1133-92-332 **Abba Gumel*** (agumel@asu.edu), School of Mathematical and Stat. Sciences, Tempe, AZ 85287, **Kamaldeen Okuneye**, Tempe, AZ 85287, and **Steffen Eikenberry**. *Modeling the effect of temperature on the dynamics of malaria vector.*

Temperature (ambient and water) is known to significantly affect the transmission dynamics of mosquito-borne diseases. This talk presents a new model for the population biology of malaria mosquitoes, that take into account the lifecycle of the mosquito, the gonotrophic cycle of the vector and the parasite's sporogonic cycle. Suitable temperature ranges for maximum mosquito abundance (hence, malaria incidence) will be presented. (Received July 31, 2017)