Pathways to Careers in Global Health: Research, Patient Care, Program and Policy

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Outline

• If there is not enough disease for you here in Providence, what can you do to build a career in medicine with an international focus?
  – Opportunities for international research
  – Examples of clinical care opportunities
  – Who works on health programs and policy in international settings?
Research
The First Steps on the Path

• To have a research career means being able to identify sources and successfully apply for funding

• Long-term funding (a “career”) can only be achieved with preliminary data and a demonstrable capacity for research

• Like all research, international research should adhere to the 3 principles of ethics
  – Justice – the research should be relevant to and a benefit for the local people and local capacity should be built
  – Beneficence – research should have a positive outcome for the local people and not be socially destabilizing
  – Respect for persons – local customs need to be respected and considered when designing research and disseminating results
Research
The First Steps on the Path

• Choose your site carefully!
  – Politics can make or break you
  – Local collaborators will be doing your work when you are not there
    • IRB
    • Data entry
    • Special procedures and techniques
  – Security of specimens and data
    • Refrigerators
    • Electricity
    • Vehicles, computers, durable equipment
Research
The First Steps on the Path

• Funding
  – Consider working with an established investigator, Fogarty Clinical Research Training Scholars and Fellows Program (Ellison), or other pre-existing projects
    • A functional IRB
    • A functional lab or care facility
    • Supply chain management and infrastructure in place
  – Pilot grants to get you started
    • UTRA, Royce, Framework, Kean Traveling Fellowship in Tropical Medicine
    • CFAR, Lifespan
    • R03, R21
  – Career development awards after collection of preliminary data
    • IRSDA K01
    • Burroughs Welcome/ASTMH

This stuff takes time and money!
Patient Care – First Steps

• Training – sub-specialization isn’t essential, but you must get comfortable with…
  – Infectious diseases remain one of the leading causes of morbidity and mortality
    • TB
    • Malaria
    • HIV
    • Tremendous variability by region – learn what is endemic and how to recognize it
  – Trauma is the other major medical problem
    • Get comfortable with managing fractures, lacerations, minor procedures
  – Gynecology, STD and obstetric care
Patient Care – First Steps

• Training programs
  – Tropical medicine – U.S.
    • Tulane
    • Johns Hopkins 8 week summer course
  – London School of Tropical Medicine and Hygiene
  – Institute for Tropical Medicine Belgium
  – Gorgas Course Peru (UAB)
## Curricula in Global Health

