

## International Field Research

David Hamer, MD  
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## Objectives

How to:

- Identify a potential mentor
- Develop a project idea
- Identify potential ways to fund field research travel and in-country expenses
- Process and rationale for obtaining IRB and local ethical clearance for international research
- Prepare for international travel

## Defining Research

CDC:

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

## Community Based Participatory Research

“Community based participatory research in health is a collaborative approach to research that equitably involves all partners in the research process and recognizes the unique strength that each brings. CBPR begins with a research topic of importance to the community with the aim of combining knowledge and action for social change to improve community health and eliminate health disparities”

Kellogg Foundation Community Health Scholars Program (2001)

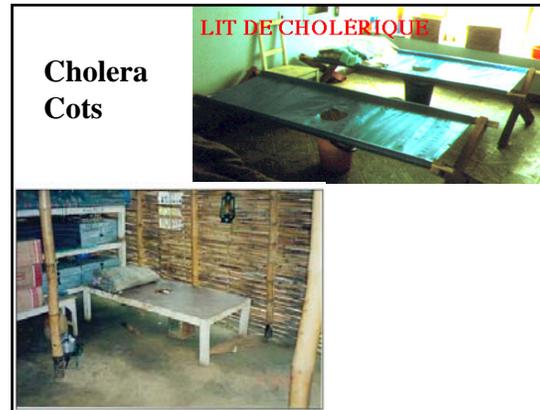
## Potential Benefits to Involvement in Global Health Research

- Expanding knowledge can improve the way health care is delivered
- Provides forum for capacity building
- Lends itself to building partnerships and long term collaborations
- Intellectually rewarding
- May influence ultimate career tract in public health

## PICKING THE RIGHT PROJECT “FINGER”

- Feasible
- Interesting
- Novel
- Grant-accessible
- Ethical
- Relevant

• Modified from Dorsey MD, PhD, “Establishing a Career in Global Health Research”, GHEC modules 2007



### Considerations for Choosing a Mentor

- Local vs. international
- Local mentor should have expertise in your field of interest
- Availability to discuss project development, provide guidelines, linkage to collaborations
- Enthusiasm/interest
- Good understanding of goals and objectives
- Foreign mentor – local knowledge, resource for feasibility, cultural/political issues



### Choosing a Research Topic

- Difficult to start “from scratch”
- Look for people with international projects or areas of expertise that can be transferred to an international setting
- Consider global importance of the topic- is there an area of research which provide practical evidence to policy makers or directly make difference in people's lives?

### Importance of Flexibility

- Project can change during development and implementation OR when you arrive at the field site!
- Opportunity to work in a specific setting (country, language, program context) may require involvement in a project different from your true interests
- Funding-there may be greater opportunity for funding certain topics

### Choosing a Research Topic (cont.)

- Geography- work 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
- Study populations- consider what type of patients you want to be involved with- children, pregnant women, specific diseases

### Mentor Roles

- Formulating research ideas, study design
- IRB issues, patient enrollment, seeking funds
- Study administration
- Good communication skills, transparent, open



### How to Find a Mentor?

- BUSPH or BUSM, faculty database, by research interest, department
- Outside schools- Boston and beyond
- Local NGOs: MSH, JSI, Abt Associates
- Other US NGOs: Project Hope, IRC, Save the Children
- Other universities
- Search available databases (clinicaltrials.gov)
- ClinicalTrials.gov
  - Currently has 70,544 trials with locations in 163 countries.
- WHO website of international trials

### Potentially Helpful Websites

- Global Health Council –  
GlobalHealth.Org
- InterAction – InterAction.Org  
(Check their Member Lists)
- Idealist.org (set up a profile)
- FastWeb.com

### Pay to Go/Volunteer

- Foundation for Sustainable Development
- Sustainable Science Institute
- NGO Abroad
- Global Service Corps
- VSO (<http://www.vso.org.uk/>)
  
- VolunteerInternational.org  
<http://www.volunteerinternational.org/resources.html> (See their Member Lists)

### Potential Job Sites

#### Relief Work

- <http://www.theirc.org/>
- AidWorkers.Net
- ReliefWeb.org
- UNJobs.org
- <http://www.coregroup.org/jobs/jobs.cfm>
- UK: PracticalAction.org
- UK: ExperienceDevelopment.org

### Center for International Health and Development (CIHD)

- Applied research organization at BUSPH
- Multidisciplinary unit
  - Infectious disease specialists (adult and pediatric)
  - Health economists
  - Social scientists
  - Demographers
  - Statisticians
  - Medical anthropologists
  - Pharmaceutical policy specialists
- Research focused on maternal/neonatal/child survival, socioeconomic impact of AIDS, AIDS orphans, health systems
- Emphasis on research capacity strengthening of developing country scientists and institutions

### A Sampling of Recent, Current and Future CIHD Projects

- Malaria studies:
  - ZIMMAPS
  - Burden of MIP in India
  - Malaria case management Kenya
- Child and Family Applied Research Project (CFAR)
  - LUNESP
  - China AFL
- EcuPAZ

### Research in Zambia





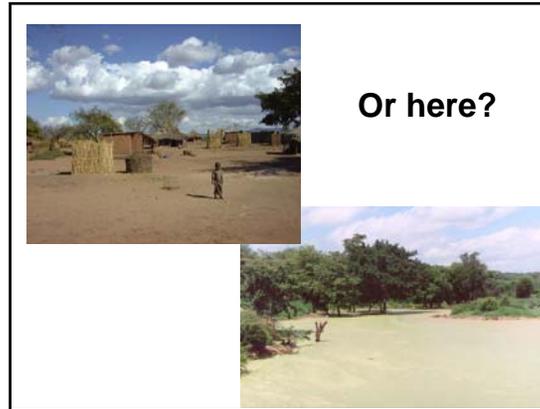
### Child and Family Applied Research Project (CFAR)



- ~ 6 million children die of ARI, diarrheal disease, and malaria each year
- Majority in Africa have poor access to medical care

### Community-based projects

How do you reduce childhood mortality here?



