

# Nervous system

*Cortex cerebri*

*Cerebellum (impregnation)*

Spinal cord

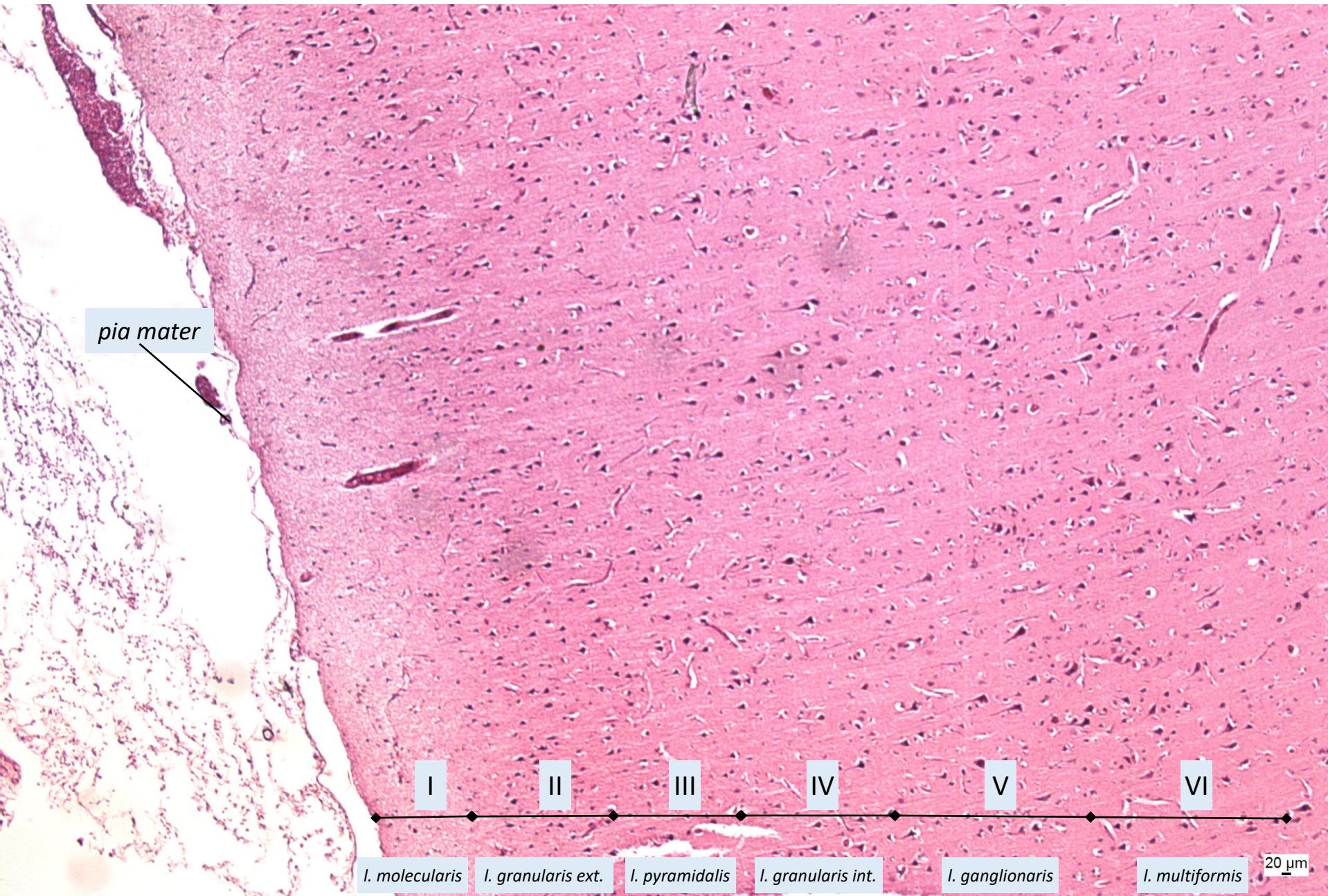
*Plexus choroideus*

*Ganglion spinale*

Autonomic ganglion

Peripheral nerve

# Cerebral cortex



# *Cortex cerebri* - izocortex

Cyto- and myeloarchitecture

## **Laminae (layers):**

- I. *I. zonalis* (cells of Cajal, band of Exner)
- II. *I. granularis externa* (stelate cells)
- III. *I. pyramidalis (externa)* (small + middle pyramidal cells, band of Bechterev)
- IV. *I. granularis interna* (stelate cells, cells of Martinotti)
- V. *I. ganglionaris (pyramidalis interna)* (large pyramidal cells of Betz, cells of Martinotti, inner band of Baillarger)
- VI. *I. multiformis* (fusiform cells, granular cells, cells of Martinotti, band of Meynert)

I. L. molecularis  
(zonalis)

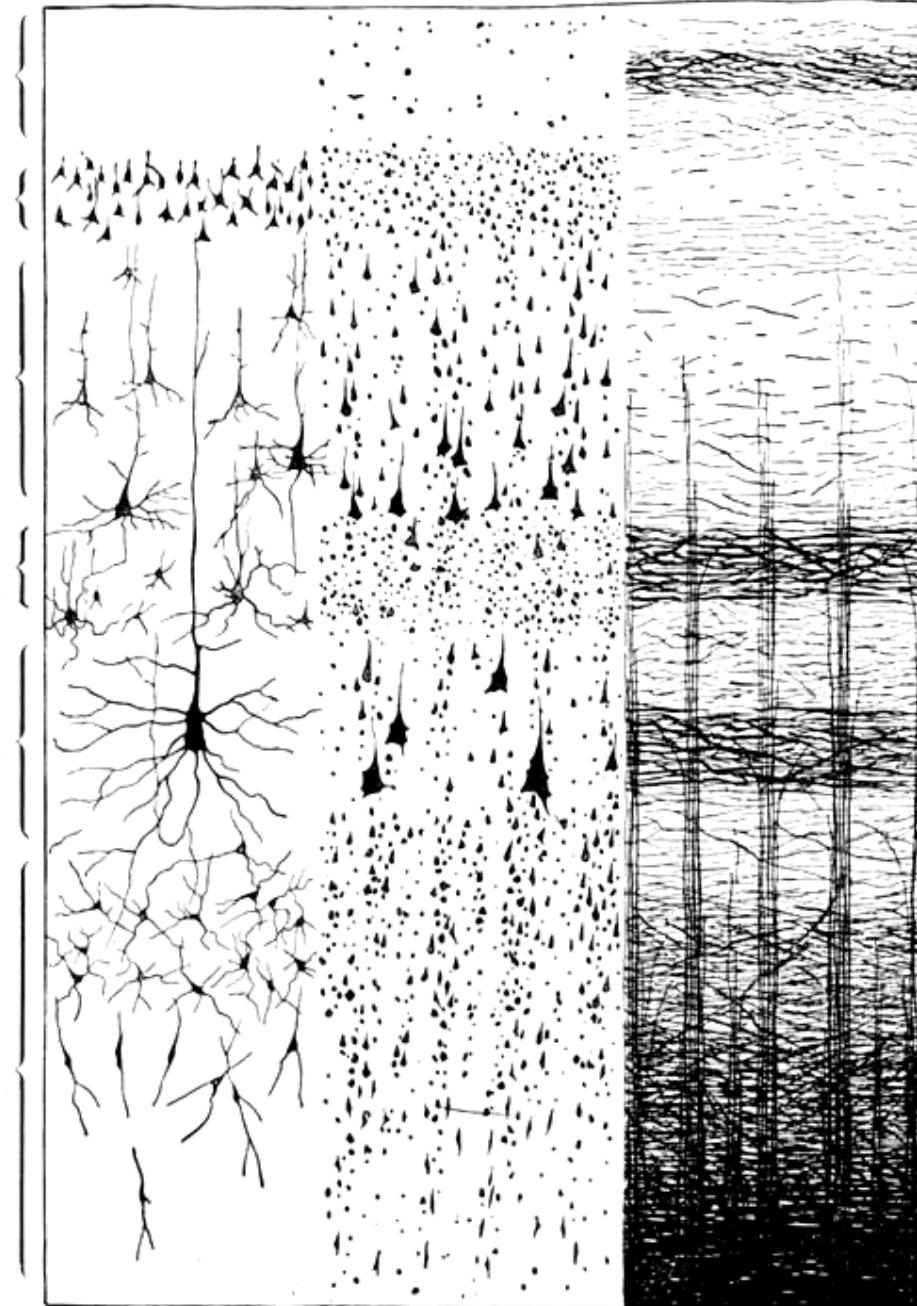
II. L. granularis ext.

