



# 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

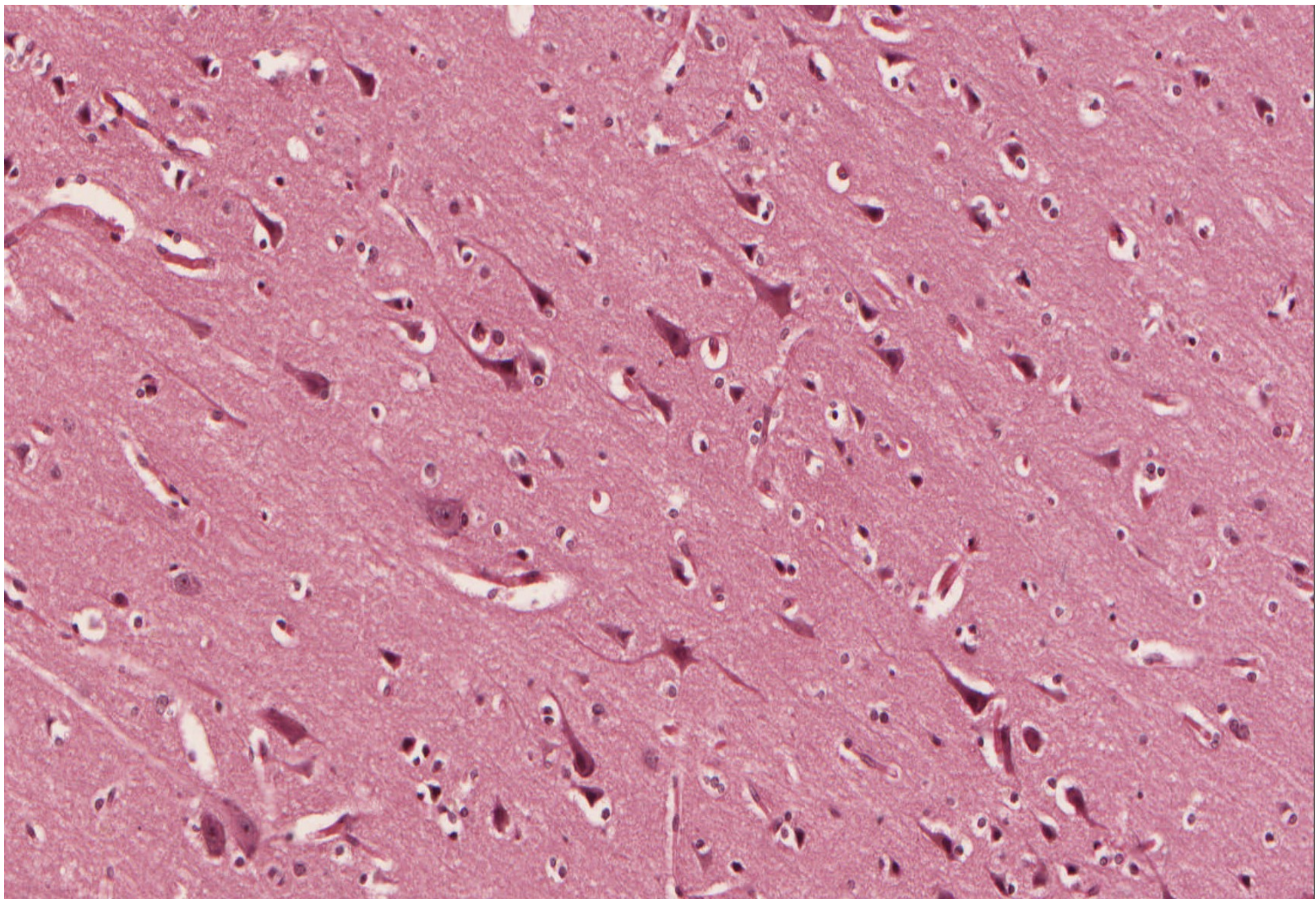
lamina pyramidalis

lamina granularis interna

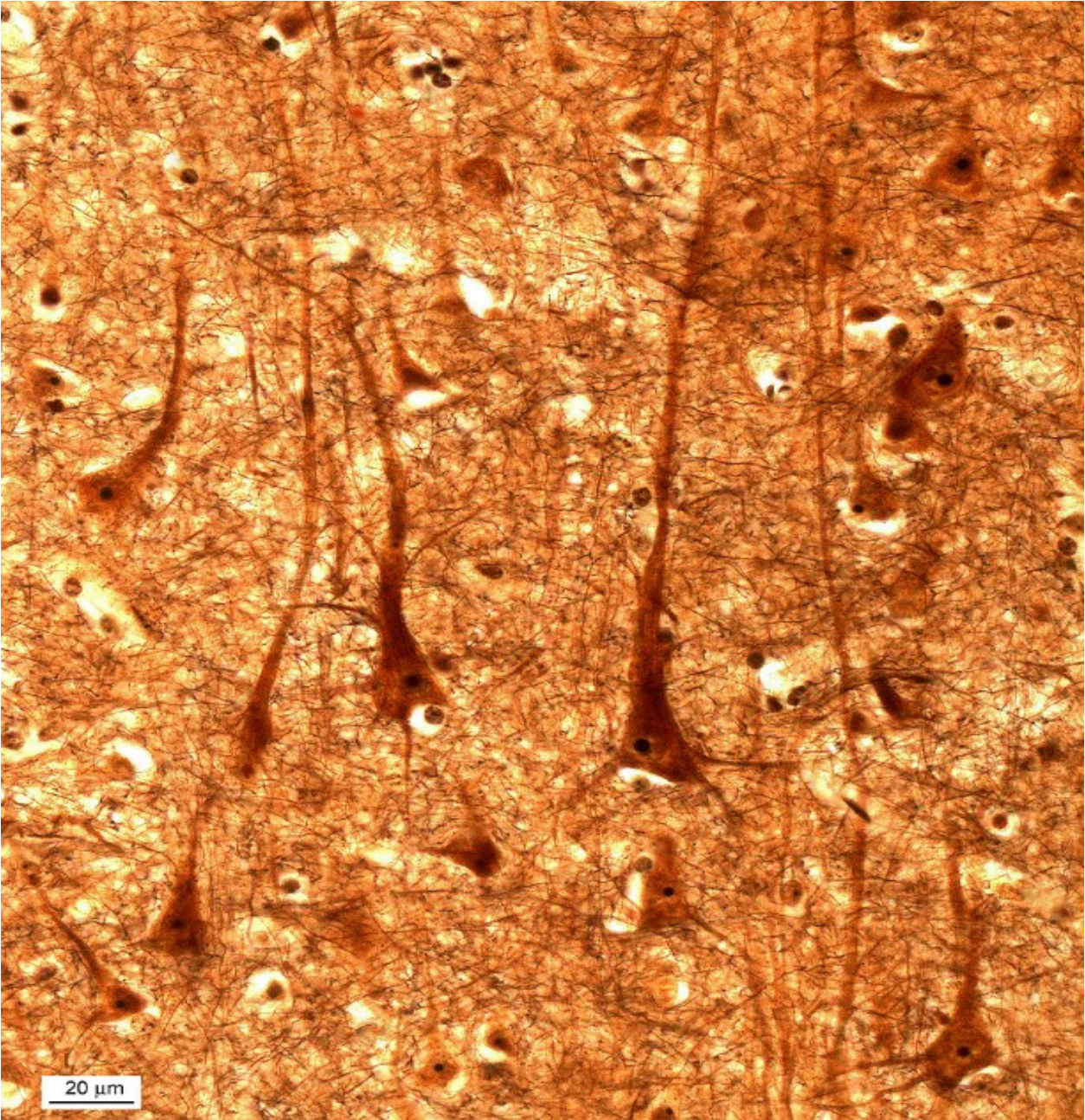
lamina ganglionaris

lamina multiformis

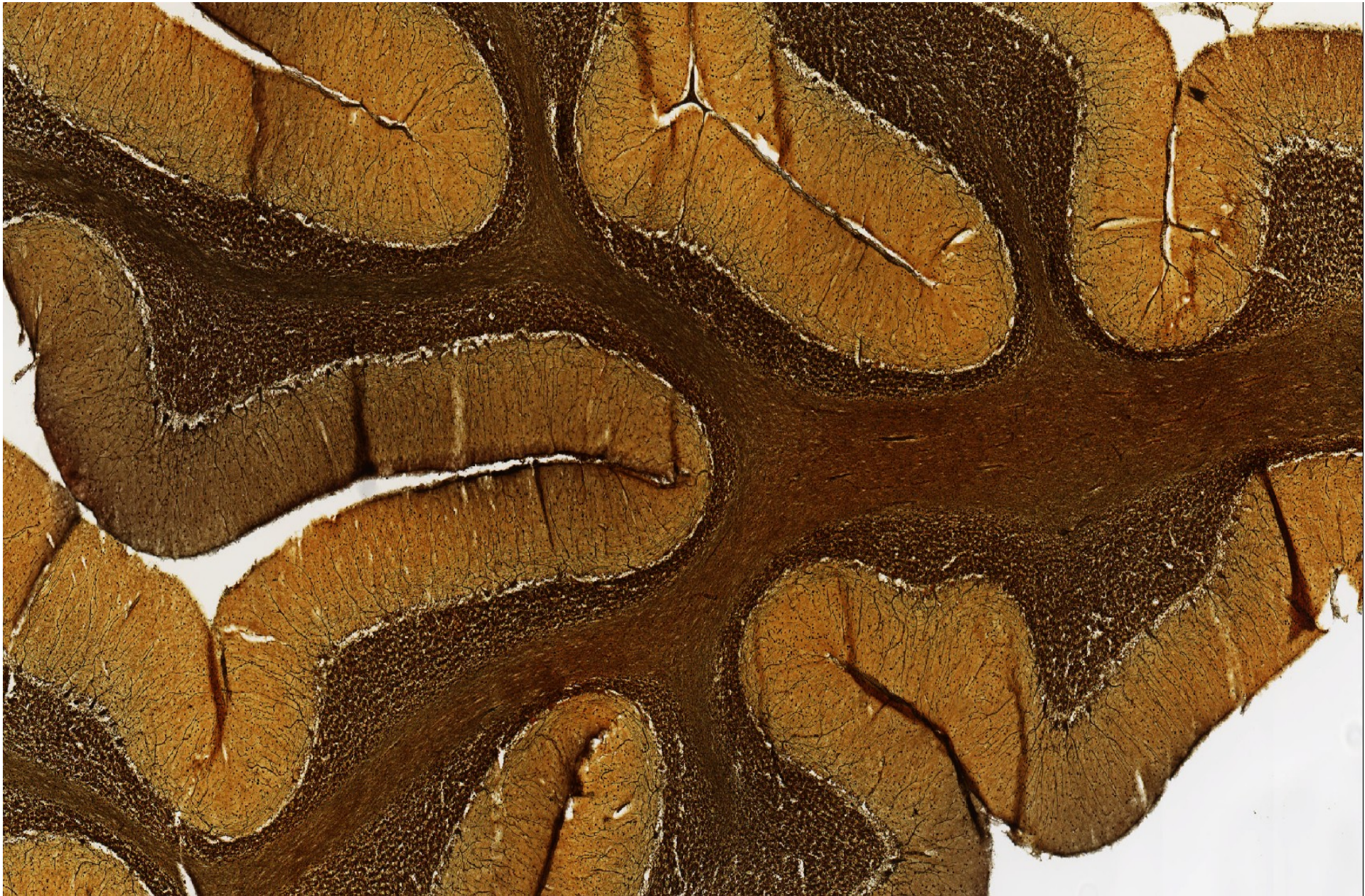
# Cortex cerebri – Pyramidal cells – multipolar neurons



