

**ORGANUM**

**VESTIBULOCOCHLEARE**

# ORGANUM VESTIBULOCOCHLEARE

## **Auris externa**

Auricula

Meatus acusticus externus

Membrana tympani

## **Auris media**

Cavitas tympani

Ossicula auditus

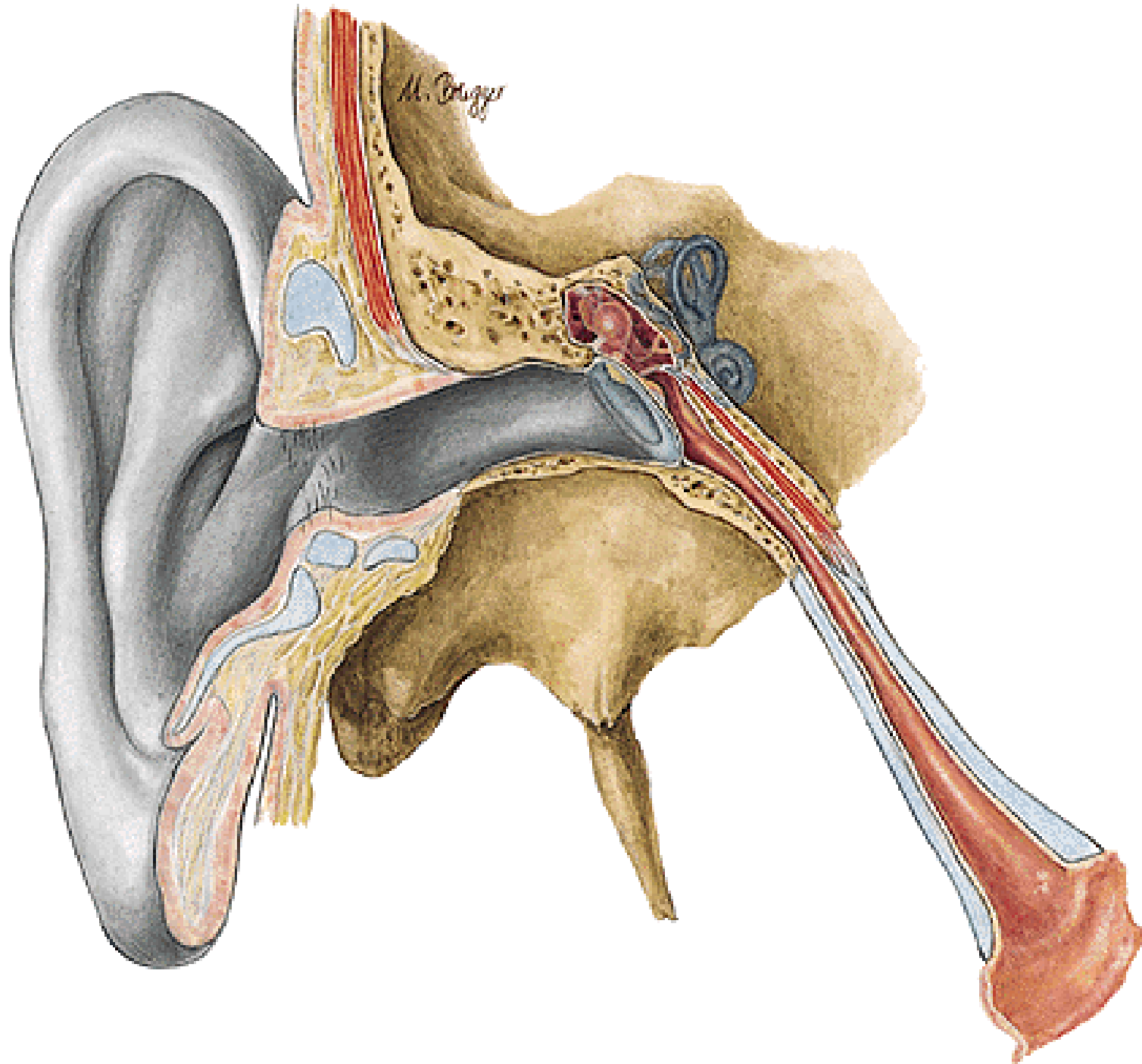
Cellulae mastoideae

Tuba auditiva

## **Auris interna**

Labyrinthus osseus

Labyrinthus membranaceus



# AURICULA

HELIX - CRUS

TUBERCULUM AURICULAE

ANTHELIX

CRURA ANTHELICIA

FOSSA TRIANGULARIS

SCAPHA

CONCHA AURICULAE

- CYMBA CONCHAE

- CAVUM CONCHAE

TRAGUS

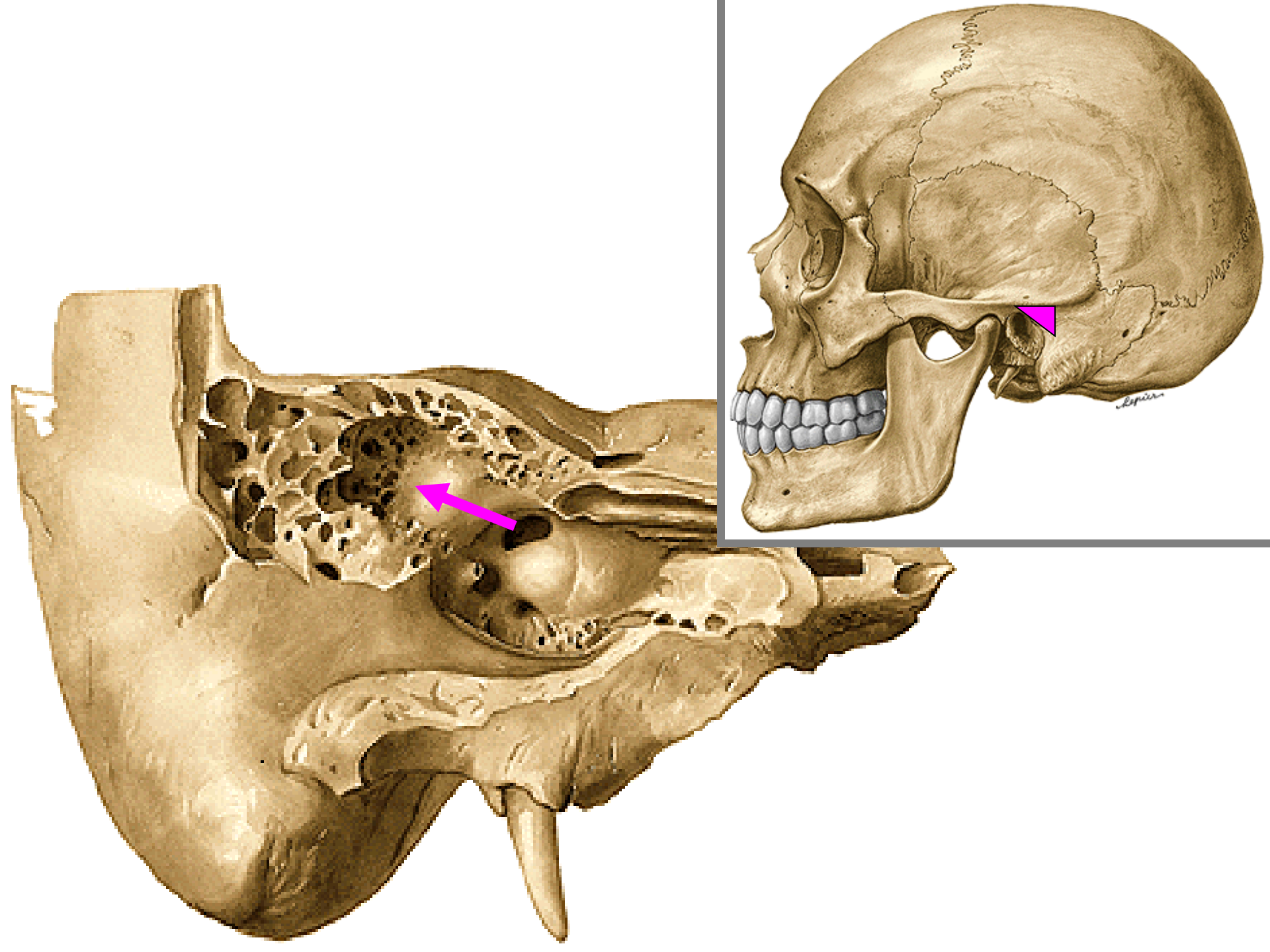
ANTITRAGUS

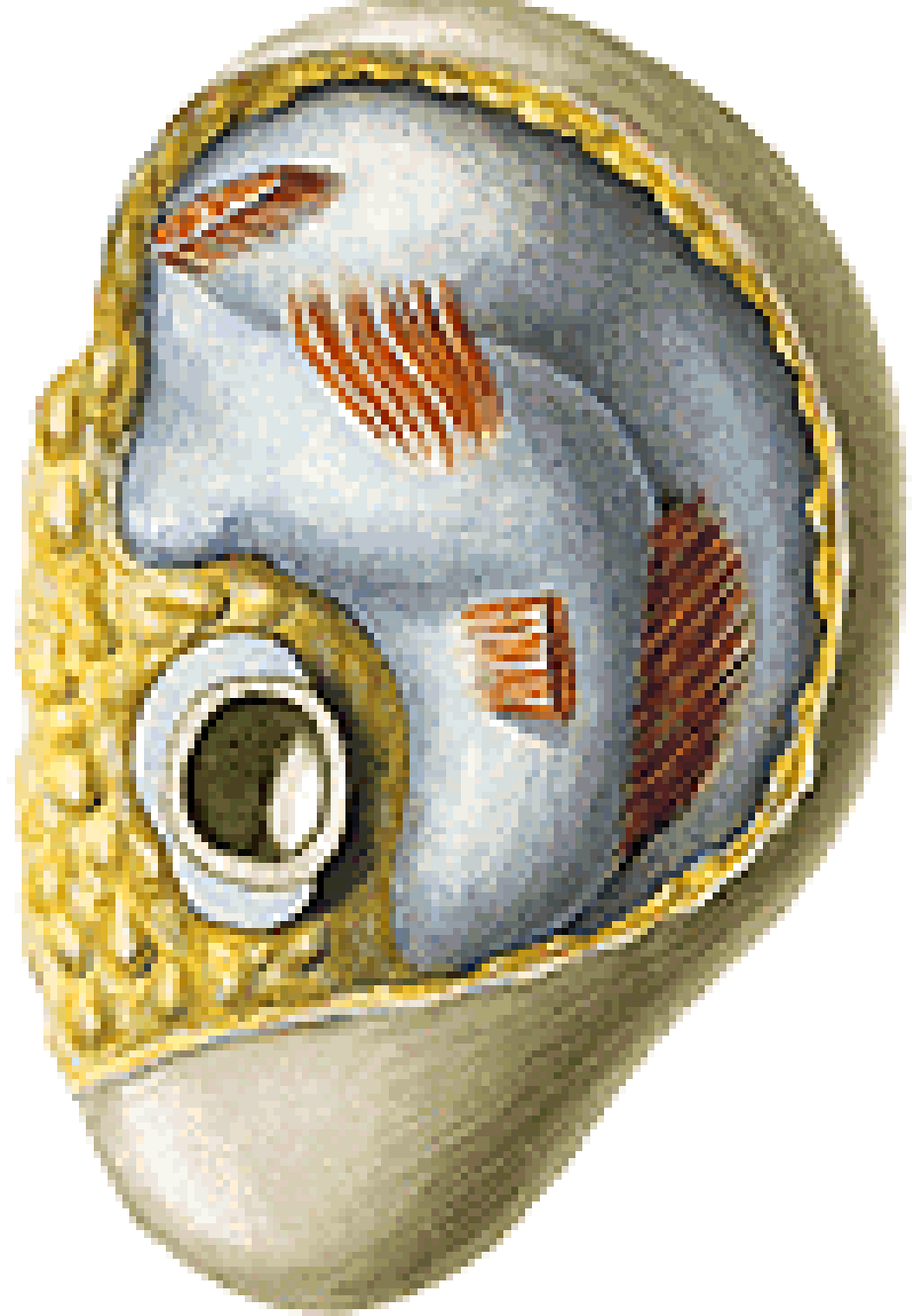
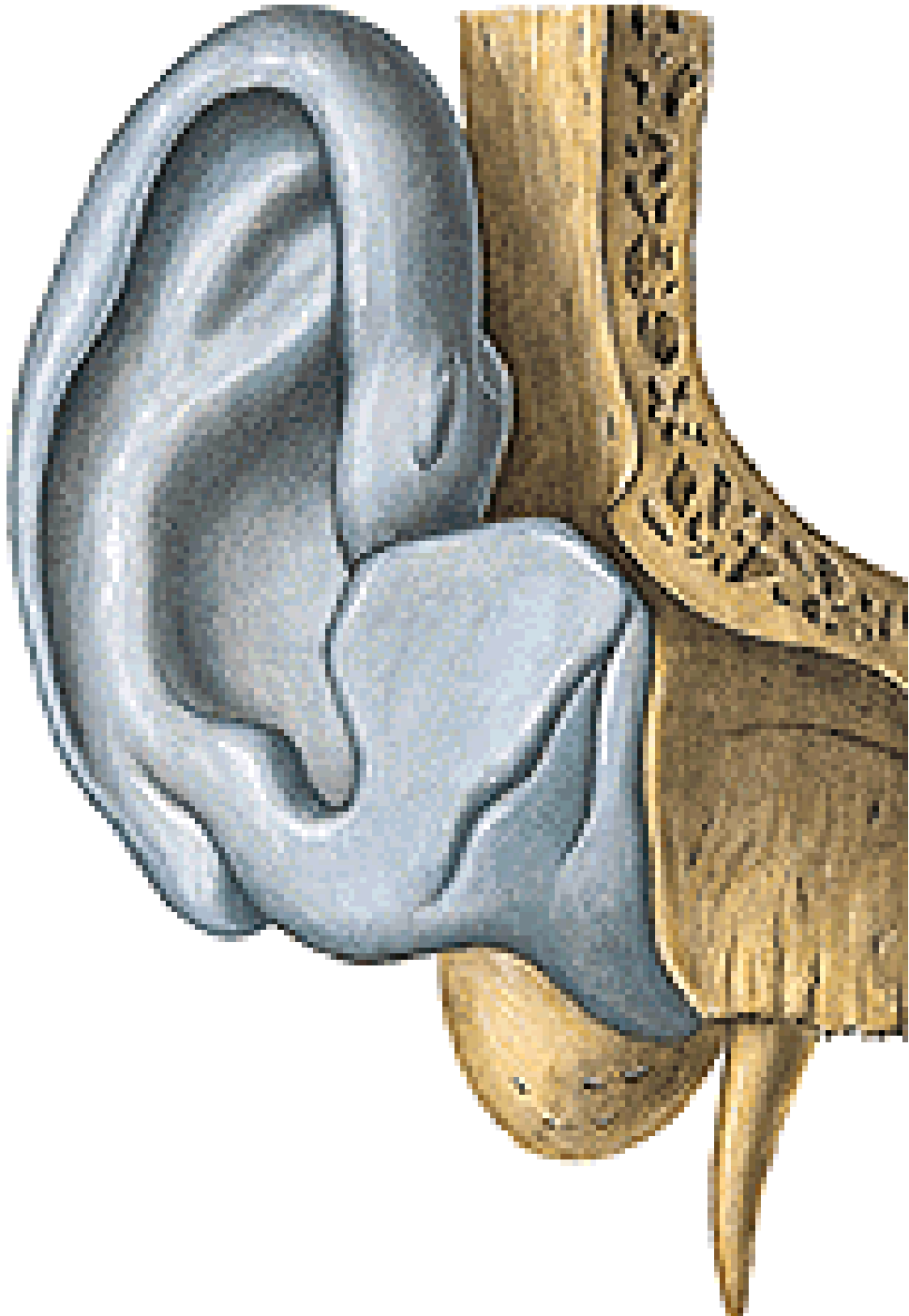
INCISURA INTERTRAGICA

