



# Nerve tissue

- Neurons

- Glial cells

CNS: oligodendrocytes, astrocytes,  
ependymal cells, microglia

PNS: satellite cells, Schwann's  
cells

Synapse

Myelin sheath



Cortex cerebri

pia mater

lamina molecularis

lamina granularis externa

lamina pyramidalis

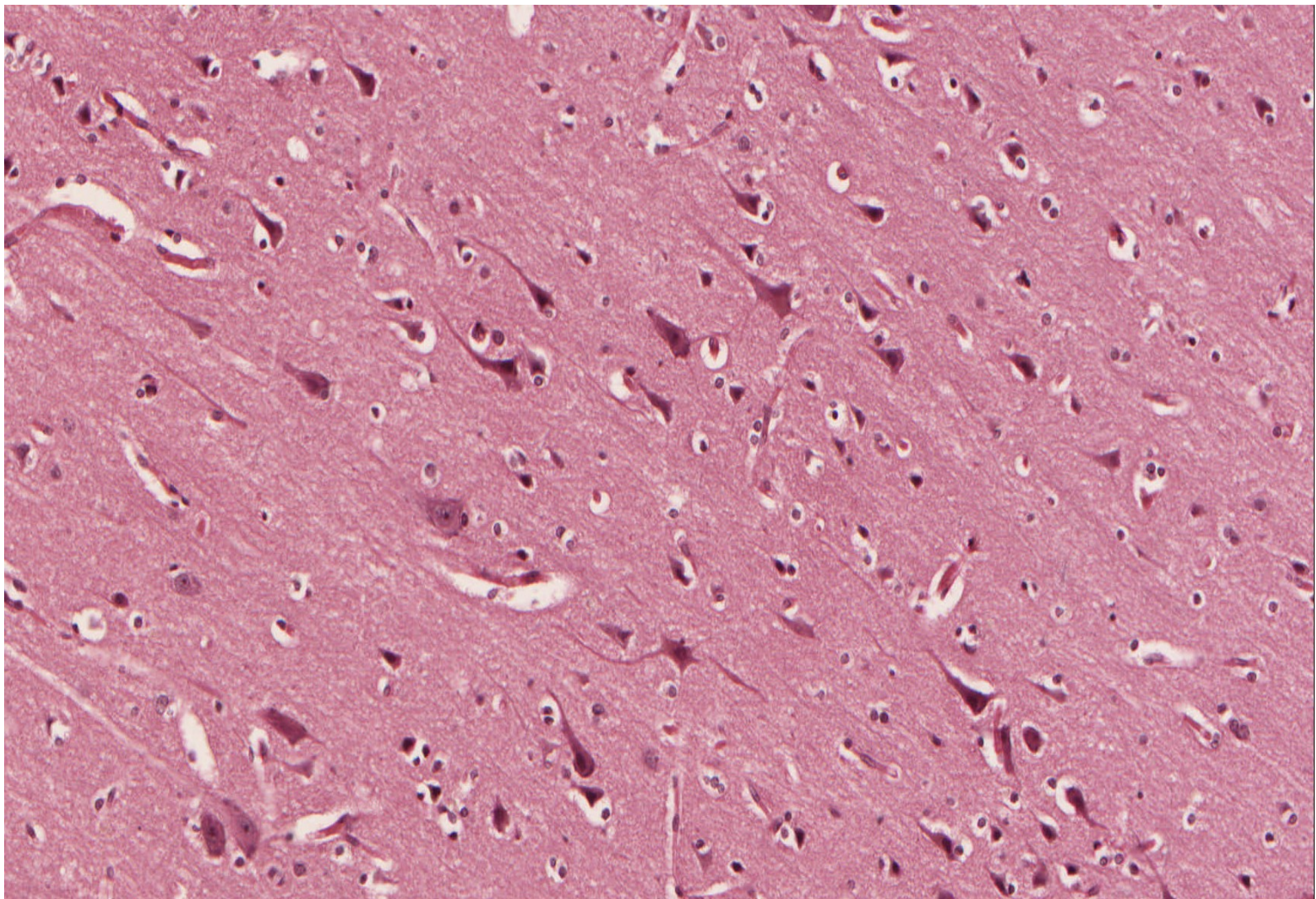