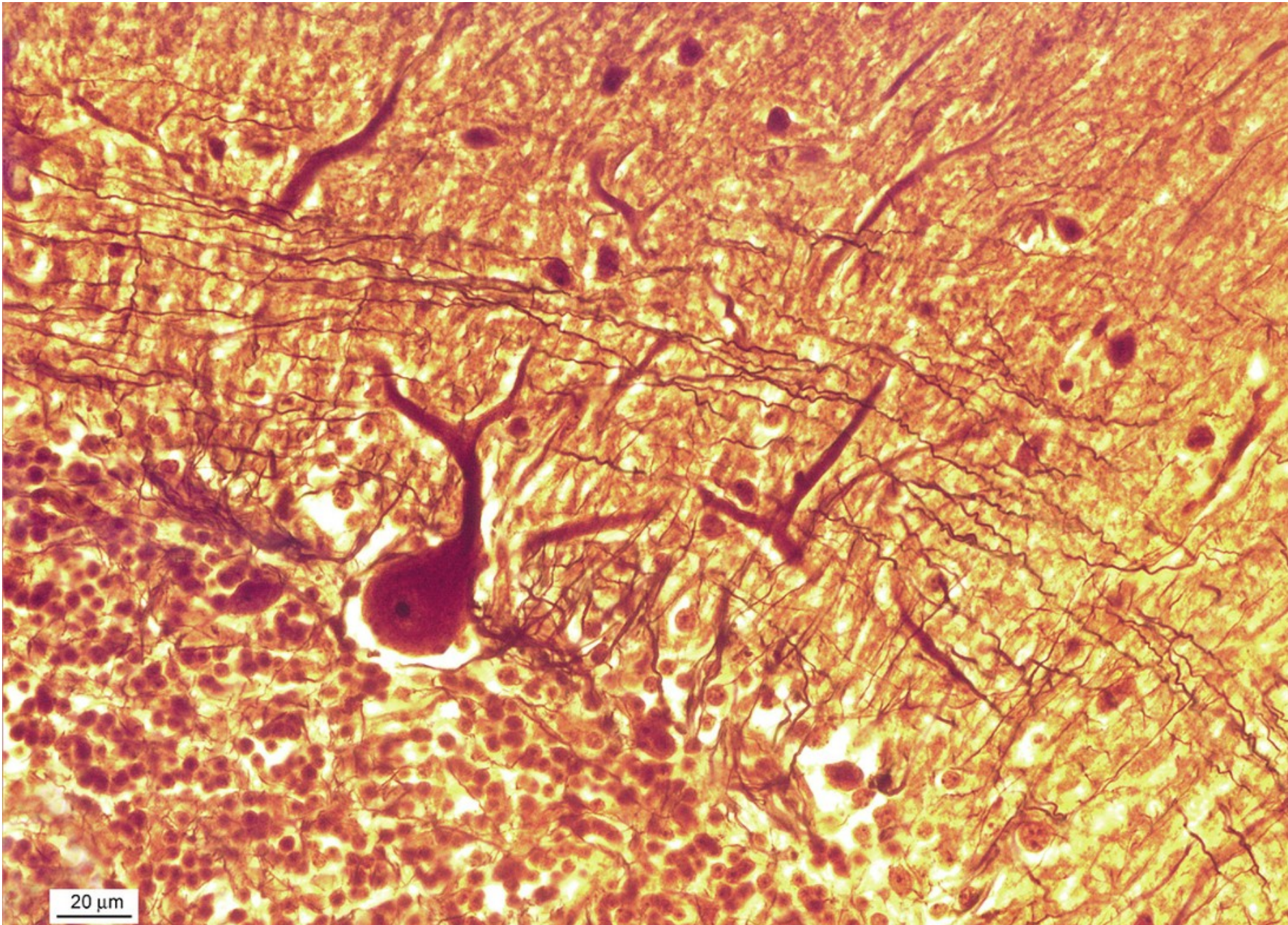
# Cortex cerebri – Pyramidal cells – multipolar neurons



