

LINKED IMMUNOLOGICAL AND EPIDEMIOLOGICAL MODELS FOR  
WEST NILE VIRUS  
SOUVIK BHATTACHARYA

I am collaborating with Suzanne Lenhart on the development of immunological models in various bird species infected with West Nile Virus. Our goal is to investigate the various features of the disease and design a model that fits the biology of the disease. We drafted an initial structure of the model, which explains the interaction between the immune responses and the virus particles in the avian immune system. In the future, we will revise the model to better connect with data from our collaborators.