

UC Berkeley MHIRT Program



MINORITY HEALTH – GLOBAL HEALTH

Info Session - September 25, 2009
<http://globalhealth.berkeley.edu/mhirt>

What is MHIRT?

- A Summer Research Program for qualified Cal students



If selected, you will:

- Work at least one semester in a lab at Berkeley
- Spend the summer conducting lab research at an infectious disease lab in the developing world
- Travel in-country, and learn about environmental factors that contribute to infectious disease burden in poor countries
- Receive a summer research stipend and travel support

Partner Sites



Managua, Nicaragua; São Paulo, Rio de Janeiro, Salvador, Brazil; Cape Town, Pretoria, South Africa; Kampala, Uganda; Kharagpur, Sevagram, Mysore, India; Xiamen, China

Common Goals



CEND Mission

Accelerate the innovation of new drugs, vaccines, and diagnostics for diseases that primarily or disproportionately afflict people in developing countries.

BSP Mission

Promote the success of students from economic, gender, ethnic and cultural groups historically underrepresented in the biological sciences.

NIH's MHIRT Goals

Train the next generation of researchers to reduce health disparities among underserved populations...

And offer international training for students from health disparity populations

cend.berkeley.edu/

bsp.berkeley.edu

ncmhd.nih.gov/our_programs/mhirt.asp

The Basics



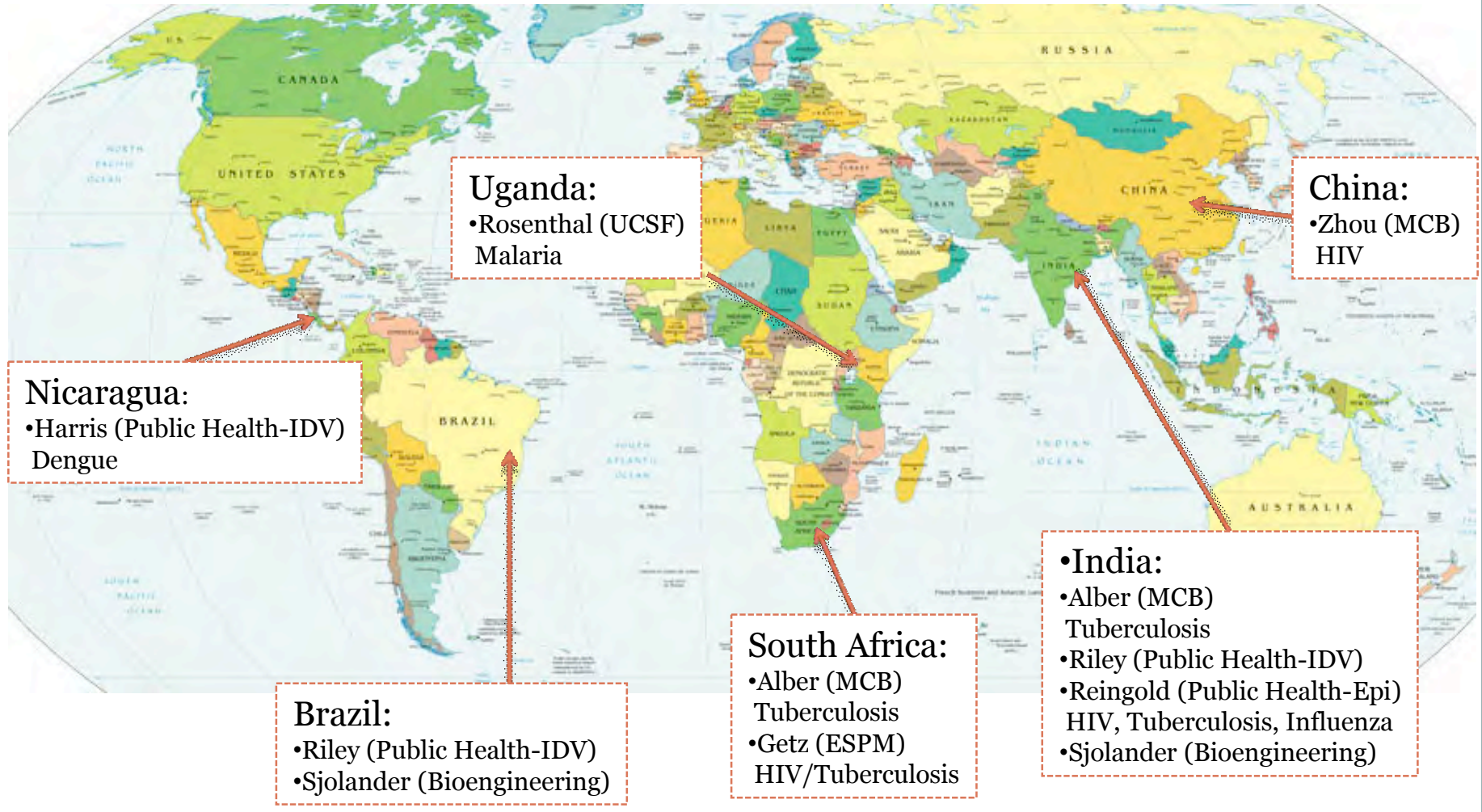
- Apply: October 2009
- Awards Announced: December 2009
- 8 Student Slots: 6 undergraduate, 2 graduate
- Spring 2010 Activities:
 - Work in a lab at UC Berkeley
 - Take the MHIRT Seminar on Research in Developing Countries
- Summer 2010:
 - Travel abroad for your summer research
- Fall 2010:
 - Present your research at the Berkeley Global Health Symposium

