



# DEVELOPING GLOBAL HEALTH CURRICULA: A GUIDEBOOK FOR US MEDICAL SCHOOLS

A COLLABORATION OF AMSA, GHEC, IFMSA-USA, AND R4WH



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**Cover Image:** Medical student volunteer and local child at IFMSA-USA's Village Concept Project in Uganda.





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# 1



## A BRIEF HISTORY OF INTERNATIONAL HEALTH

The idea that medicine and health transcend geographic boundaries is not new; however, it is taking considerable time for this concept to be appropriately and comprehensively integrated into US medical education and practice. Globalization of all sectors of society, including business, media, education, has been expedited and facilitated by the computer revolution that characterizes the last 20 years. However, the discipline of ‘international health’ (also coming to be termed ‘global health’) in its current form has evolved over the last 150 years.

The roots of ‘international health’ in modern times can be traced to the cholera outbreak of the mid-1800’s. This disease crisis prompted physicians and politicians to convene the first International Sanitary Conference (ISC) in 1851. Successive ISC’s focused on the germ du jour, such as yellow fever and the plague, for the remainder of the 19th century. International Sanitary Conferences took place annually until 1938, eventually becoming meetings where the leading discoveries in medicine were presented and serving as a vehicle for the development of shared medical diction.

In 1902 hemispheric collaboration to deal with yellow fever led to the creation of the Pan American Sanitary Bureau (now called the Pan American Health Organization-PAHO). PAHO soon became a model for transnational information sharing and health promotion. Following World War I, several organizations (the leading one of which was the League of Nations Health Committee) from

different corners of the globe expanded ‘international health’ from a infectious-disease focused effort to a discipline that addressed maternal and infant health, nutrition, housing, physical education, drug trafficking, and occupational health.

The brutalities of World War II Nazi concentration camps are credited with prompting a new degree of humanism that led to unprecedented cooperation between countries as the world vowed to prevent repetition of such human suffering. As is evident, many of the early events leading up to modern day ‘international health’ were focused on health crises in the Americas and Europe. Subsequently, the World Health Organization (WHO) was created in 1948 out of the UN’s desire to have a single global entity charged with fostering cooperation and collaboration among member countries to address health problems. The mission of WHO embodied a new concept of health; health was not merely the absence of disease, but the promotion, attainment and maintenance of physical, mental, and social well-being.

In 1948 the first Student International Clinical Conference was held. It brought together medical students from throughout Europe. In 1951 this conference evolved into the International Federation of Medical Students’ Associations with the stated objective of “studying and promoting the interests of medical student co-operation on a purely professional basis, and promoting activities in the field of student health and student relief.” This mission was soon expanded to include medical student cooperation toward the health of all populations. Almost simultaneously in 1947, doctors from 27 countries met in Paris and created the World Medical Association. Its objective is “to serve humanity by endeavoring to achieve the highest international standards in Medical Education, Medical Science, Medical Art and Medical Ethics, and Health Care for all people in the world.”

WHO’s failed efforts to eradicate malaria (after a significant victory combating small pox) revealed the interrelationship between health and infrastructure, culture, politics and economic stability. In addition, it demonstrated the imperative that health campaigns be culturally-sensitive and discredited the notion of ‘magic bullets’ for the world’s disease burdens. Medecins Sans Frontieres (Doctors Without Borders) was created in 1971 by physicians who were dissatisfied by the WHO and International Red Cross’ inadequate

efforts to address structural and political factors that led to health crises. In 1977 WHO shifted its course from a disease-specific to a health-for-all approach.

With regard to the international health medical education climate of the US, the International Health Medical Education Consortium (now called the Global Health Education Consortium) was created in 1991. This organization has a membership of approximately 80 medical schools in the US and Canada and aims to foster international health education for medical students. The increasing focus on international health is also evident in other large US organizations. The American Medical Association started their Office of International Medicine in 1978, the US chapter of IFMSA was started in 1998, and the Global Health Action Committee of the American Medical Student Association was started in 1997.

We are currently in an era of increased awareness that health is determined by interrelated medical, political, economic, educational and environmental factors, to name but a few. Consequently, the future of world health requires cooperative partnership between nations, health care professionals, medical researchers, public health specialists, corporations, and individuals. Currently, the economic, human, and environmental consequences of the health disparities in the world are being elucidated. For example, in 2004 the UN's Commission on Macroeconomics and Health put forth three core findings:

1. The massive amount of disease burden in the world's poorest nations poses a huge threat to global wealth and security.
2. Millions of impoverished people around the world die of preventable and treatable infectious diseases because they lack access to basic medical care and sanitation.
3. We have the ability and technology to save millions of lives each year if only the wealthier nations would help provide poorer countries with such health care and services.

These principles sound simple and straightforward, but their implementation is complex and expensive. We are now at a point in the natural history of international medicine, where trained individuals from many fields are cooperating to address the multifaceted challenges to world health. Each field is training individuals equipped to enter such collaborative efforts. Just as medicine is training doctors who specialize in international health, law is training lawyers who specialize in international law. To this end, medical students and medical schools worldwide are grappling with what these skills sets are and how to cultivate them among their students (or a subset therein).

# 2

## A BRIEF LITERATURE REVIEW OF INTERNATIONAL HEALTH MEDICAL EDUCATION



Many topics fit under the umbrella of international medical education. For example, there is a strong movement to create and implement Global Standards in Medical Education (much of this work is done through the World Federation for Medical Education). Others are trying to infuse evidence-based medicine into medical schools worldwide. Many institutions are bringing graduate students and basic science researchers from abroad to train or work in the US. Furthermore, there are US medical centers interested in consulting with centers abroad to help build health care infrastructure in foreign countries. Some in the US and foreign medical community seek to help graduates of foreign medical schools enter the US for residency training or practice. All these activities have “international” themes. However, this literature review focuses on ‘international health medical education’ as it pertains to US medical students, and to a lesser extent, foreign medical students who do rotations at US medical schools.

An article in JAMA November 1969 reported, “every US medical school is involved in such international activities as faculty travel for study, research and teaching, clinical training for foreign graduates, and medical student study overseas...a recent self-survey by Case Western Reserve medical students indicated that 78% of the first-year class and 85% of the second-year class were interested in studying or working abroad at sometime in their medical school careers.”<sup>1</sup> This paper went on to report that 600 medical students went abroad during the academic year 1966-1967. The claims about the extent of international health at US medical schools, as

Image: Pediatric patients at IFMSA-USA partner clinic in rural Guatemala.

demonstrated in the 35-year old article, are echoed by statements being made today. However, the activities at US medical schools are variable, fragmented, and not transparent. Currently, there is an increasing institutionalization of international health, as well as participation by medical students in international opportunities. However, the commitment and investment required by medical schools to ‘embrace’ international health is inconsistently present.

The evolution of international electives in developing countries began in the 1950’s. Several factors contributed to the rise in popularity of such electives. First, the invention of commercial air travel allowed students to access distant, often remote, areas. Secondly, the decolonization of areas in Africa, Asia, and South America created impetus to initiate international assistance programs that addressed health in these newly independent countries. Concurrently, in 1960 there was a grant of \$180,000 from Smith, Kline, and French Laboratories to fund overseas experiences for medical students. The increased access to world travel, combined with a changing global landscape and funding for medical students to enter that landscape, led to an increase in medical student rotations abroad.<sup>2</sup> Today there is an elaborate network of organizations that help medical students access and participate in international experiences. In addition, there are local, national, and international student-run organizations that unite students with interest in global health. Finally, there are physicians who dedicate their careers to aspects of international health as well as governmental/non-governmental organizations with global health missions.

