"Understanding emerging epidemic viruses in animals - mechanisms, evolution and epidemiology"

Research / Bio

Dr. Parrish has been working on understanding the controls of viral host ranges by studying three systems where viruses jumped from one host to another to cause epidemics of disease. Canine parvovirus (CPV) transferred from a cat or closely related host. The H3N8 canine influenza virus transferred from horses, while the H3N2 canine influenza virus transferred from an avian host. The studies include a variety of analyses of the viruses, their interactions with their hosts and environments, as well as their natural histories, epidemiology, and the ecology of their original and new hosts.

https://parrishlab.org/

Publications

Transferrin receptor binds virus capsid with dynamic motion, Lee, H., Et al. National Academy of Sciences USA, 2019 Sep

Limited intra-host diversity and background evolution accompany 40 years of canine parvovirus host adaptation and spread, Voorhees, I.E.H., Et al. Journal of Virology, 2019 Dec