

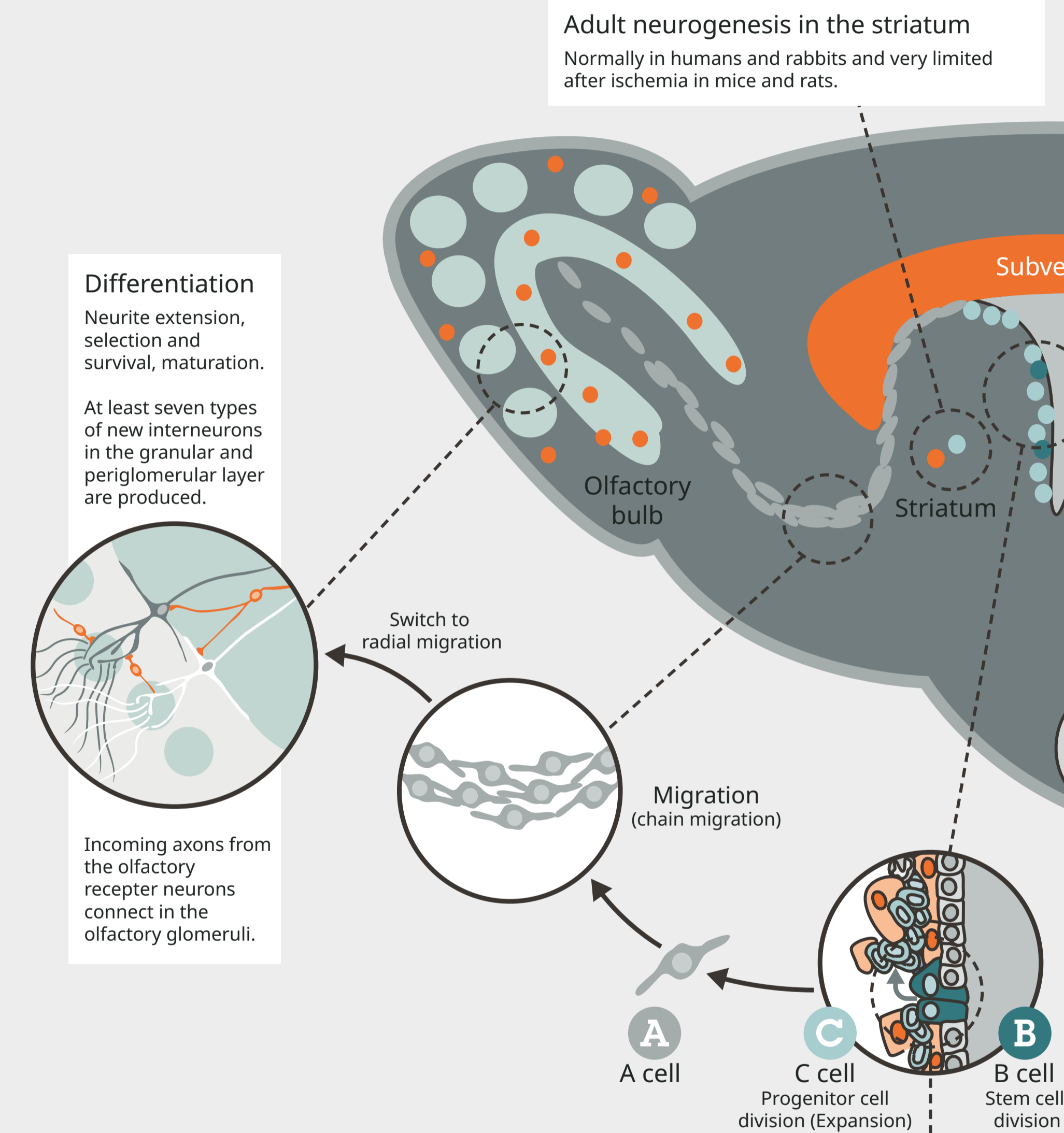
Adult neurogenesis

Created by Abcam in collaboration with Gerd Kempermann*

Adult neurogenesis is the production of new neurons in the adult brain. In many species (e.g. fish and birds) it is a common process, but in mammals it is an exception. Mammalian adult neurogenesis takes place primarily in two regions: the SVZ/olfactory bulb system and the hippocampus (as well as the striatum and the hypothalamus in some species). It is a highly complex, polygenic process that recapitulates

aspects of brain development in the otherwise non-neurogenic adult brain, and originates from local precursor cells that reside in defined neurogenic niches. In the hippocampus, adult neurogenesis is regulated by behavior and activity. Finally, adult neurogenesis contributes to specific types of plasticity in the different regions, with regeneration not being its primary purpose.

Neurogenesis in the adult olfactory bulb



Neurogenesis in the adult hippocampus