### Table 1

Resources for Faculty and Curriculum Development in Global Health

<table>
<thead>
<tr>
<th>Resource</th>
<th>Location</th>
<th>Description</th>
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<tbody>
<tr>
<td>Supercourse—Epidemiology, the Internet, and Global Health: University of Pittsburgh</td>
<td><a href="http://www.pitt.edu/~super1/index.htm">www.pitt.edu/~super1/index.htm</a></td>
<td>More than 2,000 archived lectures, with users in developing countries in mind</td>
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<tr>
<td>Modules Project: Global Health Education Consortium</td>
<td><a href="http://www.globalhealth-ec.org/GHEC/Home/Modules.htm">www.globalhealth-ec.org/GHEC/Home/Modules.htm</a></td>
<td>100 PowerPoint-based modules in development for use in undergraduate and graduate medical education</td>
</tr>
<tr>
<td>Global Health Bibliography: Global Health Education Consortium</td>
<td><a href="http://www.globalhealth-ec.org/GHEC/Resources/GHbiblio_resources.htm">www.globalhealth-ec.org/GHEC/Resources/GHbiblio_resources.htm</a></td>
<td>Comprehensive core citations for use by students and faculty interested in global health</td>
</tr>
<tr>
<td>Global Health Wikipedia: Child and Family Health International</td>
<td><a href="http://www.cfhi.org/">www.cfhi.org/</a></td>
<td>A wiki site (like Wikipedia) for global health; currently in development</td>
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<tr>
<td>E-Learning Modules: University of Wales Swansea and University of Ibadan</td>
<td><a href="http://www.medicine.swan.ac.uk/inthealth.html">www.medicine.swan.ac.uk/inthealth.html</a></td>
<td>E-learning modules on global burden of disease, TB, malaria, HIV/AIDS, obesity, parasitology</td>
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<tr>
<td>GapMinder</td>
<td><a href="http://www.gapminder.org">www.gapminder.org</a></td>
<td>Free software to create visual aids from human development and world health statistics</td>
</tr>
<tr>
<td>Global Health E-Learning Center: USAID</td>
<td><a href="http://www.globalhealthlearning.org/">www.globalhealthlearning.org/</a></td>
<td>Online courses on a variety of public health, maternal health, disease burden topics</td>
</tr>
<tr>
<td>Information Sources: Global Health Council</td>
<td><a href="http://www.globalhealth.org/sources/">www.globalhealth.org/sources/</a></td>
<td>Information resources by a unifying organization</td>
</tr>
<tr>
<td>American Society of Tropical Medicine and Hygiene Certificate Training Programs</td>
<td><a href="http://www.astmh.org/certification/courslst.rtf">www.astmh.org/certification/courslst.rtf</a></td>
<td>Lists and describes 10 US and five international courses in tropical medicine and hygiene open to the public</td>
</tr>
<tr>
<td>International Health in the Developing World course: University of Arizona</td>
<td><a href="http://www.globalhealth.arizona.edu/JHIndex.html">www.globalhealth.arizona.edu/JHIndex.html</a></td>
<td>Intensive problem-based orientation course for senior medical students and residents about to embark on a field experience</td>
</tr>
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Patient Care

• Multi-national NGO’s working in clinical care
  – MSF
  – MDM (in the U.S. – Healthright)
  – I-TECH
  – Baylor Pediatric AIDS Initiative

• Hospitals and Clinics – language and culture
  – MTRH
  – YRG-Cares
  – Angkor Hospital for Children
  – Sihanouk Hospital Center of HOPE
Program and Policy - Training

• A formal degree in public health, public policy, or development is a decided advantage

• Skill sets are vastly different from anything taught in medical school and residency
  – Financial management and budgeting
  – Fund raising, proposal writing
  – Human resources and personnel management
  – Monitoring and evaluation
Program and Policy - Examples

• International government organizations
  – US CDC, PEPFAR, USAID
  – WHO
  – UNICEF
  – World Bank
  – Global Fund

• Non-Governmental/Contractors
  – Management Sciences for Health
  – Family Health International
  – Gates Foundation
  – Clinton Foundation
Careers in Global Health Lessons Learned
Research: Fogarty AITRP Cambodia

• Advantages
  – Establish relationships with investigators and local government
  – Pre-existing funding
  – Builds strong relationships and collaboration
  – Strong impact on capacity building

• Disadvantages
  – Not your own research
  – Time consuming for low-yield activities (establishing IRB, building capacity and infrastructure, training)
  – Less control
  – Less recognition
Research – Lessons Learned

• NGO sites
  – Better infrastructure
  – Quicker results at the beginning of your career

• Public institutions
  – More appropriate for development
  – Fewer political difficulties
  – Larger patient population, better suited for scale up and generalization
  – More representative of overall situation and capacity
Clinical Care – Lessons Learned

• Human resources are the most difficult issue to address in health systems strengthening

• Entrenched habits, outdated guidelines, and un-funded mandates will limit any major progress towards improvement

• Real capacity building requires a long-term commitment and partnership, with a focus not just on patient numbers

• Learning is bi-directional
Policy – Lessons Learned

• To change policy requires influence
  – Legitimacy of your organization
  – Demonstrable qualifications and commitment
  – Cultural sensitivity

• Local ownership trumps outside expertise

• Systems are more important than products