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MAJOR RESEARCH INTERESTS

The laboratory (the groups at Duke University and the GMS) focus on RNA-protein interactions that dictate gene expression in two families of pathogenic flaviviruses, Yellow Fever virus (YFV) and dengue viruses (DEN). These agents are major health risks in the tropics and represent an emerging danger to the US population and dengue is an ever-present danger to the population of Singapore. In fact Singapore is a hub for the study of dengue and we hope to contribute our unique RNA biology expertise to this epicenter of dengue work.

Using biochemical purification and proteomic analysis, and systematic RNAi screens the laboratory is identifying host RNA binding proteins that are required for viral propagation. Once these host RNA binding proteins are identified we will set out to discover inhibitors of the critical host-pathogen interactions mediated by these factors with the hope of developing novel antiviral agents.

RECENT PUBLICATIONS

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