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Title: The function and experience-dependent regulations of newly-generated neurons in the adult dentate gyrus

In contrast to the long-held dogma that neurogenesis (generation of new neurons) is restricted to the developing brain in mammals, it is now accepted that new neurons continue to be added in specific regions of the adult brain. One of those brain areas is the dentate gyrus, a subregion of the hippocampus that is crucial in cognitive functions such as learning and memory. Accumulating evidence has suggested that these new neurons in the adult dentate gyrus have a role in learning and memory, although it is still unclear how they contribute to the memory functions. I will present our recent findings on mechanisms by which animal’s learning-related experience and associated neural activity regulate new circuit formation through adult neurogenesis and discuss its potential contribution to memory functions.

Reference