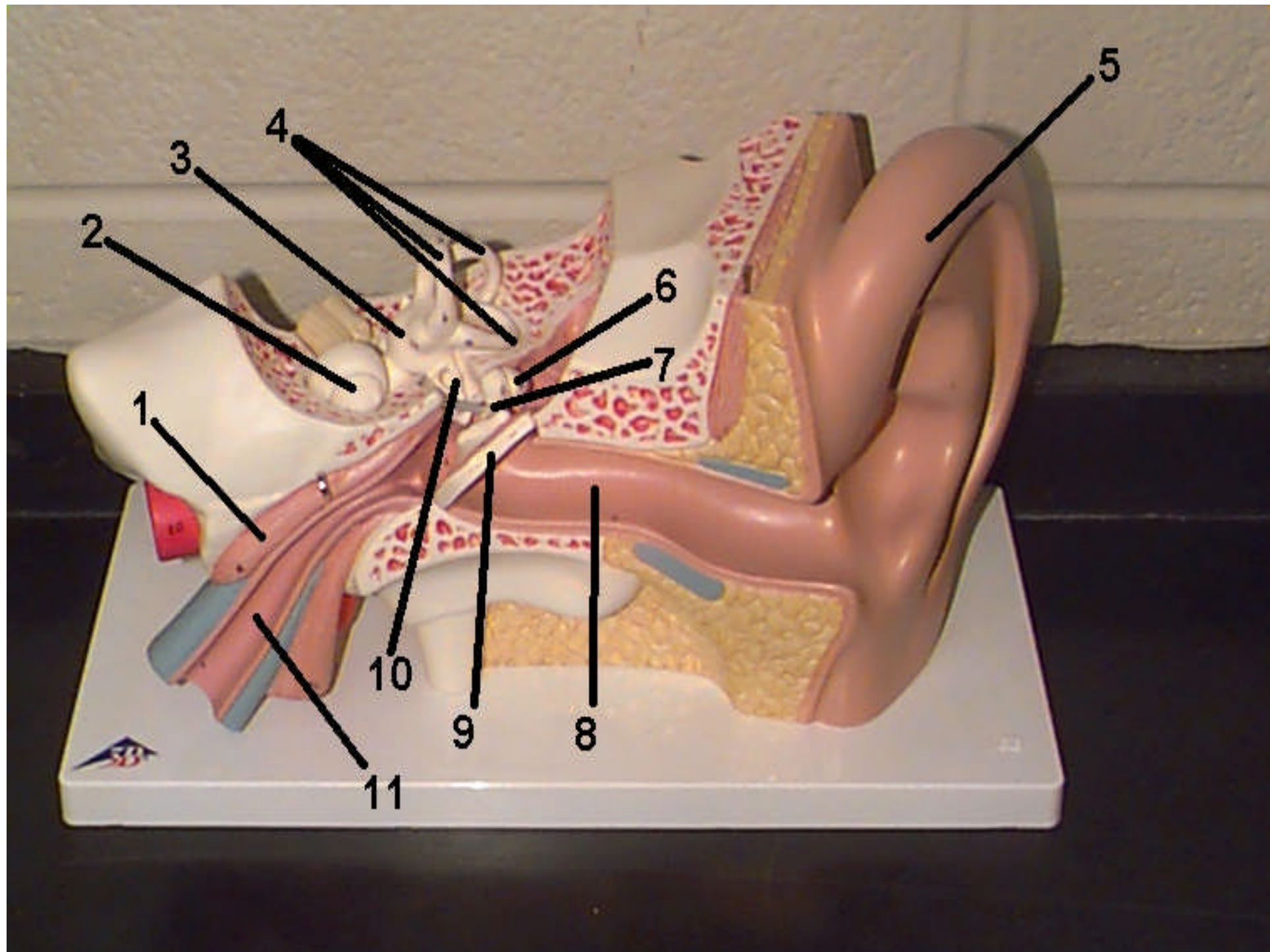
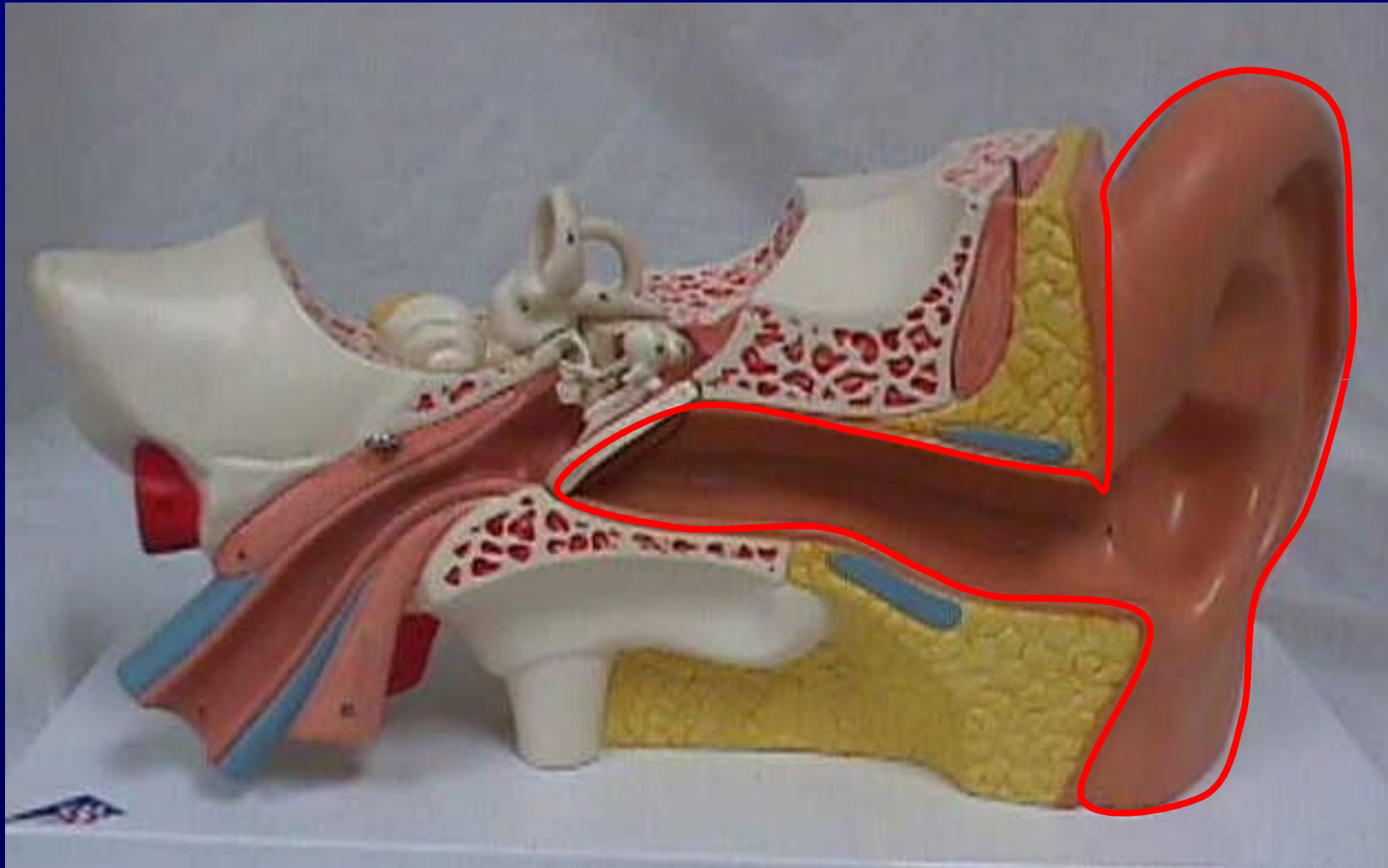


