

Histology Practical slides

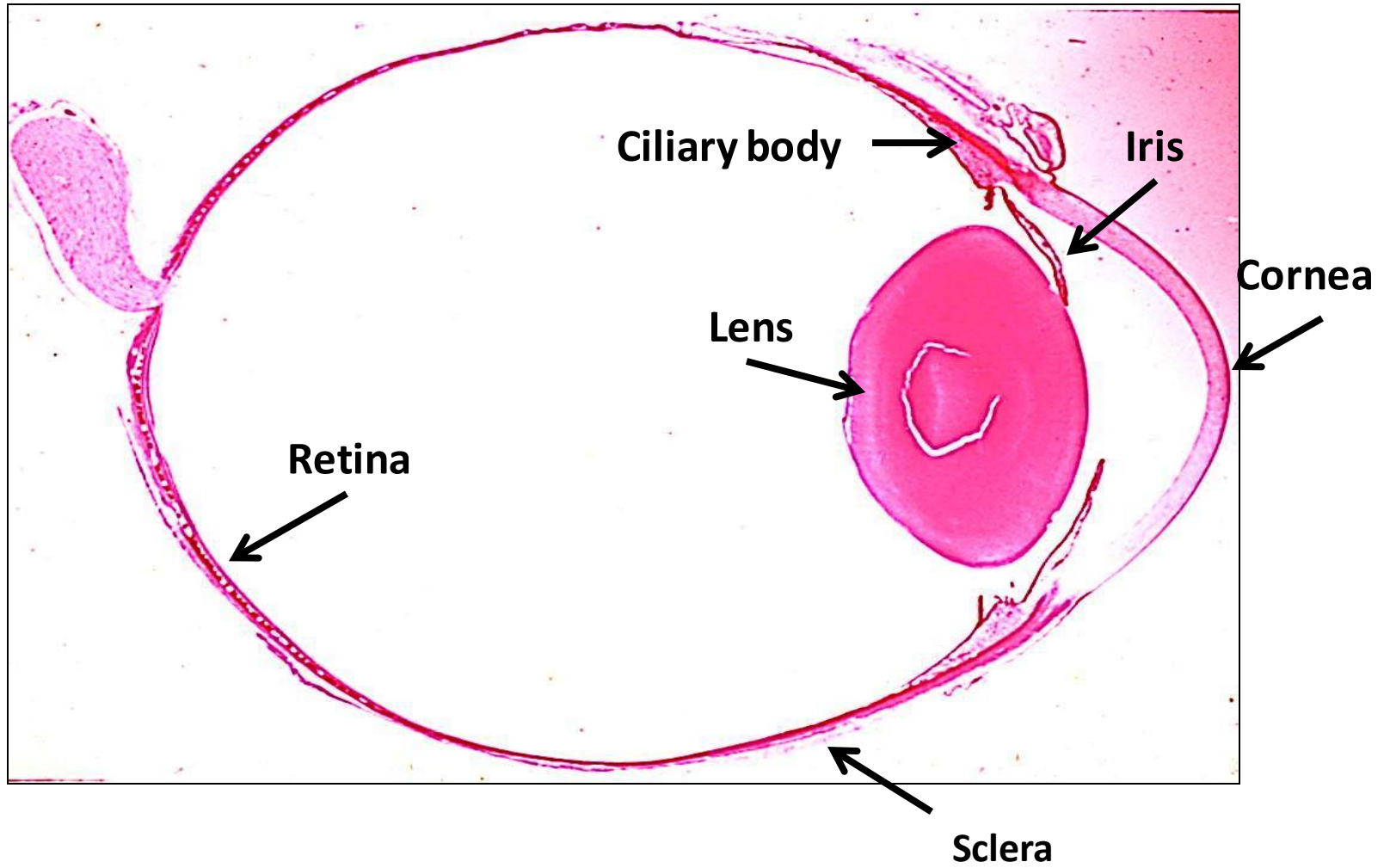
3rd year/ 2024

PNS module

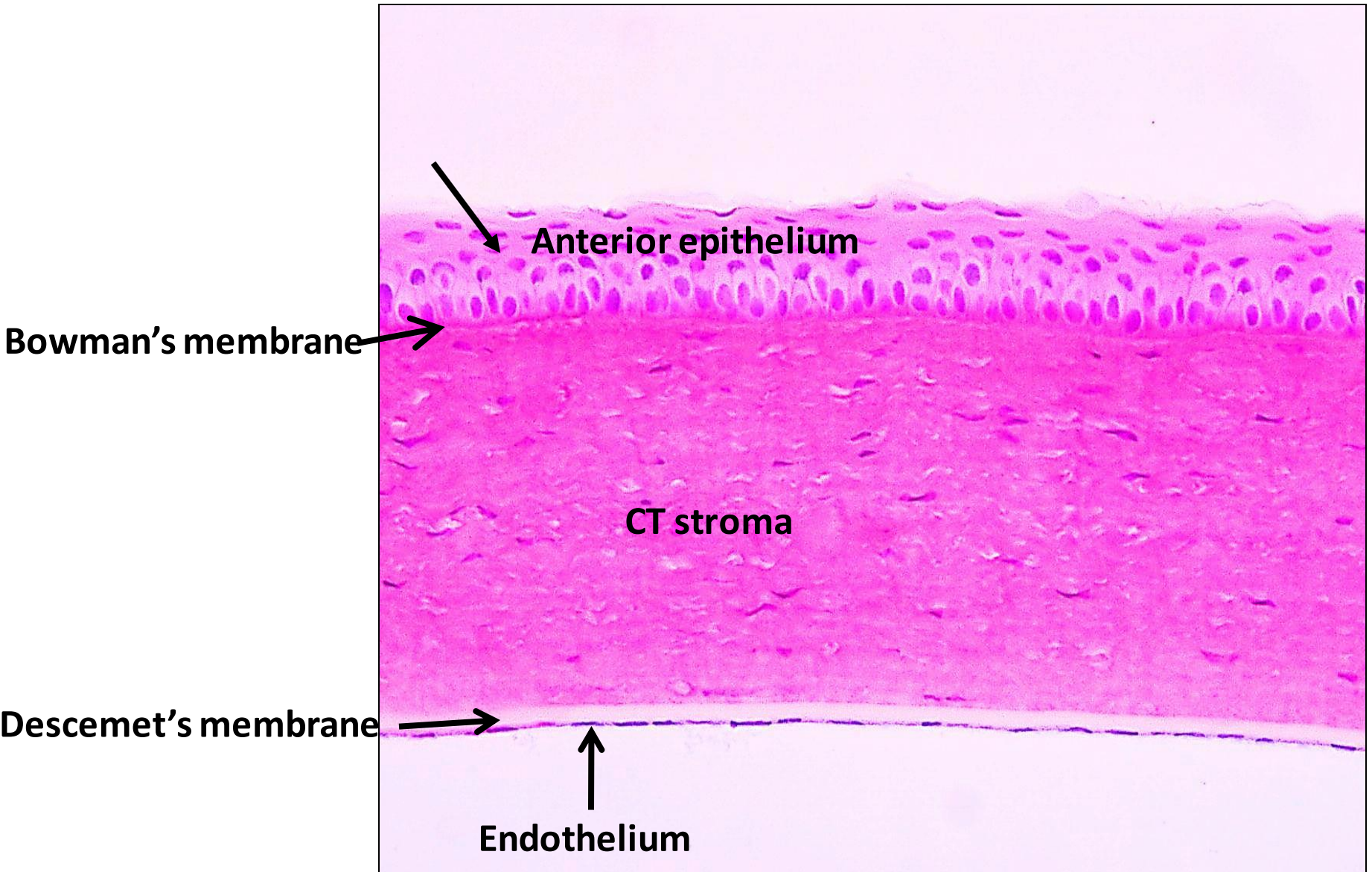
The assigned slides:

1. The eye ball - The cornea - The retina
2. The cochlea (ear)
3. The spinal ganglion (H&E)
4. The spinal ganglion (sliver)
5. The sympathetic ganglion (H&E)
6. The sympathetic ganglion (sliver)
7. The nerve trunk (H&E)
8. The nerve trunk (osmic acid)
9. Pacinian corpuscle in pancreas
10. Messienner's corpuscles in skin

H&E) (The eye ball)



