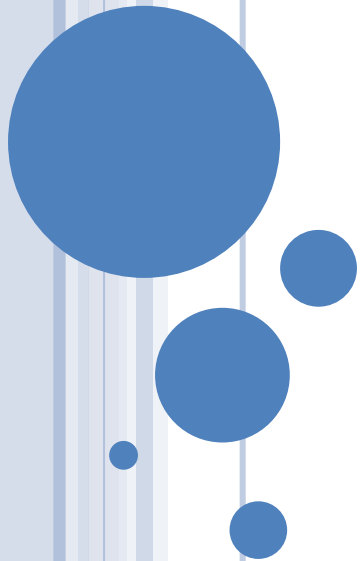
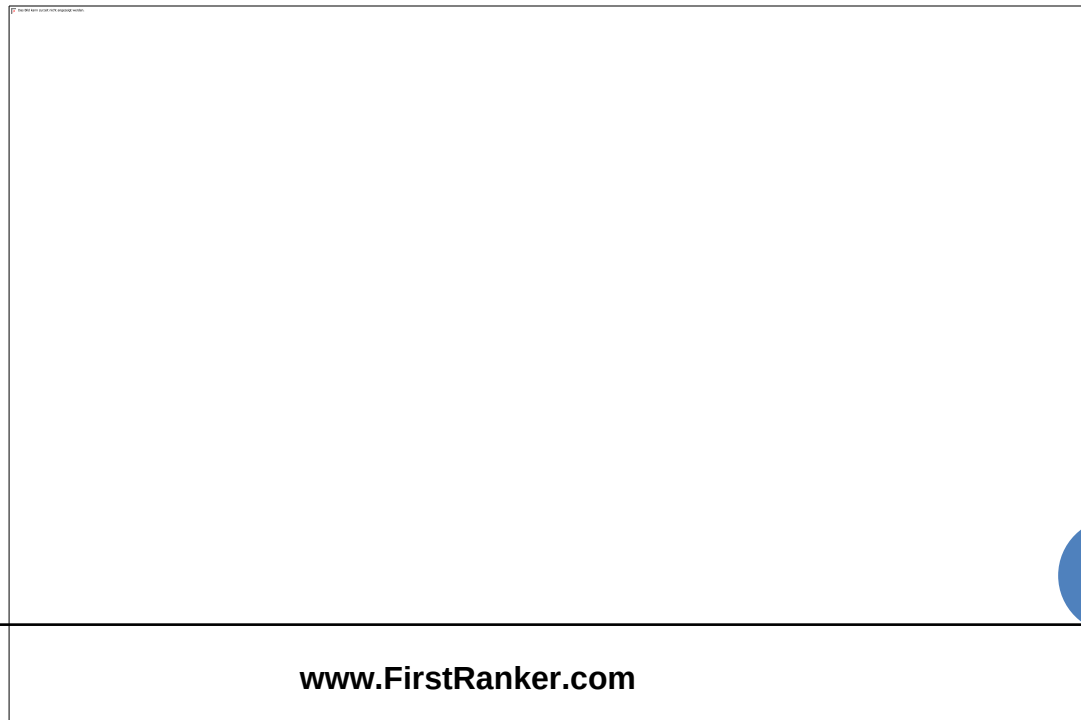


NERVOUS SYSTEM



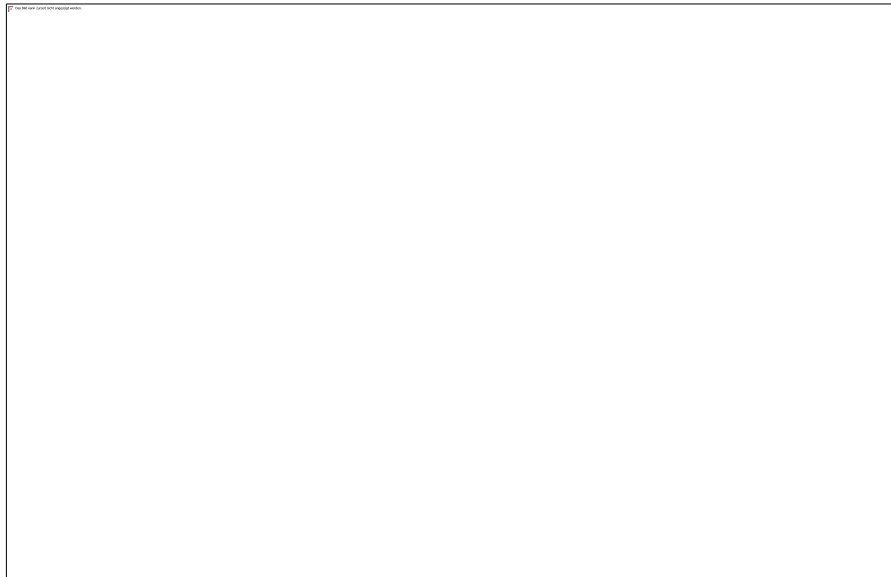
SPINAL CORD

- Externally placed white matter
- Internally present butterfly shaped grey matter
- Central canal



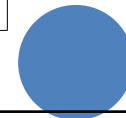
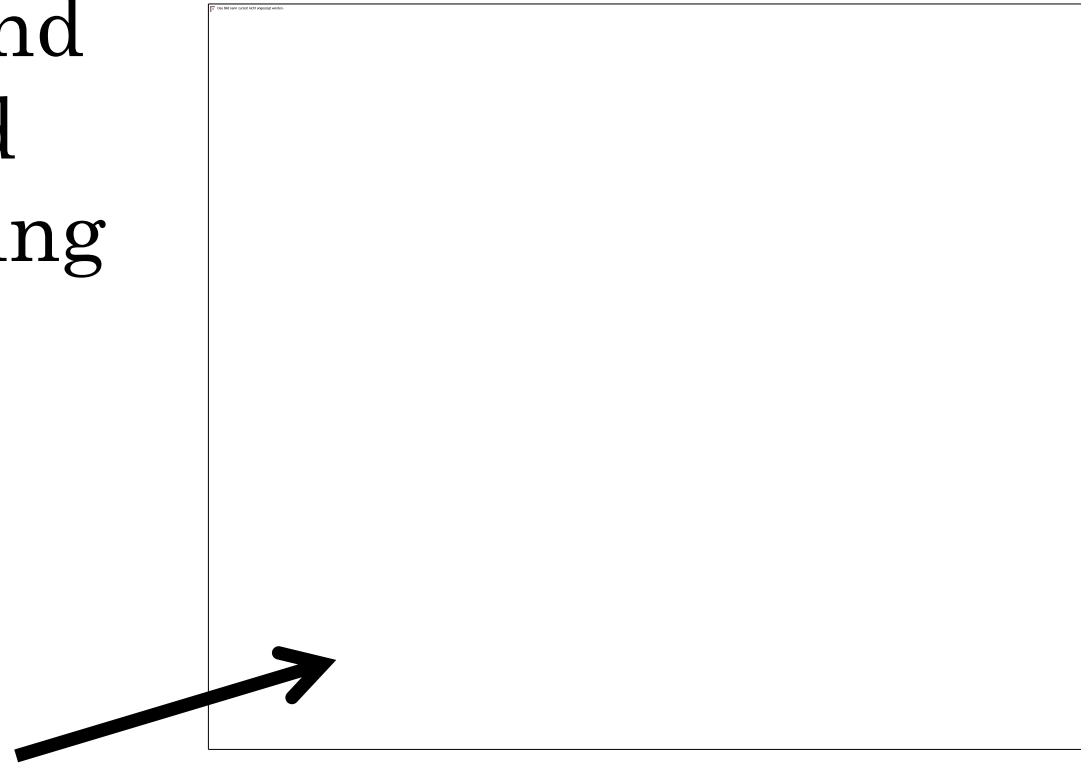
GREY MATTER