III. L. pyramidalis

IV. L. granularis int.

V L. ganglionaris

VI. L. multiformis



Exner

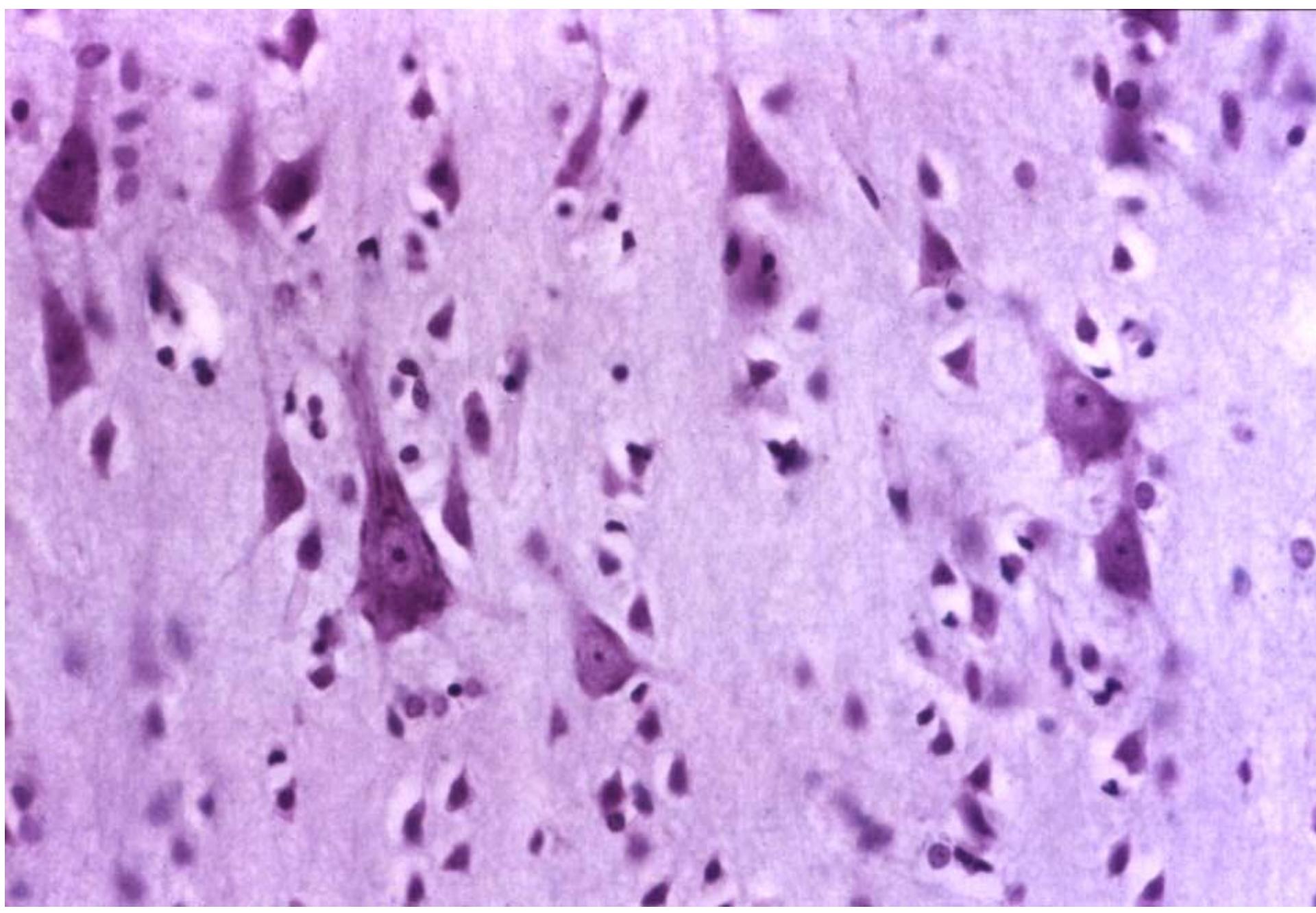
Bechterev

outer Baillarger

inner Baillarger

Meynert

*Lamina ganglionaris (pyramidalis interna)* – large pyramidal neurons

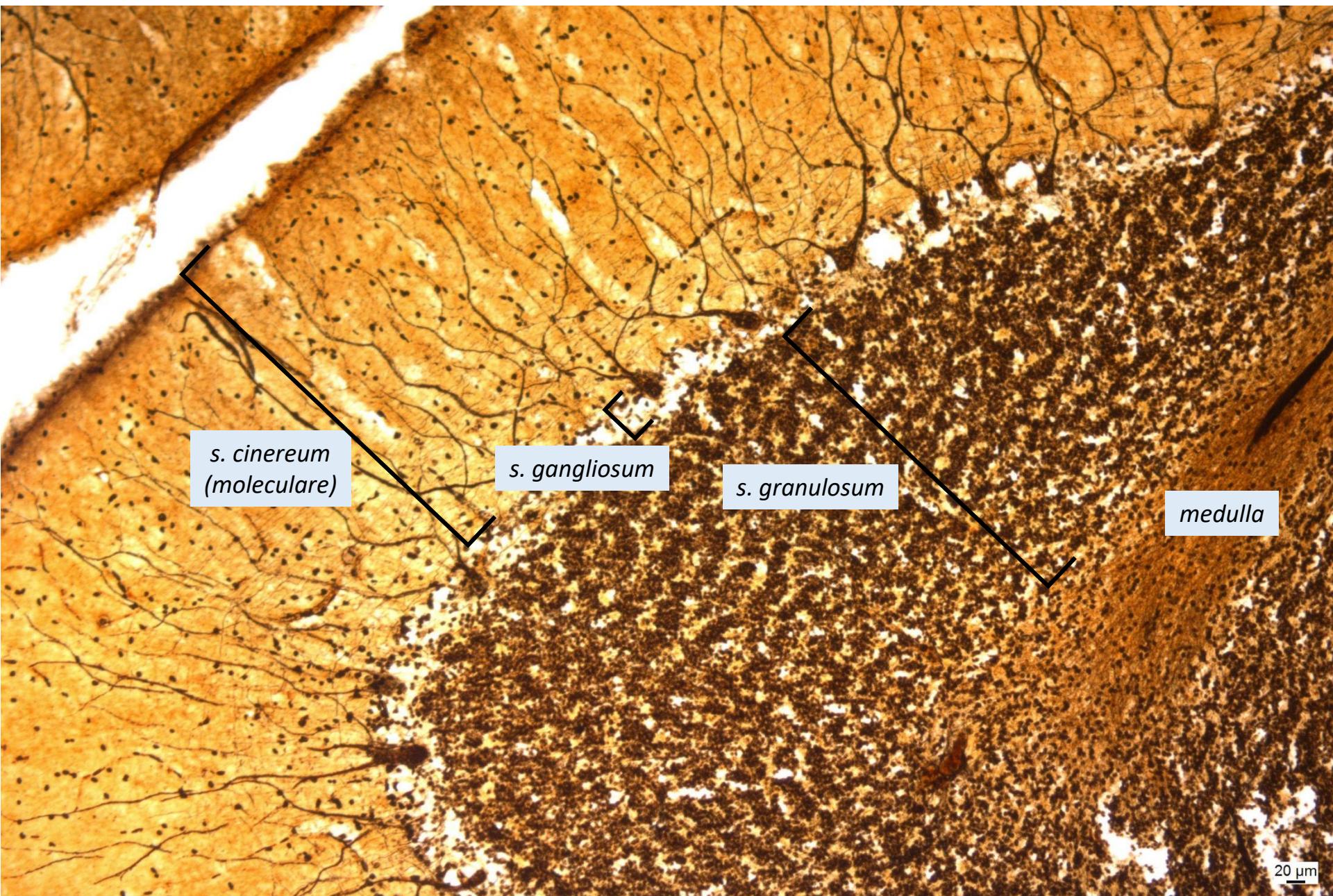


# Cerebellum

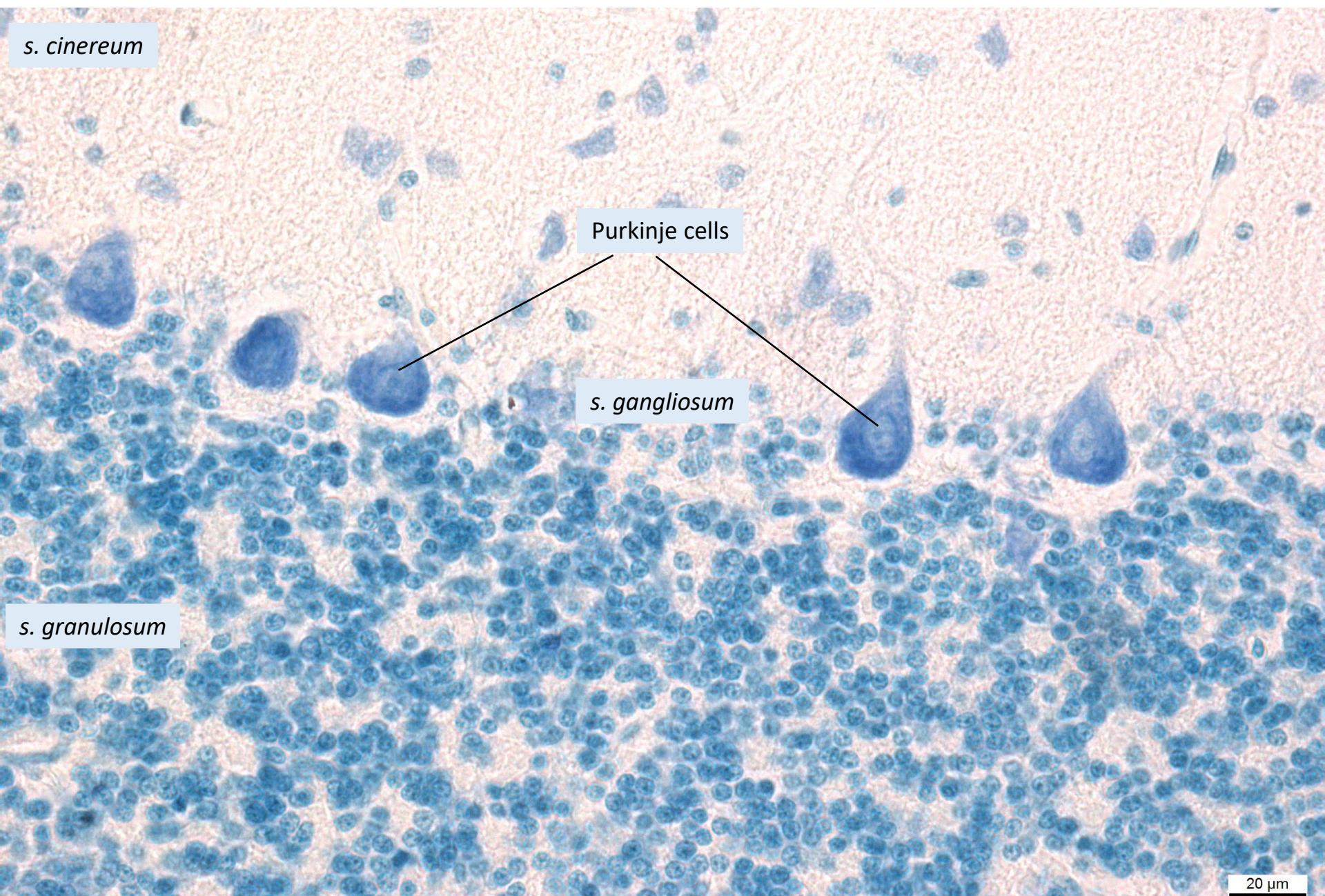