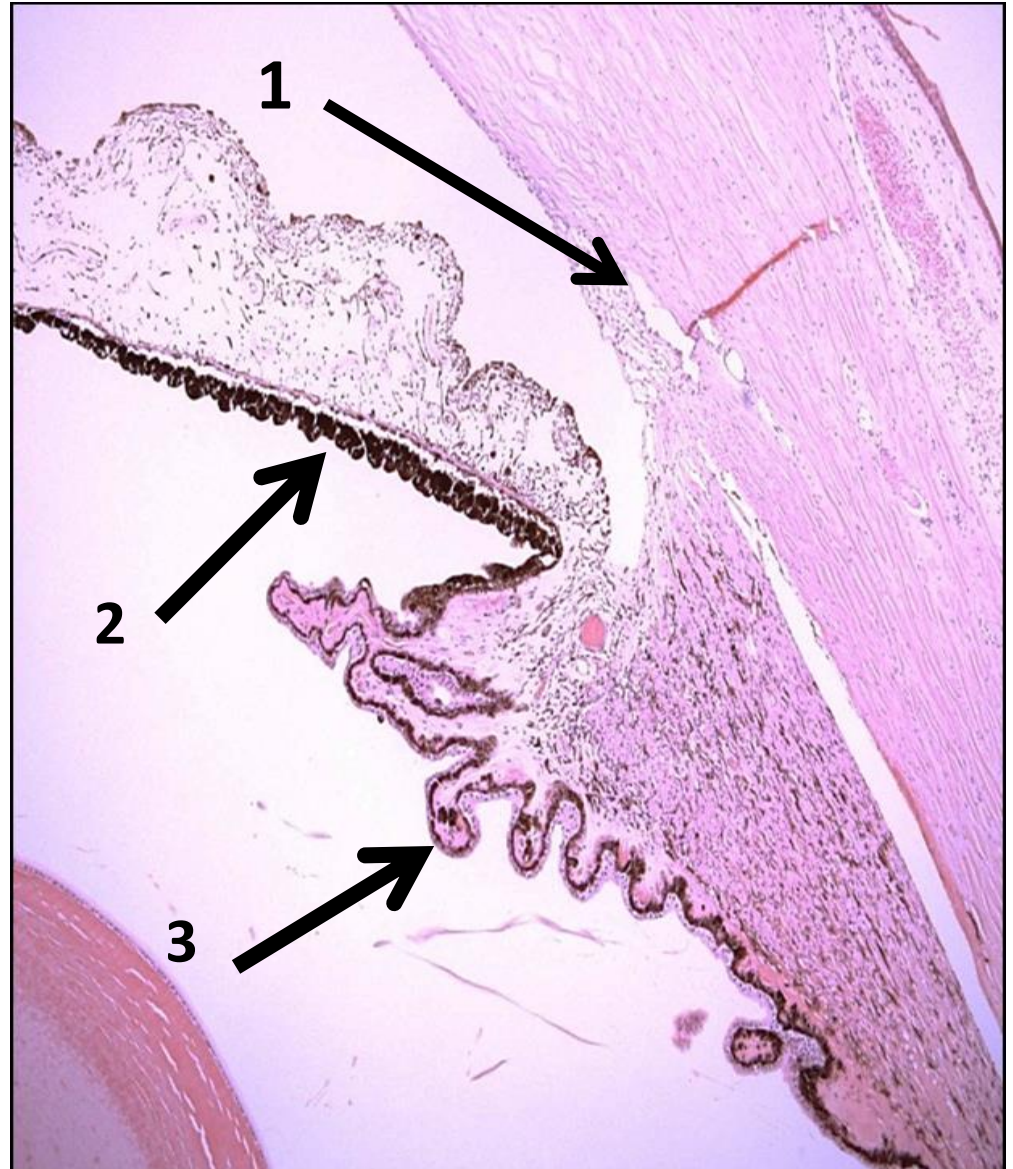
The cornea (H&E)



