



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-MSc3

Project Title: Socio-behavioural risks affecting the control of cysticercosis and toxoplasmosis in pastoral communities

Enrolment: The MSc fellow will be enrolled at the University of Dar Es Salaam, Tanzania.

Project Description: Cysticercosis and toxoplasmosis are becoming more prevalent in Africa due to increasing numbers of uncontrolled pig farming and pets living together with humans, particularly amongst the pastoral communities in rural settings. Infection can be acquired by ingestion of oocytes from contaminated environmental sources. Once ingested, the parasites migrate through the human body to reach their target tissues and may, depending on location, cause a variety of symptoms such as lateonset epilepsy or ocular damage.

Recent findings indicate that people in rural communities (southern-northern highland of Tanzania) are knowledgeable on the existence of these parasites as well as the roles of pigs, dogs and cats in the transmission of cysticercosis/toxoplasmosis infections. Some members in these communities are even aware of the behaviours that facilitate the infection process, such as living together with cats and dogs in the

same house, poor sanitation and uncontrolled pig farming systems. Despite this knowledge, people in these communities do not change their behaviours. The project is anticipated to identify (i) the social drivers of disease transmission and to propose a community based control/elimination strategy of cysticercosis/toxoplasmosis infection in the study regions in Tanzania, (ii) to assess the socio-cultural settings responsible for the persistence of the *Taenia solium/Toxoplasma* spp. cycle in those regions and (iii) to propose an effective community communication plan for the prevention and control strategy for *T. solium/Toxoplasma* spp. infection.

The project will be based in Mbulu, northern Tanzania and the Katavi/Sumbawanga regions, southern Tanzania where other studies on transmission dynamics of *T. solium* cysticercosis are being conducted.

Mentorship Team: Mangi Ezekiel (MUHAS); Gamba Nkwengulila (UDSM); Helen Ngowi (SUA); Gbati Oubri Bassa (EISMV), Bassirou Bonfoh and Gilbert Fokou (CSRS)

Qualifications: The candidate must be a citizen of an African country. Candidates from disciplines related to social science, anthropology, contributing to One health with knowledge on ethics and animal welfare will be considered.

Duration and Training: The fellowship is funded for a maximum of 30 months. Training will be provided primarily in Tanzania or Côte d'Ivoire, with further opportunities within Afrique One-ASPIRE consortium and with supervisory partners in the UK, Switzerland and Zimbabwe, depending on needs and internal budget considerations.

For more information, contact the co-leads:

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