- Contain neuronal cell bodies
- Anterior horns contain motor neurons
- Posterior horn contain sensory neurons

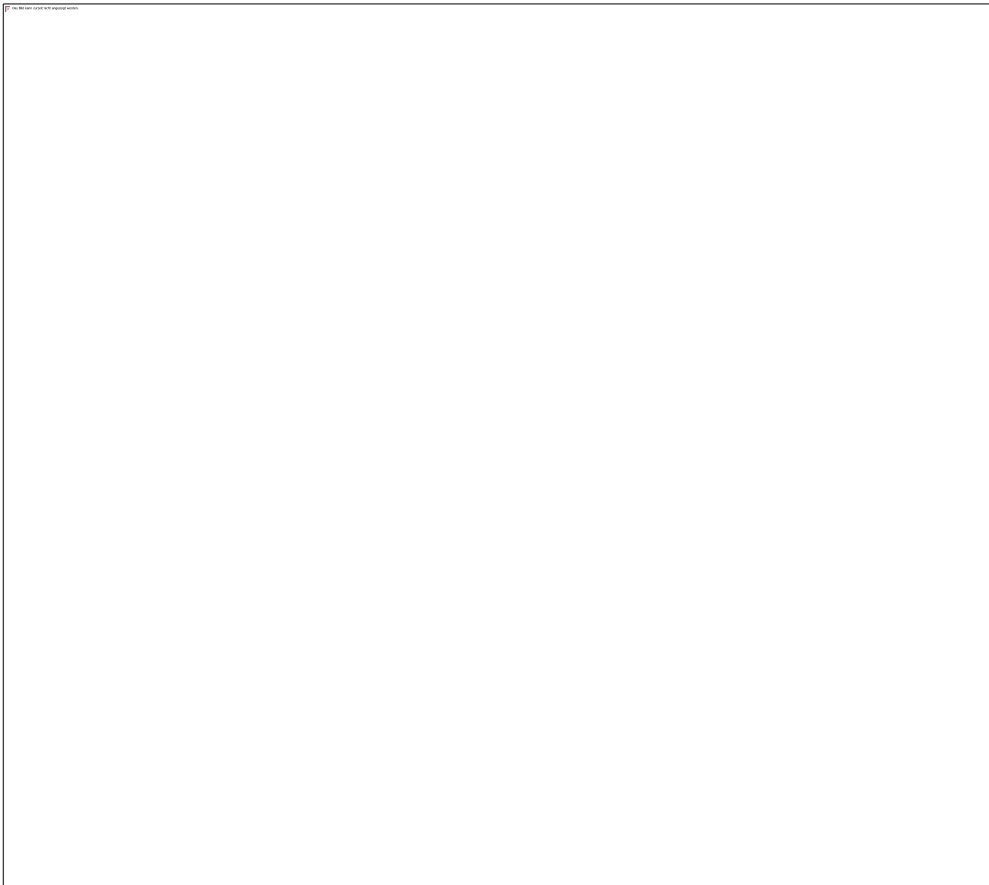


WHITE MATTER

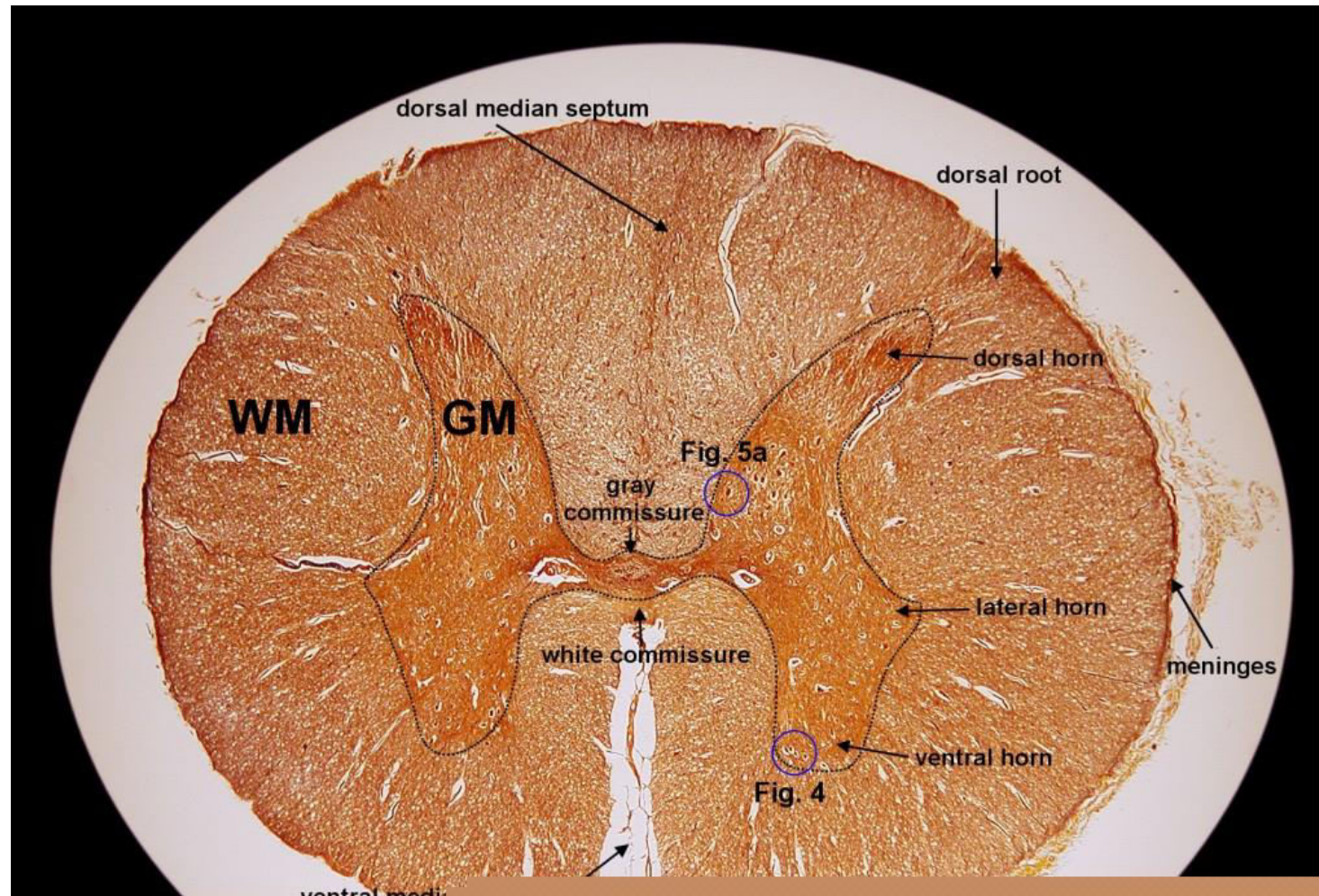
- Contains myelinated and unmyelinated axons travelling to and from spinal cord.



