HIV Caught in the Act! On Video and in Real Time!

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For the first time, researchers have captured real-time moving images of HIV spreading between cells in the body, Popular Science reports.

Publishing their findings in the journal Science, researchers stained HIV with fluorescent markers before injecting it into mice so they could track its spread in the lymph nodes, using an imaging technique called two photon laser scanning microscopy.

The researchers determined that the virus makes use of a certain protein in order to bind to immune cells known as macrophages. In this video of that process, the virus is in green.

Next, HIV binds to B immune cells. It only takes a few days for the virus to then spread into the middle of the lymph nodes. In the process, HIV kills CD4 cells and ultimately charts a path toward spreading throughout the body. In this video, B cells are red, seen traveling between the inner and outer lymph node.

The researchers theorize that if scientists could find a way to block the sticky protein's ability to help HIV bind to macrophages, they could block viral transmission.

To read the Popular Science article, click here.

To read a press release about the study and link to videos of the virus in real time, click here.

To read the study abstract, click here.