



Call for Fellowships Afrique One-ASPIRE

TTP5: Human and Animal Disease Surveillance-Response Systems

TTP5 aims to address the need to increase the reporting of zoonotic diseases through integration of human and animal surveillance systems, the use of innovative surveillance tools and involvement of communities in disease reporting. This TTP will focus on three themes:

- Surveillance tools and community involvement
- Surveillance-response systems
- Cost–benefit analysis of integrated human–animal disease surveillance systems

Theme 1: Surveillance tools and community involvement

Ref: [TTP5-Surveillance-Response-PhD1](#)

Project Title: The use of mobile phones for integrated zoonotic disease surveillance in pastoralist Maasai in northern Tanzania

Enrolment: The PhD will be most likely enrolled in NM-AIST, Tanzania.

Project Description: One of the major constraints for the control of zoonotic diseases in developing countries is the absence of qualitative/quantitative information on the diseases. Poor disease monitoring systems and a lack of resources (i.e. research funds and researchers) are among the main factors responsible for this deficit. Most of the currently available disease information is generated by active identification of disease cases by researchers and limited or passive participation by the communities affected. We hypothesize that the involvement of communities in disease reporting, using tools such as mobile phones may enhance zoonotic disease surveillance and provide information which can help in designing interventions.

The project will engage Maasai pastoralists and their families to report diseases affecting them and their livestock. Using structured questionnaires, pastoralists will be interviewed at regular intervals through mobile phones to report incidences of health issues affecting them and their animals. Information such as human demographic information (e.g. number, ages, sex, birth and death) as well as signs of disease such as fever and death will be recorded. Information on animals including species, ages, numbers, births, and signs of diseases (e.g. fever, abortions, lameness, death) will be collected. Furthermore, building on experience of home-based HIV testing, the use of field diagnostic tests that can potentially be deployed in communities will be explored to investigate how rapid diagnosis can empower and engage front-line health workers and communities.

Mentorship Team: Richard Ngandolo Bongo (IREC); Joram Buza and Emmanuel Mpolya (NM-AIST); Julius Keyyu (TAWIRI); Esther Schelling, Jürg Utzinger and Jakob Zinsstag (Swiss TPH); Daniel Haydon and Sarah Cleaveland (UoG); Phare G. Mujinja (MUHAS); Enock Matovu and Vincent P. Alibu (MAKUN)

Qualifications: The candidate must be a citizen of an African country and should have an MSc degree in health and allied sciences. A degree or experience in epidemiology will be an added advantage.

For more information, contact the Co-leads:

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