Dengue is a mosquito-borne viral disease of humans that has re-emerged in many parts of the world and has become an important international public health threat. Dengue incidence and geographical spread has dramatically increased in the last few decades and is now affecting most tropical and sub-tropical regions of the world. Despite extensive research efforts for several decades, no vaccines or therapeutics are currently available to prevent and treat dengue infections. One of the main obstacles to the development of countermeasures has been the lack of good animal models that recapitulate dengue pathogenesis in humans and reliably predict the safety and efficacy of countermeasures against dengue. In September 2008, the National Institute of Allergy and Infectious Diseases (NIAID) held a workshop to consider the current state-of-the-art developments in animal models for dengue and discuss strategies to accelerate progress in this field. This report summarizes the main discussions and recommendations that resulted from the meeting.

Keywords: Dengue; Animal; Models