



Call for Fellowships Afrique One-ASPIRE

TTP2: Thematic Training Program on Brucellosis Control and Prevention

Ref: TTP2-Brucellosis-MSc1

Project Title: Investigating the effectiveness of sniffer rats in the diagnosis of brucellosis in human and livestock

Enrolment: The MSc fellow will be enrolled at SUA, Tanzania.

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. Current diagnostics for brucellosis (for both humans and animals) have several constraints which impact on planning and delivering effective control programmes. This project will explore the possible use of sniffer rats ('hero rats' - https://www.apopo.org/en/) to study how to train rats to diagnose brucellosis.

The student will study the most effective ways to train sniffer-rats to recognize dung from different livestock species infected with *Brucella* spp. Following the training of the rats it will be necessary to design an experiment to determine the sensitivity and specificity of the rat's diagnostic ability. If time permits and the test performs well, the diagnostic potential will be trialled through a small scale prevalence survey on local livestock herds.

Mentorship Team: Rudowick Kazwala (SUA); Christopher Cox (SUA-APOPO); Jo Halliday, Dan Haydon and Sarah Cleaveland (UoG)

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, epidemiology or life sciences) 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, 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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