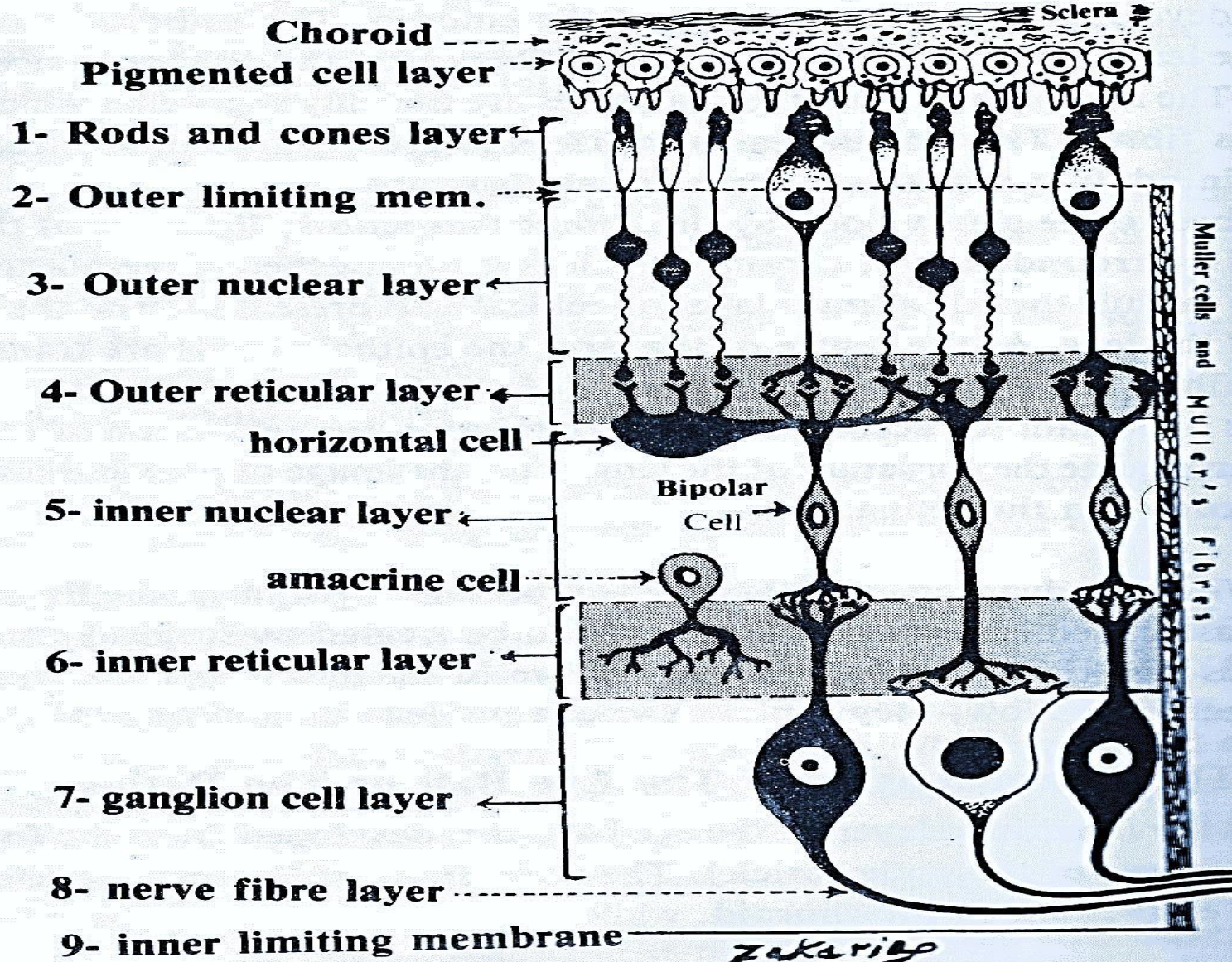
1- Canal of Schlemm

**2- Pigmented epithelium
of lower surface of iris**

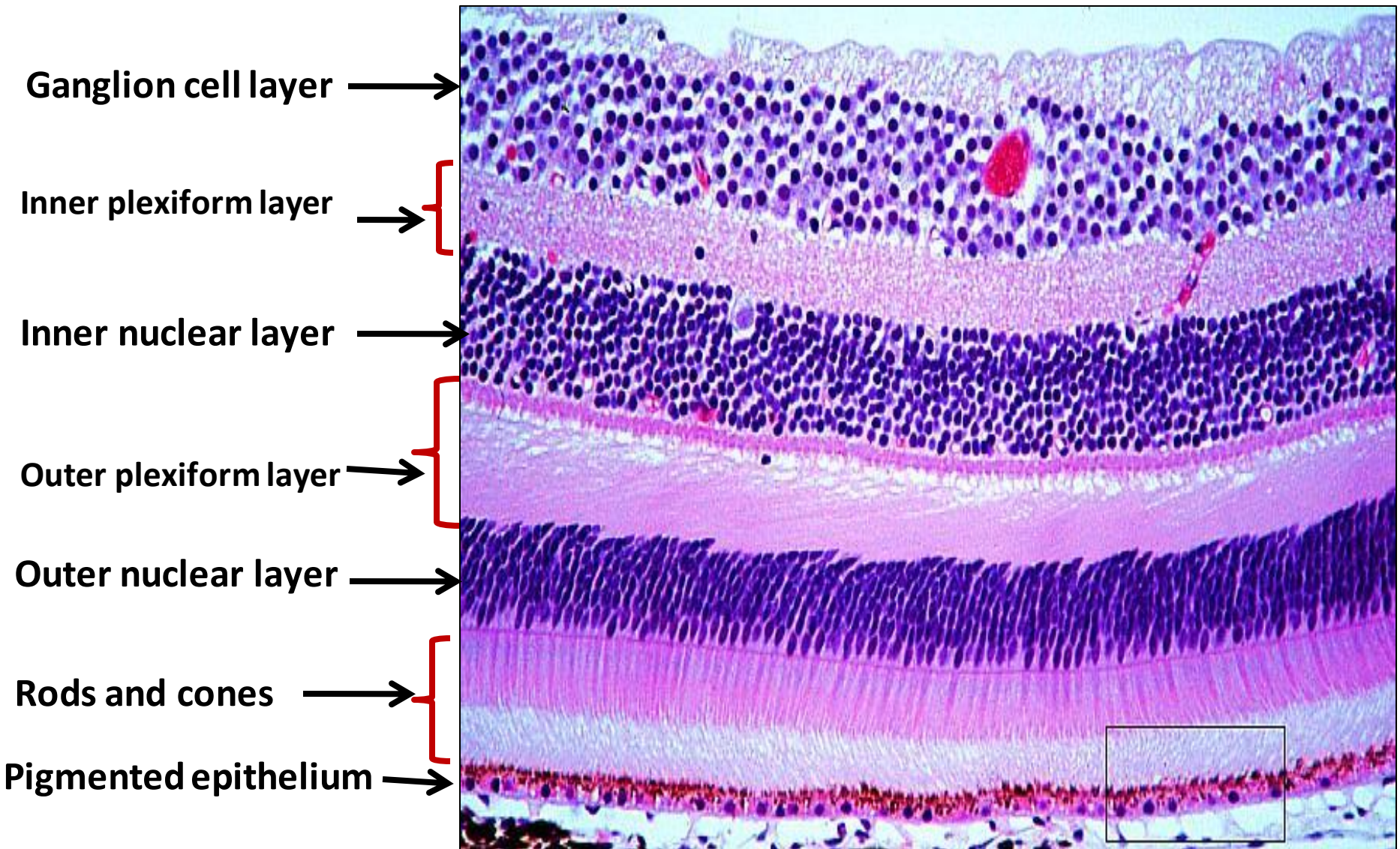
3- Ciliary process



1- The Retina

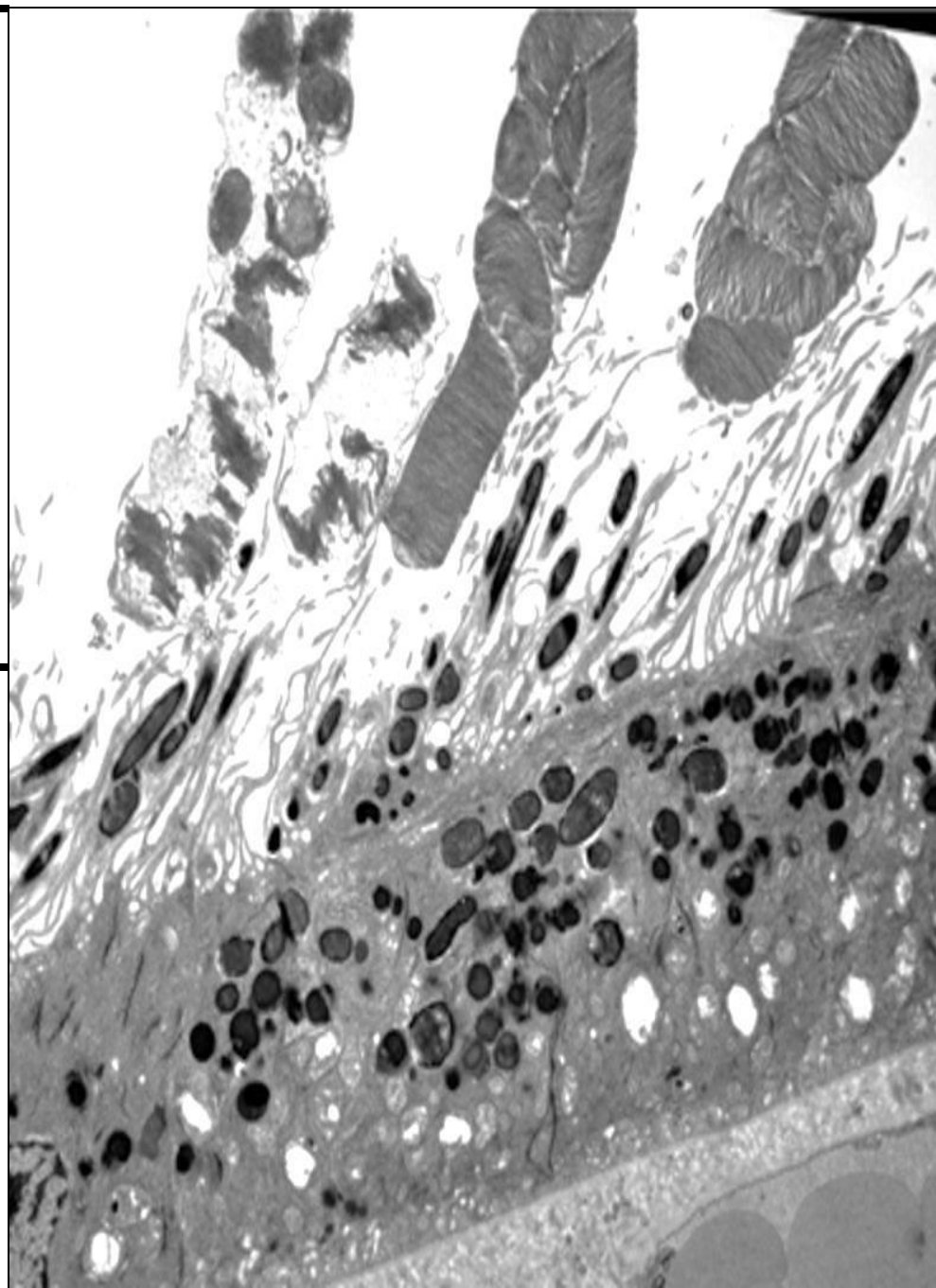


The retina (H&E)



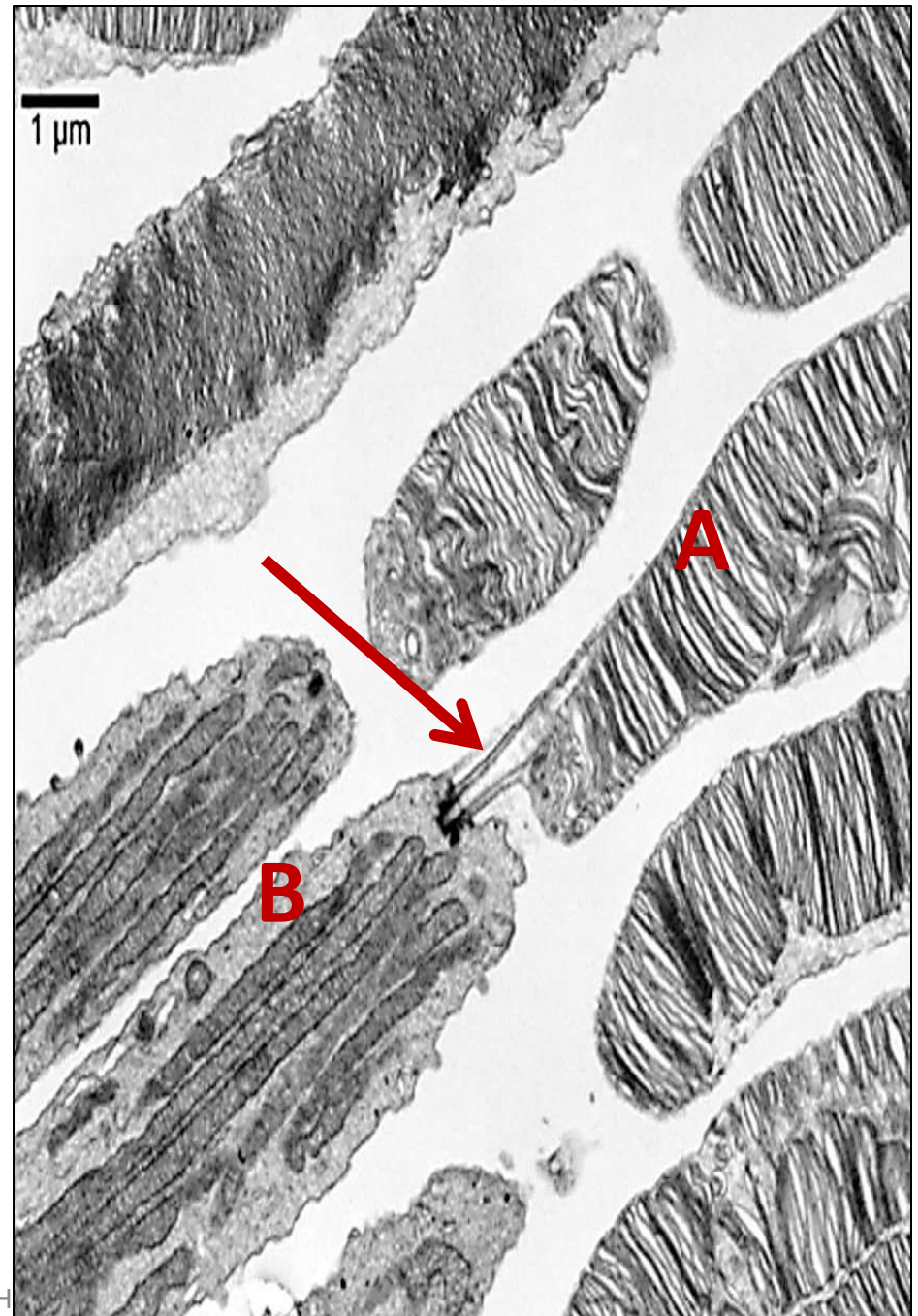
Outer segment of photoreceptors

Retinal pigmented epithelium (RPE)



