Hepatitis C Viral Network Cooperates to Dodge Immune System

June 8, 2015

The diverse population of hepatitis C virus (HCV) within an infected individual is interconnected almost like an online social network and cooperates to evade the immune system. Publishing their findings in the Proceedings of the National Academy of Sciences, researchers created a mathematical model for how variants of hep C and human antibodies interact. Then they used the model to make sense of data they had collected from people living with hep C, some of whom were followed for as long as two decades.

They found that different viral variants effectively communicate with one another when each interacts with the same antibody. Further, they discovered that, to ensure the overall survival of hep C in the body, the viral population not only continually mutates to evade the immune system, but certain viral variants sacrifice themselves as a decoy, invoking the immune response so that other viral variants might escape unharmed.

To read a press release on the study, click here.

To read the study abstract, click here.

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http://beta.docker.hepmag.com/article/viral-decoy-27356-1438441400