

Auditory and vestibular system

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Department of Anatomy



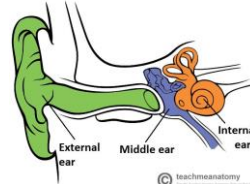
ORGANUM VESTIBULOCOCHLEARE

External ear (auris externa)

Auricle (auricula)
meatus acusticus externus
membrana tympani

Middle ear (auris media)

Tympanic cavity (cavitas tympani)
Ossicles (ossicula auditus)
Mastoid cells (cellulae mastoideae)
Eustachian tube (tuba auditiva)



Inner ear (auris interna)

labyrinthus osseus
labyrinthus membranaceus

teachmeanatomy



AURICULA

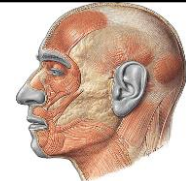


Helix
crus helicis
Tuberculum auriculae
Scapha (eminentia scaphae)
Anthelix
crura anthelictis, fossa triangularis
Concha auriculae (eminentia conchae)
cymba conchae, cavum conchae
Tragus
Antitragus, incisura intertragica
Lobulus auriculae

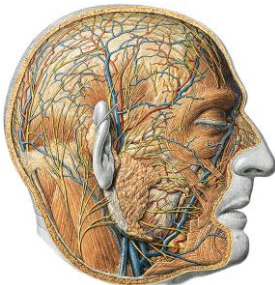


Morphology of the auricle

cartilago auriculae, lamina tragi
lobulus auriculae (fatty tissue)
ligamenta et musculi auriculae (intraauriculares, extraauriculares)
Skin (lateral and medial side)



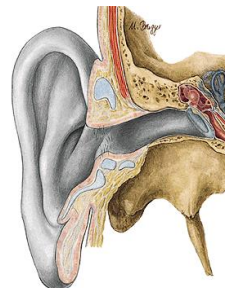
AURICULA (vessels, nerves)



Arteries:
a. temporalis superficialis
a. auricularis posterior
Veins: tributaries of v. jugularis externa
Lymph:
nodi lymph. retroauriculares
nodi lymph. parotidei
Nerves:
nn. auriculares anteriores (n. auriculotemporalis)
ramus auricularis n. vagi (n.V.)
n. auricularis magnus (plexus cervicalis)