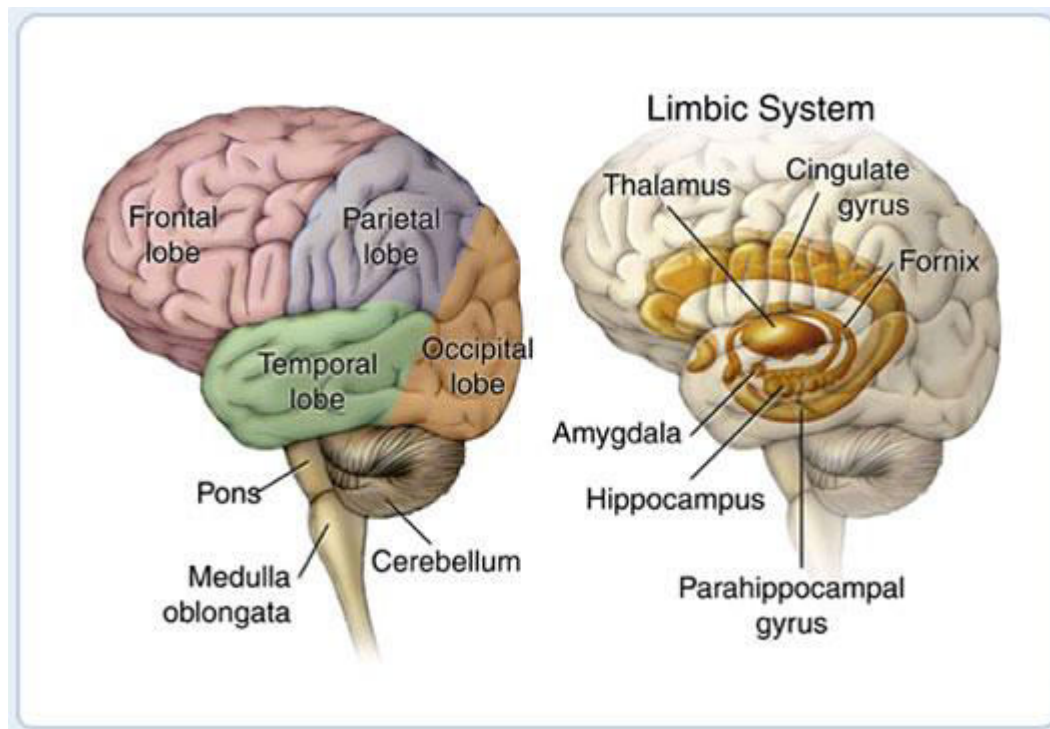
CENTRAL CANAL

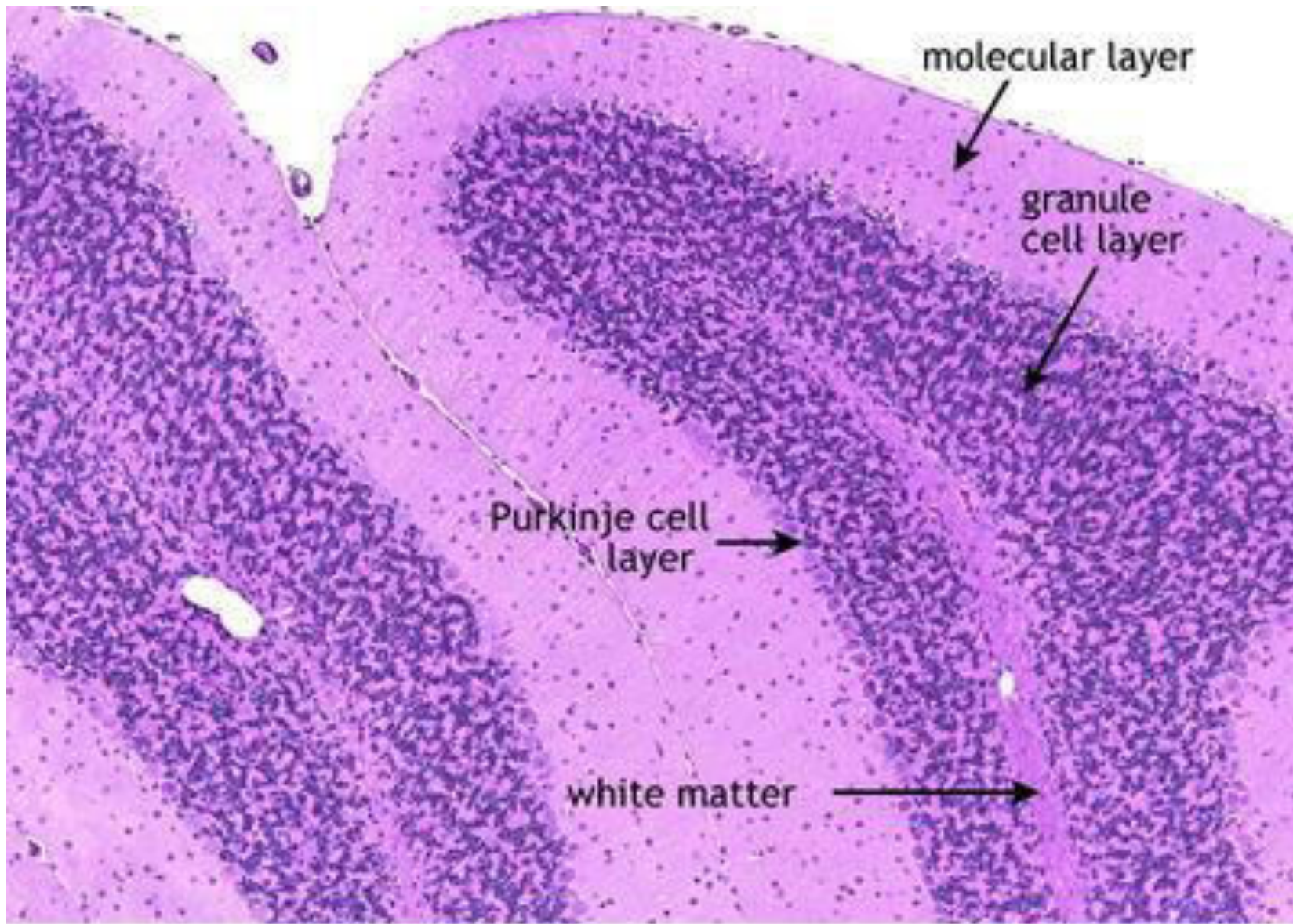






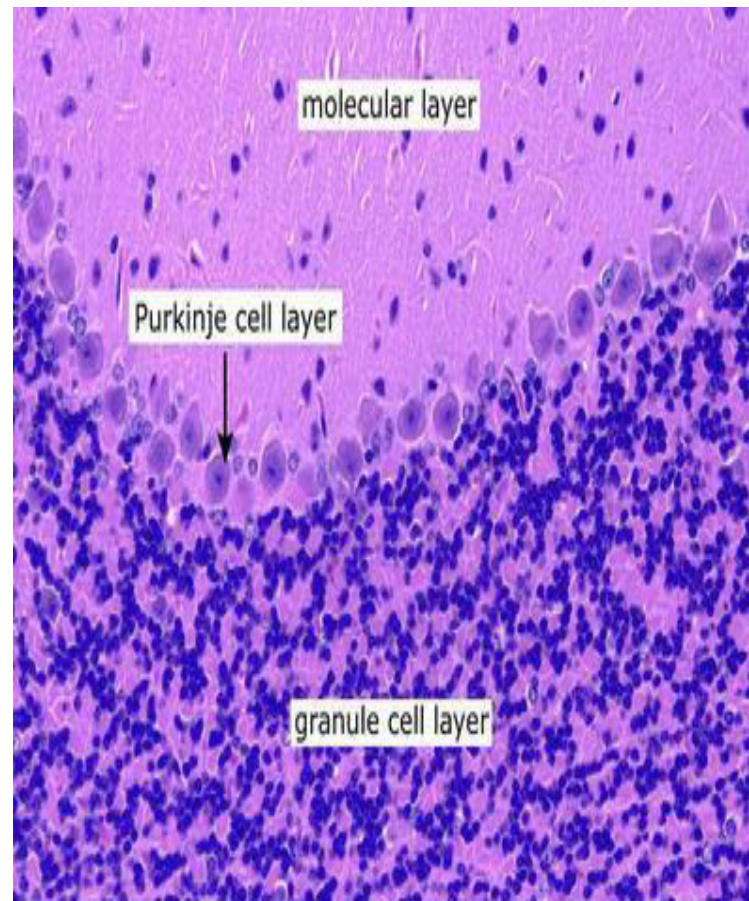
CEREBELLUM





MOLECULAR LAYER

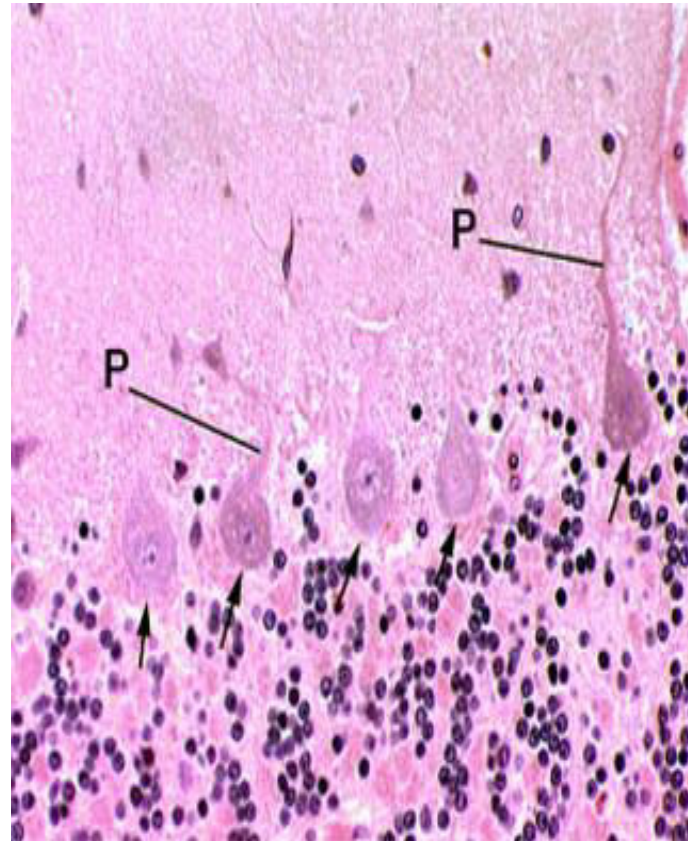
- Contains few neurons but a large number of unmyelinated nerve fibers