lamina granularis interna

lamina ganglionaris

lamina multiformis

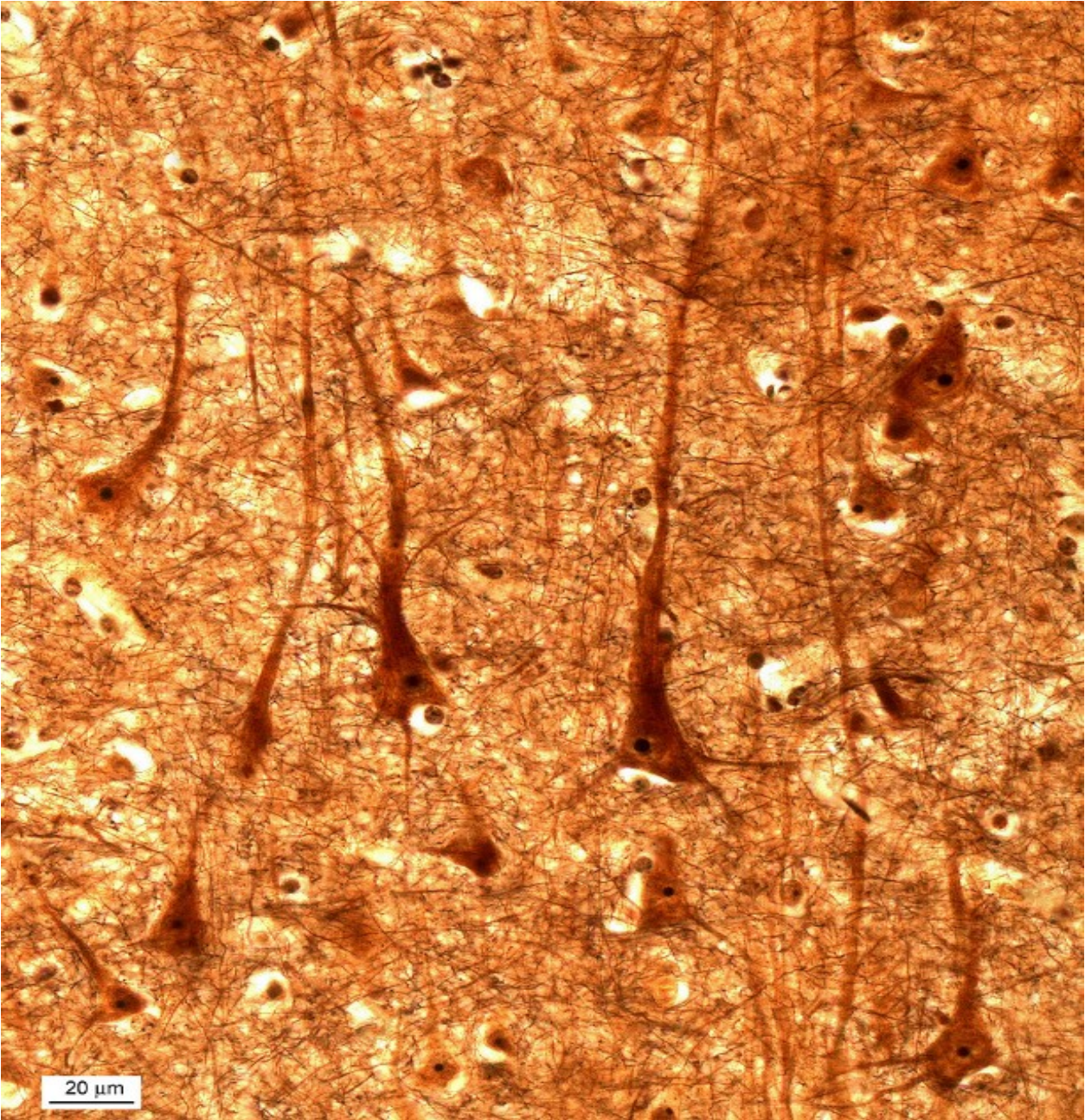


# Cortex cerebri – Pyramidal cells – multipolar neurons



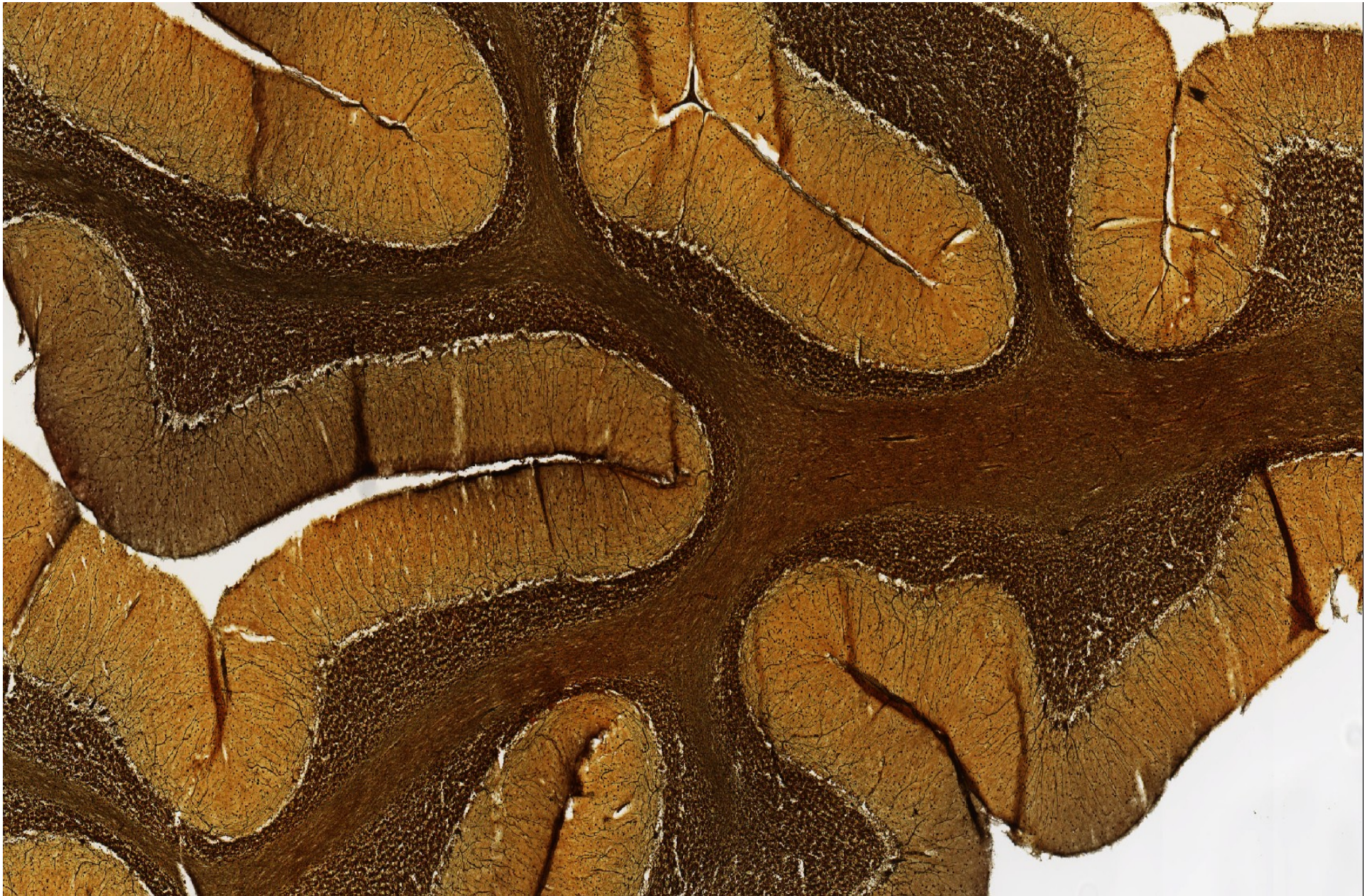


# Cortex cerebri – Pyramidal cells – multipolar neurons



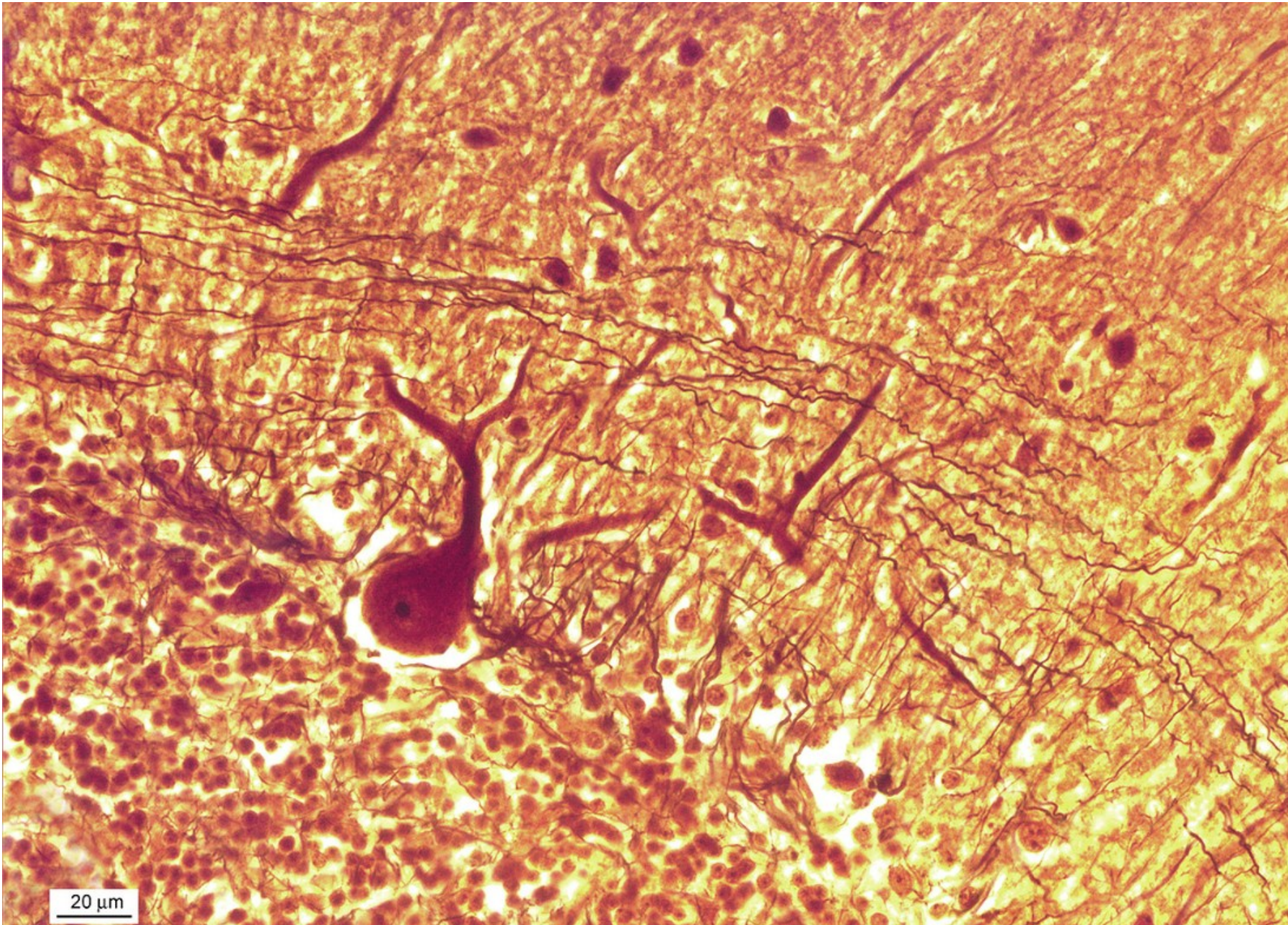


Cerebellum



