17/MHS01/256

Histology

1.Cornea -The cornea's main function is to refract, or bend, light. The cornea is responsible for focusing most of the light that enters the eye.

Pupil&Iris-The iris contracts and dilates involuntarily and changes the size of the pupil. The whole job of the iris and pupil is to control the amount of light that gets into the eye. It's called a pupillary reflex, and you have probably noticed that a person's pupils are smaller in bright light and bigger in low light.

Retina-The retina is a thin layer of tissue that lines the back of the eye on the inside. It is located near the optic nerve. The purpose of the retina is to receive light that the lens has focused, convert the light into neural signals, and send these signals on to the brain for visual recognition.

2.Layers of the retina

\* The inner limiting membrane-The inner limiting membrane is the boundary between the retina and the vitreous body, formed by astrocytes and the end feet of Müller cells.

\* The nerve fiber layer-

\* The ganglion cells layer-It receives visual information from photoreceptors via two intermediate neuron types: bipolar cells and retina amacrine cells.

\* The inner plexiform layer-is the site of complex synaptic processing

\* The inner nuclear layer-Inner Nuclear Layer. Perikarya and nuclei of bipolar cells, horizontal cells, amacrine cells, and Müller cells reside in the inner nuclear layer. ... Bipolar cells are typed to rods or cones, and function vertically to modulate brightness and color information.

\* The outer plexiform layer-The main function of the horizontal… The plexiform layers are regions in which the neurons make their interconnections. ... In the outer plexiform layer the bipolar cells make their contacts, by way of their dendrites, with the rods and cones, specifically the spherules of the rods

\* The outer nuclear layer-The outer nuclear layer contains the cell bodies of the photoreceptor cells. ... These processes synapse with each other and with the photoreceptors. The photoreceptor cell bodies and synaptic terminals show a rapid response to detachment in feline retinas

\* The outer limiting membrane-The outer limiting membrane (OLM) is considered to play a role in maintaining the structure of the retina through mechanical strength