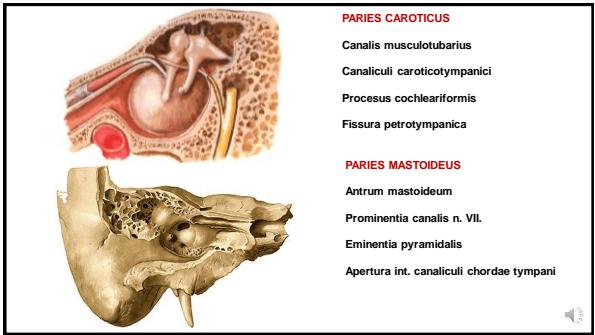
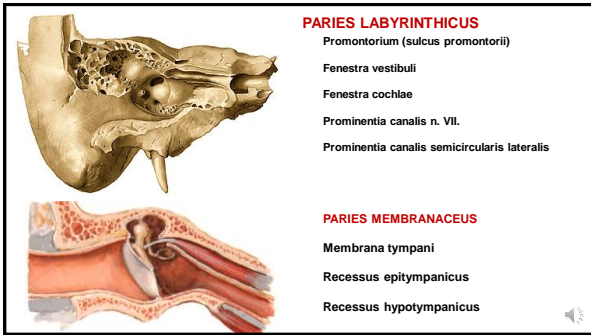
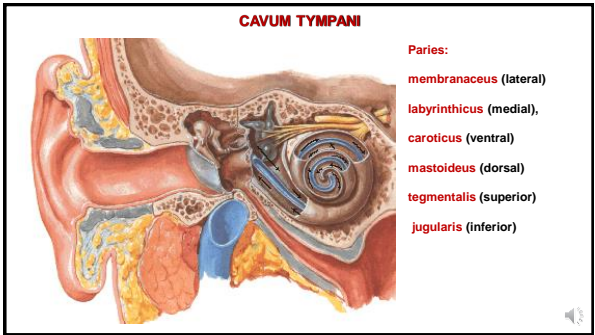
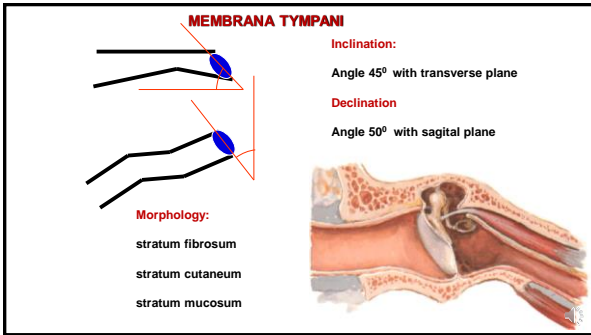
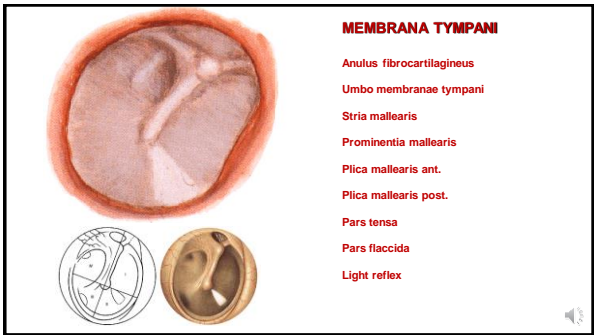
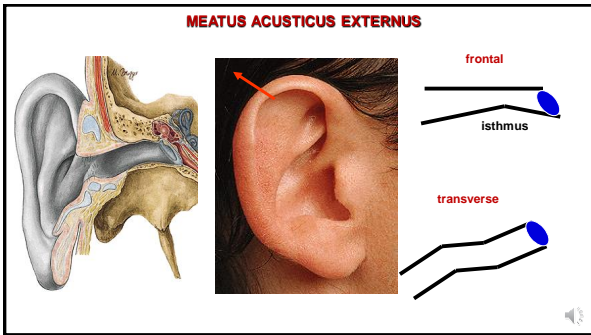


