duke University

MD: American University of Beirut

MPH: Harvard T.H. Chan School of Public Health

Past Fellows

Evelyn Wong, MBBS, FRCS (Edin) (A&E), FAMS '99-00

Senior Consultant

Department of Emergency Medicine, Singapore General Hospital, Singapore

MD: University Medical Center, Singapore





Hilarie Cranmer, MD, MPH '00-01 Director, Global Disaster Response

Harvard University / Massachusetts General Hospital, Boston, MA

Res: Harvard Affiliated Emergency Medicine Residency

MD: Washington University School of Medicine

Irfana Ali, MD '01-02 Attending Physician

Sibley Hospital, Washington, DC

Res: University of Massachusetts Emergency Medicine Residency

MD: University of Maryland School of Medicine

Ondrej Mach, MD, MPH '01-03 General Health Scientist

World Health Organization, Geneva, Switzerland MD: Charles University Medical School, Prague

Miriam Aschkenasy, MD, MPH '01-03

Initiative on Institutional Anti-Racism and Accountability, Harvard Kennedy School, Harvard University

Res: University of Connecticut Emergency Medicine Residency

MD: Sackler School of Medicine, Tel Aviv University/New York Program

Rachel T. Moresky, MD, MPH '01-03

Director, International Emergency Medicine

Columbia University Medical Center, New York, NY

Res: University of Illinois at Chicago Residency in Emergency Medicine

MD: Technion Israel Institute of Technology Faculty of Medicine, Haifa, Israel

G. Bobby Kapur, MD, MPH '02-04

President, Allegheny Health Network Emergency Medicine Management US Acute

Care Solutions

Res: Yale-New Haven Hospital Emergency Medicine Residency

MD: Baylor College of Medicine

David Presser, MD, MPH '03-05

Attending Physician

Torrance Memorial Hospital, Torrance, CA

Res: UCLA/Olive View Emergency Medicine Residency

MD: University of California, San Francisco School of Medicine

Stephanie Kayden, MD, MPH '04-06

Deputy Chair, Department of Emergency Medicine

Harvard University / Brigham and Women's Hospital, Boston, MA Res: Yale-New Haven Hospital Emergency Medicine Residency

MD: Albert Einstein College of Medicine

Susan Bartels, MD, MPH '05-07

Clinician-Scientist, International Emergency Medicine Queens

University, Kingston, ON, Canada

Res: Queen's University Emergency Medicine Residency, Canada

MD: Memorial University of Newfoundland School of Medicine, Canada

Raul Ruiz, MD, MPP, MPH '06-07

Congressman Representing the 36th District of California

U.S. House of Representatives, Washington, DC





Res: University of Pittsburgh Affiliated Residency in Emergency Medicine

MD: Harvard Medical School

Jennifer Chan, MD, MPH '07-08 Director, Global Emergency Medicine

Northwestern University Feinstein School of Medicine, Chicago, IL

Res: Harvard Affiliated Emergency Medicine Residency

MD: Northwestern University Medical School

Mamata Kene, MD, MPH '07-09

Attending Physician

Fremont Medical Center, Fremont, CA

Res: University of California, San Diego Medical Center MD: University of California, San Diego School of Medicine

Parveen Parmar, MD, MPH '08-10

Director, International Emergency Medicine

Keck School of Medicine, University of Southern California, Boston, MA

Res: UCLA/Olive View Emergency Medicine Residency

MD: Northwestern University Medical School

MPH: Harvard School of Public Health

Stephen Morris, MD, MPH '09-11

Director, Academic International Emergency Medicine

University of Washington, Seattle, WA

Res: Yale-New Haven Hospital Emergency Medicine Residency

MD: University of Washington School of Medicine

MPH: Harvard School of Public Health

Brian Sorensen, MD, MPH '10-12

Texas Midwest Emergency Physicians

Res: Yale University Emergency Medicine Residency MD: University of Vermont College of Medicine

MPH: Harvard School of Public Health

Pooja Agrawal, MD, MPH '10-12

Director, Global Health Education

Yale-New Haven Medical Center, New Haven, CT

Res: Harvard Affiliated Emergency Medicine Residency MD: Case Western Reserve University School of Medicine

MPH: Harvard School of Public Health

Maya Arii, MD, MPH '11-13

Humanitarian Policy Officer

Office of Emergency Programmes, UNICEF, New York, NY Res: Yale University Emergency Medicine Residency MD: Keio University School of Medicine, Tokyo

Shawn D'Andrea, MD, MPH '12-14

Director, Strategic Collaborations Unit

Mass General Brigham

Res: LSUHSC Emergency Medicine Residency MD: University of Colorado School of Medicine

MPH: Harvard School of Public Health





Usha Periyanayagam, MD, MPH, MS'13-14 Head of Clinical Product, Komodo Health Emergency Physician, Kaiser Permanente

Res: Northwestern University Emergency Medicine Residency Program

MD: Northwestern University Feinberg School of Medicine

MPH: Northwestern University

MS: Engineering Design and Innovation, Northwestern University

Payal Modi, MD, MS '14-15

Director, Division of International Emergency Medicine and Public Health Assistant

Professor of Emergency Medicine

University of Massachusetts Medical School, Worcester, MA

Res: Brown University

MD: Baylor College of Medicine

MS: Public Health, London School of Hygiene and Tropical Medicine

Kayla Enriquez, MD, MPH '14-16

Director, Global Health Fellowship

Associate Professor of Emergency Medicine

University of California San Francisco, San Francisco, CA Res: Highland Hospital / University of California San Francisco

