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Naveen K. Vaidya* (nvaidya@sdsu.edu), San Diego State University, 5500 Campanile Drive, San Diego, CA 92182. *Impact of Environmental Temperature on Dengue Epidemics: Mathematical Models.*

Growing spread of dengue, a mosquito-borne disease, has been a major international public health concern. In this talk, I will present mathematical models to describe the impact of environmental temperature on the dynamics of dengue epidemics. To establish the global threshold dynamics of the models, we formulate the basic reproduction number and the infection invasion thresholds. I will also present numerical simulation results to demonstrate how the environmental temperature affects the disease dynamics. (Received September 22, 2017)