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

OFFICIAL LAUNCH OF TIBA PARTNERSHIP
25th October 2017

National Institute for Health Research
Official Launch of TIBA Partnership

25 October 2017
The Project Room
50 George Square
Edinburgh EH8 9LH

Time
12:30-13:00 Arrival of Guests and Speakers

13:00-13:30 Short speeches by:
- Prof James Smith, Vice Principal International, University of Edinburgh
- Prof Mark Woolhouse, TIBA Director, University of Edinburgh
- Prof Moses Chimbari, TIBA Deputy Director, University of Kwazulu-Natal, South Africa
- Prof Francisca Mutapi, TIBA Deputy Director, University of Edinburgh
- Prof Charlie Jeffery, Senior Vice Principal, University of Edinburgh

13:30-14:00 Refreshments

What is TIBA?
Tackling Infections to Benefit Africa (TIBA) 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. 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).

Our vision is to harness the expertise and technical capability in biomedical and social sciences at the University of Edinburgh and our African partners to reduce the burden and threat of infectious diseases in Africa by informing and influencing health policy and strengthening health systems.

Through TIBA, the University of Edinburgh will be working in partnership with researchers from nine African countries: Botswana, Ghana, Kenya, Rwanda, South Africa, Sudan, Tanzania, Uganda and Zimbabwe. These researchers will generate new knowledge and inform comparative analyses of health systems, as well as identifying examples of good practice to improve health for all the people of Africa.

The combined populations of our partner countries totals approximately 300M, with about 75M living in poverty. Public funding for healthcare is approximate US$20B per year. TIBA aims to benefit about 50M people. We will achieve this by improving health policy, health systems operation and health R&D environment in Africa partner countries and beyond.

Our science base includes disciplines in 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, and innovation.

Today’s official launch includes the announcement of nine flagship rapid impact projects (RI), allocated funding of just under £1M in total, with one project led by each African partner country.
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

TIBA will focus on a set of largely neglected diseases, including but not confined to schistosomiasis, malaria, trypanosomiasis and lymphatic filariasis. These are all important in their own right but also provide opportunities to explore the ways in which health systems operate and respond to changes in policy, new scientific knowledge, or technological innovation. We will pay close attention to interactions with other infections (e.g. HIV, TB), co-morbidities and non-communicable diseases, especially in the contexts of diagnosis and clinical management.

TIBA will take on a diverse set of research projects in order to explore multiple aspects of the different ways in which African health systems have to deal with different infectious diseases. Our partner countries represent a wide range of health system structures and resources with per capita health care expenditure varying more than ten-fold. Our research will generate new knowledge and allow us to conduct comparative analyses, identify examples of good practice and evaluate transferability. We will add value and cohesion to TIBA projects by working across all our projects to learn wider lessons for strengthening health systems, making innovation work, information exchange, and capacity building and training. TIBA will also

• undertake its own capacity building;
• proactively translate research into health technologies and policies that benefit the neediest communities;
• respond to health emergencies by supporting diagnostics development and deployment, data sharing and real-time analysis of pathogen genomes

OUR BUDGET

TIBA has a budget just under £7M over a 4 year period plus in kind contributions. More than 80% of our budget will be allocated to our Africa partners.

TIBA Management

Our management structure is composed of a directorate, a steering committee, internal and external advisory committees and monitoring and evaluation bodies. The full organogram is available at http://tiba-partnership.org/about/governance.

