HOW ADULT-BORN NEURONS FUNCTION IN A CIRCUIT

Researchers think neurogenesis helps the brain distinguish between two very similar objects or events, a phenomenon called pattern separation. According to one hypothesis, new neurons' excitability in response to novel objects diminishes the response of established neurons in the dentate gyrus to incoming stimuli, helping to create a separate circuit for the new, but similar, memory.

FIRST REWARD SECOND REWARD Excitatory Interneuron signal New neuron Entorhinal Inhibitory cortex neuron signal Hippocampal neurons Dentate gyrus neuron