



The Malaria Eradication Research Agenda (malERA) initiative

Recent years have witnessed renewed impetus for malaria control and the long term goal of malaria eradication has been re-established. However, there is general consensus that with currently available tools malaria can be better controlled and eliminated in some areas, but that worldwide eradication will not be achievable. The Malaria Eradication Research Agenda (malERA) initiative was conceived as a rigorous scientific consultative process to identify knowledge gaps and new tools that will be needed to eradicate malaria globally, on the understanding that the academic and research community will necessarily play a crucial role in the fight against malaria and its eradication worldwide, and that such a goal will be unachievable without the development of a new generation of tools focused in interrupting transmission. MalERA was created after the re-establishment of malaria eradication as a long-term goal during the Malaria Forum convened by the Bill & Melinda Gates Foundation in October 2007. It has been presented to and endorsed by the Roll Back Malaria (RBM) Partnership Board.

The R&D agenda was drafted based on the outcome of work of seven Consultative Groups, each focused on different disciplinary sectors and technical areas, with additional input from a group of Young Investigators. Over the course of two years, more than 250 experts from 36 countries participated in 20 malERA meetings around the world, producing a draft research and development agenda that was refined during the malERA 'Zenith Week' meeting in Washington D.C., in March, 2010.

The comprehensive R&D agenda for malaria eradication are published in a PLoS Medicine Collection (www.ploscollections.org/malERA2011), comprising an Introduction, 9 papers devoted to specific thematic areas and two background papers on lessons learnt from previous malaria and other diseases eradication campaigns.

The process was led by a Steering Committee (chaired by Pedro L. Alonso) composed of 14 independent scientists; an International Advisory Committee (chaired by Myron M. Levine) including veterans from eradication and elimination campaigns of both malaria and other diseases; and a Leadership Council comprising Dr. Margaret Chan, Director General of the World Health Organization, Dr. Tadataka Yamada, President of the Global Health Program of the Bill & Melinda Gates Foundation, Dr. Anthony S. Fauci, Director of the National Institute of Allergy and Infectious Diseases, USA, Dr. Mark Walport,

Director of the Wellcome Trust and Dr. Awa Coll-Seck, Executive Director of the Roll Back Malaria Partnership Board.

Continuity and cross-sector communication within the different program elements was facilitated by a Secretariat based at the Barcelona Centre for International Health Research (CRESIB-Hospital Clínic, University of Barcelona), Spain. The initiative was supported by a grant from the Bill & Melinda Gates Foundation.

The malERA initiative complements the 2008 Global Malaria Action Plan with R&D issues. Its aim is not to prescribe the activities of individual organizations, but rather to gain a common view among research institutions and sponsors on current and future directions for malaria Research and Development, with eradication as the ultimate goal.

To date, the goal of eradication has already been incorporated into the agenda of many research organizations and has been embraced by the major malaria product development partnerships. On the other hand, there is common agreement that although malERA focuses in a R&D agenda for the long-term goal of malaria eradication, maintaining focus on control efforts and continuing to develop and improve tools and address fundamental research questions that can aid in these efforts in the near-term remains crucial.

Thematic papers:

- Introduction
- Basic science and enabling technologies
- Drugs
- Vaccines
- Vector control
- Diagnoses and diagnostics
- Health systems and operational research
- Monitoring, evaluation and surveillance
- Modelling
- Cross cutting issues for eradication

Background papers:

- Lessons for the future from the Global Malaria Eradication Programme (1955 – 1969)
- The role of research in viral disease eradication and elimination programs: lessons for malaria eradication