LOBULUS AURICULAE

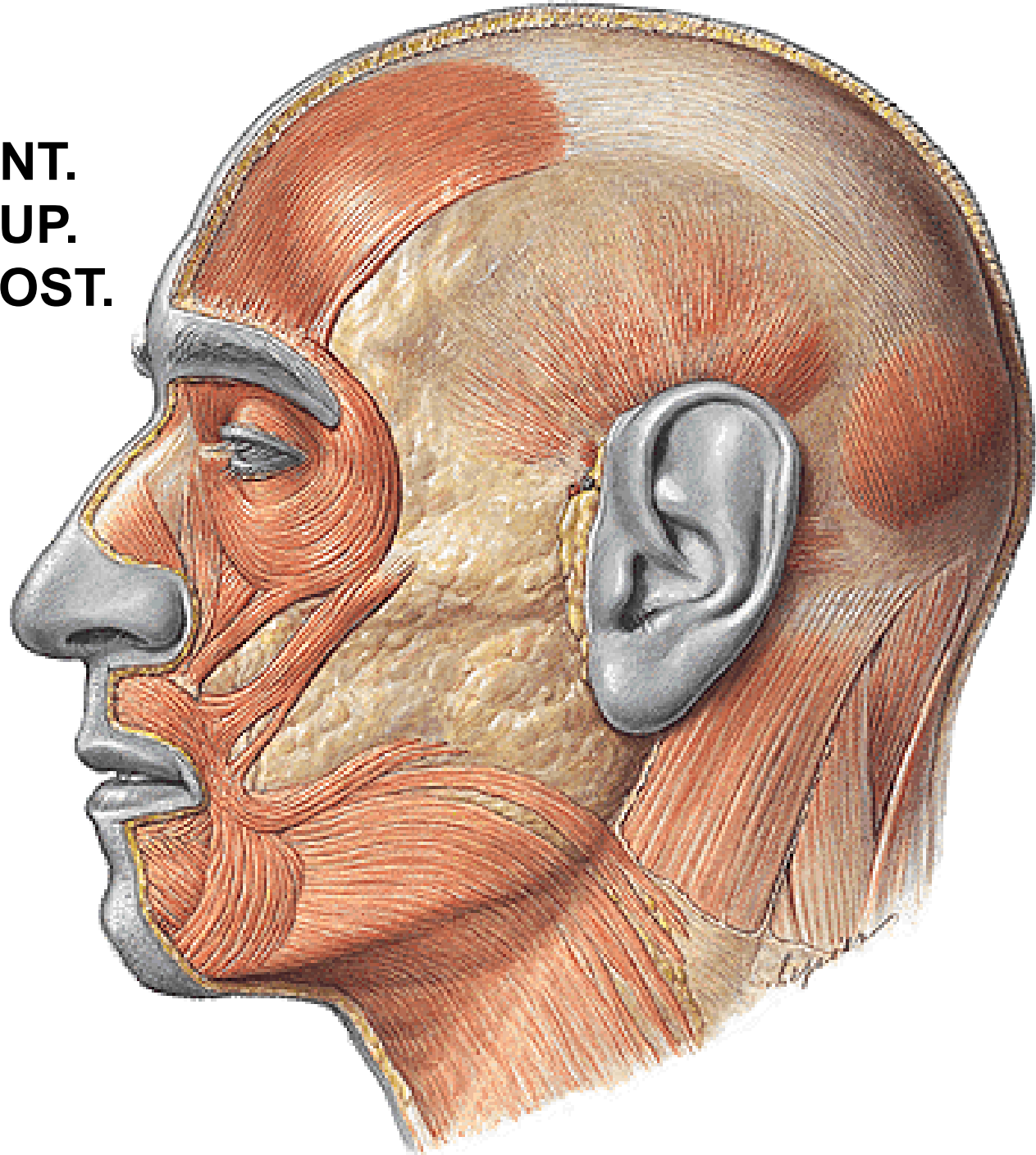




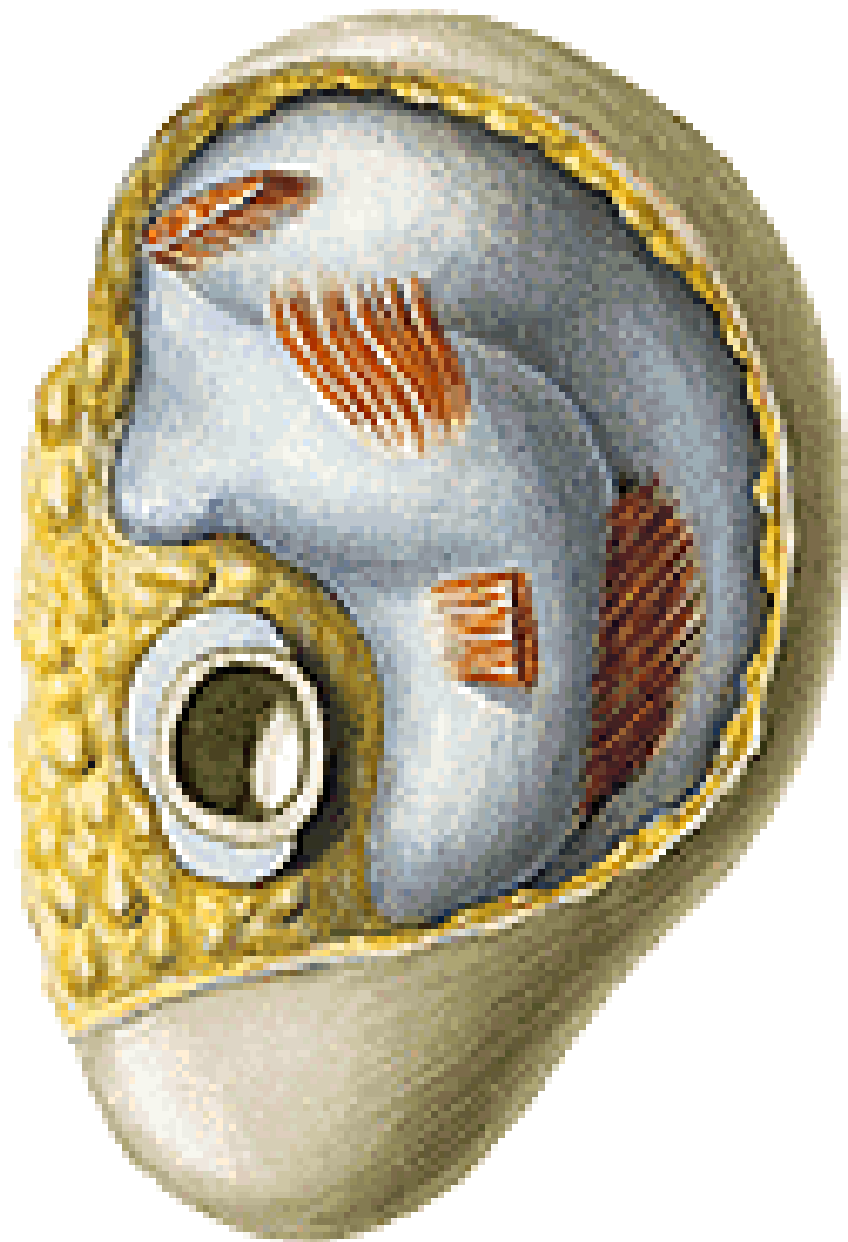
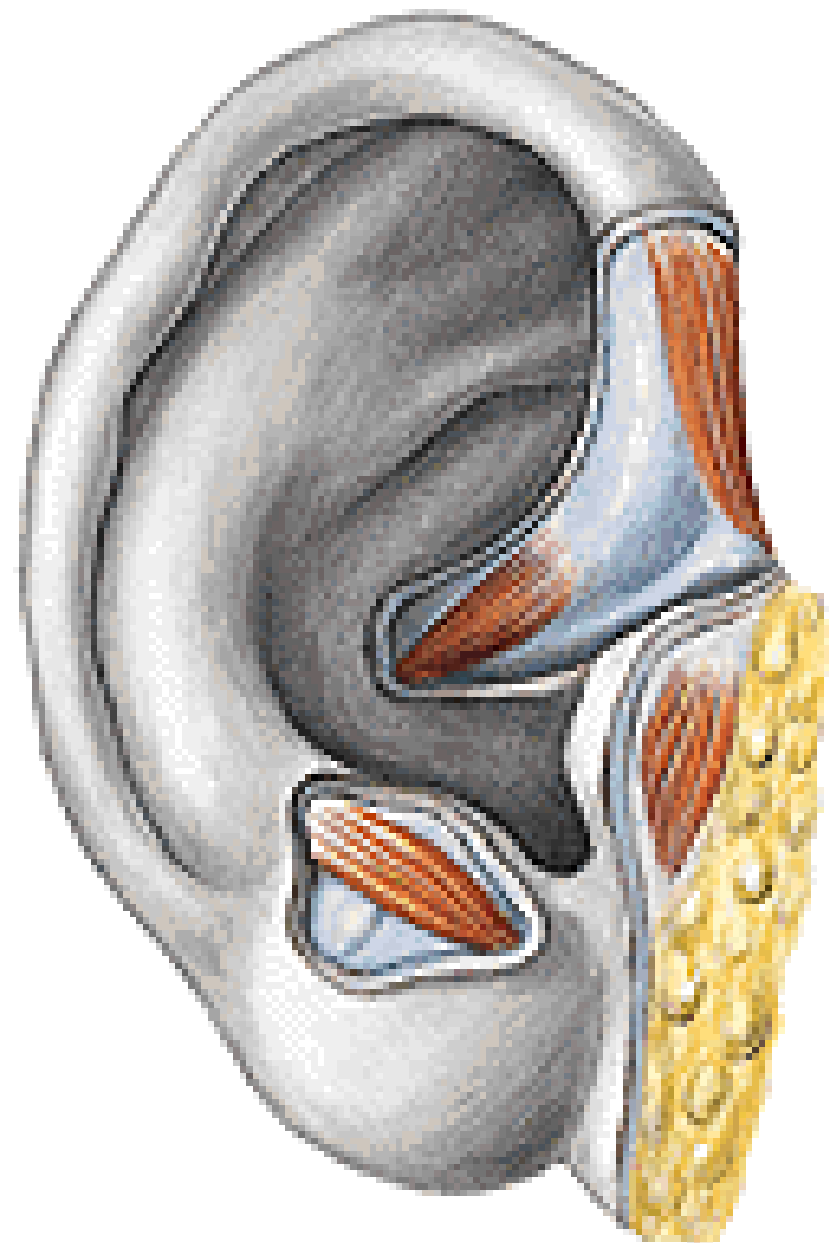




**M. AURICULARIS ANT.**  
**M. AURICULARIS SUP.**  
**M. AURICULARIS POST.**







## **AURICULA:**

**A. AURICULARIS POSTERIOR**

**RR. AURICULARES ANTERIORES A. TEMPORALIS SPF.**

**A. OCCIPITALIS**

**NODI LYMPH. PAROTIDEI**

**NODI LYMPH. MASTOIDEI**

**NODI LYMPH. CERVICALES PROFUNDI**

**N. AURICULARIS MAGNUS**

**N. OCCIPITALIS MINOR**

**R. AURICULARIS N. VAGI**

**N. AURICULOTEMPORALIS**

**N. FACIALIS**

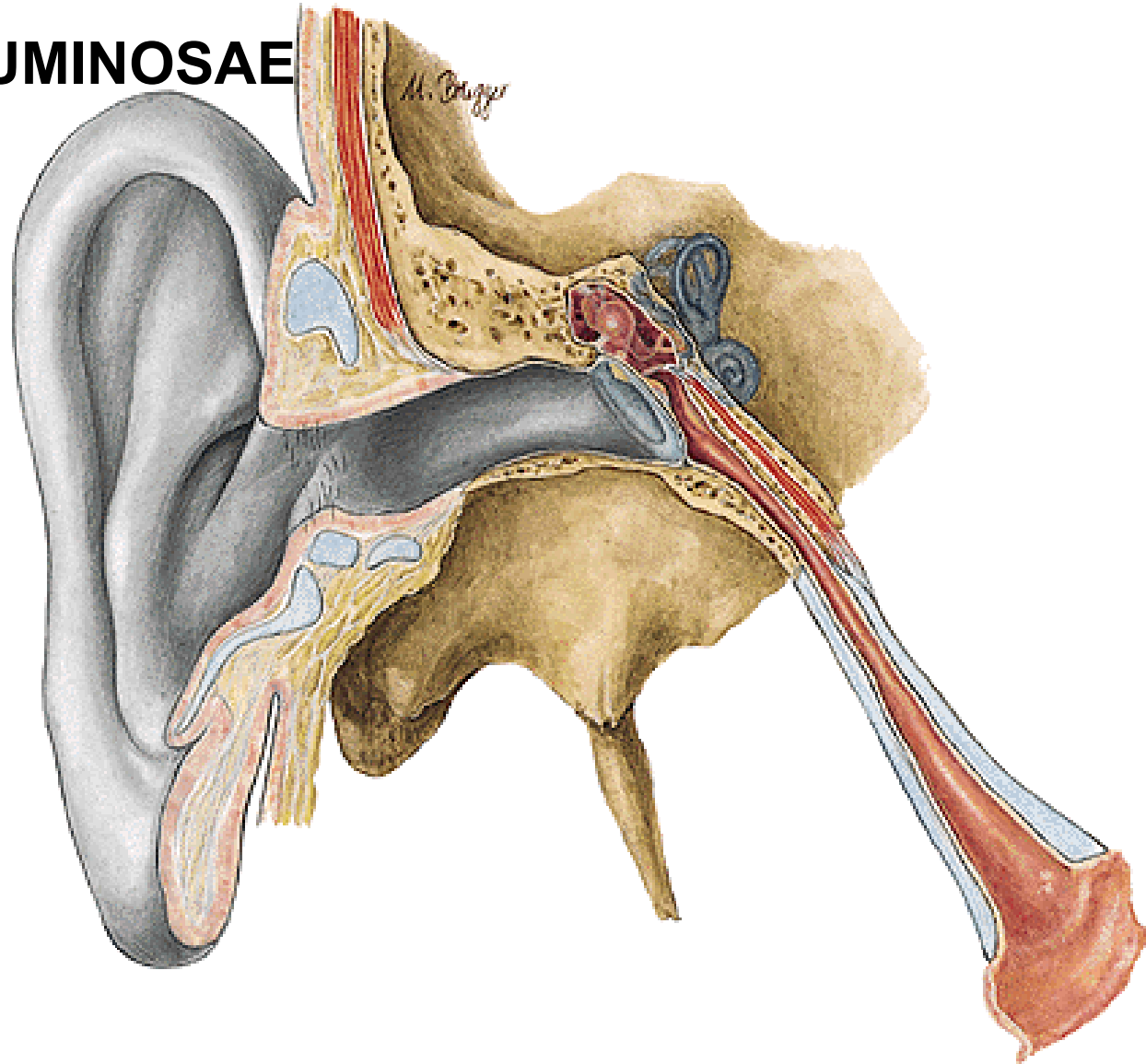
# MEATUS ACUSTICUS EXTERNUS

ISTHMUS

GLANDULAE CERUMINOSAE

