The Makerere University – UVRI Centre of Excellence for Infection and Immunity Research and Training (MUII-plus)

PhD Fellowships in **Emerging and Re-emerging Infectious Diseases**: call for applications

The vision of MUII plus is African institutions and African scientists leading Infection and Immunity research which is relevant to Africa and which has a transformative impact on African Health. Our goal is to realise this vision through a Centre of Excellence for Infection and Immunity research in Uganda.

MUII-plus aims to support training and career development for potential and emerging African leaders in Infection and Immunity research, and to support Infection and Immunity researchers at all levels in Uganda to undertake world-class research by providing grants which support collaborative initiatives.

Infectious diseases still represent a major health burden in Africa. **Emerging and re-emerging infectious diseases** threaten the fabric of society. East Africa (Uganda in particular) has experienced important outbreaks of conditions such as Ebola, Marburg and Rift Valley Fever. Several viruses of global importance have been identified first in Uganda, partly because of the characteristics of the environment and wealth of life that it supports, including reservoirs and vectors, and partly because of the work and expertise of scientists at Uganda's leading research institutions. MUII-plus is interested in supporting research in this important area and has ring-fenced funding to support two PhD fellows for this purpose.

We recognise that "emerging and re-emerging" is a difficult term to define. For the purpose of this call we include the following:

- Haemorrhagic Fever Viruses
- Rift Valley Fever
- Coronavirus infections (e.g. SARS, MERS)
- Other emerging zoonoses (e.g. Henipaviruses)
- Arboviruses (e.g. Zika, Chikungunya, Yellow Fever and others)
- Avian influenza

We welcome other suggestions so long as they can clearly be shown to be emerging/re-emerging in Africa (diseases such as tuberculosis, malaria and schistosomiasis which are endemic in Uganda, but could be considered "re-emerging" in other settings, will not be considered).

This call is for preliminary applications. We will consider individuals with experience in this field, but also individuals interested in entering this field and with a suitable background in a relevant discipline. Applicants may wish **either** to propose a project of their own **or**, if they are not in a position to do so, may express interest in one of the following projects. Approximately five candidates will be shortlisted and these will be provided with funds to travel to meet their proposed external co-supervisor to discuss the project and work on the full proposal, if this is likely to help them.

Project title	Uganda supervisor(s) [institution(s)]*	External supervisor(s) [institution]
"Emerging viral zoonoses from wildlife in Uganda -	Julius Lutwama [UVRI]	James Wood, [Cambridge,
detection of emerging diseases in humans – a one	Charles Masembe	UK]]
health approach"	[CONAS]	
"Molecular epidemiology and transmission modelling of emerging viral diseases". Mentorship in viral	John Kitayimbwa [CONAS]	Simon Frost, [Cambridge, UK]
sequence analysis and the development of		
computational/ mathematical models of infectious		
disease transmission		
"Mapping distribution and habitats for vectors of	Jonathan Kayondo	John P. Grieco
emerging infectious diseases"	[UVRI]	[University of Notre Dame, USA]
"Exploring ticks as potential vectors of emerging and	Robert Tweyongyere	Emma Thomson, Alain Kohl
re-emerging disease in Uganda; metagenomics of	[COVAB]	[Glasgow, UK]
zoonotic viruses in tick vectors"		
"Characterisation of new and emerging rhabdovirus	Robert Downing [UVRI]	Emma Thomson, Alain Kohl
infections in Uganda"		[Glasgow, UK]

UVRI: Uganda Virus Research Institute; CONAS: Makerere University College of Natural Sciences; COVAB: Makerere University College of Veterinary Medicine, Animal Resources and Biosecurity

Applications for funding through MUII-plus should propose research which (i) is based in Uganda, (ii) has a clear link to Makerere University or to the Uganda Virus Research Institute and (iii) involves translational science, linking epidemiological or clinical studies to laboratory investigations, or to bioinformatics and computational analyses. African scientists of any nationality are welcome to apply but the work must be based in Uganda.

Applications that promote collaborations between Makerere and UVRI, and with other partners in Uganda, are encouraged, as are collaborations with world-leading regional and international research partners. For this particular call, a link to the College of Veterinary Medicine, Animal Sciences and Biosecurity (CoVAB) at Makerere University is encouraged. Co-funding from a second source is encouraged where this is available and will enhance the research or training opportunity. Candidates who have already registered for a PhD in this field will be considered.

Candidates should submit their preliminary applications using the forms provided on the website. Further enquiries may be directed to the Programme Manager, Ms Allen Mukhwana (amukhwana@uvri.go.ug) or Administrator, Mr Moses Kizza (mkizza@uvri.go.ug; moses.kizza@mrcuganda.org). The deadline for preliminary applications is 31st May 2017. The deadline for full applications is expected to be in late July, with interviews to be held in August 2017.

Preliminary applications comprising (1) the Preliminary Application Form, (2) transcript showing Masters degree performance should be submitted by the candidate. Letters from of support from at least two referees should be submitted separately, by the referees themselves. For applicants proposing a project of their own, referees must include all proposed supervisors.

All documents must be submitted to Mr Moses Kizza (mkizza@uvri.go.ug; moses.kizza@mrcuganda.org) by the preliminary application deadline of 31st May 2017.

^{*} Additional supervisors may be considered where appropriate