# The Ear

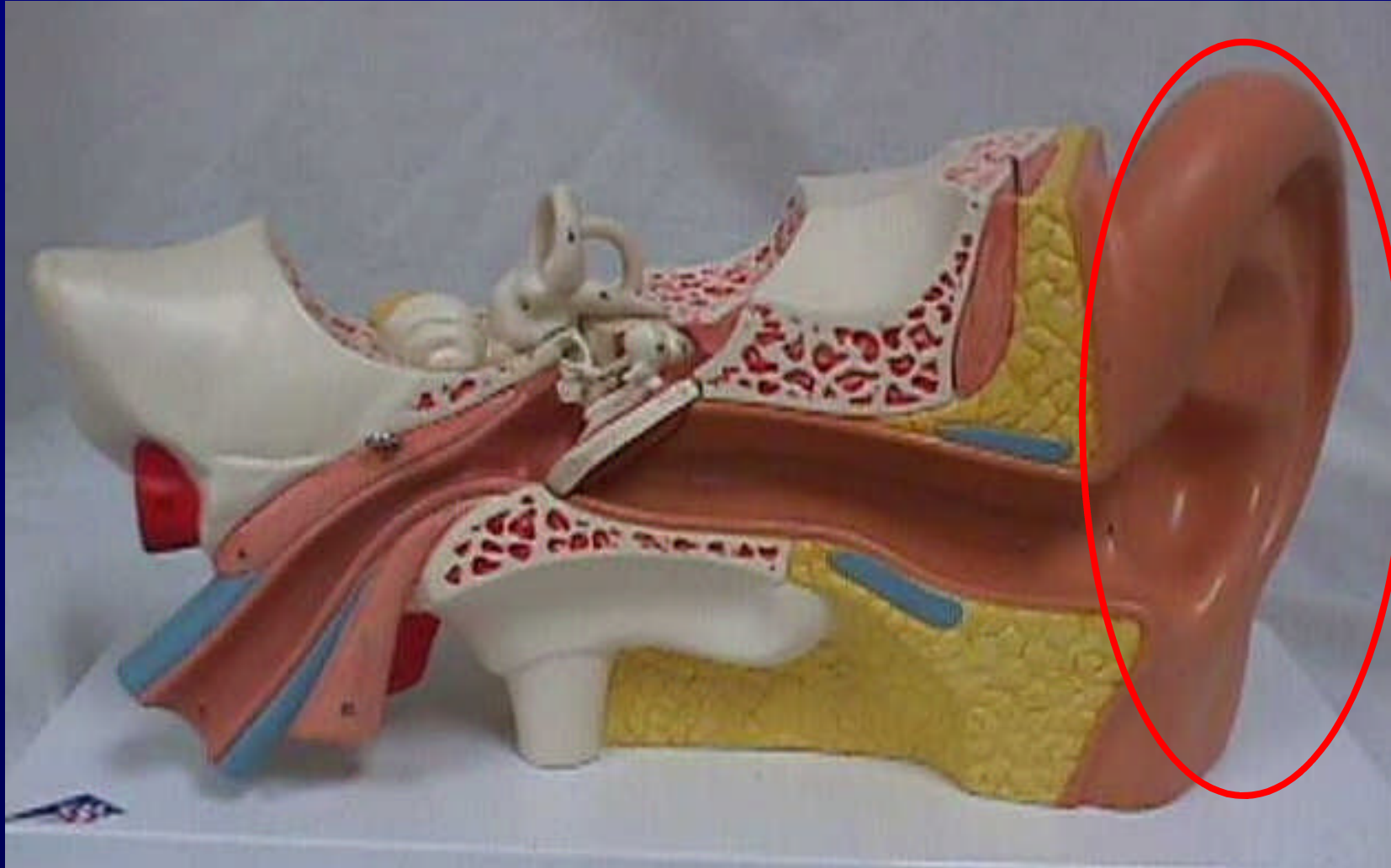
# Special Senses



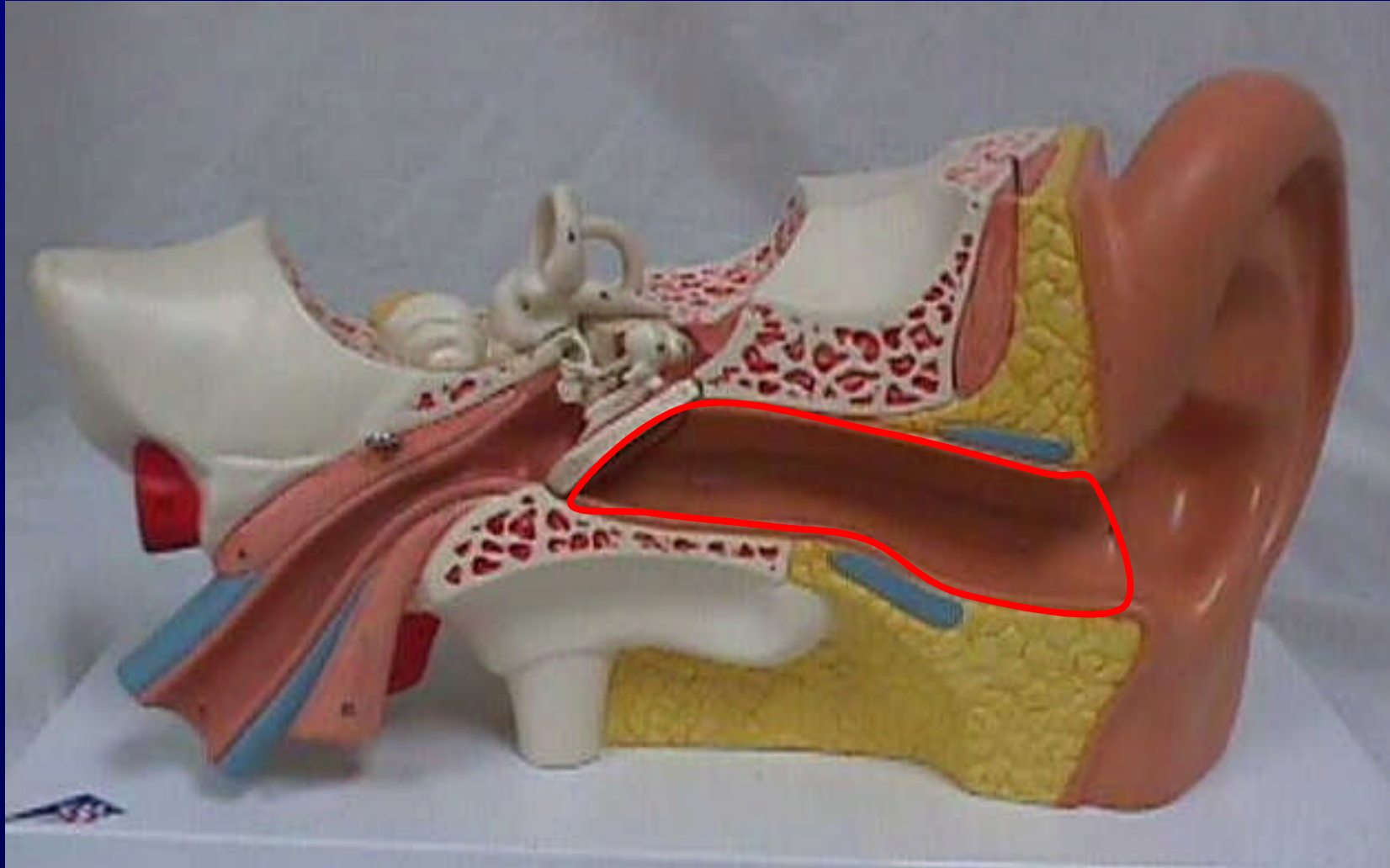
# External Ear



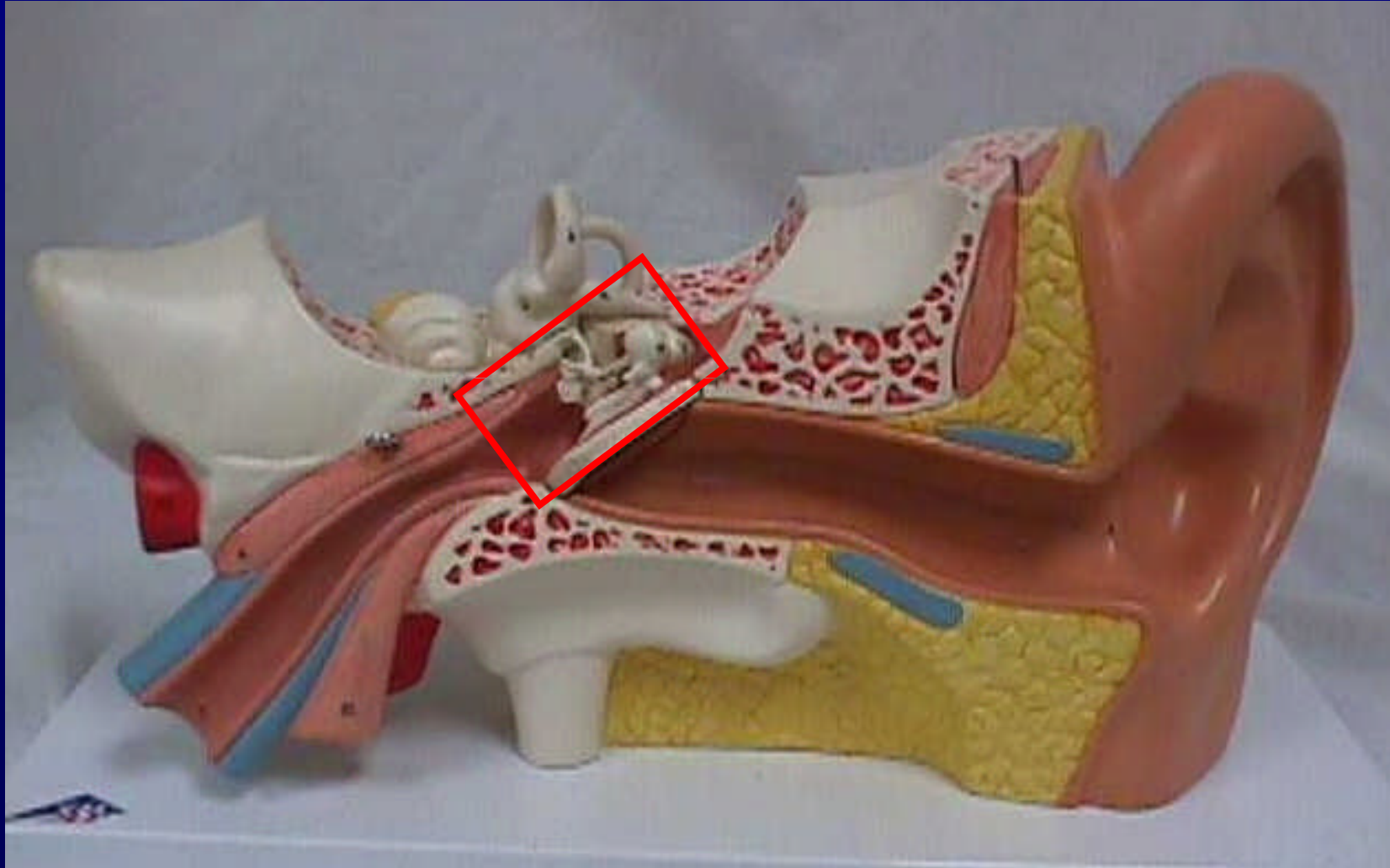
# Auricle

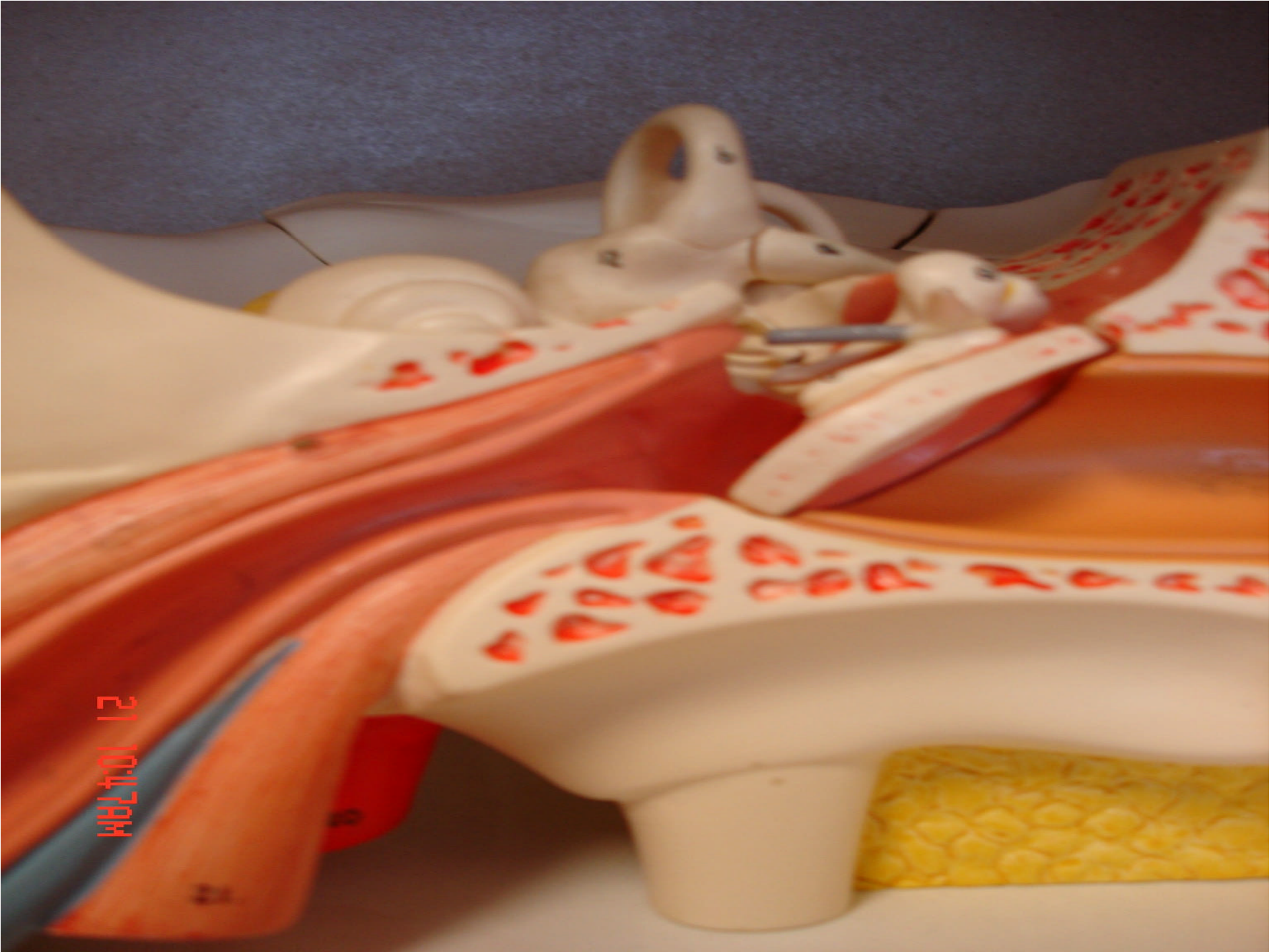


# External auditory meatus



# Middle Ear





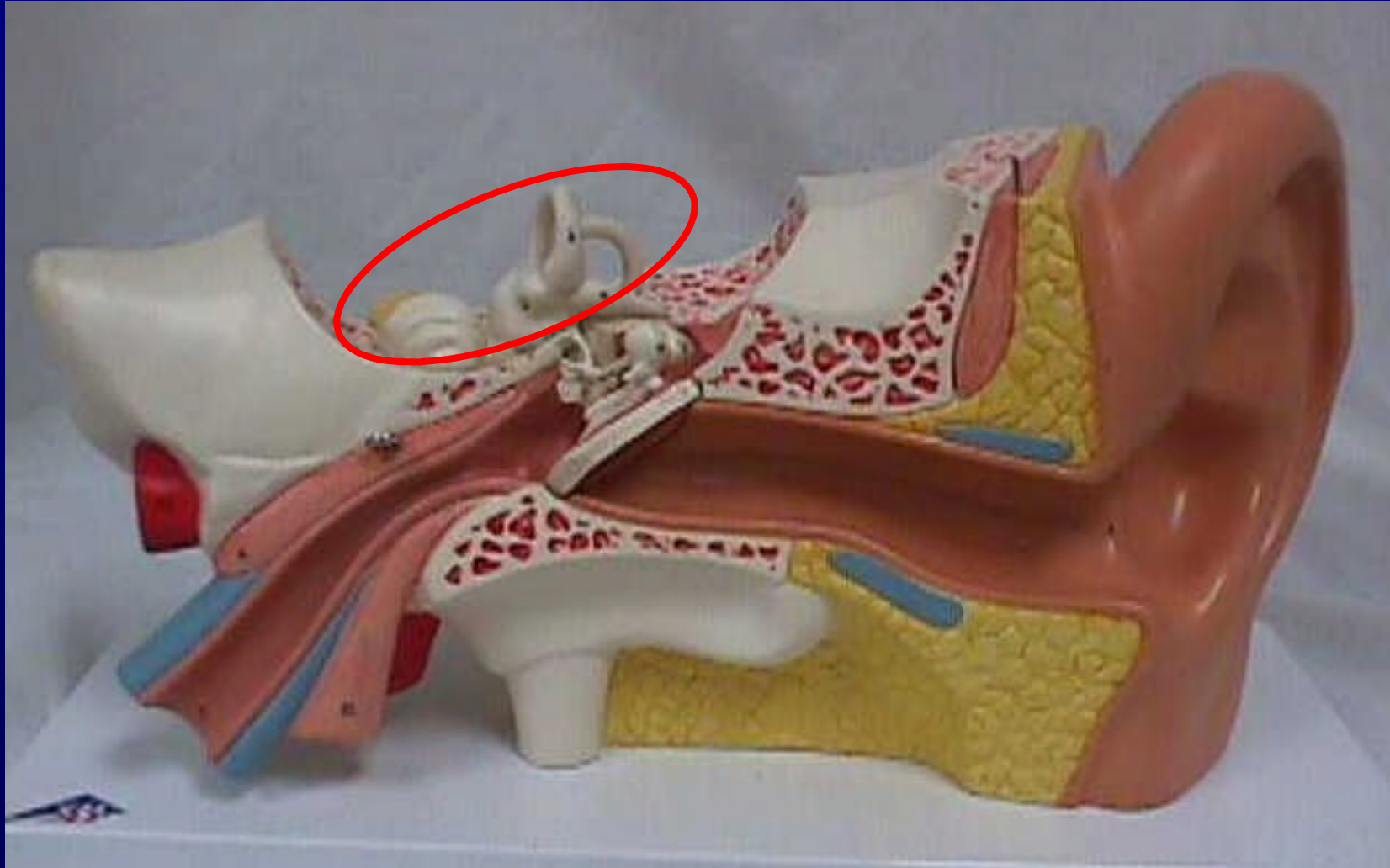
21 10:47AM

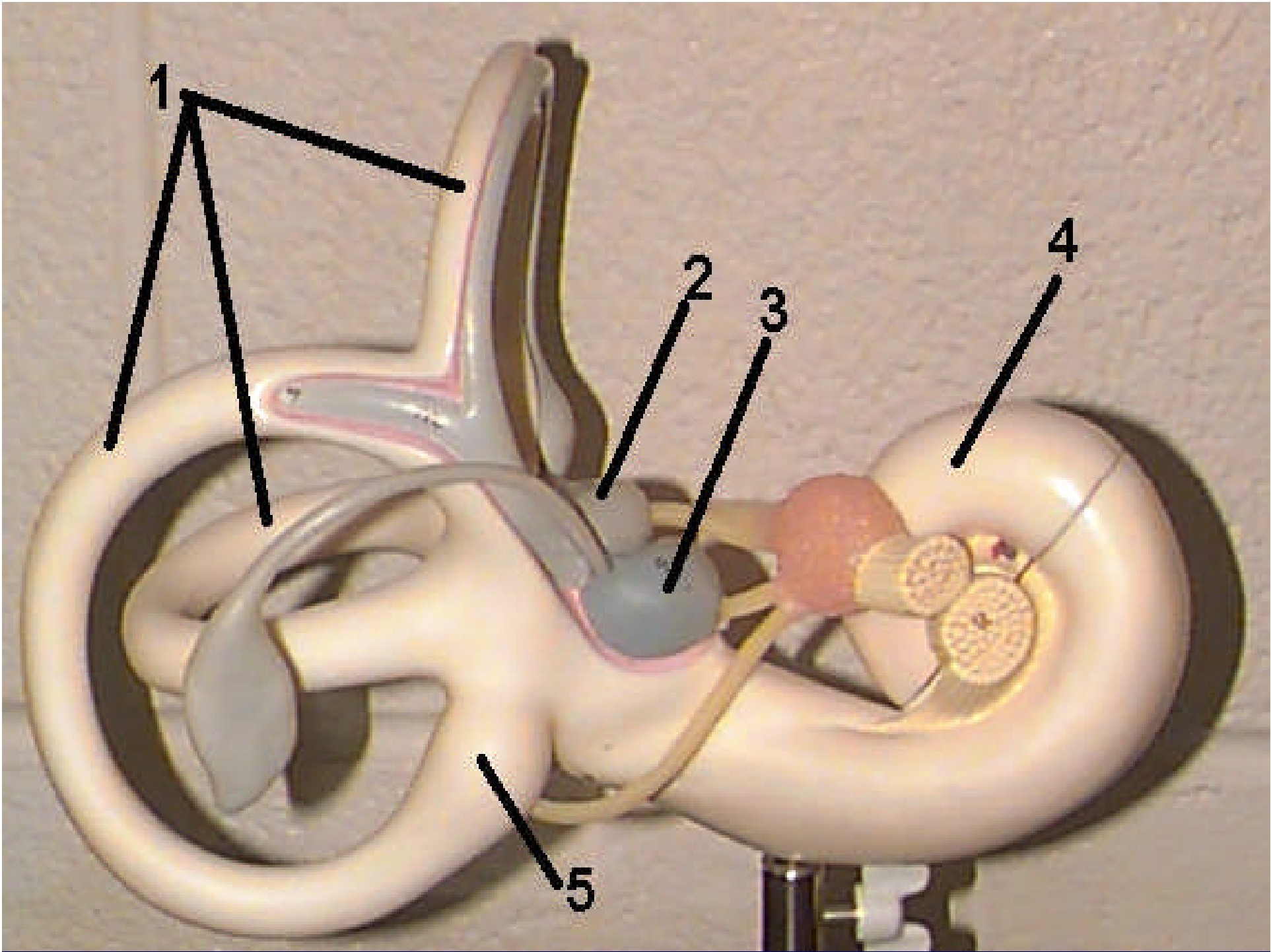
# Auditory (Eustacian) tube

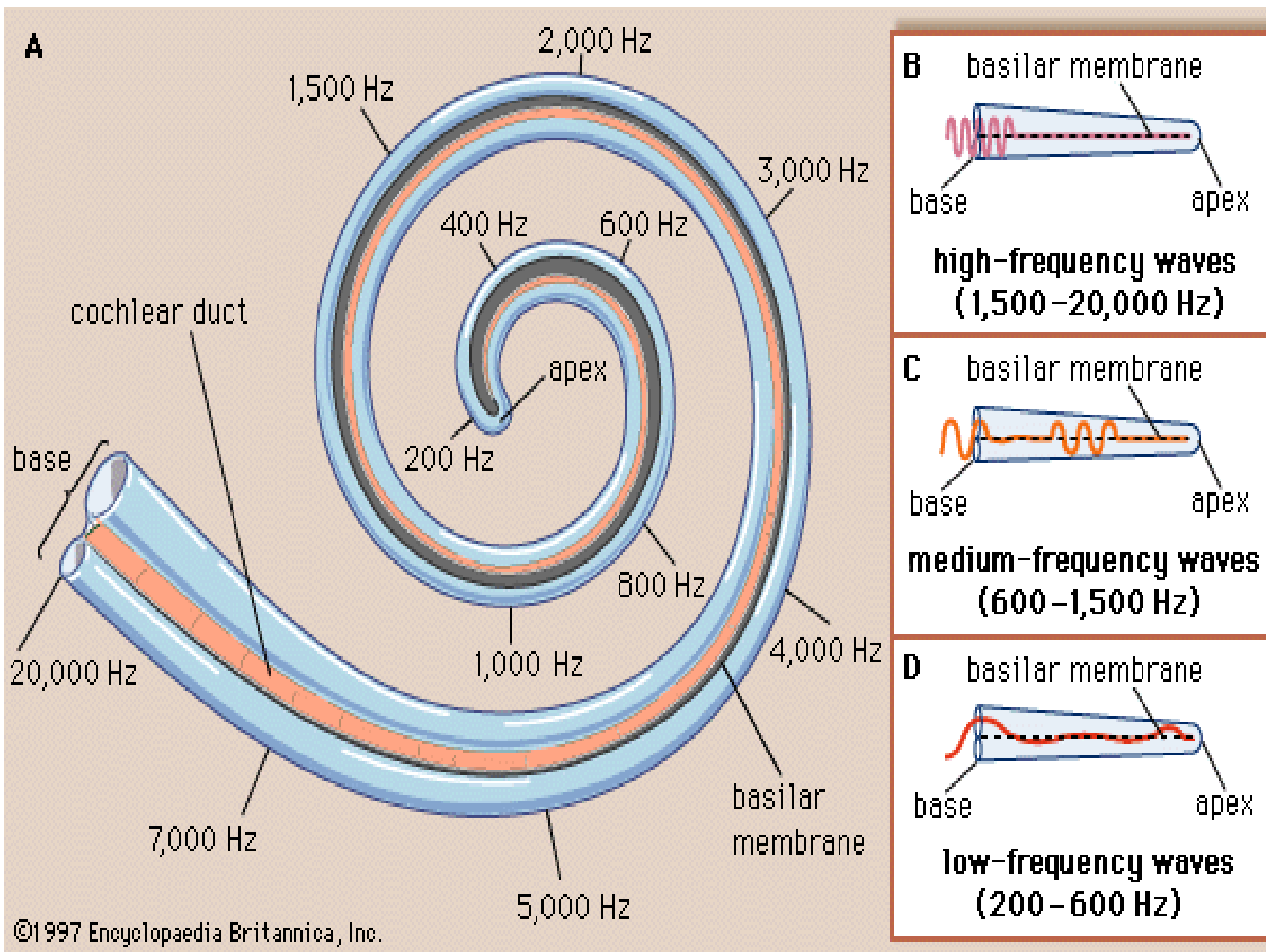




# Internal Ear





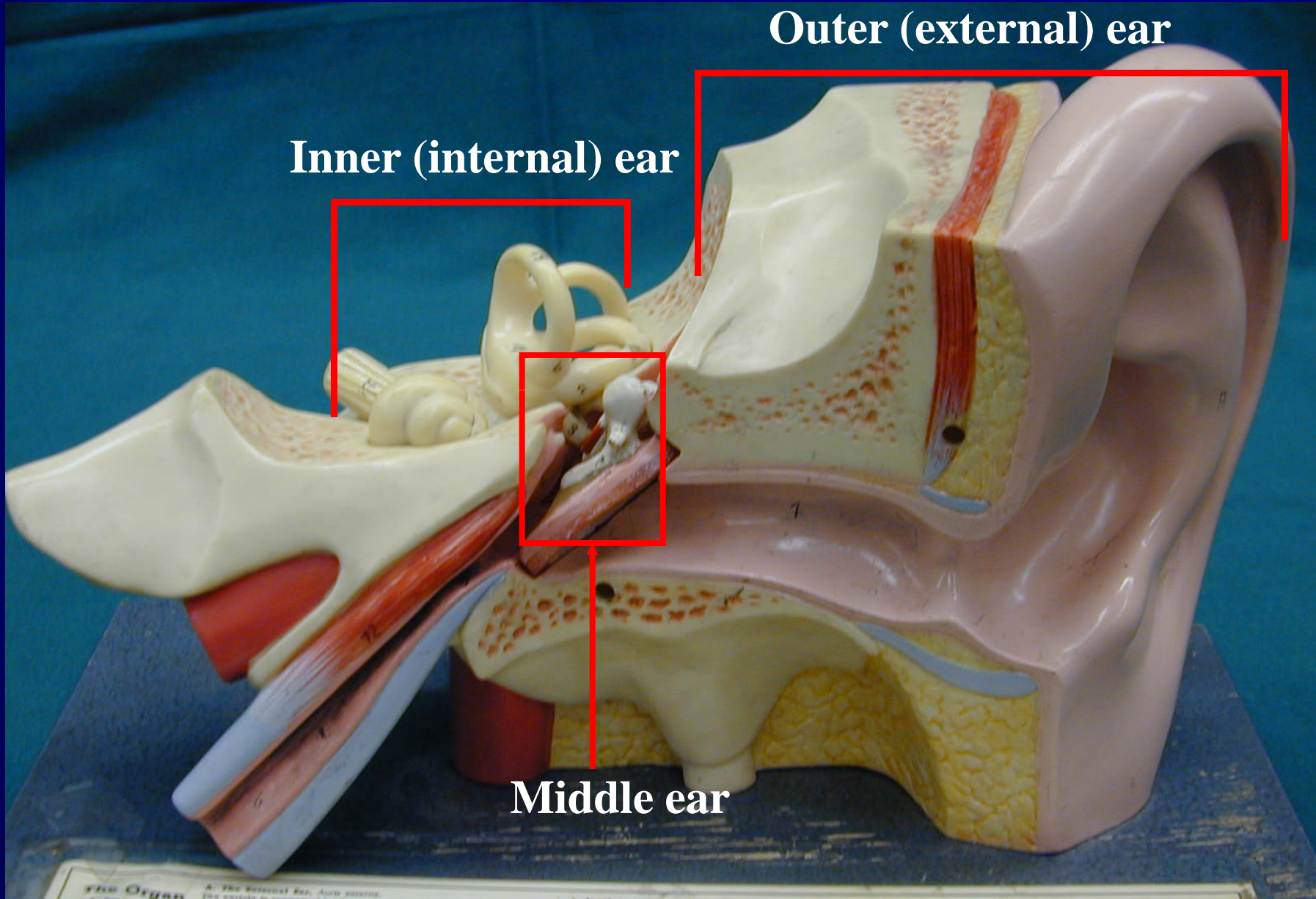


# Lateral view

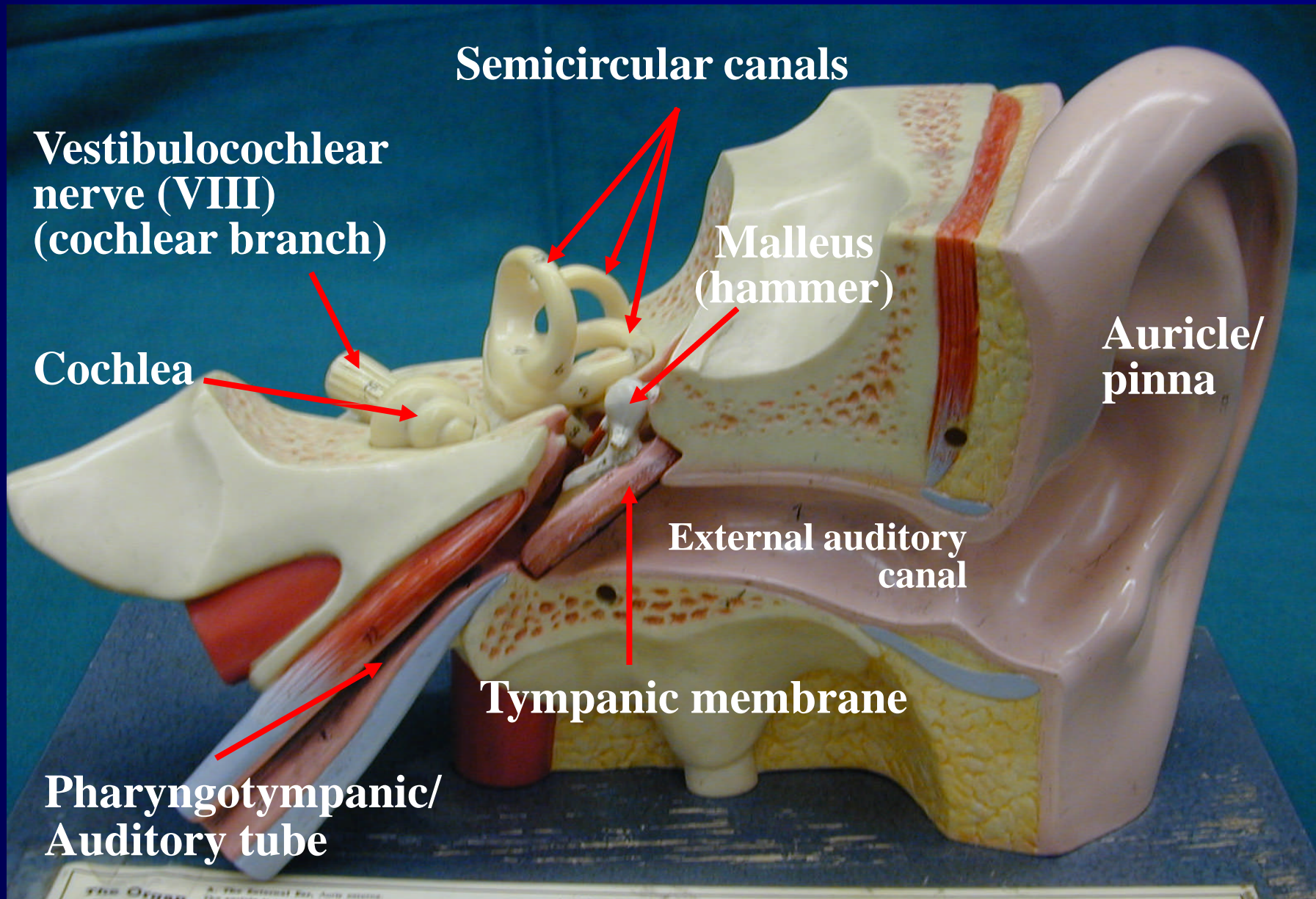
Outer (external) ear

Inner (internal) ear

