



Call for Fellowships Afrique One-ASPIRE

TTP2: Thematic Training Program on Brucellosis Control and Prevention

[Ref: TTP2-Brucellosis-PDF1](#)

Project Title: Quantitative analysis and modelling of the epidemiology and control of endemic brucellosis in Sub-Saharan Africa

Enrolment: The postdoctoral fellow may negotiate to be enrolled/based at one of the following organizations: SUA, NM-AIST, MUHAS, or TAWIRI, Tanzania or CSRS, Côte d'Ivoire.

Project Description: Species-specific livestock vaccines have been used effectively as part of brucellosis disease-control programs in different parts of the world. However, in Sub-Saharan Africa it is challenging to design control programs owing to the complex multi-species structure of the host community, two possible species of *Brucella* with unknown host affiliations/preferences, unknown transmission routes and species-specific vaccines of ambiguous effectiveness. There is considerable flexibility in the methodological details of this research program; however, the primary goal will be to develop modelling frameworks that help inform the design and assessment of *Brucella* control options. An important preparatory step will be the synthesis of available information from the primary literature and from on-going *Brucella* research projects in order to estimate key parameters relating to brucellosis epidemiology, host demography and the control process. Research will be conducted in Tanzania and Côte d'Ivoire.

This project will build on and strengthen collaborative links between on-going projects within Tanzania but also between the different countries involved in the Afrique One-ASPIRE consortium. Within Tanzania, SUA, NMAIST and KCRI/KCMC are all partners in the ongoing BBSRC-DfID funded Zoonoses in Emerging Livestock Systems (ZELS) *Brucella* project and are all involved in Afrique One-ASPIRE going forward. Through partnerships the ZELS consortium and Afrique One-ASPIRE also offer opportunities to coordinate research activities and share techniques, data and approaches between East and West African countries.

Mentorship Team: Rudowick Kazwala (SUA); Joram Buza and Lughano Kusiluka (NMAIST); Mangi Ezekiel (MUHAS); Gilbert Fokou and Bassirou Bonfoh (CSRS); Jakob Zinsstag (Swiss TPH); Jo Halliday, Mafalda Viana and Dan Haydon (UoG); Wellington Ekaya (BecA-ILRI Hub)

Potential Project Partners (outside the existing consortium members): John McGiven, Adrian Whatmore and colleagues at Animal and Plant Health Agency (APHA), UK and Simon Babayan at University of Glasgow

Qualifications: The candidate must be a citizen of an African country. Candidates from any MSc background contributing to One Health (e.g. public health, veterinary and animal sciences, modelling and epidemiology) will be considered. A PhD in a relevant field is preferred. The strongest applicants will have some experience of epidemiological modelling, knowledge of the mathematics underlying simple epidemiological models, a basic grasp of computer programming and experience in statistical data analysis.

Training: Research will be conducted primarily in Tanzania and Côte d'Ivoire, with opportunities for further training within the Afrique One-ASPIRE consortium and the northern partners in the UK and Switzerland.

For more information, contact the Co-leads:

Rudovick Kazwala, SUA, Tanzania, kazwala@gmail.com
Gilbert Fokou, CSRS, Côte d'Ivoire, gilbert.fokou@csrs.ci