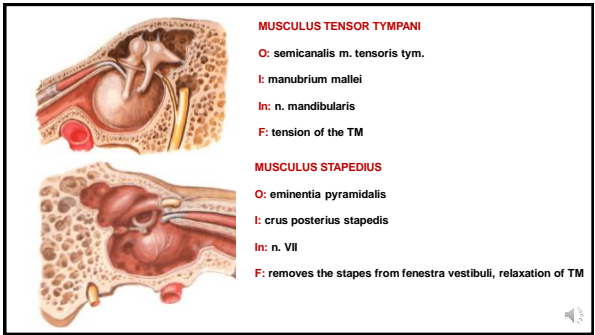
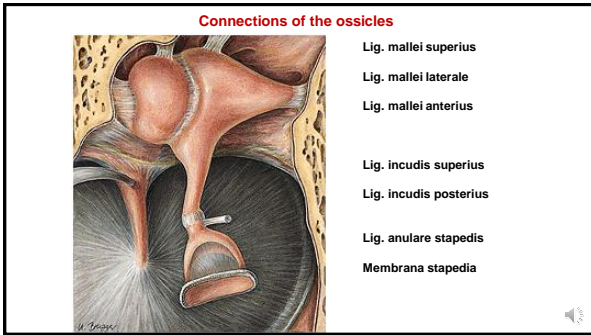
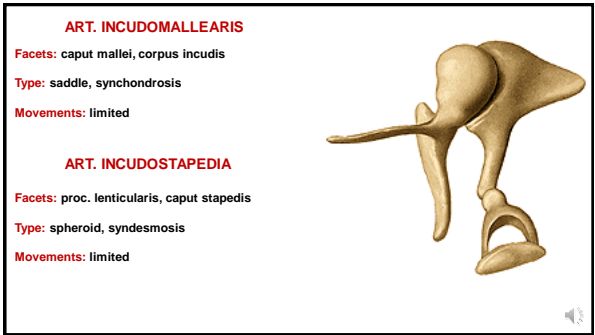
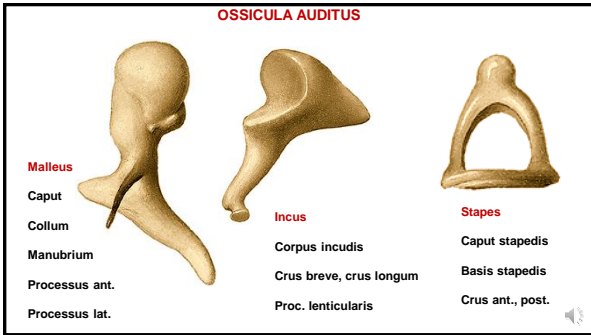
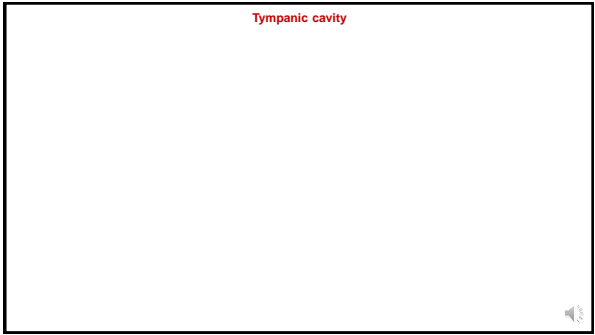
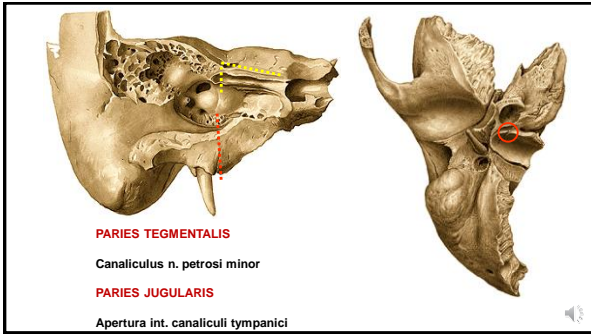
MEATUS ACUSTICUS EXTERNUS

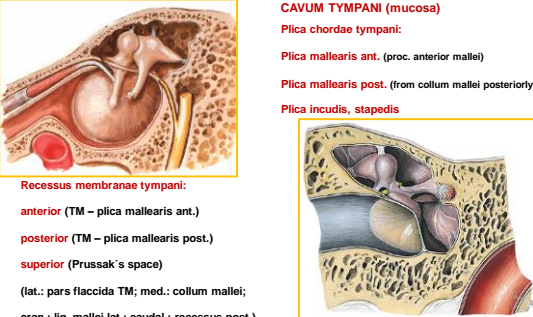


porus acusticus ext.
(cavum conchae)
cartilago meatus acustici ext.
meatus acusticus ext. osseus
sulcus tympanicus
incisura tympanica
membrana tympani
tragi
glandulae ceruminosae
cerumen









CAVUM TYMPANI (mucosa)

Plica chordae tympani:

Plica mallearis ant. (proc. anterior mallei)

Plica mallearis post. (from collum mallei posteriorly)

Plica incudis, stapedis

Recessus membranae tympani:

anterior (TM – plica mallearis ant.)

posterior (TM – plica mallearis post.)

superior (Prussak's space)

(lat.: pars flaccida TM; med.: collum mallei; cran.: lig. mallei lat.; caudal.: recessus post.)

TUBA AUDITIVA

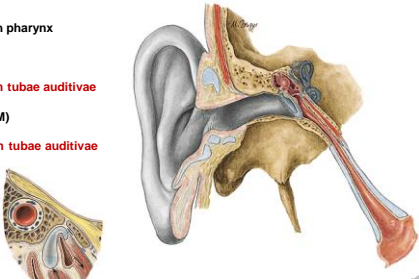
connects:

cavum tympani with pharynx

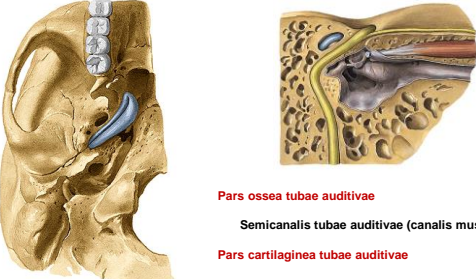
3,5-4 cm

Ostium tympanicum tubae auditivae
(paries caroticus TM)