CERUMEN

TRAGI



# **MEATUS ACUSTICUS EXTERNUS:**

**A. AURICULARIS POST.**

**RR. AURICULARES A. TEMPORALIS SPF.**

**V. JUGULARIS EXT.**

**V. MAXILLARIS**

**PLEXUS PTERYGOIDEUS**

**NODI LYMPH. PAROTIDEI**

**NODI LYMPH. MASTOIDEI**

**NODI LYMPH. CERVICALES PROFUNDI**

**N. AURICULOTEMPORALIS**

**R. AURICULARIS N. VAGI**

# MEMBRANA TYMPANI

## External Ear

### Right Tympanic Membrane

pars flaccida membranae tympani (membrana Shrapnelli)

plica mallearis anterior et posterior

prominentia mallearis

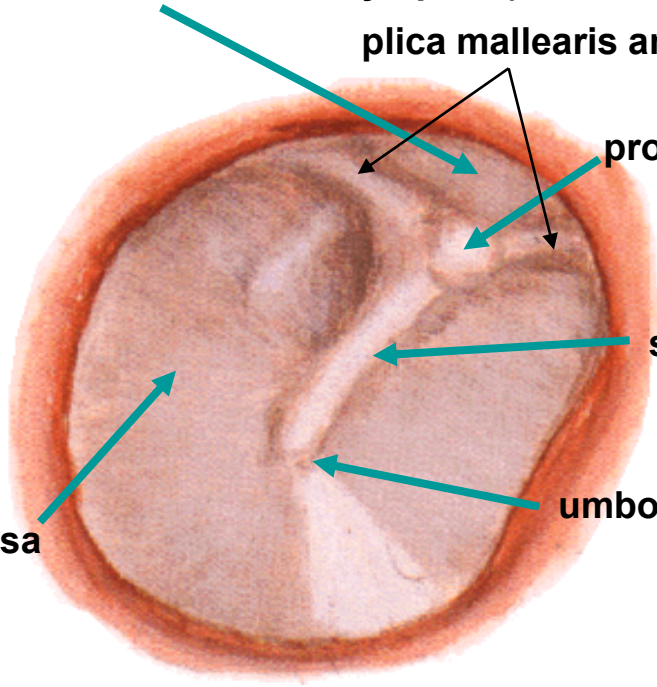
stria mallearis

umbo membranae tympani

pars tensa

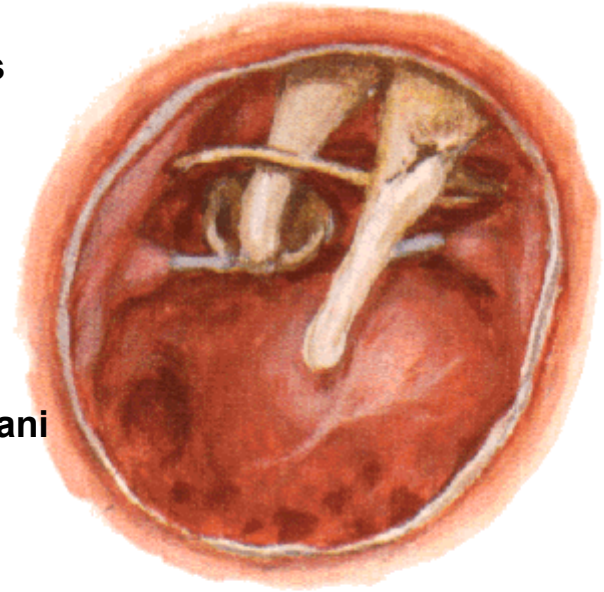
light reflex (trigonum Woodi)

