Zika and the Brain

In 2016 the Zika virus emerged as an urgent global health priority, prompting researchers throughout the world to focus on better understanding this rapidly spreading condition and its devastating side effects, including brain malformations and other birth defects in unborn babies.

Research to date demonstrates the Zika virus attacks key cells responsible for creating neurons and helping the brain develop as the embryo grows. Previous studies had suggested that Zika enters these cells, called neural progenitor cells or NPCs, by attaching to a protein named AXL on the cell’s surface.

However, scientists at the Harvard Stem Cell Institute (HSCI) are utilizing state-of-the-art technologies, including induced pluripotent stem cells (iPS cells) and genome editing to more closely examine NPCs, and have found AXL is not the only entrance point for Zika during their infection.

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