

New model may provide insights on neurocognitive disorders caused by HIV

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HIV infects certain cells in the brain called microglia, and infected microglia release toxic and inflammatory molecules that can impair or kill surrounding neurons. Researchers have been limited in their ability to study HIV in microglia, but in a new *FEBS Journal* study, investigators developed a new model of HIV infection in microglia using CRISPR/Cas9 gene editing technology.

The model will be useful for developing anti-HIV therapies and understanding how HIV infection damages the brain.

"This work is another step towards understanding how microglial cells, the primary reservoir for HIV in the brain, contribute to HIV-associated changes in neuronal function," said senior author Dr. Brandon Harvey, of the National Institute on Drug Abuse. "The model also provides a means of evaluating therapeutic strategies targeted at inactivating the virus in a challenging host cell."

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