In 1984 approximately 6.2% of US medical students participated in overseas clinical activities. This percentage grew to 15.3% in 1989 and 38.6% in 2000, according to the American Academy of Medical Colleges nationwide graduate questionnaire.<sup>3</sup> While medical student international clinical electives have clearly become the norm, medical schools still struggle with how to integrate international health into the didactic curriculum and into their institutions at large. However, the institution of such curriculum is being driven by the expectations of prospective medical students and residents. A study of prospective residents found that 50% said the international health programming at their institution influenced their decision to attend it.<sup>4</sup> Research and commentary regarding the benefits of international health medical education curriculum has created a dialogue that facilitates these efforts at individual institutions.

One major form of international health medical education is international electives. Research has started to describe the benefits of such electives. One study demonstrated that students who participated in a 3-6 week international program scored significantly higher in preventive medicine/public health portions of the USMLE board exam than a control group.<sup>5</sup> In another study, student participants described an increased awareness of the importance of public health and patient education issues following their international experience. Seventy-eight percent of students also reported a heightened awareness of cost issues and cost barriers involved in patient care following their experience. All students in this cohort also reported an increased perceived utility of history and physical examination and decreased use of diagnostic tests.<sup>6</sup> Another study demonstrated that students who do an international health experience in a developing country are more likely to subsequently practice in underserved areas within the US.<sup>7</sup> In a study of medical students and residents who participated in international health electives, participant attitudes toward the role of doctor-patient communication, use of symbolism by patients, public health interventions, and community health programs were more positive than prior to the experience. In addition, when these participants were re-interviewed two years later, they reported continued and significantly increased positive influences on their clinical and language skills, awareness of cultural and socioeconomic factors, awareness of the role of communication, and careers working with the underserved ( $p < .01$ ).<sup>8</sup> In several of the above mentioned studies, international health experiences were associated with choosing a career in primary care. This may be due to selection bias in that there is an increased likelihood of persons going into primary care to choose to participate in international experiences, or it may reflect one outcome of global health exposure on career choice.

Even short term (one month) international electives appear to result in increased cultural competency among participant residents and students. Cultural competency in this context is characterized by the positive perception of patients from different cultures, as well as a medical practice that has greater insight and empathy toward cross-cultural patients. Students who participated in an international elective had significantly improved scores on the "Cultural Self-Efficacy Scale" compared with their counterparts who did not participate in the experience ( $p = .007$ ).<sup>8</sup>

State University of New York, Downstate Medical Center has been administering an organized international electives program for over 25 years. A component of this program is a preparatory process. Heck and Wedemeyer found that although 93% of medical schools allowed for international electives (in 1991), few medical schools adequately prepared their students for the overseas experience. SUNY Downstate has conscientiously emphasized this preparation.<sup>9</sup> The preparation of medical students includes: health preparations (immunizations/universal precautions), legal preparation (liability agreement), relevant cultural preparation (utilizing reports filed by previous students who went to similar areas and/or faculty who are familiar with the region), as well as encouraged independent study of the destination.

In addition to electives abroad, international health medical education has taken various forms at US medical schools. The University of Massachusetts has a Global Multiculturalism Track, a pre-clinical educational track available to 26 medical students per year. Students participate in domestic and international immersion experiences with multicultural populations. This program was originally facilitated by a grant from the Massachusetts' Division of Medical Assistance, a group that has interest in developing physicians with cultural competence. Following the grant period (1996-2000), the medical school assumed the financial obligations to continue the course. A study of the participants found that they had increased tolerance for non-English speaking patients, improvement in already high cultural competence (because those that apply for the track have baseline high cultural competence), and maintenance of high levels of respect and compassion toward patients while non-track students demonstrated a reduction in these levels as medical school progressed.<sup>10</sup>

This reinforces an important commentary by Carl Taylor, MD, DrPH, at Johns Hopkins School of Public Health, who proposes that international health experiences are "a remarkably successful way to promote idealism and altruism." A consequence of international work in developing countries is that students "come back seeing problems in their home environment very differently from how they saw them before." Dr. Taylor emphasizes that service is often what first attracts medical students to the field. He charges medical schools with the duty to reinforce these attitudes. A method to this reinforcement is international experiences.<sup>11</sup>

Other schools, such as Case Western Reserve University, have short (often impermanent) didactic electives about international health available to medical students. The literature does not reflect the presence of sustainable, mandatory, sustainable curricula in international health at any medical schools. The existence of such curricula will be more evident after the completion of an international health survey that will be administered by AAMC/GHEC in 2005-06.

There has also been a great deal of commentary on the imperative and benefits of international health medical education. David Shaywitz, MD, PhD, from Harvard Medical School, articulates this phenomenon as follows:

The quest to improve global health represents a challenge of monumental proportions: the problems seem so enormous, the obstacles so great, and success so elusive. On the other hand it is difficult to imagine a pursuit more closely aligned with the professional values and visceral instincts of most physicians. Many young doctors enter medicine with a passionate interest in global health; our challenge is to nurture this commitment and encourage its expression.<sup>12</sup>

The history and progress of the globalization of medicine, supported by growing literature describing the benefits of international health medical education, combined with a demand from prospective and current medical students, creates an imperative for US medical schools to dedicate the resources and energy necessary to 'embrace' international health. Although the skills sets necessary to participate in health care in the global sphere are acquired through formal and informal education over a lifetime, this education needs to be sustained and nurtured while students are attending US medical schools. For schools to ignore international health medical education, indicates they are willing to ignore the world's most pressing health problems and medicine's neediest patients.

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# 3



## FORMS OF GLOBAL HEALTH MEDICAL EDUCATION

International health medical education, like most types of medical school curriculum, comes in many forms. Below is a description of the most common sources for international health medical exposure available to medical students. As is quickly evident, some mechanisms are formal and medical-school based, while others are activities sought out by students outside their required medical school curriculum. The breadth of these activities begins to expose the creativity that can be utilized to introduce medical students to global health.

### **Didactic lectures/seminars for 1st and 2nd year medical students**

One format for international health medical education is that of pre-clinical didactics. These didactics can be integrated into the mandatory curriculum or offered as elective courses for 1st and 2nd year medical students. They can be intermingled with the public health portion of the curriculum or into infectious disease lecture series. Commonly, these electives are an option for the social medicine component of 1st and 2nd year.

### **Didactics/electives during the 3rd/4th year of medical school**

International health medical education can be intertwined with infectious disease rotations, community medicine rotations, and didactics about underserved populations. Some medical schools have taken the initiative to create primer didactics for their fourth year students who will be doing an international elective. These

Image: Medical student during international summer experience between first and second year in rural Kenya.

seminar courses can discuss the provision of health care in the developing world setting, as well as inform students about safety issues unique to health care settings abroad.

### **International experiences during the summer between 1st and 2nd year**

Students interested in international health often make arrangements to explore these interests during the summer between 1st and 2nd year of medical school. This is the only extended free time students have during medical school. Often these experiences are organized independently by students. However, it is not uncommon for medical schools to help with funding and/or preparation for such experiences.