$20 \mu\text{m}$

# Cerebellar cortex

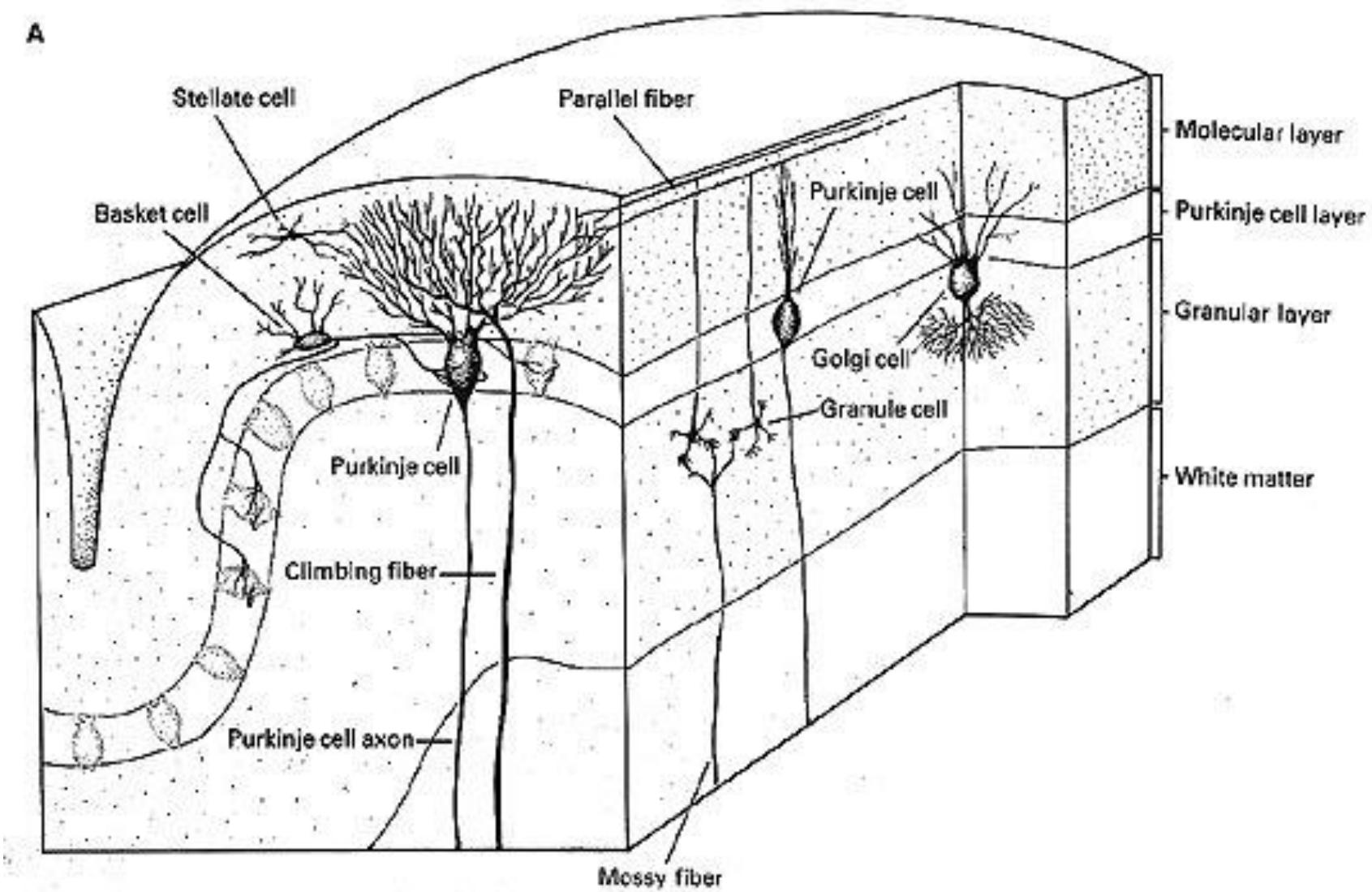


# Cerebellar cortex – Purkinje cells

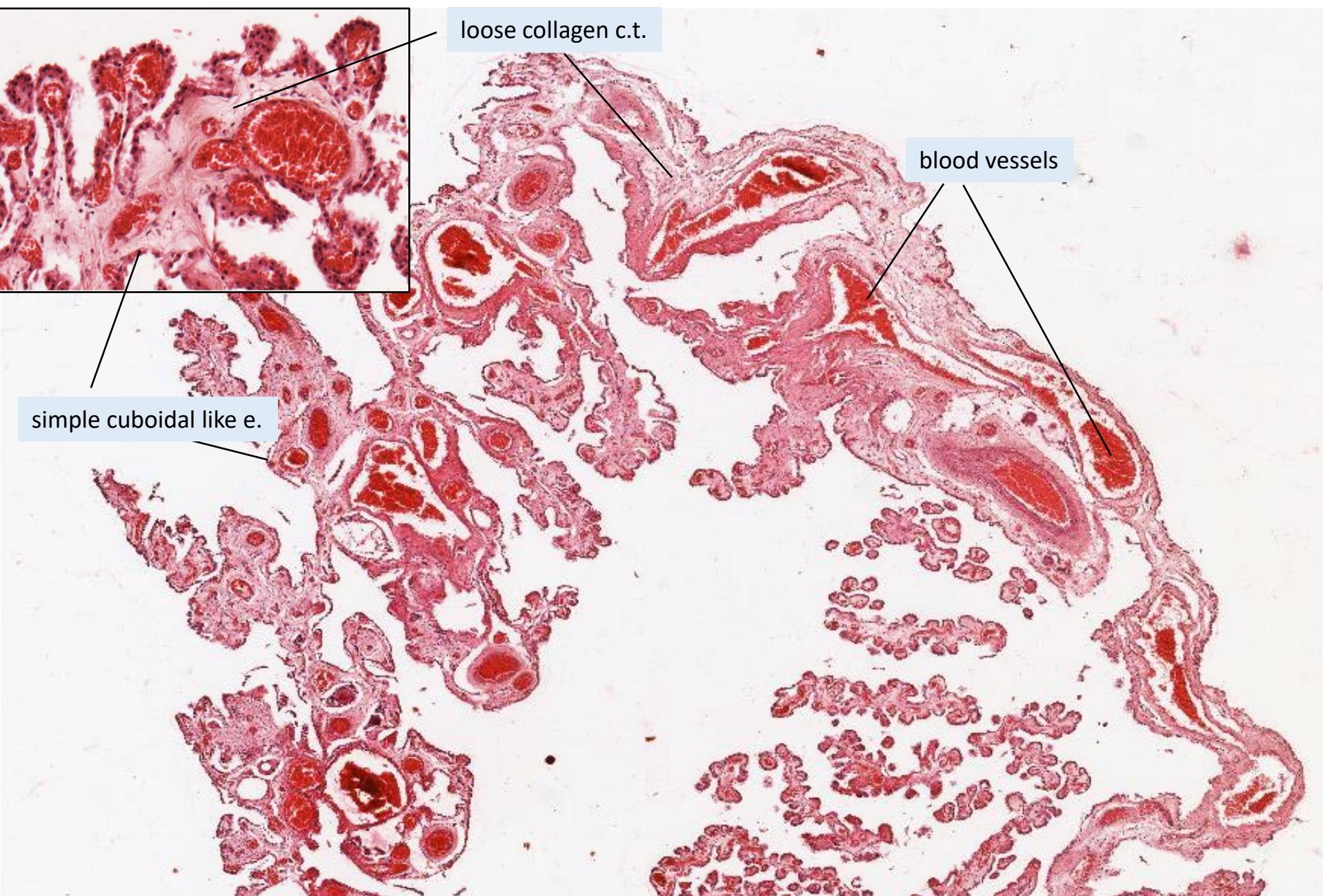


# Cerebellum – neuron synapses

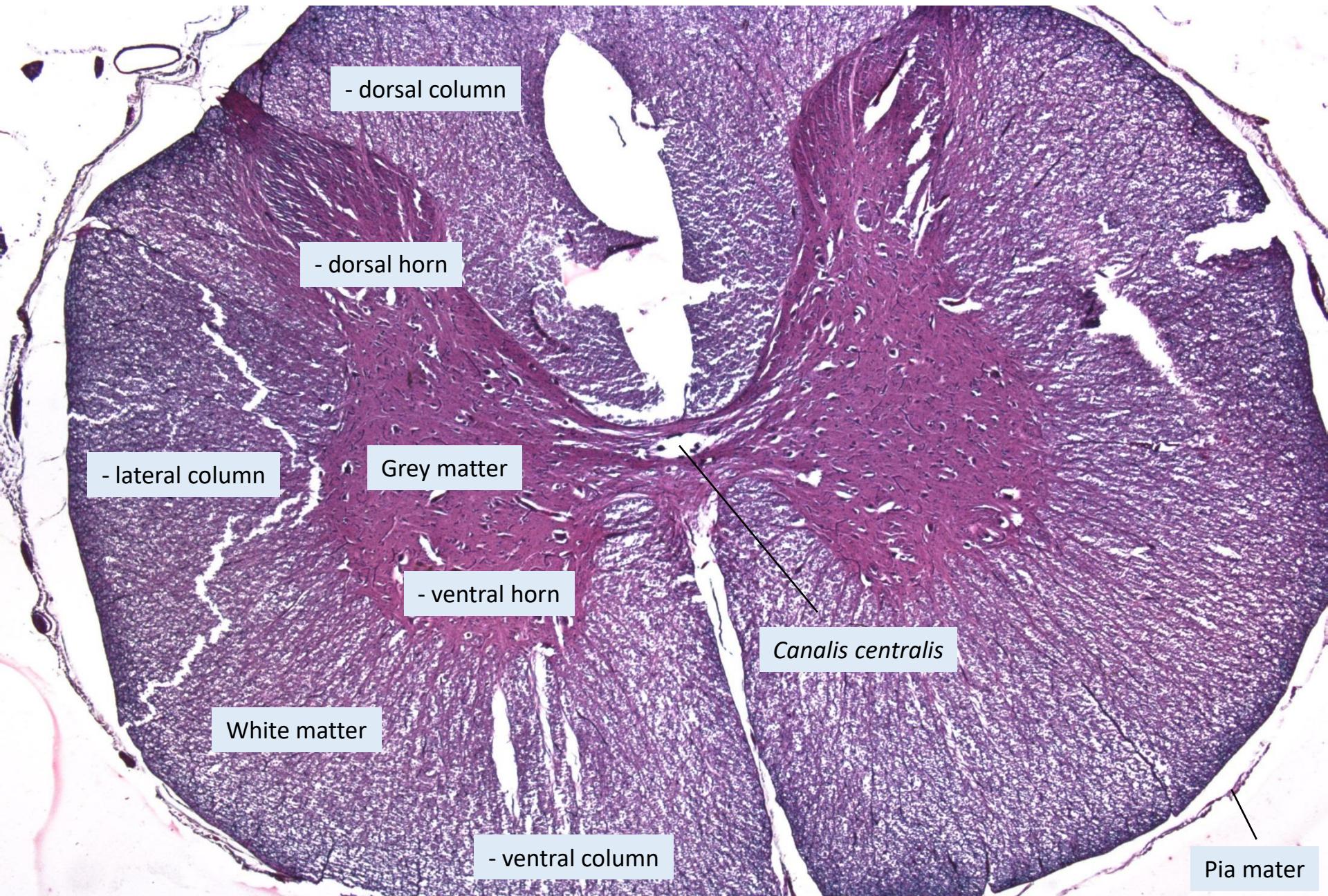
A

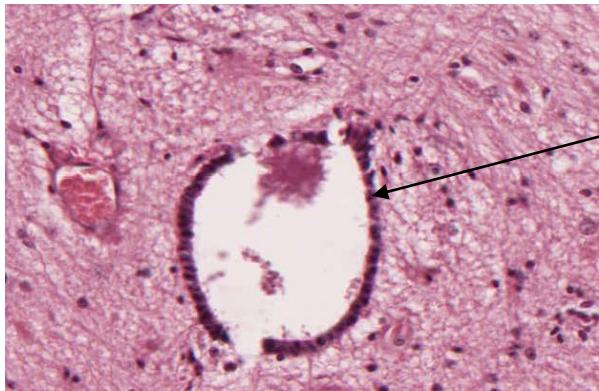


