



Call for Fellowships Afrique One-ASPIRE

TTP1: Canine Rabies Control and Elimination

Ref: TTP1-Rabies-MSc1

Project Title: Preliminary research on family aspects of dog care in rural Tanzania to inform rabies prevention interventions

Enrolment: This programme will be integrated within the new MSc course in Public Health Research led by NM-AIST that will offer the degree and the IHI that will run the training programme.

Project Description: Canine rabies can be eliminated through mass vaccination of reservoir domestic dog populations and administration of post-exposure prophylaxis to individuals exposed to suspect dog bites (Lembo et al. 2010). However, the disease still kills thousands in rural African communities, primarily because of their limited awareness, and/or implementation of effective prevention measures. Children are especially vulnerable to bites by suspect rabid animals, which often result in injuries and/or death. Improving rabies awareness and preventative behaviours, particularly amongst children, is a policy priority. However, there has been little exploratory work to understand the social and cultural factors limiting awareness and response to rabies prevention. Clarifying these aspects is critical to the design of optimal interventions to reduce the burden of rabies in affected populations.

This project will address these gaps by investigating social and cultural factors specific to rural Africa that help or limit awareness, motivation and responses towards rabies prevention. Specifically, the project will: (1) explore the relationships between villagers and dogs, including children's and villagers' practices and responsibilities for dogs and rabies prevention, especially the exposure of children to household and other dogs within their daily lives, their role in caring for them, and how this role is affected by parent–child relationships; (2) investigate what affects parents' response to their children's exposure to rabies and villagers' engagement in rabies prevention; and (3) clarify which of these causal and/or contextual factors are malleable and have the greatest scope for change. This information will ultimately

help us identifying the most promising and sustainable ways to change such factors: at which point, by what means, and using what mechanisms.

This project will expose the selected candidate to training in a range of quantitative and qualitative approaches, including collection and analysis of household-level questionnaire data as well as in-depth interviews and group discussions involving both children and their carers (biological parents and/or others). The field project will build on robust research platforms established in southern Tanzania by IHI in collaboration with UoG. Such platforms provide access to field infrastructure, for example a project vehicle, and experienced rabies researchers. Datasets also exist for providing information on the age group of children most vulnerable to rabies, and members of the household who look after and take responsibility for children, dogs and rabies prevention (e.g. dog vaccination and health care provision of children exposed to suspect dog bites).

References: Lembo T, Hampson K, Kaare M, Ernest E, Knobel D, Kazwala R, Haydon DT and Cleaveland S (2010). The feasibility of canine rabies elimination in Africa: Dispelling doubts with data. *PLoS Negl Trop Dis* 4:e626.

Mentorship Team: IHI specialists in maternal health (Godfrey Mbaruku) and social sciences (Angel Dillip); canine rabies scientists (Tiziana Lembo and Katie Hampson) and a social anthropologist with expertise in social influences on child and adolescent health and ethnography of rural Tanzania (Danny Wight) at UoG; and a biostatistician and epidemiologist (Emmanuel Mpolya) from the NM-AIST who has collaborated with the UoG and the World Health Organization in the quantitative evaluation of a canine rabies demonstration elimination project in southern Tanzania.

Qualifications: The candidate must be a citizen of a country in Africa. Candidates from any discipline contributing to One Health will be considered, but preference will be given to candidates with a background in social sciences, social anthropology or community development. The position will involve prolonged periods of time in rural Tanzania settings. Experience with field research in rural Africa and proficiency in Kiswahili will be necessary.

Training: IHI that will run the main training programme and further training will be available through the Afrique One-ASPIRE consortium and related capacity building programmes hosted by NM-AIST.

For more information, contact the co-leads: Godfrey Mbaruku, IHI, Tanzania, gmbaruku@ihi.or.tz Bassirou Bonfoh, CSRS, Côte d'Ivoire, bassirou.bonfoh@csrs.ci