Ostium pharyngeum tubae auditivae
(nasopharynx)



TUBA AUDITIVA



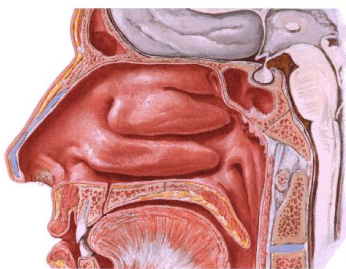
Pars ossea tubae auditivae

Semicanalis tubae auditivae (canalis musculotubarius)

Pars cartilaginea tubae auditivae

Isthmus tubae auditivae

OSTIUM PHARYNGEUM TUBAE AUDITIVAE



Plica salpingopalatina

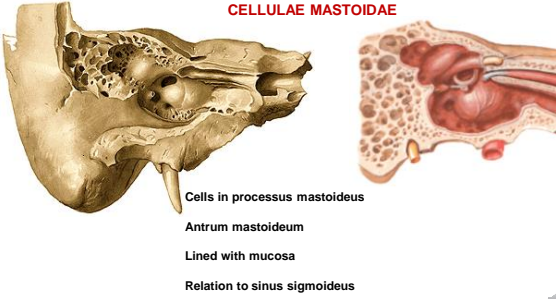
Torus levatorius

Torus tubarius

Plica salpingopharyngea

Tonsilla tubaria

CELLULAE MASTOIDEAE



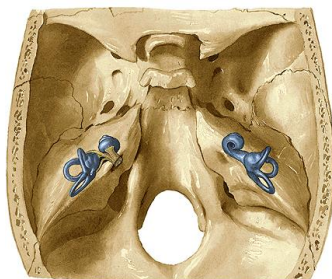
Cells in processus mastoideus

Antrum mastoideum

Lined with mucosa

Relation to sinus sigmoideus

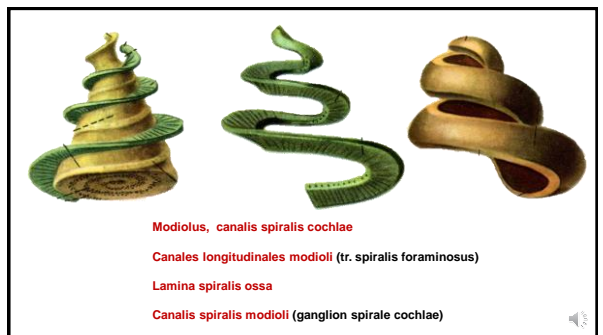
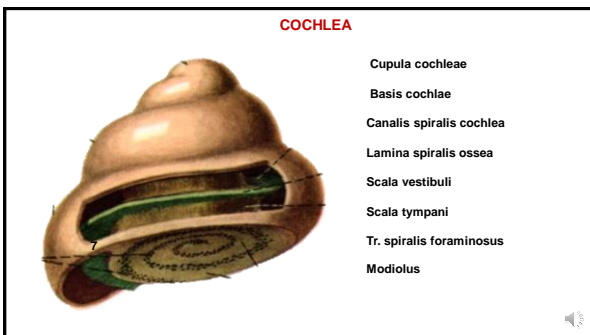
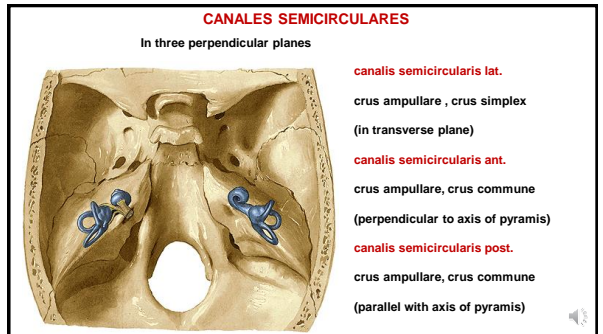
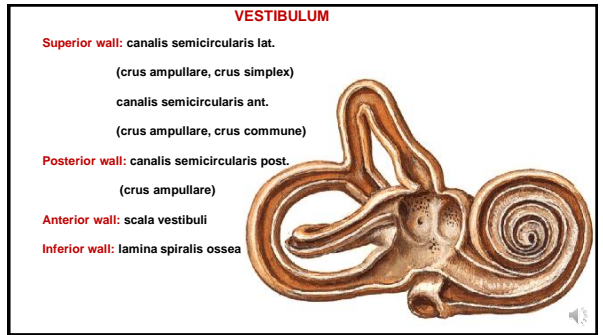
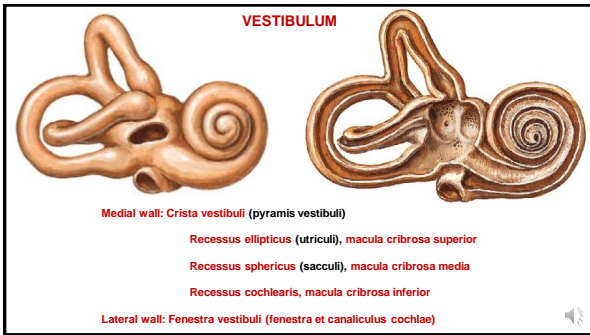
LABYRINTHUS OSSEUS