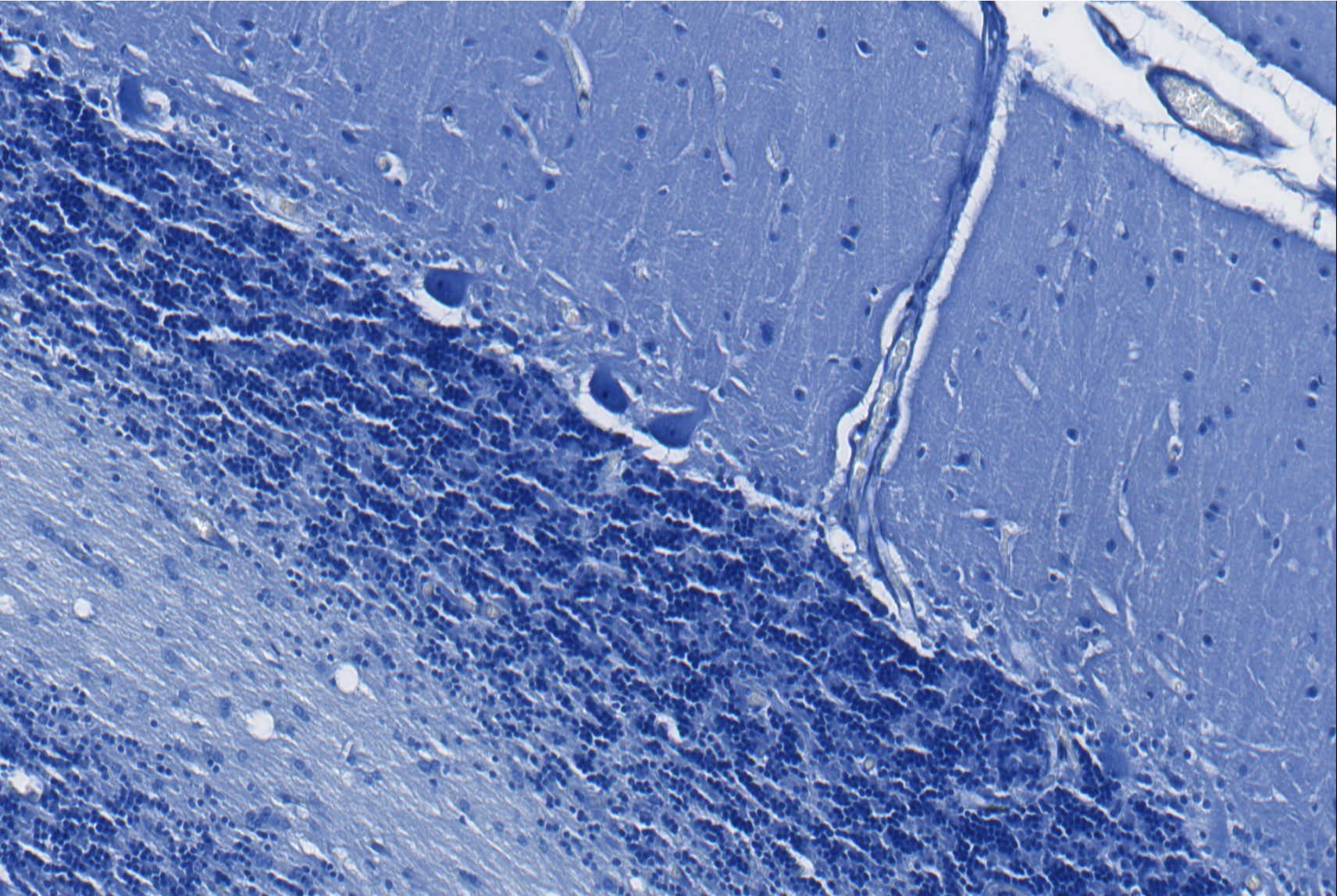


Cerebellum – Purkinje cell





Cerebellum - Nissl bodies

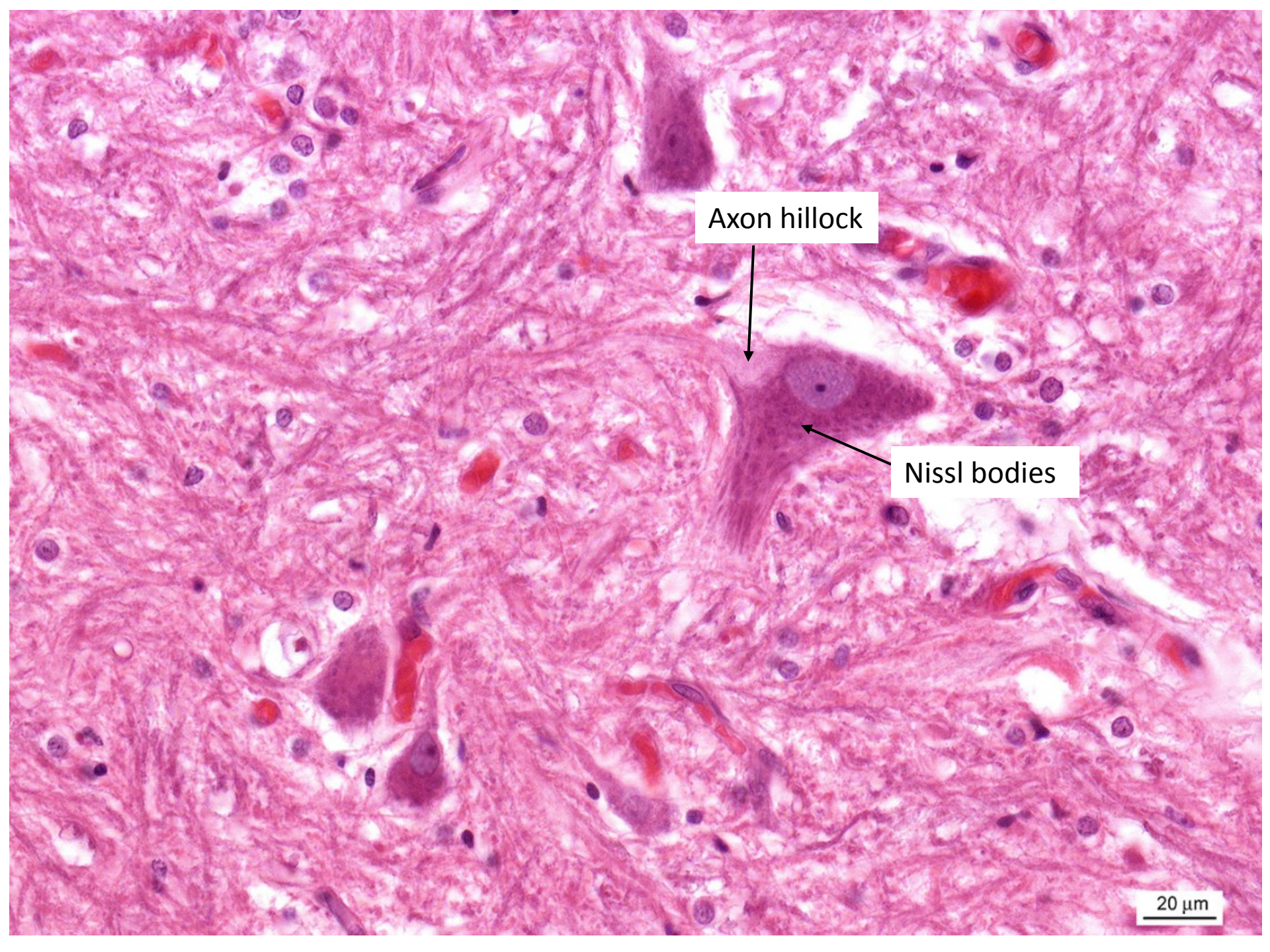




Axon hillock

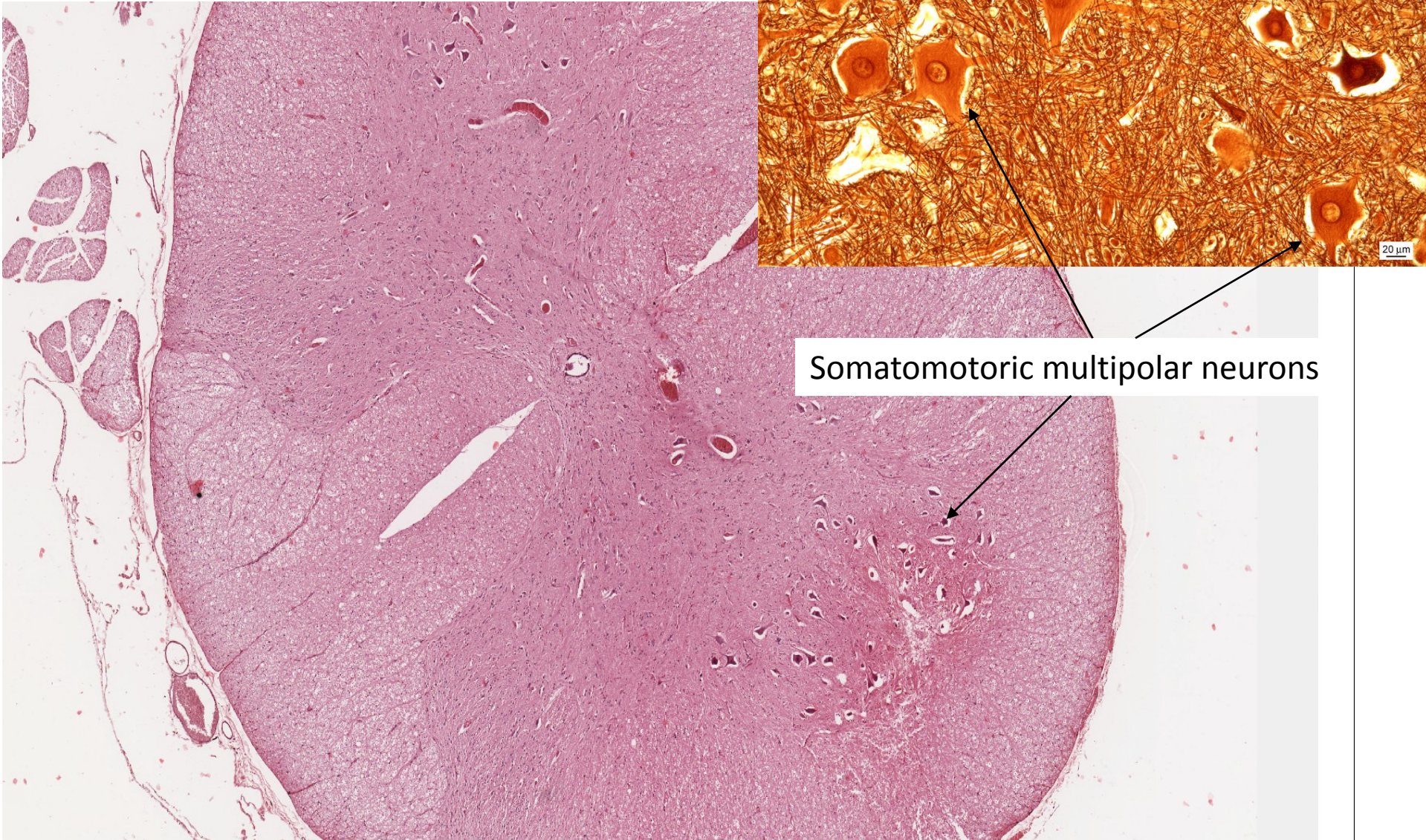
Nissl bodies

20  $\mu$ m





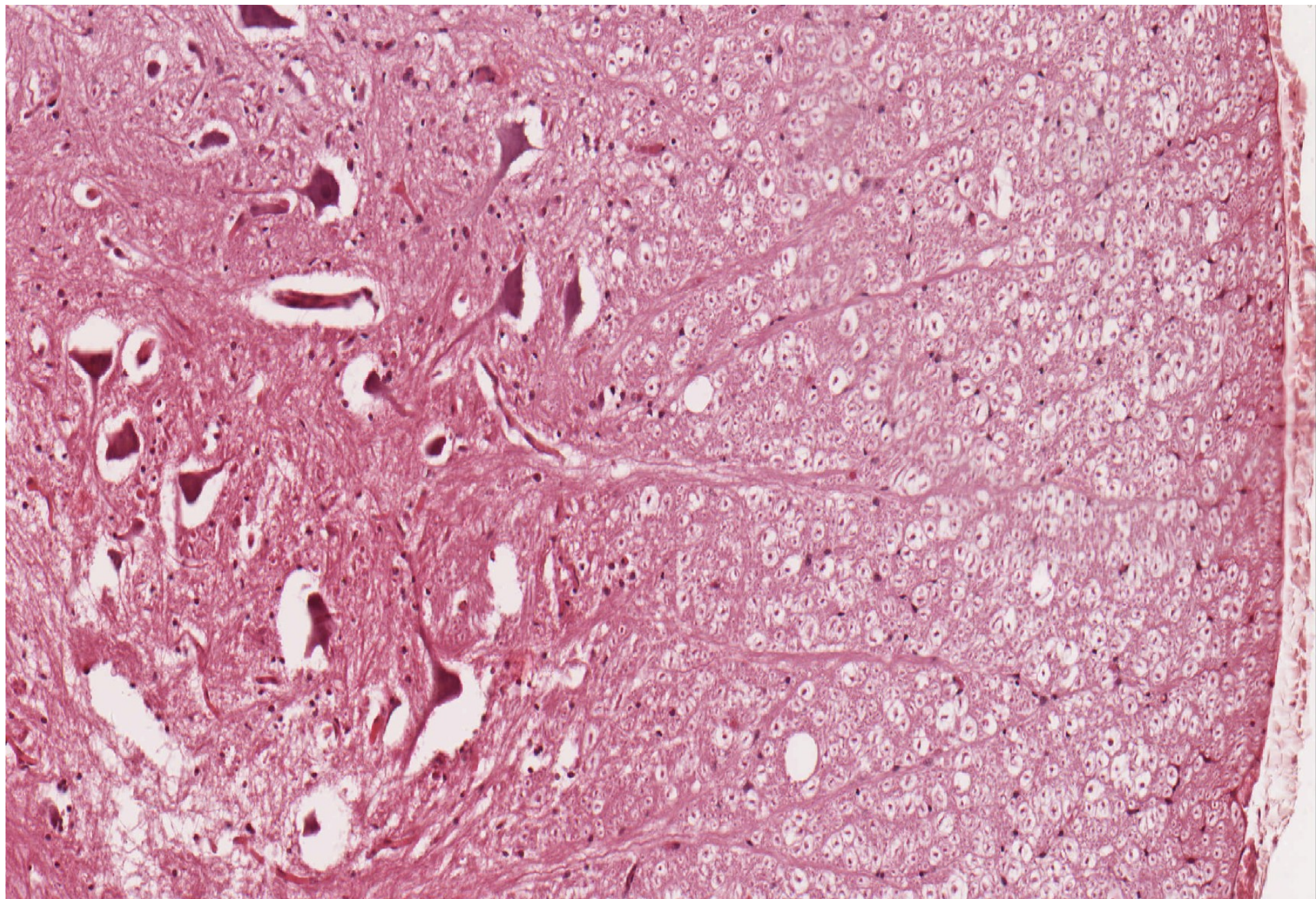
# Medulla spinalis





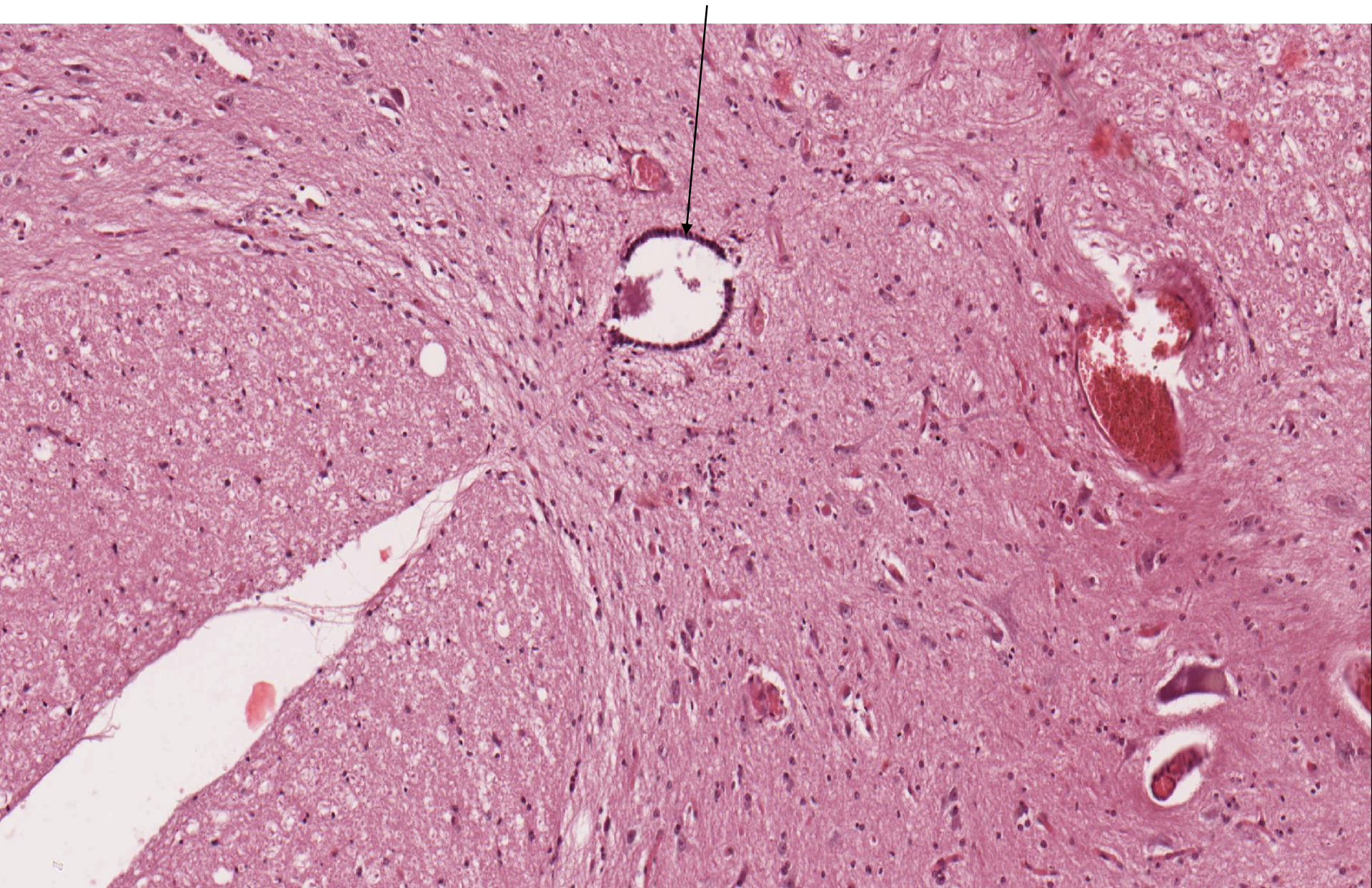