### **International electives for 4th year students**

During the 4th year students have multiple months of elective time. This is often an opportunity for students to participate in the delivery of health care at a site abroad. There are organizations, both for-profit and non-profit, that facilitate these rotations. Many students locate sites independently, with faculty mentors, or with other students. Sites for these rotations vary from hospitals to rural clinics and may take place in developed or developing nations. The rationale behind both is to allow students to see health care delivery in another setting, in a unique system or socioeconomic situation.

### **International Health Tracks for medical students**

International Health Tracks that integrate training over several or all years of medical training are increasing in popularity in US medical schools. This follows a trend of introducing international health tracks in residency training programs. These tracks vary widely with some preparing students for certifications while others give informal recognition of student achievement. There are no standards for such educational tracks. Rather, they reflect the way some schools choose to structure their international health medical education and to recognize individuals interested in studying in this field.

### **Attendance at meetings with global health focus**

There are dozens of institutional, regional and national meetings that students can attend to learn about and network for a career in international health. These meetings are often arranged around a theme or an organization. At these meetings students network with like-minded students and hear presentations from physicians who have dedicated all or part of their career to global medicine. Students at these meetings are often trying to find out what opportunities are available in international health while they are in medical school, and also how they can structure a career in global health. Students often attend these meetings at their own cost or with the support of their medical schools. Some of these meetings are the national conferences for global health-oriented organizations.-others are organized by institutions. For instance, American University Peacebuilding and Development Institute hosted a symposium on Public Health and Conflict in December 2005.

### **Presentation of research at international locations**

Students who do research will occasionally submit it for presentation at international meetings. In this way students can understand the scope of research that goes on outside the United States, as well as to learn to form relationships and collaborations with research counterparts abroad. Academic medicine meetings are held in every region. A popular venue for research presentations by students is the European Students' Conference which features medical students from all over the world ([www.es-berlin.com](http://www.es-berlin.com)).

### **Collaboration with international researchers**

Collaboration with researchers abroad can open doors for medical students to participate in research and perhaps work with colleagues abroad. These relationships can facilitate a relationship between US and foreign institutions to help form partnerships for educational, research and clinical collaboration.

### **Participating in research at an international site**

Many medical students conduct research during school and an increasing number are doing such research abroad. Although some research is done in developed countries, the majority is carried out in developing countries. In either case students will usually visit the country of interest and often work under the guidance of a mentor/PI in the United States. Research Exchange programs are available for medical students through the International Federation of Medical Students' Associations ([www.ifmsa.org/score/](http://www.ifmsa.org/score/)). There are also opportunities for students to present such research. An example is the Global Health Council "New Investigators in Global Health Program" which features research by students and new professionals at their annual Washington, DC meeting.

### **Participation in a global health national/international organization**

There are both US- and internationally-based organizations to which medical students with an interest in international health can belong. These organizations facilitate learning about global health issues, as well as the networking necessary to establish an international health career. Student-led and professional organizations exist to facilitate experience and education in global health. In the absence of an organized medical school curriculum in global health, much learning is done informally through these organizations and their related programming. The resources section of this document highlights a few of these organizations.

### **Mentoring of medical students by faculty who are active in international health**

Some schools, while lacking a structured program in global health, may nevertheless have faculty with sufficient expertise in international health to be able to mentor medical students. These faculty are often pivotal 'champions' who can help to institutionalize global health. Because international health is a multifaceted and diverse field, practical experience and connections are often necessary for effective teaching and mentoring. Increasingly, medical schools are developing databases to link faculty with experience/interest in global health with fellow faculty and students.

### **Independent learning/service learning projects**

In schools that lack faculty mentors or where the mentors are not readily accessible, students may engage in self-motivated learning and peer education. Some of the most active components of 'international health activities' at US medical schools are student groups, often called international health interest groups or the like. The existence and activities of these student-led initiatives is evidence of the strong student interest in global health. .

### **Complementary degree programs**

Medical students are increasingly seeking additional professional degrees beyond the MD/DO. These degrees are important additions for physicians who want to have a career dedicated to global health, both in the realms of policy and clinical practice. A frequent choice is a Masters in Public Health (MPH). Often MPH programs will have a policy, global health, or another focus that will lend itself to globally-active physicians. Examples of other degrees include a Masters in International Health Policy (such as that offered by the London School of Economics), and Masters of Development and Health (also offered by the London School of Economics), Masters of Business Administration (areas of concentration in health and economics, or other relevant sub-fields), and various other complementary degree programs.

### **Graduate medical education programs**

The growing interest in global health medical education is also occurring in the realm of graduate medical education. Currently there are residencies within family medicine, internal medicine, pediatrics, emergency medicine, psychiatry and surgery that have or are developing global health tracks. Each program has a unique strength or focus which constitutes their global health curriculum. Often these programs support their residents during elective rotations abroad and protect time for other scholarly activities while the residents are working at domestic sites. Commonly these residency programs also focus on underserved populations in the United States, as well as those in the developing world.

# 4

## MODELS OF GLOBAL HEALTH MEDICAL EDUCATION AT US MEDICAL SCHOOLS



Outlined below are a few of the many examples of how US medical schools are executing their global health medical education curriculum. They demonstrate various means to a similar end, viz: how to educate US medical students about health beyond US borders. Some models were consciously created while others evolved based on pre-existing institutional strengths and priorities. While there is no one correct way to achieve global health medical education, the most successful schools will be those that build their global health program based on a careful review of internal strengths and weaknesses and a clear specification of goals and priorities. Though not all of the below models have resulted in substantial global health medical education, they represent what now exists at US medical schools and can serve as starting points for further curricular improvements.

### Partnering with a school of public health

Johns Hopkins School of Medicine utilizes the Johns Hopkins Bloomberg School of Public Health and its Department of International Health to provide support and structure for medical students seeking global health experiences. The Department of International Health within Hopkins' SPH was founded in 1961. It has a rich history of being involved in four program areas: Disease Prevention and Control, Health Systems, Human Nutrition, and Social and Behavioral Interventions. The Hopkins School of Medicine has relatively informal mechanisms for sending medical students abroad and educating them about global health. They

Image: Youth at the IFMSA-USA Kenya Village Concept Project during World AIDS Day awareness celebrations.

utilize their neighboring School of Public Health to augment medical students' education in this area of knowledge. Hopkins provides a model for how a school outside of the medical school can be utilized to help provide educational opportunities for medical students. Website: [www.jhsph.edu/dept/ih](http://www.jhsph.edu/dept/ih)

### Focus on globally applicable biomedical research

Case Western Reserve University School of Medicine's Center for Global Health and Diseases is an example of a department that focuses on research into parasitic and infectious diseases. The department has 10 faculty, 5 administrators and \$12 million in annual funding. This department allows a small number of medical students to gain research experience, but has not been a formative force for funding or organizing medical student global health education. The Center exemplifies how an internationally-focused department can have a research focus and educate future physicians on the role first-world research can have in addressing developing world health problems. Website: <http://ora.ra.case.edu/geomed/>

### A faculty champion brings global health to life

At Georgetown Medical School the rise of their International Programs can in large part be attributed to the passion, conviction and tireless effort of one faculty member. Irma Frank assumed the position of Assistant Dean for International Programs in 1990. Currently, 30% of Georgetown's medical students complete a 4th year international elective. Dr. Frank established programs around the globe with hospitals and other care providers; students can set-up independent rotations subject to approval by Dr. Frank. These activities are administered by the School of Medicine's Office of International Programs. Dr. Frank illustrates how committed faculty can champion the creation and maintenance of global health programs for medical students. Website: <http://www3.georgetown.edu/som/international/index.htm>

### Department based programming

The Department of Family Medicine has emerged as the center of international health medical educational activities at University of Cincinnati College of Medicine. Departmental leadership includes

a Director of International Health Programs. An international health residency track is offered and an International Health-Care of Underserved Populations Education Track for medical students is being introduced. The Department of Family Medicine's involvement with global health medical education demonstrates how care for the underserved domestic population can be made relevant to care for the underserved worldwide.

