

## THE BILL & MELINDA GATES FOUNDATION

The Seattle-based Bill & Melinda Gates Foundation has one of the largest endowments among charitable organizations, with an endowment of approximately \$31.7 billion. Bill and Melinda Gates established their foundation to reflect their belief that "all lives, no matter where they are lived, have equal value." I looked through the Gates Foundation website and followed some links to find out what they are doing to fund prevention and treatment of malaria in sub-Saharan Africa.

The foundation's aims are global in nature, with a major component resting with enhancing healthcare efforts to prevent and treat diseases and conditions in developing countries.

One of the foundation's Global Health initiatives focuses on combating malaria. Although eliminated in several regions of the world, the disease continues to run rampant in parts of sub-Saharan Africa, where 90% of the deaths from malaria occur, according to the World Health Organization Roll Back Malaria website. Because it affects so many humans, the Gates Foundation has listed malaria as



*Mosquito nets from the Bill & Melinda Gates Foundation website*

one of the "priority diseases and conditions."

Successfully eradicating malaria in Africa depends on a commitment to more than one strategy, a need reflected in the foundation's efforts to discover safe, effective, and affordable malaria vaccines, and find new drugs to treat the disease. The Gates Foundation's global initiative on malaria extends to efforts to develop methods to control mosquitoes that transmit malaria, ensure access to new drugs

and vaccines, expand the use of existing tools to control malaria, and build support among leaders for malaria research and control.

### Grant-making priorities and strategies for the malaria initiative

The importance of eradicating malaria is evident in the foundation's grant-making activities related to the disease. While a key focus of the Bill & Melinda Gates Foundation centers on preventing malaria with new vaccines and drugs, the foundation also financially supports research to discover, develop, and clinically test malaria vaccines. These efforts would have the greatest impact on the health of infants, children, and pregnant women, who are at highest risk of malaria illness and death in malaria-endemic countries.

Another key grant-making focus for the foundation is to prevent the transmission of malaria through improved mosquito control. New tools and approaches such as alternative pesticides would prevent mosquitoes from transmitting malaria among humans. Alternately, new forms of residual pesticide spraying and strategies for monitoring their usage, and improved barrier methods such as bed nets could help prevent malaria.

On the malaria treatment front, the foundation's strategy includes the discovery, development, and clinical testing of more effective and affordable malaria drugs, with a particular focus on medications for use during pregnancy. The emerging resistance to current malaria drugs is a challenge but, with continuing research, new solutions can be found.

To help facilitate the distribution of these new drugs and vaccines, the foundation is accelerating access by developing innovative financing mechanisms for product introduction and adoption and addressing obstacles to the procurement and distribution of these products. The foundation is involved in advocating increased financial support and building commitment and awareness among decision makers and the public for effective malaria research and control.

### Grant Awardees

Over the past 12 years, the Gates Foundation has increased the number of grants for malaria-related projects. In the last 6 years the foundation awarded 40 grants for malaria-related research, compared with only 2 awards made between 1994 and 2000.

Recent grant awardees include organizations that focus on clinical trials in Africa of new anti-malaria therapeutics and those that develop advocacy programs in African nations. For example, in 2006 the

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foundation awarded \$17 million to the INDEPTH Network, headquartered in Ghana, to develop an alliance to conduct clinical trials of new anti-malarial drugs and vaccines. Offering assistance to research centers in 9 African countries (Mozambique, Tanzania, Malawi, Gabon, Nigeria, Ghana, The Gambia, Kenya and Senegal), the network's Malaria Clinical Trials Alliance focuses on how to maintain appropriately trained and managed staff in these countries.

Professor Fred Binka MB ChB, MPH, PhD, INDEPTH is executive director. His work in progress on a malaria vaccine is reported on the INDEPTH website.

In continuing their multi-prong strategy to combat malaria, the University of Leeds received a grant from the foundation to develop a new mosquito net design. Current nets are chemically treated and need treating again or replacing within 20 to 25 washes. In addition, the mosquitoes are becoming resistant to these chemicals. To combat this problem, university researchers are engineering new netting material that will use its structure to kill the mosquito without the aid of chemicals. Information about the initiatives from Leeds University is available on the website of the lead investigator, Dr Bruce Alexander.

The advocacy aspect of the foundation's strategy is illustrated in an \$8.7 million award to the Johns Hopkins Bloomberg School of Public Health Center for Communication (CCP), which launched the VOICES for a Malaria-Free Future project to highlight successful anti-malaria efforts and evidence-based results.

Designed to educate policy makers about effective programs and strategies for malaria control in Ghana, Kenya, Mali, and Mozambique, the CCP is working to break down policy barriers hampering effective prevention and control. The CCP works with community-based organizations to implement projects in Ghana and Mali. The project's director, Matthew Lynch PhD is at Johns Hopkins University.

Other awards include a \$107.6 million grant over 6 years to the PATH Malaria Vaccine Initiative (MVI) to extend the public-private partnership between MVI and GlaxoSmithKline Biologicals (GSK Bio) to develop GSK Bio's malaria vaccine for children in Africa and a \$100 million grant over 5 years to the

Medicines for Malaria Venture (MMV) to further develop and accelerate anti-malarial discovery and development projects.

*by T Lisinski PhD*

**In a malaria briefing in October 2005, Bill Gates explained the magnitude of malaria. He said, "it's really a tragedy that the world has done so little to stop this disease that kills 2,000 African children every day. If those children were in rich countries, we'd have headlines, we'd take action and we wouldn't rest until every child was protected." Mr Gates explained that he plans to launch an "all-out war" on this disease that kills twice as many humans today as it did 20 years ago.**

*AA Reynolds*

### THE MALARIA CLINICAL TRIALS ALLIANCE (MCTA)

MCTA was established by INDEPTH through a US \$17 million Gates Foundation grant and headed by Professor Fred Binka of Ghana.

Starting with inaugural meetings of all leaders of trial sites/centers and the Alliance's Management Board in Accra, Ghana in late May 2006, MCTA has held training workshops in Good Clinical Practice (GCP) in Lambarene, Gabon and Bagamoyo, Tanzania. A third training workshop was held in early November in Kilifi, Kenya.

A media training workshop on malaria reporting was held in Accra, Ghana in early November. All MCTA countries were represented.

MCTA staff have visited most of the 14 trial sites in 9 countries to make face-to-face contacts with most of the staffs at the various centers and build more confidence in each other.

Summarized from [www.indepth-network.org/mcta/mctaindex.htm](http://www.indepth-network.org/mcta/mctaindex.htm)

