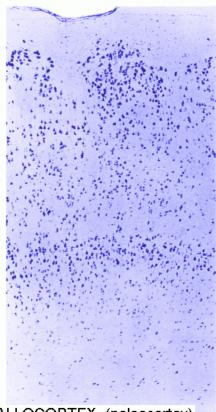
## Anatomy 9535. NEURONS OF THE CEREBRAL CORTEX.

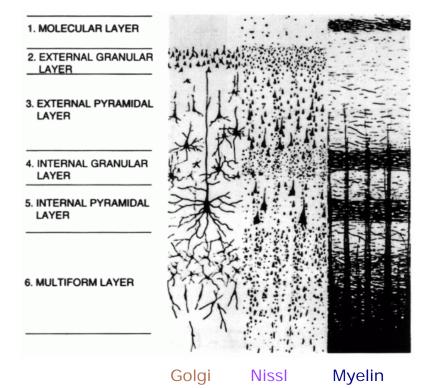
Cell types:	CORTICAL NEURONS	
	Pyramidal cells Present in all layers. The larger, more conspicuous ones are in Layers III and V. These are the principal cells of the cerebral cortex. Betz cells (a minority of the pyramidal cells in Layer V of the primary motor area) are exceptionally large.	Principal cells
	Fusiform cells Characteristic of Layer VI. At least some of these are principal cells.	
	Stellate cells Only in Layer IV. The only excitatory cortical interneurons (glutamate). They are excitatory to dendrites of pyramidal cells in the same column.	
	Basket cells Inhibitory (GABA-ergic) to the cell-bodies of pyramidal cells in adjacent columns. Granule cells. This term should not be used. It embraces all small cortical neurons, including interneurons and small	Inter- neurons
	pyramidal cells. Sometimes used specifically for basket cells. Retzius-Cajal cells Horizontally branching interneurons in Layer I.	
	Martinotti cells Interneurons in Layers III to VI. Their axons are directed towards the cortical surface.	

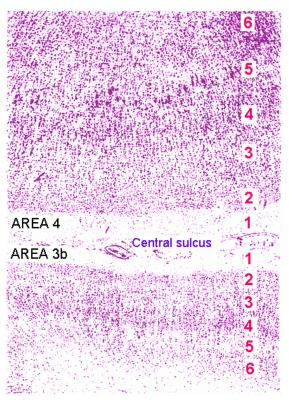


Three-layered cortex. Separated from Neocortex by the rhinal sulcus.

ALLOCORTEX (paleocortex)

## ISOCORTEX (= NEOCORTEX) has 6 layers:



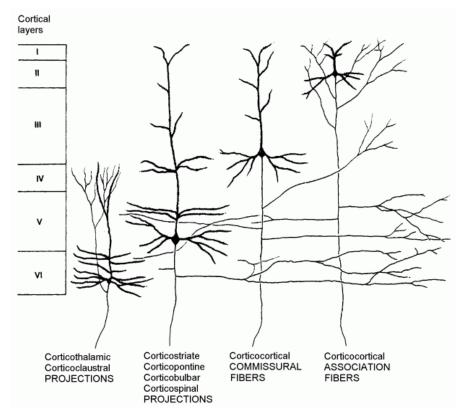


Agranular cortex. Typical of motor areas.

Large pyramidal cells in Layer 5. Giant pyramidal (Betz) cells only in primary motor area.

Granular cortex is thin. Typical of primary sensory areas.

Principal cells have somata in different layers, according to the destinations of their axons:



Examples of intracortical circuits.

