

New MPhil Studentship Call, 2023



RESPONSIBLE AI FOR DEVELOPING A ROBUST PUBLIC HEALTH SURVEILLANCE SYSTEM

A fully funded, 2-year full-time MPhil studentship position based at the Kwame Nkrumah University of Science and Technology (KNUST) and hosted by the Vector-Borne Infectious Disease Research Group is now open to applications.

Background

The current public health surveillance systems in developing countries like Ghana focus on known priority diseases with specific case definitions, making it ineffective in detecting novel infections that do not fit existing criteria. Consequently, outbreaks caused by these unidentified infections often go unnoticed, allowing them to persist in vulnerable communities until they escalate into pandemics due to delayed responses. Such surveillance systems lack adaptability and robustness and pose a constant risk of unpreparedness and inadequate response to emerging health threats. Hence, the selected candidate will work with the research team to identify novel circulating viruses in insect vectors, humans and animals. The candidate would embark on field collection of mosquitoes with biosensor-traps, perform blood meal analysis and undertake follow up collection of biological samples. DNA extraction, amplicon based and metagenomic sequencing and phylogenetic analysis / identification of known and novel viruses would be conducted by the candidate.

Candidate requirements

- An BSc degree in Biological Sciences
- Interest exploring Vector biology and virology
- Excellent written and oral communication skills

How to apply

- 1-page CV including names of 2 academic references
- 1 page letter of research motivation
- Send an email to kingsbadu@gmail.com / kbadu@knust.edu.gh

Application deadline: 30th November, 2023