Pro

TEM of retina showing
photoreceptor (Rod):
(A) outer segment
(arrow) Cilium
(B) inner segment



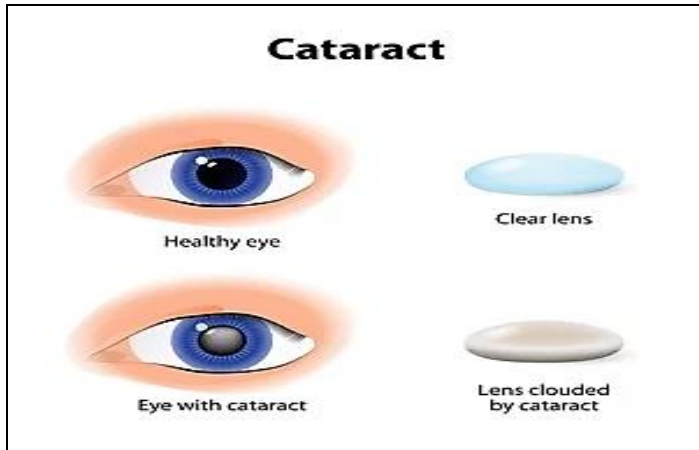
Ciliary epithelium:

Composed of two layers of cuboidal epithelium.

Ciliary Body & process



Lens



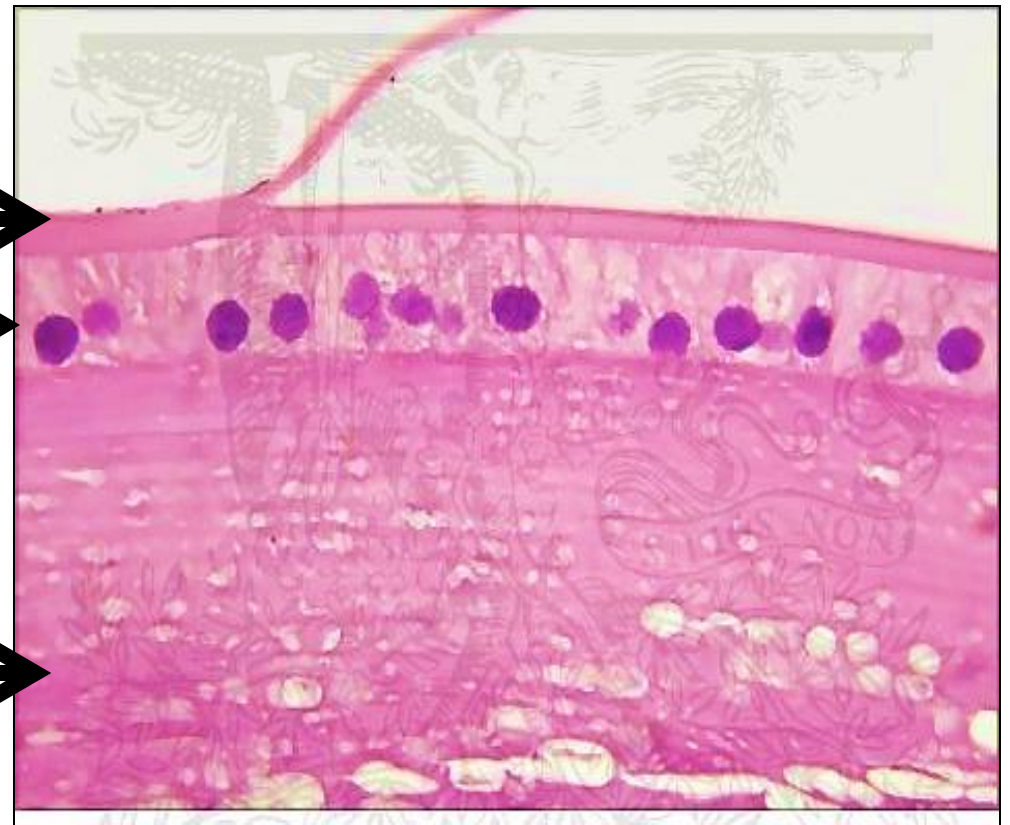
Lens capsule



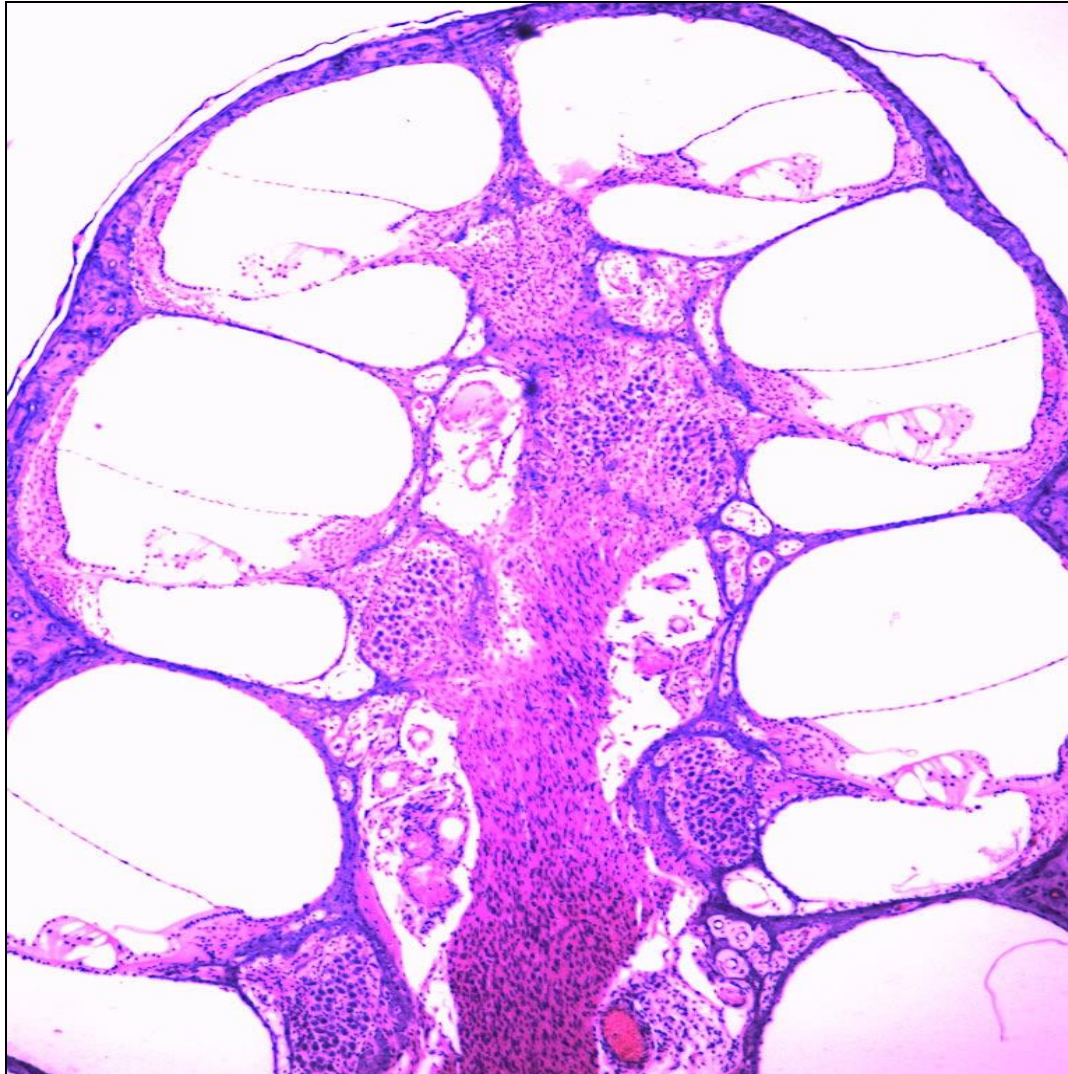
Lens epithelium



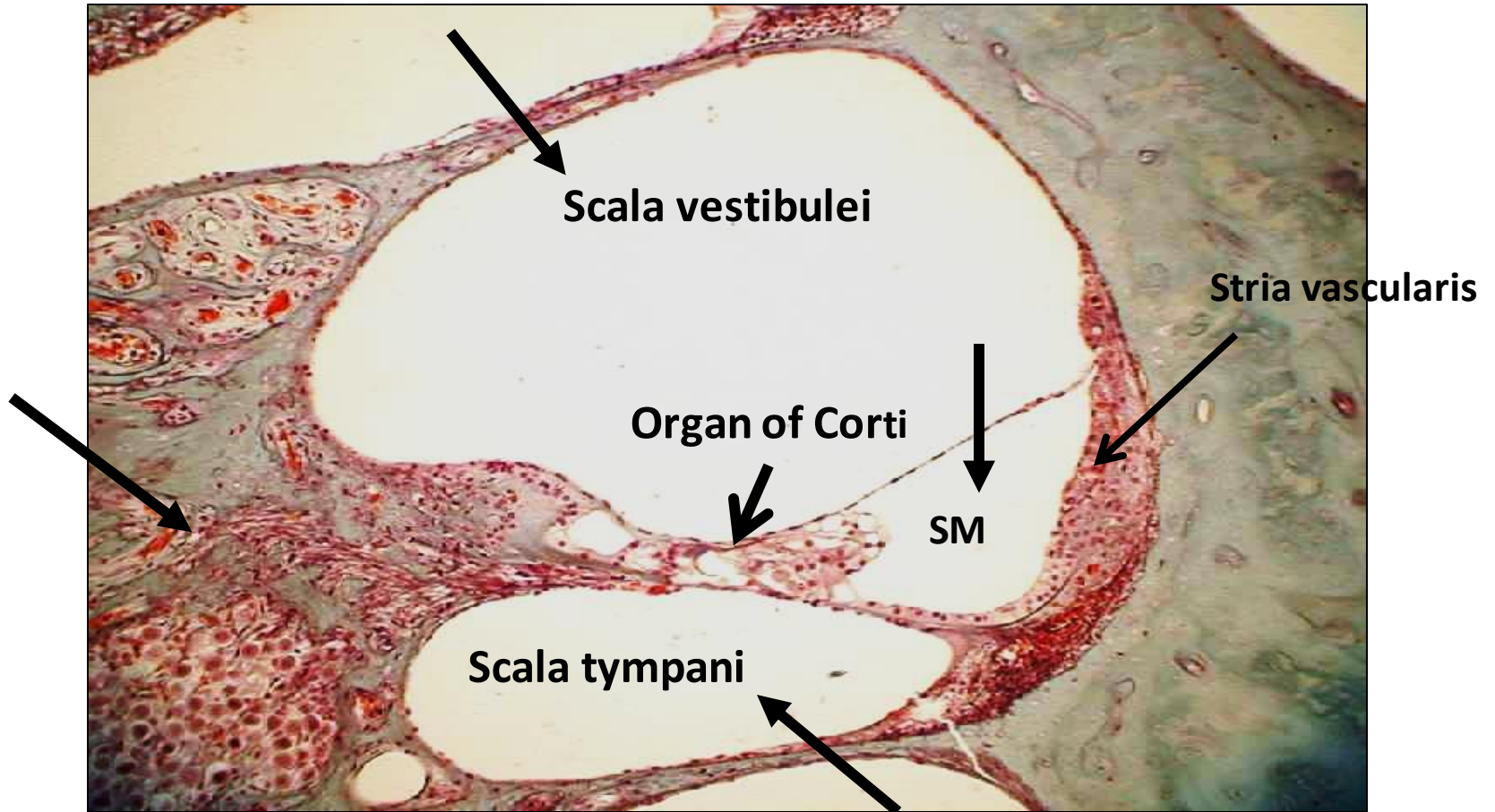
