The MIM alliance has contributed to the emergence of a growing body of reference research institutions staffed by well-trained national scientists. In a majority of cases, MIM support played a critical role in enabling well-rounded teams and partnerships to emerge. Most of the scientists MIM has supported since its inception now hold posts in academia, health ministries and international organizations, where they help to shape national and international malaria agendas and facilitate improved and effective malaria control in Africa.
The goals of malaria control may never be achieved without strong involvement of those scientists who are directly affected by this terrible disease in their daily life.

MIM is contributing to sustainable research capacity in Africa by providing mechanisms for communication and information sharing (MIMCom), opportunities for collaborative multicenter research (MIM/TDR), access to well-characterized standardized reagents (MIM/TDR) and dissemination of information regarding research opportunities and findings through the MIM Pan-African Malaria Conferences (Secretariat). In the past seven years, MIM research grants have been awarded to 40 principal investigators in 16 African countries, with international collaborators in other African countries, in Europe and in North America. To date, at least 80% of these investigators continue to work in malaria research or control programs in Africa.

The grants geared to strengthening malaria research capability that MIM/TDR has awarded to these investigators leverage other research grants and serve as a vehicle for developing human resources and upgrading research infrastructure. They provide resources such as tuition, bench fees and research costs for postgraduate MSc and PhD training, they also fund specialized workshops to standardize research protocols and upgrade skills in molecular biology, good practices (clinical and laboratory) and epidemiology. Over the years, this growing group of African scientists has emerged as an authoritative resource with national and international recognition. A number of them serve on boards of national malaria control programs, international funding agencies and other organizations.

These grants are now positioned to train a younger generation of African scientists and indeed are doing so. MIM grants have facilitated successful competition for larger grants from other donor agencies, including the US National Institutes of Health, the Wellcome Trust, Howard Hughes Medical Institute and the EU, and have resulted in publication of over 200 articles in peer-reviewed journals within two years of the award of the MIM grant. MIM investigators in Africa are strengthening malaria control efforts by work in the following areas:

- Anti-malarial drug policies, vector control, insecticide-treated bed nets, management of severe malaria, natural products as potential tools for the treatment and control of malaria, anti-malarial drug resistance and health systems research.
"I have been supported by MIM/TDR since 1998. I received my first grant four years after I had completed my post-doc. At that time, I was trying to establish my research group and develop our research programs – initially, at the Centre de Recherches Médicales, Franceville, and later at the Hôpital Albert Schweitzer, Lambarené, both in Gabon. The MIM/TDR grant essentially launched my research career. Using the resources provided through that grant, I recruited and trained three students from Benin, Cameroon and Gabon for doctoral degrees over a period of four years. The results of their work became the essence of several scientific papers published in peer-reviewed journals. In 2003, with additional support from MIM/TDR, we established collaboration with CERVE (Centre d’Etudes sur les Ressources Végétales) in Brazzaville, Congo. Under this collaboration, two Congolese PhD students are now being trained in my lab.

The MIM grants enabled me to return to Africa and continue my research after my postdoctoral training and also facilitated access to resources and grants from other funding agencies (EC, Humboldt, other TDR grants, AMANET etc.). I have also applied for an NIH grant and am expecting the response in 2005. The scientific community is recognizing my work, and I have established several new collaborations with colleagues in other institutions in Africa and in the Northern Hemisphere. Being a MIM grantee gave me a voice and recognition. Hard work, perseverance, the contribution and support of my collaborators have built on the foundation of the MIM grants, resulting in over 16 publications in the past seven years.

No doubt, MIM has played an important role in the development of my career and the acceptance of my work by the international research community.”