# Choroid plexus



# Spinal cord



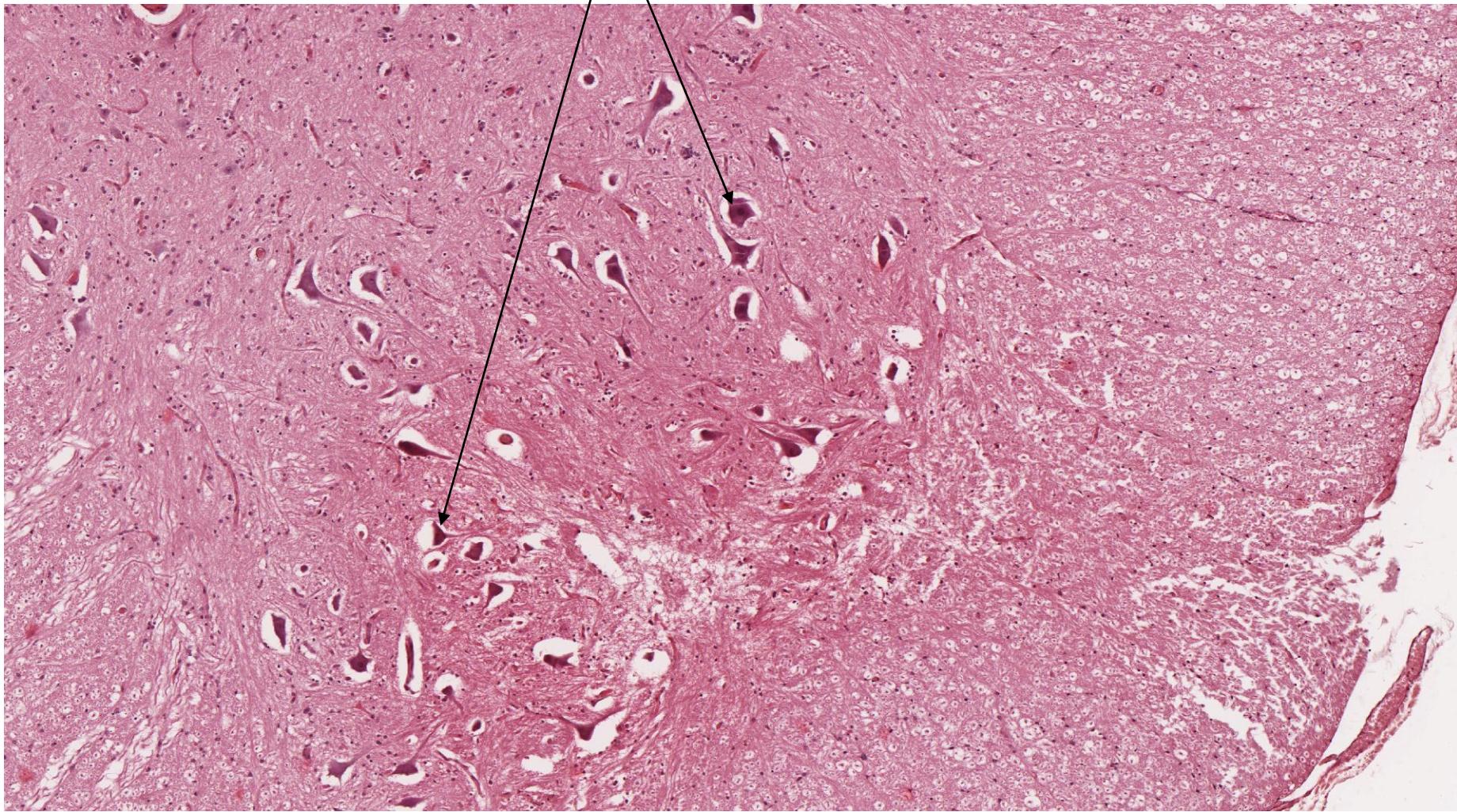


ependyma

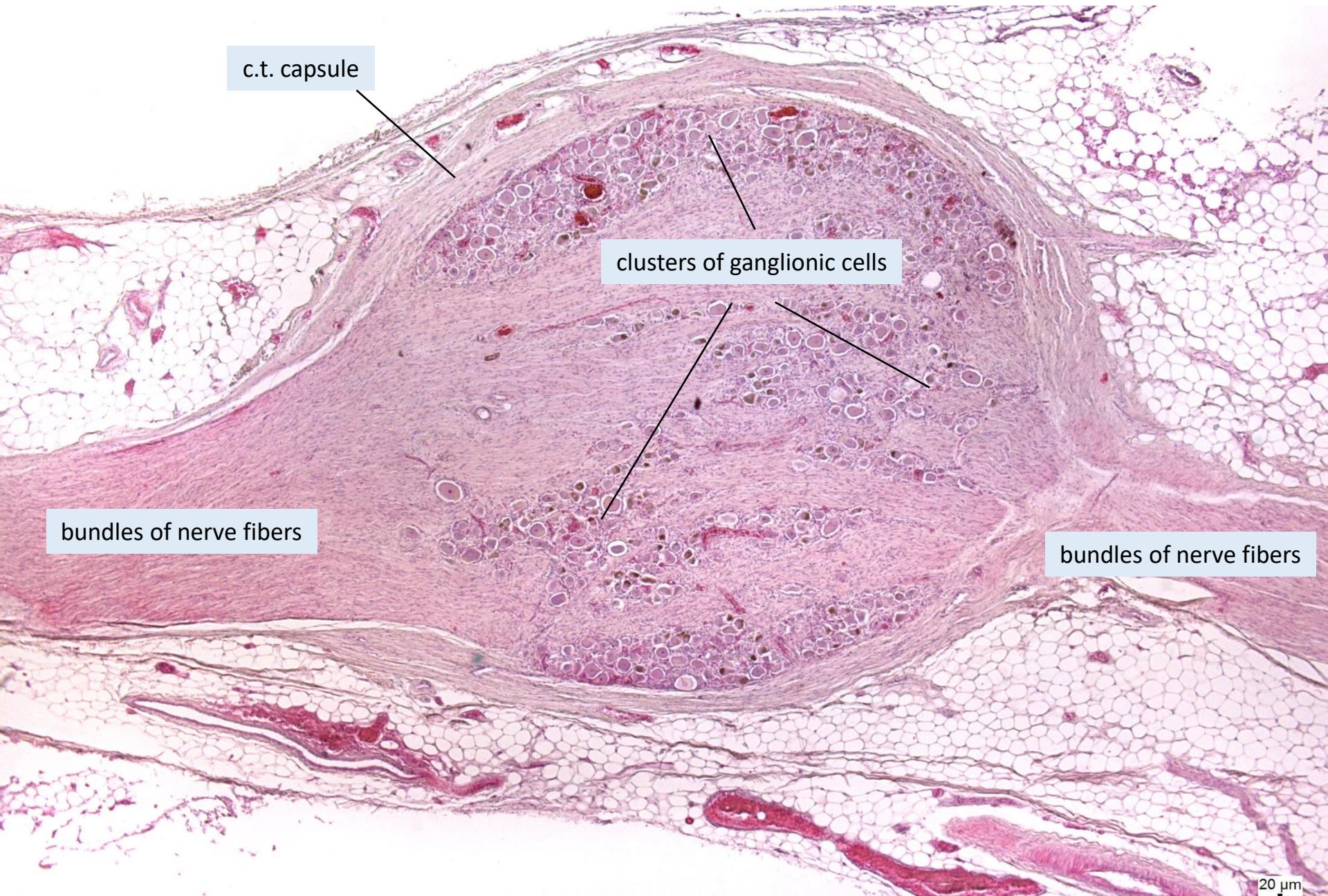
# Spinal cord

motor neurons

white matter

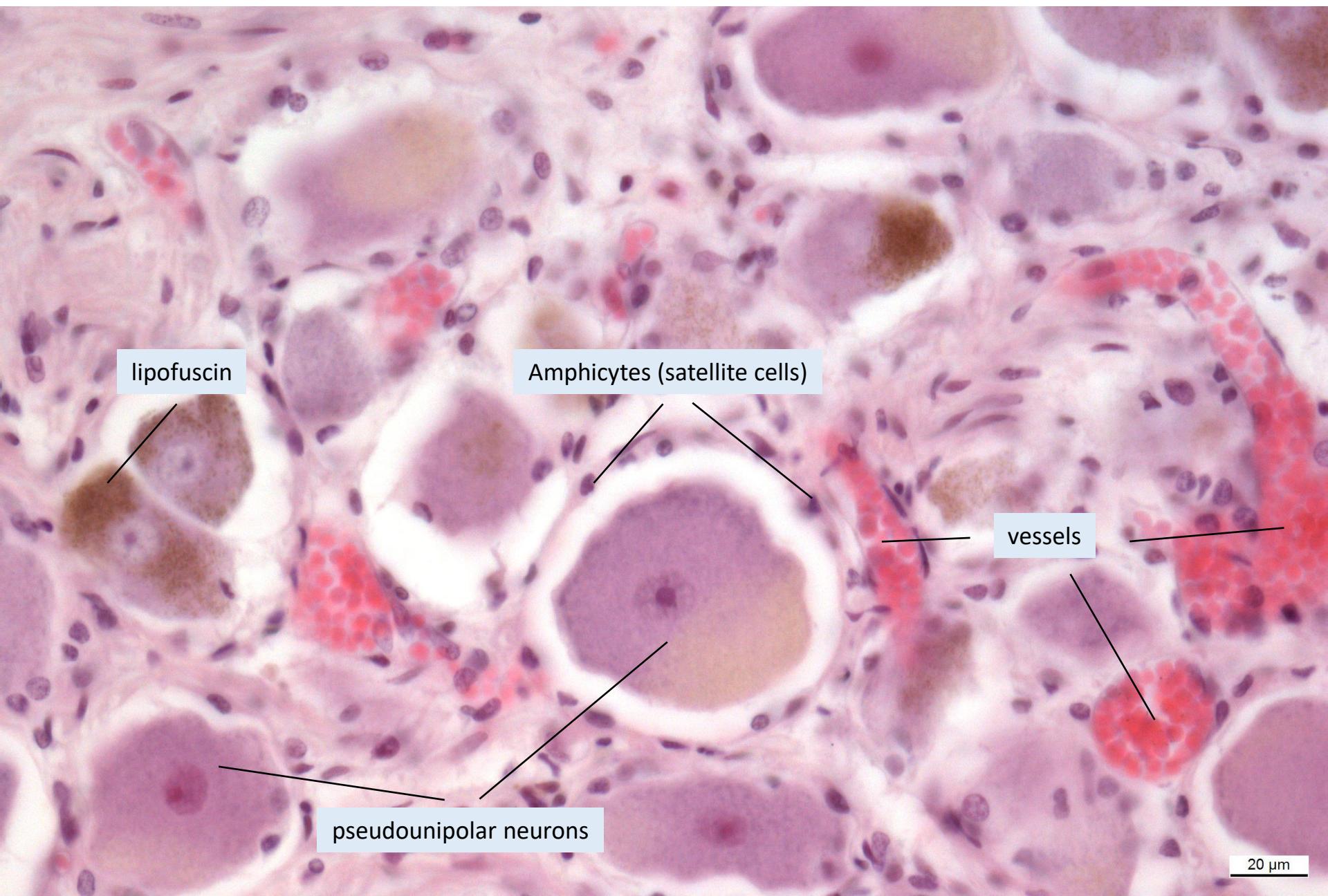


# Spinal ganglion



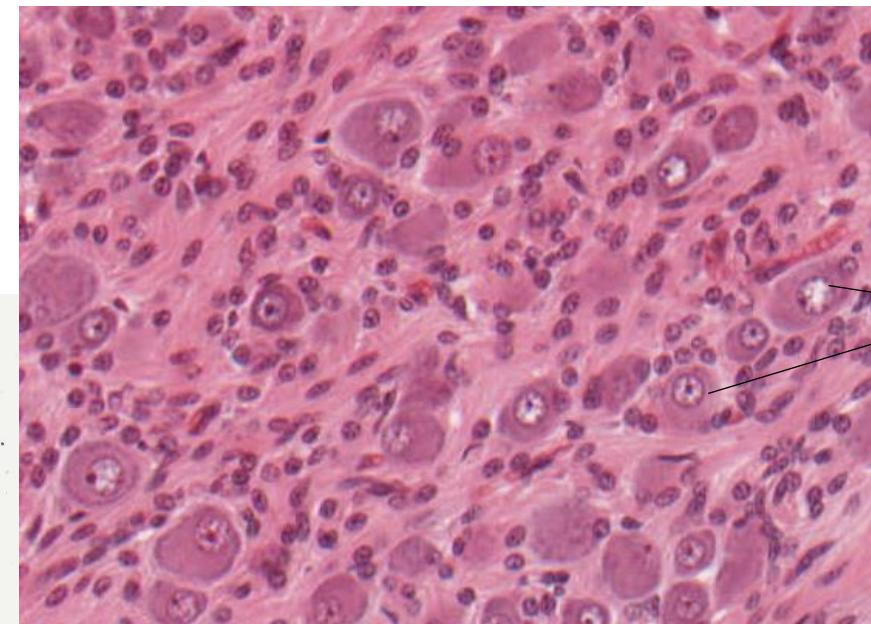
20  $\mu\text{m}$

# Spinal ganglion

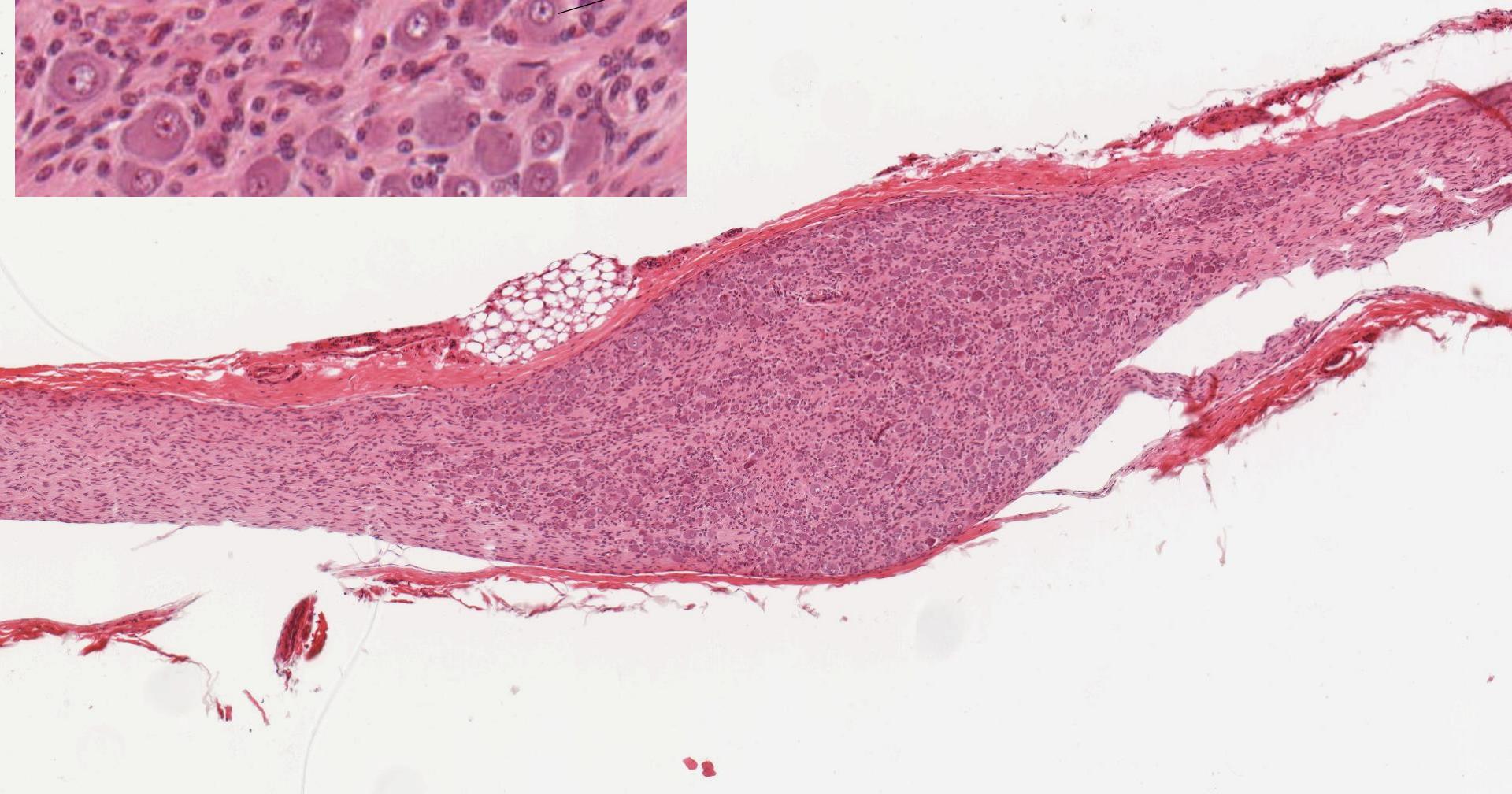