Lens fibers



The cochlea



The cochlea – organ of Corti



- 1- Scala vestibule
- 2- Scala tympani
- 3- Scala media (SM) = cochlear duct
- 4- organ of Corti
- 5- stria vascularis
- 6- Modiolous

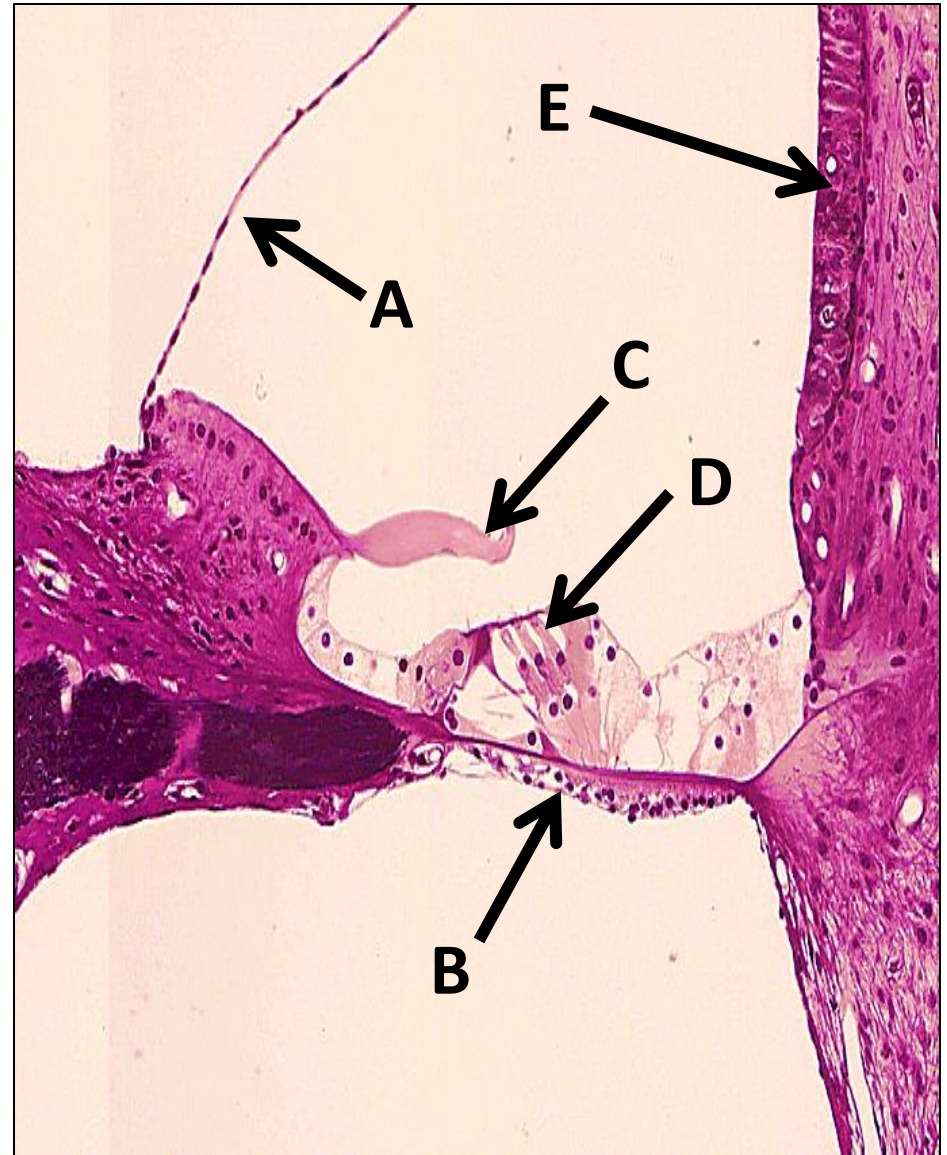
A: Vestibular membrane

B: Basilar membrane

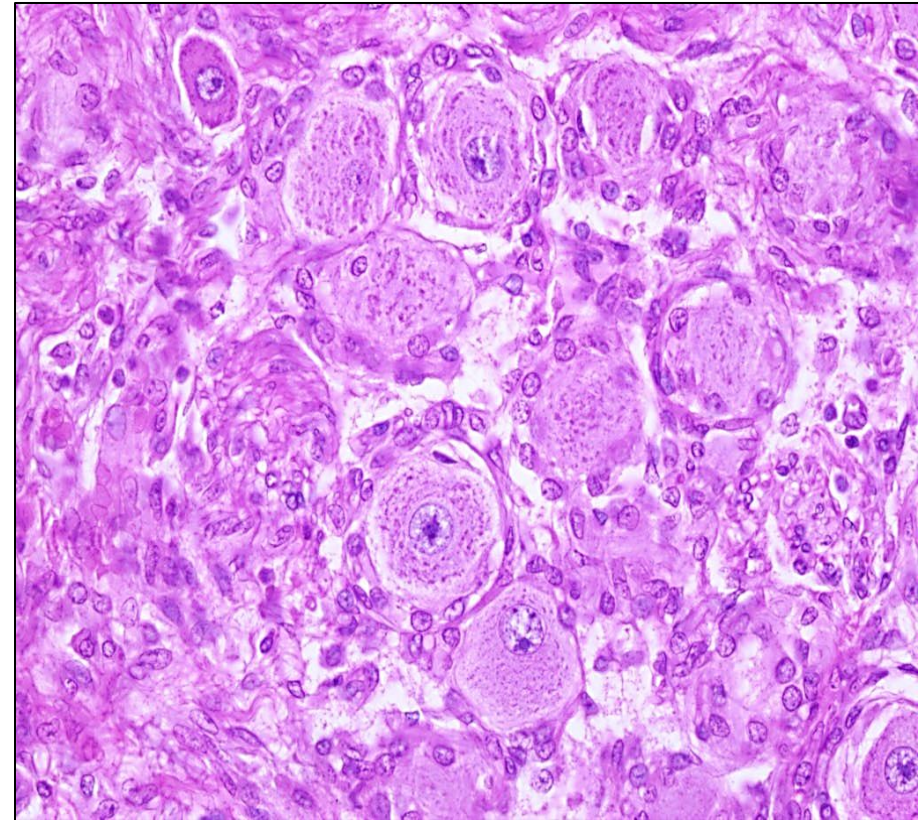
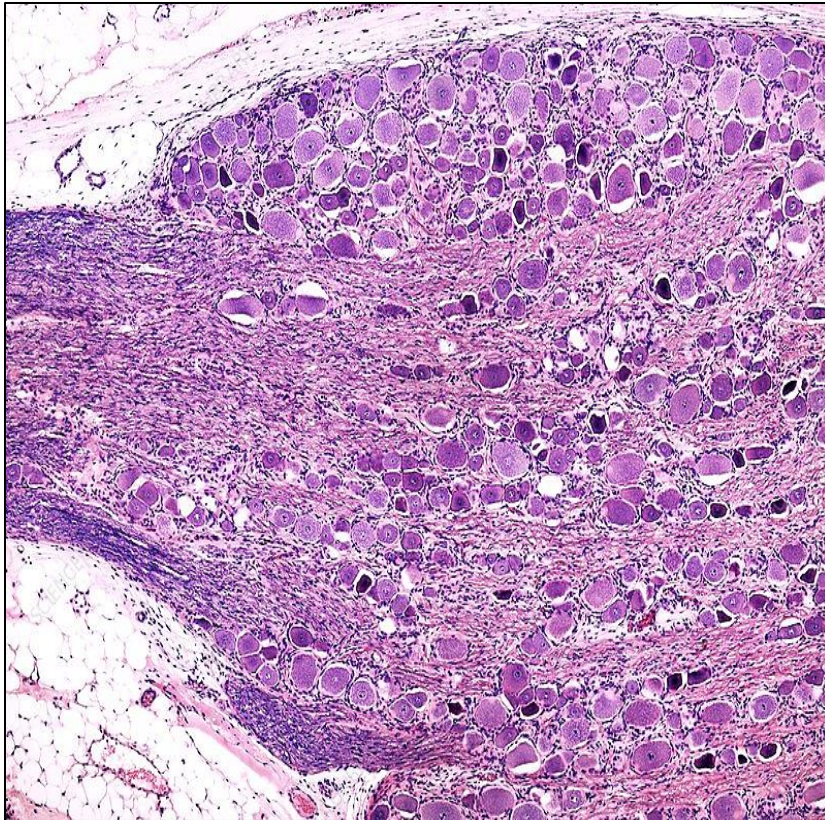
C: Tectorial membrane

