Global Health Education
What in the World Must We Do?

University of Pittsburgh School of Medicine
Medical Education Grand Rounds
14 September 2007

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Center for Clinical Global Health Education
www.ccghe.jhmi.edu
Global Health Education

- Rationale
- Challenges
- Initiatives
Definition of Global Health?

“…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

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

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 threat of the developing world is daunting, especially in infectious disease. According to the Global Health Organization (WHO), 8.8 million people were infected with tuberculosis in 2005, and 1.5 million died from the disease, which disproportionately affects the developing world. The HIV epidemic also continues to take its toll. The international community, faced with this challenge, has been slow to respond. This has led to a widespread concern about the global health crisis.

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

Virginia C. Gein reports.

Experience counts

One of the major hurdles for US or European students trying to make a career in global health is the lack of field experience. The demand for such experience is high, and there are several organizations that focus on providing these opportunities. Some of these organizations include the Global Health Institute, which offers study abroad programs, and the Global Health Network, which provides volunteer opportunities.

More than medicine

As a result, there is a growing interest in research and clinical work, often at sites that are not typically associated with medical schools. This trend is driven by the increasing demand for global health professionals, and the need for other disciplines to contribute to the field. For example, fields such as anthropology, sociology, and economics, which have traditionally been considered peripheral to the medical community, are now seen as essential to the field of global health.

The need for these professionals is driven by the growing recognition of the importance of social determinants of health, such as poverty, inequality, and political instability, in determining health outcomes. As a result, there is a growing demand for professionals who can work across disciplines to address these challenges.

Michael Marsden global health is more than medicine.

Virginia C. Gein 2007 Nature Publishing Group

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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]
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

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

Honors and Awards

Carole M. Davis Scholarship
Christopher Krogh Award
“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: [Number of Graduates Reporting]
- 1996: [Number of Graduates Reporting]
- 2006: [Number of Graduates Reporting]
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. **ISMETT Hospital** in Palermo, Italy
  6. **Chinle 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

**Provided by:**  
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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? | • Sabbaticals  
• Research |
| What, if any, opportunities does your institution offer to faculty from abroad? | • 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 |
| From which geographic region(s) have these faculty come? | • Pre-clinical research  
• Language/cultural immersion  
• Pre-clinical ’spring break’ or summer opportunities  
• Clinical electives  
• Clinical research opportunities |
| 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 JHU: 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

- 1986: 5%
- 1996: 10%
- 2006: 30%

JHU
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
Use of IT for Global Health Education

Johns Hopkins Center for Clinical Global Health Education

HIGHLIGHTS:
- LIVE WEBCAST
- NEXT GRAND ROUNDS
  Johns Hopkins Infectious Diseases Grand Rounds
  Tuesday, October 18, 2005
  - 8:00am EDT US
- PRE-RECORDED
  JH ID Grand Rounds
  Principles of ART HIV Nurse Training
  ART in Ethiopia

KEY RESOURCES:
- POC-IT Antibiotic Guide
- POC-IT HIV Guide
- More Resources

Calendar of Events  Hopkins Links  Contact Us  Site Map
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.”