

# Travelling waves for a schistosomiasis model

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Schistosomiasis mekongi is the first reported in 1957 and prevalent in the Mekong river basin from the Khong district in the Southern Laos to Kratie province in northern Cambodia. The total population at risk for schistosomiasis mekongi is estimated 60,000 in Laos.

I will present a new Ross-type model of schistosomiasis prevalence taking into account an intermediate host (snail), and final hosts (humans or mammals). A reaction-diffusion equation describes the spatial spread of the snails, while an ODE describes the dynamic of infected hosts. The talk will focus on the existence of travelling waves in the context of quasi-steady state, which leads to study a monostable source.