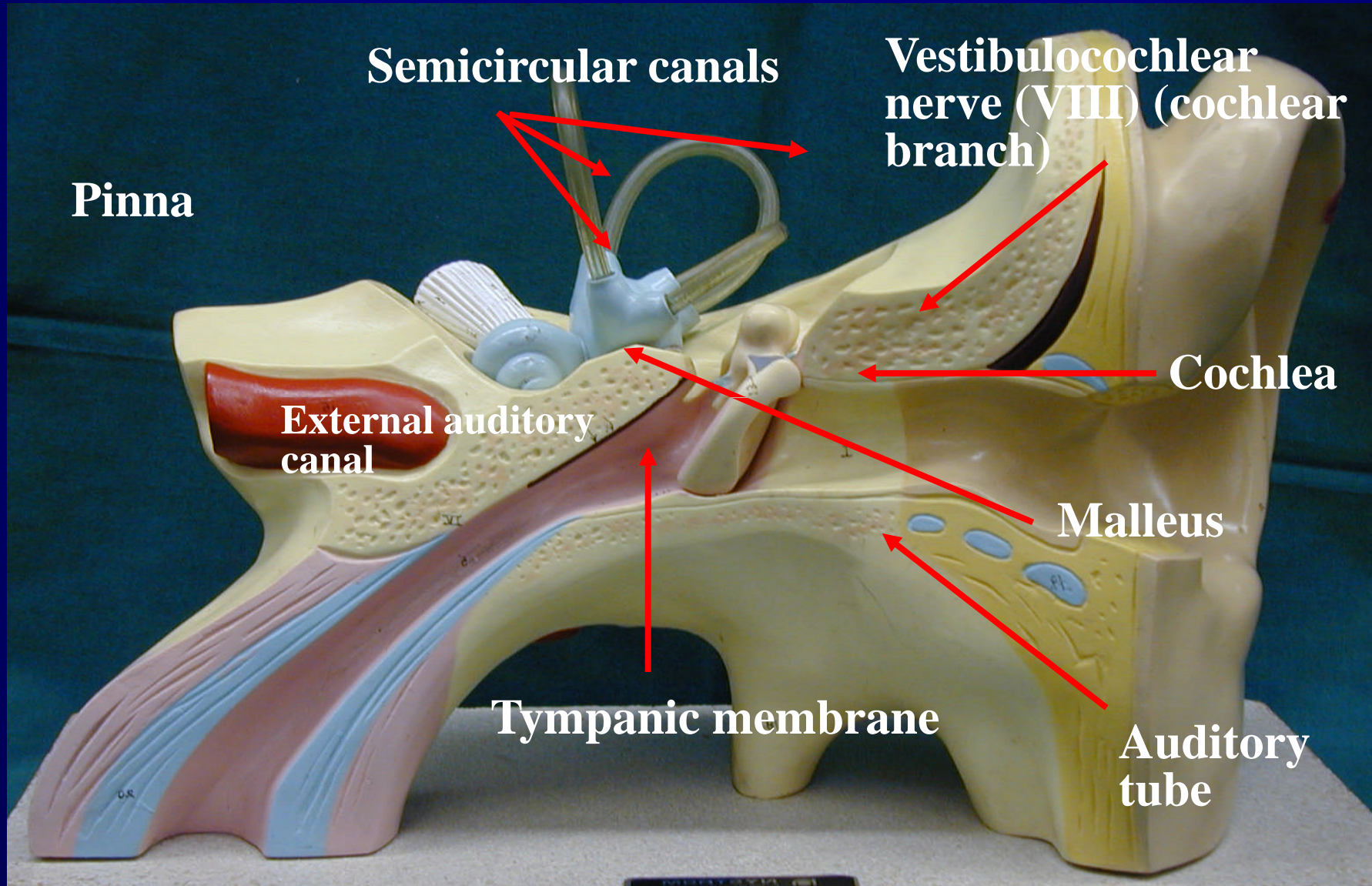
Middle ear



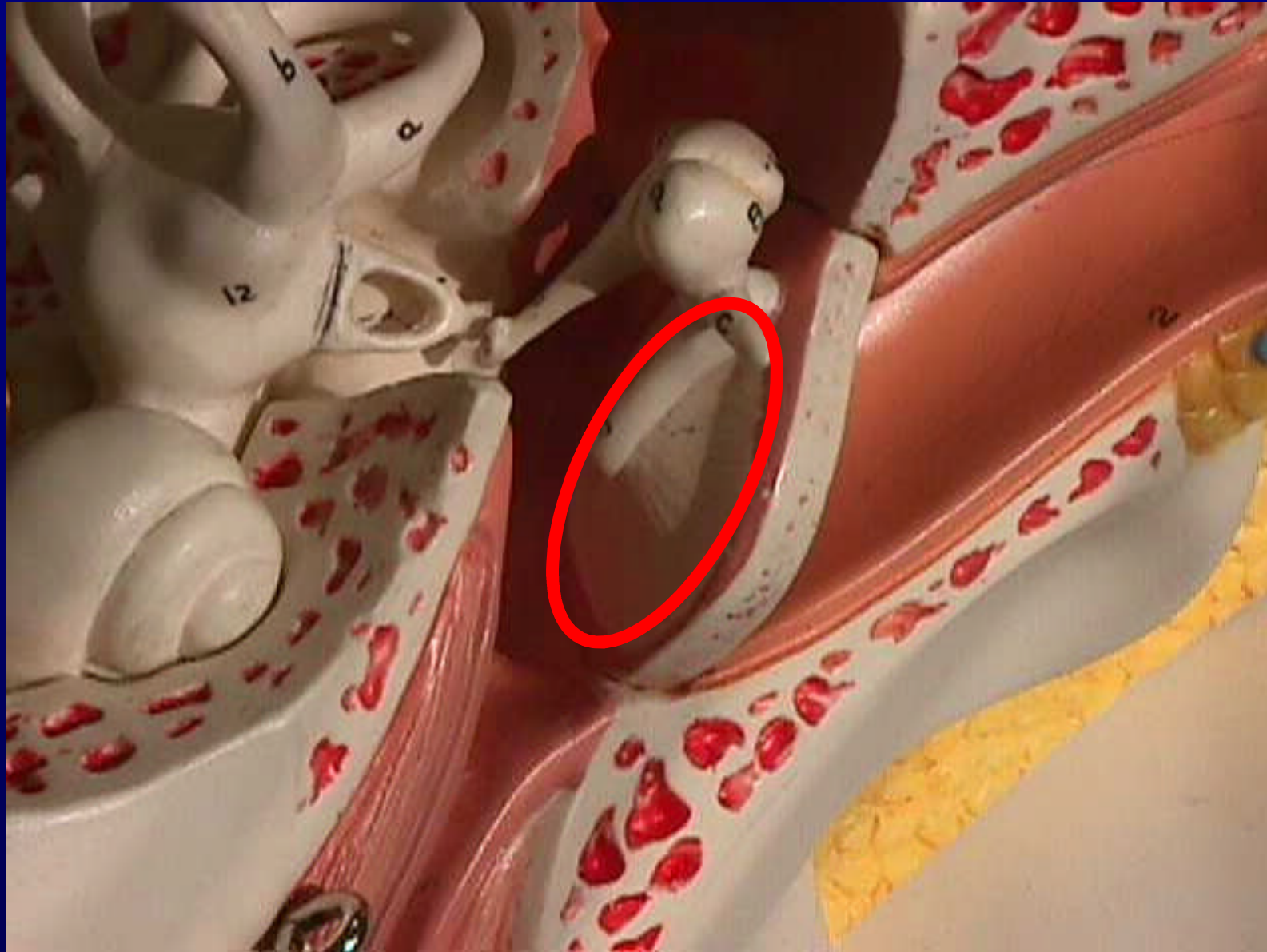
# Lateral view



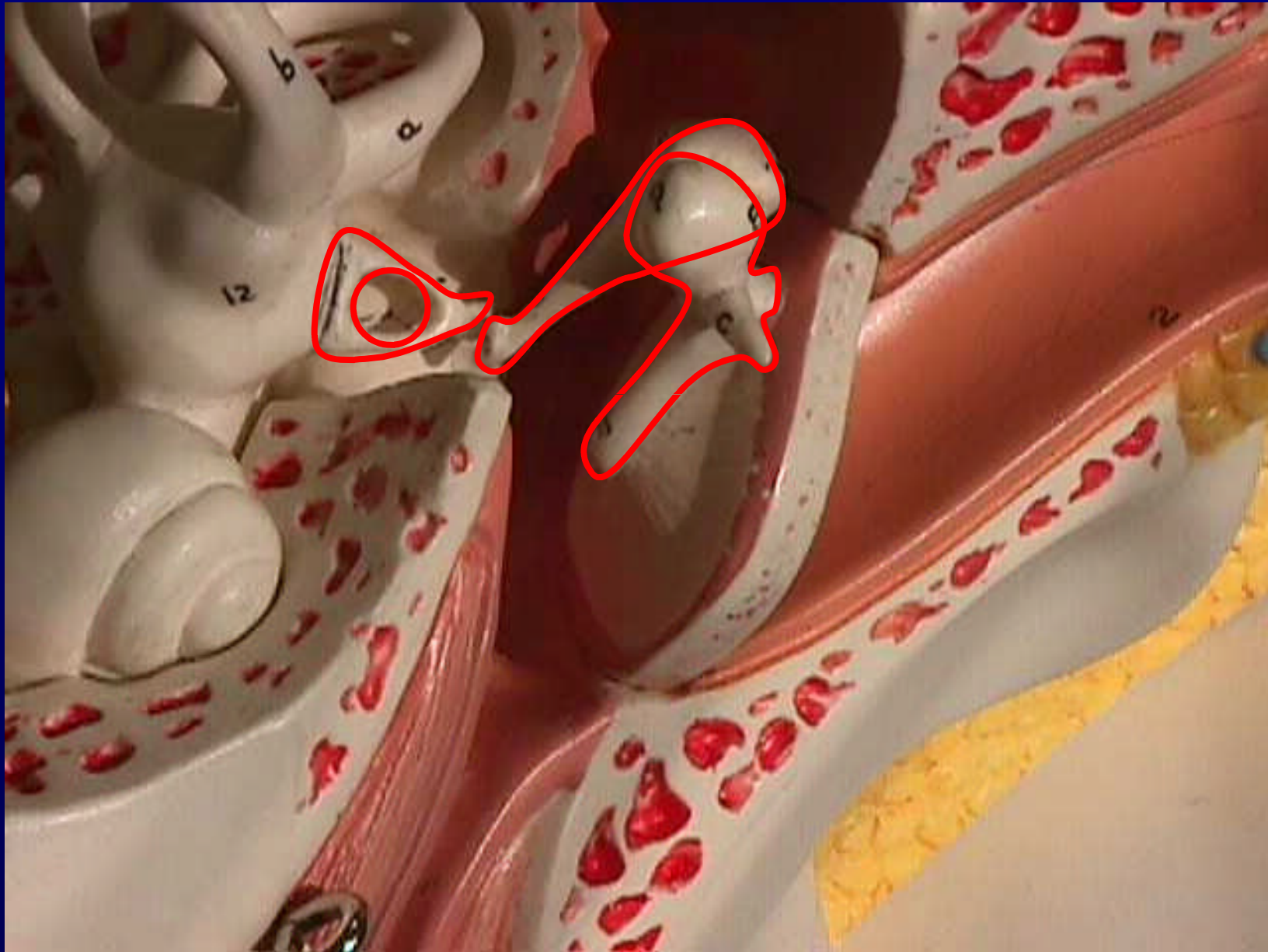
# Lateral view



# Tympanic membrane



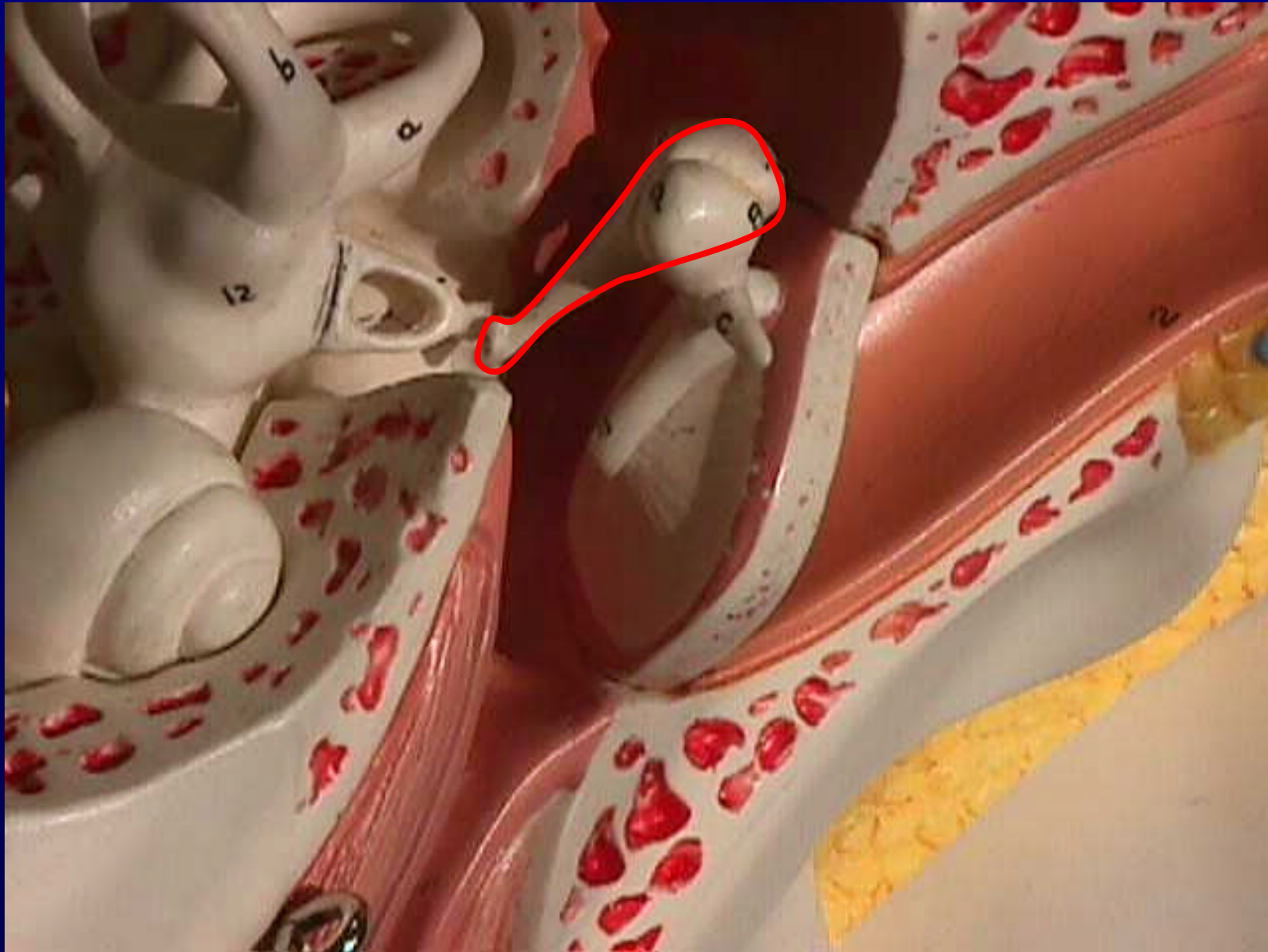
# Auditory ossicles



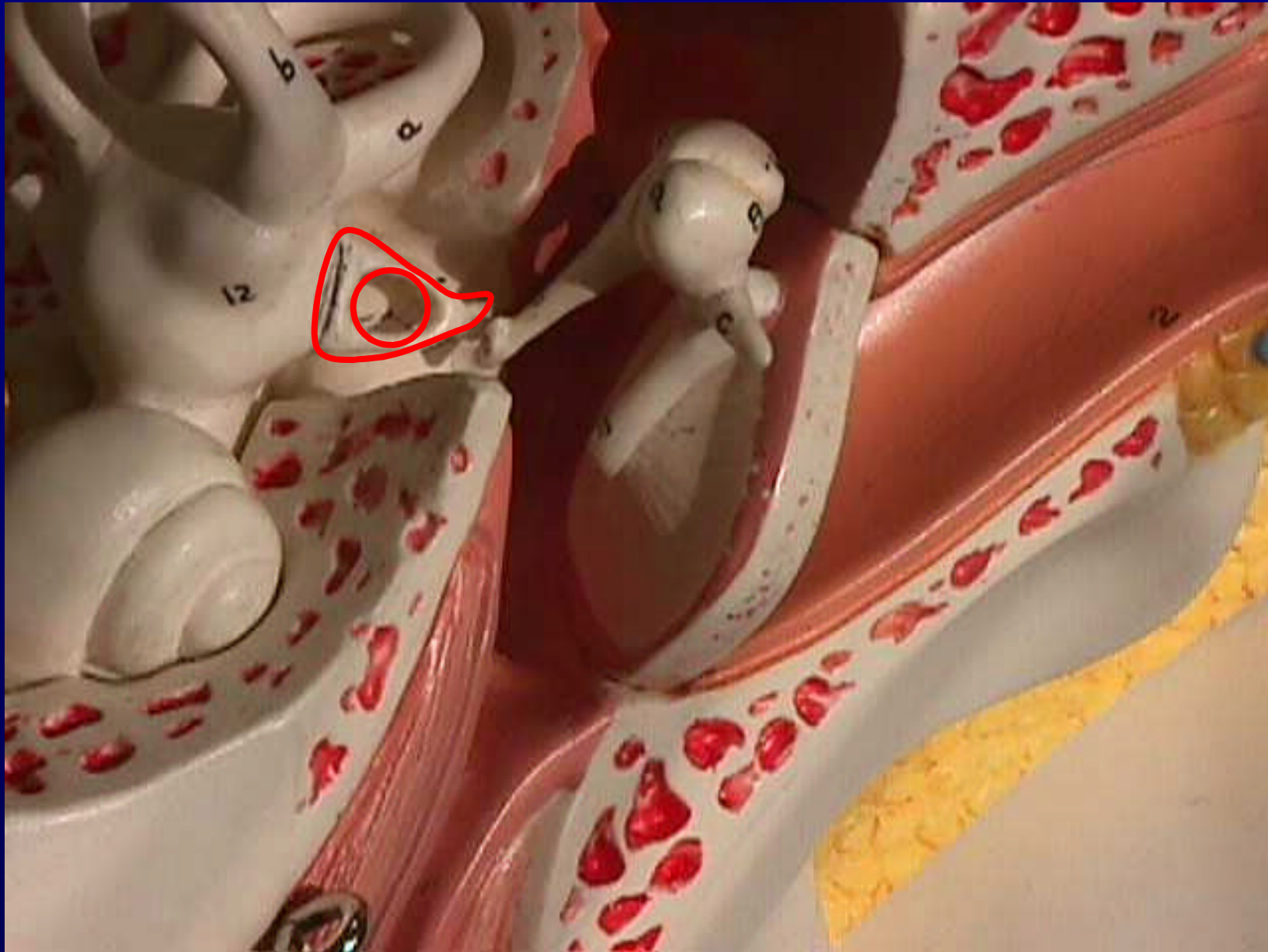




# Incus



# Stapes

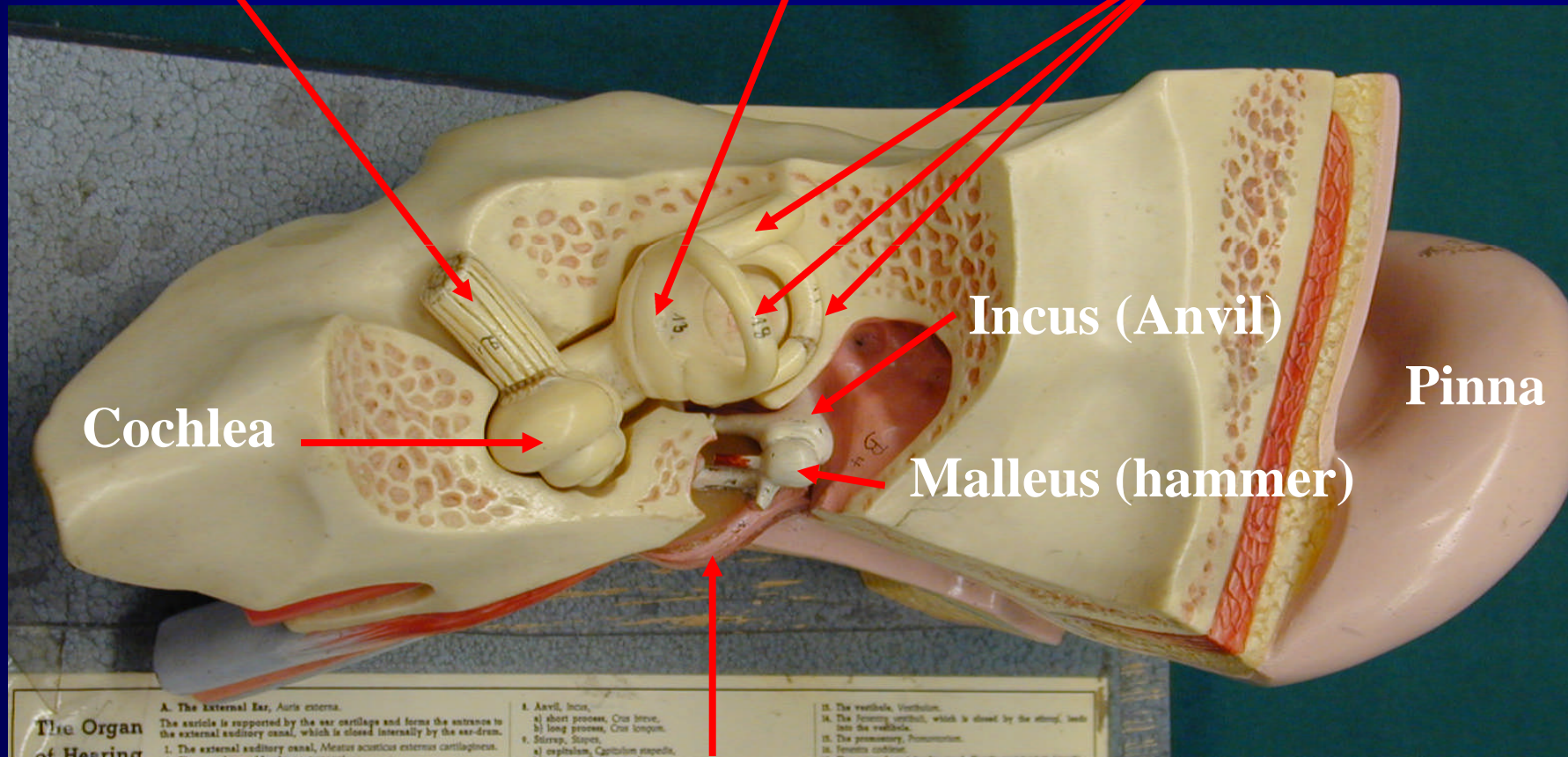


# Superior view

Vestibulocochlear nerve (VIII) (cochlear branch)

Vestibule

Semicircular canals



Cochlea

Incus (Anvil)

Pinna

Malleus (hammer)

Tympanic membrane

The Organ of Hearing

A. The External Ear, Auris externa.

