A new trans-national collaborative research project, the Malaria Transmission Consortium (MTC), funded by the Bill and Melinda Gates Foundation, was formally established at a workshop 20-26 November 2007 in Lusaka, Zambia.

The project, which is planned to be implemented over five years with a budget of USD 20 million, aims to develop tools with which to establish an evidence base to help malaria control program managers monitor malaria transmission and implement and adjust malaria control interventions across a range of malaria transmission intensities. Evidence from field trials has demonstrated the efficacy of a number of malaria control interventions. However, these trials have been carried out in a limited range of epidemiological environments and there is little knowledge on the influence of differing intensities of transmission. Moreover, the ability of control program managers to fine-tune strategies is limited by the difficulty of measuring malaria transmission.

The MTC will address this gap by working with malaria control programmes to (1) identify simple, standardized and inexpensive methods for measuring malaria transmission through entomologic, parasitologic or serologic techniques, and (2) evaluate transmission-reducing malaria control techniques, both alone and in combinations across a range of malaria transmission environments.

The Consortium comprises a network of malaria research groups associated with active malaria control programs in Indonesia, Kenya, Tanzania and Zambia. The Consortium includes experienced research organizations within each country partnered with 'northern' institutions with complementary resources. The participating institutions and research groups and their locations are listed below.

The objectives of the MTC are:

1. The development of standardized measures of malaria transmission that can be used across the range of malaria epidemiology.
2. The evaluation of the effectiveness of different transmission-reducing interventions, both alone and in combinations in environments with varying transmission levels.
3. An assessment of the impact of biological factors associated with vectors, such as insecticide resistance or variation in vector behaviors, on the effectiveness of malaria control interventions.
4. Validation of epidemiological simulation models by assessing their ability to predict the impact of interventions on entomological and parasitological measures in the study sites.

The MTC will develop partnerships with other groups that are addressing some of these objectives (e.g., Roll Back Malaria Monitoring and Evaluation Reference Group, and other malaria and vector control research consortia).

The participants at the launch workshop in Lusaka included senior officers from the national malaria control programmes, researchers from the participating institutions and groups and the
project officer from BMGF. Members of the External Scientific Advisory Committee (ESAC), who are external senior scientists with international experience in malaria control, also participated. The workshop agreed on a governance structure with an executive committee including senior scientists from the participating research projects and senior malaria control officers from each of the five endemic countries. The executive committee is supported by a management team based at University of Notre Dame and receives advice from the ESAC and three specialized sub-committees. The workshop also reviewed the Project Design and Implementation Plan, worked out detailed protocols for objective 1 and finalized a budget for the first year’s work. It was agreed to develop a joint data management system including harmonized formats for field data collection. After protocols and instruments have been tested, they will be made accessible to other scientists and control programs.

**Participating institutions, research groups and study sites by country**

**Endemic countries**

- **Indonesia** (three sites, with low, moderate and high transmission)
  - UNICEF Representative Office, Djakarta
  - Gadjah Mada University
  - Indonesian National Institute of Health
  - Eijkman Institute
- **Kenya** (western Kenya with high transmission, highlands with unstable malaria)
  - Kenya Medical Research Institute (KEMRI) /CDC Field Station, Kisumu
- **Tanzania** (Dar es Salaam, low transmission)
  - Dar es Salaam City Council
  - Ifakara Health Research and Development Centre
- **Zambia** (moderate transmission)
  - Malaria Control and Evaluation Partnership in Africa (MACEPA)

**‘Northern’ countries**

- **Switzerland**
  - Swiss Tropical Institute, Basle
- **United Kingdom**
  - London School of Hygiene and Tropical Medicine
  - Durham University
- **USA**
  - Center for Global Health & Infectious Diseases (CGHID), University of Notre Dame, Indiana,
  - Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, Georgia

Primary management of MTC is based at CGHID at the University of Notre Dame under the direction of Frank Collins, Director of CGHID. In due course, MTC will set up its own website. Until then, requests for further information may be sent to Frank Collins, email: frank@nd.edu.

The MTC welcomes queries from national malaria control programmes and research groups interested in its objectives.