Website: <http://www.familymedicine.uc.edu/>

### **Partnering with a non-governmental organization**

The University of Cincinnati Department of Family Medicine utilizes an institution-to-community approach that is facilitated by a non-governmental organization (NGO), Shoulder-to-Shoulder. This consists of working with rural Honduran communities to address health care needs and of serving as a partner in sustainable health care projects. This model exemplifies how a non-governmental organization can be utilized to carry out university-based global health work. In addition, this NGO has evolved into a collaborative effort between medical schools. Currently, University of Rochester, University of Cincinnati, and Baylor are working together in the context of this NGO. This illustrates how medical schools can work together in the international setting to enhance the educational opportunities for medical students and residents. Website: [www.shouldertoshoulder.org](http://www.shouldertoshoulder.org)

### **Global health office centralized within a medical school**

Global REACH (Research, Education and Collaboration in Health) was established in 2002 at the University of Michigan Medical School. It was spearheaded by an Associate Dean and is now headed by an MD/PhD Director of Global REACH with a dual appointment as an Associate Professor in Department of Internal Medicine. The Global REACH Student Alliance is the medical student global health interest group. In addition to the director, the staff of Global REACH includes a Research Director (who studies the educational benefits of medical student international experiences among other projects), a Research Assistant, and an Administrative Assistant whose duties includes work with visiting scholars. Current Global REACH projects include: identifying and organizing international faculty and medical student activities, working on a grant from the Institute for International Medical Education to

assess core competencies at a Chinese medical school, developing memoranda of understanding with schools abroad, and qualitative studies on the impact of international health experiences on medical students. Global REACH also provides funding for medical students to do international rotations. This program demonstrates how a centralized office situated within a medical school can bring support and opportunities to medical students while fostering medical center-wide opportunities in international health. Website: [www.med.umich.edu/medschool/global/](http://www.med.umich.edu/medschool/global/)

### **Private foundation-medical school partnerships**

The relationship between the University of Washington and the Gates Foundation/Puget Sound Partners for Global Health exemplifies an important type of partnership that can facilitate global health medical education. The University of Washington is now establishing a Department of Global Medicine. They now have a Global Health Resource Center with a Program Manager, an International Medical Education Office, a student-led International Health Group, and the Global Health Pathway for medical students. New courses, MED 560, Advanced Global Health, and MED 561, Tropical Medicine, were developed by the International Health Group with support from the Bill and Melinda Gates Foundation and the Puget Sound Partners for Global Health. The International Health Opportunities Program is funded by the latter and facilitates the international experience of 10 first year students, as well as a three-day introductory session before their departure. Funding for seminars, speakers and rotations has come from grants written to these organizations. Aligning medical schools with private foundations committed to global health can help facilitate the institutionalization of global health medical education. Website: <http://depts.washington.edu/ihg/> and <http://www.mebi.washington.edu/intl.html>

### **International health tracks for medical students**

There has been a rise of international health tracks for medical students in recent years. Two medical schools, University of California, San Francisco and Baylor, are leading this movement.

### University of California, San Francisco

The University of California, San Francisco (UCSF) currently has an Area of Concentration (AoC) in International Health for medical students and is now developing a Comprehensive Curriculum in Global Health. The AoC requires students to take several courses, including Topics in International Health and the Global Health Area of Concentration core course, and to do a practicum project. The “Topics in International Health Elective” enrolls 45 students from all 4 health sciences schools (medicine, dentistry, nursing and pharmacy) though the great majority are medical students. The 10-week, winter quarter course meets weekly for two hours. All students going abroad with school funds (about 60 per year) are required to attend a two-hour session pre-departure and most also take the “Topics” course. Students with a deeper interest in international health (currently about 12/year) take the “Global Health Area of Concentration Core Course” during the summer between 3rd and 4th year of medical school. Within the medical school there is an Office of International Programs where these programs are developed and implemented. Staff includes a Director (MD/MPH), Program Coordinator and a Program Assistant. UCSF has also created a Global Health Sciences office which oversees university-wide international health activities. Website: <http://www.medschool.ucsf.edu/intlprograms/IHCurriculum/AoC.aspx>

### Baylor Medical School

Students and faculty interested in global health issues have developed a 4-year International Health Track for Baylor medical students. Students who complete the track receive a certificate at graduation and have sufficient class hours, skills and knowledge to sit for the examination leading to the Certificate of Knowledge in Tropical Medicine and Traveler’s Health, sponsored by the American Society for Tropical Medicine and Hygiene. The track is in part organized by the Academic Coordinator for International Affairs within the Department of Family and Community Medicine. Track goals include preparing students to: discuss international problems of health and illness, with focus on the developing world; describe existing health care organizations and systems involved in international health, including the scope of their services and their interactions; apply knowledge of epidemiology, diagnosis and treatment for common tropical and parasitic diseases and health

problems of international travelers; be aware of the challenges of providing healthcare services in international settings; utilize skills in cultural competency and cross-cultural dynamics in the care of patients; evaluate the impact of global health factors (e.g., economic, epidemiologic, and cultural) on the provision of health care in the United States; design and implement a research project in international health; identify and critically utilize pertinent literature on global health issues. Website: <http://www.bcm.edu/medschool/intnltrack.htm>

### Medical school funding student global health activities

Ohio State University College of Medicine and Public Health spends nearly \$200,000 a year on medical student global health experiences. As a result, 50-60 4th year students participate in international electives. The college of medicine administers the program with the help of the university-wide international office. Electives are approved by the department relevant to the experience. Students apply for funding and are given grants that are supported by a tuition-based funding structure. Ohio State College of Medicine has recently created an Office of Global Health Education to further the global health education of their students. This funding structure ensures that involvement in global health will not be limited based on students’ personal financial status.

### Use of third party programming

The University of Chicago-Illinois and the University of Chicago-Urbana- Champaign and several other US medical schools utilize a third party, the International Federation of Medical Students’ Associations (IFMSA), to provide their medical students with opportunities abroad. IFMSA facilitates over 10,000 educational exchanges per year between medical schools worldwide. Students from over 70 countries participate. These exchanges are relatively low cost and are of high educational value as they are located at teaching institutions. Exchanges through IFMSA require that medical schools accept students from abroad in exchange for sending their students to international teaching sites. Exchanges facilitated by IFMSA-USA reflect the emphasis on egalitarian, bilateral exchange of medical education under the auspices of global health. Website: [www.ifmsa-usa.org](http://www.ifmsa-usa.org)

# 5

## STEPS TO IMPLEMENTING A GLOBAL HEALTH CURRICULUM AT U.S. MEDICAL SCHOOLS

‘Global Health’ is a broad topic. Often the integration of global health into US medical school curriculum is limited by time and financial or human resources. Once a medical school has made the decision to prioritize global health and to incorporate it into their curriculum, the practical question arises- how? Ideally, every US medical school would be able to provide at least a basic introduction to global health to each student. Since ideals are often far from reality, it is more constructive to have a practical discussion. Below are some practical steps to help a medical school implement global health in its curriculum.