Viewed through speculum

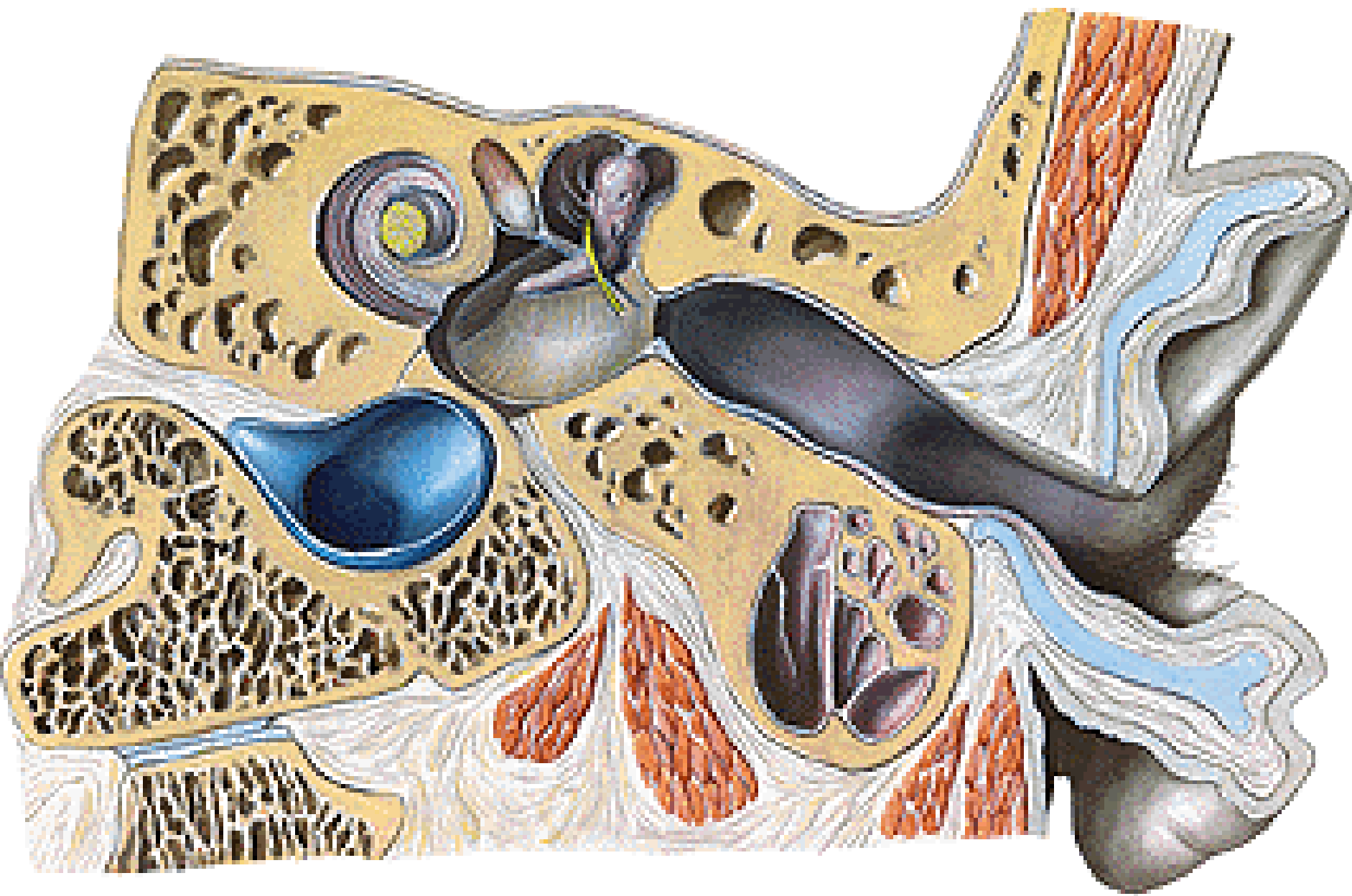


## Tympanic Cavity

Viewed from External Acoustic Meatus



Tympanic Membrane Removed



# **MEMBRANA TYMPANI:**

**A. MAXILLARIS**

**A. OCCIPITALIS**

**A. AURICULARIS POST.**

**V. JUGULARIS EXT.**

**SINUS DURAE MATRIS**

**PLEXUS TUBAE AUDITIVAE**

**N. AURICULOTEMPORALIS**

**R. AURICULARIS N. VAGI**

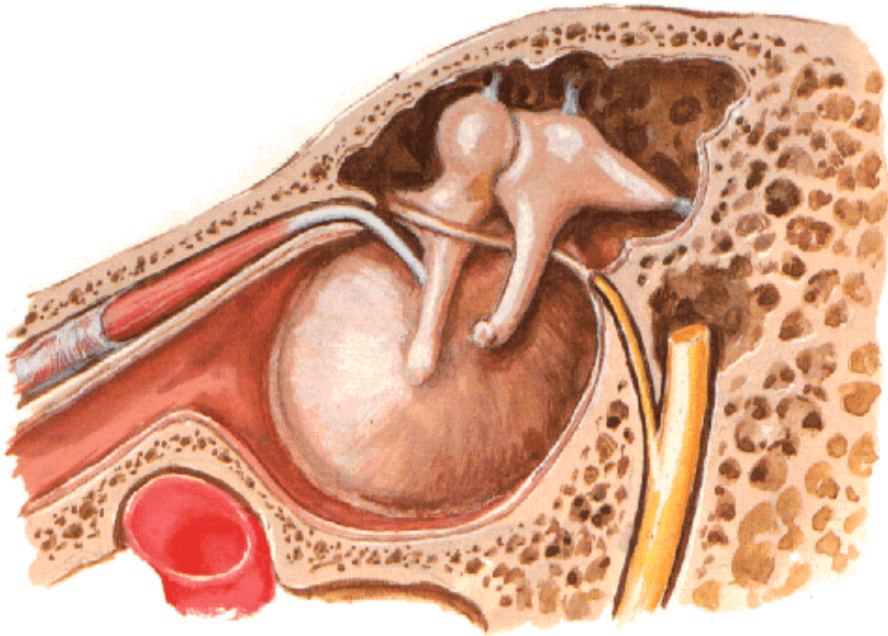
**N. TYMPANICUS N. GLOSSOPHARYNGEI**

**N. FACIALIS**

# CAVUM TYMPANI

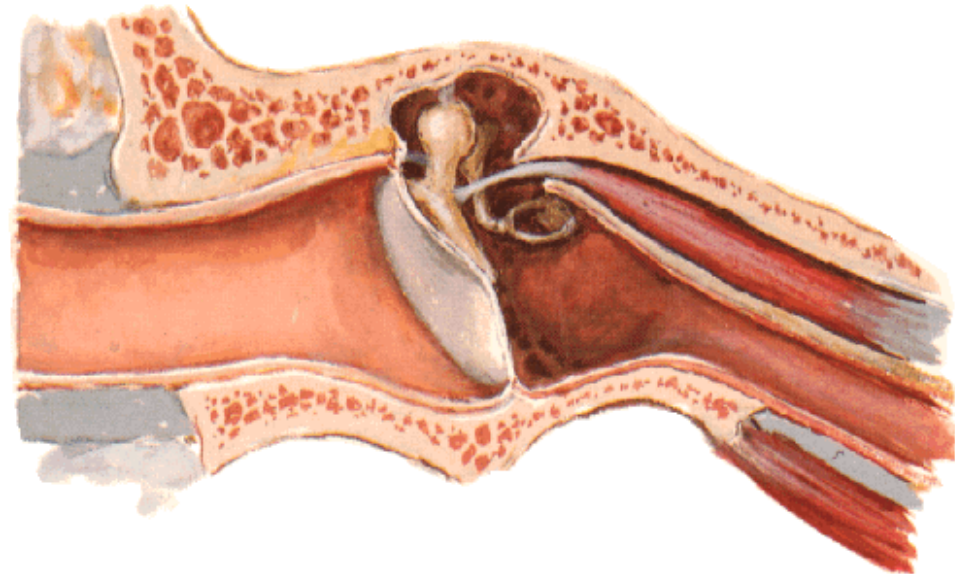
- cavum tympani proprium
- recessus epitympanicus

**Tympanic Cavity - Lateral Wall**  
Medial View



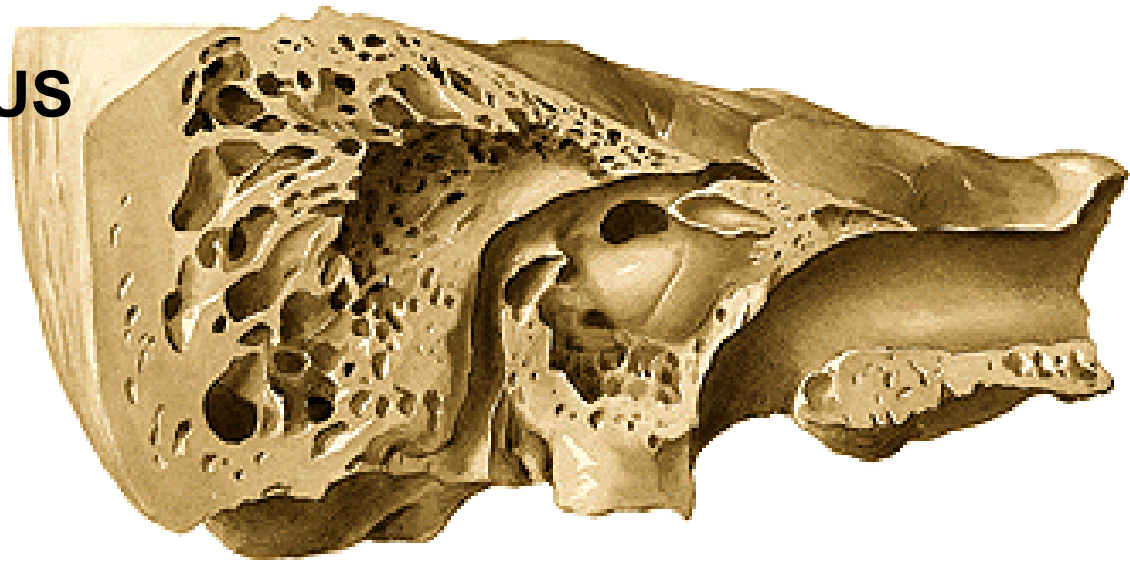
- Paries tegmentalis**
- Paries jugularis**
- Paries caroticus**
- Paries mastoideus**
- Paries labyrinthicus**
- Paries membranaceus**