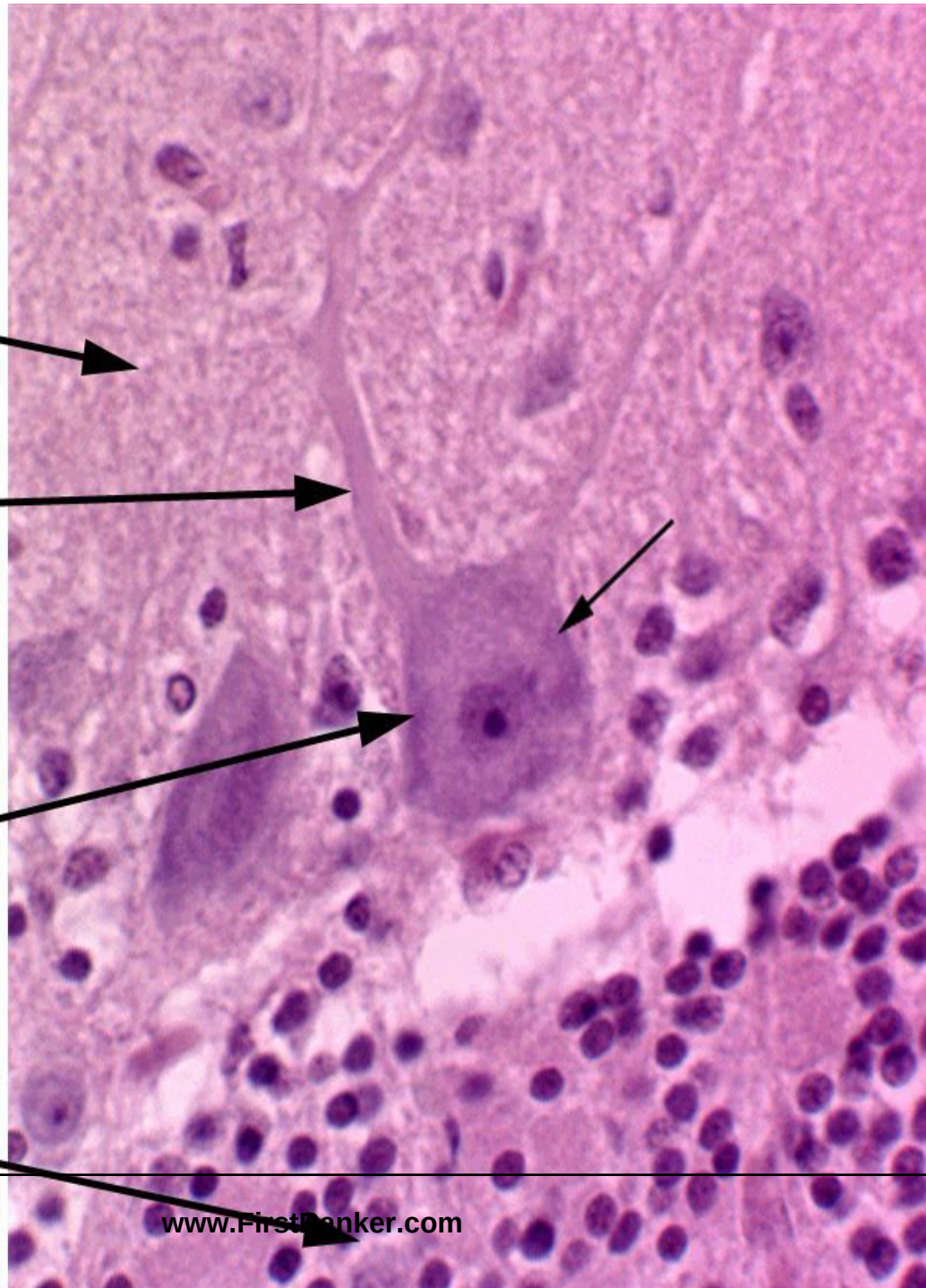
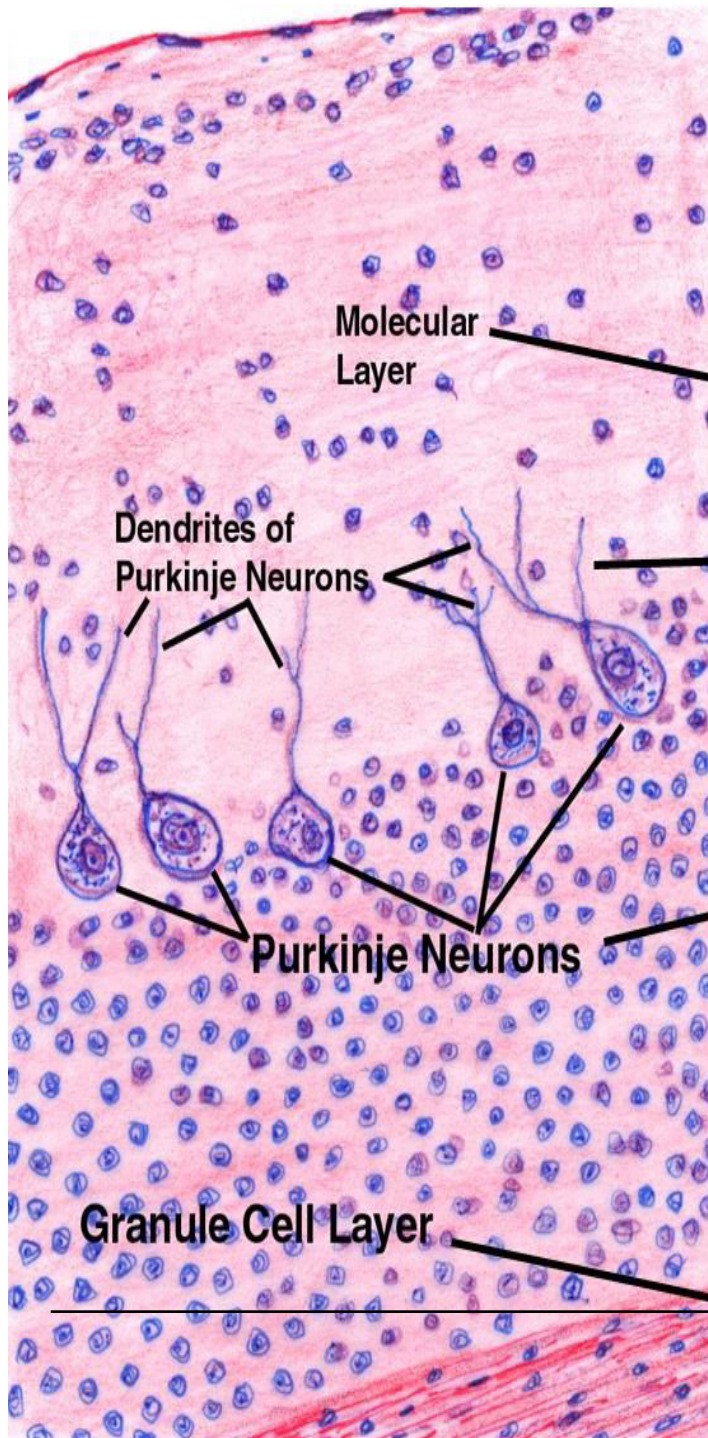


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GRANULAR LAYER

- Extremely cellular layer
- Axons bifurcate to synapse with dendrites of purkinje cells



