International Emergency Medicine Fellowship
Program Description

Overview

The Harvard International Emergency Medicine Fellowship prepares physicians to become leaders in international health and international emergency systems. 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 international emergency medicine and/or medical leadership and research in international health organizations.

Goals

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

1. Advance the specialty of emergency medicine worldwide.
2. 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.
5. Maintain a working knowledge of international public health issues and government and non-governmental organizations and infrastructure around the world.
6. Understand international humanitarian law and human rights as they relate to conflict, humanitarian crises, and global health.
7. Use leadership, teaching, and clinical skills to advance the practice of international emergency medicine.
Fellowship Structure

The fellowship begins July 1 and lasts two years. A fellow who already has an MPH degree will complete a one-year fellowship. Fellows divide their time between international projects and research, Harvard School of Public Health classes, and clinical work in the ED.

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

(1) International Curriculum

Fellows take courses at the Harvard School of Public Health and participate in other educational programs that focus on international 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 http://www.icrc.org/eng/resources/documents/misc/help_course.htm.

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: http://www.humanitarianacademy.harvard.edu/humanitarian-response-intensive-course.

(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
- International 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 the conflict in Kosovo, trained Israeli and Palestinian health workers in East Jerusalem, assessed humanitarian needs in Uganda, taught
emergency medicine in Japan and Germany, helped control a cholera outbreak in Ethiopia, evaluated refugee health programs in Tanzania and Mozambique, created a trauma registry for Bhutan, and aided survivors of the tsunami in Indonesia and the earthquakes in Pakistan, Haiti, and Japan.

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

(3) Harvard School of Public Health

The Harvard 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 42.5 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, Ethics, and Human Rights. Further information on the MPH program and courses is available in the MPH Curriculum Guide at www.hsph.harvard.edu/mph/.

Core Requirements: MPH in Global Health (credits)
- Ethics of Public Health Practice (2.5)
- Practice and Culminating Experience (3.75)
- Biostatistics (5.0)
- Epidemiology (2.5)
- Environmental Health Sciences (2.5)
- Health Services Administration (2.5)
- Social and Behavioral Sciences (2.5)

Fellowship candidates must apply separately to the Harvard School of Public Health MPH program by the December 15 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 international 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 and is a Level I Trauma and Burn Center. As attending physicians, fellows supervise residents in the BWH emergency department. The 54-bed ED serves 59,000 patients per year. The Harvard Affiliated Emergency Medicine Residency (www.haemr.org) is a PGY 1-4 program with 60 residents, many of whom have a strong interest in international health.

Fellows receive clinical and academic appointments at Brigham and Women’s Hospital and 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.

(6) Humanitarian Aid and Disaster Response

The emergency medicine faculty of the Division of International Health and Humanitarian Programs (www.brighamandwomens.org/DIHHP/) at Brigham and Women’s Hospital is actively involved in humanitarian emergency response. The Division coordinates a hospital-wide disaster response roster and sends faculty and fellows into disaster areas as the need arises.

Through collaborations with a number of international aid organizations—including the International Rescue Committee, Oxfam, Save the Children, CARE, Red Cross/Red Crescent, Médecins Sans Frontières, Samaritan’s Purse, Emergency, and Catholic Relief Services—the fellowship provides substantive field experiences and excellent learning opportunities for fellows.

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 Chairman 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.

**International 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 School of Public Health, the John F. Kennedy School of Government, Harvard Business School, and the Harvard Faculty of Arts and Sciences. Current international emergency medicine faculty at Brigham and Women’s Hospital include the following:

J. Stephen Bohan, MD, MS  
Executive Vice Chairman and Clinical Director, Emergency Medicine, Brigham and Women’s Hospital  
Assistant Professor of Medicine (Emergency Medicine), Harvard Medical School

Gregg Greenough, MD, MPH  
Research Director, Division of International Health and Humanitarian Programs  
Assistant Professor of Medicine (Emergency Medicine), Harvard Medical School  
Research Director, Harvard Humanitarian Initiative, Harvard University

Stephanie Kayden, MD, MPH  
Director, International Emergency Medicine Fellowship  
Division of International Health and Humanitarian Programs  
Instructor in Medicine (Emergency Medicine), Harvard Medical School  
Director, Lavine Family Humanitarian Studies Initiative, Harvard University

Jennifer Leaning, MD, SMH  
Associate Professor of Medicine (Emergency Medicine), Harvard Medical School  
François-Xavier Bagnoud Professor of the Practice of Health and Human Rights, Harvard School of Public Health  
Director, FXB Center for Health and Human Rights, Harvard University

Kelli O’Laughlin, MD, MPH  
Division of International Health and Humanitarian Programs  
Instructor in Medicine (Emergency Medicine), Harvard Medical School