### LUNESP Study Team



### **Funding Projects**

- Speak to your mentor
- Ken James Travel Fund
- ASTMH
- Fogarty International Center
- IDSA
- Your family?
- AIG bonus recipients?

### **Writing a Proposal**

#### **Rule #1:**

#### **Start With a Good Idea**

- Innovative
- Feasible
- Conceptually significant (will benefit the scientific community or public)

#### **Rule #2:**

An interdisciplinary project is usually more creative than a project emanating from a single discipline

#### **Rule #3:**

Be ambitious, but focused—  
select one or two single  
important questions, not many

#### **Rule #4:**

#### **Don't try to do it alone**

- Use mentors, colleagues, collaborators.
- Look at old successful grants

#### **Rule #5:**

#### **Find a statistician (with your mentor's help)**

- How many subjects will you need? Will revising your approach to the question make numbers less daunting?
- Do you need to revise your plans because of numbers problems?
- What's the best analysis plan?

**Rule #6: Ask for Help with the  
Other Sections of the Grant**

- 40% of work of grant application is unrelated to body of grant: biosketches; budget; resources and environment; abstract, letters of support.
- Use mentor and experienced support staff in department (or grant office) to help with these parts. Ask for this help EARLY!
- These parts are important!

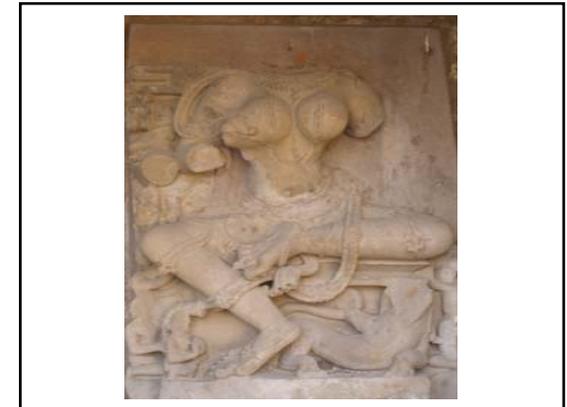
**Rule #7:**  
The likelihood of funding is  
correlated directly with  
preparation time

**Rule #8:**  
Be nice to your reviewers

- Large font if possible
- Clarity (a sloppy proposal suggests potential for low quality work).
- Tables/Figures—whenever possible
- Consistency in #'s/labels!

**Rule #9:**  
Continue the Same Themes  
Throughout Your Grant

- Restate the specific aims and hypotheses verbatim in experimental design and methods section.
- Outline how you will address specific aims and hypotheses in the analysis section.
- Use exactly the same words and labels to express your concepts throughout the grant.



International Health Research - workshop

### Study Planning

- Background research/literature review
- Study design
- Sample Size
- Data management
- Statistical analysis
- Data collection instruments

### Ethical Issues

- BU IRB and local Ethics Committees
- Need to make sure project goals “do no harm”
- Informed consent—individual and community
- Data collection issues in other languages and cultural settings
- Protocol changes
- Safety monitoring

### Roles and Responsibilities Cultural Issues

- Local power structure
- Decision making
- Privacy expectations/regulations
- Communication/transparency – misunderstandings about motivation, recognition, trust,
- Building consensus- avoid making unilateral decisions

### Other considerations: Safety/Stability

- Work in safe environment critical
- Avoid places at high risk for political instability
- School cannot endorse project if high level travel warning

### Characteristics of Successful Student Projects

- Set Clear GOALS in advance
- Find an accessible mentor
- KEEP it simple
- PLAN AHEAD, anticipate delays
- Hard work
- Maintain communication with your mentor and field supervisor
- Finish what you have started

### Preparing for Travel

- See a travel medicine specialist for:
  - Itinerary specific health education
  - Vaccinations (required and routine)
  - Antibiotics
  - Antimalarials

### Risk of Illness While Traveling

- Approximately 50% of travelers to developing countries will experience some sort of health problem during their trip (per month of travel)
- 8% will see a physician
- 5% will stay in bed for some period of time
- About 30% will have a bout of traveler's diarrhea
- Up to 2% of travelers to West Africa will develop malaria if no chemoprophylaxis is taken

Adapted from Steffen R et al J Infect Dis 1987;156:84-91

### Travel-Associated Risk Factors

- Tropical health problems
  - Food- and water-borne disease
  - Vector-borne disease
- Travel risks
  - MVA




### Risk Factors to Expatriate Health

- Exacerbation of routine medical problems
- Occupational injuries
- Sexually transmitted diseases
- Political turmoil
- Violent crime
- Unsafe quarters



### Background Reading

- Finding Work In Global Health  
through Global Health Council
- Survival Kit for Overseas Living  
a classic that covers the all the basics
- Culture Shock Series  
for deep treatment of a place & their culture
- Alternatives to the Peace Corps  
(There are several books with this title)

### Any Questions?