20 µm

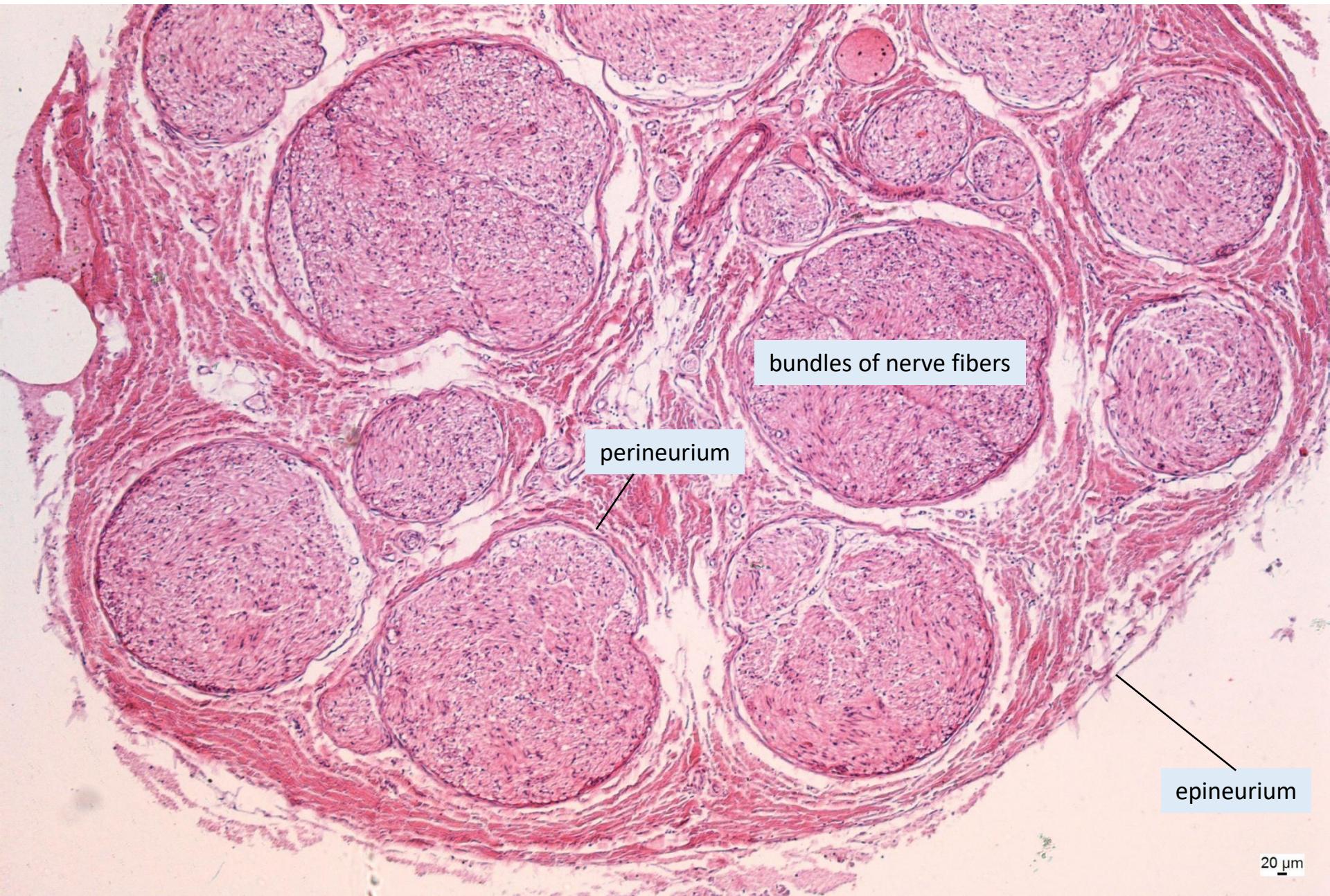
# Autonomic ganglion



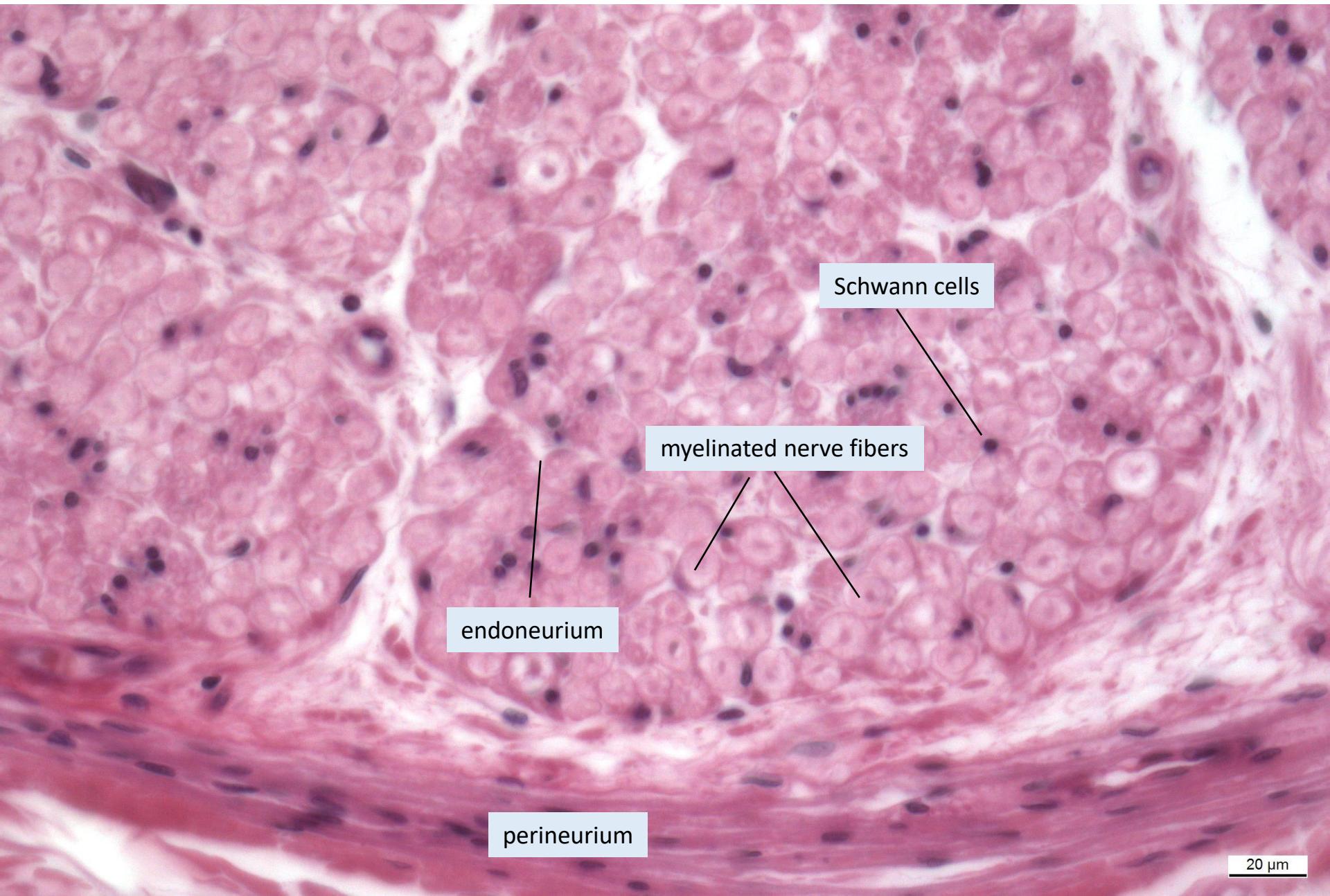
multipolar neurons



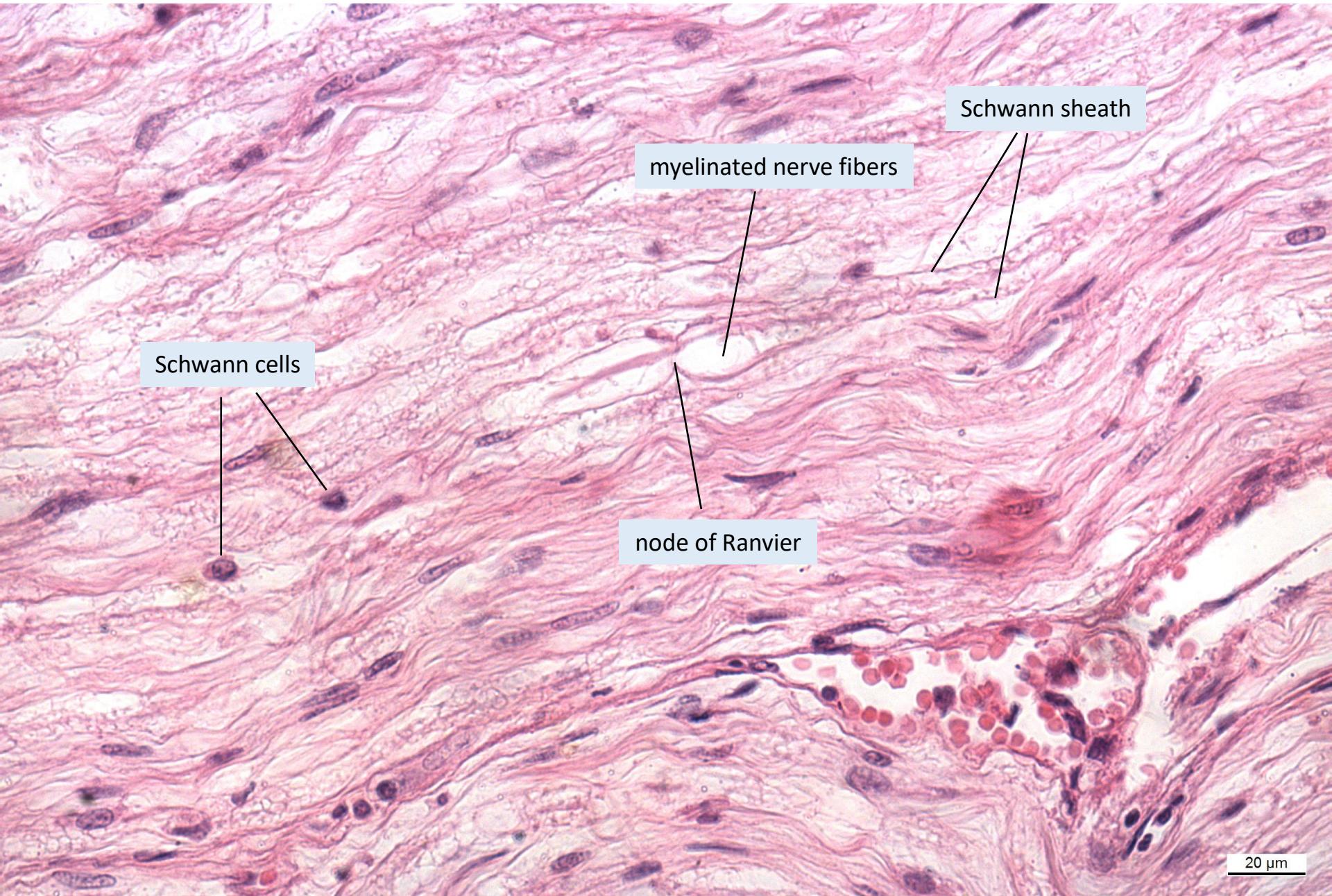
# Peripheral nerve



# Peripheral nerve

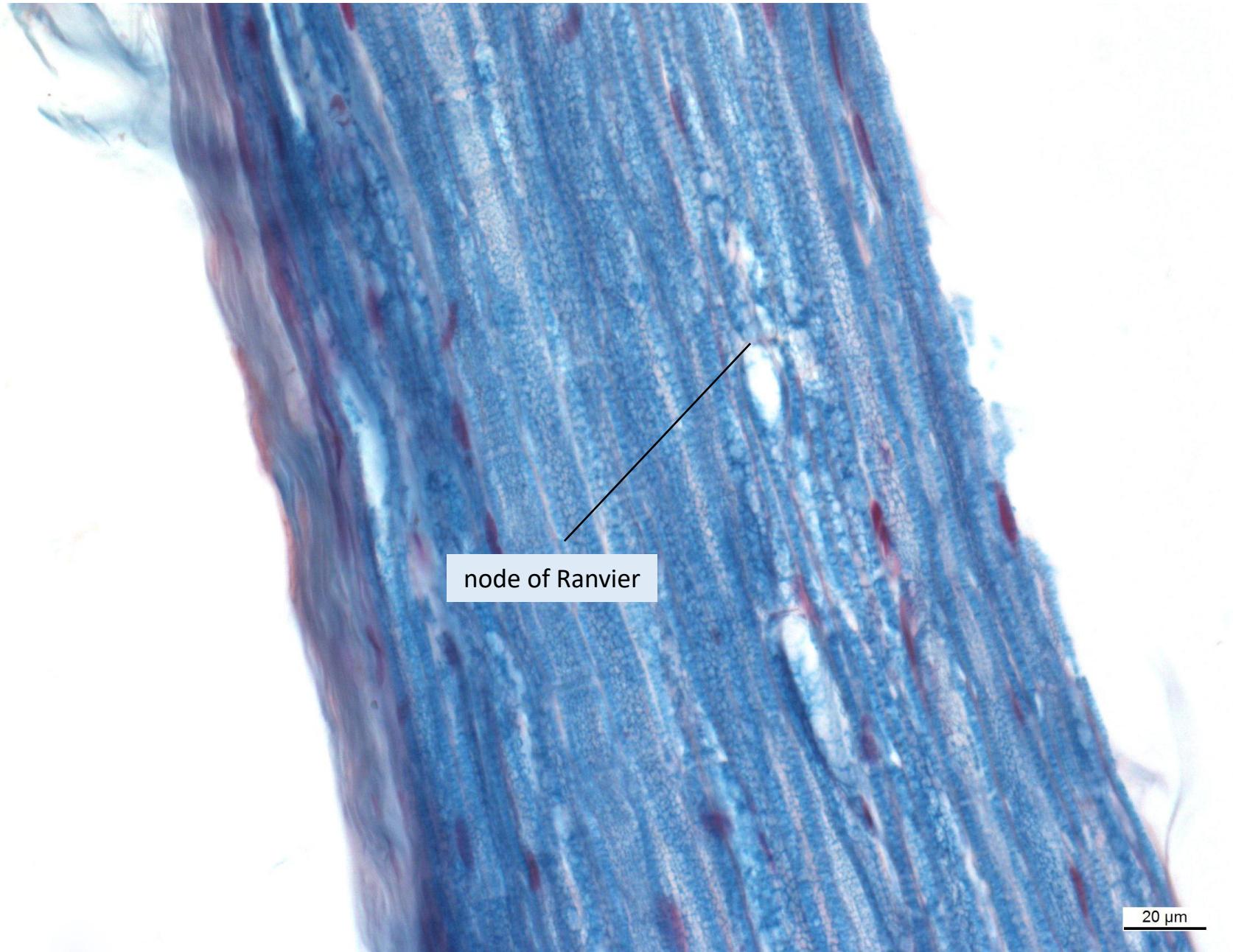


# Peripheral nerve

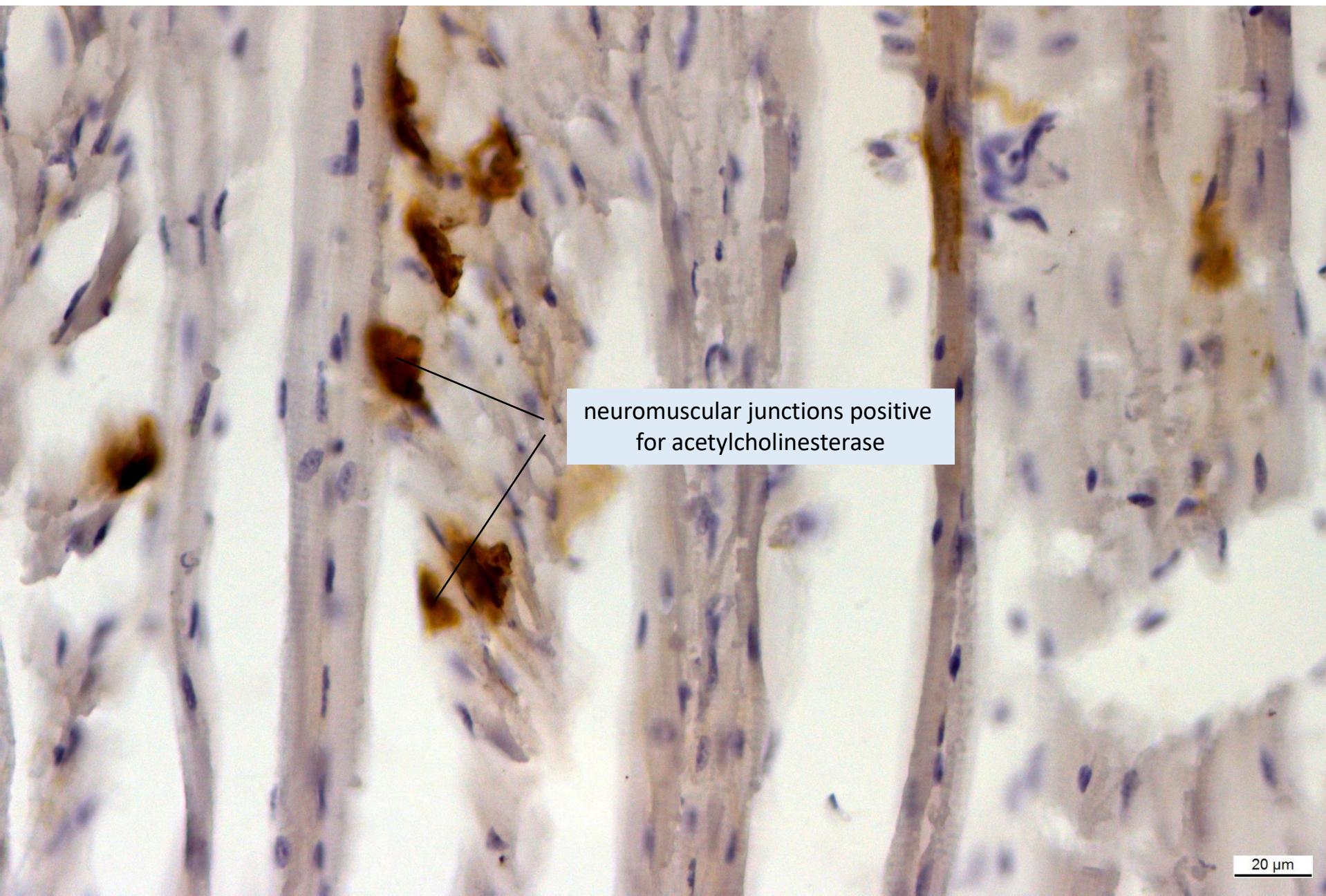