**External Ear and Tympanic Cavity**  
Coronal Oblique Section





# **PARIES LABYRINTHICUS**



**PROMONTORY**

**FENESTRA VESTIBULI**

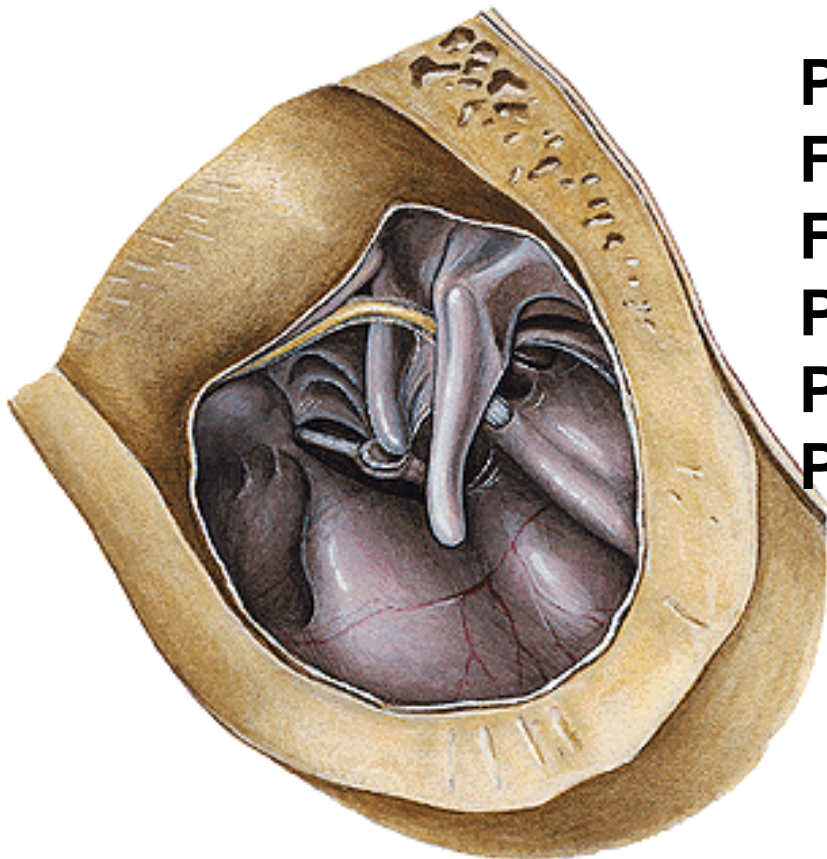
**FENESTRA COCHLEAE**

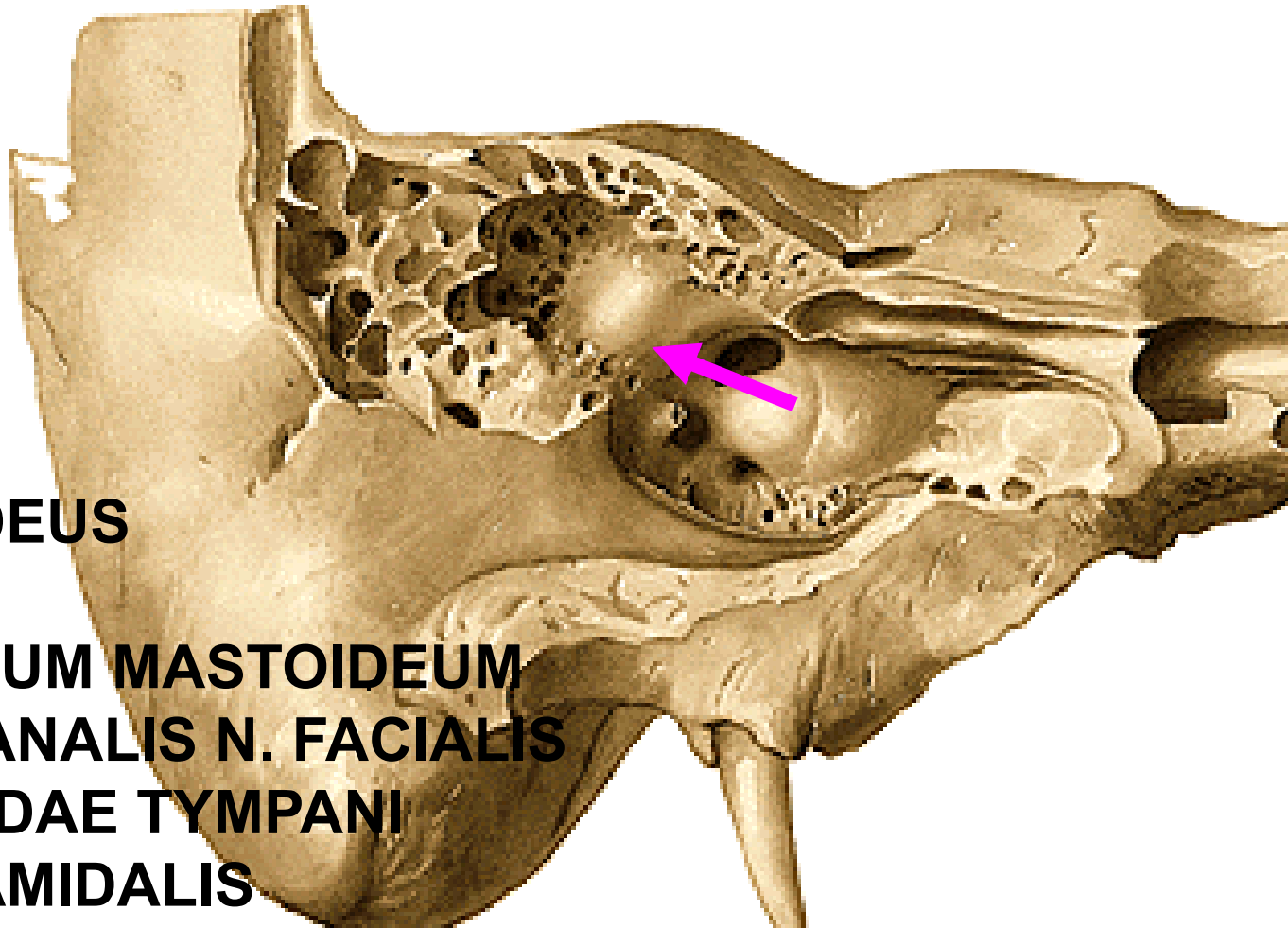
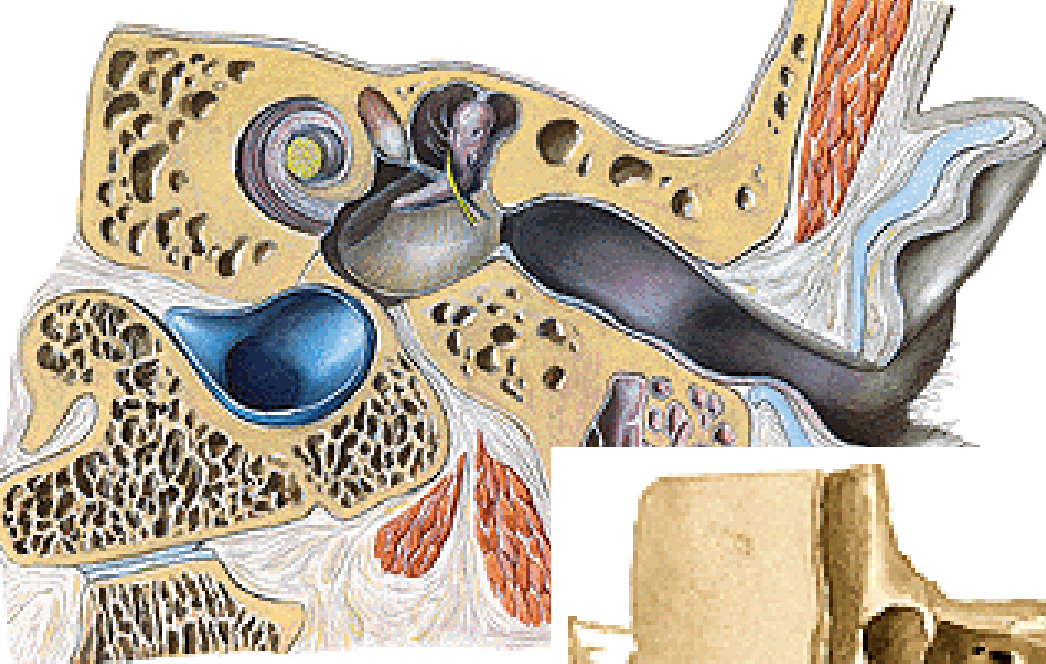
**PROCESSUS COCHLEARIFORMIS**