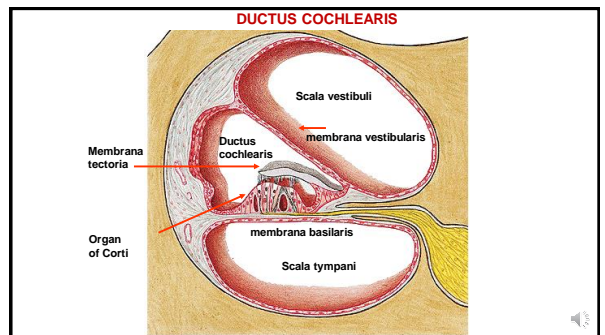
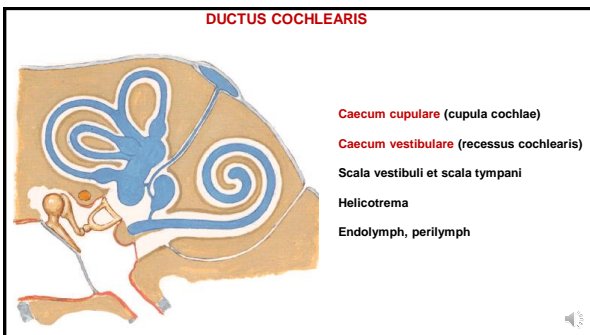
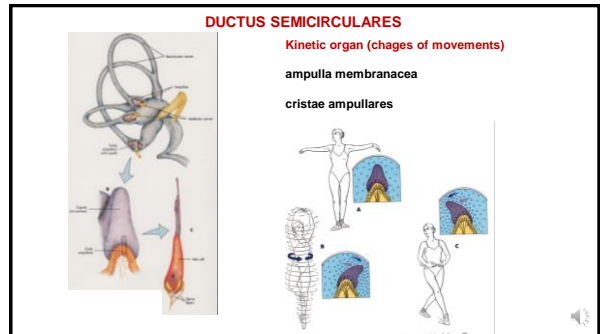
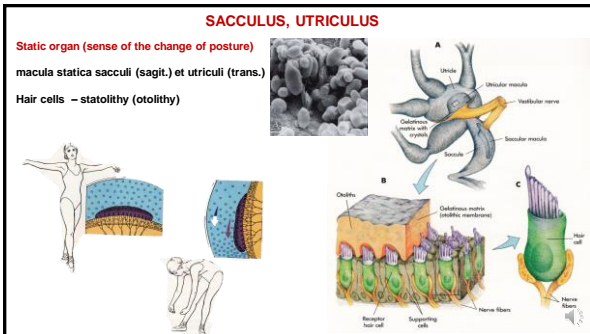
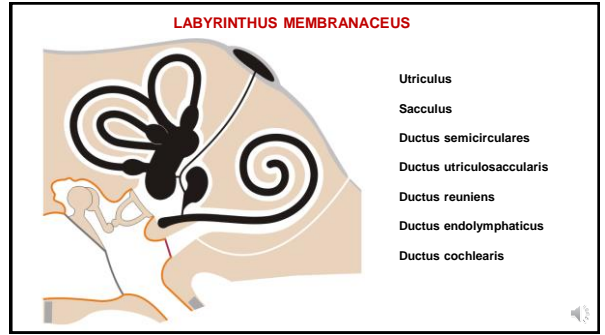
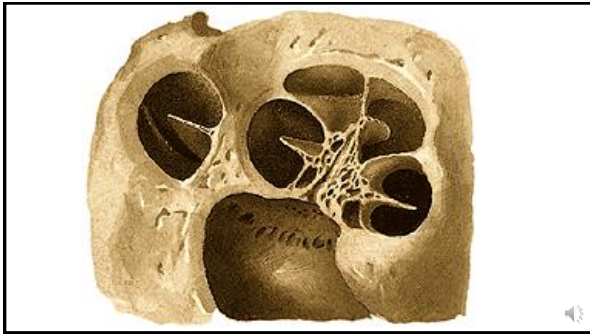