$20 \mu\text{m}$

# Peripheral nerve



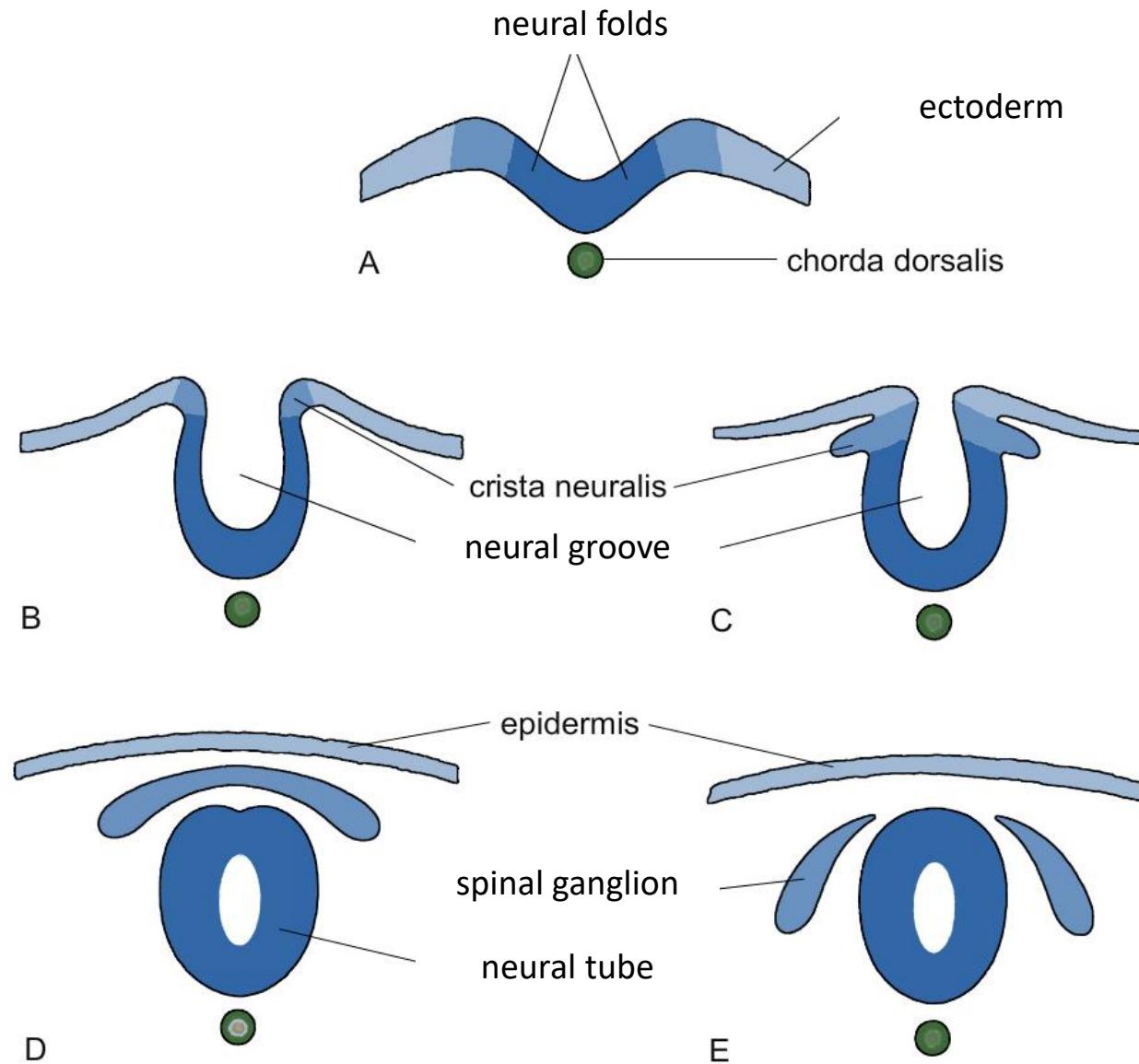
# Neuromuscular junction

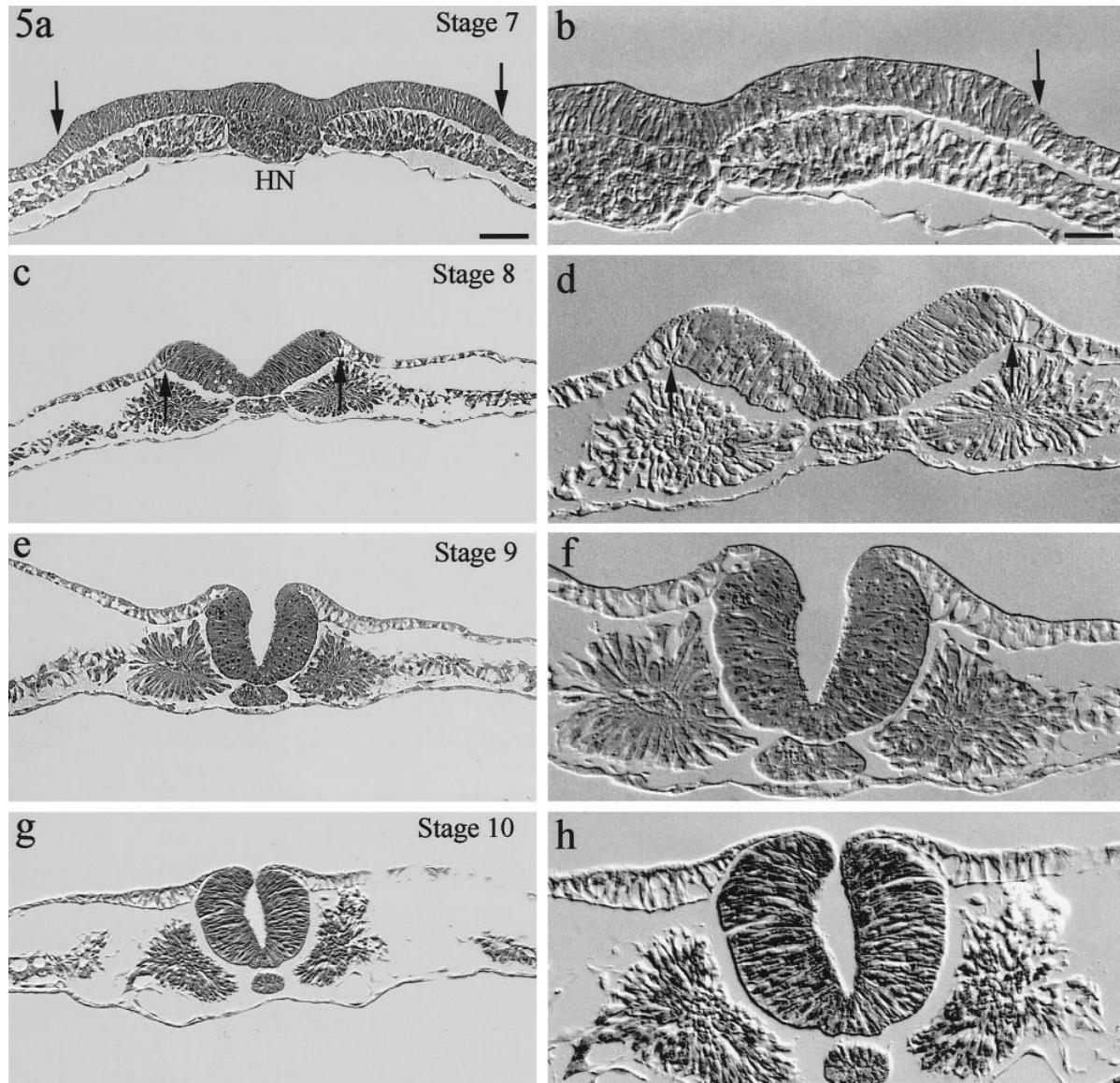


# List of slides

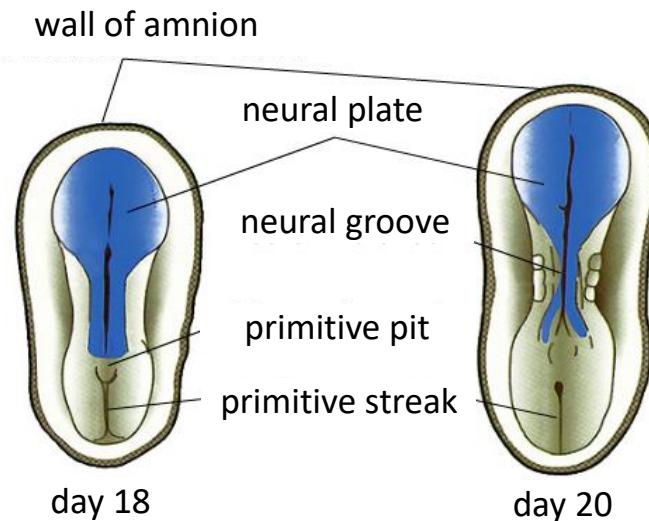
- 75. *Cortex cerebri*
- 76. *Cortex cerebri* (impregnation)
- 77. *Cerebellum* (impregnation)
- 78. *Cerebellum* (Nissl substance)
- 79. *Medulla spinalis*
- 80. *Plexus choroideus*
- 81. *Ganglion spinale*
- 82. *Ganglion spinale* (impregnation)
- 83. *Ganglion autonomic*
- 84. Peripheral nerve – cross section
- 85. Peripheral nerve – cross section (myelin)
- 86. Peripheral nerve – longitudinal section
- 87. Peripheral nerve – longitudinal section (myelin)

