

Loss-of-Function and Gain-of-Function Explained



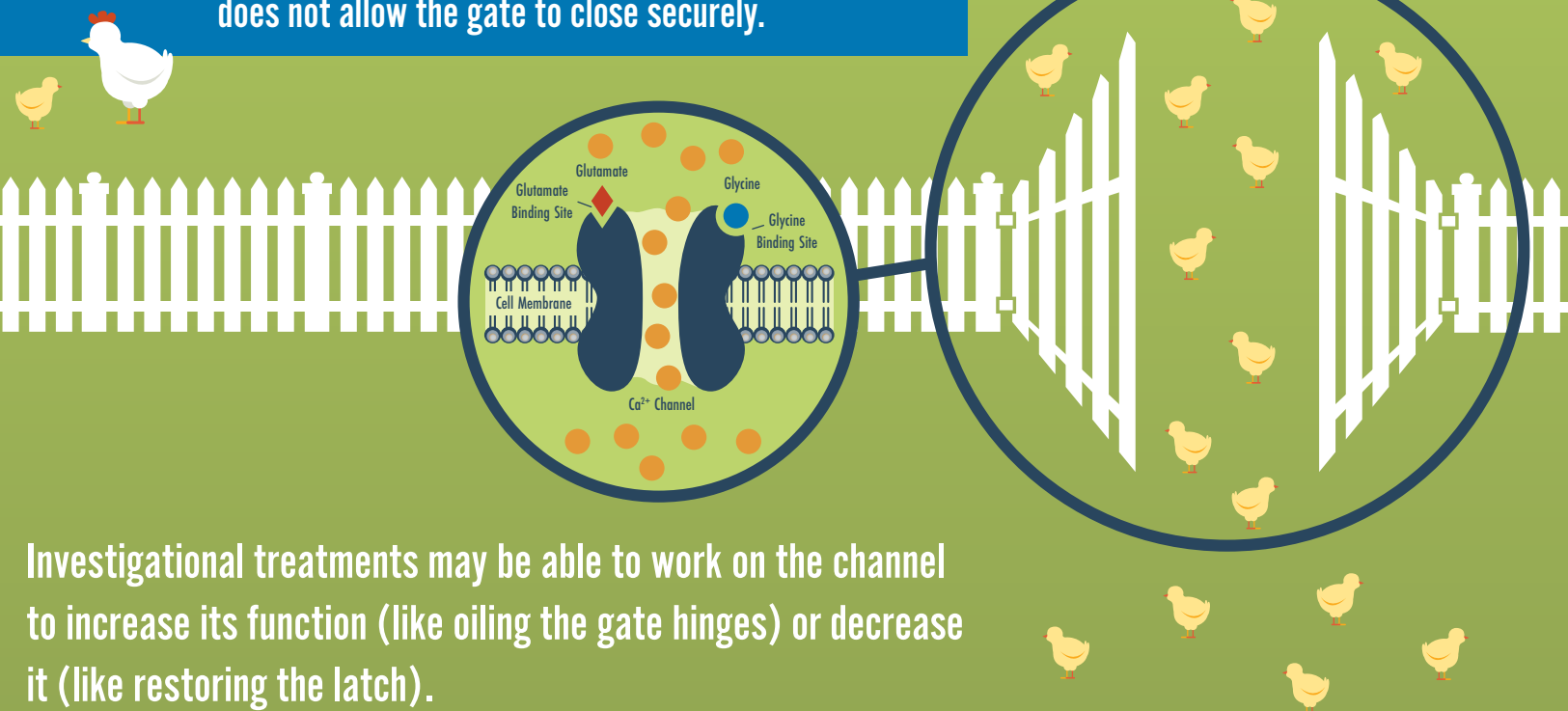
Imagine the NMDA receptor in the cell surface like a gate in a fence.

If there is a change in the structure of the receptor, it could change the flow of calcium through the channel. If that change reduces the flow, like the gate with a sticky latch, it would be considered a **LOSS-OF-FUNCTION**. And if it allows for increased flow, it would be a **GAIN-OF-FUNCTION**.



LOSS-OF-FUNCTION is like a sticky gate that will not open easily.

GAIN-OF-FUNCTION is like a broken latch that does not allow the gate to close securely.



Investigational treatments may be able to work on the channel to increase its function (like oiling the gate hinges) or decrease it (like restoring the latch).

In considering investigational treatments intended to specifically restore more normal function to the channel, it may be important to know whether a particular variant is **LOSS-OF-FUNCTION** or **GAIN-OF-FUNCTION**.



GRIN
THERAPEUTICS

A Neurvati Neurosciences Company