The auricle is supported by the ear cartilage and forms the entrance to the external auditory canal, which is closed internally by the ear-drum.

1. The external auditory canal, Meatus acusticus externus cartilagineus.

2. Auricle, Incus.

a) short process, Crus brevis.  
b) long process, Crus longum.

3. Stirrup, Stapes.

a) capitulum, Caputulum stapedis.

12. The vestibule, Vestibulum.

13. The fenestra vestibuli, which is closed by the stapes, leads into the vestibule.

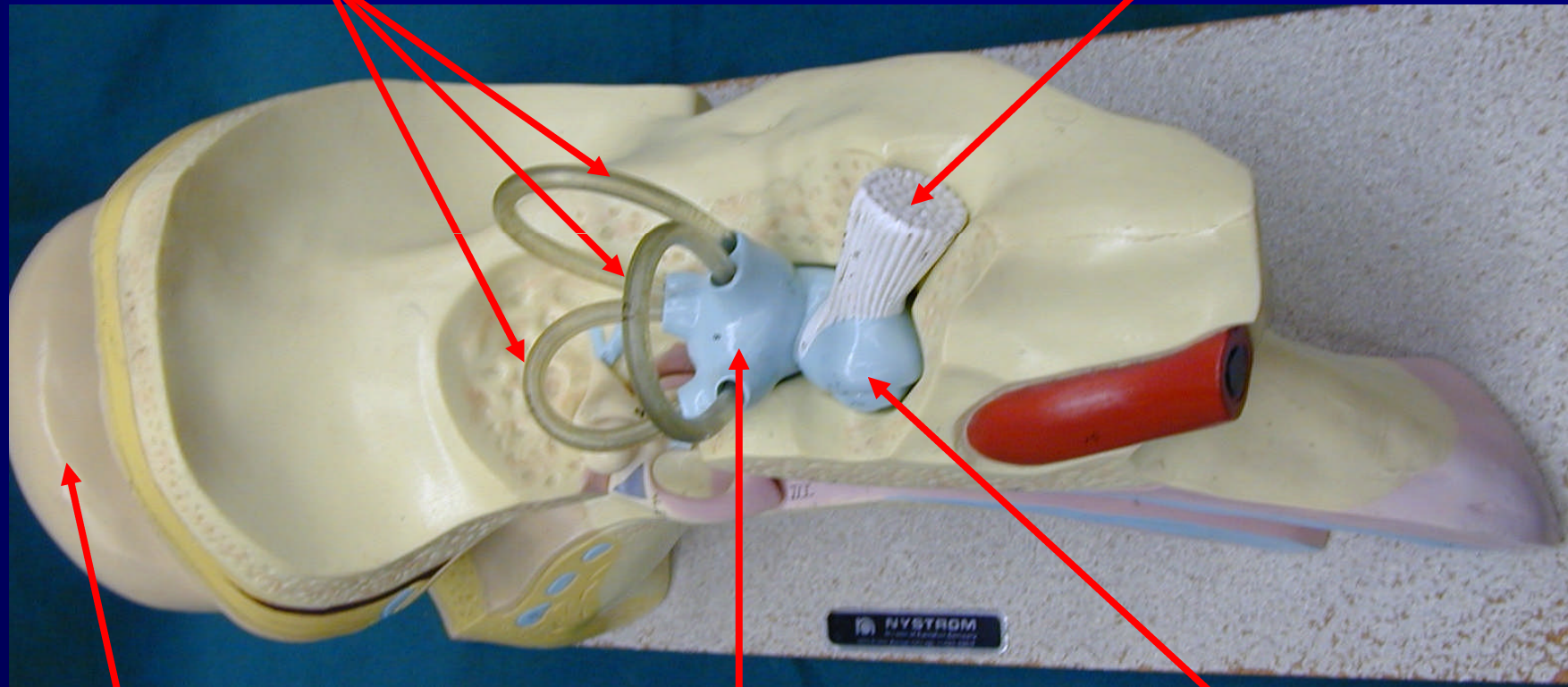
14. The promontory, Promontorium.

15. Fenestra cochlearis.

# Superior view

Semicircular canals

Vestibulocochlear nerve (VIII)  
(cochlear branch)