Dr. Francine Ntoumi
Hôpital Albert Schweitzer, Lambarené, Gabon

In 1997, most research laboratories in Africa had a single computer with dial-up access to handle e-mail. It was often impossible to send or receive large documents and access the World Wide Web. This was identified in Dakar as a major barrier to the timely communication of information. MIMCom, created by the US National Library of Medicine in partnership with organizations in Africa and Europe, is the world’s first electronic malaria research network. There are currently 25 research institutions across Africa on the MIMCom network, with high-speed Internet access to publications and document delivery services, medical reference resources and databases. The MIMCom intervention has had remarkable effects at these sites. Medical informatics is gradually becoming a veritable scientific tool for communicating research findings to policy makers. Members of the MIM/TDR anti-malarial drug resistance network are exploring this tool via a Web database provided by MIMCom to share their data and coordinate activities.
The success of any malaria intervention will also depend on the research capacity in endemic countries to implement, monitor, evaluate and improve the measures employed to control the disease.

The Dakar conference identified the importance of access to reference collections of malaria reagents and materials to facilitate collaborative research. MR4 has established a collection of more than 1,100 well-characterized reagents. These reagents are available free of cost to malaria scientists in endemic countries. MR4 is currently exploring ways of improving access in Africa by facilitating the development of repositories in appropriate African countries, as proposed in Dakar. MR4 also promotes standardization of protocols used for malaria research and offers training in bioinformatics, good laboratory practice and other areas related to handling biological materials and using the latest laboratory techniques.

“This project is providing important information on the current distribution of malaria vectors and their susceptibility status to pyrethroid insecticides in Nigeria. Although I have received excellent doctoral and postdoctoral training in entomology, prior to this project, my research relied on laboratories in Europe and South Africa for molecular analysis of our specimens and related assays. The MIM grant has facilitated bridging this gap with the establishment of a molecular entomology laboratory at the Nigerian Institute of Medical Research. The establishment of an insectarium, where reference mosquito colonies are cultured, has also enhanced our contribution and relevance to malaria control and the RBM program in Nigeria. In a nutshell, the grant has provided a unique opportunity to bridge the gap that has long existed between research and malaria vector control program in the country.”

Dr. Samson Awolola
Nigerian Institute of Medical Research, Lagos, Nigeria
The MIM Pan-African Malaria Conferences remain the largest international meetings entirely devoted to malaria research and control. The Conferences, held every three years, are a platform for malaria scientists to share their research findings and exchange ideas with the global community of scientists, control managers, Roll Back Malaria (RBM), industry representatives and policy makers. The past three Conferences, organized by the Secretariat, served to promote the links between malaria research and control, and to keep malaria high on the global agenda. Further, the MIM Conferences provide unique opportunities for advocacy and bringing together many international malaria organizations. The participation of these organizations strengthens collaboration and advances the scientific agenda in a synergized way.

In the past eight years, since the inception of the Multilateral Initiative on Malaria, several programs addressing one or more aspects of the malaria burden have emerged. Efforts to control malaria have been significantly bolstered by the establishment of the World Health Organization’s Roll Back Malaria program (RBM), the Grand Challenges and the Global Fund to Fight AIDS, TB, and Malaria. As should be the case, most of the current effort is focused on scaling up available intervention and management measures in endemic countries. Given what we know about the natural history of malaria, it is critical that these efforts rest on solid scientific ground, that current interventions be improved, and that new interventions be developed. MIM has acted as a catalyst, bringing together other malaria organizations and helping raise the priority of malaria on the global agenda.

MIM operates upstream, with a long-term commitment to supporting sustainable malaria research and promoting a critical mass of well-trained scientists who can actively shape the research agenda and be a part in evaluating implementation of control measures. The effective distribution of any vaccine, new drug or other control tool will depend on local scientific capability, making the MIM effort more important than ever.

“MIMCom has greatly facilitated African capacity development.”

“We’re not so far away anymore. We’re finally ‘here’.”

“MIMCom removes those old barriers which were about controlling information, because information is power.”

African researchers’ comments on MIMCom.
MIM continues to strengthen African research leadership and management, and to facilitate the "incubation and emergence" of the next generation of African scientists, thereby ensuring sustainability.