Establishing a career in Global Health Research

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Outline

• Defining research
• Choosing a research topic
• Establishing collaborations
• Identifying roles and responsibilities
• Capacity building and training
• Intersect between research and policy
• Lifestyle issues
• Successful student projects
Defining research

• According to the CDC, research is defined as: “a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge.”

• There are many potential rewards to a career in Global Health research
  – Expanding knowledge can improve the way health care is delivered
  – Research provides an excellent forum for capacity building
  – Research lends itself to building partnerships
  – Intellectually rewarding
  – Viable career tract in academic medicine
Choosing a research topic

• Institutional strengths
  – Difficult to “start from scratch”
  – Look for areas of expertise that can be transferred to an international setting

• Available mentors
  – Choosing a mentor(s) is probably the most important decision when establishing a research career
  – With Global Health it is particularly advantageous to have multiple mentors
    • Developed country mentor(s) should have expertise in your field of interest, help with funding and career development, provide connections and linkage to international collaborations
    • Essential to have foreign mentor(s) to provide local knowledge, resource for cultural/political issues, etc.
Choosing a research topic

• Personal interest
  – Choose an area that is of interest to you
  – Difficult to stay engaged if you are not enthusiastic about your research

• Global importance / funding opportunities
  – Chose an area of research that will fill a void and/or make a difference in people’s lives
  – Funding is essential. Chose an area that has a healthy funding stream and is not overly saturated
Choosing a research topic

• Geography
  – Best to work in a part of the world where you will feel comfortable
  – Consider language, culture, political stability

• Available foreign collaborations
  – Best to work with people who have experience, access to necessary patient populations, interest in what you want to do

• Patient population
  – Consider the type of patients you would like to be involved with
    • Children, pregnant women, specific diseases, etc.
Establishing collaborations

• Foreign mentors
  – Well placed in academia, public health, and/or government
  – Ideally will help in the following local roles
    • Formulating research ideas, study design
    • IRB issues, patient enrollment, seeking funds, obtaining necessary approvals
    • Project administration, human resources, finances
  – Good communication skills, transparent, open
Establishing collaborations

- **Local capacity**
  - Need local personnel who have the proper training or potential for training
  - Consider local infrastructure and resources available (electricity, space, equipment, transportation, etc.)

- **Safety/stability**
  - Working in a safe environment is critical
  - Avoid places at high risk for political instability, corruption, etc.
Establishing collaborations

• Potential for growth / filling void
  – Many organizations/institutions now competing to work in international settings
  – Often poor communication between overlapping projects
  – Avoid projects that duplicate the efforts of others or will not lead to any meaningful benefit for the local population

• Enjoying yourself
  – Work in a place you find interesting with people you enjoy being around
Identifying roles and responsibilities

• Cultural issues that need to be understood
  – Local power structure
  – Decision making
  – Privacy expectations and regulations
  – Be aware of economic “chasm” that often exists

• Communication / Transparency
  – Misunderstandings about motivation, recognition, trust often exist
  – Best policy is to be as open as possible and discuss issues early before problems develop
Identifying roles and responsibilities

• Building consensus
  – Avoid making unilateral decisions (regardless of how small the issue)
• Important roles of developed country partner
  – Background research / literature review
  – Acquiring funding
  – Study design
  – Technology
  – Data management and statistical analysis
  – Writing
Capacity building and training

• Avoid “airport research”
  – Ask yourself how the research you are doing is going to benefit the local population
• Investigator partnerships
  – Avoid collaborations that do not equally benefit local investigators
• Identify funding source for training of foreign investigators
  – Look to tie research to didactic training or degree conferring educational opportunities for foreign collaborators
Capacity building and training

• Share in scientific presentations and publications
  – Make an effort to send foreign collaborators to international meetings
  – Foreign collaborators should be given the opportunity to be lead authors on publications
    • Respective author roles and listing sequence should be agreed upon well in advance
• Bring technology to the field
  – Providing access to technology locally can generate local enthusiasm and help close the technology gap
  – Often a good long-term investment
Intersect between research and policy

• Work with policy makers
• Have a thorough knowledge of local policy issues and how they are implemented
• Understand flow of information and make sure your findings are communicated in the right way to the right people
• Disseminate your research findings locally
• Be aware of barriers to implementation of research findings (i.e., socio-economic issues)
• Make sure your research is relevant
• Try to stay one step ahead and do not be afraid to have ambitious dreams about what is possible in the future
Lifestyle issues

• How much time to spend in foreign country
  – Nothing can replace hands on experience
  – Living and working abroad for an extended period of time can provide you a unique perspective and build lasting relationships

• Personal issues if you live abroad
  – Professional opportunities if you have a partner
  – Access to good schools if you have children
  – Finances, health and safety, activities outside of work are all important considerations
Lifestyle issues

• Where do you want to be in 10 years?

  – Expanded funding opportunities, growing commitment to global health, and improvements in information technology are some of the many reasons why an academic career in global health is becoming increasingly feasible and rewarding
**Successful student projects**

- Identify the right mentor
  - Accessible
  - Good communication skills
  - Good understanding of your goals and objectives
- Picking the right project (“FINER”)
  - Feasible
  - Interesting
  - Novel
  - Ethical
  - Relevant
Successful student projects

• Set clear goals in advance
• Keep it simple!
• PLAN AHEAD (and anticipate delays)
• No replacement for hard work
• Finish what you started
My own pathway

**Training**

- Medical School 89-93
  Southwestern Medical Center
- Internal Medicine Residency 93-96
  University of California San Francisco
- Master’s in Public Health 96-97
  University of California Berkeley
- Infectious Diseases Fellowship 97-02
  University of California San Francisco
- PhD Epidemiology 01-04
  University of California Berkeley
- Assistant Professor 02-current
  University of California San Francisco

**Funding**

- Loans!
  More loans!
- Resident salary
  Moonlighting 3rd year
- Part time attending physician
  Moonlighting
- CDC emerging infections grant
- K01 NIH training grant
- DDCF Clinical Scientist Award
  NIH Loan Repayment Program
- Principal Investigator 2 NIH grants
  Principal Investigator CDC grant
Credits

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