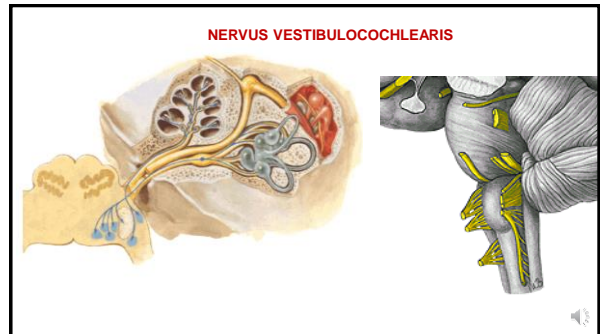
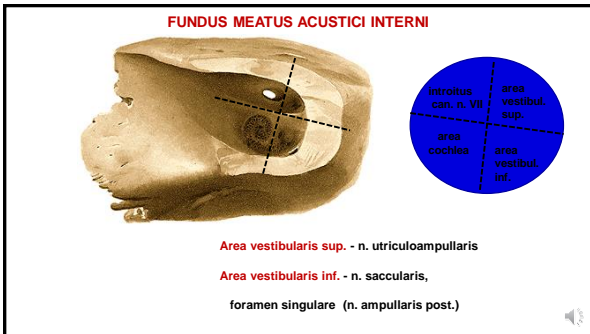
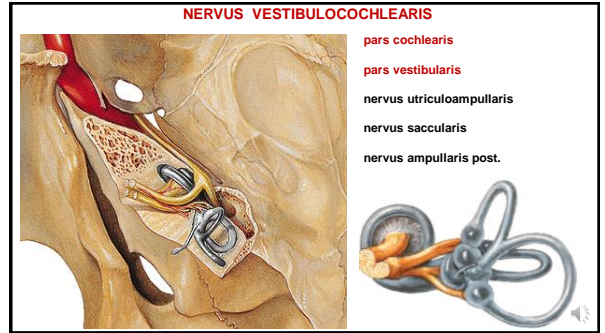
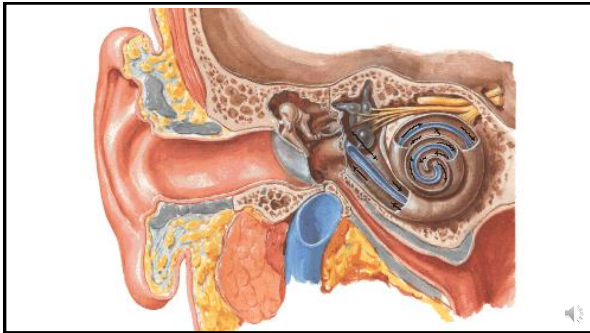
Vestibulum

Canales semicirculares

Cochlea







References:

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