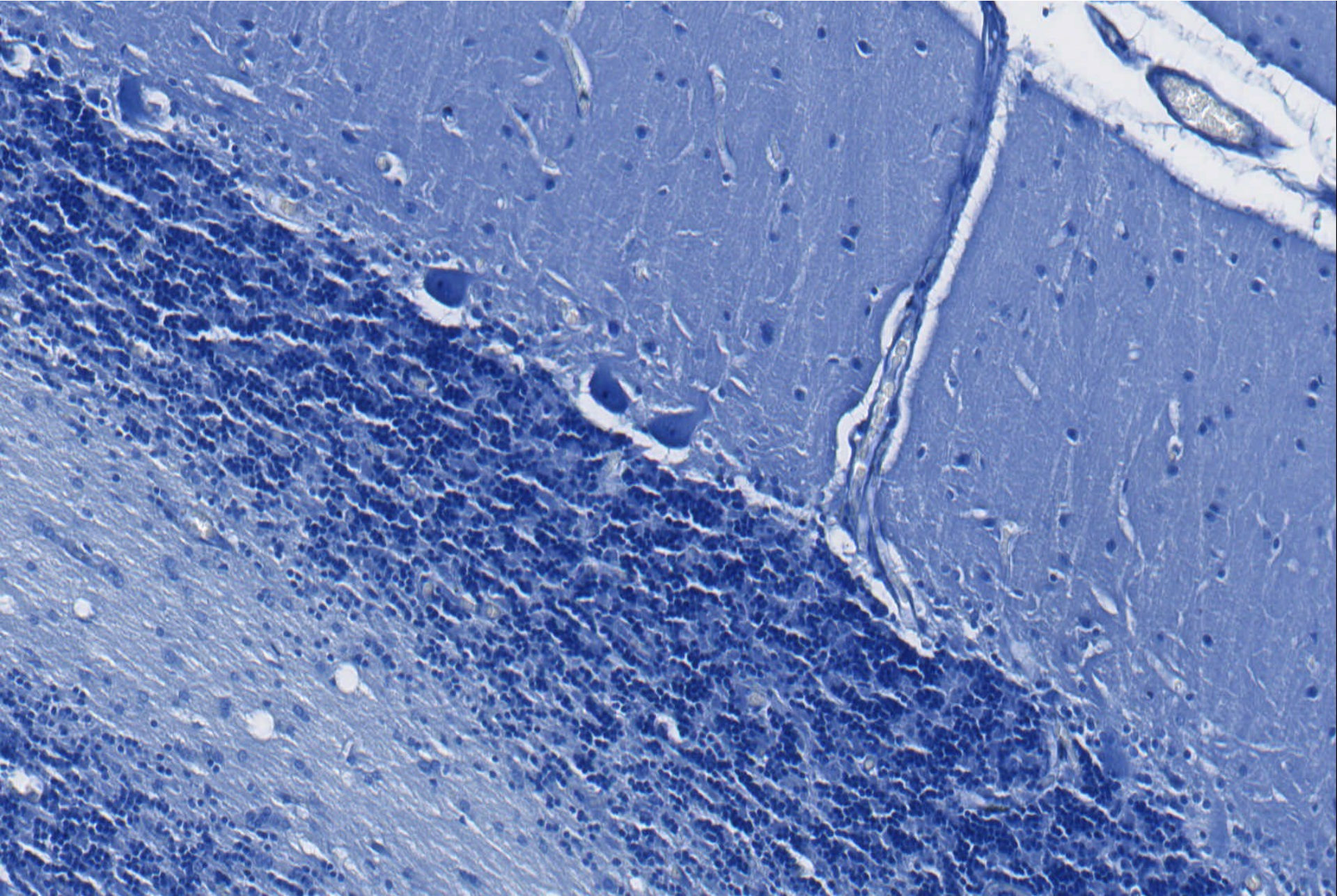
Cerebellum

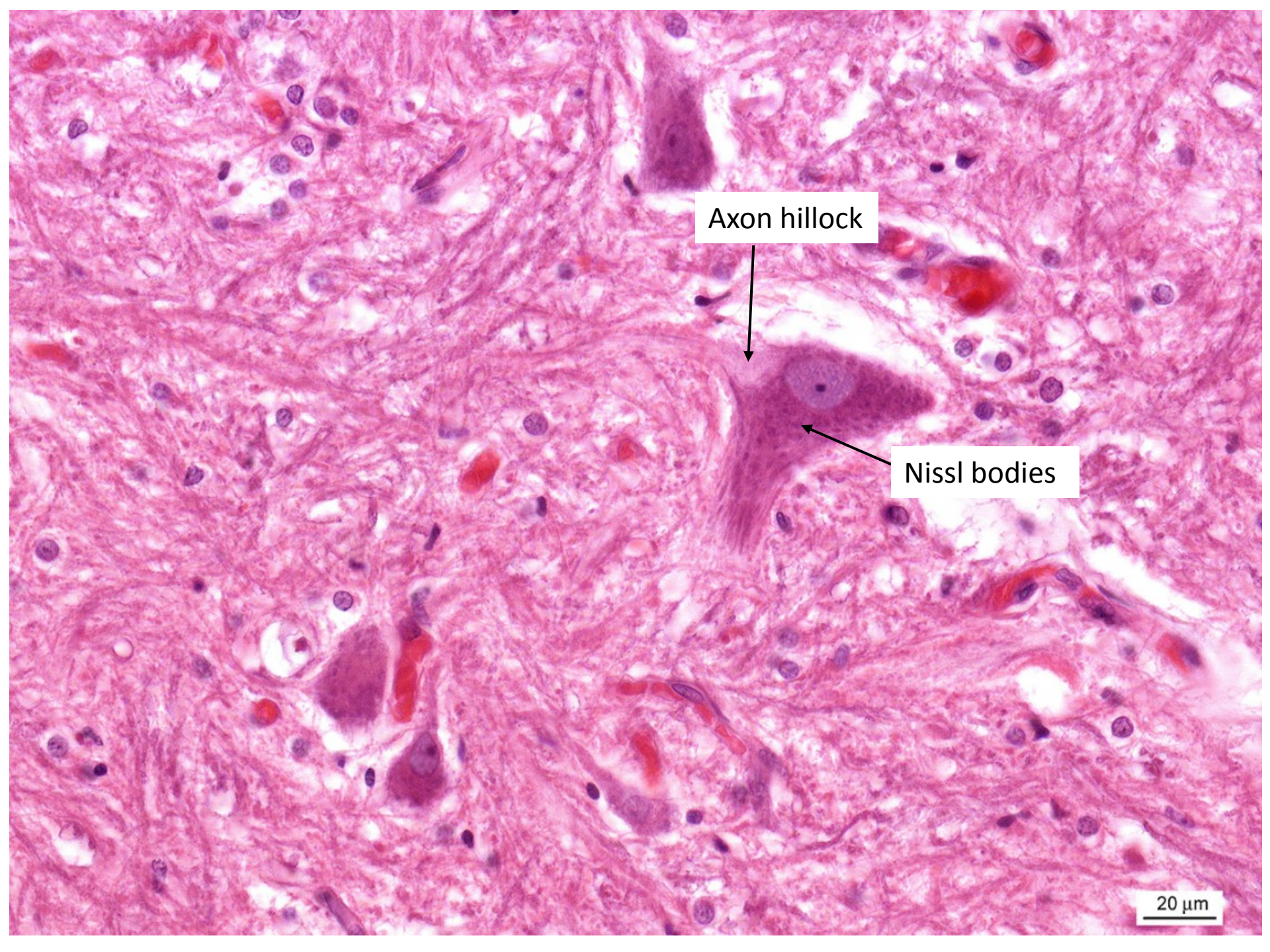


Cerebellum – Purkinje cell



Cerebellum - Nissl bodies





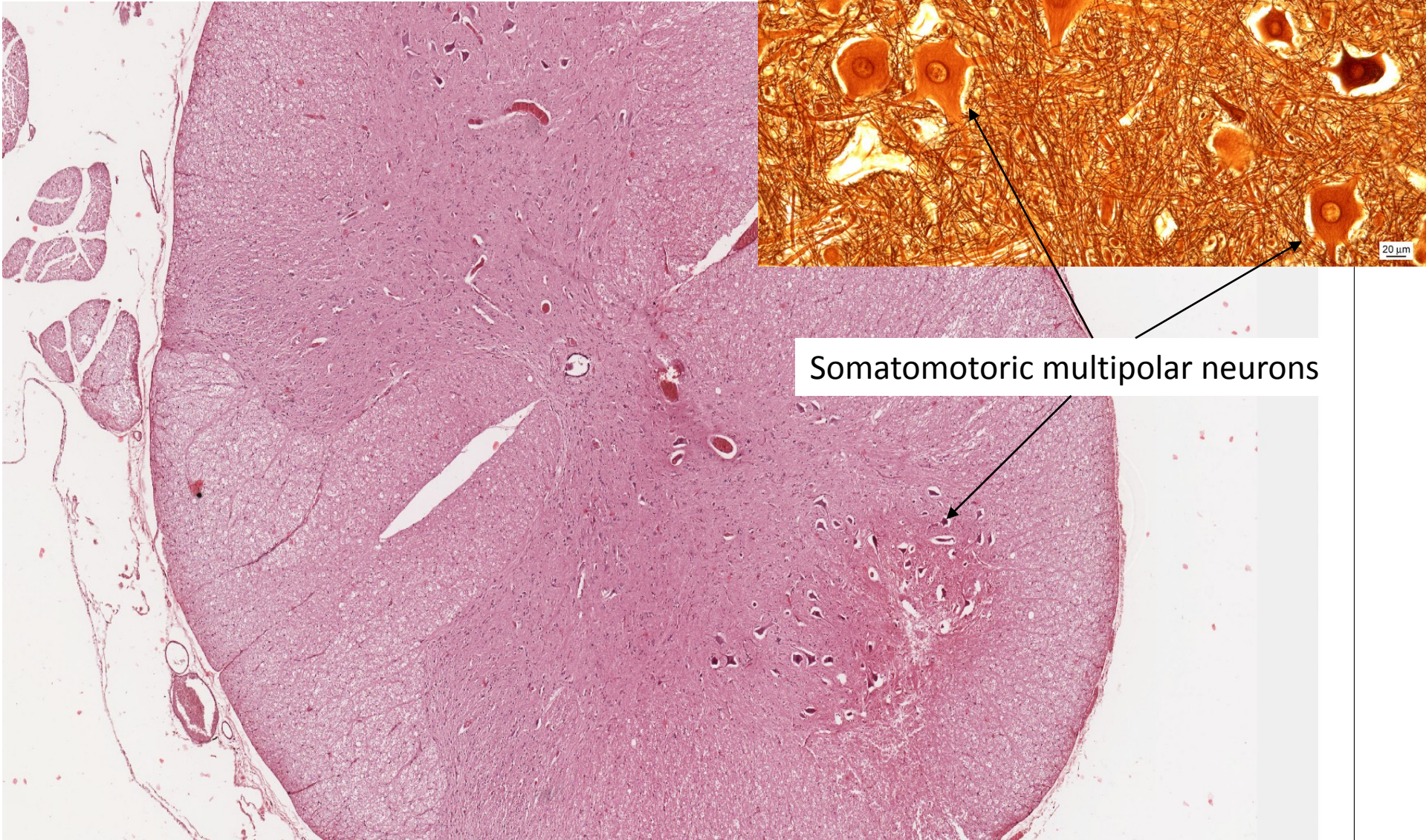
Axon hillock

Nissl bodies

20  $\mu$ m

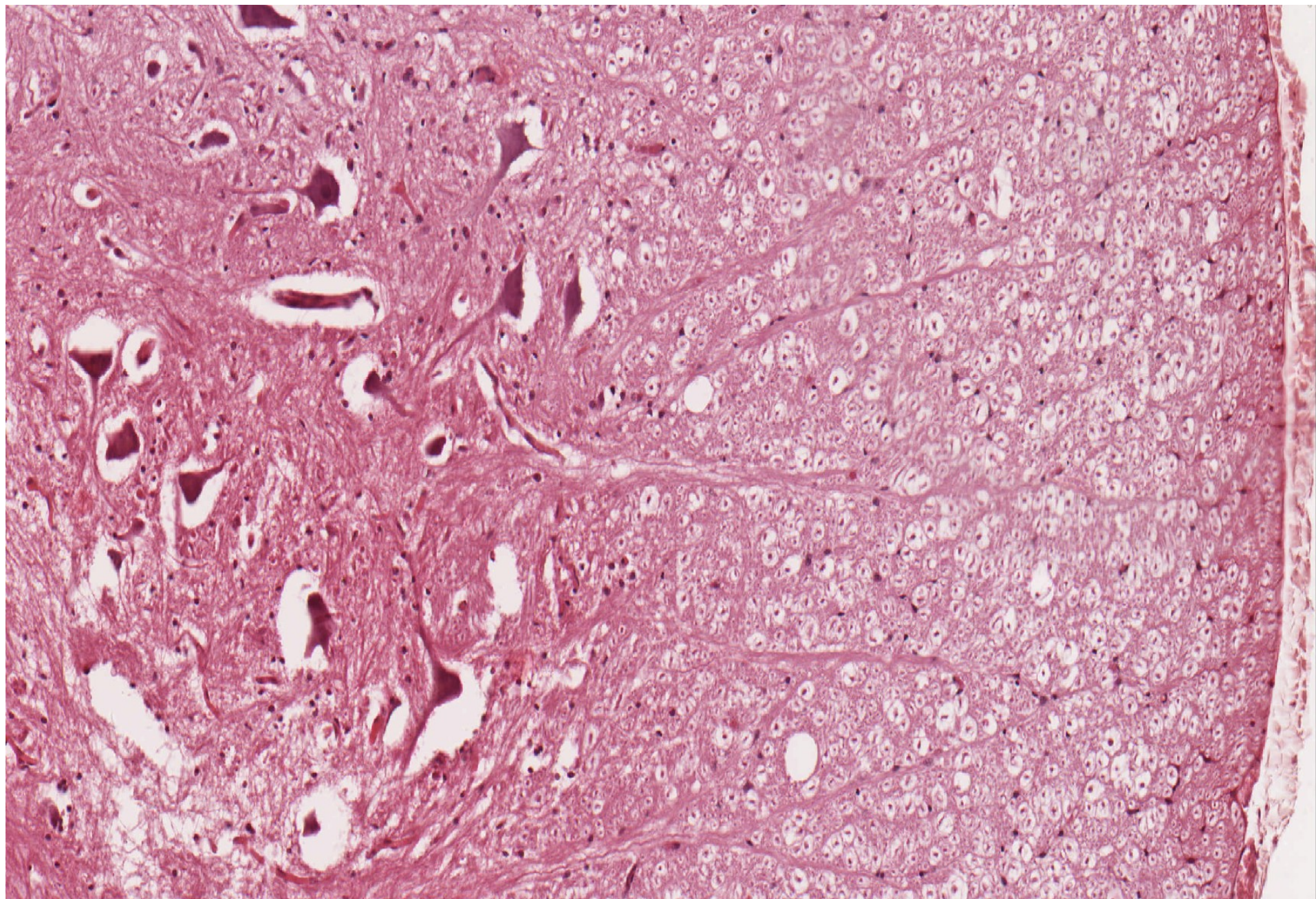


# Medulla spinalis

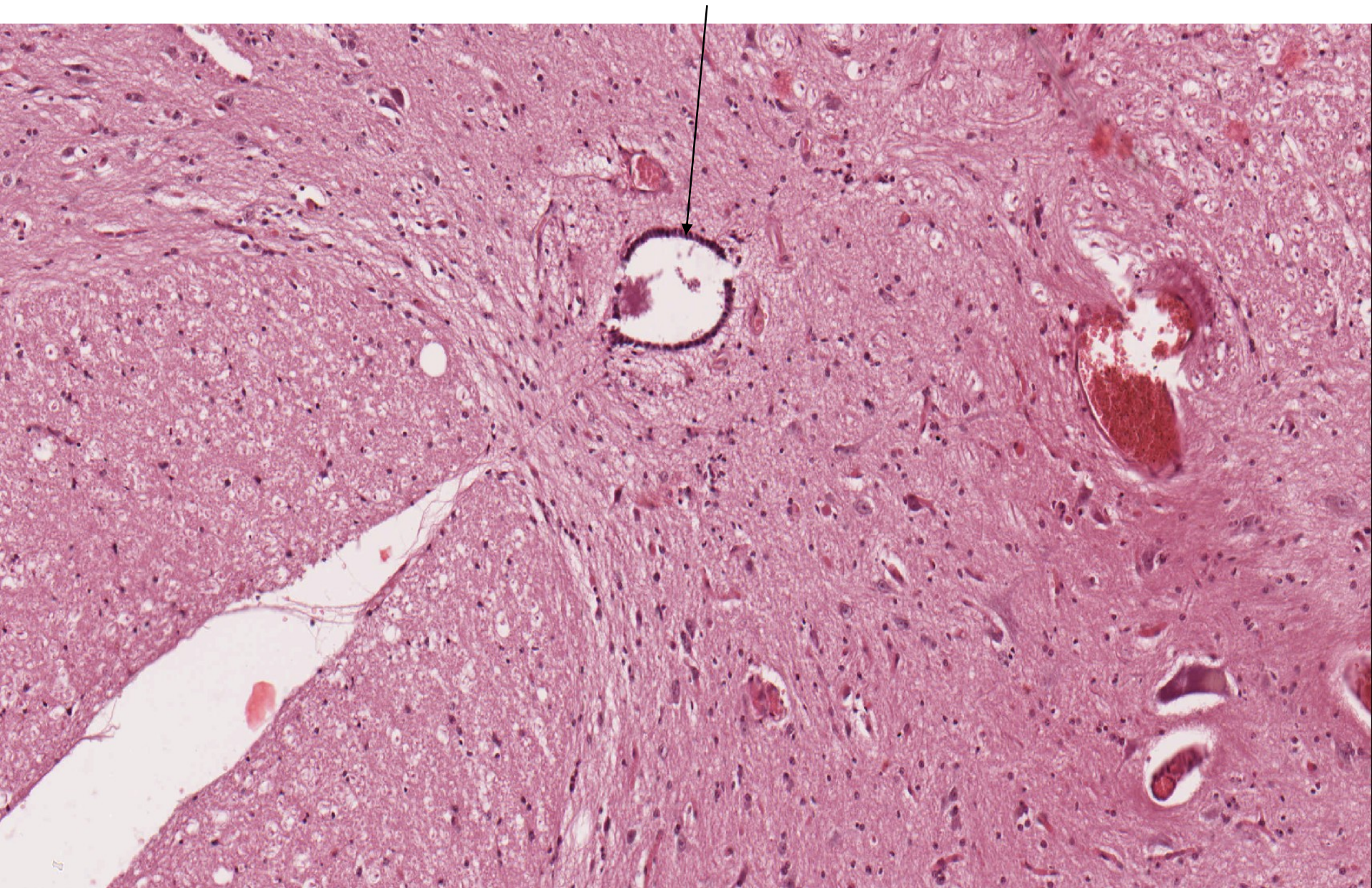