Who's Eligible?



- Berkeley undergrads in their 3rd year or higher, and doctoral students, interested in health-related research careers and from a “health disparity” population.
- U.S. government defines “health disparity” populations as African Americans, Asian Americans, Hispanic Americans, Native Americans, Alaskan Natives, Native Hawaiians and Pacific Islanders, and the medically underserved (i.e., socio-economically disadvantaged individuals in rural and urban areas)
- You must meet minimum course and GPA requirements (to be announced in October 2009)

Where/What Can You Study?



MHIRT Berkeley Investigators



Tom Alber, MCB
Structural biology, biochemistry.
Studies protein-protein interactions in TB, trypanosomes, and HIV with a long-term goal of drug target discovery.

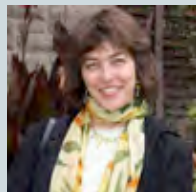


Lee Riley, SPH, Infectious Disease & Vaccinology
Epidemiology, molecular biology.
Molecular epidemiology of STIs and other infections in slums and studies of *M. tb* mutants in a mouse model of latent TB.

Wayne Getz, ESPM
Mathematical modeling, eco-informatics.
Develops models of HIV and TB transmission through human populations, to understand and test impacts of different treatment regimens.



Kimmen Sjölander, Bioengineering
Computer science, computational biology.
Develops computational tools for prediction of gene function from sequence, with a particular interest in identifying genes that confer virulence to microbes.



Eva Harris, SPH, Infectious Disease & Vaccinology
Virology, epidemiology.
Combines field-based and molecular epidemiology with studies of the dengue virus in mouse models.



Phil Rosenthal, UCSF
Molecular biology, clinical trials.
Studies comparative effectiveness of treatments for Malaria and HIV; malaria drug target discovery and screening

Art Reingold, SPH, Epidemiology
Epidemiology, diagnostic evaluation.
Examines social and environmental factors in infectious disease transmission, molecular epidemiology of flu and STIs, and cost-effectiveness of point-of-use diagnostics.



Qiang Zhou, MCB
Molecular biology, biochemistry
Studies protein-protein interactions in HIV, particularly the role of host transcriptional regulation in HIV replication.



