

Information on Postgraduate Research Scholarship - Ref: VC 2022-FES-NRI 2

Faculty:	Engineering and Science	Department: AHED, NRI

Project Title: : Gender roles and exposure to malaria vectors

Lead Supervisor: Prof Richard Hopkins

Project Description:

Vector borne diseases remain one of the major challenges facing people in low- and middle-income countries. Malaria in particular is the foremost public health challenge globally with an estimated 228 million cases worldwide and over 600 thousand deaths in 2020. Mosquitos, the vector that transmits a malarial infection, are not evenly distributed in space and time, consequentially, spatial and temporal location are significant risk factors for infection. At the same time, movement patterns of people can also expose them to an increased risk of mosquito bites and potential malarial infection. One of the concern patterns is the high informant mortality and adverse effects in pregnant women. Malaria infections among these groups are contributing factors to a range of other developmental and health issues, in addition to the risk of death. How much this relates to uneven exposure is not currently understood. Therefore, understanding the overlapping movements of mosquitoes and people and subsequent risks that this poses for different groups of people, through gender and intersectional research, can make a significant contribution to the development of effective and sustainable malaria reduction strategies.

While evidence on the risk perception of exposure to vector borne diseases such as malaria is established, social differentiation methods are often not applied, and the techniques to link risk to the biting distribution of vectors is unavailable. The application of a new technique to identify the gender of the people vectors have bitten, will allow us to empirically identify biting behaviour (Teltsher *et al.* 2021) and allows us to approach the questions below in a less intrusive and more cost-effective manner. This scholarship offers the opportunity to undertake novel trans- and interdisciplinary research with real world impact.

Potential research questions to be addressed: Can differences in the prevalence of malaria among different groups of people be explained by the biting rate of mosquitoes? What role does gender and social differentiation in livelihoods play in risk of malaria infection? How is malaria risk understood and contextualised within specific landscapes?

Duration:	3 years, Full-Time Study or 6 years, Part-Time Study	

Bursary available (subject to satisfactory performance):

Year 1: £17,668 (FT) or pro-rata (PT) Year 2: In line with UKRI rate Year 3: In line with UKRI rate

In addition, the successful candidate will receive a contribution to tuition fees equivalent to the university's UK Home rate, currently £4,596 (FT) or pro-rata (PT), for the duration of their scholarship. International applicants will need to pay the difference between the UK and international fee rate (currently £15,100) for the duration of their scholarship.

Criteria: E or D Education and Training:		
taught Master's degree with a minimum average of 60% in all areas of assessment (UK or UK equivalent) in a relevant area to the proposed research project		
For those whose first language is not English and/or if from a country where English is not the majority spoken language (as recognised by the UKBA), a language proficiency score of in an IELTS certificate demonstrating that you have achieved at least 6.5 overall and a minimum of 6.0 in any of the elements or an acceptable, demonstrable equivalent to this UK VISA and Immigration secure English Language Test is required, unless the degree above was taught in English and obtained in a majority English speaking country, e.g. UK, USA, Australia, New Zealand, etc, as recognised by the UKBA.	E	
Experience & Skills:		
Previous experience of undertaking research (e.g. undergraduate or taught masters dissertation)	E	
Experience of mixed (qualitative and quantitative) research methodologies	D	
An understanding of basics of vector borne disease	D	
Knowledge/experience of social science approaches and methods	D	
Knowledge/experience of gender and/or intersectional analysis	D	
Previous research experience in LMICs	D	
Previous experience of molecular biology	D	
Knowledge/experience of interdisciplinary research	E	
Personal Attributes:		
Understands the fundamental differences between a taught degree and a research degree in terms of approach and personal discipline/motivation	E	
Able to, under guidance, complete independent work successfully	Е	
Demonstrable interest in and enthusiasm for sustainability issues	Е	
Other Requirements:	•	
The scholarship must commence by January 2023	Е	

Making an application:

Please read this information before making an application. Information on the application process is available at: https://www.gre.ac.uk/research/study/apply/application-process. Applications need to be made online via this link. **No other form of application will be considered**.

All applications must include the following information. Applications not containing these documents will not be considered.

- In the first part of the application select the following: Agriculture, Health and Environment
- Scholarship Reference Number (VC 2022-FES-NRI 2)— included in the personal statement section together with your personal statement as to why you are applying
- a CV including 2 referees *
- a short proposal (1 page) on how you would address the research topic
- academic qualification certificates/transcripts and IELTs/English Language certificate if you
 are an international applicant or if English is not your first language or you are from a
 country where English is not the majority spoken language as defined by the UK Border
 Agency *

Before submitting your application, you are encouraged to liaise with the Lead Supervisor on the details above.

^{*}upload to the qualification section of the application form. Attachments must be a PDF format.

Closing date for applications: midnight UTC on 31st October

For further information contact: E-mail: R.J.Hopkins@gre.ac.uk