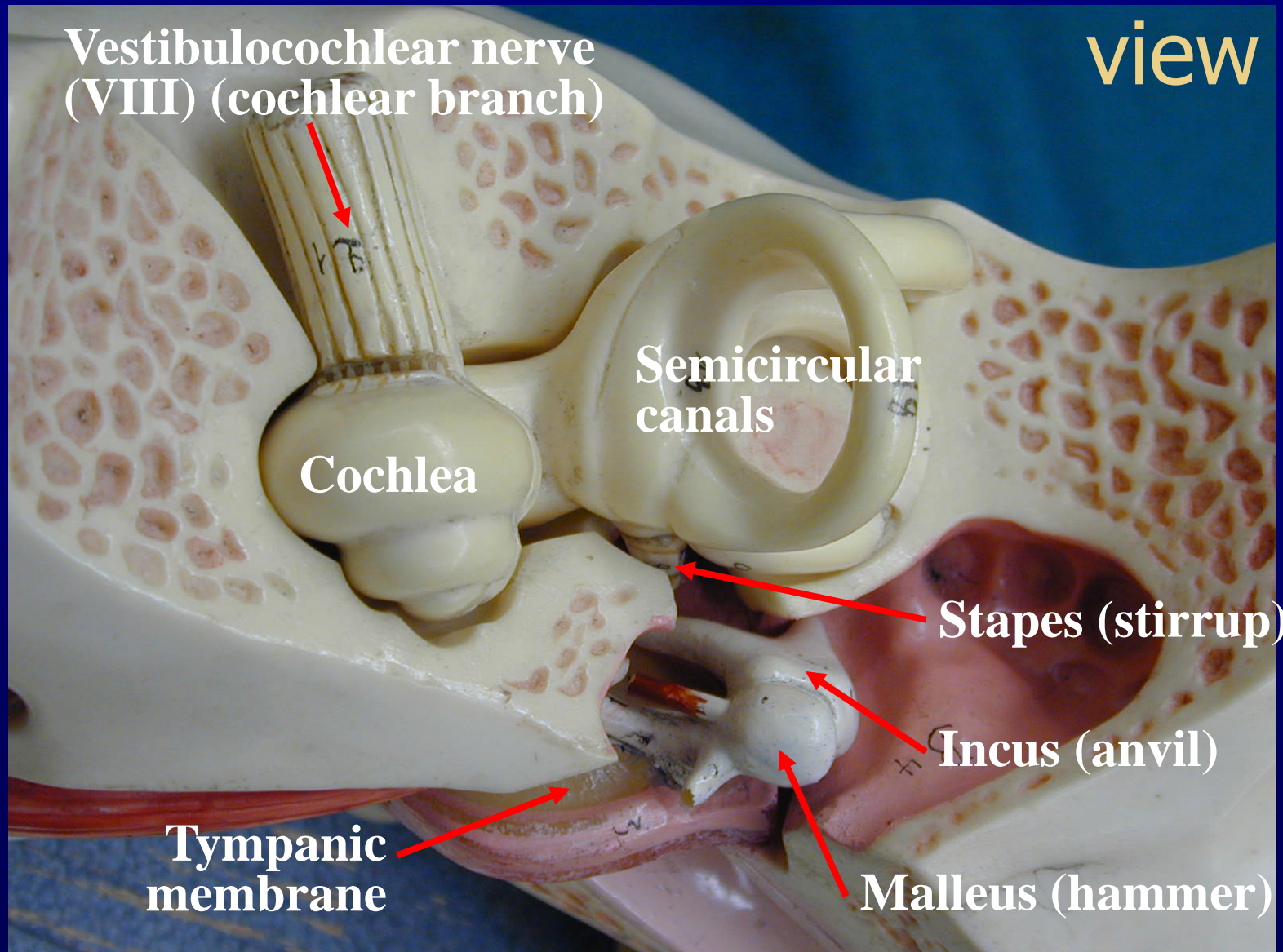


Pinna

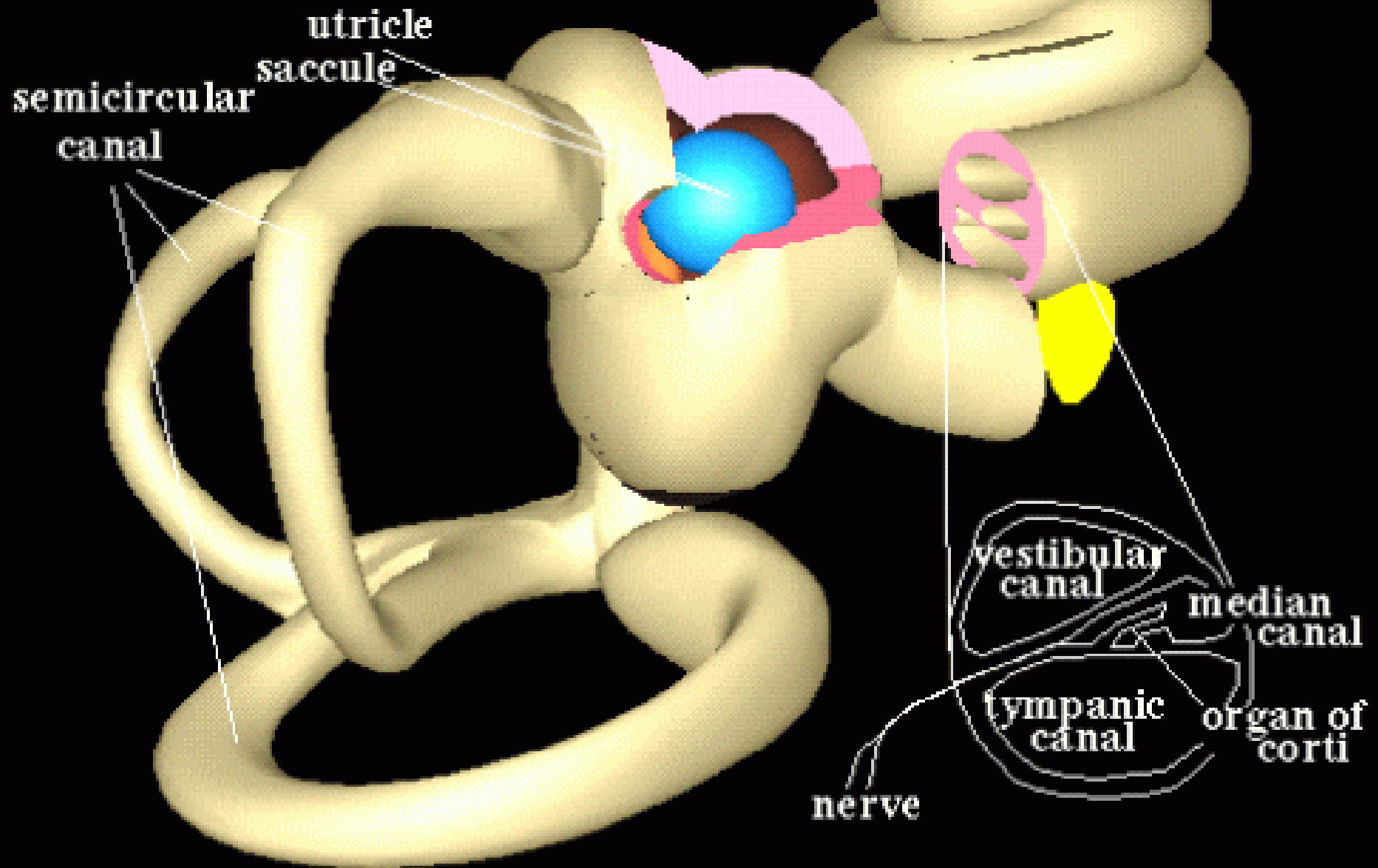
Vestibule

Cochlea

# Inner and Middle Ear - Superior view



# Structure of Inner Ear



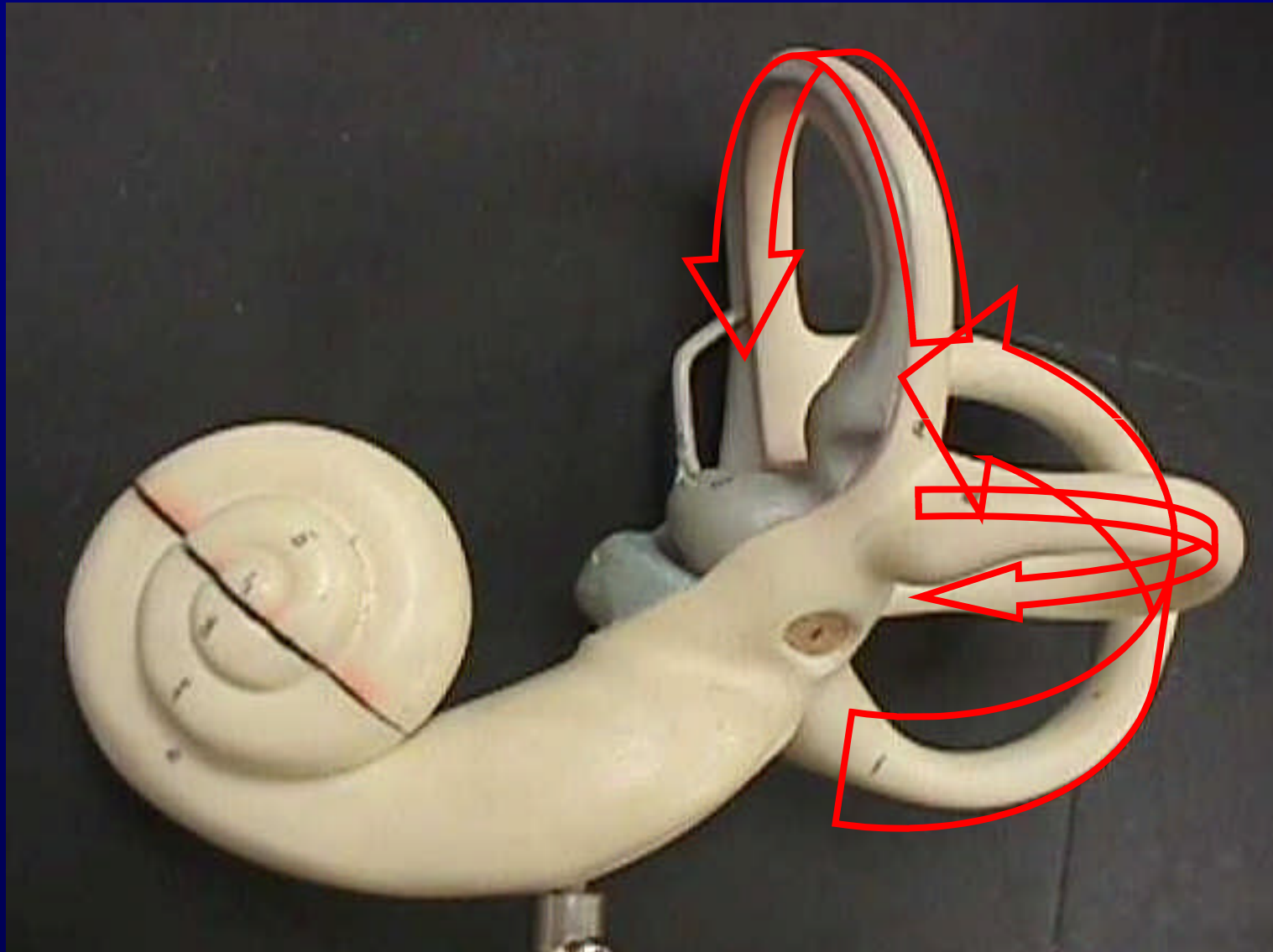
Round window

Oval Window

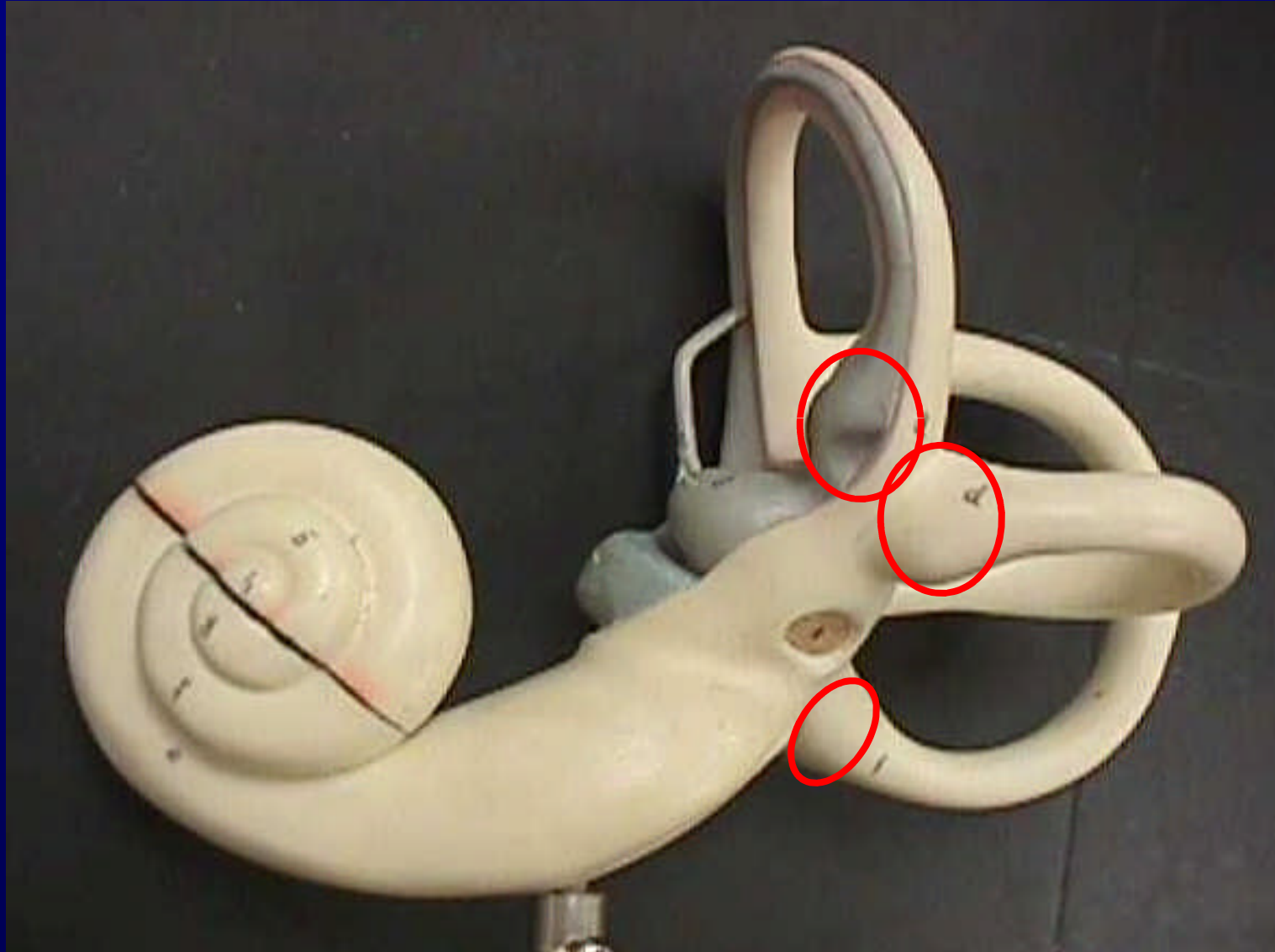




# Semicircular canal



# Ampulla



# Vestibule (space)



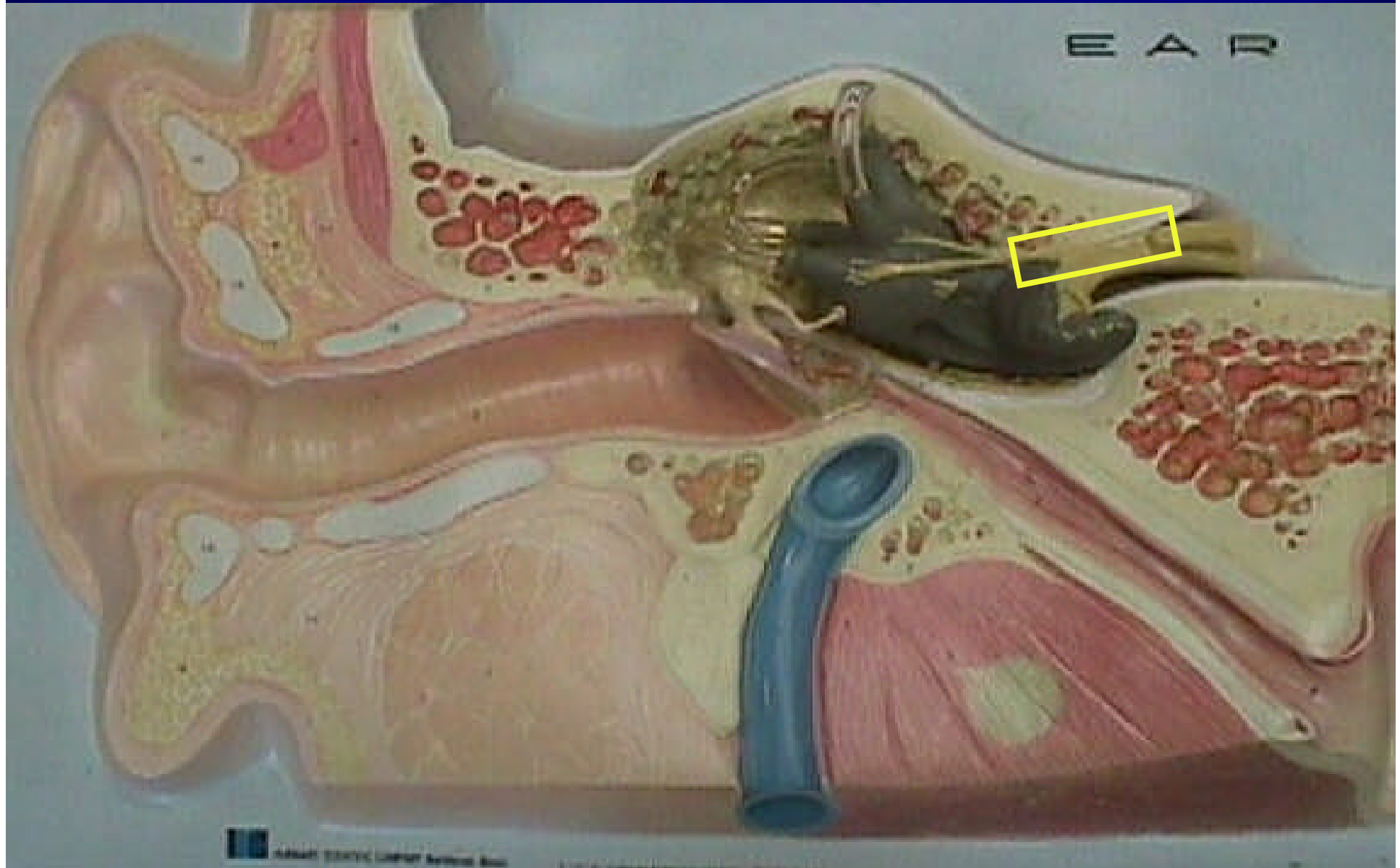
# Saccule



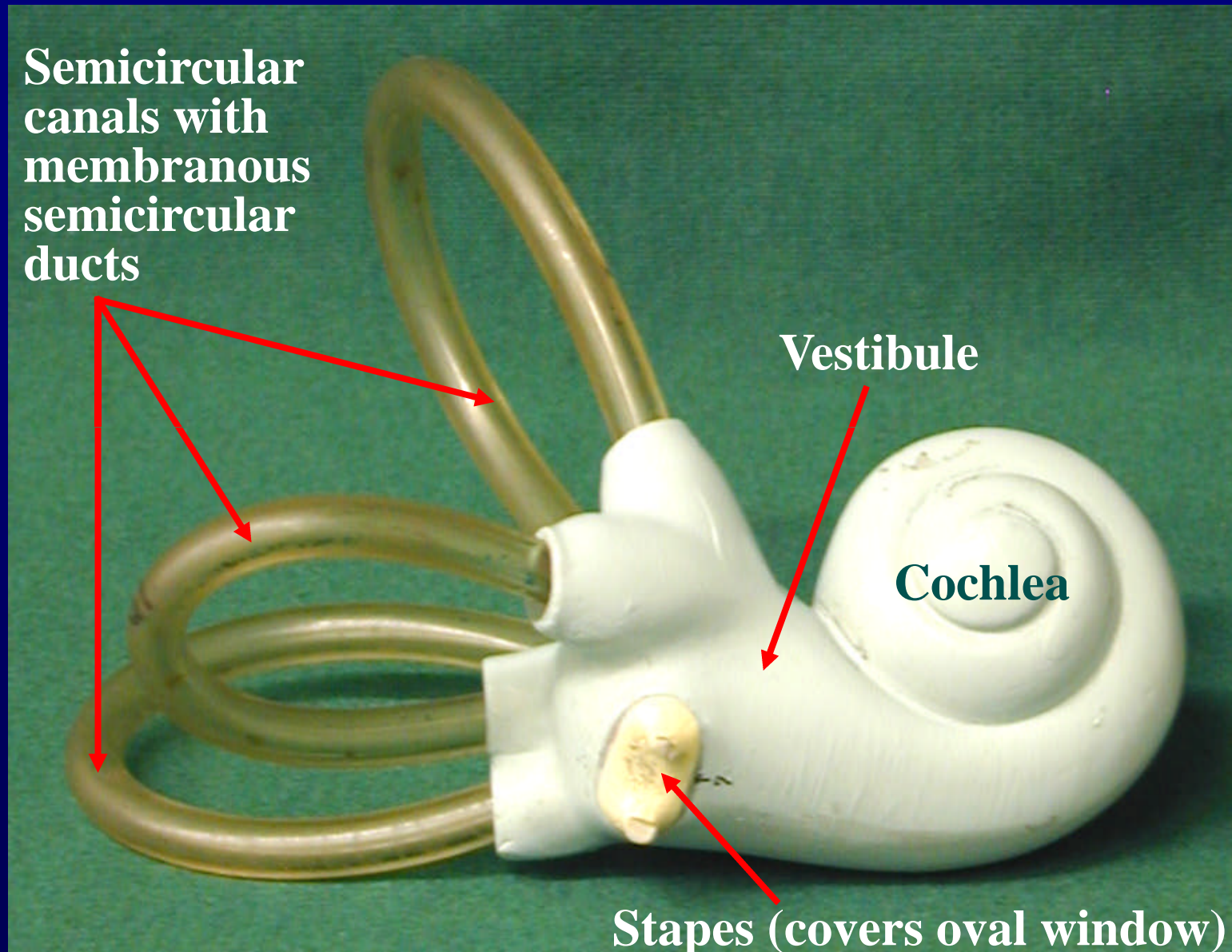
# Utricle



# Vestibulocochlear (Auditory) nerve



# Inner Ear



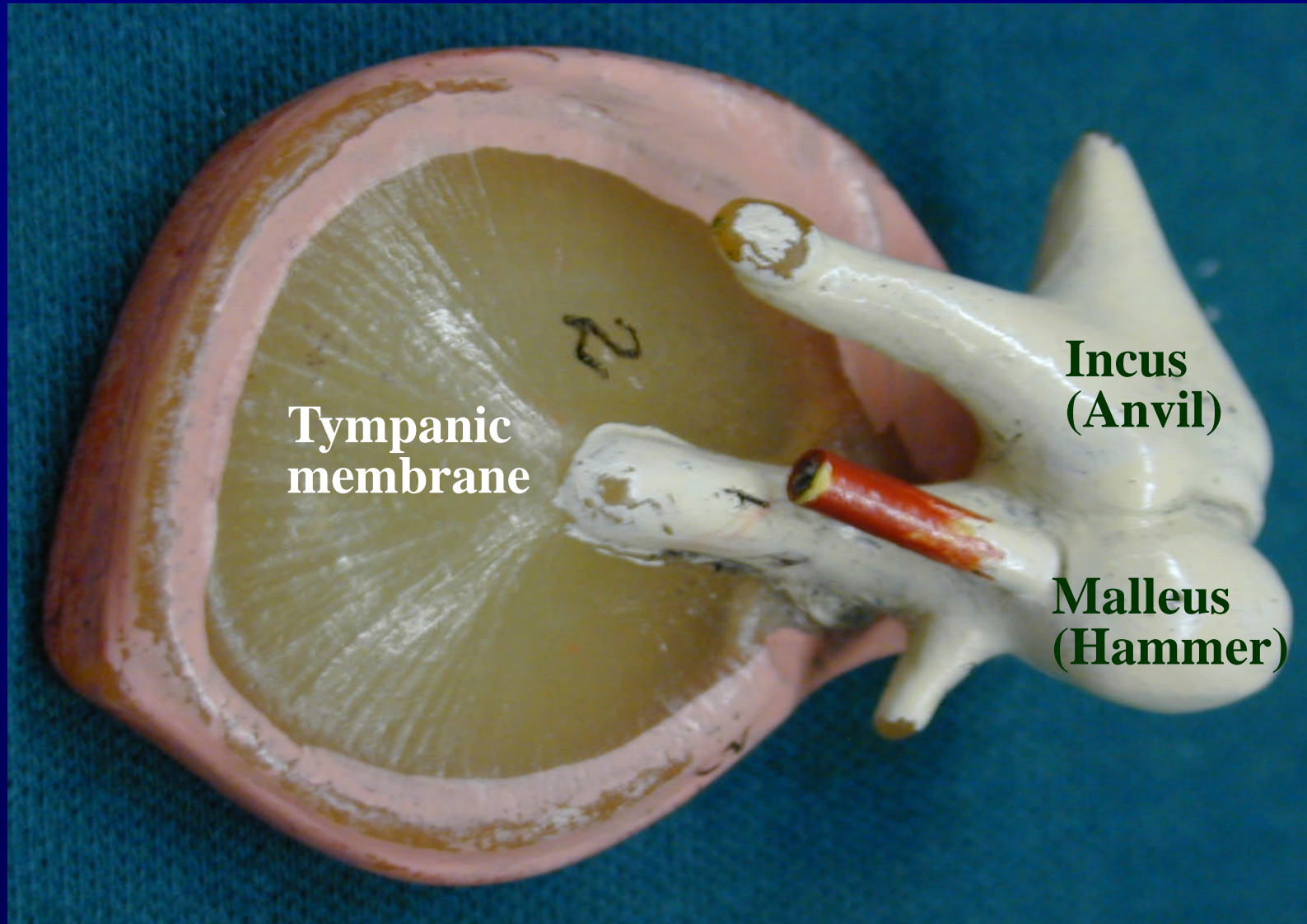
Semicircular  
canals with  
membranous  
semicircular  
ducts

Vestibule

Cochlea

Stapes (covers oval window)

# Middle Ear



Tympanic  
membrane

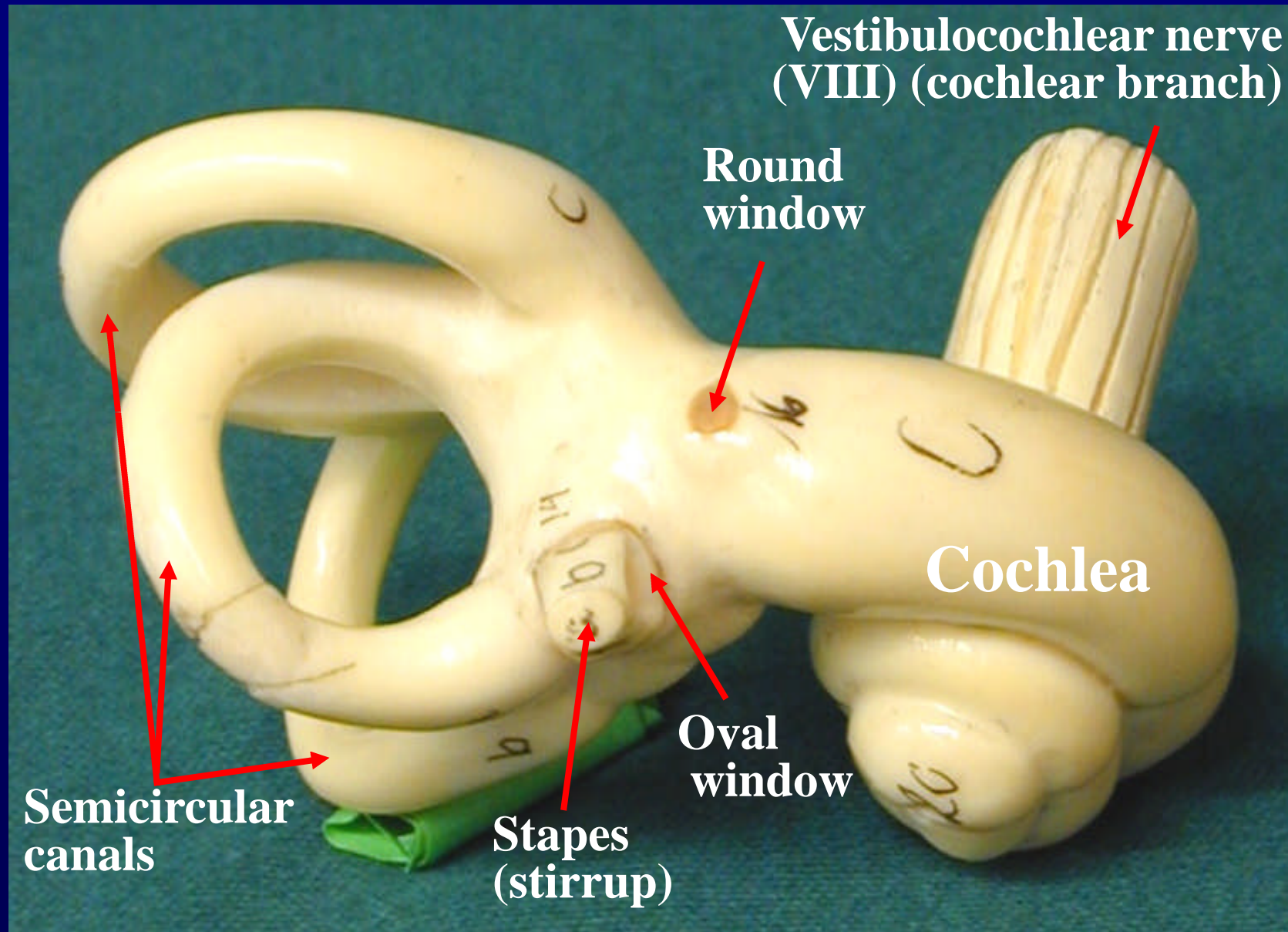
Incus  
(Anvil)