**PROMINENTIA CANALIS FACIALIS**

**PROMINENTIA CANALIS**

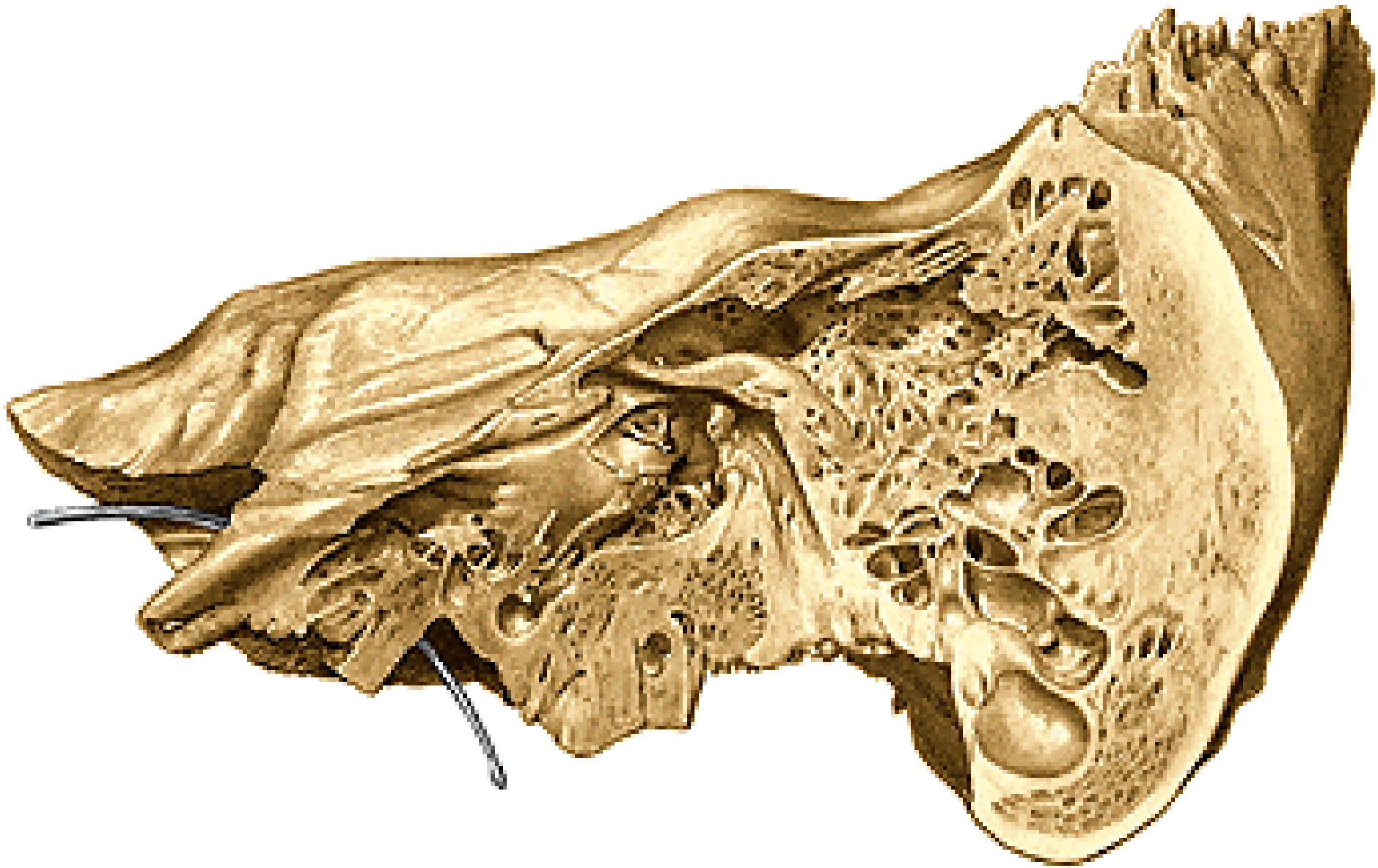
**SEMICIRCULARS LATERALIS**





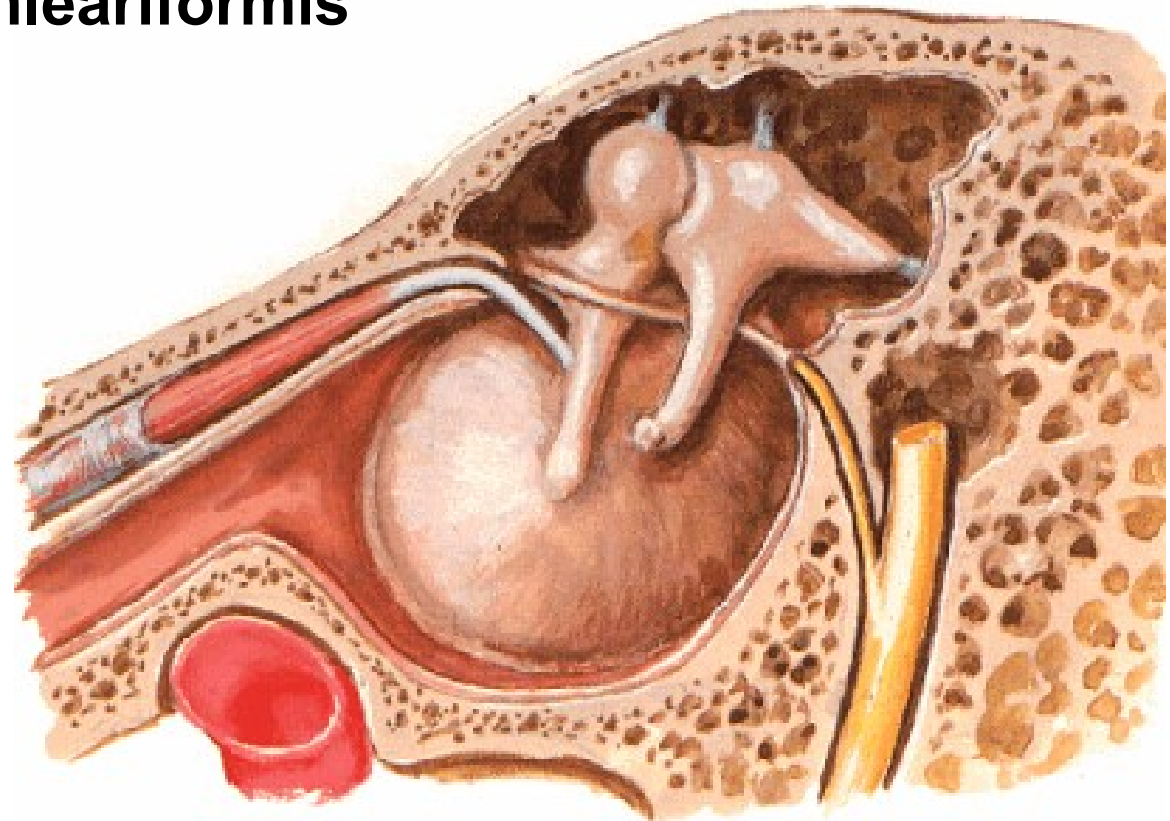
**PARIES MASTOIDEUS**

**ADITUS AD ANTRUM MASTOIDEUM**  
**PROMINENTIA CANALIS N. FACIALIS**  
**FORAMEN CHORDAE TYMPANI**  
**EMINENTIA PYRAMIDALIS**



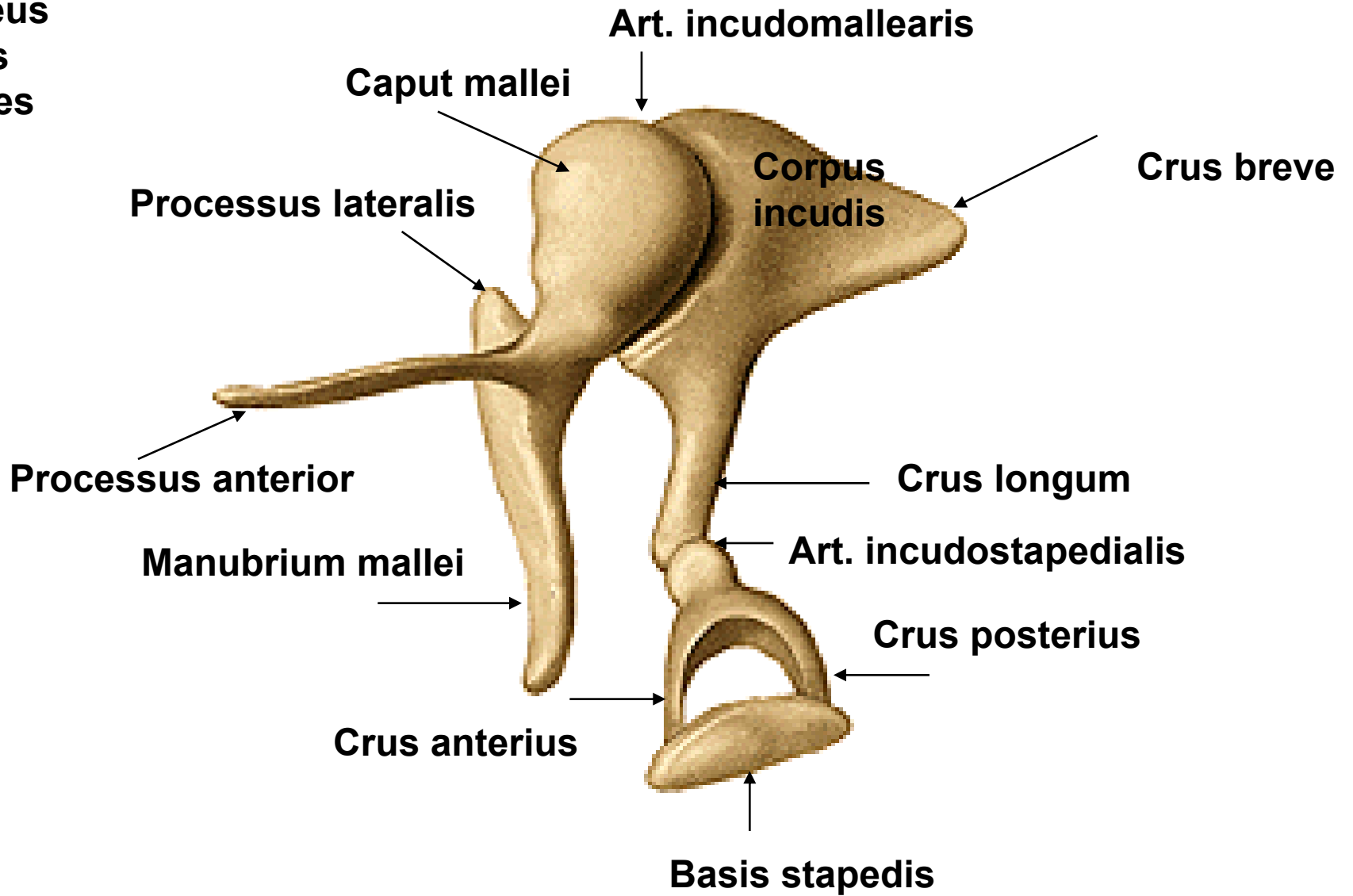
## **Paries caroticus:**

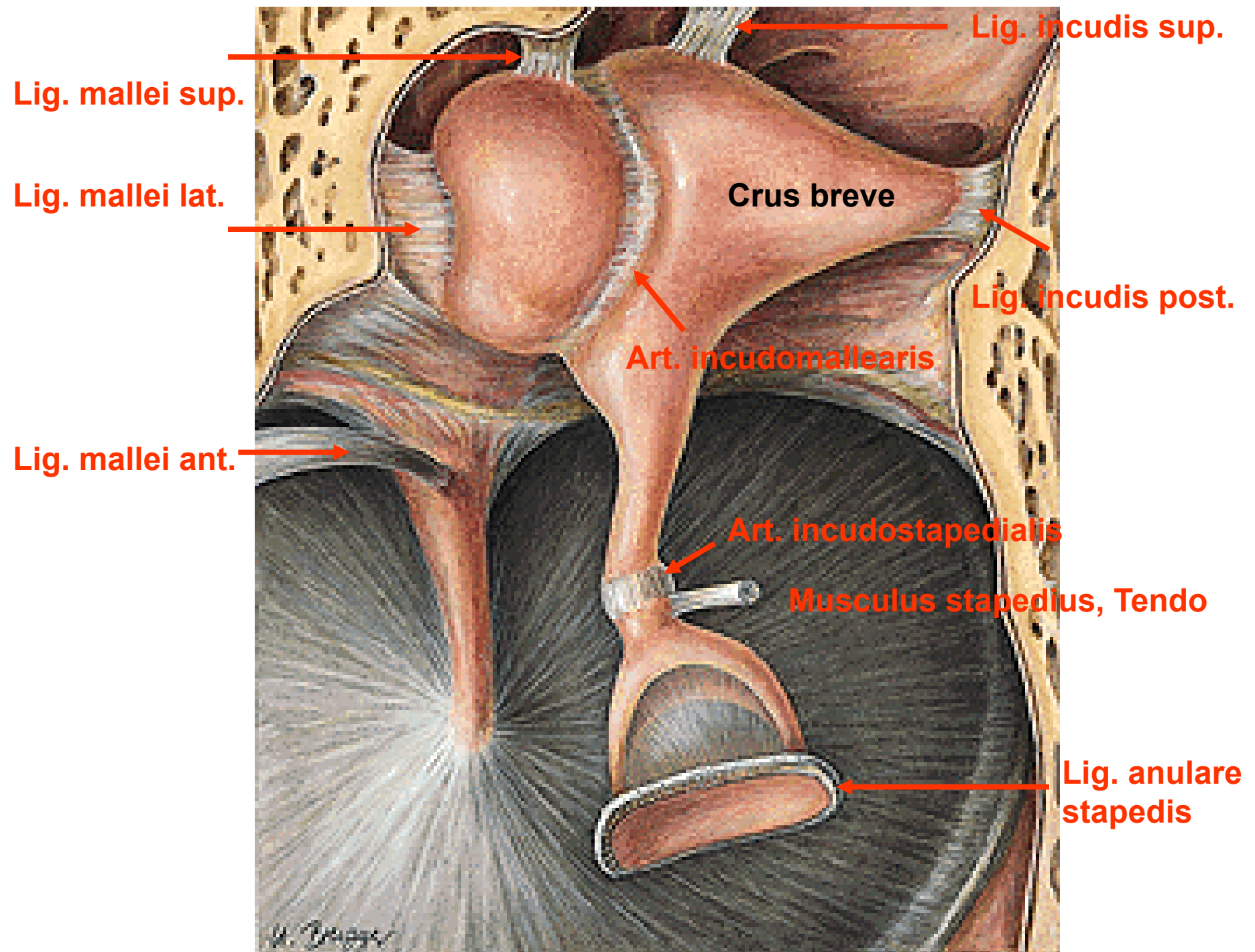
- **nn. caroticotympanici**
- **canalis musculotubarius – semicanalis m. tensoris tymp.**
  - **semicanalis tubae auditivae**
- **processus cochleariformis**

