

Title of PhD project / theme	Investigating the pathways to adverse pregnancy outcomes among women infected with malaria infection and/or sexually transmitted/reproductive tract infections during pregnancy in sub-Saharan Africa
Supervisory team	LSHTM: Dr Matthew Chico, Prof Daniel Chandramohan Nagasaki: Dr Chris Smith, Prof Mitsuaki Matsui
Brief description of project / theme	<p>Malaria and sexually transmitted/reproductive tract infections (STIs/RTIs) during pregnancy are important causes of adverse pregnancy outcomes in sub-Saharan Africa. Prevalence of these infections among women attending antenatal care is unacceptably high and many pregnancy women are, indeed, co-infected. Considering recent evidence from Zambia, pregnant women may be more likely to have malaria, <i>Trichomonas vaginalis</i>, and/or bacterial vaginosis co-infection in pregnancy than any individual infection, or no infection at all.</p> <p>The PhD student will use of data from the ASPIRE trial (Aim for Safe Pregnancy by reducing common Infections) in Zambia, a four-year study scheduled to begin enrolment in November of 2019. The PhD student will investigate the relationships between maternal infections, inflammatory responses, and pregnancy outcomes to produce evidence that may support new antenatal interventions designed to reduce the burden of malaria and curable STIs/RTIs in pregnancy.</p>
The role of LSHTM and NU in this collaborative project	LSHTM will involve the PhD student in the ASPIRE trial and provide access to data that will be used by the PhD student. The PhD student will develop a statistical analysis plan with support from LSHTM and NU. This may involve an evaluation of rapid point of care tests for <i>Trichomonas vaginalis</i> and bacterial vaginosis that are manufactured by Sekisui Diagnostics.
Particular <i>prior</i> educational requirements for a student undertaking this project	The ideal candidate for this PhD will have an MSc in the field of Public Health, a strong understanding of infectious disease epidemiology, and be aware of the current gaps in knowledge and challenges facing management of malaria and other infections in pregnancy.
Skills we expect a student to develop/acquire whilst pursuing this project	Through this studentship, the PhD student will develop epidemiological and statistical analysis skills, a strong understanding of the epidemiology of co-infections in pregnancy and the associated risk to the newborn, as well as the ability to inform important health policy debate related to antenatal care interventions currently recommended by the World Health Organization.