

# LEVERAGING EARTH OBSERVATION DATA FOR INFECTIOUS DISEASE SURVEILLANCE

7 October 2022 (Friday)  
12-1 PM SGT | Geography Seminar Room

## Abstract

---

Vector-borne diseases, such as malaria and schistosomiasis, are major causes of global morbidity and mortality. These diseases are highly spatially heterogeneous and sensitive to local environmental conditions. With unprecedented levels of global environmental change, it is increasingly critical to monitor changing vector-borne disease dynamics. Earth Observation data provides new opportunities to characterise the impacts of environmental change on disease transmission and develop targeted surveillance and control measures. This talk will present examples of how aerial and satellite-based EO data are being used for vector-borne disease surveillance and control in Africa, Southeast Asia and South America. This will also examine how new sources of EO data and analysis methods can be integrated into disease surveillance systems, explore constraints to EO data access and use and discuss research and policy implications.

---

## Speaker bio

Kimberly Fornace is a Visiting Senior Research Fellow at NUS, a Sir Henry Dale Fellow at the University of Glasgow and an Assistant Professor at the London School of Hygiene and Tropical Medicine. Her work focuses on the role of changing environments in infectious disease transmission and emergence. She is particularly interested in how spatial and Earth Observation data can be used for infectious disease surveillance.