Malleus  
(Hammer)

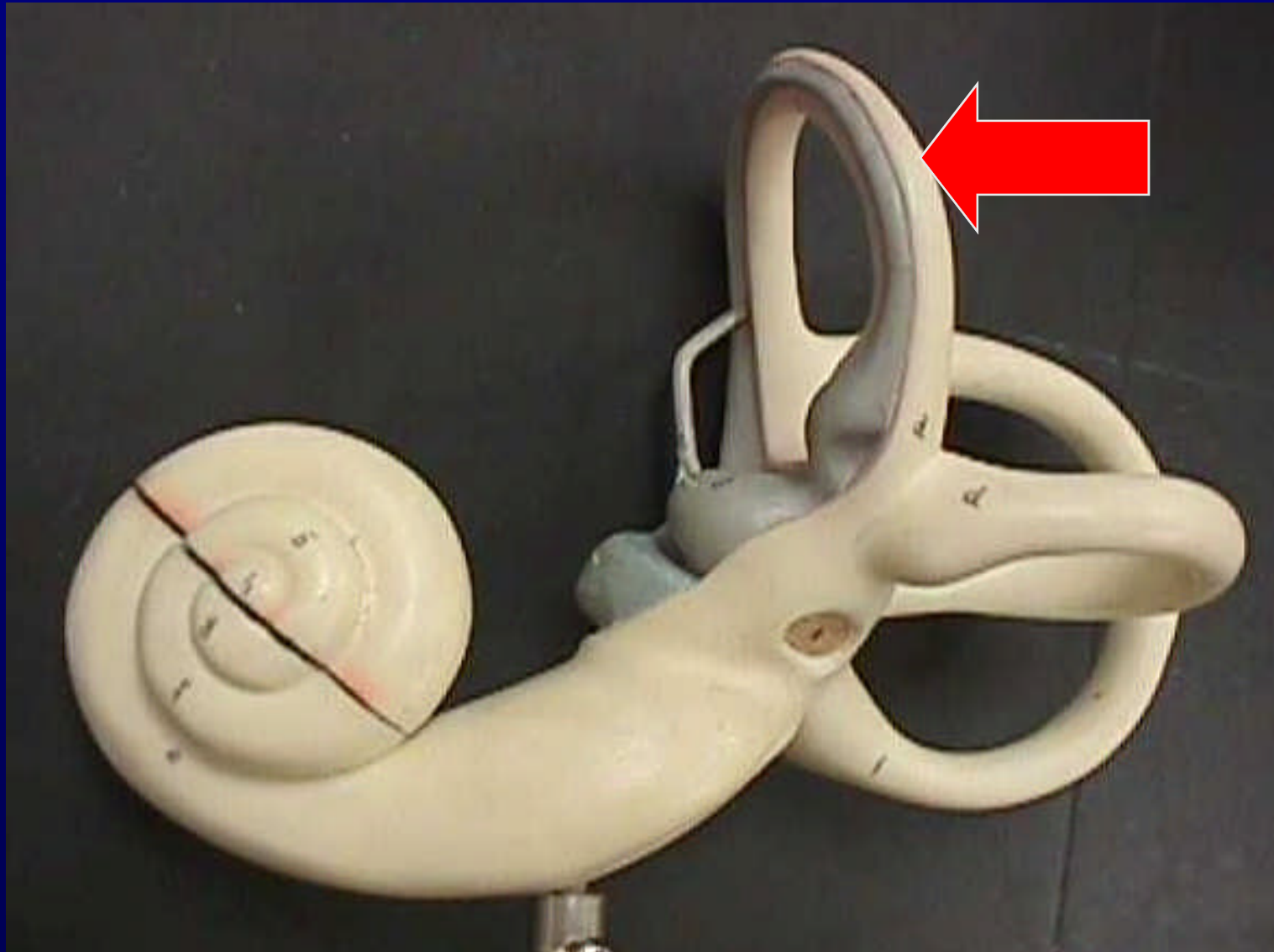




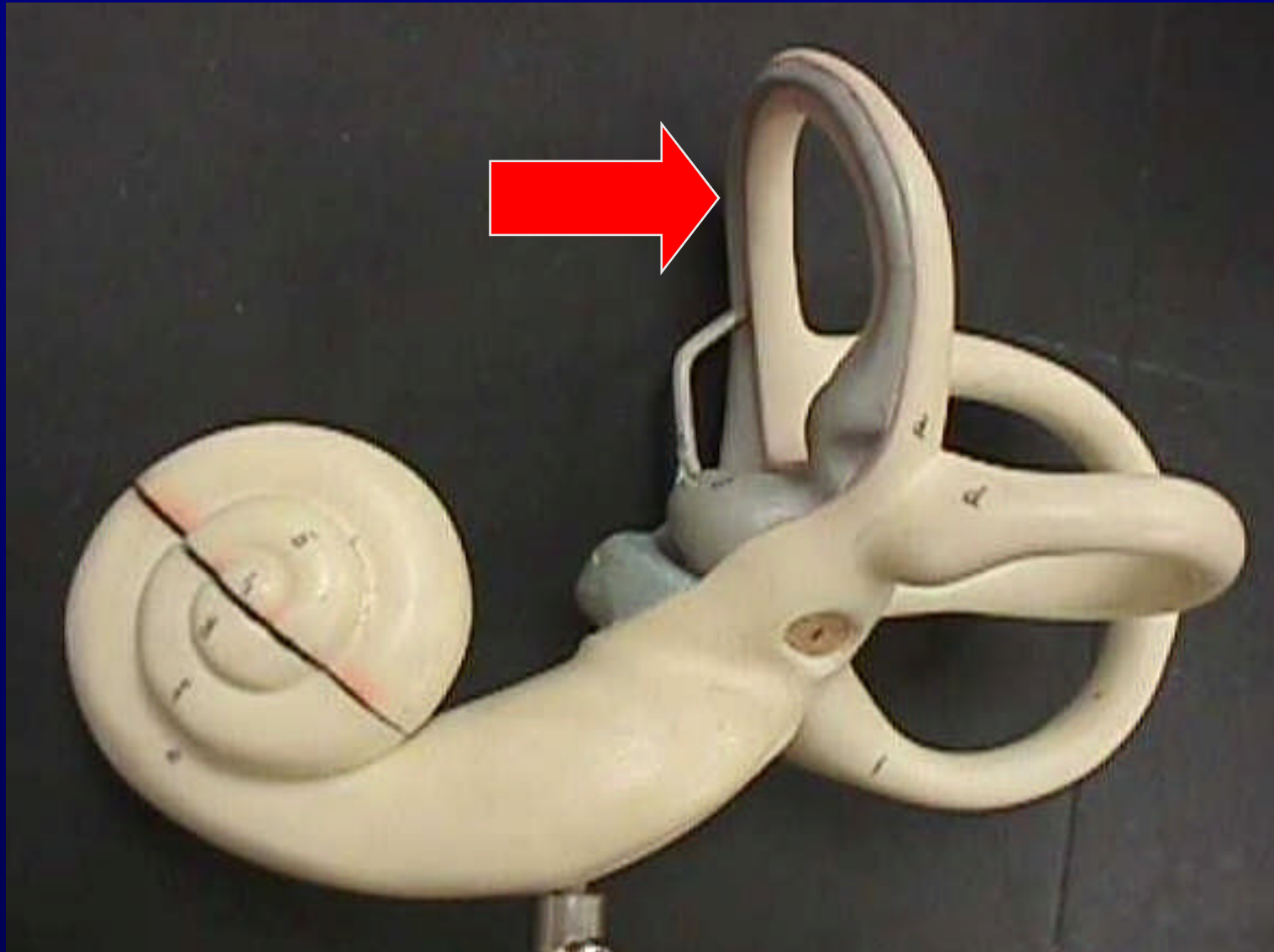
# Inner Ear



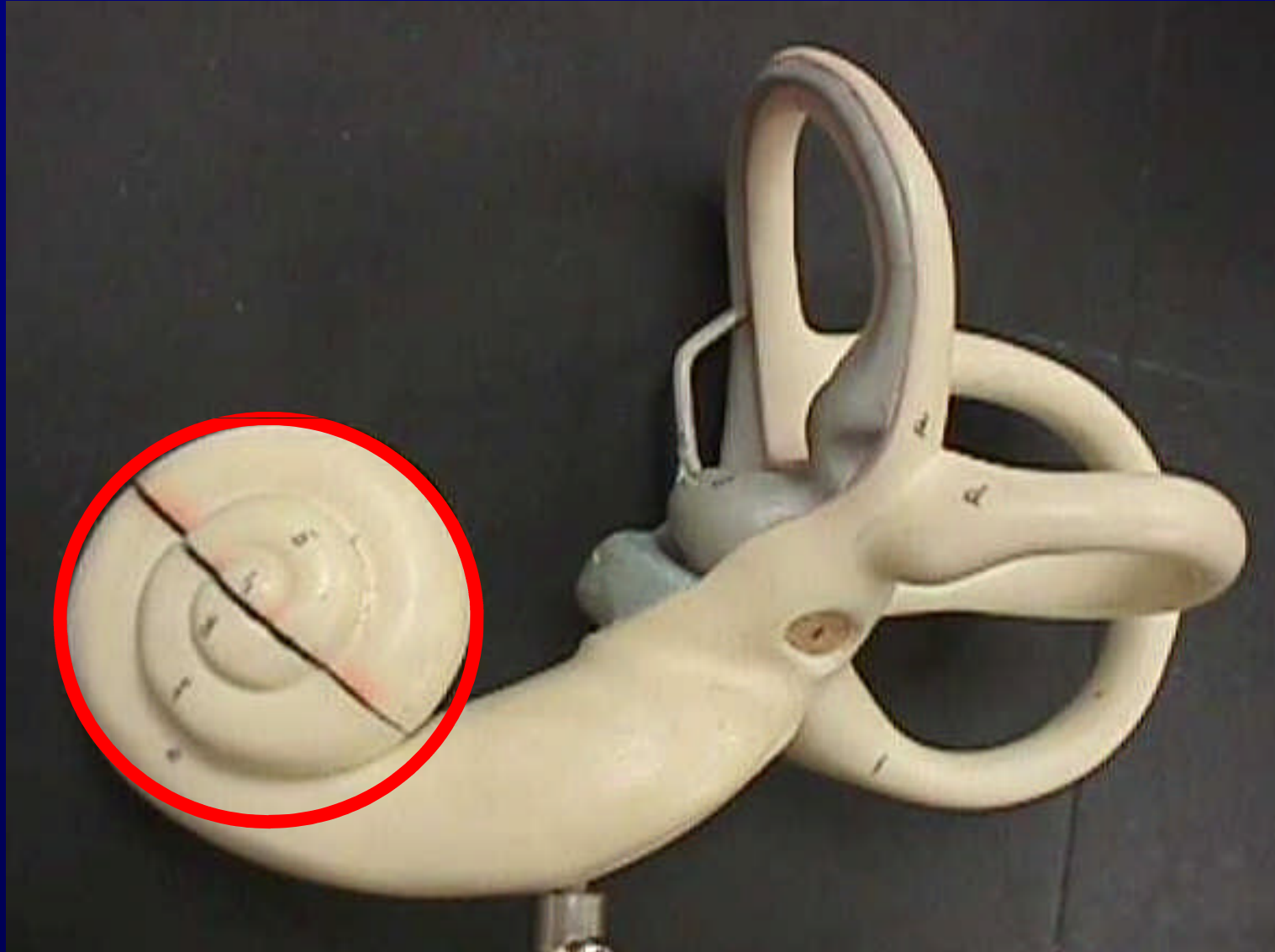
white layer



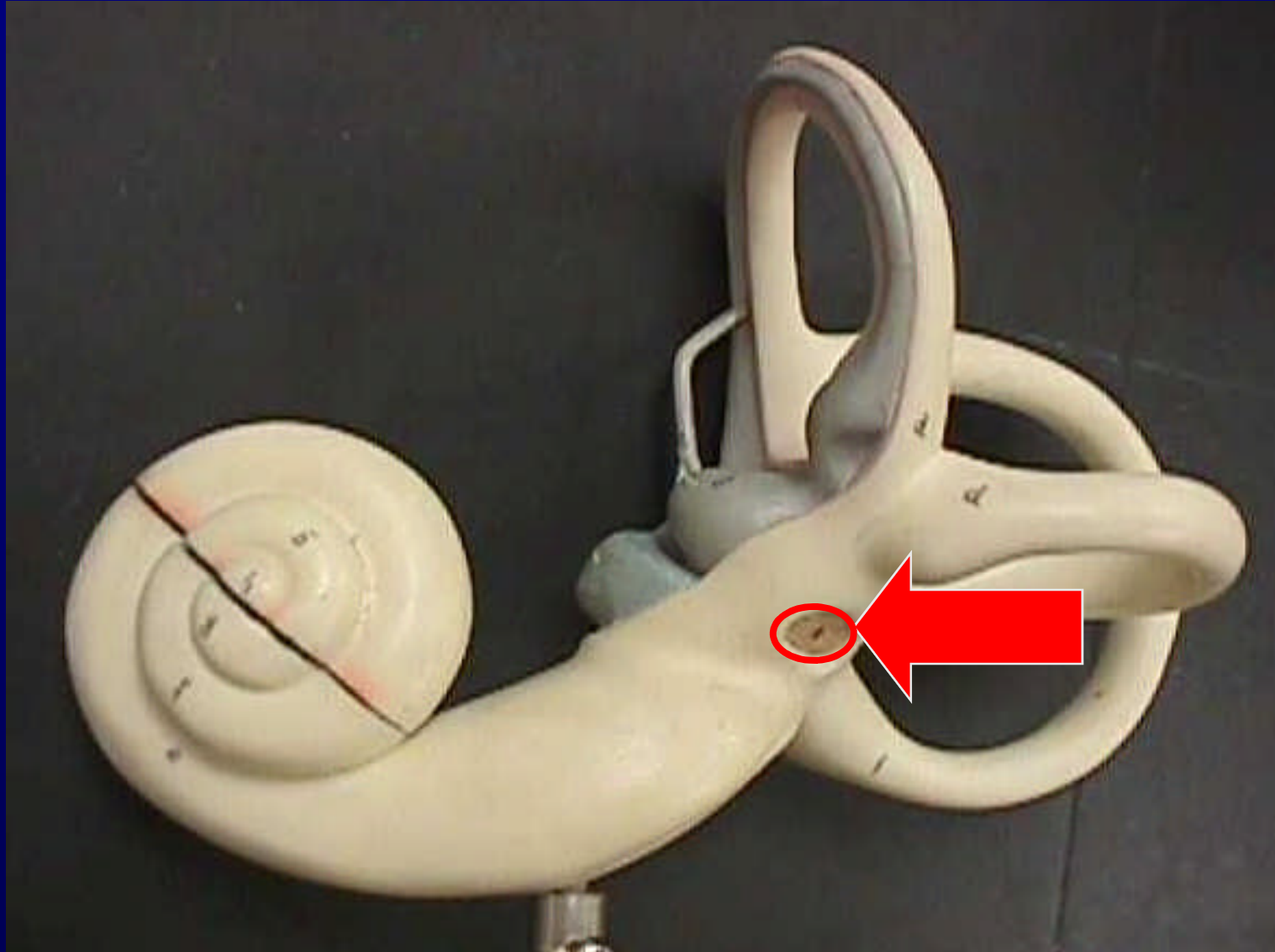
## Membranous labyrinth – inner gray layer