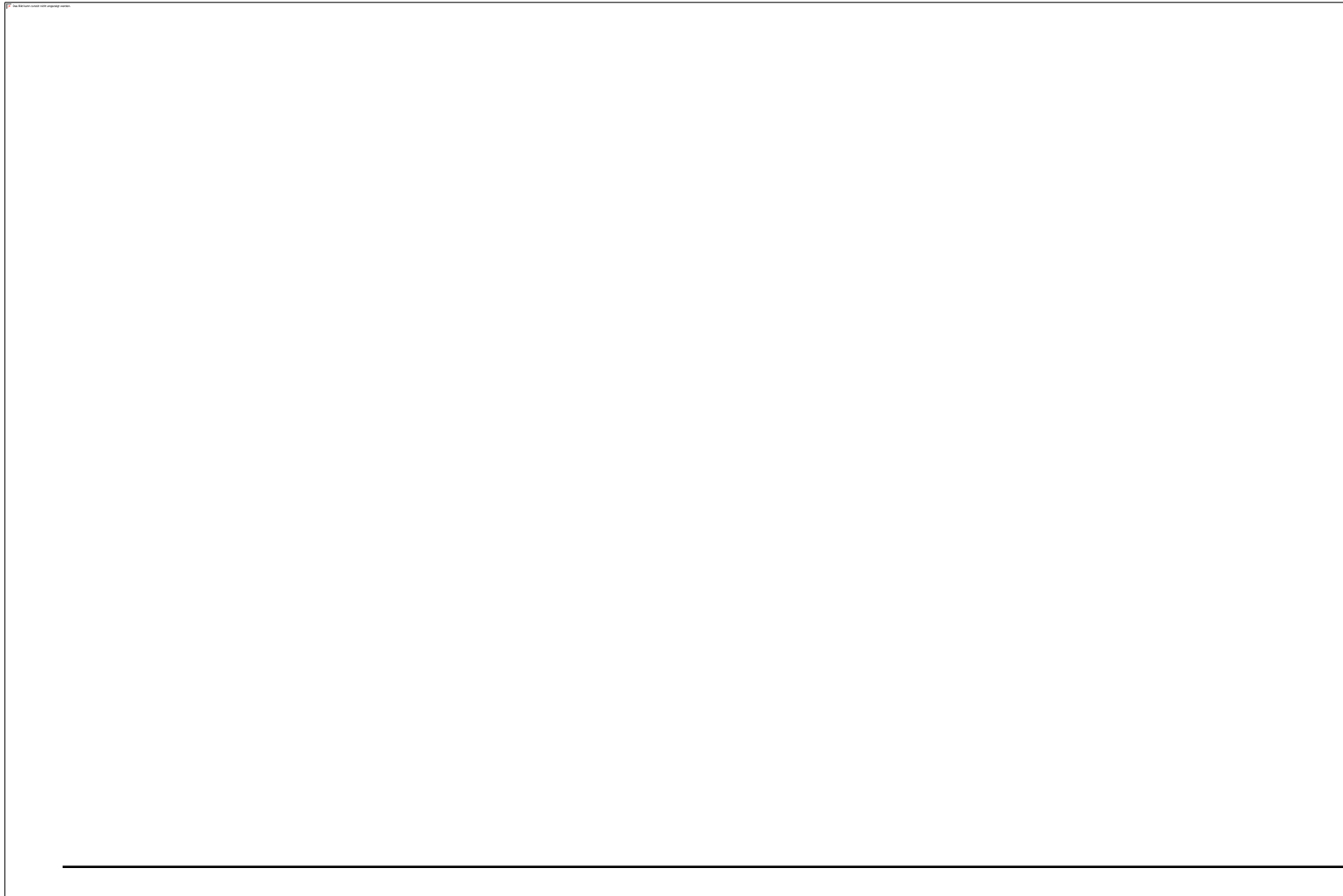


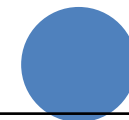
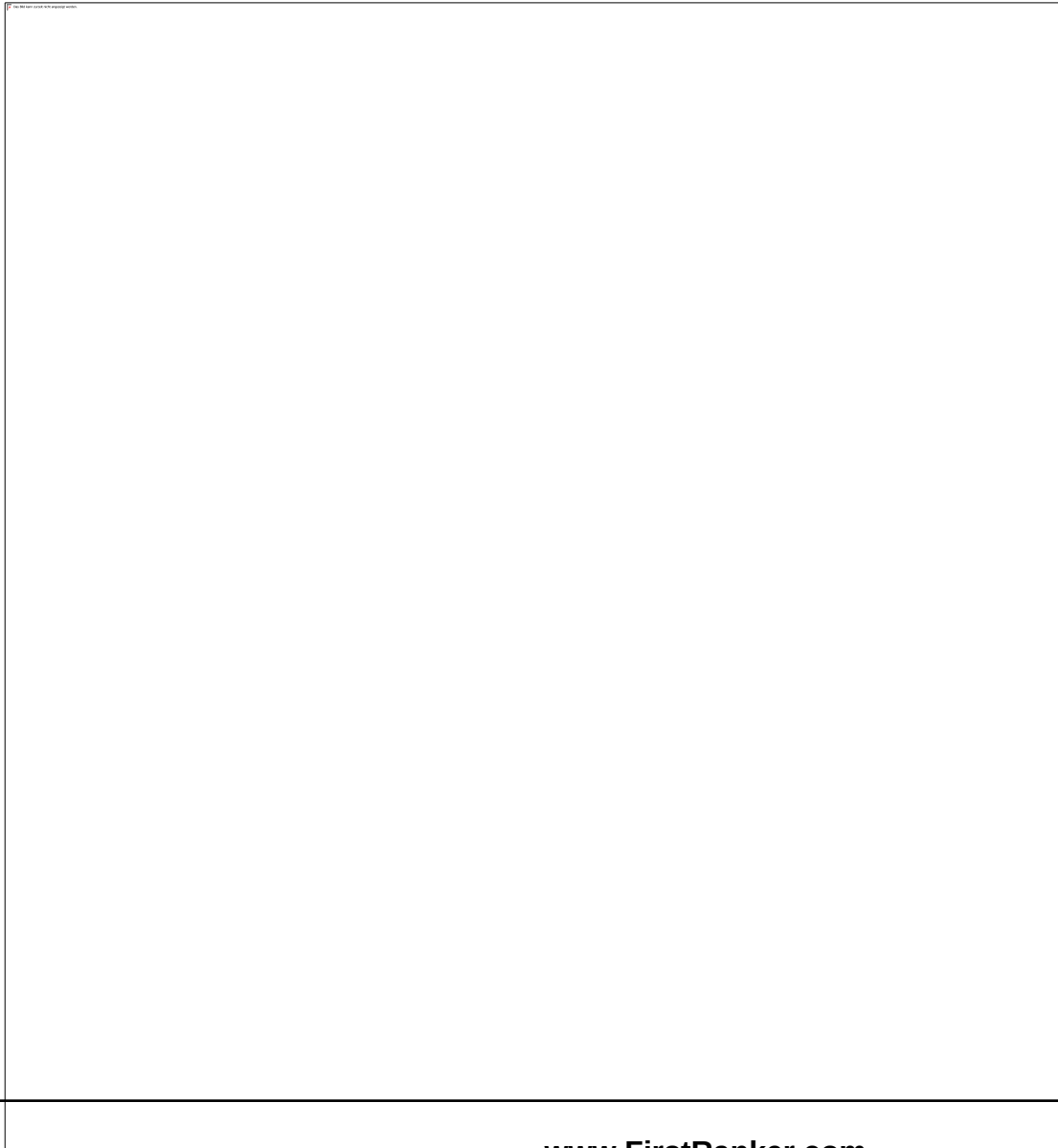
PURKINJE CELLS

- Single layer of flask shaped cells