Global Health Education
What in the World Must We Do?

University of Pittsburgh School of Medicine
Medical Education Grand Rounds
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Global Health Education

• Rationale

• Challenges

• Initiatives
“…health problems, issues, and concerns that transcend national boundaries, may be influenced by circumstances or experiences in other countries, and are best addressed by cooperative actions and solutions”

-Institute of Medicine 1997
Emerging Diseases
This is an official

CDC HEALTH UPDATE

Distributed via Health Alert Network
Tuesday, May 29, 2007, 15:30 EDT (03:30 PM EDT)
CDCHAN-00262-2007-05-29-UPD-N

Corrected: Investigation of U.S. Traveler with Extensively Drug Resistant Tuberculosis (XDR TB)

This message is being sent to correct the flight number of the Czech Air flight on May 24, 2007 from Prague, Czech Republic to Montreal, Canada. The flight number was 0104 not 410.

Original information from CDC Advisory #00261, transmitted May 29, 2007:

The Centers for Disease Control and Prevention (CDC) is working with a number of international, state, and local partners on an investigation involving a U.S. citizen recently diagnosed with extensively drug-resistant tuberculosis (XDR TB). XDR TB has been recently defined as a subtype of multidrug-resistant tuberculosis (MDR TB) with additional resistance to the two most important second-line antibiotics (i.e., a fluoroquinolone and an injectable agent [amikacin, kanamycin, or capreomycin]) in addition to the two most important first-line drugs (i.e., isoniazid and rifampin).
Re-emerging Diseases

Figure 1. Number of malaria cases among U.S. and foreign civilians — United States, 1973-2004

1200 Cases/year
Map: American countries with laboratory-confirmed hemorrhagic fever, prior to 1981 and from 1981 to 2003

American Countries with laboratory confirmed dengue hemorrhagic fever, prior to 1981 and from 1981 to 2003

Prior to 1981

1981 - 2003

Source: WHO/PAHO/CDC, Aug. 2004
Texas experiences first dengue outbreak in almost 20 years

October 6, 1999
Web posted at: 2:58 p.m. EST (1858 GMT)

From Correspondent Charles Zewe

NUEVO LAREDO, Mexico (CNN) -- The biggest outbreak of "dengue fever" to hit south Texas in almost 20 years has sickened more than a dozen people in the border town of Laredo. Epidemiologists there have confirmed 14 cases of the viral illness, which is spread by mosquitoes and nicknamed "breakbone fever." Over 100 cases have been identified just across the Mexican border and many more are suspected.

Dengue is very painful, but rarely fatal.

"The pain in the bones is so great that they feel like they're breaking and hence the nickname," said Julie Rawlings, an epidemiologist with the Texas Department of Health.
Globalization of Diseases

Original Article

The Detection of Monkeypox in Humans in the Western Hemisphere
Globalization of the US Patient Population

Figure 1.
LPR Flow to the United States: 1900 to 2006

>1 Million “Green Cards”/Yr

Source: U.S. Department of Homeland Security
Globalization of the US Patient Population

- 35 million foreign-born citizens
- 10-15 million undocumented
- 200,000 foreign-born adopted children
- 50 million international arrivals to US/year
- 30 million US citizens travel internationally/year
- 1+ million ill returning travelers/year
The global challenge

The international effort to address the health crisis in the developing world is providing a wealth of career opportunities.

Virginia Gowin reports

T he health crisis faced by the developing world is daunting, especially in infectious disease. According to the World Health Organization (WHO), 110 million people were infected with tuberculosis in 2005 and 1.8 million died from the disease, which disproportionately affects the developing world. The HIV epidemic also continues to take its toll in the developing world. For industrialized nations, helping those countries to solve such problems is a challenge — but it is one that is attracting increasing numbers of scientists from governments, universities and philanthropic organizations. As a result, international efforts to address global health now offer a wide range of career opportunities.

The need is recognized by nations to develop research infrastructure and careers in areas such as epidemiology, policy and economics. "Global health is a new area of science that is now emerging," says Nile Dokidou, president of the Global Health Council, an umbrella group of global health organizations based in Washington, DC.

Much of the growth in health care has been fueled by donations from organizations such as the Bill & Melinda Gates Foundation and the Global Fund to Fight AIDS, Tuberculosis and Malaria. These organizations are not the only players on the international front. There are many other donors that are contributing to the development of health care initiatives worldwide.