Somatomotoric multipolar neurons

Myelinated axons



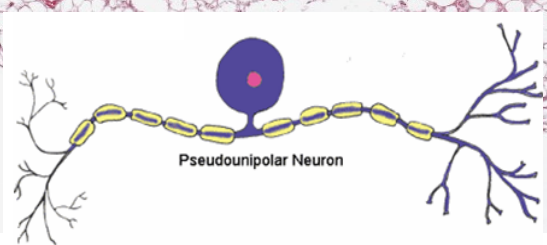
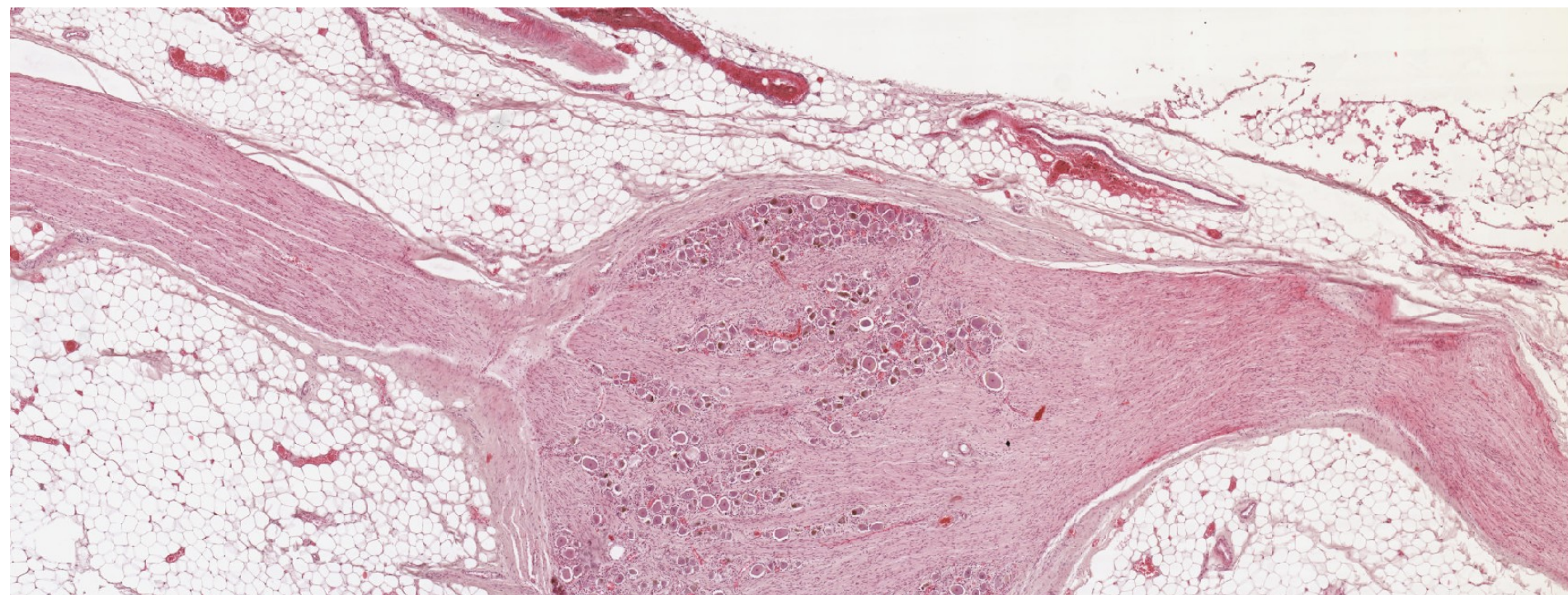


# Medulla spinalis – ependymal cells



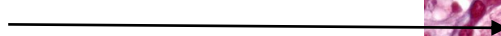
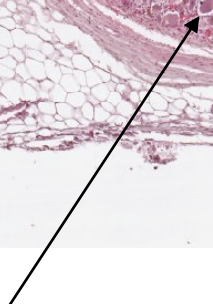
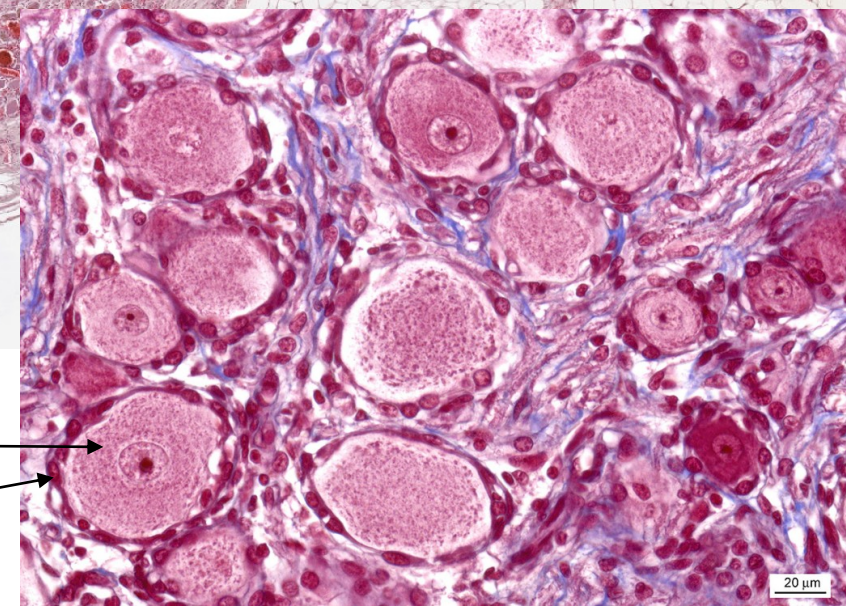