Somatomotoric multipolar neurons

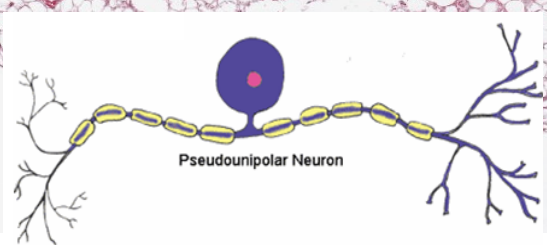
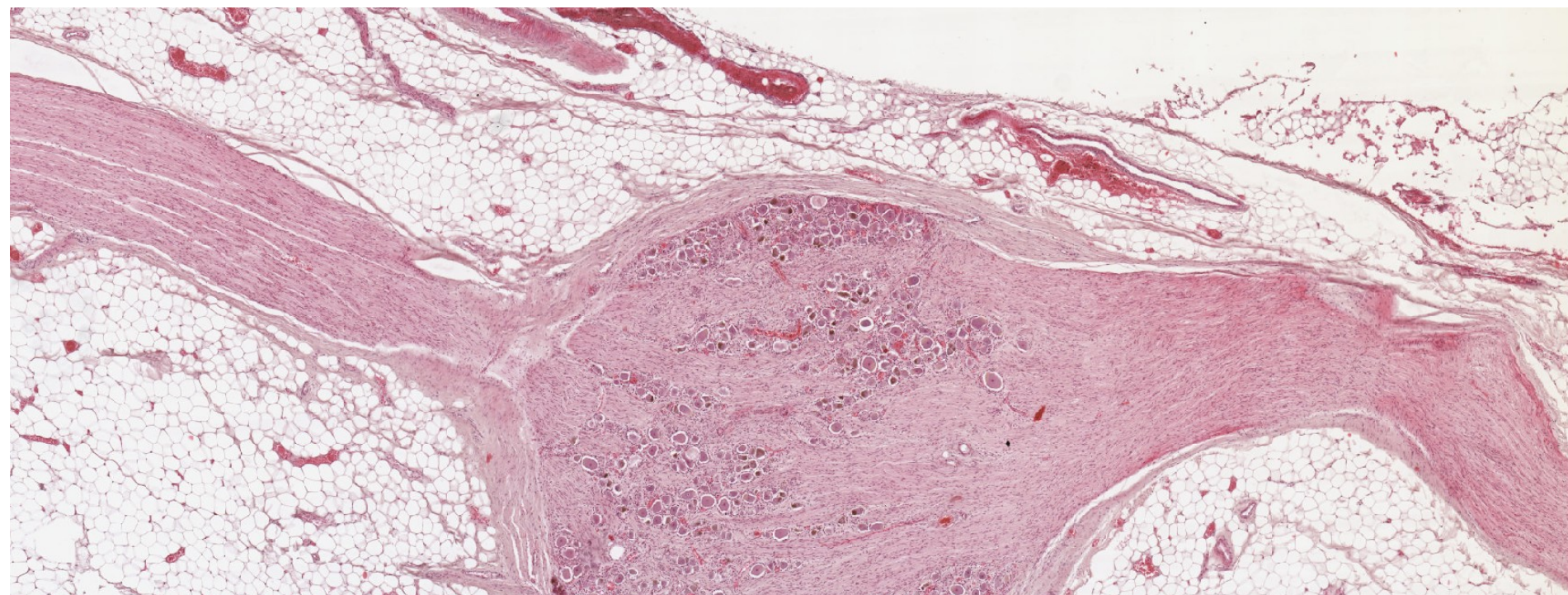
Myelinated axons



# Medulla spinalis – ependymal cells

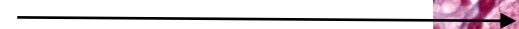
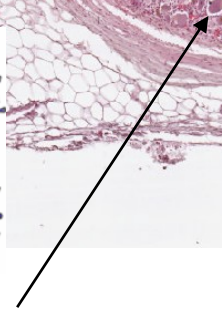
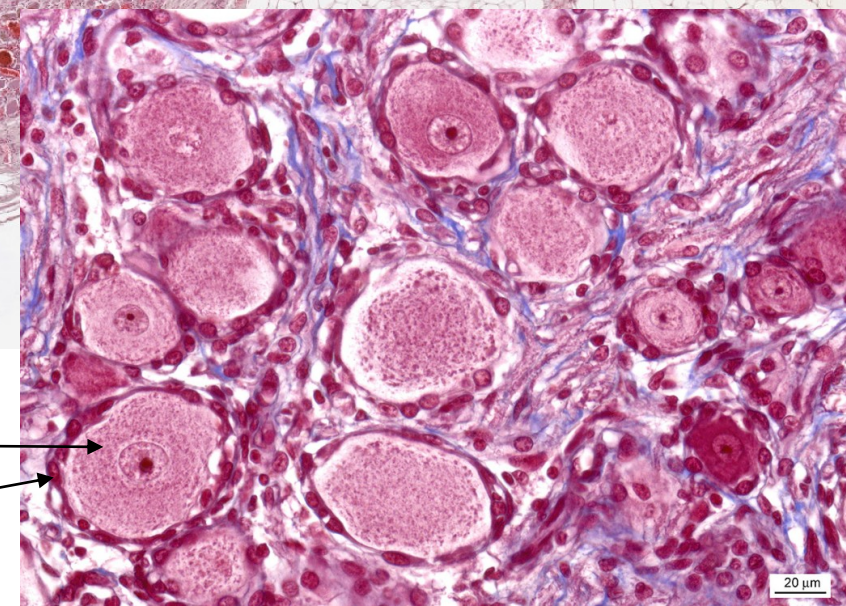