D: Outer hair cells

E: Stria vascularis

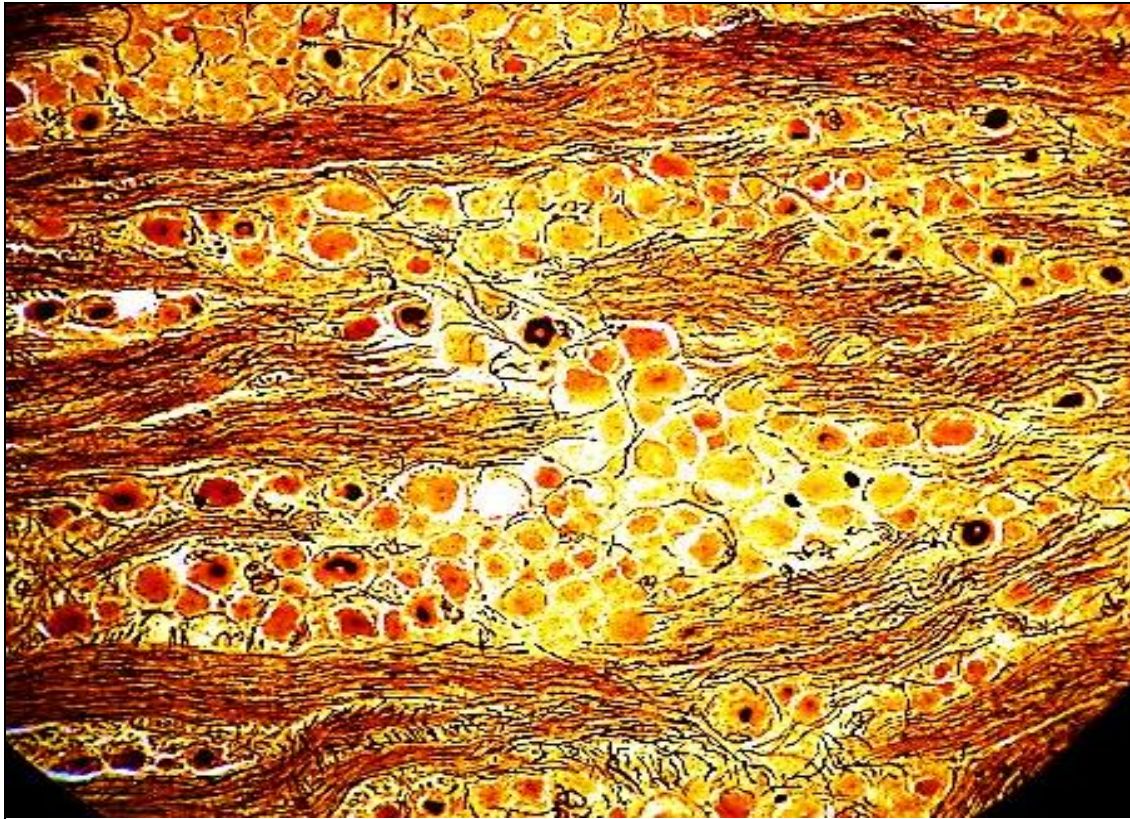


The spinal ganglion (H&E)



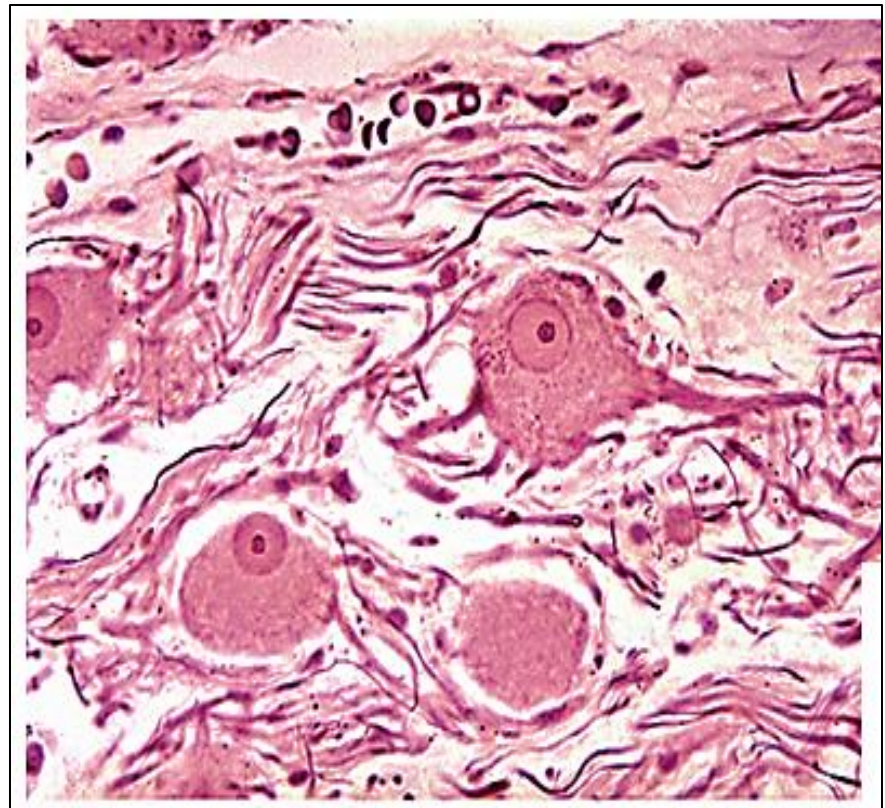
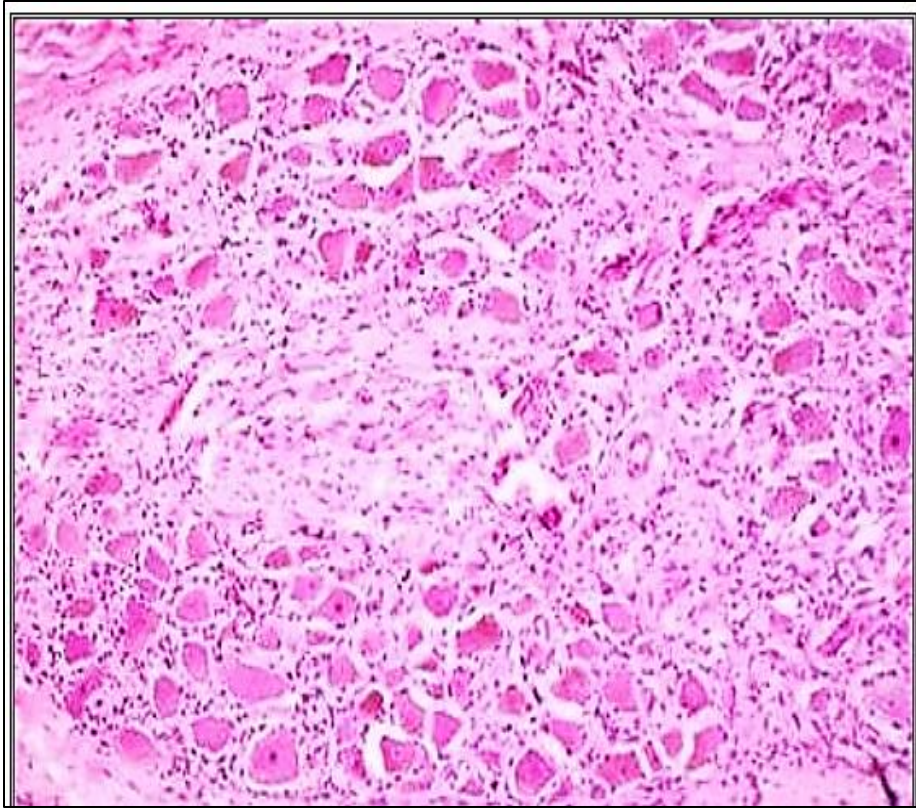
- 1- nerve cells are rounded (unipolar) & present in rows
- 2- nuclei central
- 3- Myelinated nerve fibers
- 4- Satellite cells surround each nerve cell body

