

**Project description:**

SENTINEL-II is a research project that aims to investigate the potential of pesticides and other organic micropollutants to increase the transmission of schistosomiasis in western Kenya. The project is funded by the German research foundation (DFG) and comprises of Kenyan institutes: Kenya Medical Research Institute (KEMRI), Moi University and the International Centre of Insect Physiology and Ecology – Icipe (Kenya) in collaboration with German institutes: Helmholtz Center for Environmental Research – UFZ, Leipzig, Goethe University Frankfurt and Stendal University of Applied Sciences, Magdeburg, Germany. The project will be implemented in Kenya and Germany, and will involve two PhD students: one student will be involved with the biology of *Schistosoma* host snails while the other student will perform the chemical analysis. This advertisement is specific for the biology student.

**PhD position Subject: Spatio-temporal dynamics of the *Schistosoma*, host snails and associated environmental factors.**

Schistosomiasis is a tropical disease caused by trematodes of the genus *Schistosoma*, hosted by snails from the genus' *Bulinus* and *Biomphalaria*. The project aims to investigate the population dynamics of the host snails in connection with the schistosomiasis and its associated environmental drivers. Field monitoring of macroinvertebrates (including snails and their parasites) will be carried out to study the spatiotemporal changes associated with pesticide pollution and environmental conditions. Macroinvertebrates collected from the field will be identified in the laboratory under microscope. Laboratory investigations will be implemented to study the effect of sub-optimal conditions on host snails and their infection by schistosomes. Data will be analyzed with multivariate statistics for contamination patterns, environmental conditions and co-variation with biological parameters from the analysis of snail and cercaria abundances as well as macro-invertebrate community assessment. This project offers fully funded fellowship to train PhD student to learn the procedures above and undertake research at an international level.

**Required Qualifications:**

The successful candidate should have a master's degree in a relevant field to the PhD such as Medical Entomology/Parasitology/Ecotoxicology with interest in the same. Experience with field collection and laboratory practices such as PCR preferred. Fluency in English (working language) is a requirement. For further information about the fellowship please contact: Eric L. Agola ([eric12@gmail.com](mailto:eric12@gmail.com)) and Matthias Liess ([matthias.liess@ufz.de](mailto:matthias.liess@ufz.de)).

**Duration of position and workplace:**

The period of appointment for the PhD student is 36 months, starting from 1<sup>st</sup> November 2020 or later, depending on the COVID-19 pandemic. The PhD position will be based at KEMRI. Some of the work will be implemented at KEMRI-Kisumu and Nairobi, icipe's Mbita Campus in Homa Bay County and research visits might be scheduled to the laboratories in Germany. PhD student will be enrolled at a Kenyan or German University.

**Application process:**

Candidates should provide the following information in their application in English:

1. Cover Letter, detailing your motivation and background for the PhD project.
2. A detailed CV including technical and analytical skills and publications if applicable.
3. Academic certificates (BSc and MSc) including university academic transcripts.
4. An abstract of the BSc and MSc thesis including any previous research project (if applicable).
5. Two reference letters with contact information of referees (phone number and email).

The closing date for applications is 31st September 2020.

Please submit your application to Dr. Eric L Agola, [elelo@kemri.org](mailto:elelo@kemri.org) copied to [ericelo12@gmail.com](mailto:ericelo12@gmail.com)-  
**(Indicate Project & Position as the subject of your Email)**. Applications from all qualified candidates regardless of age, gender, race, religion, nationality or ethnic background are highly welcomed.

***KEMRI is an equal opportunity employer. Persons with disability, women, youth and those from marginalized areas are encouraged to apply.***

**Only short-listed candidates will be contacted.**