# Ganglion spinale

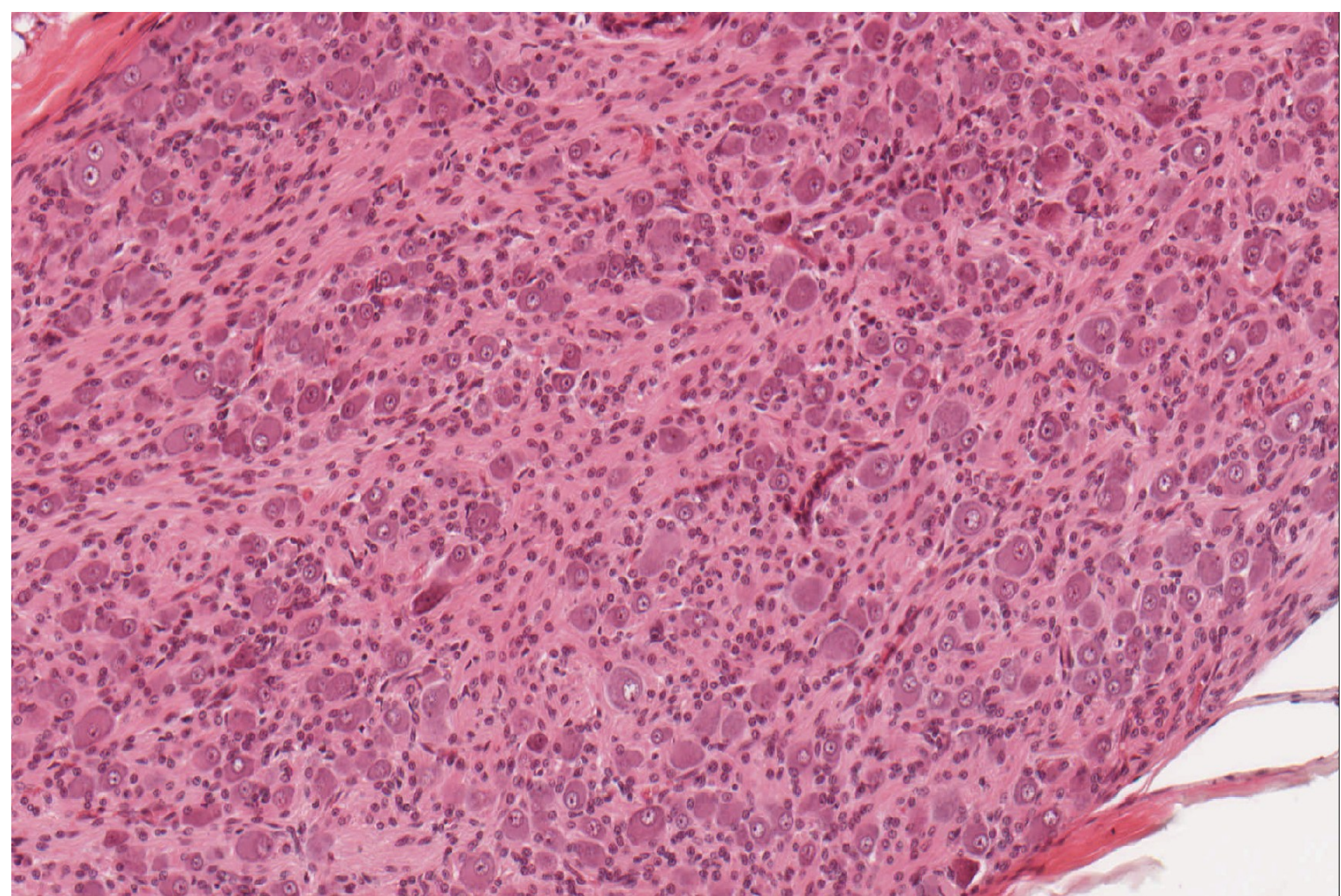


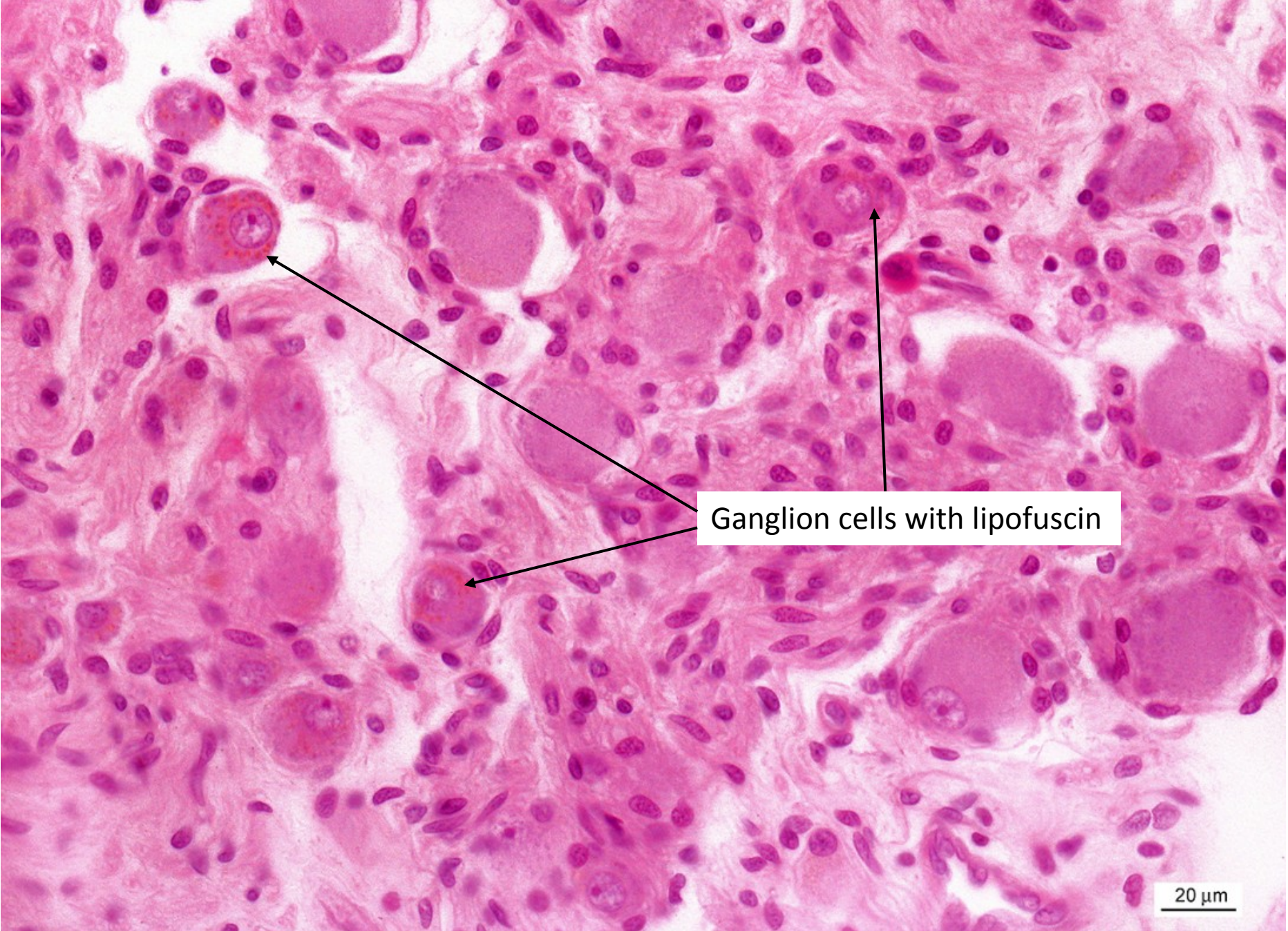
Pseudounipolar neurons

Satellite cells



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

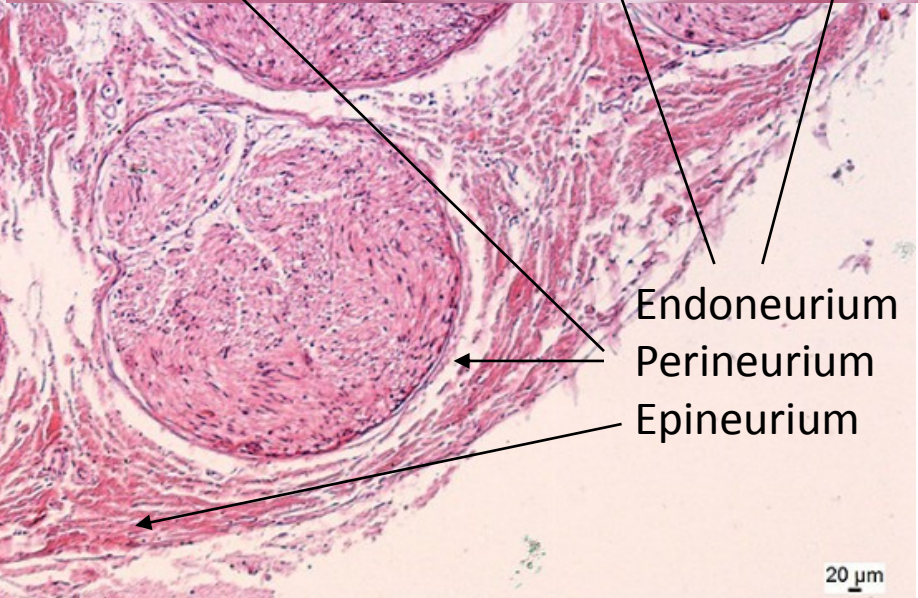
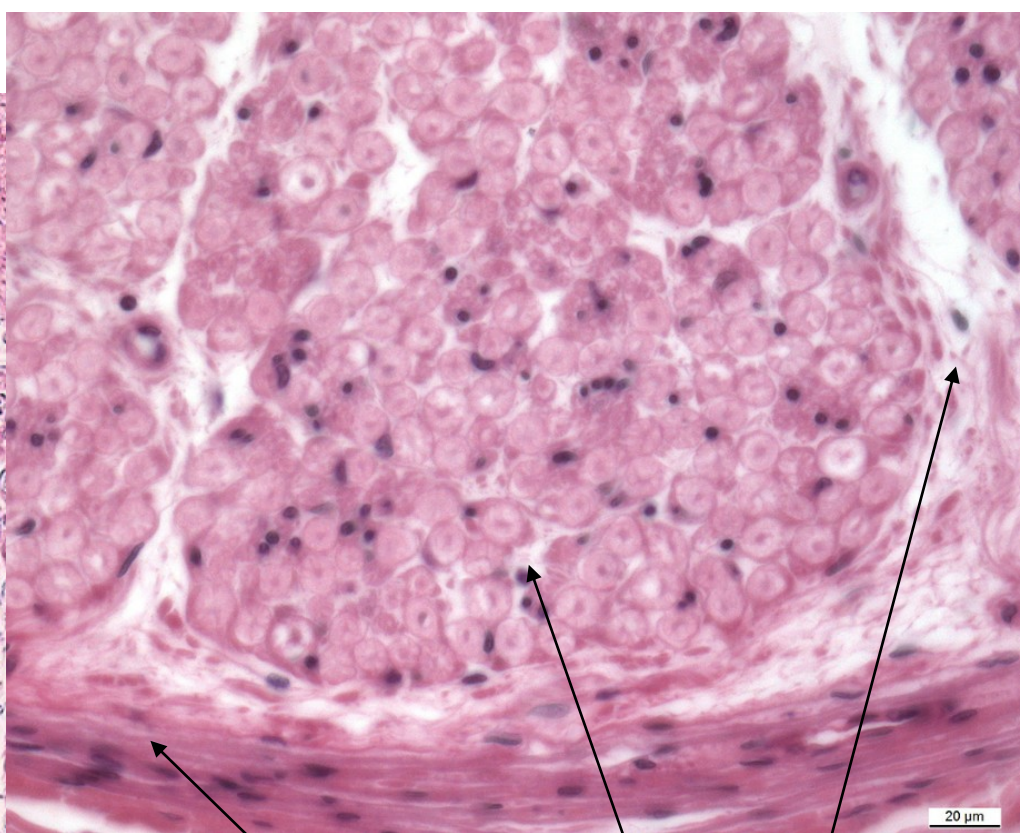
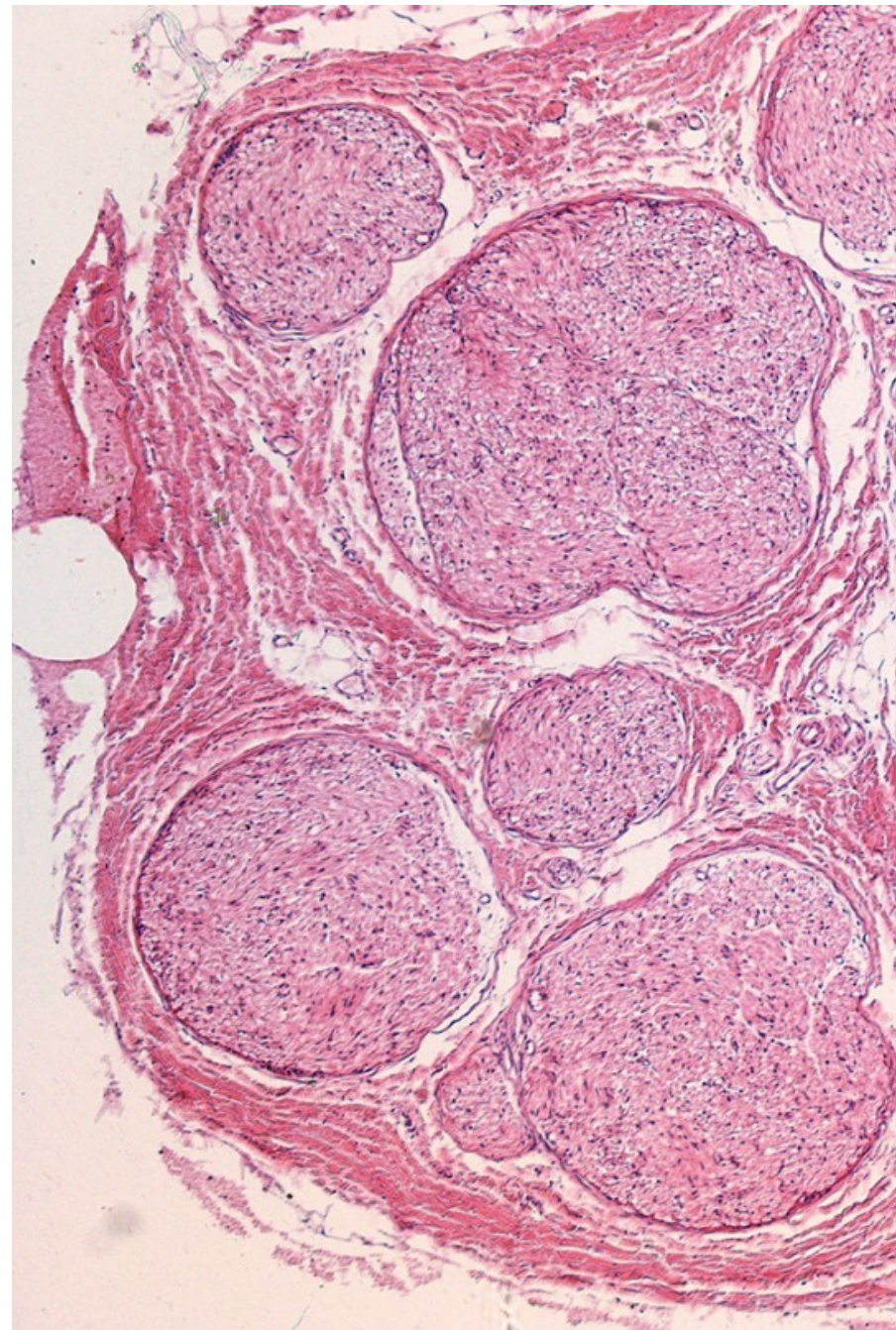