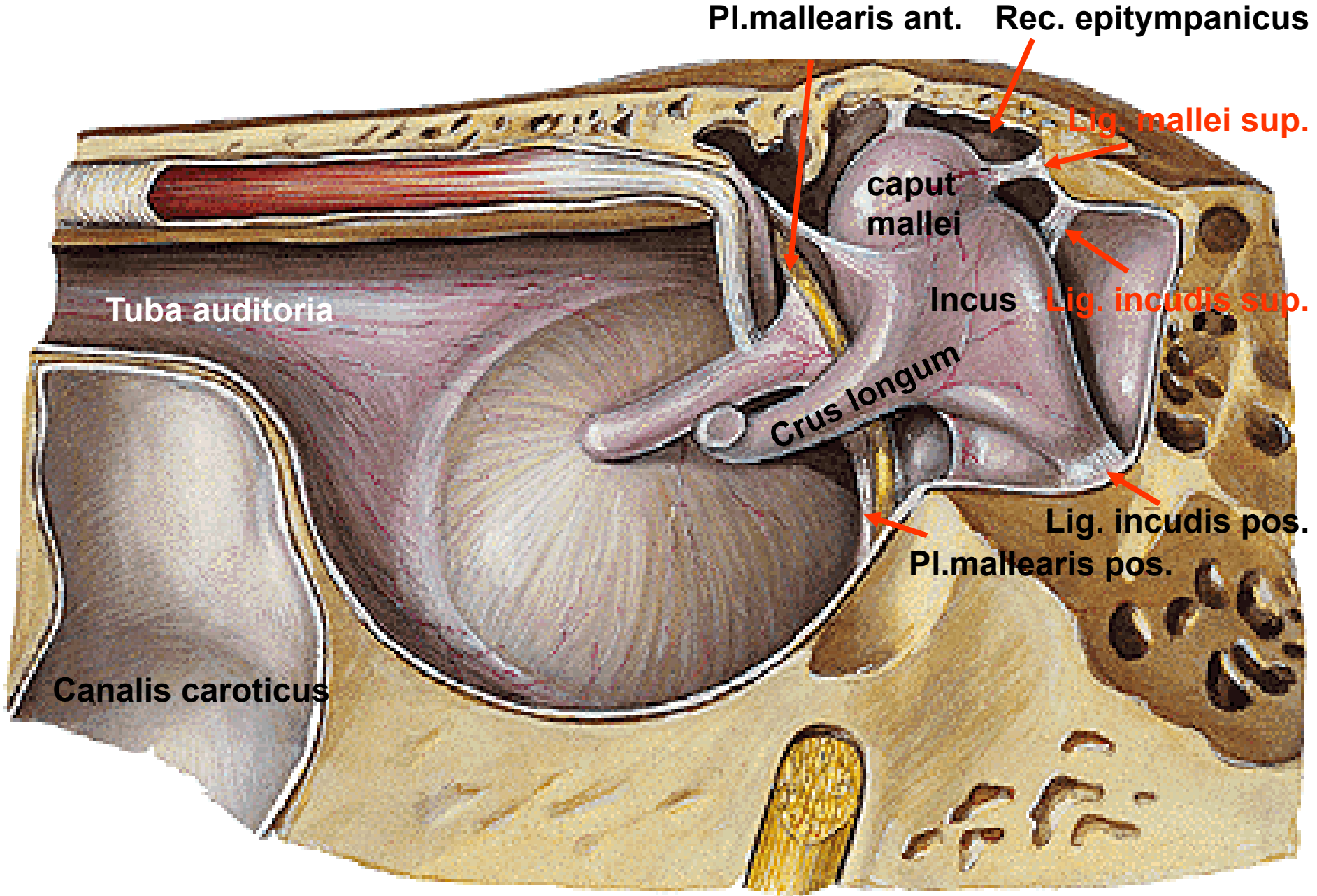


# OSSICULA AUDITUS:

Malleus  
Incus  
Stapes







Pl.mallearis ant. Rec. epitympanicus

Lig. mallei sup.

caput mallei

Incus

Lig. incudis sup.

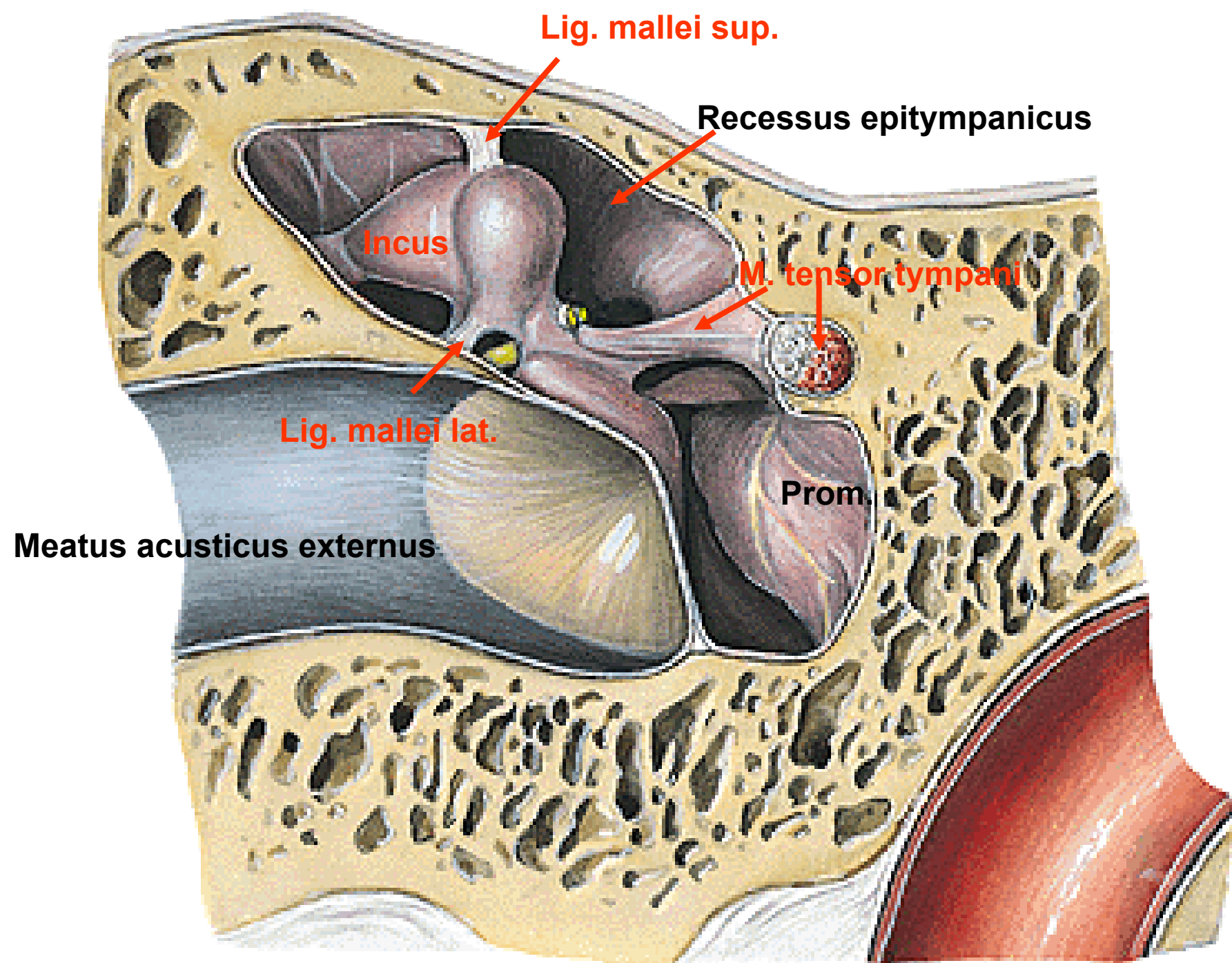
Crus longum

Lig. incudis pos.

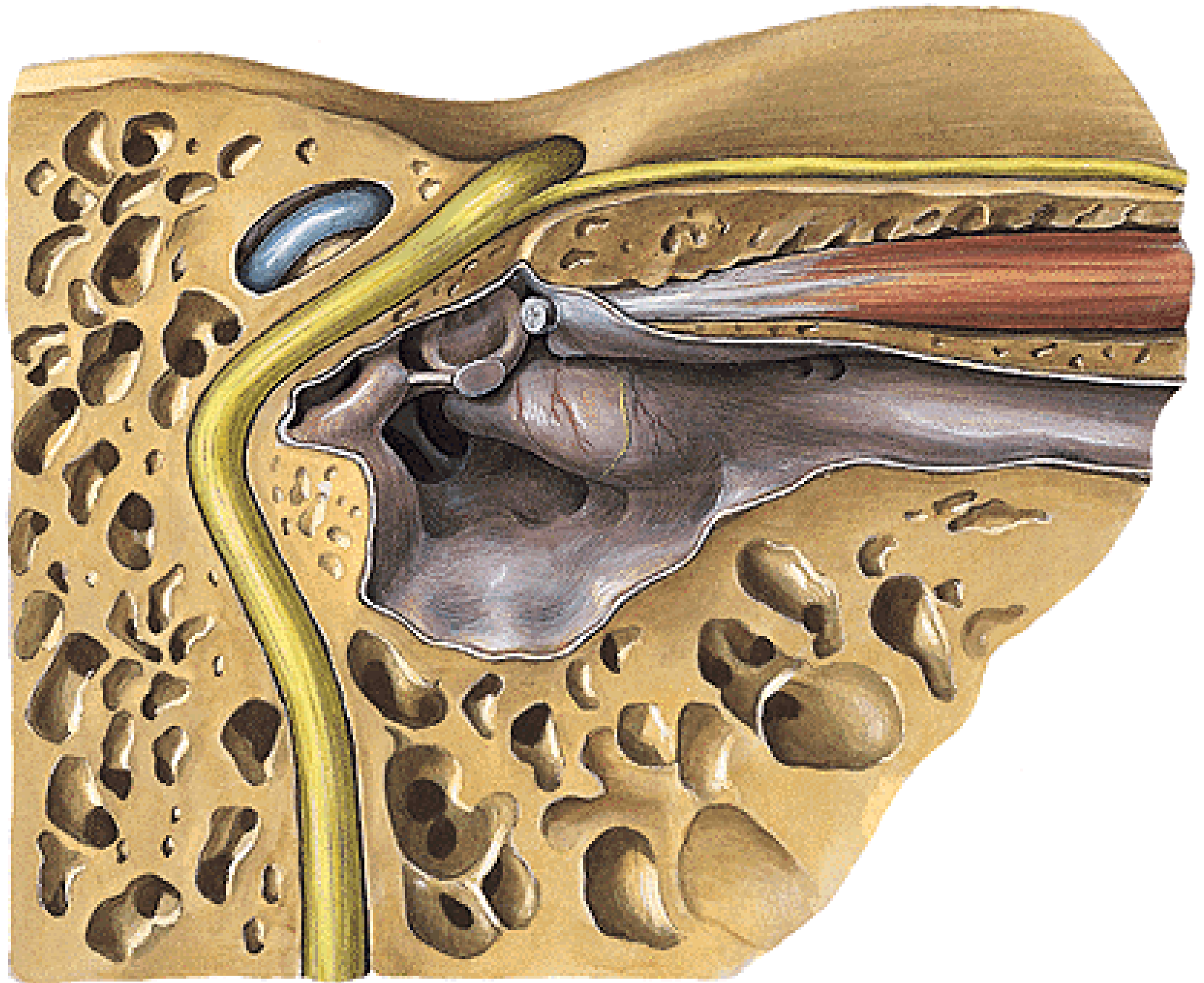
Pl.mallearis pos.