### Consider two tiers of global health medical education:

Medical students enter school with varying levels of global health understanding. One student may have had a two-year Peace Corps experience in rural Uganda while another may not realize there are differences between health in the United States and Uganda. Given these varied levels of understanding, medical schools should consider providing two tiers of global health education. At a minimum schools should dedicate several hours within the required, standardized first and second year didactics to an overview of global health. Though not a comprehensive overview, it will provide time to discuss a few vignettes or highlight the international health expertise of a faculty member on salient aspects of global health. Furthermore, during this time students can be directed to resources, articles, and organizations through which they can learn more about global health.

The second ‘tier’ of global health curriculum would be more substantial discussions and didactics for medical students with a pre-existing interest in global health. This curriculum could be integrated into the elective didactics or rotations for medical students. Being an elective, it will be chosen by students with an interest in learning about global health. These students will benefit from the course as well as being directed to resources about careers in global health, complementary degree programs, and mentorship opportunities.

### Identify topics to teach and faculty who can teach them:

When medical educators want to create a curriculum in robot-assisted surgical techniques, they speak with the chair of surgery, who will direct them to the faculty with most expertise on the subject. Global health medical education curriculum is not quite as straightforward. Topics which are relevant to medical students are vast, and each medical school’s curriculum will in some ways be determined by the expertise and international experience of faculty. Unfortunately for educators and administrators trying to create this curriculum, these individuals are not located in a single department. Rather, faculty with experience in global health may be in any department of a medical school, medical center, or university campus.

To create a curriculum in global health, the obvious first step is convening a committee. This committee should be composed of curriculum stakeholders, faculty with experience in global health, and curriculum administrators. Many schools will also appoint medical students with experience and leadership roles in global health to this committee. Since the movement to increase global health medical education is in large part a student-led initiative, students may be some of the most dedicated and energetic members of a curriculum development committee.

One of the first charges of this committee should be to locate the faculty within the medical school with global health experience. Some schools already have these databases while others are starting from scratch. It is important to look beyond medical school faculty to other academic bodies such as schools of public health and nursing, departments of anthropology, allied health schools,

research departments and other diverse locations. Since experience in global health is one major qualification for teaching the subject, these individuals will provide a database of possible lecturers and mentors.

Concurrently, the global health curriculum committee should be brainstorming topics they want to be covered in the curriculum. Section 6 of this book outlines some possible areas. There are several textbooks and articles which may also be helpful (listed in the resource section of this book). The topics covered in each medical school's curriculum will in part be determined by locally available expertise.

The third step is to match the topics to be covered with the faculty whose experience allows them to lecture on a certain topic. Clearly, this process will result in a different curriculum at each institution. To broaden the possible topics that can be adequately covered, approach faculty with global health experience or specialized training in areas such as public health, politics, and economics, and ask them to lecture on an aspect of global health. However, each global health curriculum will invariably introduce and elaborate on the unique challenges to health and health care outside US borders.

Another method for infusing global health curriculum into medical school didactics is to allot time during each module (whether your school utilizes systems-based or a discipline-based curriculum). During each module a lecture would teach about the subject in a global health context. For example, during the gynecologic module a discussion about uterovesicular fistulas or cervical cancer and HIV would take place. Other examples include a discussion of malaria eradication campaigns during the infectious disease module, the burden of diarrheal illness during pediatrics, and the mental health problems that surface in refugee camps during psychiatry. Some schools may find it is more practical to dedicate one hour or more per module, than to create a new global health course altogether. Again, this will be institution-dependent.

Successful programs will be those that take time to locate pre-existing institutional strengths, either in the form of people, institutes, organizational relationships, or other schools/ departments. Medical schools which capitalize on those institutional strengths will ease the implementation of global health medical education.

### Examples In Topics Of Global Health Medical Student Courses/lectures At Us Medical Schools:

- Global Health Issues (University of Iowa)
- Global Mental Health and the Post-Conflict Environment (UCSF)
- Cancer in Developing Countries (UCSF)
- Infectious Disease Outbreak Investigation (UCSF)
- Evidence-Based Approaches to Malaria Control (UCSF)
- Seminar in Global Health Equity (Harvard)
- Human Health and Global Environmental Change (Harvard)
- Tuberculosis: The Organism, the Host, and the Global Threat (Harvard)
- Nutrition and Rural Medicine in Latin America (Harvard)
- Readings in International Health (Baylor)
- Intensive Course in Travel and Tropical Medicine (Baylor)

### Get Involved With The Larger Global Health Medical Education Community

Just as the motivations behind global health are the antithesis of isolationism, medical schools who try to create and maintain global health medical education in isolation will be remiss. There is a growing community of medical educators who are working toward the creation, implementation, and sustainability of global health medical education. This community is a network within which to share ideas, contacts, resources, and support of all kinds. In the United States, the Global Health Education Consortium (GHEC) is one such organization. Medical schools can join the Global Health Education Consortium as institutional members. GHEC convenes annual and regional meetings which provide an outlet for curriculum sharing, highlighting research, and many other activities. Medical schools may find it productive to send a delegate to these meetings- to both disseminate and absorb curricular ideas. Furthermore, GHEC is a vehicle through which to link with the larger global health community. This community is captured in the membership of the Global Health Council (GHC). GHEC is an organizational member of GHC. GHC has an annual meeting which is also productive to get a sense of the larger global health world. Medical students are embraced by both organizations. Medical students who attend either meeting will be benefited by educational, leadership, and scholarship opportunities.

# 6

## Components of a Curriculum in Global Health



### Determinants of Health

Health encompasses more than the simple absence of disease. The narrowly focused disease model historically implemented has proven inadequate in light of the difficulties facing many communities globally. Inequities in the global disease burden – health of populations and delivery of health care – reflect political, economic and social disparities. In this paradigm, issues of human rights, policy, trade, the environment, and healthcare delivery systems are central to the health of patients. As physicians, long focused on treatment of the individual, we find ourselves unable to treat patients without addressing external factors that contribute to our patients’ inability to maintain treatments or obtain preventive interventions. In our globalizing world, if we are to understand health and disease, we must turn our attention to the growing array of social variables associated with the disease burden globally.

The frameworks in which health can be examined on an international basis vary widely. Historically, international health in medical education has been dominated by infectious and tropical disease. Health care can now be framed in the context of the global flow of ideas, information, culture and goods known as globalization. Global health is often discussed in the context of human rights. However, health is also discussed in a broader context - the scope of all that goes into determining health – often noted as determinants of health. This broad understanding of health includes biological, social, legal, political, cultural and

Image: A local boy utilizes a water filtration system introduced by medical student volunteers at IFMSA-USA’s Kenya Village Concept Project.

economic determinants, and brings us to the root causes of health inequality.

