Modeling hepatitis C virus dynamics

Libin Rong

Abstract

Treatment of chronic hepatitis C virus infection has experienced a significant progress in the last several years. New therapy using direct-acting antiviral drugs has greatly increased the cure rate. The new drugs directly interfere with different steps of the HCV replication cycle. Thus, mathematical models that do not consider within-cell processes may not be optimal in analyzing data from patients treated with new drugs. In this talk, I will review models used to study HCV dynamics under traditional therapy and discuss recent advances in the development of multi-scale models for new drugs.