



Call for Fellowships Afrique One-ASPIRE

TTP2: Thematic Training Program on Brucellosis Control and Prevention

[Ref: TTP2-Brucellosis-MSc2](#)

Project Title: Investigating the socio epidemiologic and behavioural drivers of brucellosis to inform strategies for control and elimination in Africa.

Enrolment: The MSc fellow will be enrolled at MUHAS, Tanzania, EISMV Senegal or at University of Bouaké/CSRS, Côte d'Ivoire.

Project Description: Brucellosis is a bacterial infection that systemically affects a wide variety of mammalian species, including humans. Brucellosis occurs worldwide, both endemically and zoonotically to varying degrees, particularly in Africa. Various studies have been conducted in both East and West Africa. Many of them have demonstrated the burden, extent of transmission of the infective agents (*Brucella* spp.) across various populations in varying ecosystems. However, appropriate intervention strategies remain to be fully developed.

Control of brucellosis on the global scale has been successful due to the availability and use of a number of tools that are effective in industrialized areas. However, in developing countries, brucellosis continues to be endemic. In these countries important gaps remain in the understanding of the epidemiology, social dynamics and the behavioural risk factors of brucellosis. Consequently, there is limited information to inform appropriate control strategies.

This project seeks to identify which routes are the most important in transmitting brucellosis to humans in rural environments, towns and rapidly expanding cities. The transmission pathways and dynamics of brucellosis are mediated by the socio-cultural milieu in which the disease occurs. In addition, there is limited information on the epidemiologic patterns of the disease in rural and urban populations in East and West Africa. This project will build on existing literature on brucellosis in Africa and elsewhere as well as on lessons learned from available interventions that have demonstrated positive results in addressing the social, epidemiologic and behavioural drivers of this disease. Cutting edge basic research will be conducted in

rural Tanzania to investigate (a) the risk factors for brucellosis infection and treatment seeking patterns for patients b) the socioeconomic burden of the disease in the affected communities (c) the transmission dynamics of brucellosis in agro-pastoral communities within the Kilombero Valley and (d) to document the existing interventions and the feasibility for developing a community based intervention to address the social and behavioural risk factors for brucellosis.

The project will be based in the Mikumi-Kilombero valley ecosystems in south-eastern Tanzania or Korhogo in Côte d'Ivoire, as part of ongoing brucellosis interventions within a long-term research programme (e.g. ZELS, DTRA). It will involve fieldwork in selected locations within the valley and NCCR North-South.

Mentorship Team: Dan Haydon, Sarah Cleaveland and Jo Halliday (UoG); Rudovick Kazwala (SUA); Mangi J. Ezekiel (MUHAS); Gilbert Fokou and Bassirou Bonfoh (CSRS); Julius Keyyu (TAWRI)

Qualifications: The candidate must be a citizen of an African country. Candidates from any discipline contributing to One Health (e.g. public health, veterinary and animal sciences, social sciences, geography, epidemiology or health economics) will be considered. Candidates with an Undergraduate degree (GPA 3.5 and above) in a relevant field from a recognised university are preferred.

Training: Training will be provided primarily in Tanzania, Côte d'Ivoire and Senegal with opportunities for further training within the Afrique One-ASPIRE consortium and with supervisory partners in the UK and Switzerland depending on needs and internal budget considerations.

For more information, contact the Co-leads:

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