

# Neuron study could lead to enhanced memory

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A study by Chinese scientists suggests that electrical stimulation of non-functional brain neurons can induce the production of amino acids and improve memory.

Through laboratory tests on mice, researchers at the Shanghai Institute for Biological Sciences found that "silent synapses" -- brain cells that fail to transmit chemical signals to other cells -- were sometimes related to the release of the amino acid glutamate.

They found that the neurons could become functional when stimulated by electrical impulses that caused them to release glutamate.

The findings, which were published in the May 4 issue of the international scientific journal *Neuron*, could lead to methods of improving human memory, lead researcher Duan Shumin said.

In a commentary in the journal, Deniz Atasoy and Ege Kavalali, professors in neuron science at the University of Texas Southwestern Medical Center, said, "Their results provide a fresh look at these silent synapses and their switching to active ones."

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