# Ganglion spinale



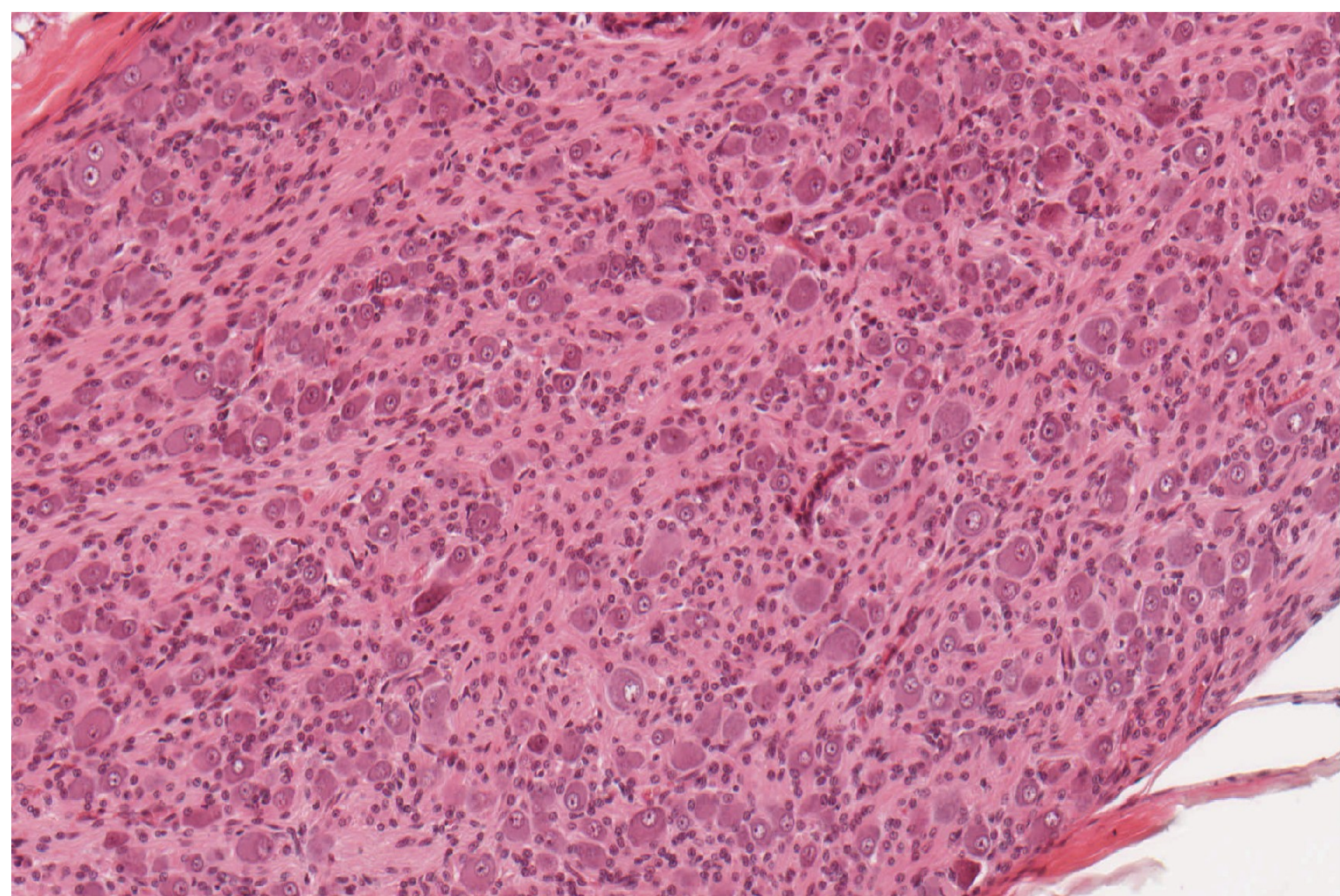
Pseudounipolar neurons

Satellite cells

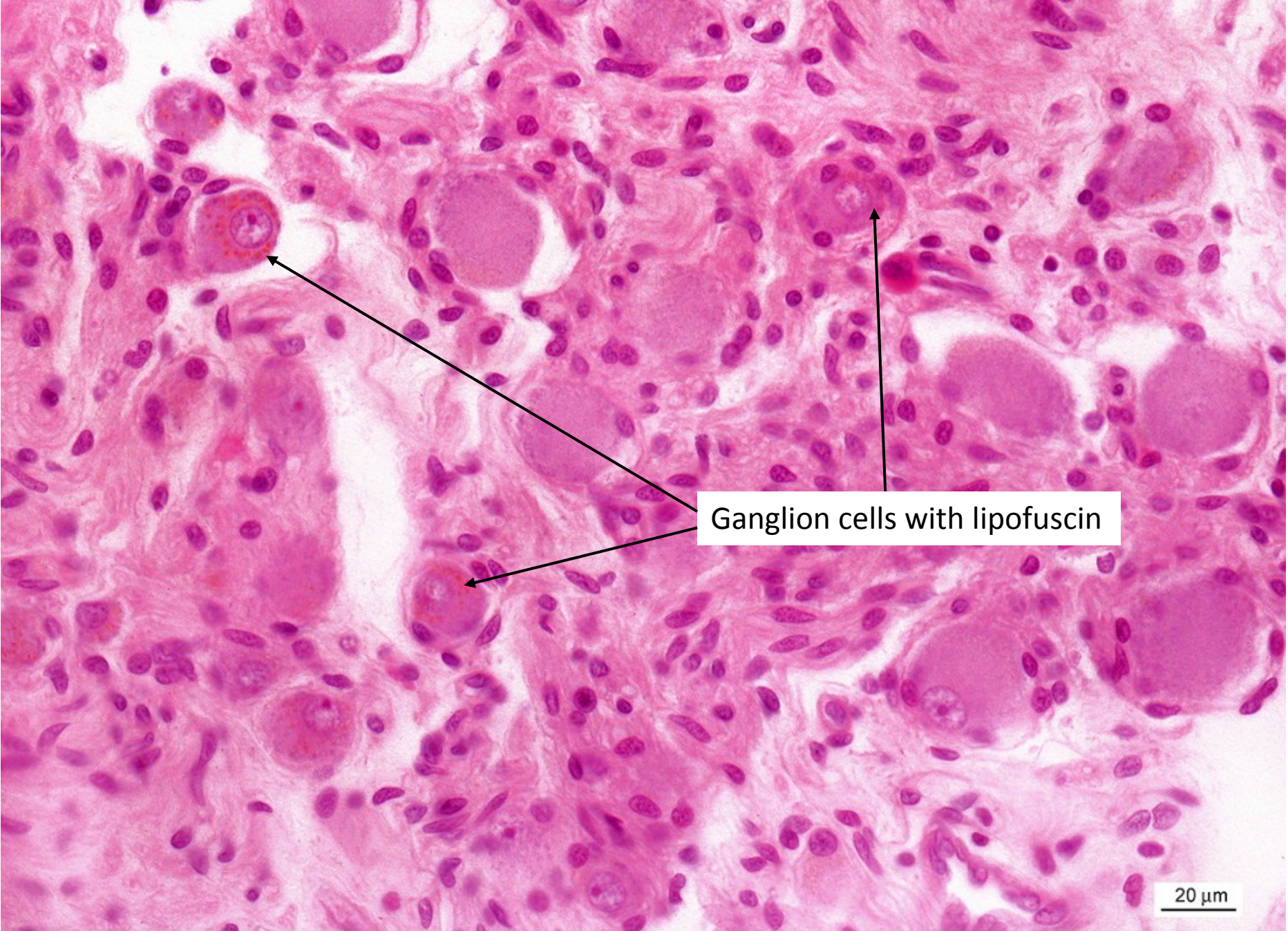




Vegetative ganglion – ganglion cells (multipolar neurons), satellite cells





