Determining Mechanism of Action of Antivirals for Respiratory Illness

IRMA RODRIGUEZ, HANA DOBROVOLNY, Texas Christian Univ — Viral infections in the respiratory tract are common in humans and can cause serious illness and death. Drug treatment is the principal line of protection against many of these illnesses and many compounds are tested as antivirals. Often the efficacy of these antivirals are determined before a mechanism of action is understood. We use mathematical models to represent the evolution of these diseases and establish which experiments can help determine the mechanism of action of antivirals.