Most medical education today does not now adequately prepare physicians to be active participants in the process of alleviating inequities that form the basis for health disparities. The social roots of health and disease require solutions beyond those provided by the health sciences, pharmaceutical or biotechnology industries. The current generation of physicians-in-training recognizes and demands training that will prepare them to take the lead in building sustainable solutions to today’s health problems. We propose an international health curriculum that focuses on the interface between community and preventive medicine and international health in order to compensate for the lack of training addressing global inequalities. The international health curriculum we propose provides tools for physicians interested in solving the problems of health and health disparities at their roots.

The following outline is intended to be a guide for designing a comprehensive international health curriculum that will address a lack in the current medical education system. Different approaches could be taken in the presentation of this material. Some may prefer to integrate this material into existing blocks of the medical school curriculum while others may choose to make case presentations for each topic. Regardless of the format, it is the information and message conveyed that is of utmost importance. This will begin to prepare future physicians to become positive change agents both at home and abroad.

Language and cultural understanding are core competencies required to become active participants in international health, for communication that is both effective and respectful. Other themes to consider throughout each international health curriculum module include culture, gender, politics, socio-economic status, race, conflict and the environment.

### I. Human Rights

- a. **UN Declaration of the Human Rights**
- b. **The framework of Health and Human Rights**
- c. **Ethics and human rights: History of physicians in human rights protection and abuses: Current and evolving role of physicians in human rights protection and abuses.**
- d. **Law and human rights**

The United Nations Declaration of Human Rights was adopted on December 10, 1948. While this seminal document has much relevance to health work around the world, it is rarely taught to health care professionals. The member states were asked “to cause it to be disseminated, displayed, read and expounded principally in schools and other educational institutions, without distinction based on the political status of countries or territories.” A good foundation in the UN Declaration will segue naturally into discussing health in the context of human rights.

Ethical concerns can be addressed here if they are not adequately addressed in other parts of the medical school curriculum. Doctors play a major role in protecting human rights. This is especially true in the setting of physicians practicing international health. The nature of human rights would be explored, and the nature of the compromise of these rights. The current role of physicians in drawing attention to human rights abuses, as well as attention to discovering these abuses, would be central. Finally, this module would cover law as it relates to human rights in different contexts surrounding health.

## **II. Social determinants of health**

- a. Basic economics and health**
- b. Poverty and health**
- c. Income inequality and health**

Our contribution as physicians and healthcare workers comprises only one aspect of the overall health of individuals and society. Population health is largely a measure of the socioeconomic conditions of that society. The World Health Organization’s Department of the Social Determinants of Health states that these factors “account for most of the global burden of disease and death, and for the bulk of existing health inequities between and within countries.” For this reason, ‘Social Determinants of Health’ is the core module for disease etiology for this international health curriculum, and sets the stage for an understanding of other aspects of the curriculum. A fundamental understanding of economics is crucial for these students. Students will benefit from competency in such areas because economics drive much of today’s healthcare decision-making and policy. Additionally, these lessons will impart an understanding that health is both a necessity for life and essential to any program for economic growth in the developing

world. From this basic understanding, the curriculum should detail what is known about the effects of poverty on the ability to achieve and maintain health. Barriers to breaking from poverty, including disease, would be addressed. Policies, policy failures, programs, and structural conditions that lead to poverty and inequality should be highlighted. Relevant details concerning the causative mechanisms should be discussed in the module. Societal inequalities, which are necessary to consider when discussing international health work, should be highlighted. The focus of such discussions will concern strategies aimed at addressing the links between these societal inequalities and health.

## **III. Policy, Trade, and Health**

- a. WHO, UNAIDS**
- b. WTO, World Bank, IMF, GATT, TRIPS, trade agreements**
- c. NGOs**
- d. Governments**

Social determinants of health also include specific social entities, both public and private. An understanding of these policy-forming bodies is important for understanding their effects on health in a globalizing world. Governmental agencies that oversee broad international health initiatives should be addressed specifically, such as the World Health Organization. Explanations of the roles of other global financial institutions such as the World Trade Organization (WTO), the World Bank, and the International Monetary Fund will lend background to how economic development is and has been financed in the past. Discussion of how economic resources flow back and forth between more developed countries and lesser-developed countries will elaborate on previously addressed topics of poverty. Trade agreements, intellectual property rights, and economic debt of poor countries are all claimed to have significant health effects on the populations of these countries. Many supra-national corporations that operate in poor nations have budgets larger than those of the countries in which they operate. This includes several health related industries, such as insurance and pharmaceutical industries. The roles of non-governmental organizations (NGOs) often include offering services traditionally provided by governments. Finally, the plight of governments in the setting of international health should be examined. This should cover topics such as government resources as well as political and social climates and instability. Any experiential international health

initiative accompanying this aspect of medical training will work more effectively if programs have specific relationships with specific institutions or countries. Furthermore, complementary in-country experiences will deepen students' appreciation of the issues.

#### **IV. Global burden of disease**

- a. Water, nutrition, and child health**
- b. HIV/AIDS/TB**
- c. Infectious diseases**
- d. Non-communicable diseases, injuries and violence**
- e. Measuring population health**

The global burden of disease is a growing and important area of focus. The diseases students are exposed to in the United States are generally not those that dominate many international health settings. Additionally, the need to address social and structural problems that lead to these diseases is of the utmost importance. The social determinants of health module will set the stage for covering more specifically the social settings that predispose populations to these diseases, as well as their diagnosis and treatment. Basics such as water, nutrition, and vaccinations will be core. Additionally, the discussion of current thinking on policy surrounding and treatment available for HIV/AIDS and tuberculosis will illustrate several aspects of how social policy and health dramatically impact the health of populations and the ability of those populations to address complex social issues. Social conditions and their relevance to non-communicable diseases, including injuries, violence, tobacco-related disease, and growing worries of obesity and related diseases in areas with changing nutrition habits will help contextualize the burden of disease. Lastly, measuring population health will provide students with the tools to assess local burden of disease in both high and low-income countries.

#### **V. Health care delivery systems**

- a. Western healthcare models: insurance, payers, individual care**
- b. Community-based care models: promotoras, acompagnators**
- c. Participation and empowerment**
- d. Access to care and health: evidence-based research**
- e. Public health model: vaccination, eradication, population approaches**

In understanding health care delivery systems we see the cost of sickness and the price of health. This module will highlight the various roles of healthcare workers in different social contexts. The goal is to help US medical students put their experiences in perspective as they prepare to participate in international health systems. The four major functions of health systems, as defined by WHO (creation of resources, financing, service provision, and stewardship) will be compared across several settings in developed and developing nations. The newest data on links between access to healthcare and health would be presented. The public health model of treating populations instead of individuals, at the core of many international health efforts, will impress upon students the need for large-scale population treatment in developing regions of the world.

