



## Call for Fellowships Afrique One-ASPIRE

## TTP4: Foodborne Diseases and Nutritional Illnesses

TTP4 aims to address the nutritional patterns in transitional landscapes and their impact on food-related diseases by studying the epidemiological links between infectious diseases and selected/related non-communicable diseases of livestock dependent populations. It covers the following aspects:

- Animal-source food value chains livelihood of livestock dependent populations
- Consumption patterns true foodborne disease (FBD) burden and risk of infection – non-communicable disease (NCD) analysis and opportunities
- Socioeconomic cost-effective design of interventions

## Ref: TTP4-Food-PDF1

**Project Title:** Development of innovative surveillance tools for predicting and evaluating the risks of FBDs and NCDs

**Enrolment:** The postdoctoral fellow will be enrolled at CSRS, Côte d'Ivoire and NIMR, Tanzania and collaborate with the other four thematic training programmes on rabies, tuberculosis (TB), brucellosis and surveillance-response.

**Project Description:** FBDs (e.g. poisoning, brucellosis and TB) are taking a massive toll on the world's poorest communities in Sub-Saharan Africa. According to WHO the global burden of foodborne diseases, as assessed for 31 hazards, was 33 (95% UI 25–46) million DALYs in 2010, positioning the problem as the second biggest public health concern worldwide. Moreover, WHO identified malnutrition as the single most important risk factor for developing disease. Economic constraints (e.g. low income, high medical costs) at the household level often perpetuate ill-health by leading to reduced and poor quality food consumption. Other determinants that influence a person's health status include education, social status, personal health and hygiene practices (e.g. hand washing). The emergence of NCDs is linked to nutrition and the types of food that is consumed, according to WHO.

The fellow will address the epidemiological links between food and human health including infectious and non-infectious diseases, and how these risk factors will influence the cost-effectiveness of control interventions. The work will characterise multipathogen patterns and their effects on animal-source food value chains. An intervention model comprising sensitivity analysis will be the core methodology to develop novel policy standards and guidelines. We believe that effective control of foodborne diseases should be based on validated information derived from One health research. Therefore, the specific methods and approach that will be used to address the topic are (i) participatory risk analysis, (ii) intervention design based on risks and incentives, (iii) cost-effectiveness of risk mitigation and (iv) capacity development in FBD control and policy. The project will cover settings in East Africa (Tanzania) and West Africa (Côte d'Ivoire) and consider rural and urban contexts.

**Mentorship team:** Appolinaire Djikeng, Josephine Birungi and Francesca Stomeo (BecA-ILRI); Giovanna Raso, Jakob Zinsstag and Felix Roth (Swiss TPH); Daniel Haydon and Tiziana Lembo (UoG); Phare G. Mujinja (MUHAS); Nonga Hezron Emmanuel (SUA); Emmanuel Mpolya and Neema Kassim (NM-AIST); Andrew Yona Kitua (NIMR); Shabbar Jaffa (LSHTM)

**Qualifications:** The candidate must be a citizen of an African country. Candidates with a background related to any One Health discipline will be considered (e.g. public health, veterinary and animal sciences, social sciences, geography, epidemiology and health economics). Candidates with a PhD degree in a different field are preferred.

**Duration and Training:** The position is funded for 3 years. Training will be provided primarily in Tanzania or Côte d'Ivoire, with opportunities within the Afrique One-ASPIRE consortium and with supervisory partners in the UK and Switzerland depending on need and internal budget considerations.

## For more information, contact the co-leads:

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