Wild type — CA1 — Normal NMDA receptors — Ca²⁺

NR2B Transgenic — NR2B subunit overexpressed — More Ca²⁺ enters the cell

A NMDA-type receptor synaptic current

NR2B transgenic

Wild type

40 pA

100 ms
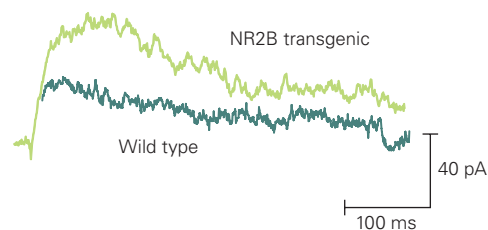
B Long-term potentiation

Transgenic

Wild type

100 Hz, 1 s
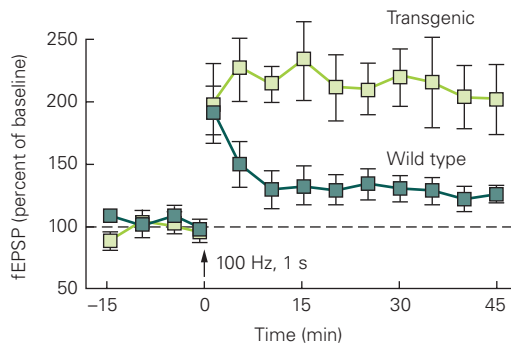
C Morris water maze learning

Wild type

Transgenic

Wild type
Transgenic

Target quadrant Right quadrant Opposite quadrant Left quadrant