between molecular and granular layer.
- These are only efferent fibers from cerebellar cortex

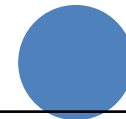
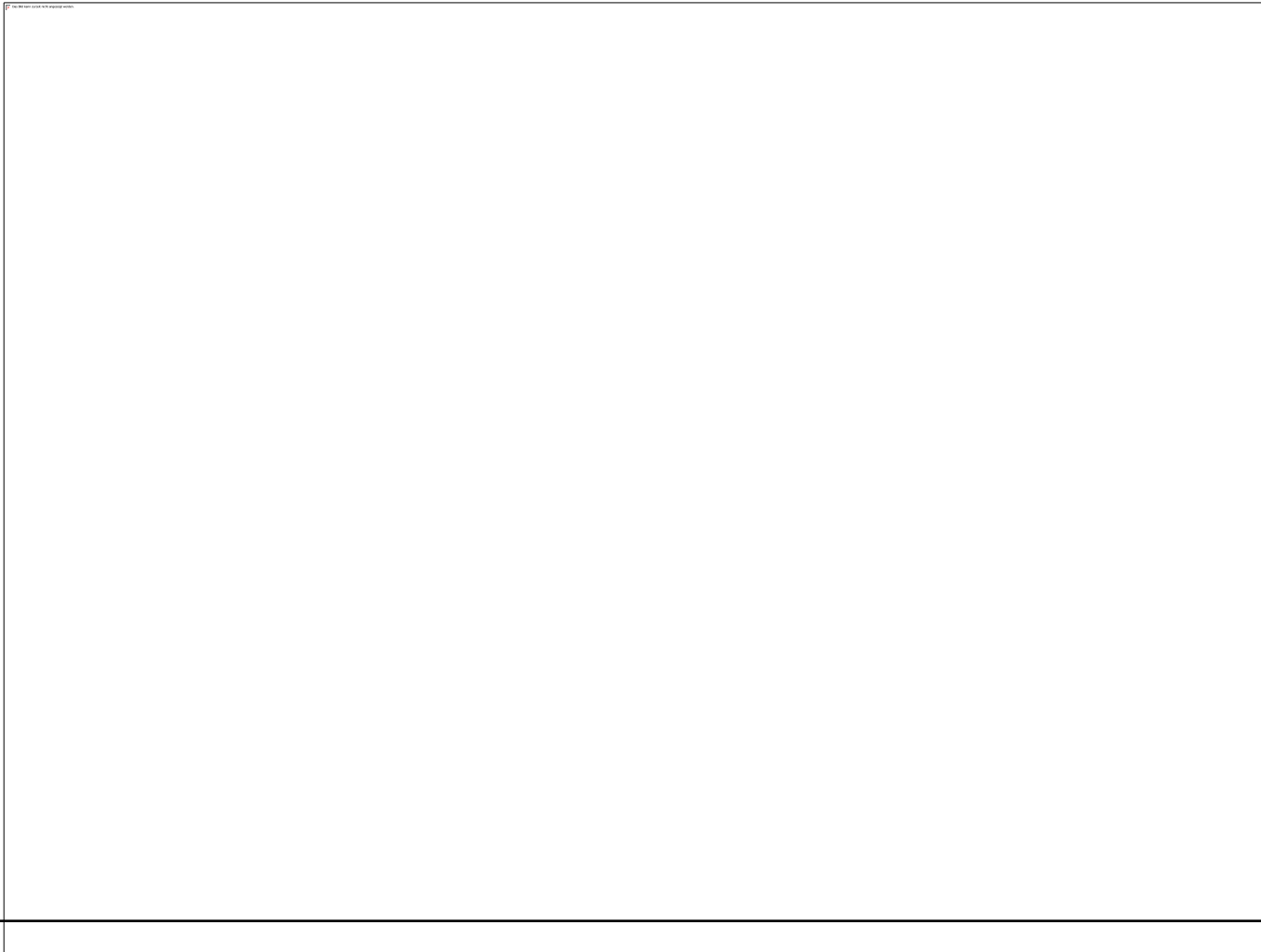