Directorate
Mark Woolhouse, Director
Francisca Mutapi, Deputy Director
Moses Chimbari, Deputy Director
University of Edinburgh
University of Edinburgh
University of KwaZulu-Natal, South Africa

Steering Committee members
Gordon Awandare
Samson Kinyanjui
Keith Matthews
Paul Ndebele
James Smith
Sue Welburn
University of Ghana
KEMRI-WT Programme, Kilifi, Kenya
University of Edinburgh
Medical Research Council of Zimbabwe
University of Edinburgh
University of Edinburgh

Other Edinburgh PIs
Andrew Rambaut
Devi Sridhar
University of Edinburgh
University of Edinburgh

External Advisory Committee members
Berhanu Abegaz
Elizabeth Bukusi
Abdallah Daar
Francine Ntoumi
African Academy of Sciences
University of Washington
University of Toronto
Congolese Foundation for Medical Research

Monitoring & Evaluation
LTS International

TIBA staff
Seth Amanfo, Research Coordinator (UoE)
Kath Tracey and Roz Shields, Secretariat (UoE)
Communications & Engagement Officer (UKZN)
Gareth Poxon, ICT support (UoE)
Administrative support provided by Ingentium
Africa Partners

<table>
<thead>
<tr>
<th>Partner Country</th>
<th>Investigator</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>Botswana</td>
<td>Nthabi Phaladze</td>
<td>University of Botswana</td>
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<td></td>
<td>Boitumelo Mudabuka</td>
<td>Botswana Institute for Technical Research &amp; Innovation</td>
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<tr>
<td>Ghana</td>
<td>Gordon Awandare</td>
<td>University of Ghana</td>
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<td>Kenya</td>
<td>Samson Kinyanjui</td>
<td>KEMRI-WT Programme, Kilifi</td>
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<td>Faith Osier</td>
<td>University of Heidelberg, Germany &amp; KEMRI Centre for Geographic Medicine Research</td>
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<tr>
<td>Rwanda</td>
<td>Nadine Rujeni</td>
<td>University of Rwanda</td>
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<td>South Africa</td>
<td>Moses Chimbari</td>
<td>University of KwaZulu-Natal, South Africa</td>
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<tr>
<td>Sudan</td>
<td>Maowia Mukhtar</td>
<td>University of Khartoum, Sudan</td>
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<td>Tanzania</td>
<td>Upendo Mwingira</td>
<td>National Institute for Medical Research, Tanzania</td>
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<td>Uganda</td>
<td>Charles Waiswa</td>
<td>Coordinating Office for Control of Trypanosomiasis, Uganda</td>
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<td>Zimbabwe</td>
<td>Paul Ndebele</td>
<td>Medical Research Council of Zimbabwe</td>
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<td>Simbarashe Rusakaniko</td>
<td>University of Zimbabwe</td>
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<td>Elopy Sibanda</td>
<td>Asthma, Allergy &amp; Immunology Clinic</td>
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University of Edinburgh Partners

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<tr>
<th>Institute</th>
<th>Contact Person</th>
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<tr>
<td>Edinburgh Genomics</td>
<td>Mark Blaxter</td>
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<td>Edinburgh Infectious Diseases</td>
<td>Ross Fitzgerald</td>
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<td>Global Health Academy</td>
<td>Liz Grant</td>
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<td>Innogen</td>
<td>Geoffrey Banda</td>
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<td>SynthSys</td>
<td>Joyce Tait</td>
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<td>International Agency Partners</td>
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<td>AAS The African Academy of Sciences</td>
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<td>African Union</td>
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<td>NEPAD TRANSFORMING AFRICA</td>
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Industry Partners

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<td>Kestrel Technology Group</td>
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<td>Omega Diagnostics Group PLC</td>
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Work Packages

WP1: RAPID IMPACT PROJECTS (Years 1-2)
TIBA is supporting 9 Rapid Impact (RI) projects, one proposed by each African partner. These capture some of the diverse challenges of health care systems in Africa and will both inform the development of our Making a Difference projects (WP2) and provide data for our Tool kit projects (WP3). Each RI 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. The RI projects are for a period of one year and are formally being announced today. The RI projects for the respective partner countries are as follows.

