## Seminar Talk Department of Biomedical Sciences



## "Epidemiological Surveillance of Malaria Transmission Using New Serological Assays"

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**Date**: 21 February 2019 **Time**: 3:00pm – 4:00pm

Venue: Room P4704, 4/F, Yeung Kin Man Academic Building

## **Abstract**

In the last decade, there has been a renewed interest in the global eradication of malaria, and, today, over 30 endemic countries are currently pursuing national elimination policies. As malaria declines and becomes more heterogeneous, classical surveillance tools, such as rapid diagnostic tests or light microscopy, often fail to detect a significant proportion of asymptomatic infections. As a result, mass screening with these diagnostics is not currently recommended by the WHO.

The use of serology to detect previous malaria exposure is a tool that is relatively cost-effective and deployable in resource-limited settings. Our lab at LSHTM is currently developing a unique immunological assay on the Luminex quantitative suspension array technology (qSAT) using a suite of diverse antigenic targets. This platform is being optimised to characterise trends in malaria epidemiology in a number of endemic settings, including The Gambia, the Zambezi Region Namibia, Haiti, Indonesia, and Uganda. This technology may have the potential for future use in routine surveillance by national malaria control programmes on the path towards elimination.

## **Biography**

Dr. Lindsey Wu, obtained her B.S. in Biotechnology in 2005 from University of Pennsylvania in the USA, followed by M.S. and Ph.D in Public Health and Malaria Epidemiology at London School of Hygiene and Tropical Medicine, in 2013 and 2018, respectively.

Currently, Dr. Wu is a Research Fellow at London School of Hygiene and Tropical Medicine. Dr. Wu's research activities have been focused on 1) sero-diagnostic platforms for surveillance and community-based efficacy trials, 2) surveillance strategies to confirm absence of transmission for malaria elimination and 3) Cluster randomized trial design in pre-elimination settings.