The recently established Global Alliance for Vaccines and Immunization (GAVI), for example, is working with international organizations to promote the development of vaccines and immunization services. GAVI has already provided $30 million to help develop vaccines and immunization services in developing countries.

The world is looking for skilled personnel to fill these positions. "We need to develop a whole new generation of health care professionals," says Dokidou. "We need people who are going to be able to work in the field and be able to make a difference."

The demand for health care professionals is growing in other areas as well. The United States is facing a shortage of nurses and other health care providers.

The US National Institutes of Health (NIH) has set up a new program to train students in the field of global health. The program will provide students with the skills and knowledge they need to work in the field. The NIH is looking for students who are interested in working in the field of global health.

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Benefits of Global Health Education

• Improved clinical care
• Integration of public health with clinical practice
• New and unprecedented career opportunities
• Improved cultural competency
Welcome to International Health

Welcome to the International Health subcommittee of GHAC! Our mission as is to educate, empower and promote action on global health issues. We believe these goals can be accomplished by:

1. Facilitating medical professionals experiences abroad
2. Promoting international health advocacy and education at home and
3. Working to create a more cohesive and engaged International Health community!

Subscribe to the Global Health Listserve

Get involved in group discussions, communicate with fellow AMSA members and receive committee coordinator announcements, [Listserve Guidelines]

your email address  Subscribe

The International Experience

- International Health Opportunities
  Internships, fellowships, electives, course work, volunteer/educational and Medical Spanish
  Submit your international opportunity for inclusion

- Going Abroad Toolkit
- Checklist for Going Abroad
- Program Comparison Worksheet
- Funding Your Trip
- Preparing For Your Trip
- International Health Residency Programs

Bringing International Health Home

- Medical Supplies and Textbook Donations
- Starting an International Health Curriculum at Your School

FOR MORE INFORMATION:

Tanyaporn Wansom
Global Health Chair

INTERNATIONAL HEALTH ACTIVISM RESOURCES

- Global Health Council
- AMSA's Legislative Action Center
- Physicians for Social Responsibility
- Planned Parenthood International
- Physicians for Human Rights
- Public Citizen
Annual GHEC Conference

Mark Your Calendar for the
:: 17th Annual GHEC Conference
:: April 3 - 5, 2008 :: Sacramento, California
:: Global Health Ethics and Human Rights :: Practical Applications to Multicultural Health Issues Here and Abroad

Revisit the 16th Annual GHEC Conference
>> Global Health and Migrating Populations
February 15-17, 2007
Santo Domingo, Dominican Republic

> Speakers' Biosketches
> Panel Descriptions
> Poster Presentations
> Slideshow Presentations

Honors and Awards
>> Carole M. Davis Scholarship
>> Christopher Krogh Award

Global Health Teaching Modules

Modules features and characteristics include:
• suitability for introductory and more advanced courses
• suitability for students of multiple health disciplines
• learning features such as learning objectives, quizzes
• usable in either instructor-led or self-instructional mode
• a wiki—enabling users to add content and dialogue

>> Sample Modules and Authoring Guidelines
“But real adventures, I reflected, do not happen to people who remain at home: they must be sought abroad.”

James Joyce (Dubliners)
Medical School Graduation Questionnaire

Percent of Graduating US Medical Students

Reporting International Elective

- 1986
- 1996
- 2006
The Challenges for Global Health Education

• LCME requirements
• Academic Environment
• Educational Objectives/Core Competencies
• Educational Format
• Evaluation of Program Effectiveness
• Continuity of care requirement (RCC)
Objectives of Global Health Education for US Medical Students

- To develop “pleuripotential stem cells”
- To improve global health knowledge
- To improve clinical practice
- To stimulate global health careers
Educational Formats for Global Health Education

- International electives (eg U. Penn)
- Global health courses, electives, seminars (eg Harvard)
- Integration throughout the curriculum (eg U Mich)
- MD/MPH (eg JHU)
- Area of Concentration (eg UCSF)
- International Health Track (eg Baylor)
- One tier vs. two tier approach
Training Program: Global Health Track

- The Global Health Track is a unique program designed to train physician leaders in clinical medicine, teaching, health policy, and research in global health.

- At its foundation is a core internal medicine competency with a strong generalist perspective, cost-conscious practice, and back-to-basics diagnosis. Clinical training provides exposure to local and international sites, coupled with a curriculum and scholarly work designed to address health policy, public health issues, and social factors influencing health and disease in the global context.

