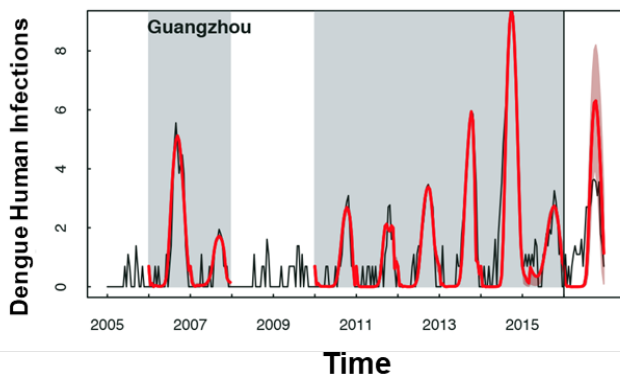


# Ecology & Evolution Seminar Series

Thursday 14<sup>th</sup> November, 1 pm,  
Fisher/Haldane

## Climate-driven variation in mosquito density predicts the spatiotemporal dynamics of dengue

Dengue is a climate-sensitive mosquito-borne disease with increasing geographic extent and human incidence. Monitoring of mosquito abundance across Chinese cities provides a new path to combine meteorological data with mathematical models to map risk of future dengue outbreaks. Using data on dengue incidence and mosquito abundance in China from 2005 to 2015, I show how associations between local climate conditions – temperature and precipitation – and mosquito densities in Chinese cities can be used to predict dengue incidence in time and space, quantifying the climate effect on dengue dynamics through its impact on vector dynamics.



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Schedule online: [www.imperial.ac.uk/silwood-park/research/thursday-seminars/](http://www.imperial.ac.uk/silwood-park/research/thursday-seminars/)