<table>
<thead>
<tr>
<th>Country</th>
<th>Rapid Impact project</th>
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<tbody>
<tr>
<td>Botswana</td>
<td>A situational analysis of schistosomiasis among communities in the Okavango Delta.</td>
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<tr>
<td>Ghana</td>
<td>The effects of Artemisinin-based combination therapy (ACT) on the dynamics of <em>Plasmodium falciparum</em>, <em>P. malariae</em> and <em>P. ovale</em> infection in Ghana.</td>
</tr>
<tr>
<td>Kenya</td>
<td>Validation of novel merozoite targets for new vaccines against <em>Plasmodium falciparum</em> malaria.</td>
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<tr>
<td>Rwanda</td>
<td>Evaluate the impact of e-health in the management of severe malaria cases in Rwanda.</td>
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<tr>
<td>South Africa</td>
<td>Preparing for an effective Mass Drug Administration Programme for South Africa: Elucidating burden, coverage, efficacy issues.</td>
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<tr>
<td>Sudan</td>
<td>Preparation for malaria elimination from Khartoum State: Improvement of the health system and detection of persistent transmission foci of <em>Plasmodium</em> species.</td>
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<tr>
<td>Tanzania</td>
<td>Monitoring of lymphatic filariasis in persistent hotspot transmission zones.</td>
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<tr>
<td>Uganda</td>
<td>Stability of <em>T.b. rhodesiense</em> in domestic cattle in Eastern Central Uganda and implications for rHAT and AAT control.</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>Adapting international criteria for the diagnosis of drug/ immunization-related auto-immunity and allergies for specificity to African populations.</td>
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WP2: MAKING A DIFFERENCE PROJECTS (Years 2-3)
These projects will
- Demonstrate relevance to national health needs
- Show a clear pathway to impact
- Serve as indicators for measuring impact
- Involve 2 or more Africa partner countries
- Fit with TIBA aims and objectives
- Provide opportunities to progress Tool kit projects

WP3: TOOL KIT PROJECTS (Years 3-4)
- Strengthening health systems
- Innovation-to-application value chains
- Information exchange and data sharing
- Best practice for capacity building and training

WP4: CAPACITY BUILDING
- Postgraduate training (in country)
- Postdoctoral fellowships (out of country)
- Technology transfer
- TIBA will adhere to the Seven Principles for Strengthening Research Capacity in LMICs http://www.who.int/tdr/publications/Essence_report2014_OK.pdf

Applications for the In-Africa Postgraduate Studentships and the Out-of-Africa one-year Research Fellowships will be invited shortly at: http://tiba-partnership.org/projects/tiba-studentships

WP5: DISSEMINATION FOR ACTION
This will include Community, National, Continental and Global level engagements. For further details please visit http://tiba-partnership.org/about/communication

WP6: EMERGENCY RESPONSE
TIBA will enhance local capacity to respond to health emergencies by supporting development of:
- Field diagnostics (portable kits, bench top sequencing)
- Data sharing
- Realtime genomic analysis
**Speaker biographies**

(alphabetical order)

**Professor Moses Chimbari** is Dean of Research in the College of Health Sciences, University of KwaZulu-Natal. He holds a PhD in Schistosomiasis Control from University of Copenhagen. Previously he was Deputy Director at the Okavango Research Institute, University of Botswana (2008-2012); Director of Research and Innovation at the National University of Science and Technology, Zimbabwe (2006-2008); Scientific Director of University Lake Kariba Research Station, University of Zimbabwe (2000-2006); and Officer in Charge of De-Beers Research Laboratory (1987-2000).

Moses has more than 80 publications mainly on vector borne diseases and health systems research. He has led 4 major projects in the past decade: Edulink project on Research Capacity Building involving Botswana, Zimbabwe and Sudan (2008-2012) funded by the EU; Botswana Ecohealth Project (2010-2014) funded by IDRC; Malaria and Bilharzia in Africa (MABISA) funded by WHO/IDRC (2013-2017) and is now leading the South African team on the TiBA partnership programme. Through these projects he has supervised and graduated 12 PhD and 13 Masters students. Moses is also the Deputy President for the International Association for Health and Ecology (IAEH), Chair of the Scientific Advisory Board of Southern Africa Science Service Centre for Adaptive Land Use (SASSCAL) and Board Member of BRTI (Biomedical Research and Training Institute). Previously (2011-2015) he served as an IPAC (International Panel Advisory Committee) member for the ESPA (Ecosystem Services for Poverty Alleviation) programme.