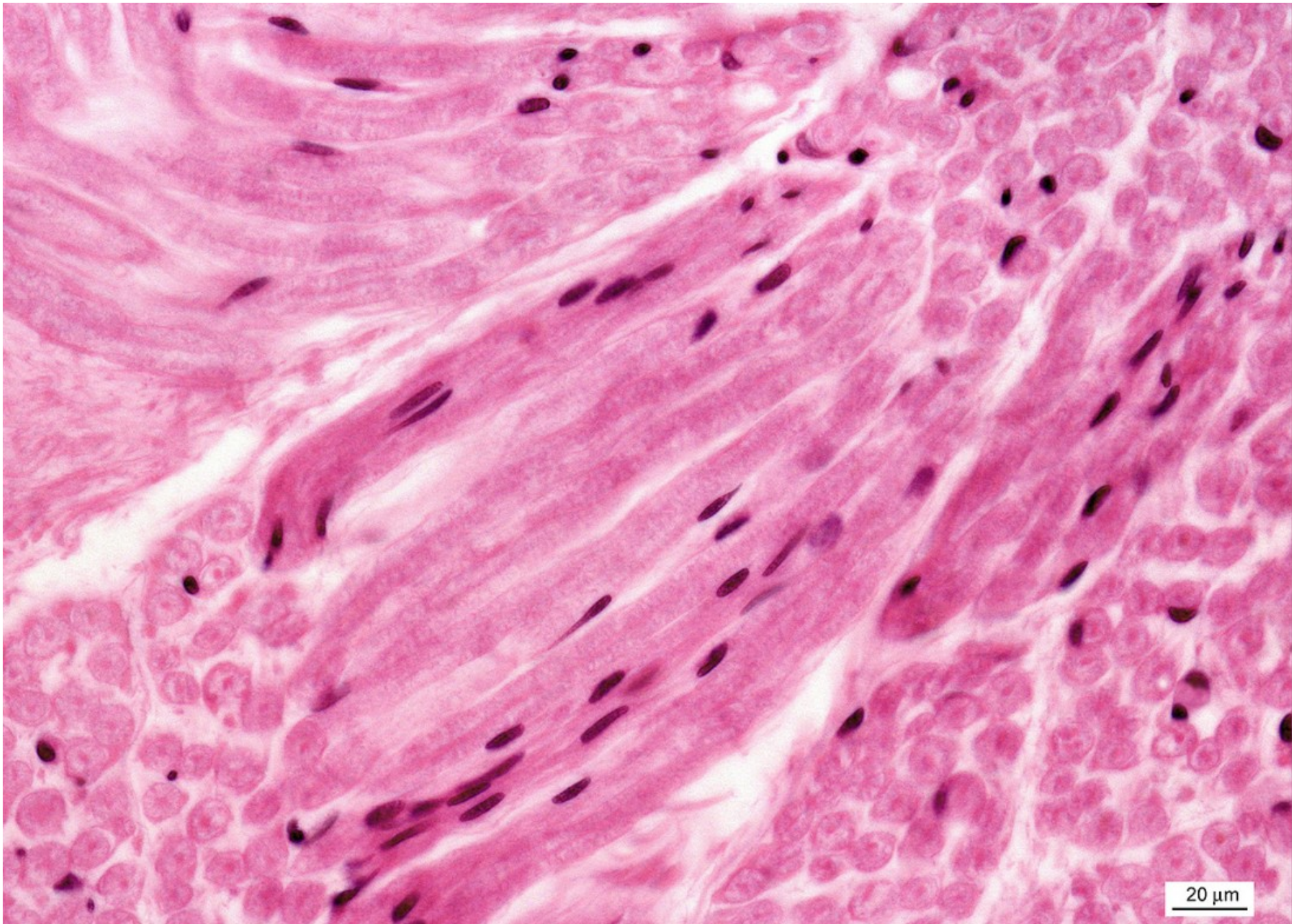
Ganglion cells with lipofuscin

20  $\mu$ m

# Peripheral nerve



# Peripheral nerve





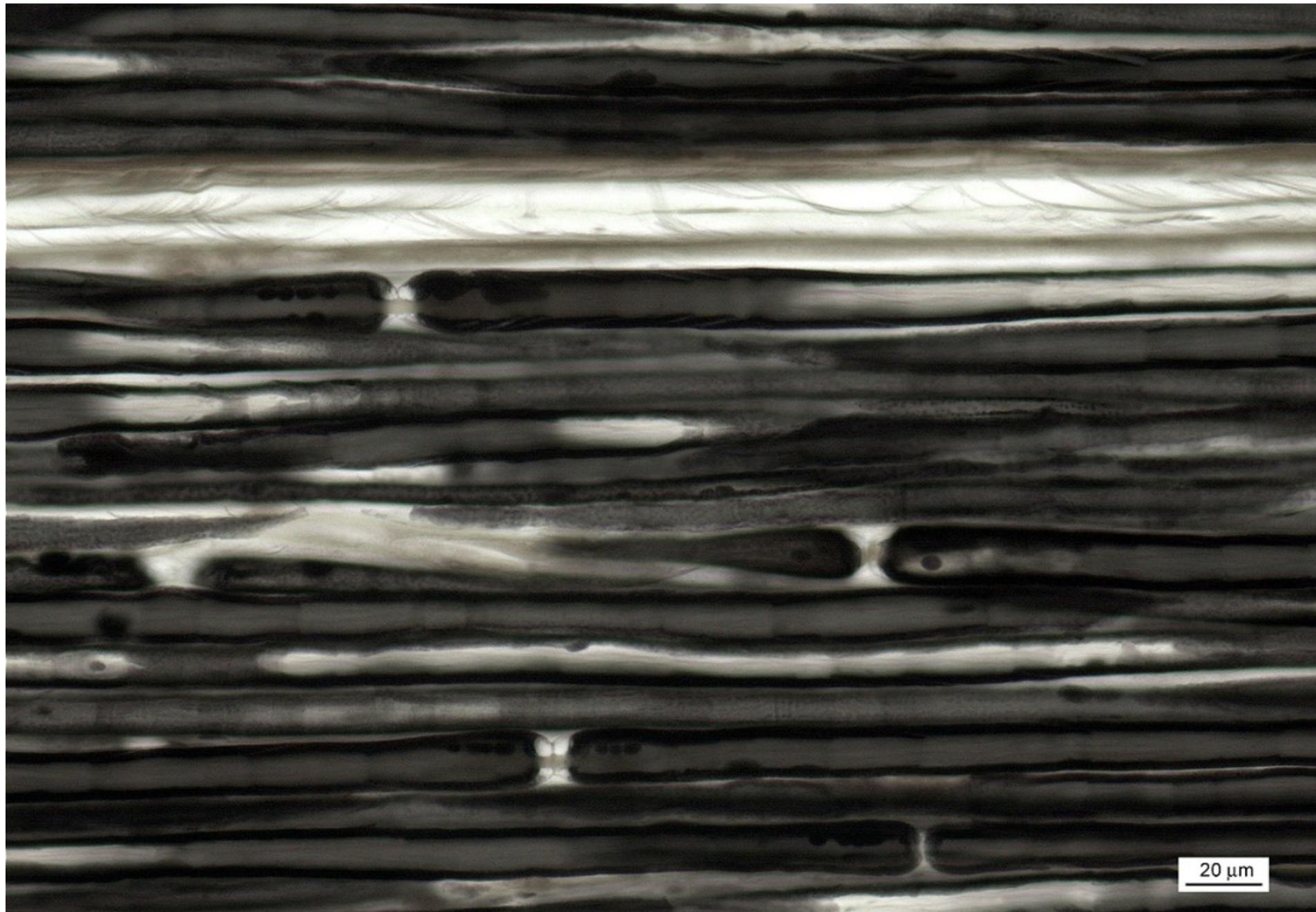
Peripheral nerve – longitudinal section