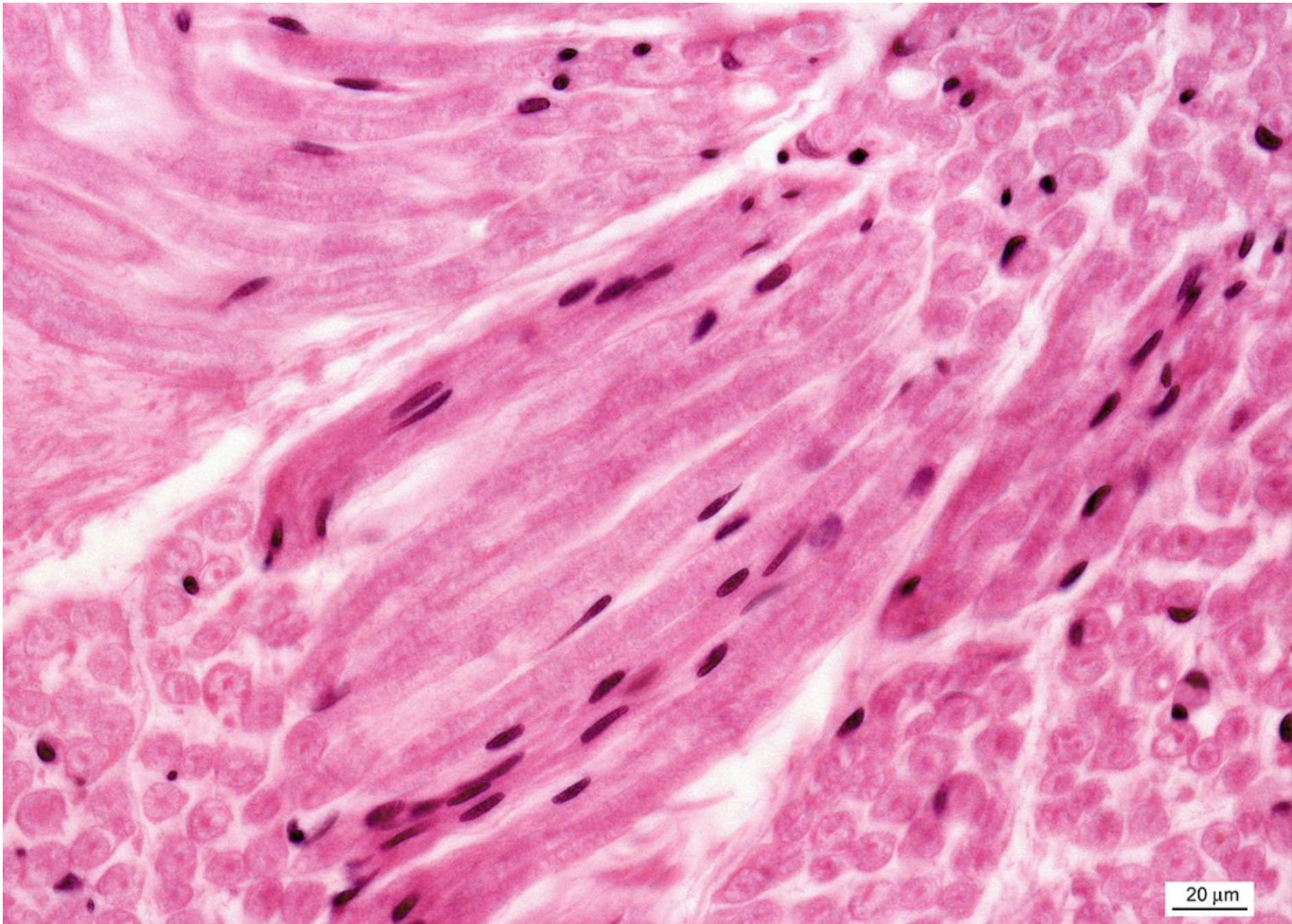


Ganglion cells with lipofuscin

20  $\mu$ m

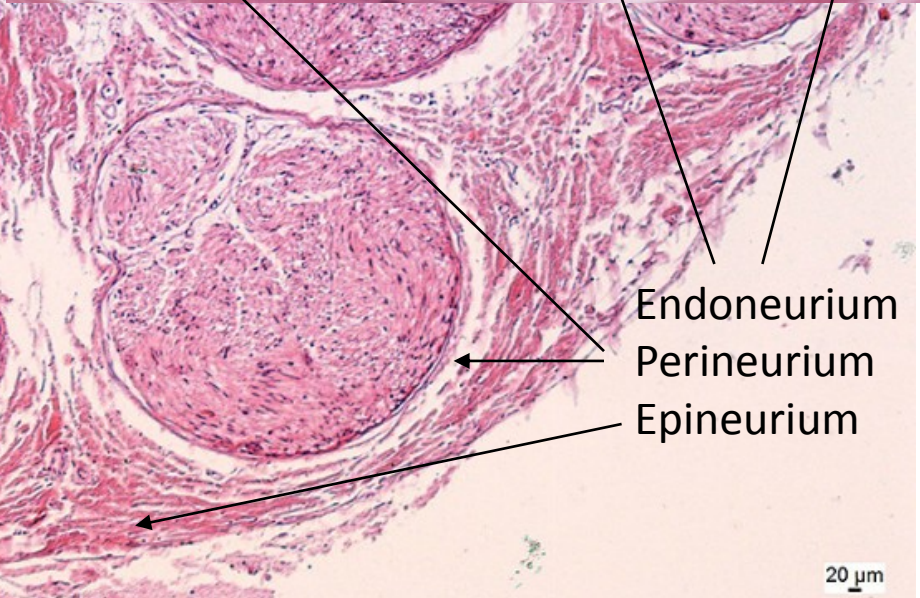
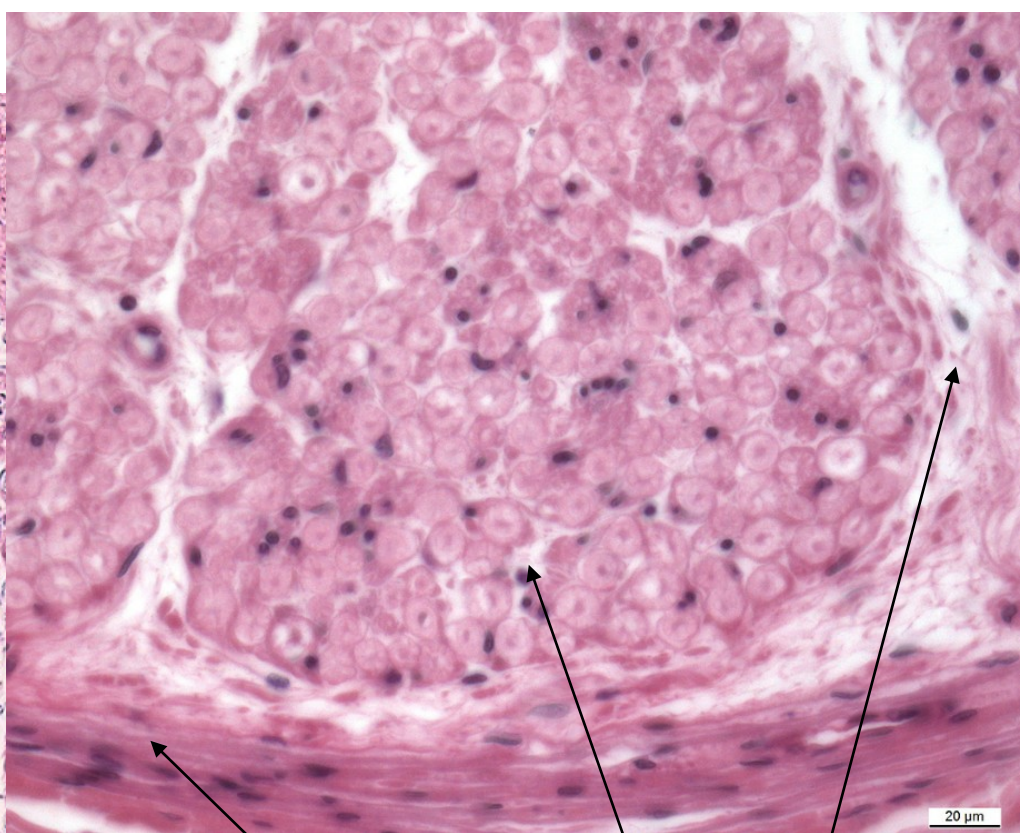
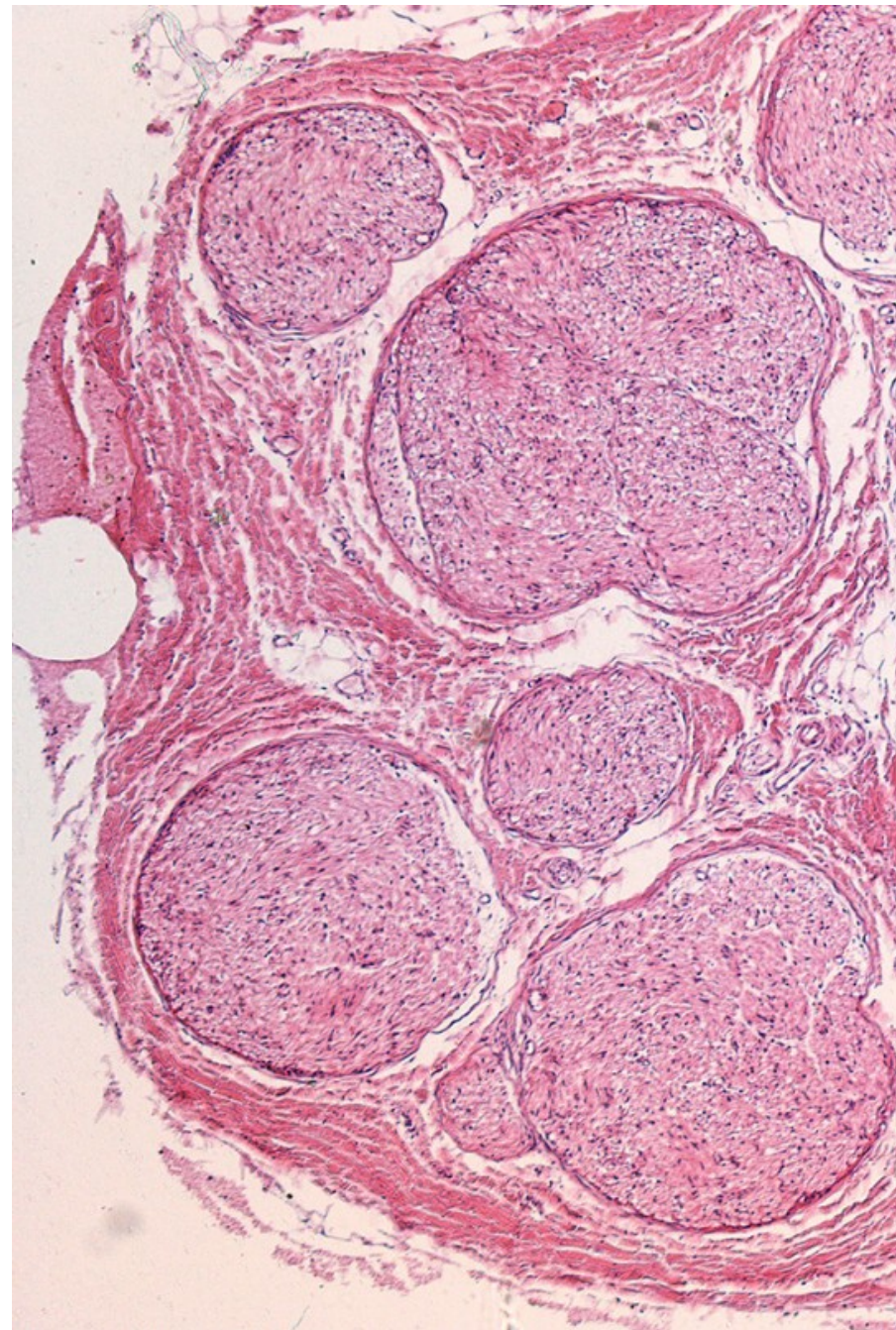