- Clinical experiences are available in Pittsburgh, other areas of the United States, and international sites such as the following:
  1. *Medici Hospital* in Hyderabad, India
  2. Kamuzu Central Hospital in Lilongwe, Malawi (Africa)
  3. San Jose, Honduras, in conjunction with the Shoulder to Shoulder Program
  4. Sapporo, Japan
  5. *JSMEET Hospital* in Palermo, Italy
  6. *Chinie Comprehensive Health Care Facility*
  7. Rural health clinics in Pennsylvania
  8. *The Birmingham Free Clinic* and other *Health Care for the Homeless Clinics in Pittsburgh*
Components of a Curriculum in Global Health

The Determinants of Health

- Human rights
- Social determinants of health
- Policy, trade and health
- Global burden of disease
- Health care delivery systems
- The environment and health
30-hour Global Health Curriculum

- Burden of global diseases
- Traveler’s medicine
- Immigrant health
# International Health Opportunities

Johns Hopkins University School of Medicine

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**Date provided:** 04/07/2006

| What, if any, international opportunities does your institution offer to your faculty? | • Sabbaticals  
• Research  
• Clinical services |
|---|---|
| In which geographic region(s) have your faculty members been assigned? | • Africa: Sub-Saharan  
• North Africa/Middle East  
• Central Asia  
• East Asia/Pacific  
• South Asia  
• Central America/Caribbean  
• North America  
• South America  
• Eastern Europe  
• Western Europe |
| Are any of the above opportunities are available to faculty from other domestic institutions? |---|
| What, if any, opportunities does your institution offer to faculty from abroad? | • Sabbaticals  
• Research |
| From which geographic region(s) have these faculty come? | • Africa: Sub-Saharan  
• North Africa/Middle East  
• Central Asia  
• East Asia/Pacific  
• South Asia  
• Central America/Caribbean  
• North America  
• South America  
• Eastern Europe  
• Western Europe |
| What, if any, international opportunities does your institution offer to your medical students? | • Pre-clinical research  
• Language/cultural immersion  
• Pre-clinical ‘spring break’ or summer opportunities  
• Clinical electives  
• Clinical research opportunities |
Hopkins Global Health Education for Medical Students

- Population biology of disease
- Nutrition
- Tropical diseases microbiology
- Elective courses and seminars
- Infectious diseases clinical elective
- International clinical and research electives
- New elective seminar course (Fall 07)
- ID telemedicine grand rounds
Percent Reporting that Time Devoted to Global Health Issues was Inadequate

- All: 47.3%
- JHU: 40.6%
125 Hopkins Global Health Courses

• Public Health: 102
• Medicine: (1)
• Nursing: 5
• Arts and Sciences: 4
• Engineering: 3
• SAIS: 10
Medical School Graduation Questionnaire

Percent of Graduating US Medical Students Reporting International Elective

JHU
Johns Hopkins University Global Health Research Partnerships
Draft Criteria for International Electives
(N. Nathanson et al. U.Penn, JHU, U Wash, UCSF)

• Adequate teaching and training oversight
• Safe, supportive educational environment
• Adequate living arrangements
• Clearly documented malpractice/liability responsibilities
• Multi-year partnership
• Clearly documented objectives
• Clearly documented program evaluation
Infectious Diseases Accredited Training in International Health
ACGME RRC-IM: Variance Action-January 2007

- Approval required for >6 week international rotation, within 2 accredited training years
- Specific competency-based goals documented
- Continuity experience documented
- ABIM-certified, Key Clinical Faculty supervision on-site
- Access to live or archived core conferences
- Evaluation plan
New Hopkins SOM
Global Health Seminar Course

- Key Causes of Death/DALY
- Major Infectious Diseases
- Maternal/Reproductive Health
- Vaccines
- Child Nutrition and Survival
- Chronic Diseases
- Violence and Injuries
- Emerging Diseases
- Refugee Health/Disaster Relief
- Global Health Research
- Human Rights, Politics and Health
- Global Health Agencies/Programs
- Global Health Career Opportunities
Telemedicine Education: India and Hopkins

Johns Hopkins School of Medicine
Center for Clinical Global Health Education
Global Health Education
Rate Limiting Steps

- LCME regulatory support
  - Consensus that it is a priority
  - Consensus on educational objectives/competencies
  - Consensus on evaluation of program effectiveness
  - One tier or two tier?

- SOM administrative support
  - Institutional mission
  - Medical student demand
  - Cost
  - LCME regulatory support
Benefits of Global Health Education

Western Reporter: “What do you think of Western civilization?

Gandhi: “I think it would be a very good idea.”