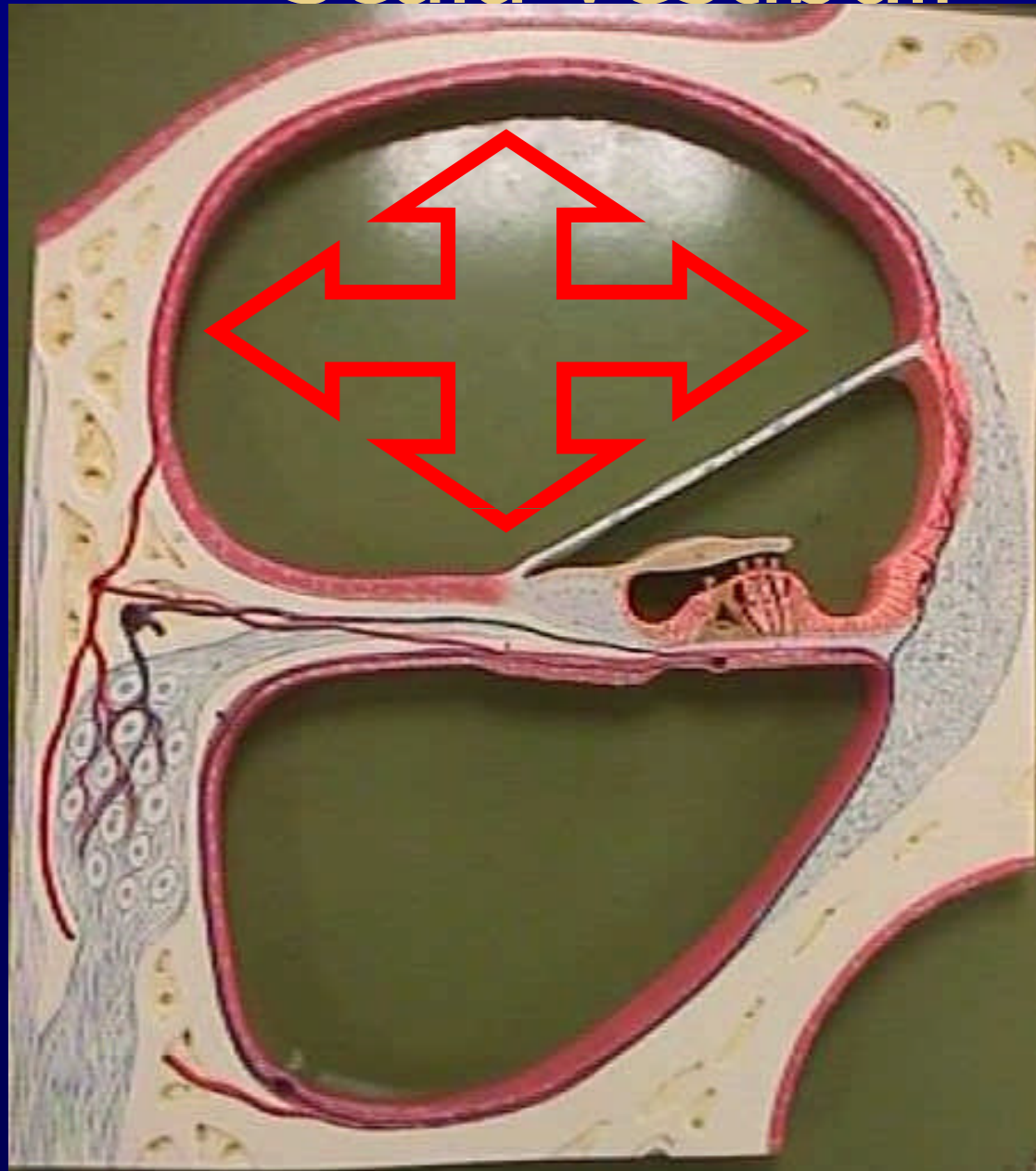
# Cochlea



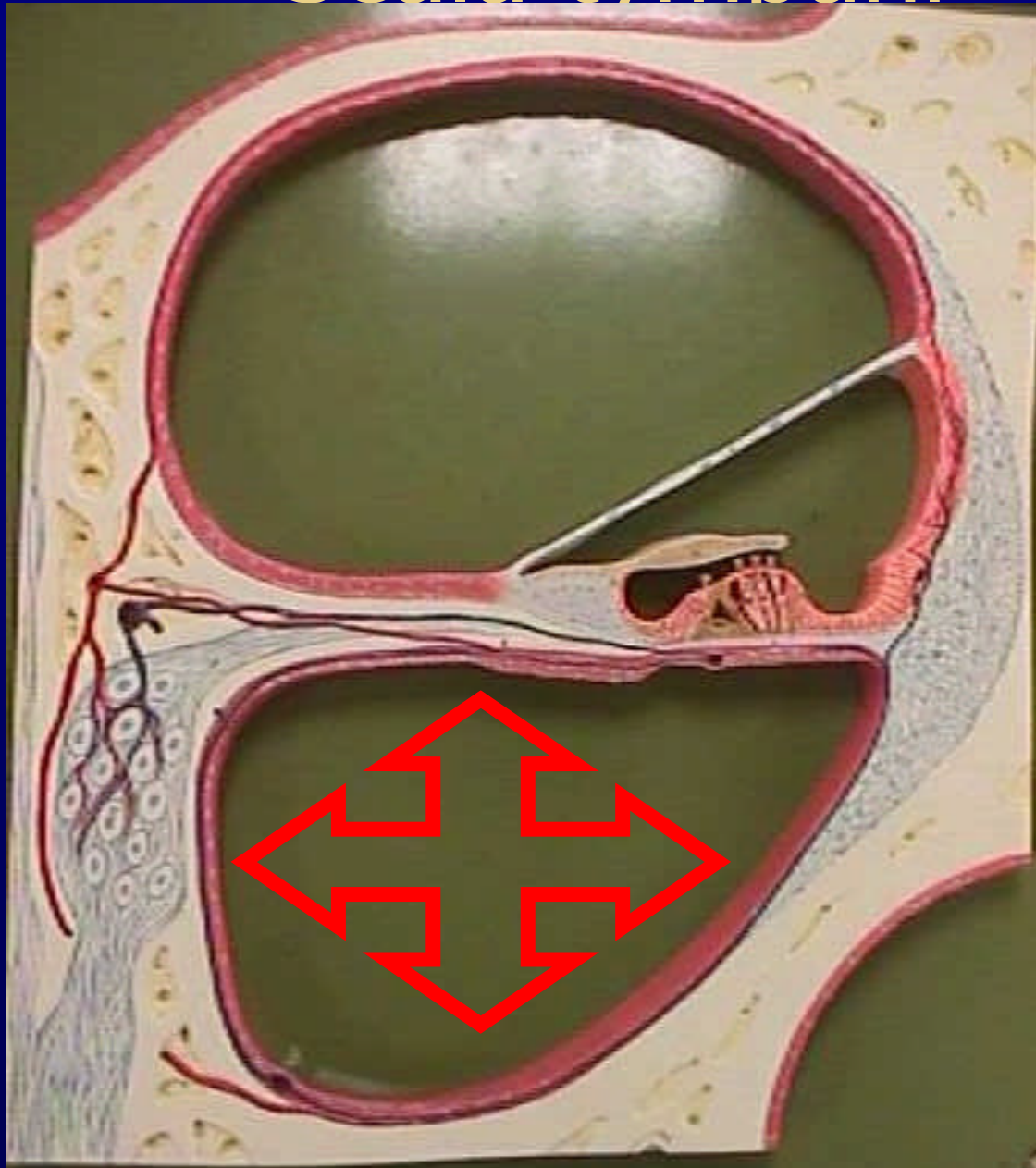
# Oval window



# Scala vestibuli

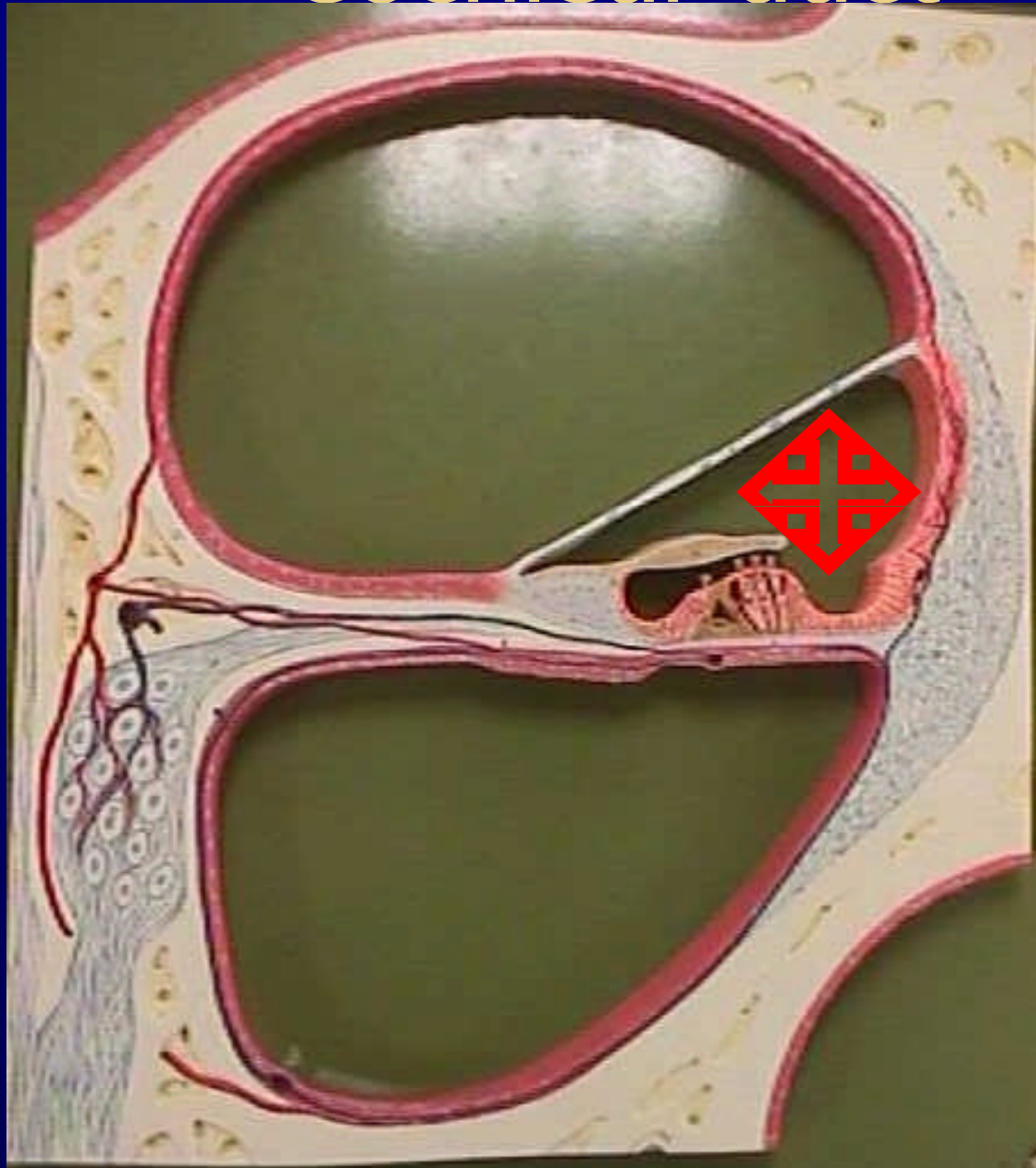


# Scala tympani

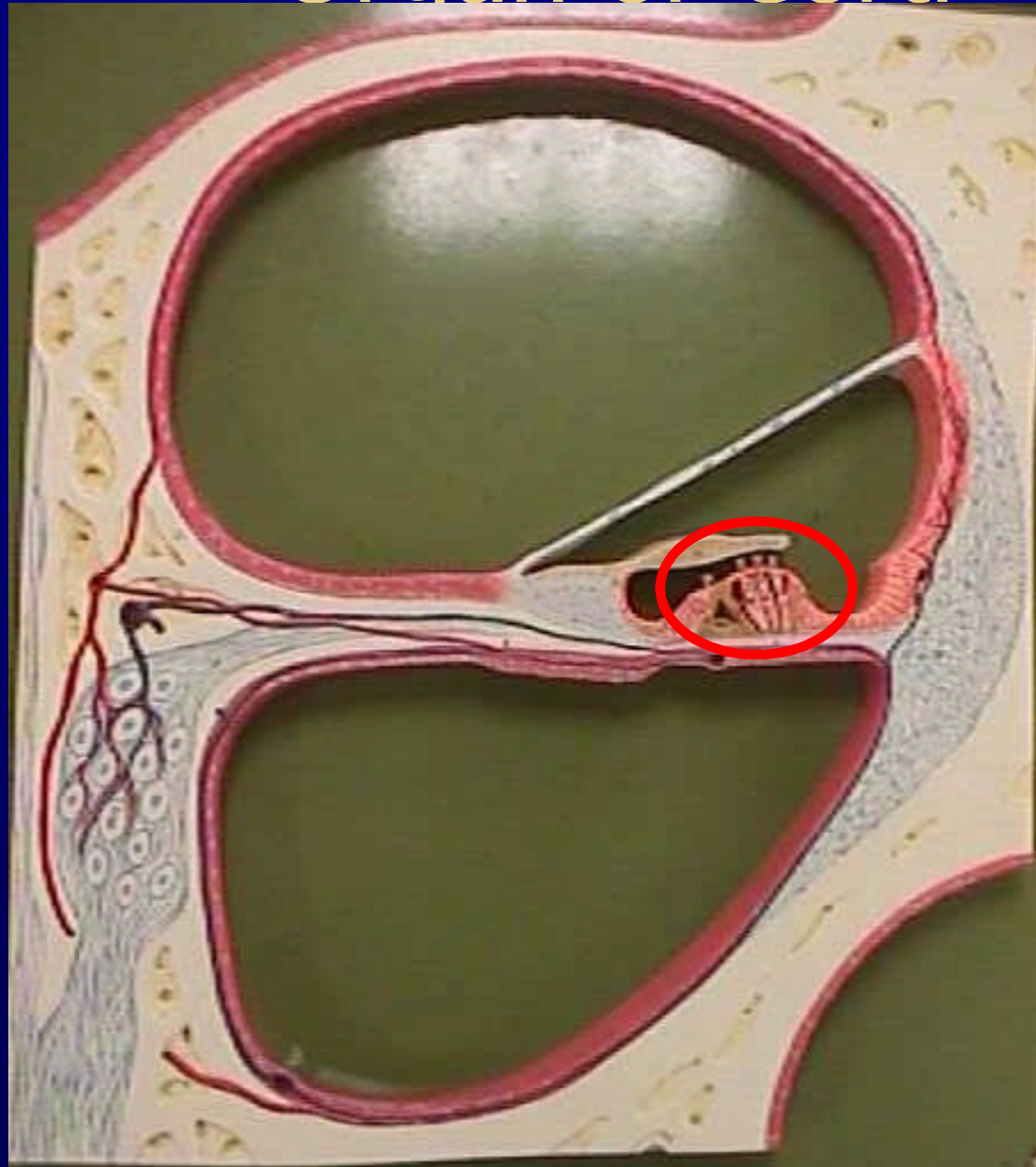




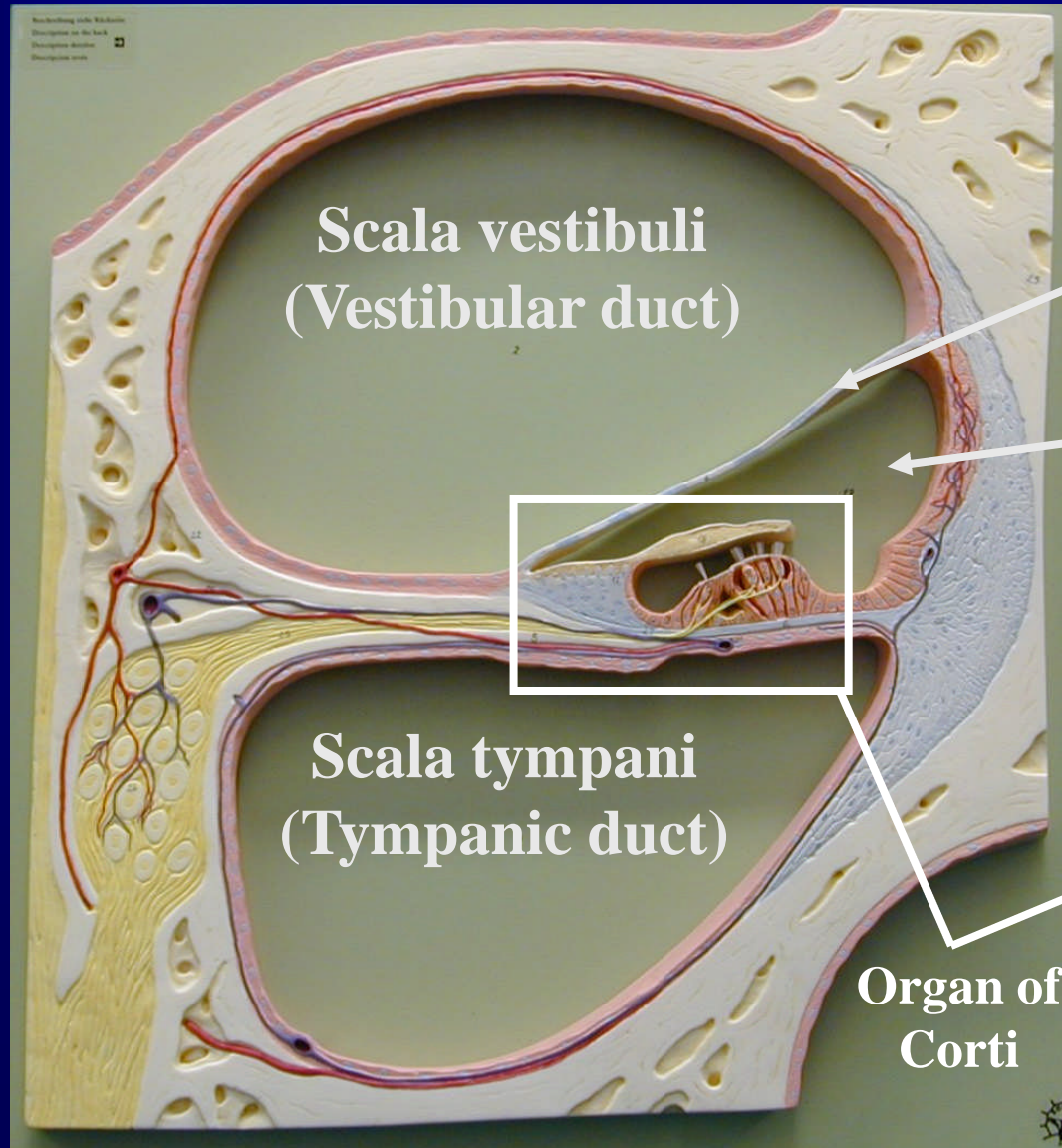
# Cochlear duct



# Organ of Corti



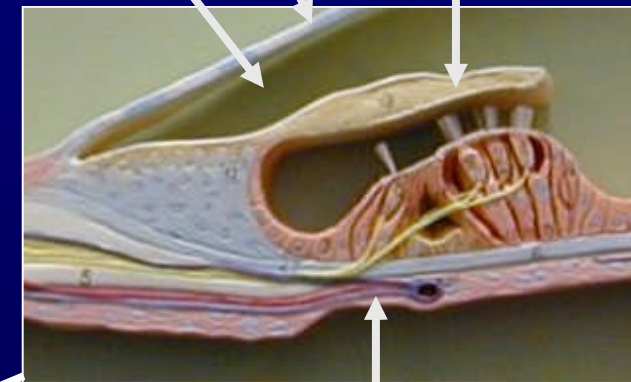
# Cochlea



Vestibular  
membrane

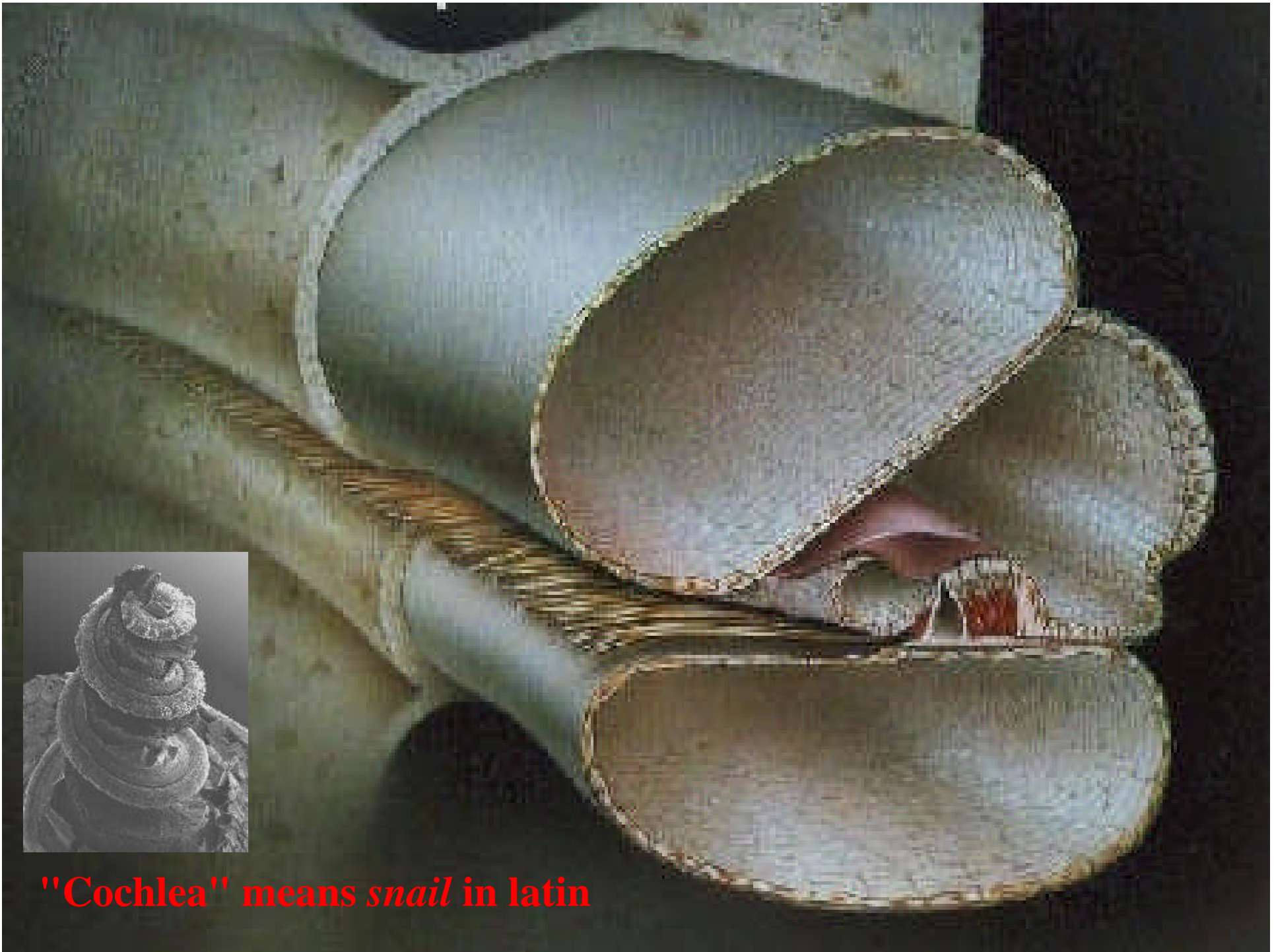
Scala  
media\*

Tectorial  
membrane



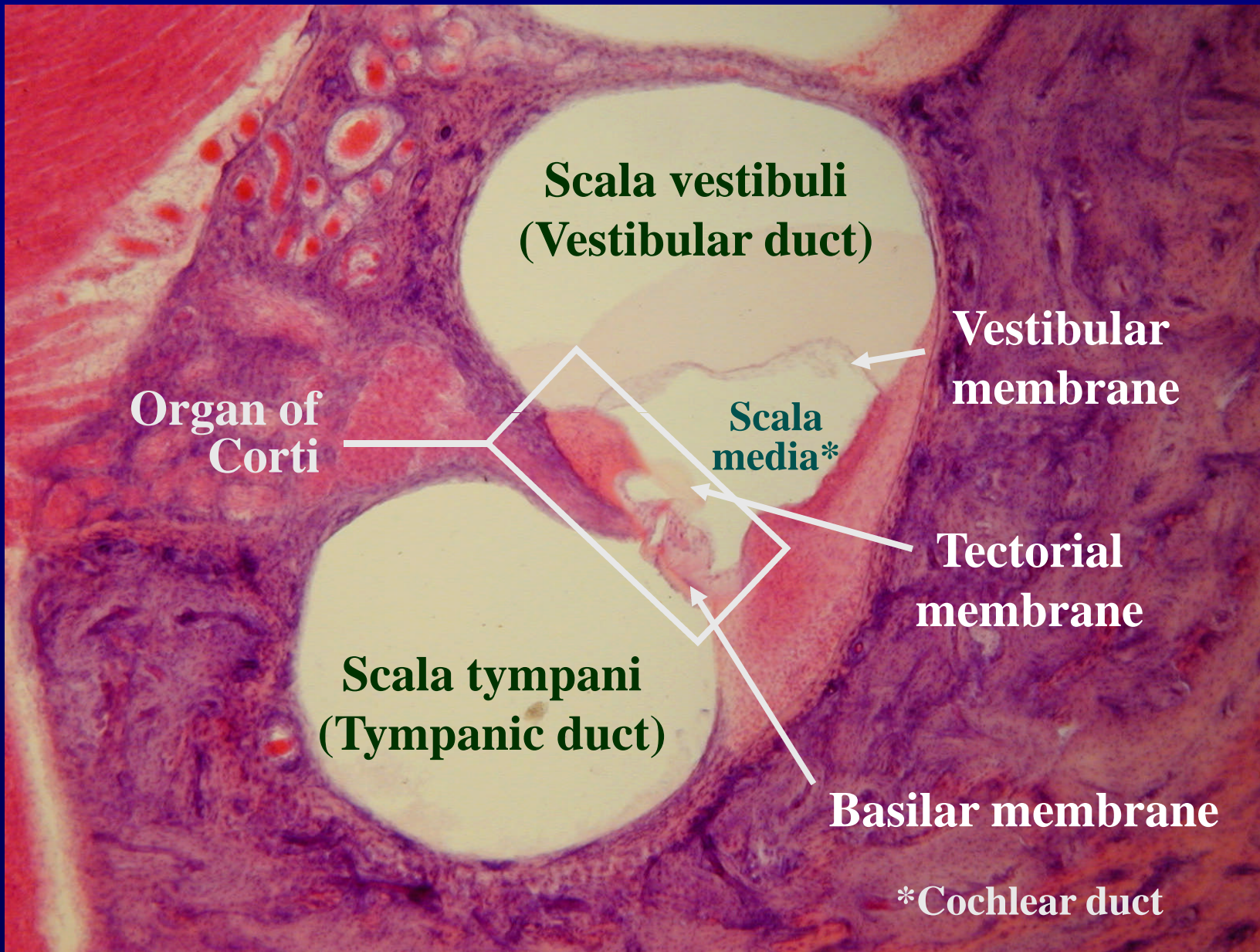
Basilar membrane

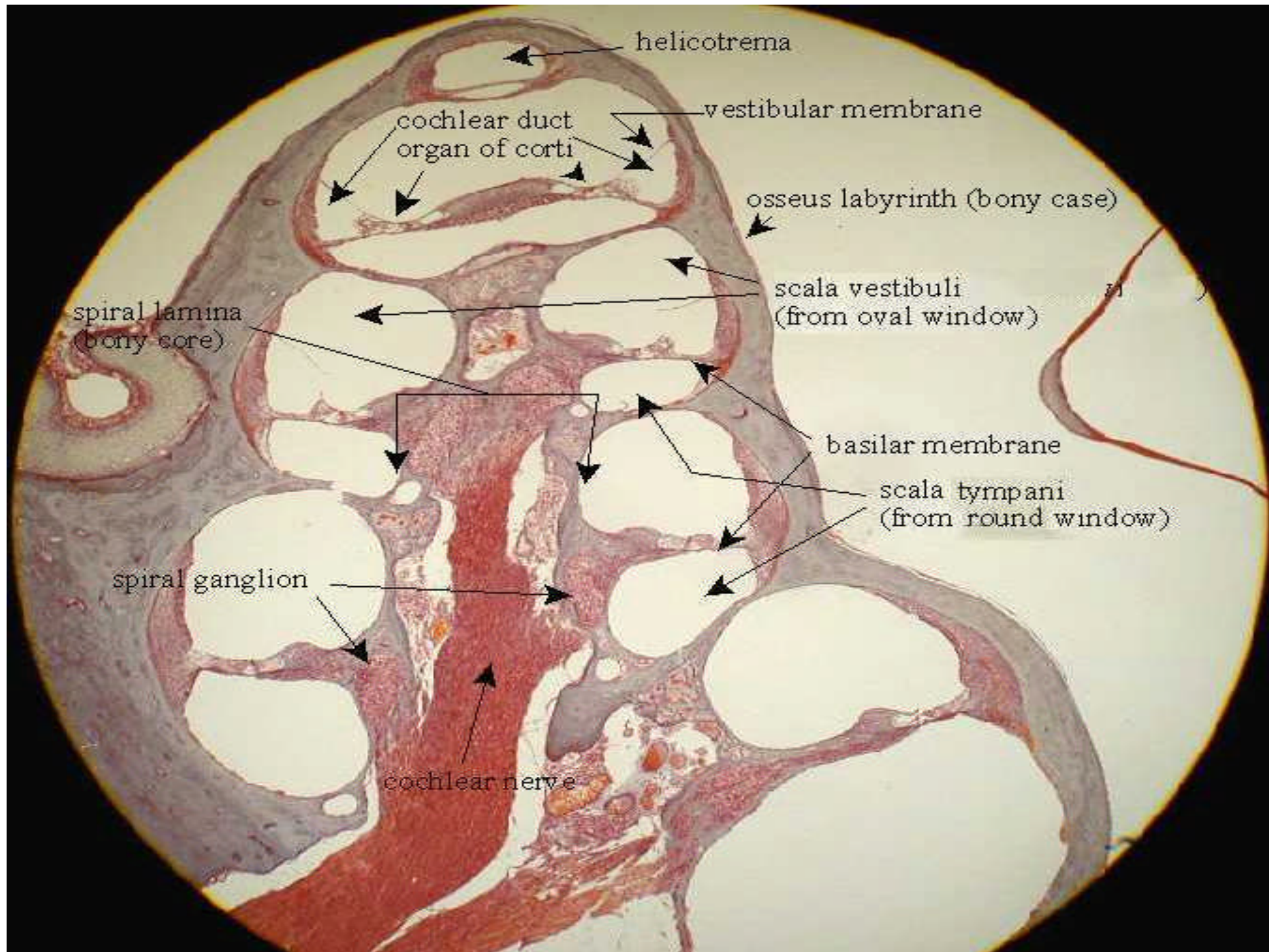
