



Call for Fellowships Afrique One-ASPIRE

TTP4: Foodborne Diseases and Nutritional Illnesses

TTP4 aims to address the nutritional patterns in transitional landscapes and their impact on food-related diseases by studying the epidemiological links between infectious diseases and selected/related non-communicable diseases of livestock dependent populations. It covers the following aspects:

- Animal-source food value chains livelihood of livestock dependent populations
- Consumption patterns true foodborne disease (FBD) burden and risk of infection – non-communicable disease (NCD) analysis and opportunities
- Socioeconomic cost-effective design of interventions

Ref: TTP4-Food-PhD2

Project Title: The role of pastoral nutritional systems in early childhood and risk factors of emergence of NCDs in adults

Enrolment: The PhD fellow will be enrolled at NM-AIST, Tanzania.

Project Description: NCDs, consisting mainly of cardiovascular diseases (CVD), diabetes, chronic respiratory diseases and cancer have emerged relatively unnoticed in most African countries in the past years and are now representing a major health concern. Under-nutrition *in utero* and low birth weight which is particularly prevalent among low-income populations, increase the subsequent risk of CVD and diabetes. There is evidence that the childhood socioeconomic status is linked to type 2 diabetes and obesity in later life which, in turn, is associated with CVD. Pastoralist communities, whose diet is mainly based on meat and meat products, may have therefore a relatively high exposure to NCDs owing to the potentially high intake in saturated fats. The pastoralist behaviour of eating mainly meat-based food puts this segment of the population in high risk for NCDs. In general, more research is necessary to establish the risk factors related to the consumption of meat and meat products in African settings and suitable interventions to mitigate the risk factors.

In this project we will investigate nutritional status and weaning practices in early childhood to predict future NCDs risk factors. The aim is to develop best practice interventional packages for mitigating the risk factors for developing NCD in adulthood in rural ethnic groups that differ according to the degree of traditional livestock-keeping: (a) Maasai (Tanzania) and Fulani (Côte d'Ivoire) that traditionally practice pastoralism.

Mentorship Team: Sayoki G. Mfinanga and Esther Ngadaya (NIMR); Bassirou Bonfoh (CSRS); Pammla Petrueka, Joram Buza, and Neeama Kassim (NM-AIST); Kaushik Ramaiya (MUHAS); Julius Mwaisalage (Ocean Road Cancer Institute Dar Es Salaam)

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 MSc degree in a relevant field are preferred.

Duration and Training: The PhD fellowship is funded for a maximum for 4 years. Training will be provided primarily in Tanzania or Côte d'Ivoire, with further opportunities within the Afrique One-ASPIRE consortium and with supervisory partners in the UK, Switzerland and Zimbabwe, depending on need and internal budget considerations.

For more information, contact the co-leads:

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