# Peripheral nerve





# Peripheral nerve

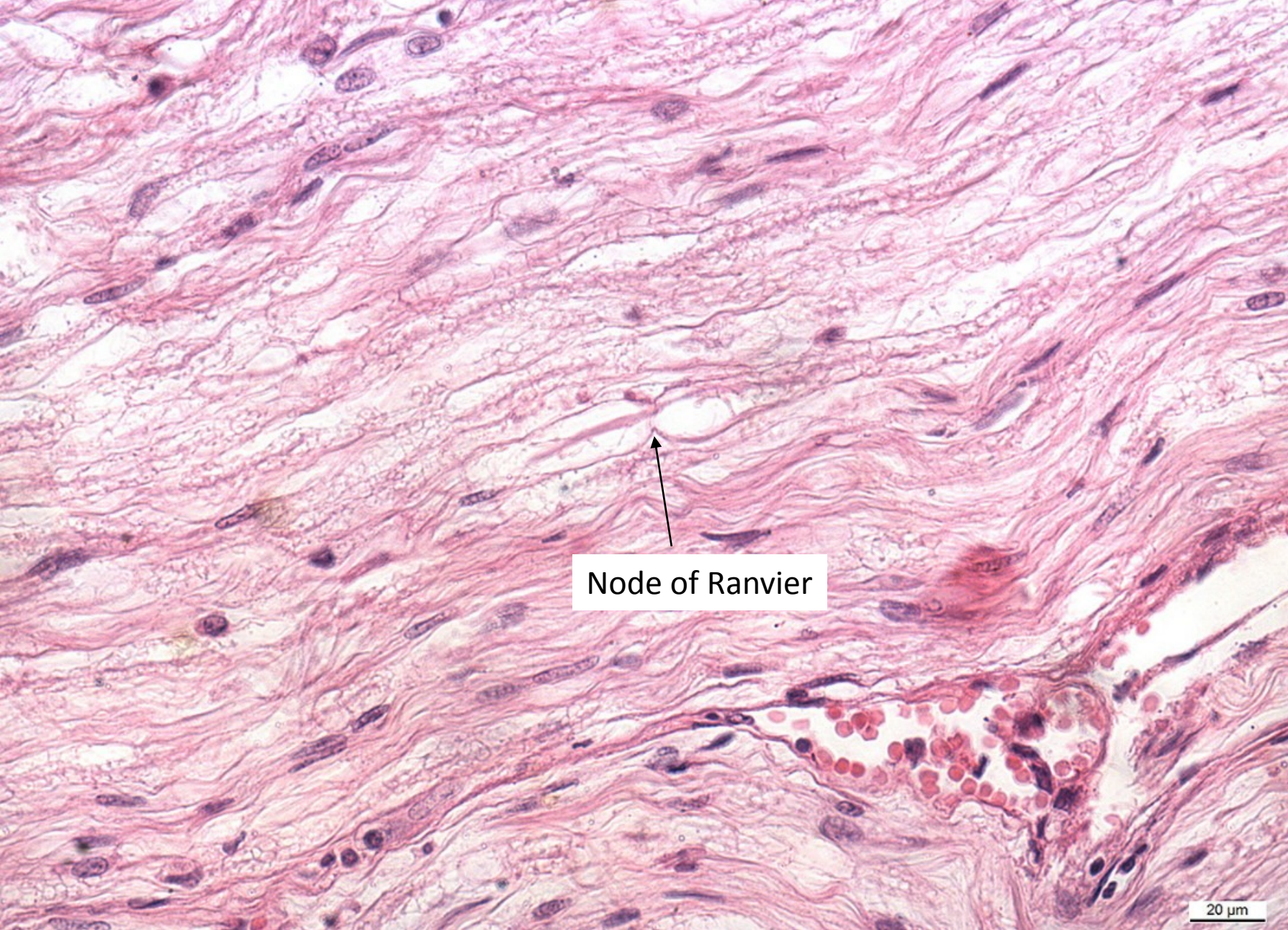


Endoneurium  
Perineurium  
Epineurium

20 μm

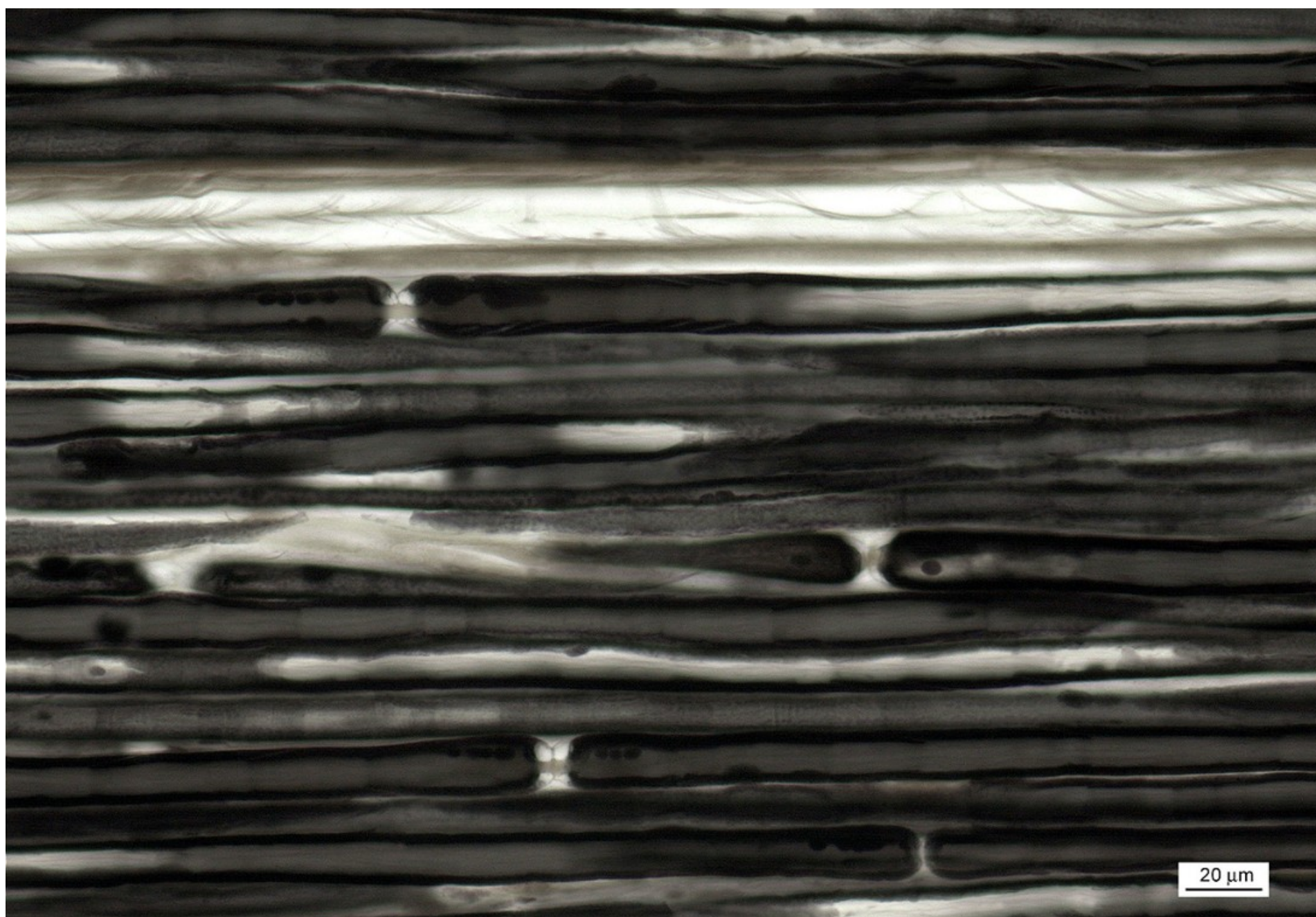


Peripheral nerve – longitudinal section





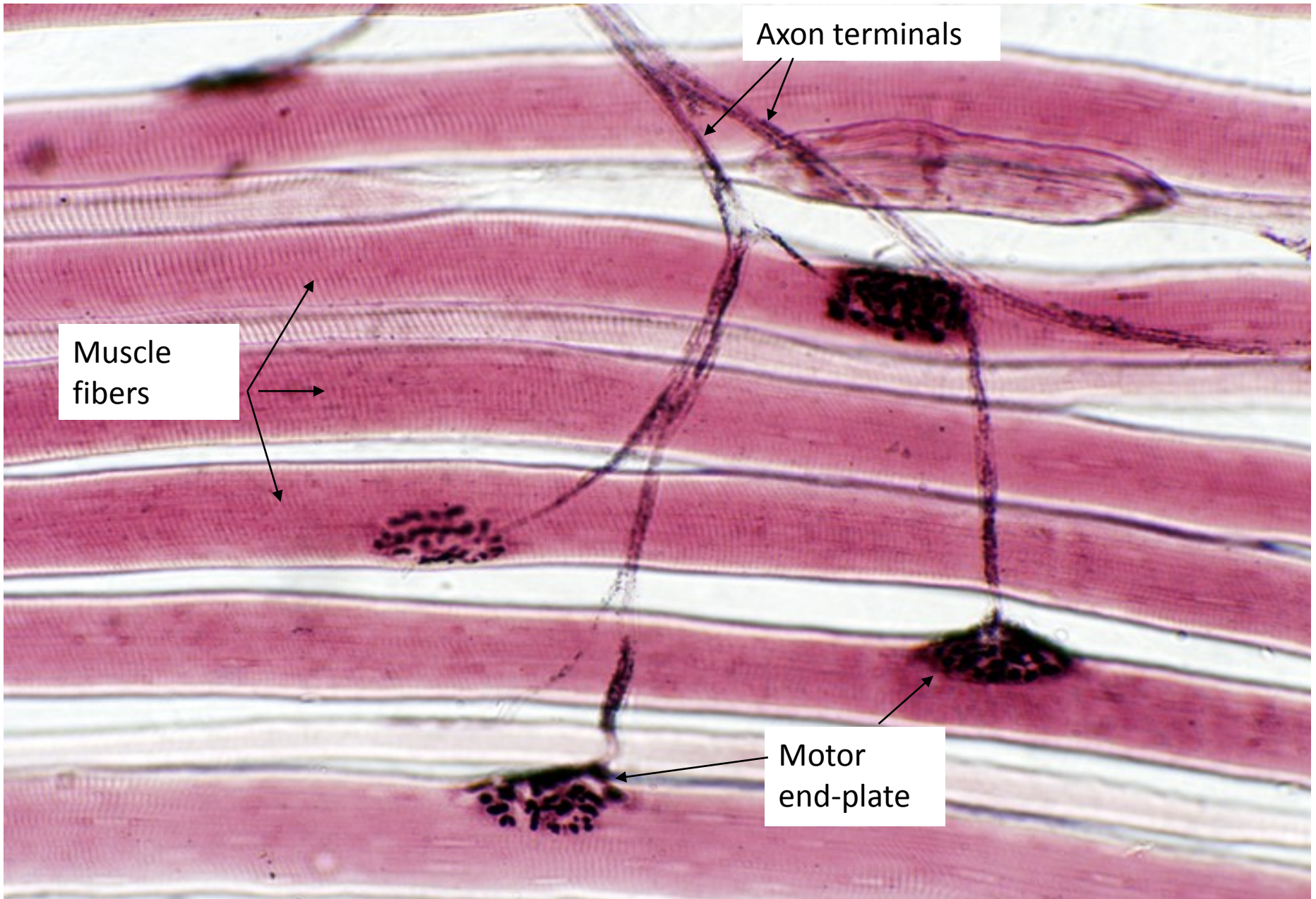
Myelin sheaths with nodes of Ranvier – peripheral nerve (OsO<sub>4</sub>)



20  $\mu$ m

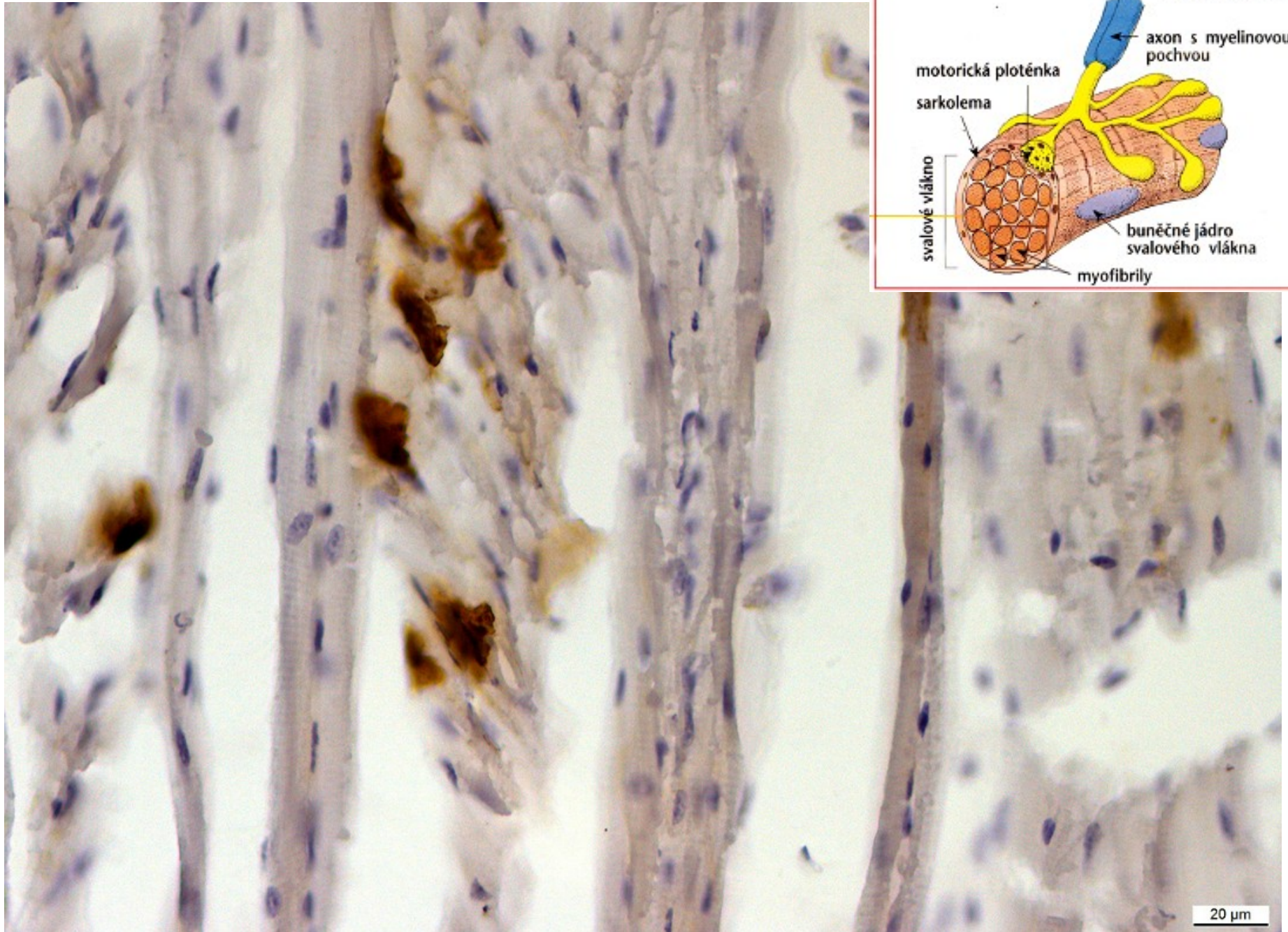
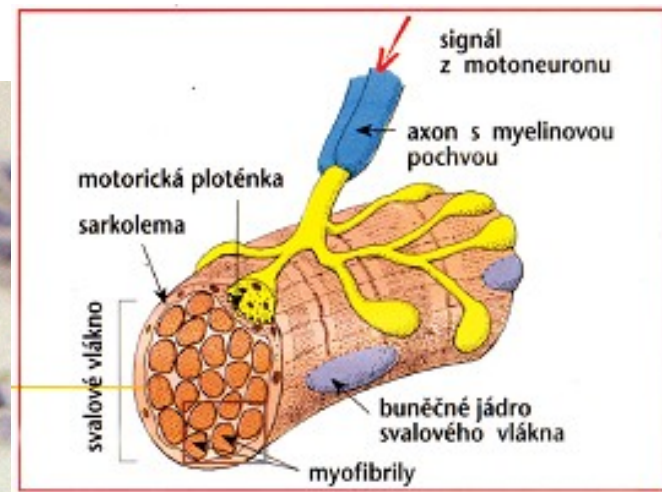