Node of Ranvier

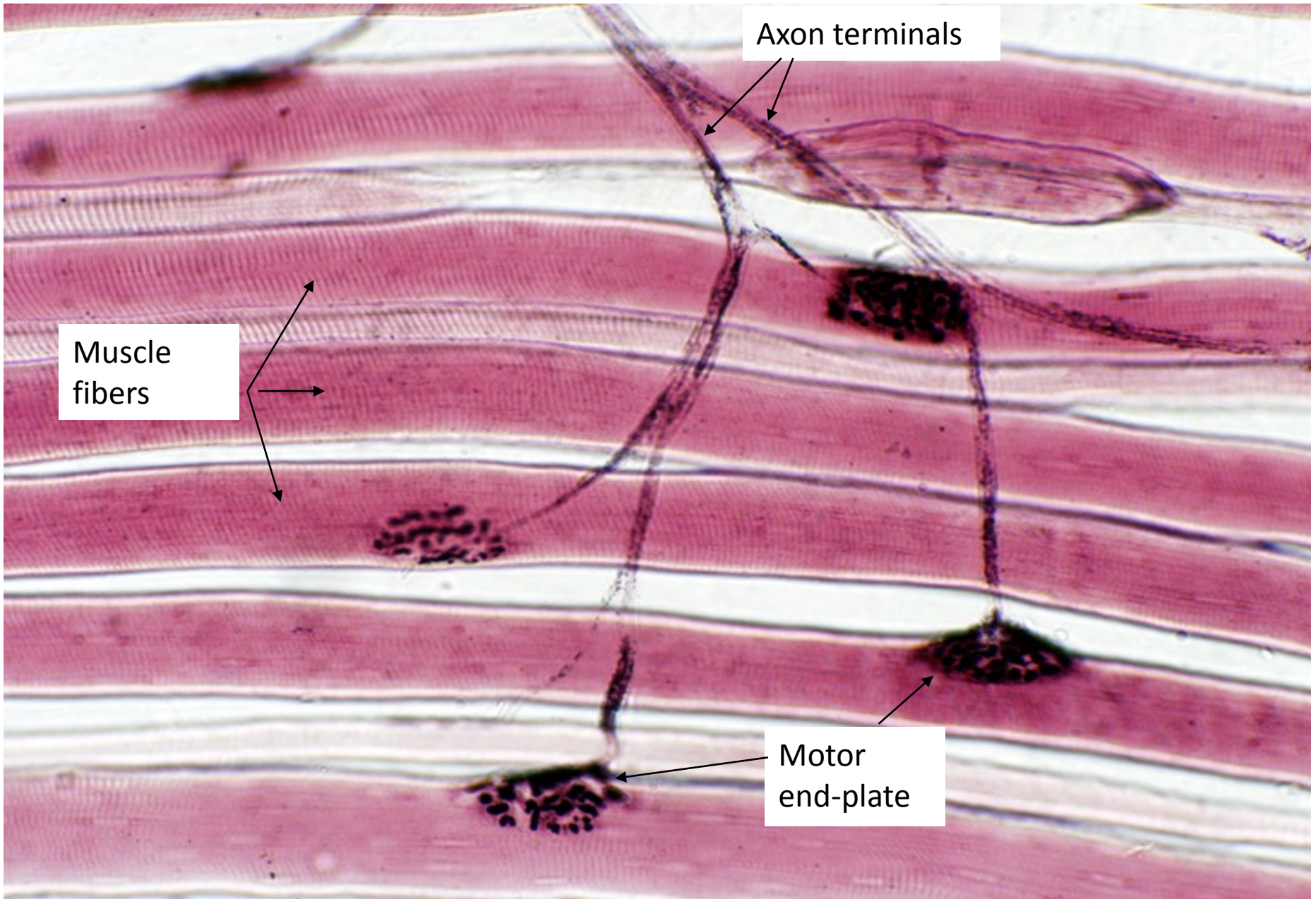
20 μm

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

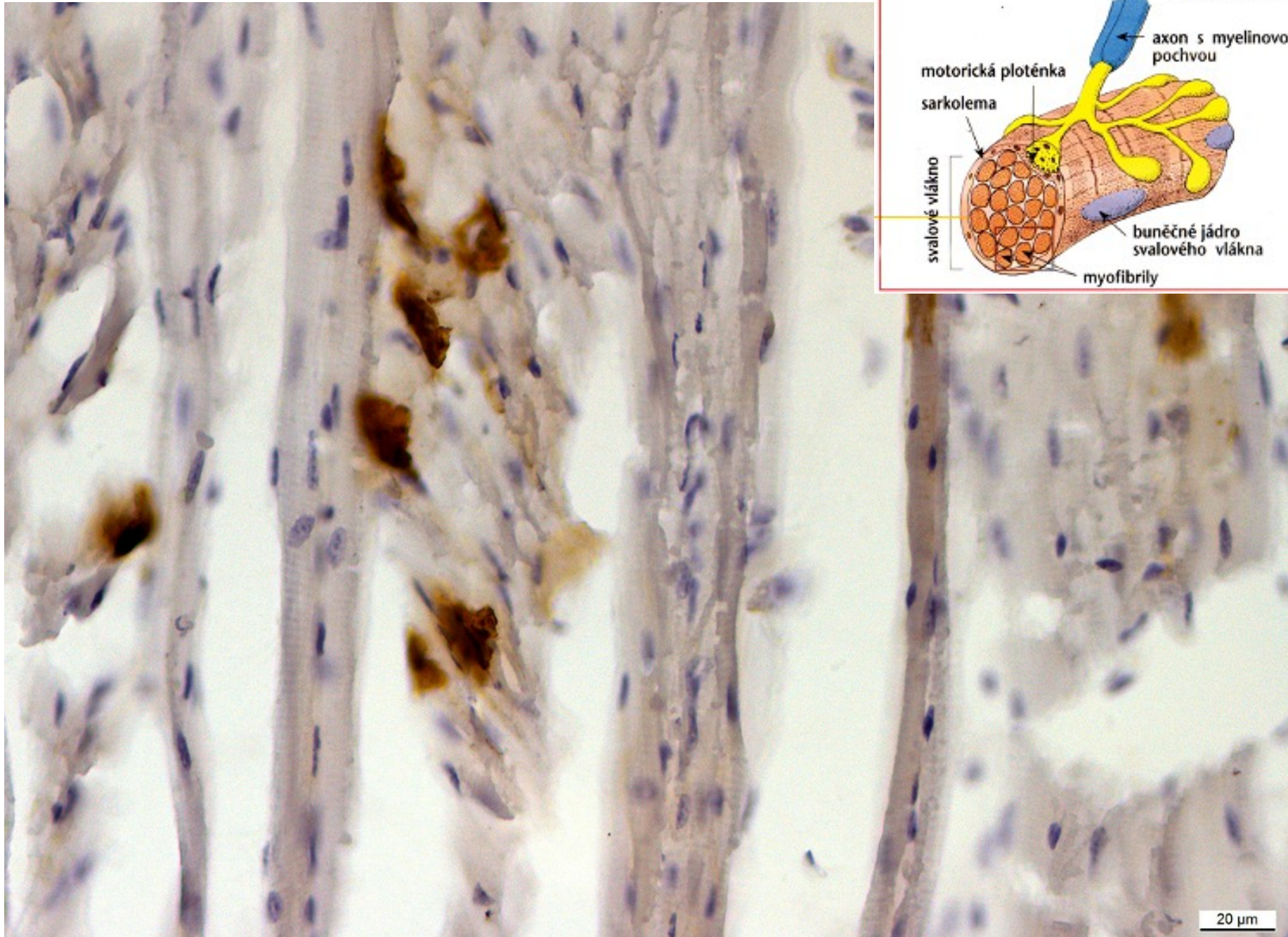
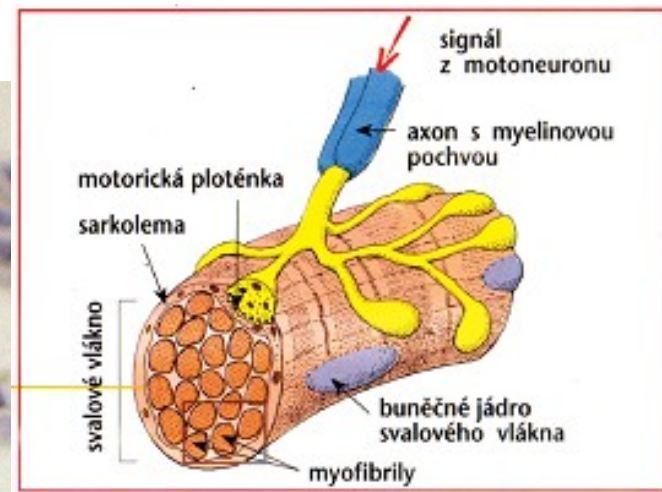


