

Wellcome Trust initiative: Animal Health in the Developing World

Caroline Aylott

Abstract

The Wellcome Trust is one of the world's largest independent research-funding charities, with a mission to foster and promote research with the aim of improving human and animal health. Based in London, UK, the Trust funds a wide range of research, from basic science to the history of medicine, and supports more than 3,000 researchers in 54 different countries. The Trust's total annual charitable expenditure is over £500 million; in 2006 it spent £73 million on health research and capacity building in developing and restructuring countries. Although the Wellcome Trust is more generally known for funding research into human health, it views animal health as important in its own right and, recognising the importance of livestock diseases, in 2003 launched a global five-year initiative termed 'Animal Health in the Developing World – Livestock for Life'. This initiative is supporting a spectrum of activities that focus on livestock diseases in developing countries and their impact on human health and wellbeing. [*Ethiop.J.Health Dev.* 2008;22(Special Issue):123-125]

Introduction

The Wellcome Trust was created in 1936, under the will of Sir Henry Wellcome (1853–1936), and is now one of the world's largest and most diverse independent biomedical charities. Our mission statement, which is based on the will of Sir Henry Wellcome, is to foster and promote research with the aim of improving human and animal health. Its broad definition allows us to undertake a wide range of activities and to respond flexibly to both medical needs and scientific opportunities.

Each year, we spend about £500 million to support biomedical and health research in the UK and internationally. Our research portfolio ranges from fundamental biological studies through to clinical and public health research, and support is also provided for public engagement with science, for technology transfer to encourage commercial application of research to meet medical needs, and for research and capacity building in biomedical ethics and the history of medicine.

International funding

Each year, around 10–15 per cent of the Trust's budget is spent on research outside the UK – in 2006 we spent £73 million on health research and capacity building in developing and restructuring countries. To build on the success of our biomedical health research programmes in public health and tropical medicine, in 2005 we agreed to increase funding for researchers in developing and restructuring countries who work in these fields, and we have recently announced a new international strategy (<http://www.wellcome.ac.uk/globalhealth>). The core aims of this strategy are:

- Broadening the base for scientific endeavor by investing in excellent scientists who show they have the greatest promise to advance knowledge, and ensuring they have the resources that they need to carry out their work.
- Increasing our support to areas of science that have the most potential for increasing health benefits for people and livestock in the developing world.

- Supporting international networks and partnerships that are focused on health research in developing and restructuring countries, and that will facilitate the sharing of ideas and resources, and ultimately accelerate scientific progress.

We believe that building sustainable research capacity starts with developing people, as it is talented researchers who drive the formation of productive programmes and networks that ultimately accelerate scientific progress. Examples of where this has been successful are our four Major Overseas Programmes in Kenya, Malawi, South-east Asia and South Africa. Each programme is embedded within a local institute, and provides a base for high-quality research into important local health issues and aims to put research into practice.

In Ethiopia, the Trust has funded a variety of research projects over the past 40 years. For example, awards have been made to Dr Abdulkadir for a 'Clinical and epidemiological study of malnutrition related diabetes mellitus', to Professor Prince on the 'Relative impact of major depression upon clinical course, disablement and service use in rural Ethiopia', to Dr Larensen for the 'Pathogens of Canidae in multi-species host systems: reservoirs, transmission and effective control', and to Professor Morton on 'Engaging with the corporate sector for pastoral development in Ethiopia'.

Funding animal health research

Although the Wellcome Trust is more generally known for funding research into human health, since its inception the Trust has funded research in animal health. Today, such studies are funded in two main categories: 'livestock and livelihoods' and 'wildlife, emerging infections and zoonoses'.

Recognising the importance of livestock diseases and their impact upon human health, in 2003 we launched a fixed-term initiative called 'Animal Health in the Developing World – Livestock for Life'. This initiative, which

emphasized practicalities, actual needs and real solutions, aimed to fund research that:

- improves the understanding of the epidemiology of disease to predict and improve control of outbreaks
- stimulates efforts to understand biology of transmission
- exploits genomics for new disease control measures
- produces livestock with enhanced resistance to disease
- raises awareness and understanding of animal health issues to maximize health gain from existing strategies
- strengthens links between local communities, livestock keepers, practitioners, researchers, scientists, policy makers and other stakeholders to make a significant impact on animal health.

Personal support schemes
Developing country scientists/clinicians

Senior



Intermediate



Training



Figure 1: Overview of fellowships available to researchers based in developing countries
Box 1: Web links

Twelve awards in biomedical science were made in December 2004. Most of the awards were to large international consortia, with collaborating researchers from 28 different countries, and included a grant for the investigation of bovine tuberculosis in Ethiopia, led by Professor Douglas Young (Imperial College London, UK). Other awards included studies into the epidemiology, genomics, immune responses, prevention and diagnosis of livestock diseases, and covered animal diseases such as bovine tuberculosis, African swine fever, babesiosis, peste des petits ruminants, theileriosis and

cysticercosis. Details of the awards can be found at www.wellcome.ac.uk/doc_wtx025304.html.

For the Livestock for Life scheme, 19 smaller projects were funded. Many went to collaborative public engagement programmes, with award holders representing 15 different countries across Africa, Latin America and Southern Asia. Programmes that were funded aimed to enhance dialogue between different stakeholders, strengthen education and training, or involve various parties in policy and advocacy issues pertinent to the health of livestock. One such project is led by Professor *Ethiop.J.Health Dev.* 2008;22(Special Issue)

Jakob Zinsstag (Swiss Tropical Institute, Switzerland) on 'Effective management of bovine tuberculosis in Africa: towards adapted control policy, in Africa'. Full details of all the awards can be found at www.wellcome.ac.uk/doc_WTX035581.html.

Although some of the projects started quite recently, advances in animal health and the translation of research into policy and practice have already begun. Examples include the development of protective vaccines against diseases such as cysticercosis and schistosomiasis, which are presently being tested in the field, and epidemiological studies that are shedding light on the impact of livestock diseases such as trypanosomiasis.

Funding opportunities

Although there are no plans for a new 'Animal Health in the Developing World – Livestock for Life' initiative, researchers can apply to the Trust for support through our standard funding schemes. Funding opportunities are available for UK- and Republic of Ireland-based researchers, and for developing country scientists who wish to carry out research in their home country. Full details of how to apply for support are available on www.wellcome.ac.uk/funding. In general, researchers from a developing country who wish to work in a developing country, and are based at an eligible institute, can apply for a **fellowship** in public health and tropical medicine (Figure 1), while those who wish to work in collaboration with researchers in the UK or Republic of Ireland can apply for a **collaborative project or programme grant**.

We have recently changed our eligibility rules so that applicants who have previously been successful in obtaining Wellcome Trust funding a principal applicant can apply directly to use without the requirement for a UK partner. This includes eligibility to request support for multi-user items of equipment, under our **equipment grant** scheme, as well as applying for a **Strategic Award**, which is our new flexible form of support, to facilitate under other existing schemes.

In summary, it is the Trust's policy to focus on the best people and the best teams who are asking innovative questions. Through long-term funding, we aim to make a difference in human and animal health issues of global importance.

References

1. The Wellcome Trust: www.wellcome.ac.uk
2. Wellcome Trust International Strategy: <http://www.wellcome.ac.uk/globalhealth>
3. Awards in the 'Animal Health in the Developing World - Livestock for Life' initiative: www.wellcome.ac.uk/doc_wtx025304.html
4. Wellcome Trust funding: www.wellcome.ac.uk/funding.