



## Call for Fellowships Afrique One-ASPIRE

### TTP2: Thematic Training Program on Brucellosis Control and Prevention

Ref: [TTP2-Brucellosis-MSc3](#)

**Project Title:** Role of different livestock husbandry systems in the spread of brucellosis in animals and humans in Africa

**Enrolment:** The MSc fellow will be enrolled at SUA, Tanzania, EISMV, Senegal or Ivorian Universities, Côte d'Ivoire.

**Project Description:** Brucellosis in animals is a sub-acute or chronic disease which may affect many species of animals. The initial phase following infection is often not apparent in some animal hosts. In sexually mature animals the infection localizes in the reproductive system and, typically, produces placentitis followed by abortion in the pregnant female, usually during the last third of pregnancy, and epididymitis and orchitis in the male. Brucellosis is a disease that affects many animal species but especially livestock, including sheep (especially milk-producing), goats, cattle and pigs and, on a more localized scale, camels and water buffaloes.

Infections in sheep and goats are highly contagious owing to the pathogenicity of *Brucella melitensis* and because of the close contact caused by the density of the flocks or herds, the co-mingling of those of different owners and heavy exposure in housing. Animal-to-animal transmission occurs as a result of the large number of organisms shed in the environment.

The severity of the disease depends upon many factors such as previous vaccination, age, sex and livestock management (e.g. herd or flock size and density). Abortions are more prevalent in unvaccinated animals and numbers of organisms shed are much greater.

The purpose of this MSc fellowship is to determine the extent of infection of *Brucella* spp. across the different livestock systems in Tanzania and characterise the epidemiological determinants of the spread of brucellosis to humans and animals in the different livestock husbandry systems.

The project will be based in West and East Africa working in tandem with Zoonoses in Emerging Livestock Systems (ZELS) projects on brucellosis based in EISMV, and Tanzania (including a DTRA SUA Brucellosis project).

**Mentorship Team:** Rudovick Kazwala (SUA); Joram Buza (NM-AIST); Bassirou Bonfoh (CSRS); Esther Schelling and Jakob Zinsstag (Swiss TPH); Jo Halliday 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 and wildlife management) will be considered. Candidates with an Undergraduate degree (GPA 3.5 and above) in a relevant field from a recognised university are preferred. Candidates with a BSc degree 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 Switzerland, UK and US, depending on needs and internal budget considerations.

**For more information, contact the Co-leads:**

Rudovick Kazwala, SUA, Tanzania, kazwala@gmail.com

Gilbert Fokou, CSRS, Côte d'Ivoire, gilbert.fokou@csrs.ci