20 μm

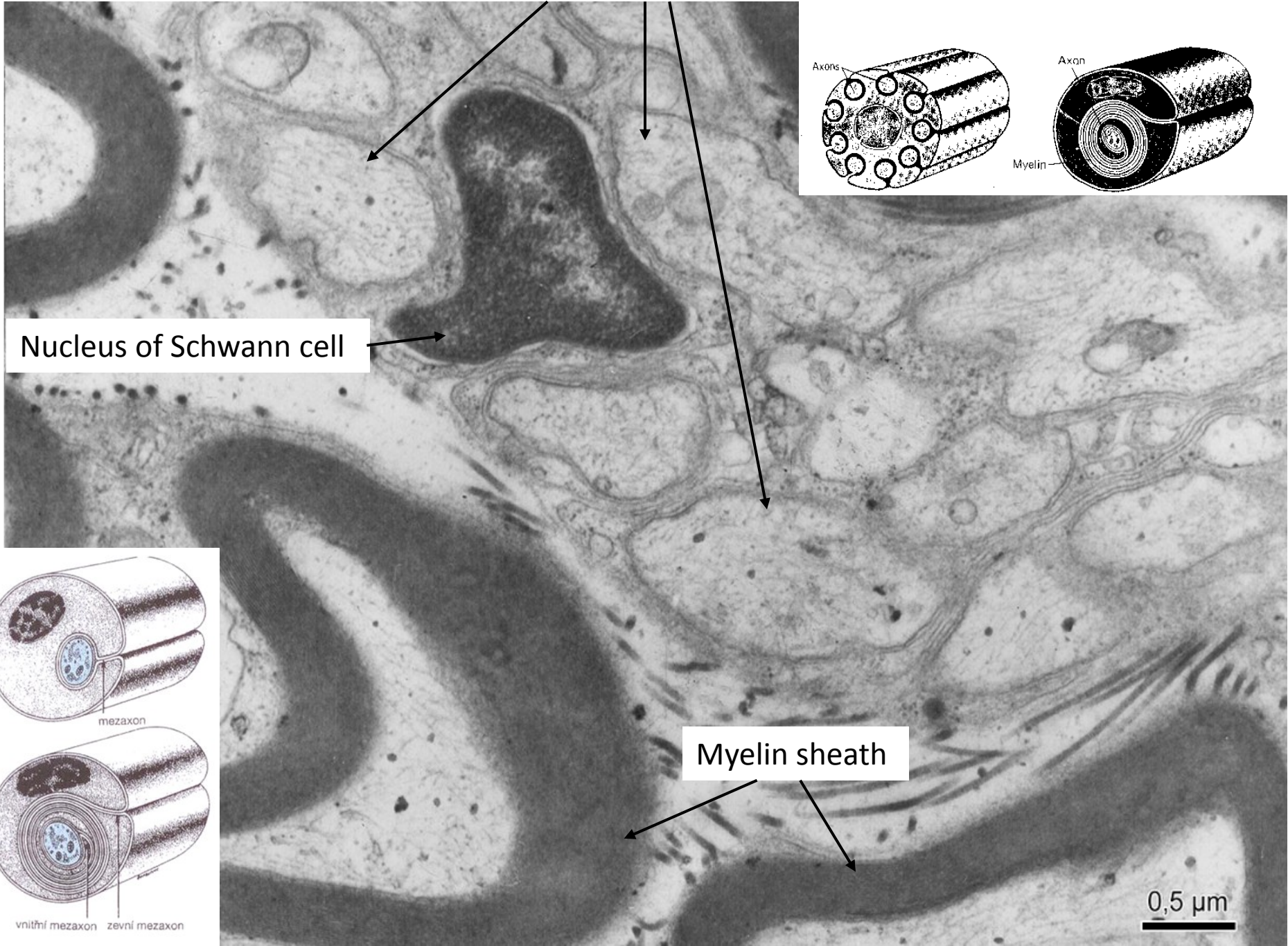
# Motor end-plates in motor unit



# Motor end-plates (localization of acetylcholinesterase)



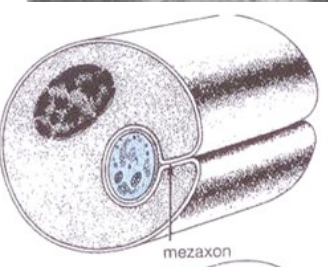
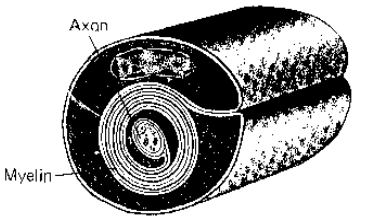
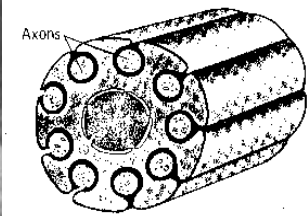
# Axons with Schwann sheath



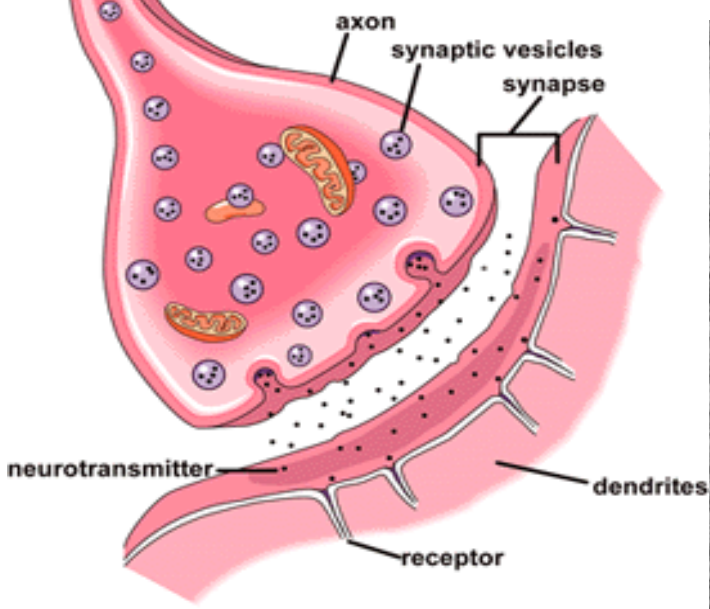
Nucleus of Schwann cell

Myelin sheath

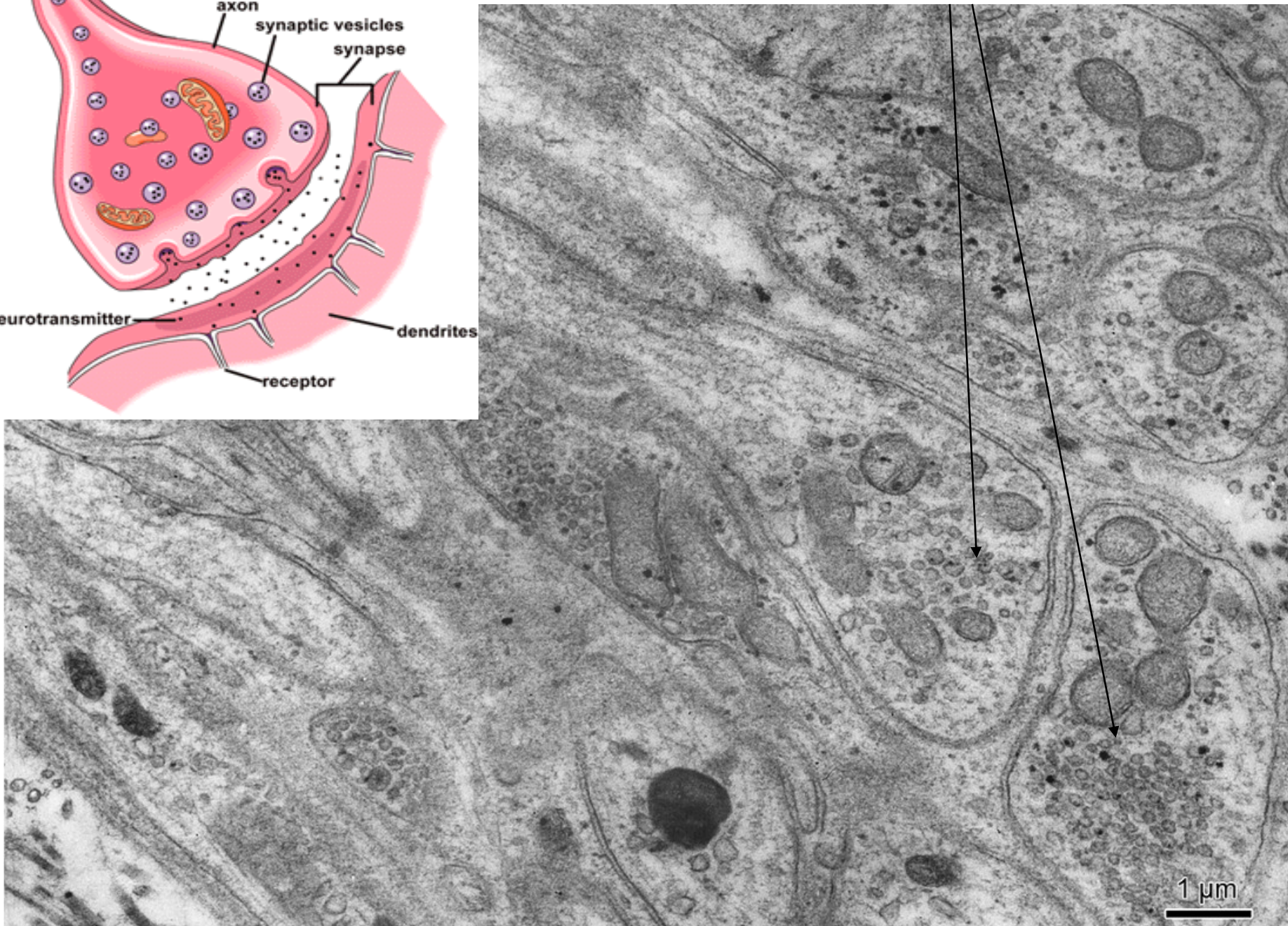
0,5 μm



# 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)