CEREBRUM





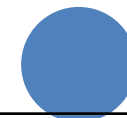
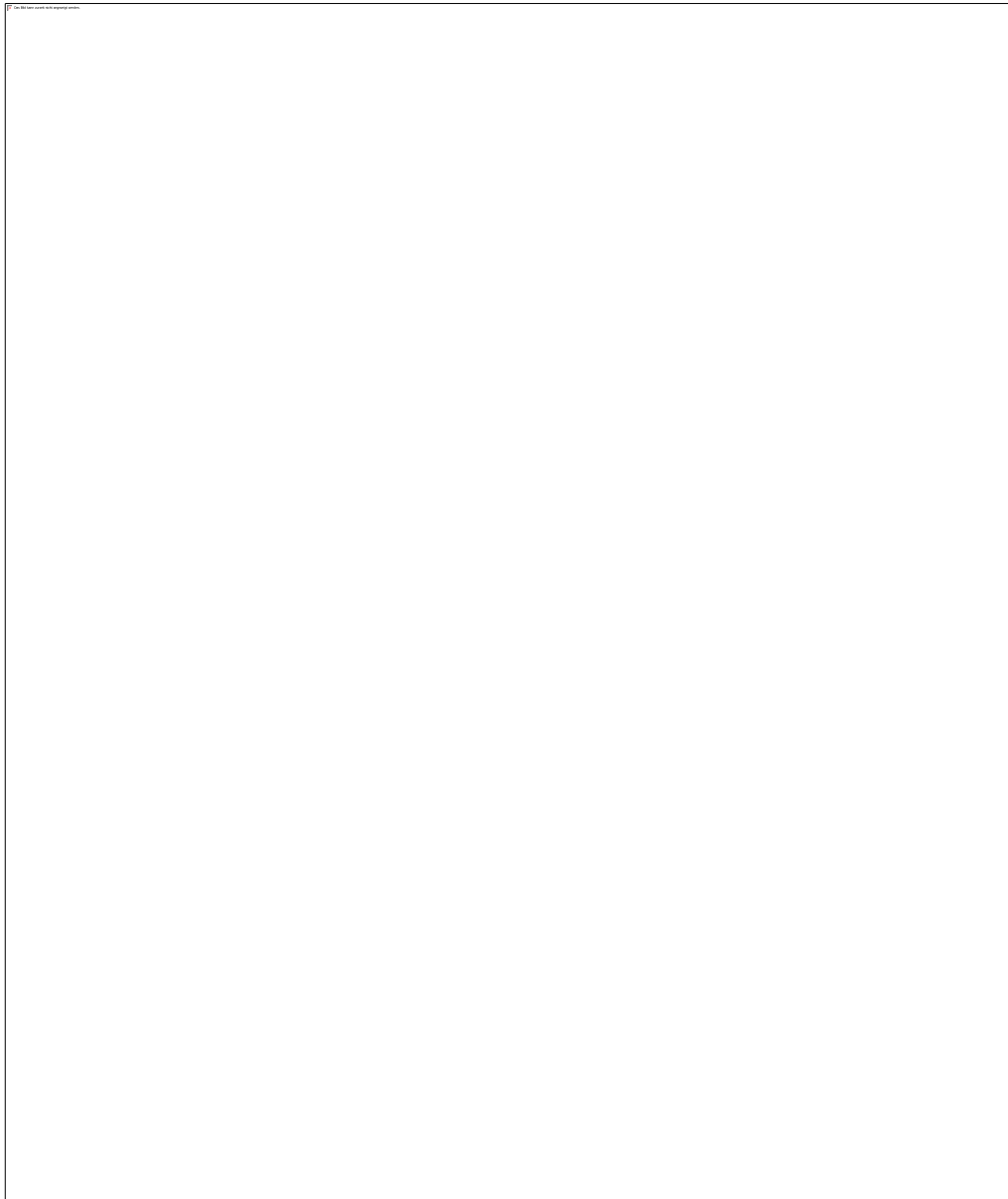
CEREBRAL CORTEX



HORIZONTAL LAYERS OF CEREBRAL CORTEX

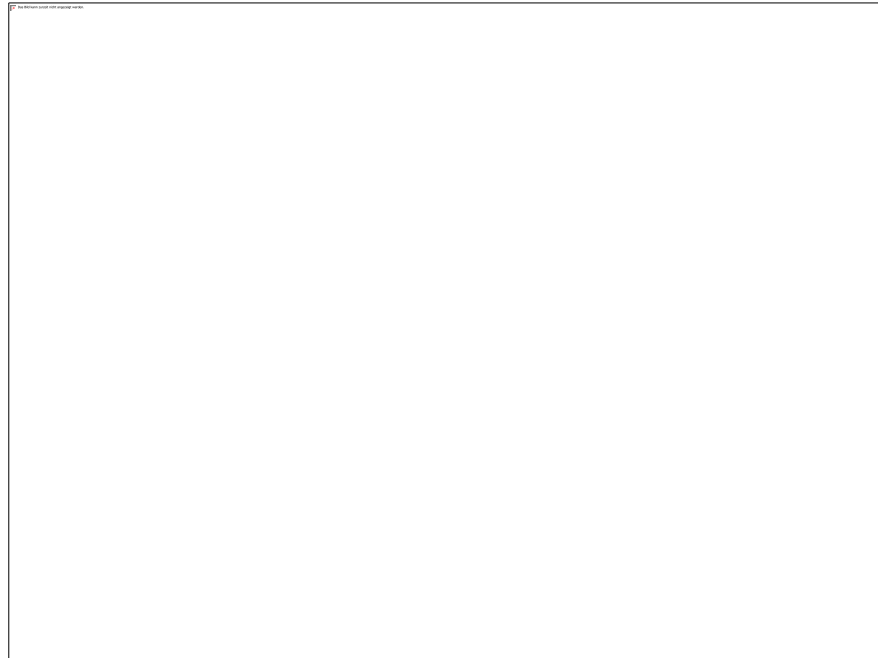
From superficial to deep, the six **layers** are:

- 1] Molecular layer — fiber layer; apical dendrites & non-specific afferents;
- 2] Outer granular cell layer — interneurons for non-specific afferent input;
- 3] Outer pyramidal cell layer — small and medium cells; short association output
- 4] Inner granular cell layer — interneurons for specific afferent input
- 5] Inner pyramidal layer — large cells; projection & long association output
- 6] Multiform layer — variably shaped cells; projection & long association



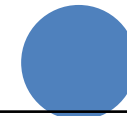
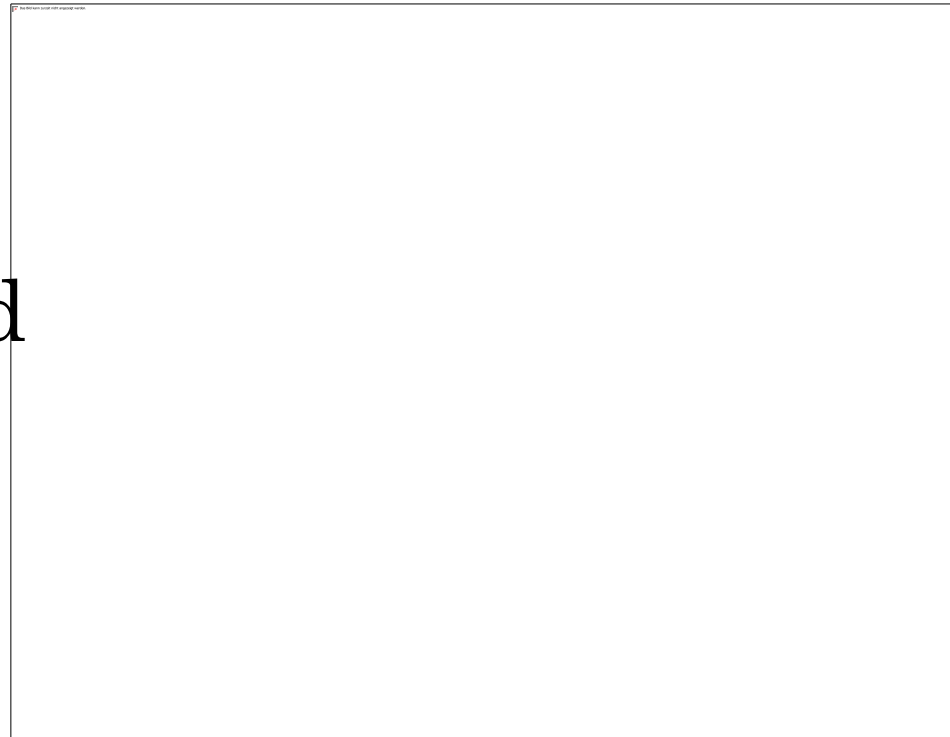
MOLECULAR LAYER

- Contains dendrites and axons of cortical neurons making synapses with one another



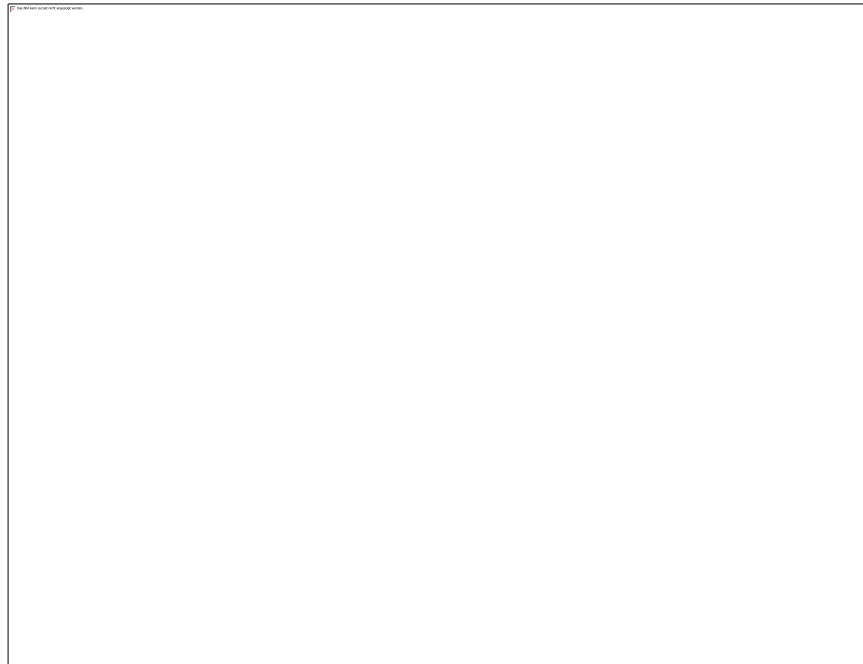
OUTER GRANULAR LAYER

- Formed of densely populated pyramidal and stellate cells



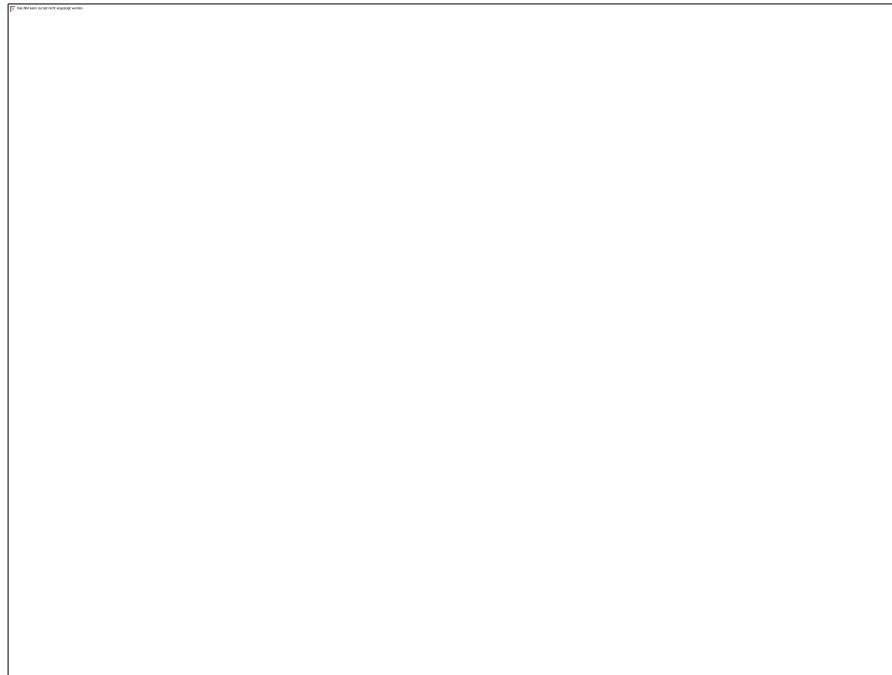
PYRAMIDAL LAYER

- Dominated by pyramidal cells



INNER GRANULAR LAYER

- Formed of densely packed stellate cells



GANGLIONIC LAYER

- Large pyramidal cells and smaller number of stellate cells and cells of Martinotti make this layer.



MULTIFORM LAYER

- Wide variety of different morphological forms of cells are found in this layer.
- It contains pyramidal cells and cells of Martinotti, as well as stellate cells.