**Professor Charlie Jeffery** is a Professor of Politics and Senior Vice Principal at the University of Edinburgh, having earlier been Vice Principal Public Policy and Impact and Head of School of Social and Political Science. He has led a number of research initiatives on Scottish and UK politics for the UK Economic and Social Research Council and was a member of ESRC’s governing Council from 2005-11.

He chaired the UK Political Studies Association from 2011-14 and was a member of the Politics and International Studies assessment panel for the UK’s 2014 Research Excellence Framework. He has been special adviser to parliamentary committees in Scotland and at Westminster, and to the EU Committee of the Regions. He was a member of the UK Government’s Commission on the Consequences of Devolution for the House of Commons which considered special arrangements for English legislation at Westminster. Most recently he has been leading work coordinated for the University of Edinburgh on the Scottish constitutional debate with the support of the Economic and Social Research Council and working with the City of Edinburgh Council to develop a ‘City Deal’ designed to drive on the economic growth of Edinburgh and the surrounding region.

**Professor Francisca Mutapi** is a Professor in Global Health Infection and Immunity. We believe to the best of our knowledge, that Francisca is the first black woman to be appointed a Professor in the University of Edinburgh’s over 400 years history. Francisca obtained her BSc Hons degree in Biological Sciences at the University of Zimbabwe followed by a DPhil at the University of Oxford in 1997. Her postdoctoral training at the Prince Leopold Institute of Tropical Medicine in Antwerp, Belgium was followed by a departmental lectureship post back at the Department of Zoology and St Hilda’s College in Oxford. This was followed by university lectureship positions at Birkbeck College and the University of Glasgow’s Veterinary School, and an MRC training fellowship at the University of Edinburgh in 2002. After the fellowship, she was awarded a 6-year, tenure-track research fellowship from the Research Councils of the UK (RCUK Fellowship) and established an independent research group. She was elected as one of the 60 founding members of the Royal Society of Edinburgh’s Young Academy in 2012, a Fellow of the African Science Leadership Program in March 2015 and a Fellow of the African Academy of Science in November 2015.

**Professor James Smith** was appointed Vice Principal International on 1 November 2014, having held a personal chair of African and Development Studies since 2010. He previously served as a director of the Centre of African Studies, the Innogen Centre and the Global Development Academy (where he was also Assistant Principal between 2011 and 2014). James has previously held academic appointments at the University of the Witwatersrand, Johannesburg (1997-2002) and worked with Oxfam Southern Africa (2001-03).
James holds visiting professorships in Development Policy and Practice at the Open University and in the Department of Geography, Environmental Management and Energy Studies at the University of Johannesburg. His research is primarily funded by the European Research Council and looks at the changing nature of innovation around African trypanosomiasis control. He is interested in exploring how research into the diagnosis, treatment and control of African trypanosomiasis, in both humans and animals, has evolved over the last 100 years. The hope is that this will give us insights into how to manage innovation more effectively for global health, international development, and neglected tropical diseases in particular.

Professor Mark Woolhouse is Professor of Infectious Disease Epidemiology at the University of Edinburgh, U.K. He studied biology and ecology at the Universities of Oxford and York in the UK and Queen's University in Canada, then held Research Fellowships at the University of Zimbabwe, Imperial College London (MRC) and Oxford (Beit and Royal Society), before moving to an established chair at Edinburgh in 1997. His research interests concern the population dynamics of pathogens, especially those associated with emerging infectious diseases and antimicrobial resistance, applying ecological and evolutionary approaches to combat threats to both human and animal health. He has contributed to research in Africa for 30 years, including work on schistosomiasis, trypanosomiasis and theileriosis. He is a frequent advisor to the UK government and national and international agencies and was awarded an OBE in 2002. He has published over 250 scientific articles and is a Fellow of the Royal Society of Edinburgh and of the Academy of Medical Sciences.