
Spatial epidemiology of infectious diseases in changing environments

Faculty:

[Associate Professor Kimberly FORNACE](#)

Email: kfornace@nus.edu.sg

Project Description:

Research projects are available for students on a range of topics on the impact of environmental and climate changes on infectious disease dynamics. This includes both field and modelling studies on zoonotic and vector-borne diseases such as malaria, Ebola and Marburg viruses. These studies aim to identify the impact of environmental change on disease risks as well as how spatial and environmental data can be used to better target disease surveillance. A core focus of this work is applying novel technologies to monitor changing risks, including developing machine learning approaches to analyse Earth Observation (drone and satellite) data and camera and acoustic data to monitor wildlife populations. Students will have the opportunity to develop independent project ideas and work with a wide network of collaborators in Southeast Asia, Sub-Saharan Africa, South America and Europe. Please get in touch with me to discuss project ideas.