#### **VI. The environment and health**

- a. Natural disasters and disaster relief**
- b. Man-made disasters**
  - **global conflict, war, refugees**
  - **global toxin burden**
- c. Migration, travel, global interaction**
  - **Epidemics in time of global travel**
  - **Immigration impacts on global disease**

The environment and its effects on health are well known to be powerful. In the international setting this is often seen through disaster relief efforts, support for refugees in areas of social unrest, and sometimes in environmental toxic disasters such as the Chernobyl nuclear reactor explosion, or the Dow Chemical explosion in Bhopal, India. In all of these cases the environmental impact on the health of the surrounding populations is grave. In addition to covering the history of many of these disasters, this module would introduce the students to international relief efforts for humanitarian crises, war, disasters, and other refugee situations. A large part of refugee health includes psychological effects. This part of the module will also cover sensitivity for diagnosing and treating psychological distress in a time of humanitarian disaster. To this end, it will cover the global toxin burden, highlighting where toxins are more heavily concentrated and less thoroughly regulated. The effects of the environment are ever-expanding in a world brought together through globalization. Recent immigration patterns along with discussion of epidemics and pandemics in the



**age of globalization will give students the needed perspective to understand their role as health practitioners in the international theater.**

# 7

## CAREER COUNSELING FOR MEDICAL STUDENTS INTERESTED IN GLOBAL HEALTH



For some medical students, exposure to global health during medical school will be the extent of their involvement in this arena. However, more and more medical students are interested in developing careers that involve global health in one capacity or another. There is a spectrum of global health opportunities- from week-long volunteer positions to full-time paid positions. Global health work is increasingly becoming professionalized. Physicians and non-physicians who want to dedicate a career to global health will often need specific training and experience. Previously it was common for physicians to individually go abroad and practice in a local clinic- the bush doctor, so to speak, and indeed this still happens. However, it is becoming increasingly important for physicians to assume roles in program development, assessment, and capacity building in the host country. The skills necessary for these roles require education beyond that of medical school and residency. Physicians are getting this training in complementary degree programs such as in a public health specialty, fellowships, experiential learning abroad, and work in domestic offices of global health organizations.

With regard to career counseling for medical students interested in incorporating global health into their career, there are several helpful resources. *Finding Work in Global Health* by Garth Osborn and Patricia Ohmans (available at [www.globalhealth.org](http://www.globalhealth.org)) is an essential beginning for any medical student or doctor interested in global health. This book outlines the type of work available in global health, as well as how to go about getting a position.

Image: Students interested in a career in global health register for the 2006 IFMSA-USA National Convention in San Diego.

In addition to this book, the Global Health Council organizes a Career Network which can be accessed from their website [www.globalhealth.org](http://www.globalhealth.org). The annual meeting of the Global Health Council is also a productive event for making contacts and furthering understanding about careers in global health. Additional materials helpful for those considering a career in global health can be found at the Global Health Educational Consortium's website ([www.globalhealth-ec.org](http://www.globalhealth-ec.org); click "resources" and then "GHEC Library").

Moreover, there are websites which post job listings for various organizations. The qualifications for and nature of these positions are helpful to guide career planning for medical students. The volunteer, job and internship opportunities within the UN system are found at <http://icsc.un.org/joblinks.asp>.

Many medical students wonder how to proceed after medical school in order to go into global health. Since global health is such a diverse field, any residency or specialty can segue into a career in global health. However, medical students should be made aware of residencies with global health tracks and emphasis. Currently there are residencies within the fields of pediatrics, internal medicine, emergency medicine, and family practice with global health emphasis. A list of some of these residencies is listed on the AMSA website at <http://www.amsa.org/global/ih/resprograms.cfm>.

There are also multiple complementary degree programs relevant to global health which can be pursued following or during medical school. The most common complementary degree is a Masters in Public Health. However, programs in international relations, health care administration, business, law, economics and many others can augment a medical degree and increase an individual's relevancy in the global sphere.

# 8

## MEMBERSHIP/EXTRACURRICULAR ORGANIZATIONS FOR MEDICAL STUDENTS INTERESTED IN GLOBAL HEALTH

There are a variety of organizations that provide exposure to global health through different mechanisms and emphasis. Some of these organizations have missions and activities which overlap. This overlap provides an opportunity for collaboration which can strengthen the shared missions of global health awareness and activism. These organizations range from general interest to disease or theme oriented. Below is a short description of some of the most active organizations relevant to medical students and medical education. Importantly, this list is not comprehensive. A comprehensive resource of global health organizations is the Global Health Directory published annually by the Global Health Council, a membership alliance for organizations and institutions dedicated to global health issues (this and other useful resources can be purchased at <http://www.globalhealth.org/publications/>).

**American Medical Association - Medical Student Section (AMA-MSS):** The AMA-MSS's involvement with global health is via the International Health and Policy Committee. Through this sub-committee they provide resources for HIV/AIDS advocacy, promote the AMA WorldScopes Program which collects stethoscopes for physicians worldwide, and promotes programs such as Child Family Health International's RECOVER program (to recover medical supplies which would otherwise be discarded), and resources for book donation. Furthermore, this sub-committee of the AMA-MSS adopts resolutions with regard to support for various initiatives, such as debt forgiveness and support for the United Nations Population Fund. Website: [www.ama-assn.org/ama/pub/category/11902.html#2](http://www.ama-assn.org/ama/pub/category/11902.html#2)

**American Medical Student Association-Global Health Action Committee (AMSA-Global):** AMSA-Global is the international health arm of the larger AMSA organization. AMSA is composed of medical student, pre-med and resident members, a subset of which participates in the Global Health Action Committee. AMSA-Global coordinates various projects within the following focus areas: AIDS, Environment, Human Rights, Leadership, and Global Education and Opportunities. AMSA-Global serves as a forum to unify and foster collaboration amongst US medical students. In addition, AMSA-Global and its parent organization support US medical student initiatives, such as the Ride 4 World Health. AMSA-Global has medical student coordinators for each project area and provides leadership opportunities for US medical students. AMSA-Global has a journal (Global Pulse), organizes a Global Health Leadership Institute, and fosters many other opportunities for activism within the US medical student community. Website: [www.amsa.org/global](http://www.amsa.org/global)

**Child Family Health International:** Child Family Health International (CFHI) "builds and strengthens sustainable health care services in underserved communities worldwide." The organization focuses on community initiatives, medical supply recovery and global service learning. The global service learning opportunities are available to medical students and facilitate rotations abroad which focus on cultural competency. CFHI has clinical opportunities available in Central and South America, Africa, and India. Uniquely, the funding structure for these rotations provides support to local clinics that host medical students and facilitates sustainability of these programs. Website: [www.cfhi.org](http://www.cfhi.org)

**Doctors for Global Health:** Doctors for Global Health (DGH) is an organization with free membership comprised of health professionals, students, educators, artists, attorneys, engineers, retirees and others. DGH partners with communities in developing countries to establish and sustain community-oriented primary care projects and address other social justice issues. The mission statement of DGH is "To improve health and foster other human rights with those most in need by accompanying communities, while educating and inspiring others to action." DGH works only with communities which ask for assistance. Their projects are located mainly in Central and South America and Africa. The

organization has an Advocacy Committee which responds to urgent action requests to bear witness for and against human rights violations. Medical students can volunteer at projects for a minimum of 2-3 months. They can also get involved in various other capacities including procuring supplies needed at project sites. Website: [www.dghonline.org](http://www.dghonline.org)

**Global Health Council:** Global Health Council (GHC) has the following mission: “The Council works to ensure that all who strive for improvement and equity in global health have the information and resources they need to succeed.” In 2004 GHC embarked on the University Coalitions for Global Health. This program aims to support and unite the various undergraduate, graduate, and professional student activities in the realm of global health which are underway at US colleges and universities. Global Health Council hosts an annual meeting with student abstracts, programming and internship opportunities. GHC also has a variety of helpful resources available for purchase which include “Finding Work in Global Health” and “Global Health Directory.” Website: [www.globalhealth.org](http://www.globalhealth.org)