# Motor end-plates in motor unit





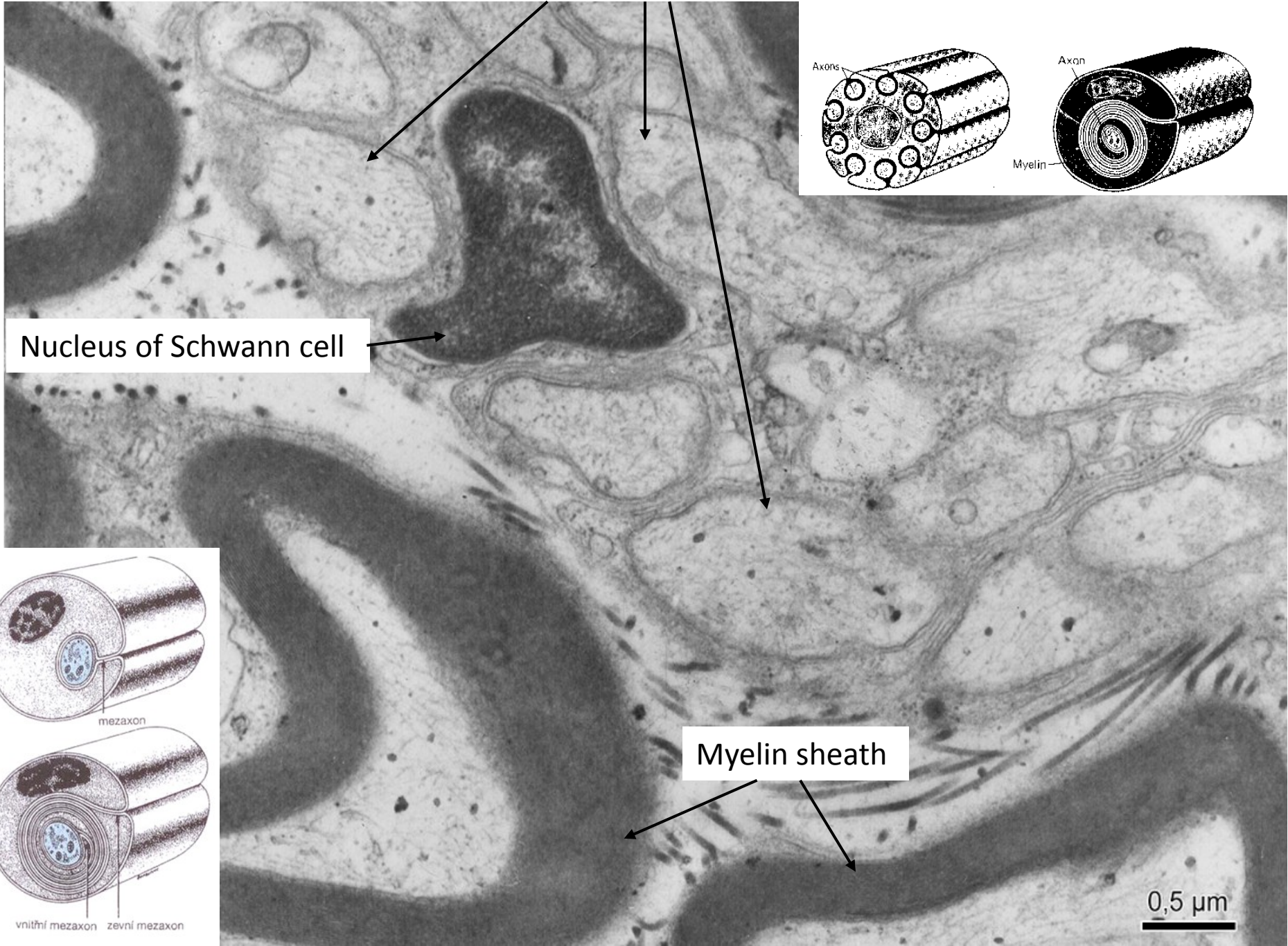
# Motor end-plates (localization of acetylcholinesterase)



20  $\mu$ m

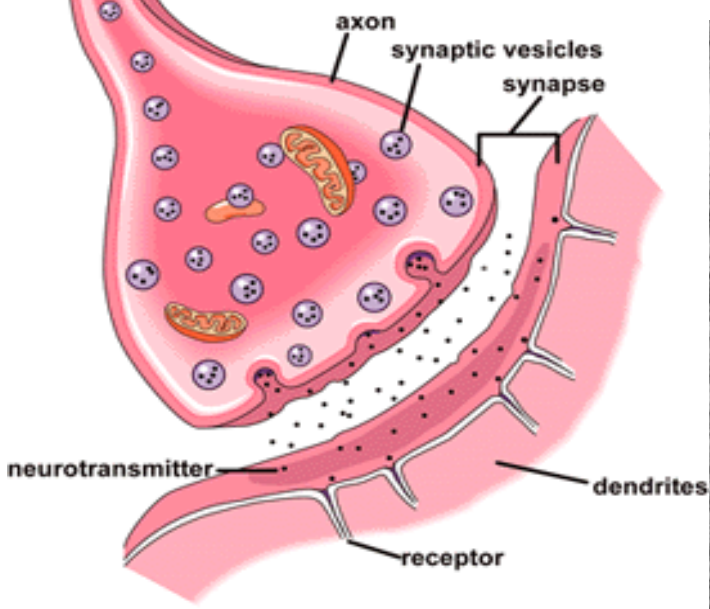


# Axons with Schwann sheath

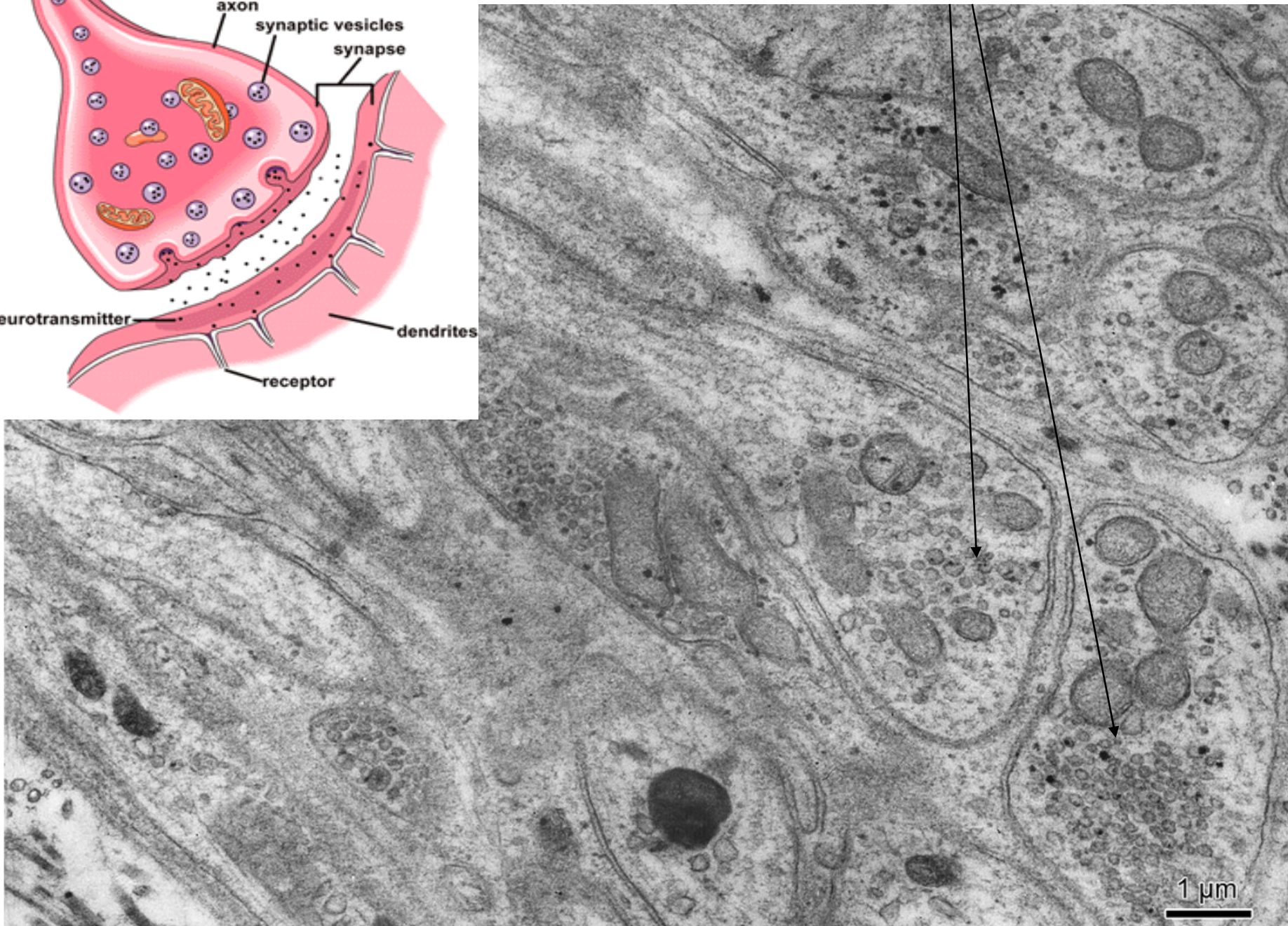




# Synapse



# Presynaptic ending





# NERVE TISSUE

## Slides:

Pyramidal cell (75, 76. Cortex cerebri)

Purkinje cell (77. Cerebellum)

Nissl substance (78. Cerebellum)

Somatomotoric multipolar neuron (79. Medulla spinalis)

Pseudounipolar neuron (81. Ganglion spinale)

Axon with myelin and Schwann sheath (84, 86. Peripheral nerve)

Myelin sheath (87. Peripheral nerve)

Motor end plate (acetylcholinesterase detection)

## Atlas EM:

Nucleus (3) and cytoplasm of neuron (55)

Axons with sheaths (56, 58)

Presynaptic endings (57)