Program Timeline



- Oct. 12: Application available online
- Nov. 13: Applications due by midnight
- Dec. 1 – 11: Interviews with faculty
- Dec. 19: Decisions announced
- Jan. 18-22: Weekly workshop starts
- Feb. 1: Students begin training in their labs (start date will vary by lab)
- May 26: Pre-travel orientation
- Oct: Berkeley Global Health Symposium

Workshop



- One night a week, beginning the week of Jan. 18
- Topics:
 - Burden of neglected diseases in endemic countries
 - Neglected disease R&D: financing and policy
 - History of international health research
 - Research ethics and “global health experiences”
 - Social determinants of health
 - Overview of the UCB global health research community
 - Developing a research plan and skill-sharing project
 - Multi-cultural leadership and networking
- Outputs: Research plan, skill-sharing project

Support



- Stipend

The MHIRT stipend covers your costs of living during the summer (plus any visa, vaccination fees you need to pay).

NO stipend is provided in the Spring semester; you must arrange this yourself

- Funds for your travel to/from foreign site
- Summer housing allowance at foreign site
- Course enrollment fees (at foreign universities)
- Supply budget for your hosting lab (abroad)

Before You Apply



- Research the labs you're interested in
 - Read the papers, visit the lab websites
 - Check out the foreign collaborators' websites
 - You are **STRONGLY DISCOURAGED** from contacting the MHIRT investigators with questions about the program! Applications will be reviewed by an outside committee.
- Ask for letters of recommendation in advance
- If you have questions about the grant or application, email cend@berkeley.edu

Application Process



- **Online application form:** available October 12th
<http://globalhealth.berkeley.edu/mhirt/apply.html>
- **Letter of Intent**
- **Transcript:** Unofficial Bearfacts transcript accepted. Transfer and graduate students, include transcripts from previous institutions.
- **FinAid:** Unofficial Bearfacts statement of financial aid/need accepted (optional).
- **Letters of Recommendation:** 1 – 2. Letters should come from academic or professional sources when possible.
- **Resume**

Letter of Intent



- 1 Page limit, addressing:
 - Why you want to conduct research abroad
 - The MHIRT research project(s) of interest to you
 - Your specific career objectives relating to health disparities, international health, and health science research
 - How you will apply your study abroad experiences to your career upon returning to the U.S.
 - Why you feel particularly suited or qualified to contribute to this area of research

Letter of Recommendation



- Start looking now!
- How to ask for a letter:
 - Ask at least 4 weeks before you need the letter.
 - **Note: Letters will not be accepted after November 13.**
 - Provide as much information as possible (e.g., your resume, transcript, description of MHIRT, why you're applying)
- Ask someone who can attest to your professionalism and communication skills
 - Professor whose lab you worked in/UGSIed for > Professor whose class you did well in > GSI whose class you did well in > Former employer > Personal contact

Selection Process



- October 1st: MHIRT investigators advertise open positions in their labs.
- November 13: Each applicant submits a single proposal package. You may choose no more than 2 labs/positions to apply to.
- Nov 14-30: Outside review panel selects top 3 applicants for each open lab position.
- Dec 1-11: Top 3 applicants are forwarded to the MHIRT investigators, who conduct interviews with their preferred candidate(s).
- MHIRT investigators make final decisions.
- Dec 19: Approximate date for announcement of winners.

What if I'm Already in a Lab?



- All the collaborations for 2010 are set, BUT you can...
- Talk to your professor
 - Your professor can contact the Berkeley MHIRT professor and collaborating lab, to propose a project that you do in collaboration with all the three labs.
 - The MHIRT Advisory Committee must approve the project
 - You would list this project in your MHIRT application
- Or, work in two labs for the Spring semester (big commitment)
- Or, finish your current lab commitments in the Fall, and begin in the MHIRT lab in the Spring
- **You will be asked on your application if you currently plan to be part of a non-MHIRT lab in Spring 2010!**