Detailed Modeling of HIV Progression

The project focuses on the quantitative mathematical description of the progression of HIV infection, at the animal and cell levels. The project has two phases. The first is primarily on the study of relevant articles in the open literature describing the biological events that take place during HIV infection. Subsequently a review of the open literature on modeling HIV infection will be pursued. In the second phase of this project, refining our previously developed models will be pursued followed by an analysis of the modeling results. The ultimate goal of this project is to develop an accurate description of HIV infection across all relevant levels, to be used for the development of efficient treatment strategies.