The spinal ganglion (sliver)



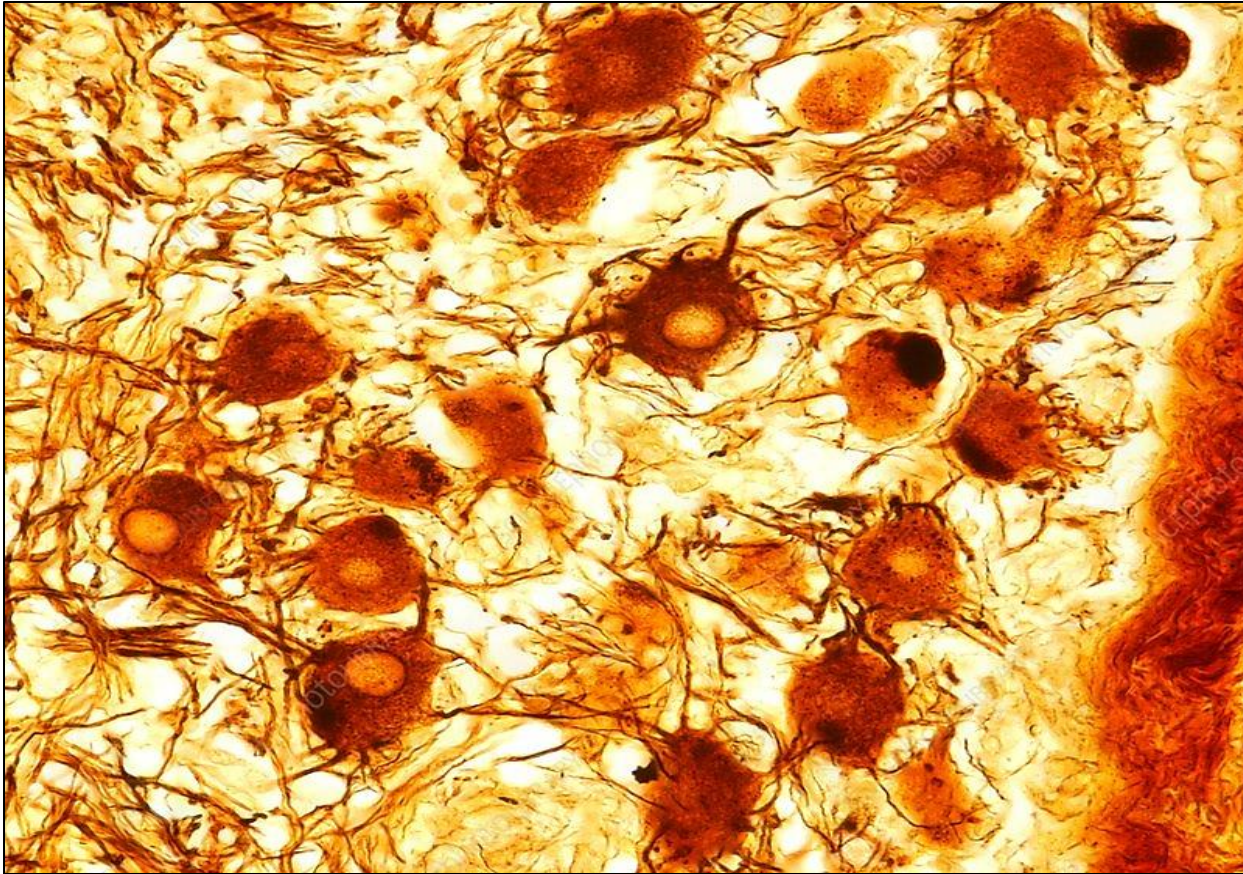
- 1- nerve cells are rounded (unipolar) & present in rows**
- 2-Myelinated nerve fibers**

Sympathetic ganglion (H&E)



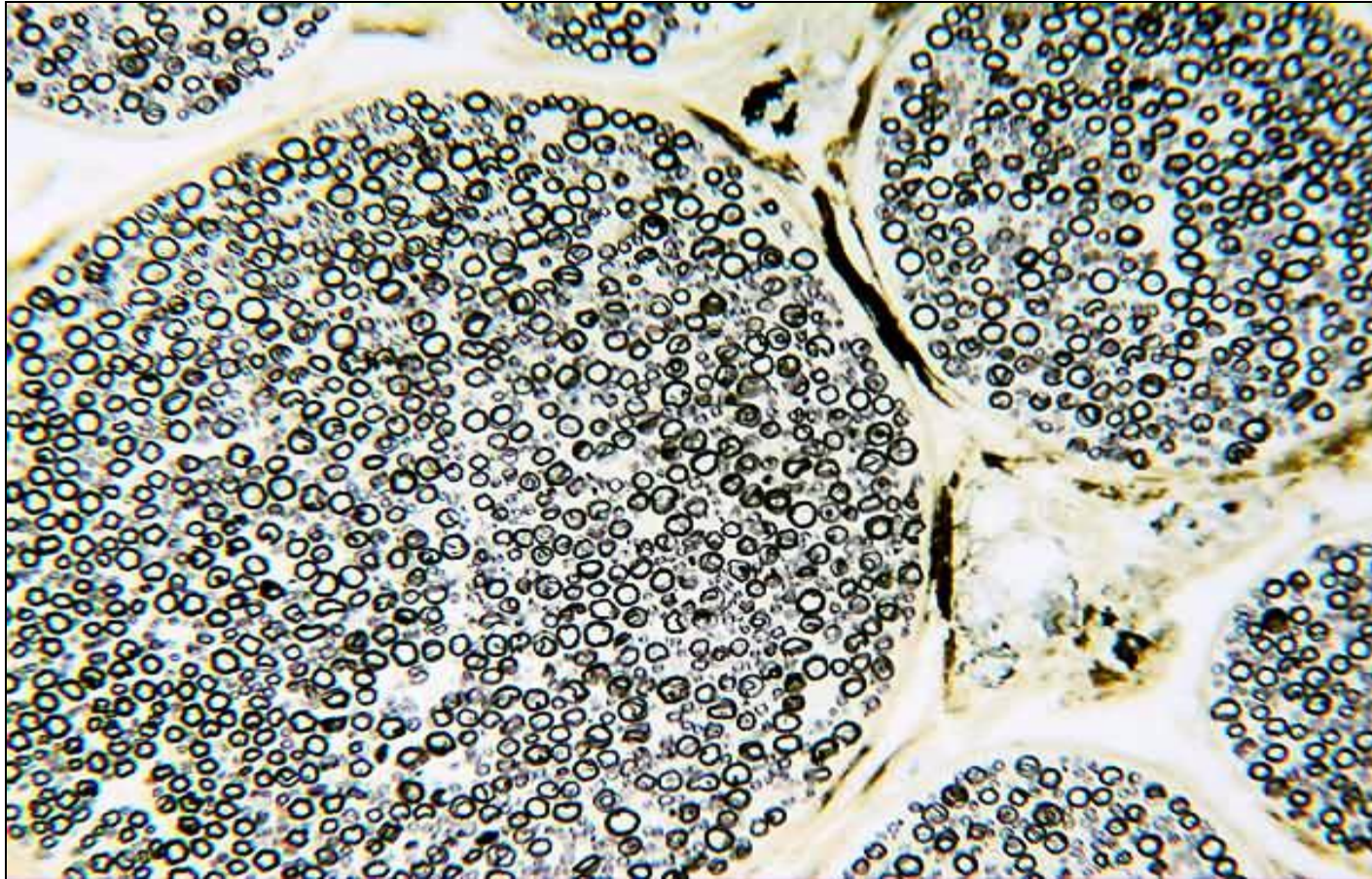
- 1- nerve cells are multipolar and scattered**
- 2- nuclei are eccentric**
- 3- few satellite cells**

Sympathetic ganglion (sliver)