MD: George Washington School of Medicine

MPH: Harvard School of Public Health

Sean Kivlehan, MD, MPH '15-16

Assistant Professor of Emergency Medicine

Harvard University / Brigham and Women's Hospital, Boston, MA

Res: University of California San Francisco Emergency Medicine Residency

MD: New York Medical College MPH: New York Medical College

Harveen Bergquist, MD, MSc '16-17

Medical Officer

U.S. Department of State, Washington, DC

Res: Cooper University Hospital Emergency Medicine Residency MD: University of Pennsylvania Perelman School of Medicine MSc: Development Management, London School of Economics

MSc: Global Health, University of Oxford

Nirma Bustamante, MD, MPH '16-18

Mexico Country Director

US-Mexico Unit, Division of Global Migration and Quarantine Centers for

Disease Control and Prevention, Atlanta, GA

Res: Harvard Affiliated Emergency Medicine Residency MD: University of Texas Southwestern Medical School MPH: Harvard T. H. Chan School of Public Health

Megan Rybarczyk, MD, MPH '17-19

Assistant Professor of Clinical Emergency Medicine

University of Pennsylvania Perelman School of Medicine, Philadelphia, PA

Res: Boston Medical Center Emergency Medicine Residency

MD: Johns Hopkins University School of Medicine MPH: Harvard T. H. Chan School of Public Health





Jonathan Dyal, MD, MPH '18-19

Assistant Professor of Emergency Medicine

University of Texas Health Science Center at Houston, Houston, TX Res: Baylor College of Medicine Emergency Medicine Residency

MD: Johns Hopkins University School of Medicine MPH: Johns Hopkins Bloomberg School of Public Health

Jonathan Strong, MD, MPH '19-20

Instructor of Emergency Medicine

Harvard University / Brigham and Women's Hospital, Boston, MA Res: University of Maryland Emergency Medicine Residency

MD: University of Wisconsin School of Medicine

MPH: Johns Hopkins Bloomberg School of Public Health

C. Daniel Schnorr, MD '19-21

Emergency Medicine Director

San Carlos Apache Healthcare, Peridot, AZ

Res: Highland Hospital Emergency Medicine Residency MD: Columbia College of Physicians and Surgeons MPH: Harvard T. H. Chan School of Public Health

Morgan C. Broccoli, MD, MPH, MSc '20-22

Director, Global Emergency Medicine Fellowship

Harvard University / Brigham and Women's Hospital, Boston, MA

Res: Boston Medical Center

MD: Johns Hopkins University School of Medicine

MSc: University of Cape Town

MPH: Harvard T. H. Chan School of Public Health

Uche Anigbogu, MD, MPH '21-23

Assistant Professor of Emergency Medicine

George Washington University Res: Baylor College of Medicine MD: Rush Medical College

MPH: Harvard T.H. Chan School of Public Health

Nichole Michaeli, MD, MPH '22-24

Assistant Professor of Emergency Medicine

University of Vermont Res: Brown University

MD: University of Texas Health Sciences Center at San Antonio

MPH: University of Texas Houston

Prem Menon, MD, MPH '23-25 Attending Emergency Physician Martha's Vineyard Hospital

Res: Emory University

MD: University of Texas Health Sciences Center at San Antonio

MPH: Harvard T.H. Chan School of Public Health

Courtney Bearnot, MD, MPH '24-25

Res: Brown University

MD: Stanford University School of Medicine

MPH: Yale School of Public Health





Fellowship Benefits

Fellows receive a competitive salary and generous package of faculty benefits and CME funds. Full tuition and fees related to the Harvard T. H. Chan School of Public Health MPH degree program, including the cost of required textbooks (up to \$1,000), are covered by the fellowship. Costs of attending the ICRC's H.E.L.P. course, the Humanitarian Response Intensive Course, and the International Emergency Department Leadership Institute's Essentials Course are also fully paid. Fellowship-related travel costs are paid, including airfare, room and board, global malpractice insurance coverage, and international medical and evacuation insurance. Two weeks of vacation and two weeks for educational pursuits are allowed per year.

Application Requirements

Applicants must be board certified or board eligible in emergency medicine when they begin the fellowship. Successful applicants must also (1) receive a clinical appointment at Brigham and Women's Hospital, (2) receive a clinical fellow appointment at Harvard Medical School, (3) obtain a Massachusetts medical license, and (4) be accepted into the MPH program by the Harvard T. H. Chan School of Public Health.

Fellowship candidates must submit the following materials via email to <u>iem@partners.org</u> by the September 19th application deadline. Please see the application for further details.

- 1. Application form
- 2. Letter of interest
- 3. cv
- 4. Personal statement
- 5. Three letters of recommendation (one from residency director or current chairman)

Fellowship candidates must also apply separately to the MPH program of the Harvard T. H. Chan School of Public Health by the December 1 deadline. For application information and instructions, visit www.hsph.harvard.edu/admissions/.

Thank you for your interest in our program. Please feel free to contact us with any questions about the fellowship or your application.

Morgan Broccoli, MD, MPH, MSc
Fellowship Director
Division of Global Emergency Care and Humanitarian Studies
Department of Emergency Medicine
Brigham and Women's Hospital, 75 Francis Street, Neville House, Boston, MA 02115
Tel 617-732-5813 | Fax 617-264-6848 | mbroccoli@bwh.harvard.edu

