



**Imperial College
London**

xSTAR Project Scholarship Opportunity on Arbovirus and other Pathogens Serosurveillance and Modelling: 1 PhD position

Infectious Disease and Environmental Health Research Group, Department of Microbiology,
Faculty of Life Sciences, University of Ilorin, Nigeria

In collaboration with

Department of Infectious Disease Epidemiology, Faculty of Medicine, Imperial
College London, United Kingdom.

Background

Arboviruses, transmitted primarily by arthropod vectors such as mosquitoes and ticks, continue to pose significant public health challenges in Africa. With the increasing frequency and geographic spread of arbovirus outbreaks, there is a pressing need for robust diagnostic methods to facilitate timely and accurate detection, surveillance, and control efforts across the African continent.

Therefore, the Wellcome Trust award to support the project entitled "Reconstructing the transmission intensity of arboviruses across Africa and the impact of interventions in a changing climate" (the "xSTAR Project"), is advertising a Ph.D. position at the Infectious Disease and Environmental Health Research Group, Department of Microbiology, Faculty of Life Sciences, University of Ilorin, Nigeria.

The xSTAR project will explore the use of Luminex immunoassay for the multiplex detection of arboviruses and other pathogens and their prevalence. The mathematical models will be used to integrate serological and demographic data to investigate arbovirus prevalence, predictions, and outbreak preparedness in a changing climate.

Requirements

Applicants are expected to be highly motivated and enthusiastic with background qualifications in Biological and Life Sciences, with a keen interest in data analysis and modelling of multiplex serological data. The Ph.D. candidate must also have earned an MSc degree in relevant fields of Virology, Life and Medical Sciences, Biological Sciences, Mathematics, Epidemiology, and Biostatistics. The Ph.D. will run for 3 years, and the candidate will be required to comply with the PhD programme requirements of the University of Ilorin. The PhD student is expected to participate in training programs at our partner laboratories in Senegal, France, and the United

Kingdom; therefore, willingness and availability to travel abroad for a few months are necessary. The candidate will support other activities related to the project implementation, including setting up a modelling laboratory at the University of Ilorin and mentorship of new modellers.

Only shortlisted candidates will be contacted and interviewed on a date to be communicated. Females are encouraged to apply.

Ideal Candidate

We seek a highly motivated and proactive individual with strong analytical and computational skills. The candidate should be able to work independently and as part of a collaborative research team. Excellent communication and interpersonal skills are essential, along with the ability to work independently without constant supervision.

Desirable: Experience in infectious disease modeling, particularly with R software (and potentially other programming languages such as C or Python).

Award

The successful candidate will be fully funded, covering tuition, living, research, and travel expenses.

Application procedure

Interested applicants are required to submit a CV including the contact details of two referees, a covering letter, and a motivation letter via <https://forms.gle/LvNmH2BaqxR2BF1x8>. Interested candidates are also expected to apply to the University of Ilorin Postgraduate School for admission through <https://portal.unilorin.edu.ng/applicant/PG>.

Note: The funding will only apply to the candidate with a successful admission letter from the University of Ilorin Postgraduate School.

Closing Date: 18th November 2025

Signed

Prof. Olatunji Matthew KOLAWOLE FRSPH, FRSB(UK), FAPH, FAMI, FSEPHON, FNYA
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