\*Cochlear duct

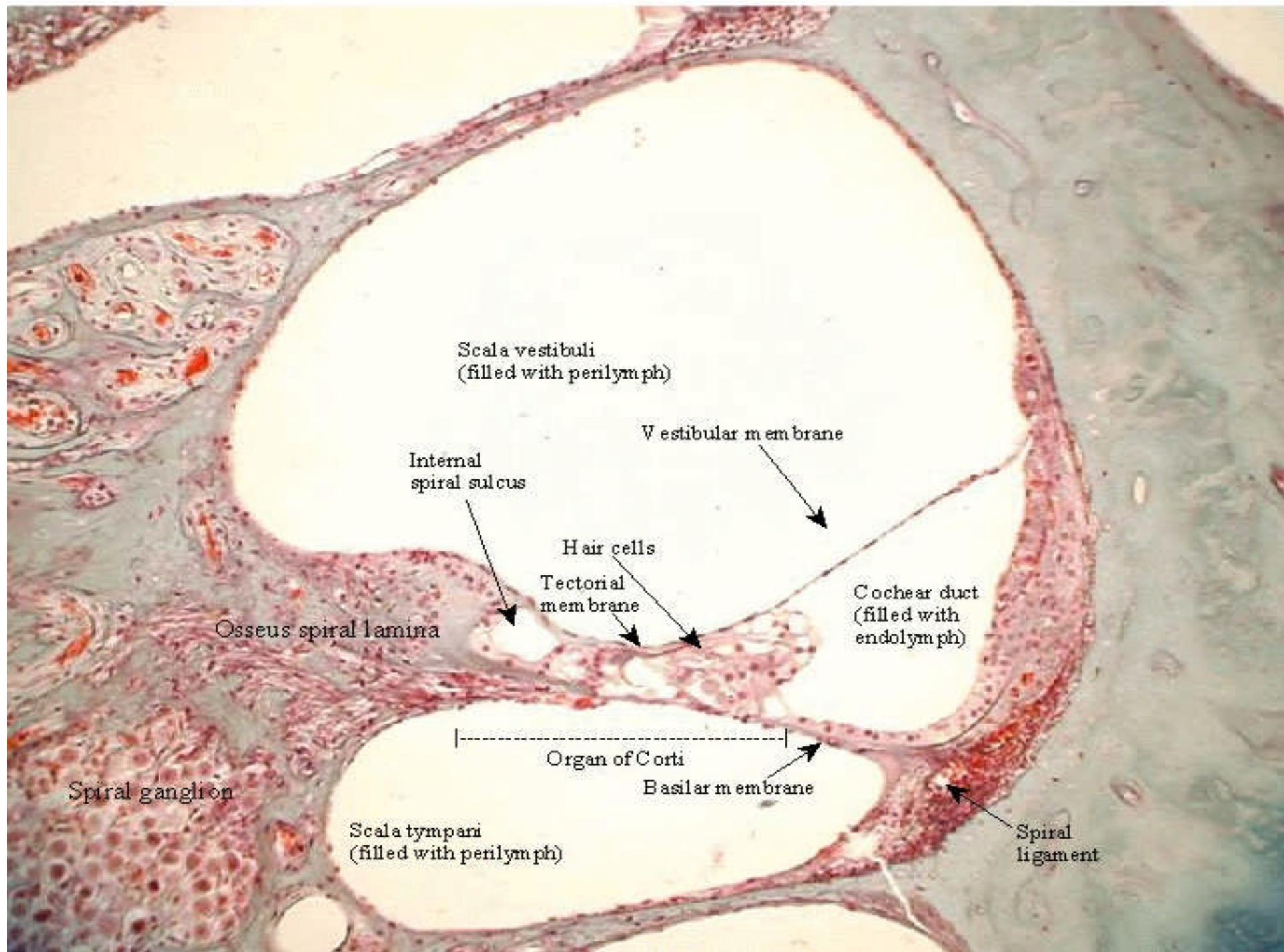


**"Cochlea" means *snail* in latin**

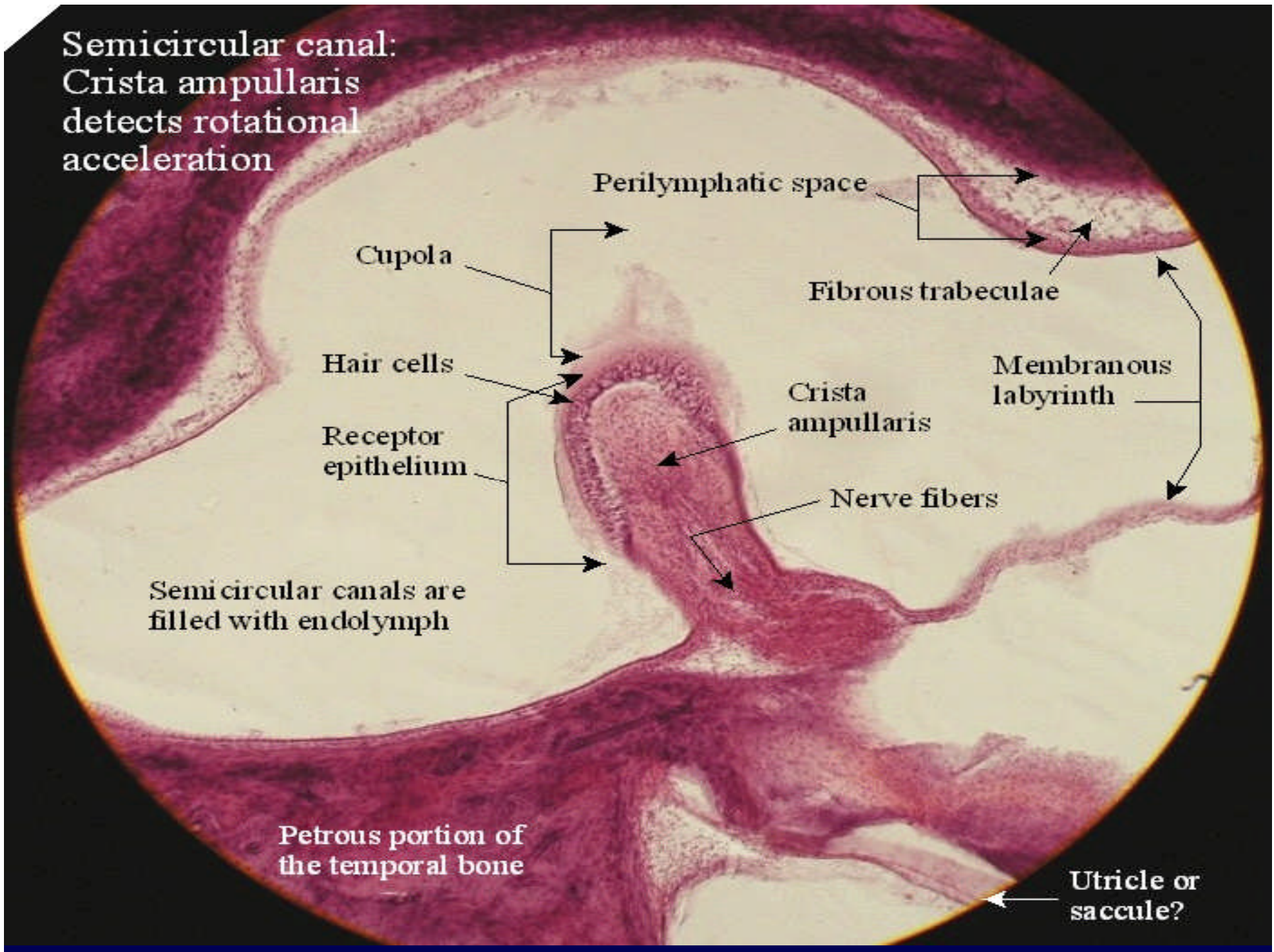
# Cochlea - Slide





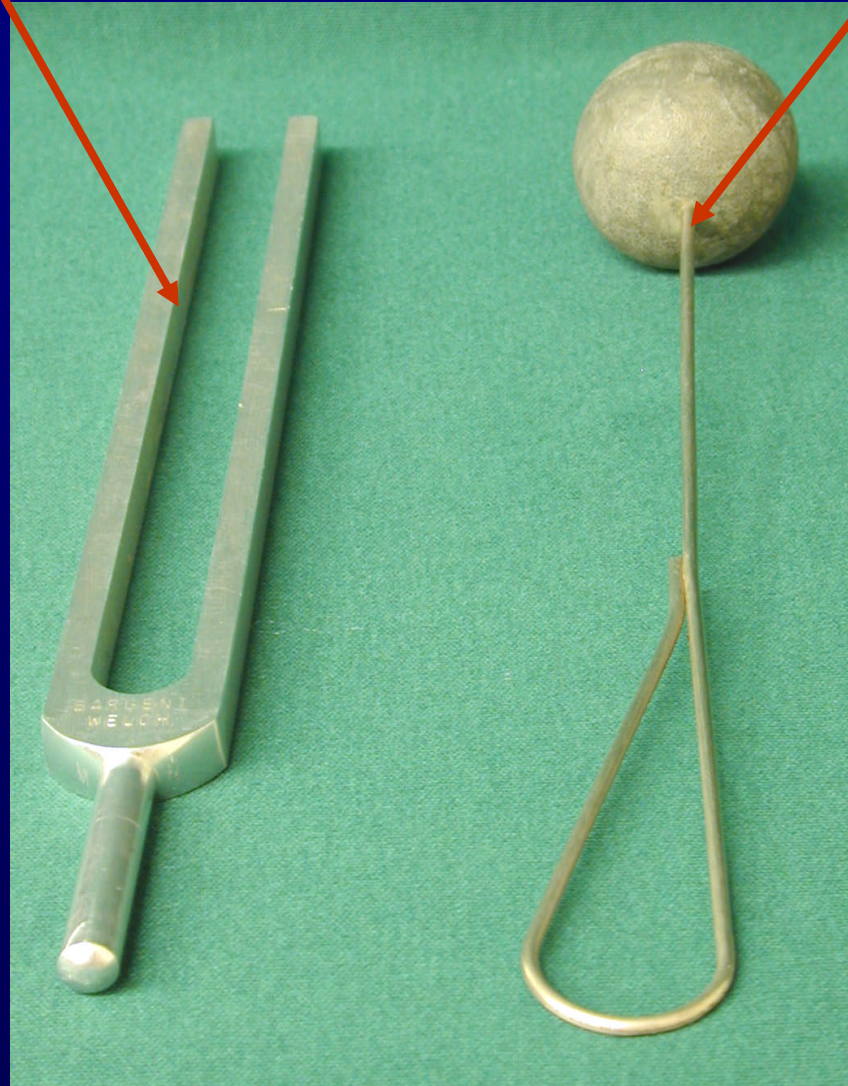


Semicircular canal:  
Crista ampullaris  
detects rotational  
acceleration





# Tuning Fork and Mallet



# References

**[http://biology.clc.uc.edu/fankhauser/Labs/Anatomy\\_&\\_Physiology/A  
&P202/Special\\_Senses/Histology\\_Ear.htm](http://biology.clc.uc.edu/fankhauser/Labs/Anatomy_&_Physiology/A&P202/Special_Senses/Histology_Ear.htm)**