25TH ANNIVERSARY OF THE KEMRI–WELLCOME TRUST RESEARCH PROGRAMME

KEMRI | Wellcome Trust
Well known around the world for our work on malaria and other infectious diseases, we conduct basic, clinical and health systems research with results feeding directly into local and international health policy. We aim to increase Kenya’s capacity to conduct strong and sustainable multidisciplinary research.

In 1989 the Kenya Medical Research Institute (KEMRI), one of Africa’s leading health research institutions, formed a landmark partnership with the Wellcome Trust, one of the largest global funders of health research, and the University of Oxford, one of the world’s top research universities, to establish a research programme on the coast of Kenya. The Trust has supported collaborative health research in Kenya for over 70 years aiming to improve the health of Kenyans.

Over 25 years, we have grown from a small group of 12 people to become a major Programme with around 800 staff working across Kenya and conducting collaborative research in many other countries in the region. We are internationally recognised for our landmark research, particularly in child health.

Finding ways to beat malaria
In the early days, the Programme was based in Kilifi Hospital, a busy facility serving a large population on the coast. Initial work focused on malaria, at that time a devastating disease filling health facilities with sick patients during the rainy seasons and causing the deaths of many children. Working closely with colleagues in the Ministry of Health, our researchers conducted a number of pivotal studies to understand better how to prevent and treat malaria. Many of these fed directly into determining the policy for Kenya’s National Malaria Control Programme. These included studies of insecticide-treated bed nets and of antimalarial drugs used to prevent malaria in pregnant women, which were important in informing WHO policy across Africa. These studies have contributed directly to protecting many millions of people from malaria. Over the last 15 years there have been impressive improvements in malaria control across many part of Africa, and in Kilifi itself malaria cases have dropped by 90 per cent. The wards of local hospitals are no longer full of children during the rainy seasons.

As the Programme developed it was quickly apparent that, important though malaria is, it was just one of a host of health problems confronting children on the coast and that often these problems interacted. Our focus
therefore expanded to include work on other major diseases – including pneumonia, meningitis, HIV and malnutrition – and also to include social science and health systems perspectives. Work was conducted not only in health facilities but also in the community and involved studies of new approaches to prevention and treatment, including new drugs and vaccines. This work has had a direct input to many policies, in Kenya and internationally, for the management and prevention of major childhood diseases. Our focus continues to evolve as Kenya goes through an epidemiological transition, with falling childhood mortality and growing prominence of non-communicable diseases.

By the early 2000s we were in a position to make a major investment in developing international standard research facilities in Kilifi. With support from the Wellcome Trust, the new KEMRI Centre for Geographic Medicine Research Coast was built with state-of-the-art laboratories, IT support and offices. Later development of the campus, with the support of the Trust and the University of Oxford, included the building of a dedicated training centre. Today, the Kilifi campus is recognised as a centre of excellence in Africa and is the site of many international meetings and training courses.

Working with the people
A unique feature of our work in Kilifi is the integrated demographic and epidemiological surveillance of a population of nearly 300,000, the largest such surveillance system in Africa. Our clinical staff work closely with the staff of Kilifi District Hospital
to provide excellent clinical services for the people of Kilifi County. From the beginning, our work has involved building close ties with local communities. Community views are critical in planning and conducting work. In Kilifi, through regular interactions with opinion leaders and a network of over a hundred KEMRI community representatives, our dedicated community liaison team works to build mutual understanding between researchers and the community, and to ensure research is responsive to community views and interests.

We have a particular focus on building links with schools in the community, which includes promoting better understanding of science and research. A school attachment scheme encourages the brightest science students in Kilifi to spend periods in the Programme to gain experience before going to university.

Having expanded from our base in Kilifi, we now work across Kenya and conduct collaborative research in many other countries in Africa. Several of our research groups specialising in large-scale epidemiology are based in Nairobi, with work including the application of advanced mapping techniques to malaria and other diseases across Africa. Nairobi is also the base for a major programme of health systems research involving many hospitals across Kenya and linked closely to the Ministry of Health and to county governments. A key principle of all our research is to ensure close links with national policy makers from the earliest planning stages, and much of our research involves staff from relevant government departments as partners.

New scientific leaders
Apart from conducting the highest-quality research, one of our objectives is to support the development of scientific leadership in Kenya. This begins with a structured internship programme for introducing Kenyan graduates to research – for which every year we receive thousands of applications. Many go on to do Master’s degrees and PhDs with us and at leading universities. Following their PhDs, researchers are supported through a system of career development to join other research institutions in the region or to develop careers with us. Many of our groups are now led by Kenyan researchers holding internationally competitive funding, and many of our former interns have gone on to hold leadership positions in other organisations in Kenya and the region.

We have extensive international collaborations both within Africa and globally. As well as the long-term links with Oxford, we now have staff from other international institutions including the London School of Hygiene and Tropical Medicine, Imperial College London, the University of Warwick and the Liverpool School of Tropical Medicine. Within Kenya, we have strong links with all of the leading universities, the National Commission for Science, Technology and Innovation, and the Consortium for National Health Research.

As we look back over 25 years, we also look forward to continuing to deliver high-quality research tackling Kenya’s changing health challenges, making an important contribution to fulfilling Kenya’s Vision 2030 and improving health for all across Africa.