

BayCEER Kolloquium

Lectures in Ecology and
Environmental Research

Summer 2017



UNIVERSITÄT
BAYREUTH

Thursday

13.07.2017

12:00 in H6, GEO

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Modelling the impact of climate change on vector- borne diseases

Zika, dengue, chikungunya, malaria, Lyme disease, bluetongue, Shmallenberg are vector-borne diseases with huge impacts on societies and they are omnipresent in the news. These diseases are transmitted by exothermic arthropod vectors such as mosquitoes, midges and ticks which are extremely sensitive to external environmental conditions. Rainfall is an important factor as it provides breeding sites for larvae. Temperature impacts a broad range of factors such as vector development, its survival, vector biting rates and the time required for the pathogen to develop inside the arthropod vector.

Consequently, anthropogenic climate change is expected to greatly impact the distribution and severity of these vector-borne diseases. This talk will present recent modelling advances about climate change impacts on animal and human vector-borne diseases.