Parveen Parmar, MD, MPH  
Associate Director, International Emergency Medicine Fellowship  
Division of International Health and Humanitarian Programs  
Instructor in Medicine (Emergency Medicine), Harvard Medical School

Ronak Patel, MD, MPH  
Division of International Health and Humanitarian Programs  
Instructor in Medicine (Emergency Medicine), Harvard Medical School  
Director, Urbanization and Emergencies Program, Harvard Humanitarian Initiative

Michael VanRooyen, MD, MPH  
Chief, Division of International Health and Humanitarian Programs
Professor of Medicine (Emergency Medicine), Harvard Medical School
Director, Harvard Humanitarian Initiative, Harvard University

Ron Walls, MD
Chairman, Department of Emergency Medicine, Brigham and Women’s Hospital
Professor of Medicine (Emergency Medicine), Harvard Medical School

**Current Fellows**

Shawn D’Andrea, MD ’12-14
  Res: LSUHSC Emergency Medicine Residency
  MD: University of Colorado School of Medicine

Usha Periyanayagam, MD, MPH ’13-’14
  Res: Northwestern University Emergency Medicine Residency Program
  MD: Northwestern University Feinberg School of Medicine

**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
  Education Director, Harvard Humanitarian Initiative
  Harvard University / Brigham and Women’s 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
  Medical Epidemiologist
  Global Immunization Division, Centers for Disease Control, Atlanta, GA
  MD: Charles University Medical School, Prague

Miriam Aschkenasy, MD, MPH ’01-03
  Public Health Specialist
  Oxfam America, Boston, MA
  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
Girish Bobby Kapur, MD, MPH ’02-04  
Associate Chief for Educational Affairs & Residency Program Director  
Section of Emergency Medicine, Baylor College of Medicine, Houston, TX  
Res: Yale-New Haven Hospital Emergency Medicine Residency  
MD: Technion Israel Institute of Technology Faculty of Medicine, Haifa, Israel  

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  
Director, International Emergency Medicine Fellowship  
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  
Associate Director, International Emergency Medicine Fellowship  
Beth Israel Deaconess Medical Center, Boston, MA  
Res: Queen’s University Emergency Medicine Residency, Canada  
MD: Memorial University of Newfoundland School of Medicine, Canada  

Raul Ruiz, MD, MPP, MPH ’06-07  
Attending Physician  
Eisenhower Medical Center, Rancho Mirage, CA  
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  
Hayward/Fremont Medical Centers, 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  
Associate Director, International Emergency Medicine Fellowship  
Harvard University / Brigham and Women’s Hospital, Boston, MA  
Res: UCLA/Olive View Emergency Medicine Residency  
MD: Northwestern University Medical School
Stephen Morris, MD, MPH ’09-11
Instructor, Division of Emergency Medicine
University of Washington, Seattle, WA
Res: Yale-New Haven Hospital Emergency Medicine Residency
MD: University of Washington School of Medicine

Brian Sorensen, MD, MPH ’10-12
Attending Physician
Texas Midwest Emergency Physicians, Hendrick Medical Center, Abilene, TX
Res: Yale University Emergency Medicine Residency
MD: University of Vermont College of Medicine

Pooja Agrawal, MD, MPH ’10-12
Instructor, Department of Emergency Medicine
Yale University, New Haven, CT
Res: Harvard Affiliated Emergency Medicine Residency
MD: Case Western Reserve University School of Medicine

Maya Arii, MD, MPH ’11-13
Faculty, Department of Emergency Medicine
Keio University, Tokyo, Japan
Res: Yale University Emergency Medicine Residency
MD: Keio University School of Medicine, Tokyo

Fellowship Benefits

Fellows receive a competitive salary and generous package of faculty benefits and CME funds. Full tuition and fees related to the Harvard 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 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 by Brigham and Women’s Hospital, (2) receive a faculty appointment by Harvard Medical School, (3) obtain a Massachusetts medical license, and (4) be accepted into the MPH program by the Harvard School of Public Health.

Fellowship candidates must submit the following materials via the International Emergency Medicine Fellowships Website (http://www.iemfellowships.com/) by the September 20 application deadline. Please see the application form for further instructions.
1. Application form  
2. Letter of interest  
3. CV  
4. Personal statement  
5. Three letters of recommendation (one from residency director or current chairman)  
6. Official USMLE transcript

Fellowship candidates must also apply separately to the MPH program of the Harvard School of Public Health by the **December 15** deadline. For application information and instructions visit [www.hsph.harvard.edu/admissions/](http://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.

Stephanie Kayden, MD, MPH  
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Division of International Health and Humanitarian Programs  
Department of Emergency Medicine  
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