



Mapping Tropical Disease: A Most Critical First Step

Laboratory for molecular surveillance of tropical diseases opens in the Congo

Applied Research Brings a New Approach

New molecular and demographic methods can help national and international health organizations track data and map tropical diseases. This information can not only help guide efforts to control diseases such as malaria, drug-resistant malaria and African sleeping sickness, but will also help in evaluating the effectiveness of treatment.



Asking the Right Questions

• *Who has the Disease?*

The team will target the most susceptible element of the population—the poorest of the poor. These are the people who bear the brunt of the burden of tropical disease.

• *Where Do They Live?*

Locating disease hot spots will help medical teams target control, ferreting out areas of highest density.

A New Model for Emerging Populations

Research will begin in the Democratic Republic of the Congo (DRC). Data will be of immediate use for the DRC, while also serving as a model for surveillance in other developing countries.

The immediate and long-range benefits make this a particularly attractive endeavor. This applied research approach often eludes the notice of institutions that place emphasis on either research or field work.

The unique opportunity presented through UNC Gillings School of Global Public Health is to embrace this hybrid approach—“Applied Research”—with the understanding that this work offers the best of both worlds.

Leadership



Steve Meshnick, MD, PhD, professor of epidemiology, UNC Gillings School of Global Public Health, says of the team, “We are about as close to practice as research can get.” The multidisciplinary team includes epidemiologists, geographers, molecular biologists and tropical disease experts. Exceptional, too, is the presence of a member from the country being studied. This will help build epidemiological capacity in the DRC while helping strengthen UNC’s leadership in global public health.



GOAL

To map out the most critical areas affected by tropical disease in the Democratic Republic of the Congo (DRC) and use the same approach to combat disease elsewhere.

PARTNERS

Macro-International, Inc., the Institute of Tropical Medicine in Antwerp, the Kinshasa School of Public Health and other experts in the U.S. and the DRC.

IMPACT!

Finding/Fighting Disease

Infectious diseases remain the leading cause of death and disability in developing countries. In order to more effectively combat tropical diseases, we need to know how many people have these diseases and where they live. Finding effective ways to map diseases will help target future efforts to eradicate them.

