



tiba 

**NIHR Global Health Research
Unit Tackling Infections
to Benefit Africa at the
University of Edinburgh**

NHS

*National Institute for
Health Research*



What is TIBA?

Tackling Infections to Benefit Africa (TIBA, which means "to cure an infection" in Swahili) is an Africa-led, wide-ranging, multi-disciplinary research programme that explores and draws lessons from the ways that different African health systems tackle infectious diseases. Through TIBA, the University of Edinburgh will be working in partnerships with researchers from Botswana, Ghana, Kenya, Rwanda, South Africa, Sudan, Tanzania, Uganda and Zimbabwe to generate new knowledge and inform comparative analyses of health systems.

Our Vision

To harness the expertise and technical capability in biomedical and social sciences at the University of Edinburgh (UoE) and African partners to reduce the burden and threat of infectious diseases in Africa by informing and influencing health policy and strengthening health systems.

TIBA will help empower African scientists to effectively and sustainably tackle neglected tropical diseases (such as schistosomiasis, malaria, trypanosomiasis and lymphatic filariasis), and improve preparedness for epidemics (such as Ebola).

TIBA's Aims

1. Improve the diagnosis and surveillance of infectious diseases in resource-poor settings
2. Improve the deployment of existing drug treatments and enhance local capacity to develop new ones
3. Improve the deployment of existing vaccines and enhance local capacity to develop new ones
4. Improve the management of endemic and epidemic infectious diseases by:
 - i. Strengthening health systems, governance and ethics
 - ii. Improving policy development and implementation
 - iii. Enhancing capacity to respond to infectious disease emergencies

These aims will be delivered by collaborative and coordinated activities organised as 6 work packages:

- WP1 Rapid Impact projects;
- WP2 Making a Difference projects;
- WP3 Toolkit projects;
- WP4 Technology transfer and training;
- WP5 Dissemination for action;
- WP6 Responding to health emergencies.



Our science, budget and impact

Disciplines - infection biology, clinical medicine, primary health care, health systems, international development, governance and ethics, diagnostics, surveillance and epidemiology, molecular biology and drug development, immunology and vaccinology, genomics and bioinformatics, synthetic biology, innovation.

Diseases - schistosomiasis, malaria, trypanosomiasis, lymphatic filariasis, co-morbidities, NCDs + emerging infectious diseases.

Budget: We have a budget of just under £7M over a 4 year period plus in kind contributions. More than 80% of this will be allocated to our African partners.

Impact: Partner countries population total = 300M; Population living in poverty = 75M; Health care spend (public funds) = US\$20B; TIBA beneficiaries' = 50M people. Achieved by: improving health policy, health systems operation and health R&D environment in Africa partner countries and beyond.



WP 1: Rapid Impact projects

10 projects (£100k each), at least one proposed by each African partner and capture some of the diverse challenges of health care systems in Africa. Each project will address a current knowledge gap which is resulting in either non deployment of diagnostics or interventions or a lack of operational knowledge to improve the health of affected populations.



WP 2: Making a Difference projects

These consist of five projects (£500k each) building on WP 1. They demonstrate relevance to national health needs; show clear pathway to impact, i.e. policy change, uptake by end users; propose indicators for measuring impact on poorest people; involve 2 or more Africa partner countries; fit with TIBA aims and objectives; and provide opportunities to progress the Work Package 3 Toolkit agenda.



WP3: Tool Kit projects

These are aimed at strengthening health systems, looking at innovation-to-application value chains, information exchange and data sharing, and best practice for capacity building and training. Examples include working with local authorities to develop a road map for African drug and vaccine manufacturers.



WP4: Capacity Building

Establishing in-country expertise through PhD, MSc, and MPH training along with postdoctoral fellowships and technology transfer. This is important for sustainability.



WP5: Dissemination for Action

This is crucial for TIBA's impact on the actual health of the individuals and their communities – this is how TIBA's findings will be communicated to end users, i.e. communities as well as the national, continental, and global stakeholders. These stakeholders have been engaged from initial application onwards, and TIBA has received support from the African Union; New Partnership for Africa's Development (NEPAD); African Academy of Science; and Ministries of Health from all 9 countries. That engagement with stakeholders and communities is continuing.



WP6: Emergency Response

This work package is designed to enhance local capacity to respond to health emergencies in all 9 African countries, by supporting the development of field diagnostics, data sharing, and performing real-time genomic analyses. Edinburgh is developing portable diagnostic kits for viral, bacterial and parasite infections employing biomarkers, electrochemical and bio-sensors, or sequencing technologies. Together with several of the African partners (Kenya, Botswana, South Africa), TIBA is taking an eHealth approach to improving outbreak surveillance by optimizing technologies (e.g. smart phones), surveillance system design and data communication capabilities.



Our team



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TIBA Director

Africa partners



University of Edinburgh Partners



Global Health Academy

Edinburgh Infectious Diseases
Leading infectious disease research and training

International Agency Partners



African Union



World Health Organization
Regional Office for Africa



World Health Organization



Industry Partners



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