# Development of neural tube



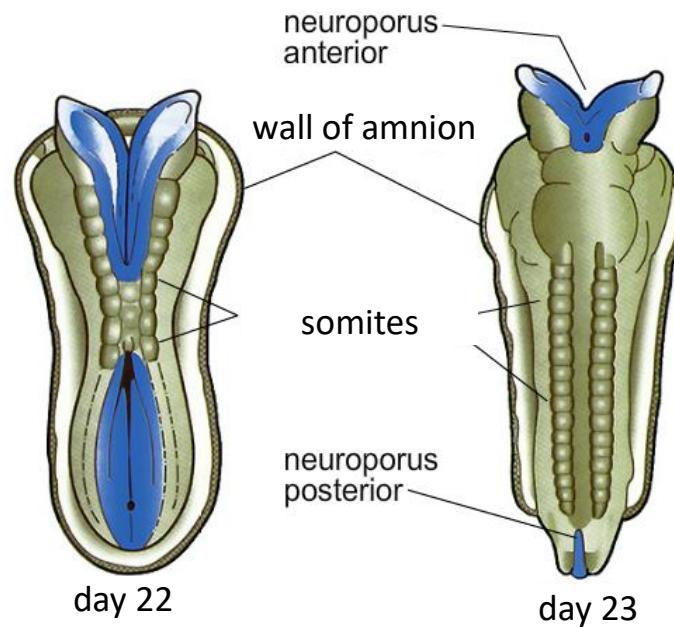


# Closing of neural tube



day 18

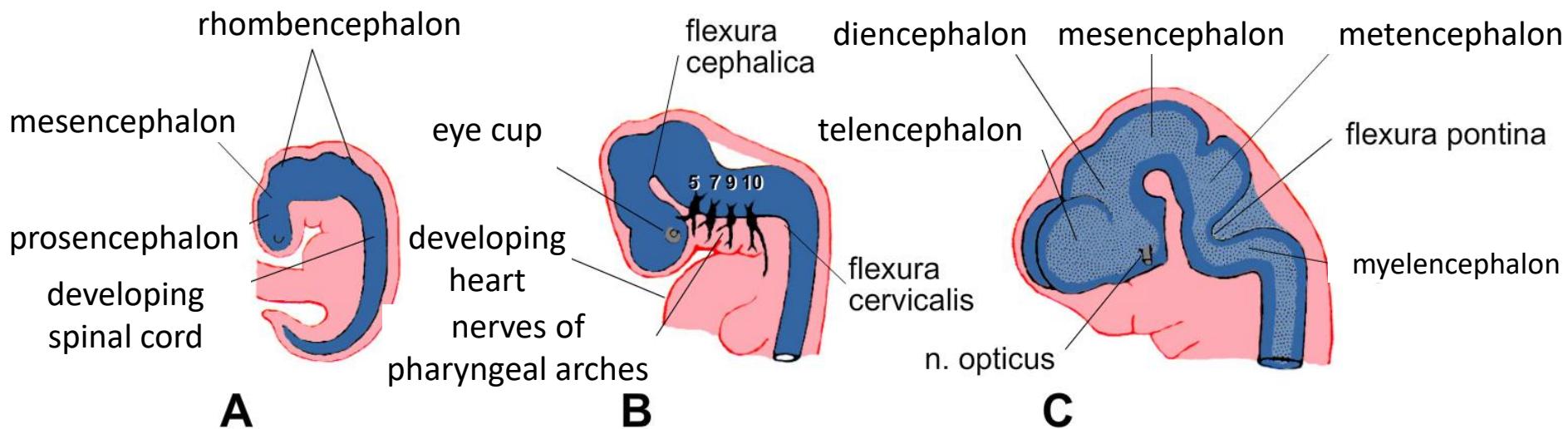
day 20



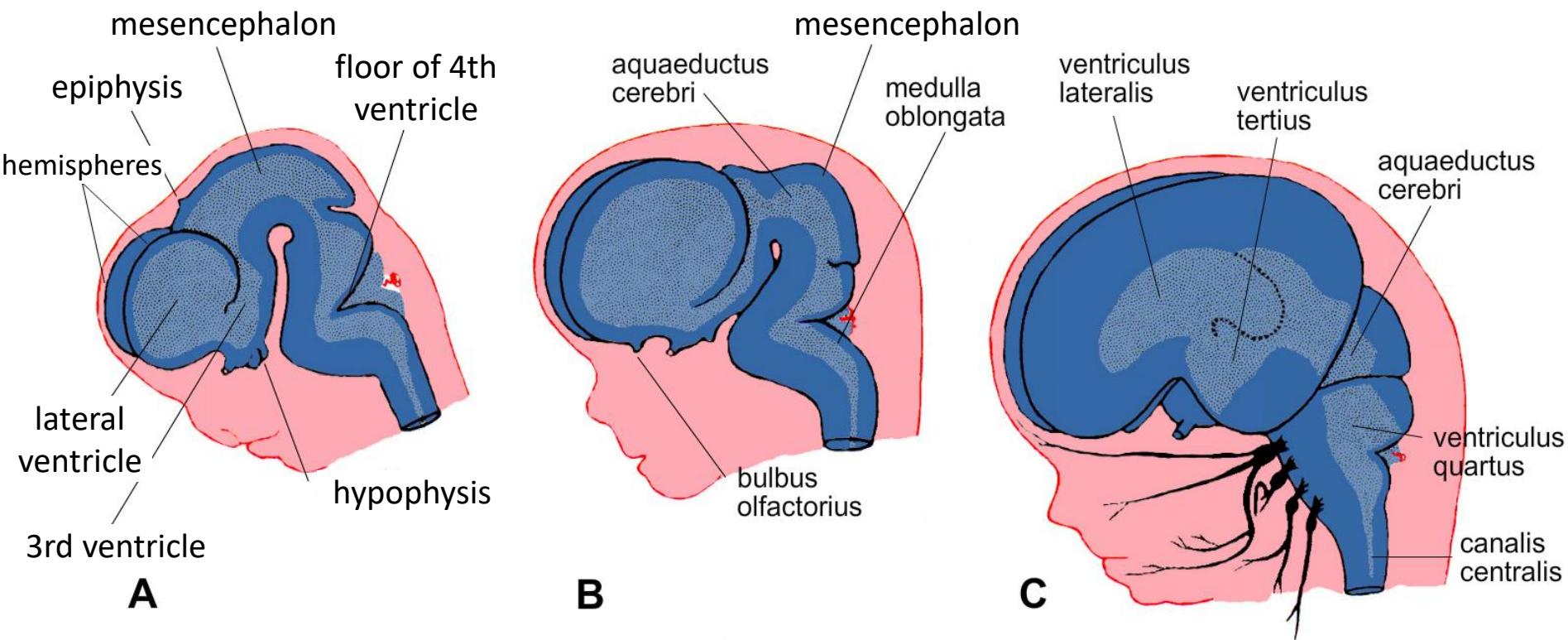
day 22

day 23

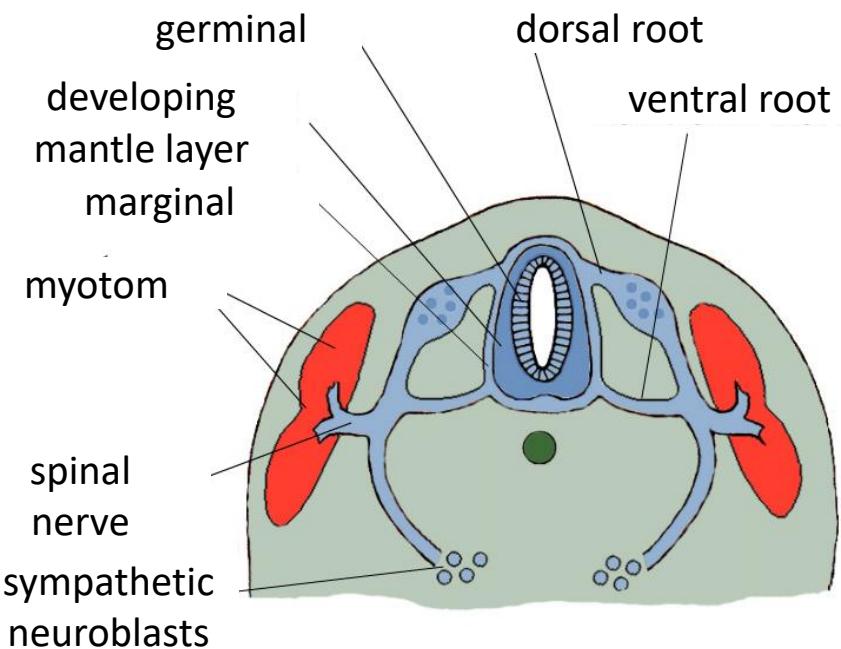
# Development of brain



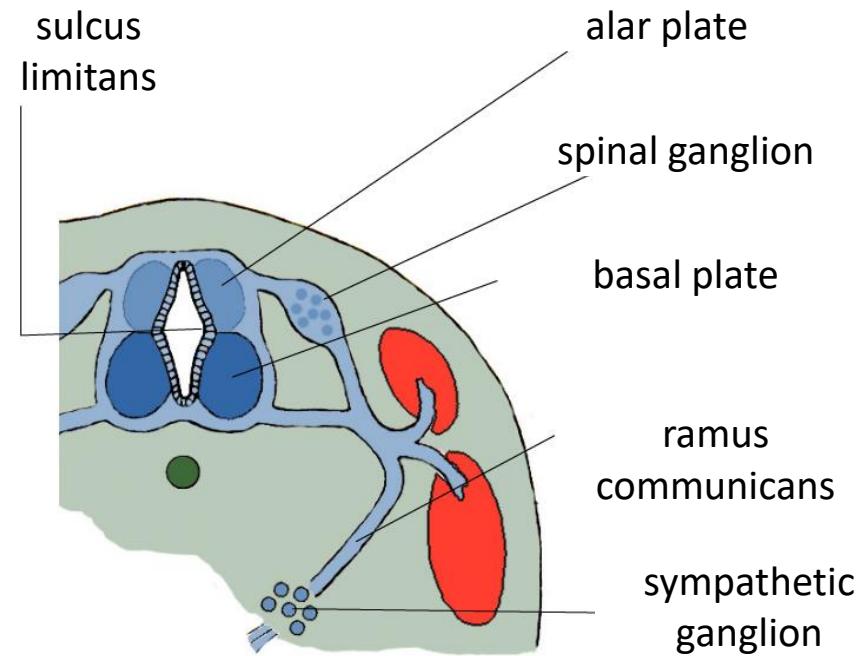
# Development of brain



# Development of spinal cord



A



B