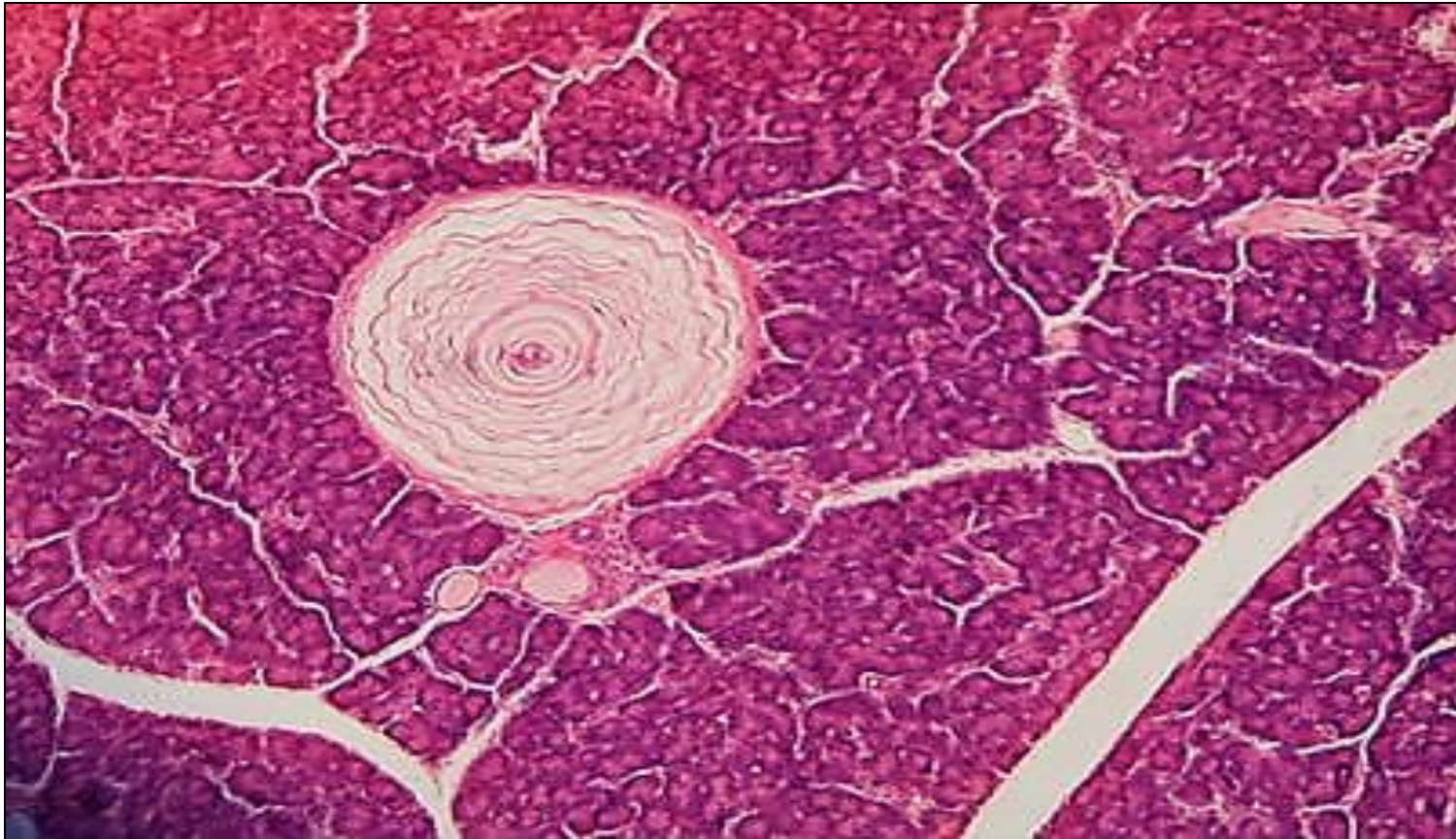
- 1- nerve cells are multipolar and uneven**
- 2- nerve cells are scattered**

Nerve trunk(Osmic acid)



Myelin sheath stained black

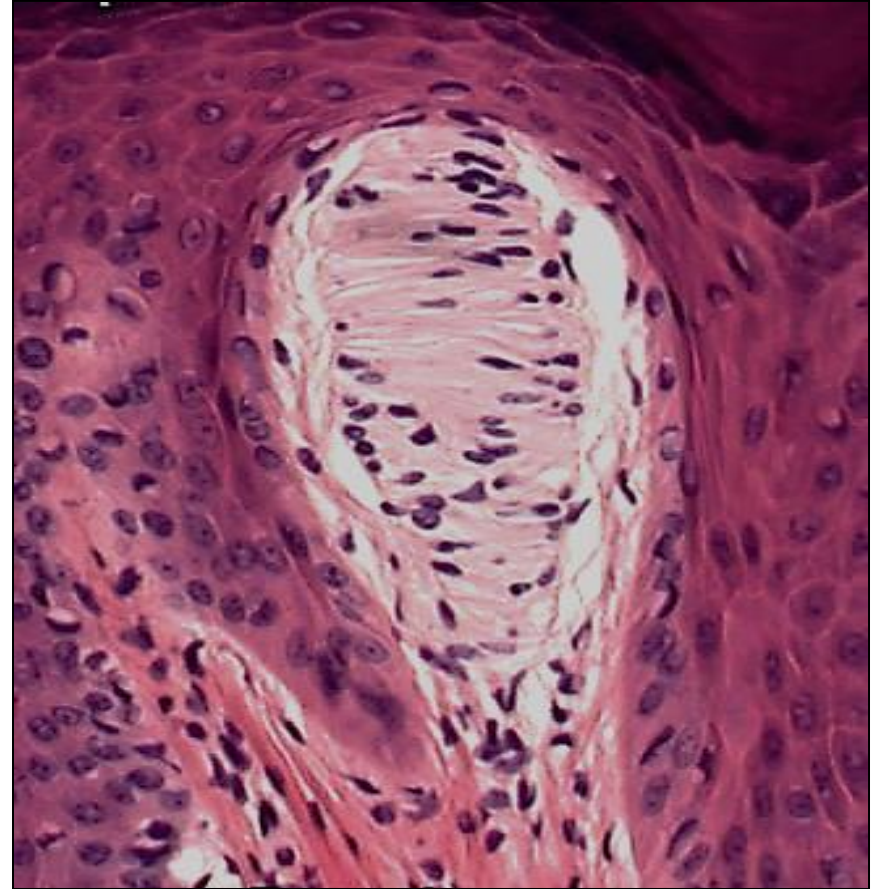
Pacinian corpuscle

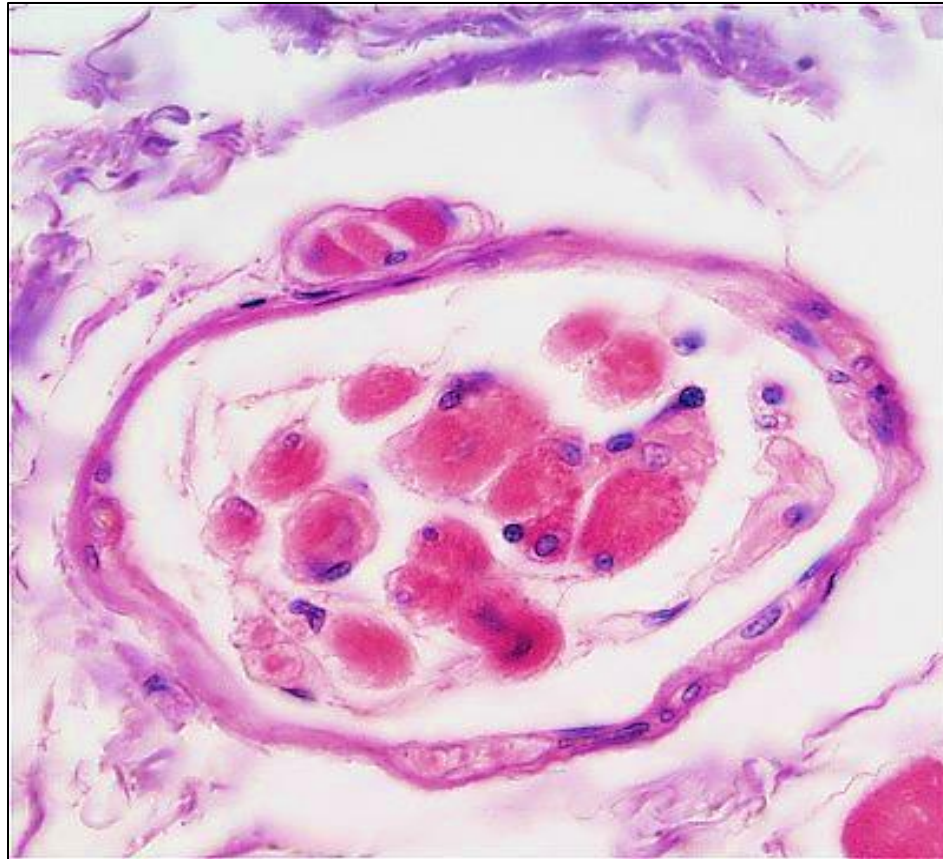


- 1- Large oval structure**
- 2- concentric layers of Schwann like cells**

Meissner's corpuscles

- 1- Oval structures
- 2- found at the dermal papillae of skin





Muscle spindle



Crista ampullaris



Taste buds

Thank you