**Global Health Education Consortium (GHEC):** Previously named the International Health Medical Education Consortium (IHMEC), the Global Health Education Consortium aims to “foster international health medical education in four program areas: curriculum, clinical training, career development, and international education policy.” Members of GHEC include over 80 medical schools in the United States, Canada, and Central America (institutional members) as well as over 1000 individual members, including physicians, medical students, and other medical educators. GHEC organizes annual meetings which bring together students and educators, as well as regional meetings within the United States to foster global health activities. GHEC maintains a library of helpful resources to help individuals and institutions understand the complex, multifaceted world of global health. Resources include the “Global Health Players: Organizations Involved in Global Health” and “The IHMEC Guidebook: Advising Medical Students and Residents for International Health Experiences.” Website: [www.globalhealth-ec.org](http://www.globalhealth-ec.org)

**International Federation of Medical Students’ Associations- United States of America (IFMSA-USA):** IFMSA-USA is the United States chapter of the global organization, the International Federation of Medical Students’ Associations. IFMSA is a membership organization for national medical student organizations in over 90 countries, united in this forum toward the following mission: “Our mission is to offer future physicians a comprehensive introduction to global health issues. Through our programming and opportunities, we develop culturally sensitive students of medicine, intent on influencing the trans-national inequalities that shape the health of our planet.” The US chapter facilitates collaboration with medical student counterparts abroad. IFMSA-USA also runs village projects in which medical and allied health students organize and execute community-based sustainable health work. IFMSA coordinates over 10,000 education and research exchanges between medical students in over 70 countries annually. Website: [www.ifmsa-usa.org](http://www.ifmsa-usa.org)

**Ride for World Health:** Ride for World Health (R4WH) was founded in November, 2004 by a group of medical students seeking an innovative way to get involved in national and international healthcare. R4WH strives to create an annual event in which a group of medical students, healthcare professionals, and community representatives participate in a 3,700-mile bicycle ride from San Francisco, CA to Washington, D.C. R4WH will stop at numerous medical centers in major metropolitan areas to create a dialogue and lead discussions on issues related to healthcare in the United States and abroad, in addition to raising significant funds for non-governmental healthcare organizations.

**Physicians for Human Rights:** Physicians for Human Rights (PHR) uses medical and scientific methods to investigate and expose human rights violations around the world. PHR educates health professionals and medical, public health and nursing students, and facilitates their activity in the human rights movement and the creation of a culture of human rights within the medical profession. PHR has over 50 chapters at medical, public health and nursing schools. It organizes an annual student conference, Week of Action, and humanitarian awards. PHR has various listserves that facilitate political action, collaboration, and knowledge dissemination. PHR also operates the PHR Asylum Network, Health and Justice for Youth Project, and the Colleagues at Risk program. Website: [www.phrusc.org](http://www.phrusc.org)

**Unite for Sight:** Unite for Sight is an organization which has grown from one energetic founder/volunteer to a significant international effort to address eyesight in underserved communities throughout the world. The organization has 90 chapters worldwide based at universities, medical schools, corporations and high schools. In addition to providing volunteer opportunities for medical students and others, Unite for Sight organizes an Annual International Conference and many other programs. One of the unique programs is a Microenterprise program which helps generate personal income within refugee camps. Unite for Sight has distributed over 70,000 pairs of eyeglasses, and has funded over 500 cataract surgeries in the most underserved populations worldwide. Website: [www.uniteforsight.org](http://www.uniteforsight.org)

# 9

## RESOURCES

Importantly, the Global Health Education Consortium has spearheaded a collaborative effort to develop curriculum modules in a variety of global health topics. These modules will consist of web-accessible powerpoint presentations created by experts in global health content areas. These powerpoints will be available to medical schools to be used to help teach core global health curricular topics. Please visit the Global Health Education Consortium website for more information ([www.globalhealth-ec.org](http://www.globalhealth-ec.org)).

The below list of resources is not exhaustive, but does begin to demonstrate the breadth of global health, and help individuals become familiar with the topics, research, programs and organizations - present and future - of global health. A more complete bibliography is available at: [http://www.globalhealth-ec.org/GHEC/Resources/GHbiblio\\_resources.htm](http://www.globalhealth-ec.org/GHEC/Resources/GHbiblio_resources.htm)

### Textbooks

Basch, P. F. (1999). *Textbook of International Health*. Ed. P. F. Basch. New York, Oxford University Press.

Merson, MH, RE Black and AJ Mills (2001). *International Public Health: Diseases, Programs, Systems, and Policies*. Gaithersburg, MD, Aspen Publishers.

Sen, G., A. George, and P. Ostlin (2002). *Engendering International Health: The Challenge of Equity*. Cambridge, Mass., MIT Press.

Wikler, D. and R. Cash (2003). *Global Public Health: A New Era*. R. Beaglehole. Oxford, New York, Oxford University Press.

### Other Books

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[www.amsa.org/global/](http://www.amsa.org/global/)

Child and Family Health International  
[www.cfhi.org](http://www.cfhi.org)

Doctors for Global Health  
[www.dghonline.org](http://www.dghonline.org)

Partners in Health  
[www.pih.org](http://www.pih.org)

Physicians for Human Rights  
[www.phrusa.org](http://www.phrusa.org)

Global Health Council  
[www.globalhealth.org](http://www.globalhealth.org)

Global Health Education Consortium  
[www.globalhealth-ec.org](http://www.globalhealth-ec.org)

International Federation of Medical Student's Associations- USA  
[www.ifmsa-usa.org](http://www.ifmsa-usa.org)

Ride for World Health  
[www.rideforworldhealth.org](http://www.rideforworldhealth.org)

Shoulder-to-Shoulder  
[www.shouldertoshoulder.org](http://www.shouldertoshoulder.org)

Unite for Sight  
[www.uniteforsight.org](http://www.uniteforsight.org)

World Medical Association  
<http://www.wma.net/e/>

### Medical School Based Programming

Baylor College of Medicine International Health Track  
<http://www.bcm.edu/medschool/intnltrack.htm>

Boston University School of Medicine International Health Program  
<http://www.bumc.bu.edu/Dept/Home.aspx?DepartmentID=396>

Case Western Reserve University Center for Global Health and  
Diseases  
<http://ora.ra.case.edu/geomed/>

Georgetown School of Medicine Office of International Programs  
<http://www.georgetown.edu/som/international/index.htm>

Harvard Medical International  
<http://www.hms.harvard.edu/hmi/newindex.html>

John's Hopkins School of Public Health Department of International  
Health  
<http://www.jhsph.edu/dept/ih>

Ohio State University College of Medicine Office of International  
Medicine  
<http://www.medicine.osu.edu/international/>  
Tulane Department of International Health and Development  
<http://www.tulane.edu/~inhl/inhl.shtml>

University of California, San Francisco Office of International  
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<http://www.medschool.ucsf.edu/intlprograms/>

University of California, San Francisco Global Health Sciences  
<http://globalhealthsciences.ucsf.edu/>

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htm](http://www.medicine.uiowa.edu/osac/Global%20Programs/index.htm)



University of Michigan Medical School Global REACH  
<http://www.med.umich.edu/medschool/global/>

University of Pennsylvania Medical School Global Health Programs Office  
<http://www.med.upenn.edu/globalhealth/index.shtml>

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