Tuba auditoria

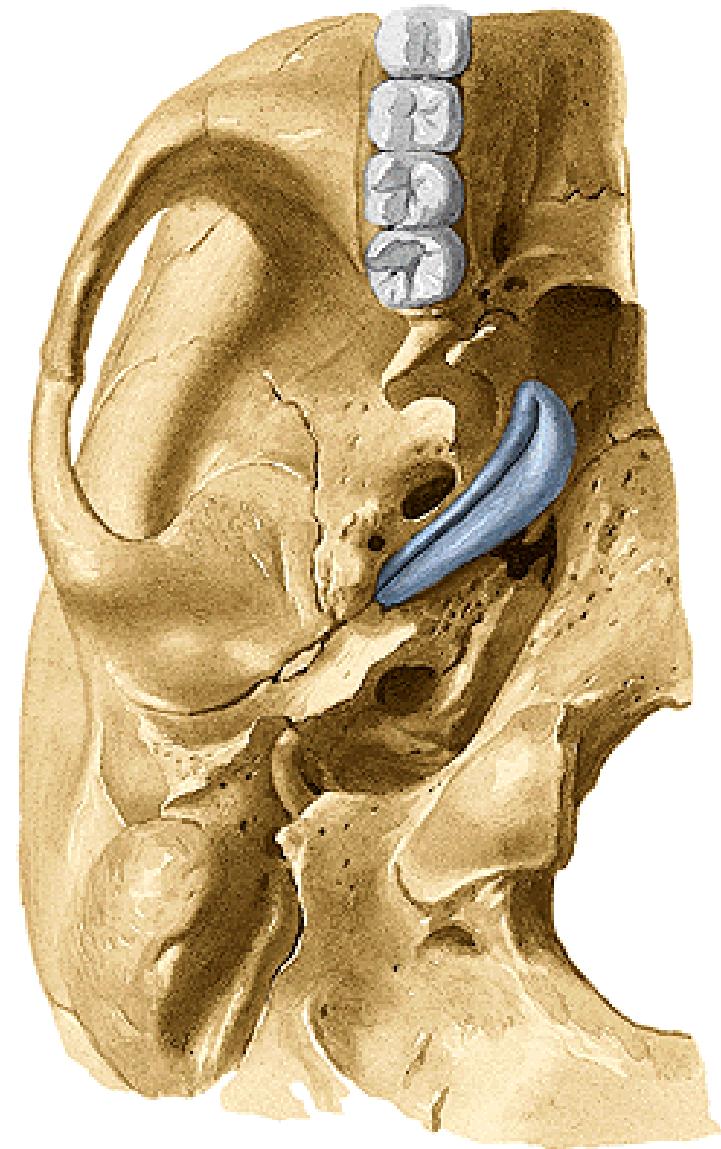
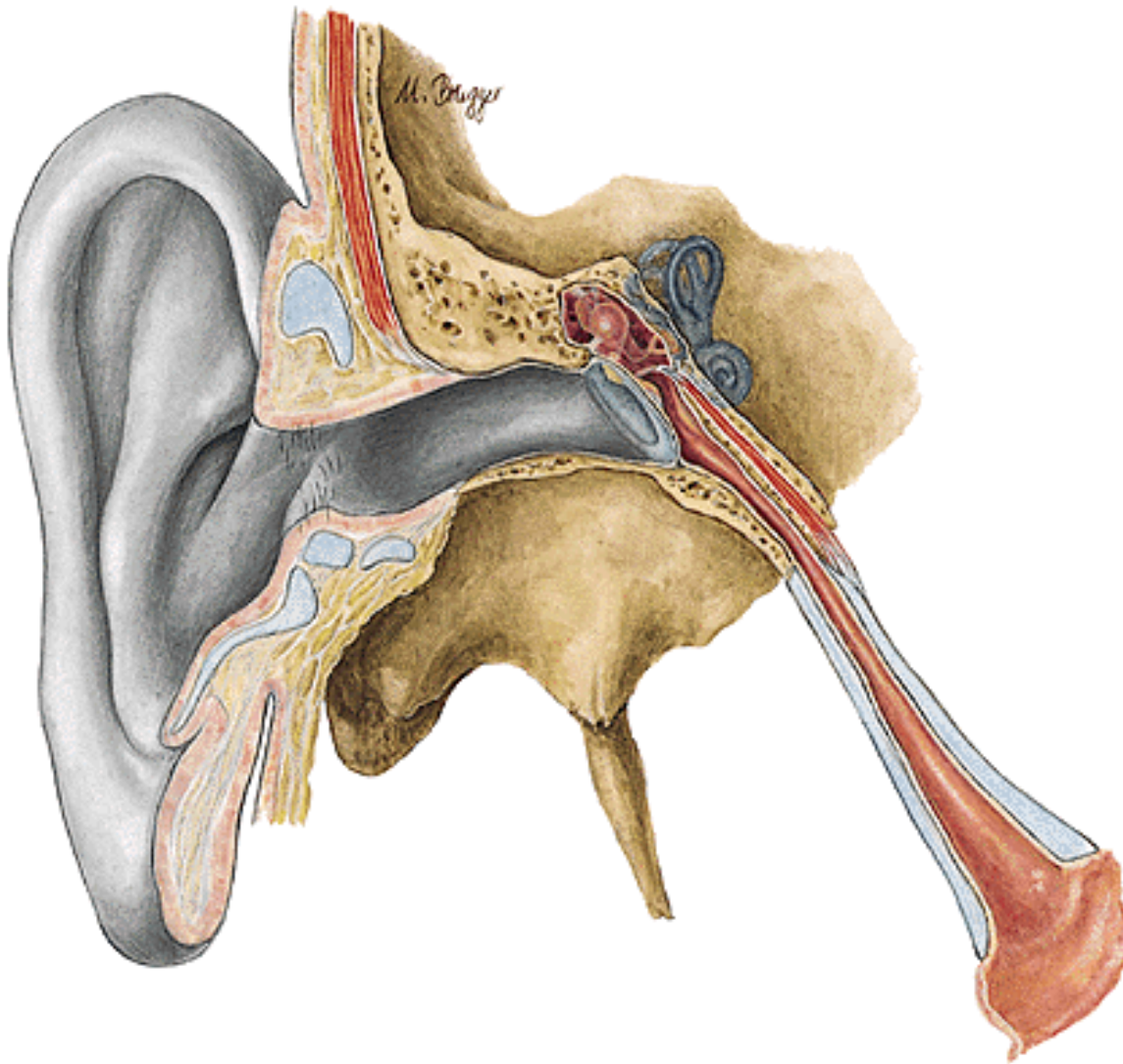
Canalis caroticus







# TUBA AUDITIVA (PHARYNGOTYMPANICA)



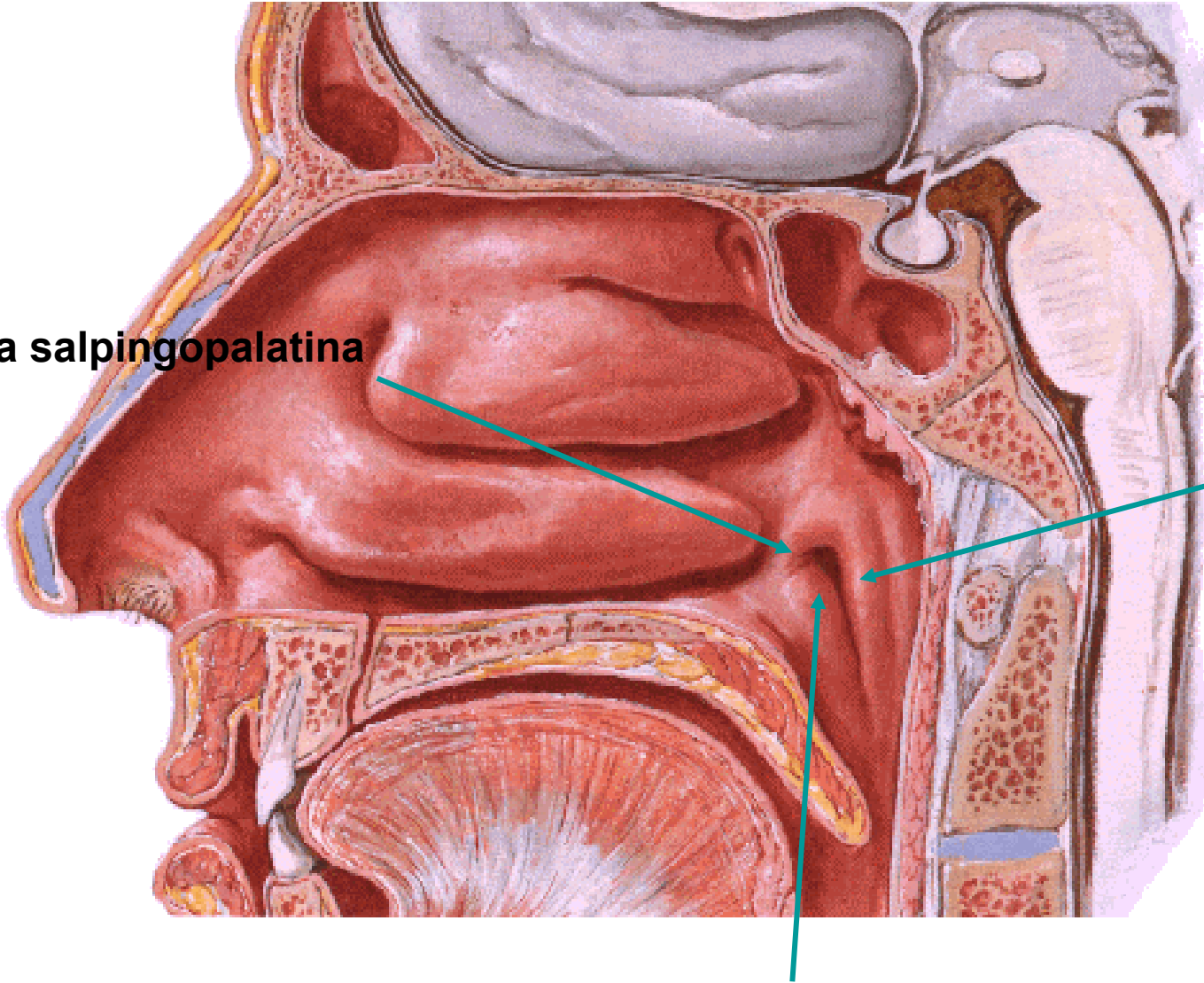
# OSTIUM PHARYNGEUM TUBAE AUDITIVAE

Plica salpingopalatina

Torus tubarius

Tonsila tubaria

Torus levatorius



## **CAVUM TYMPANI:**

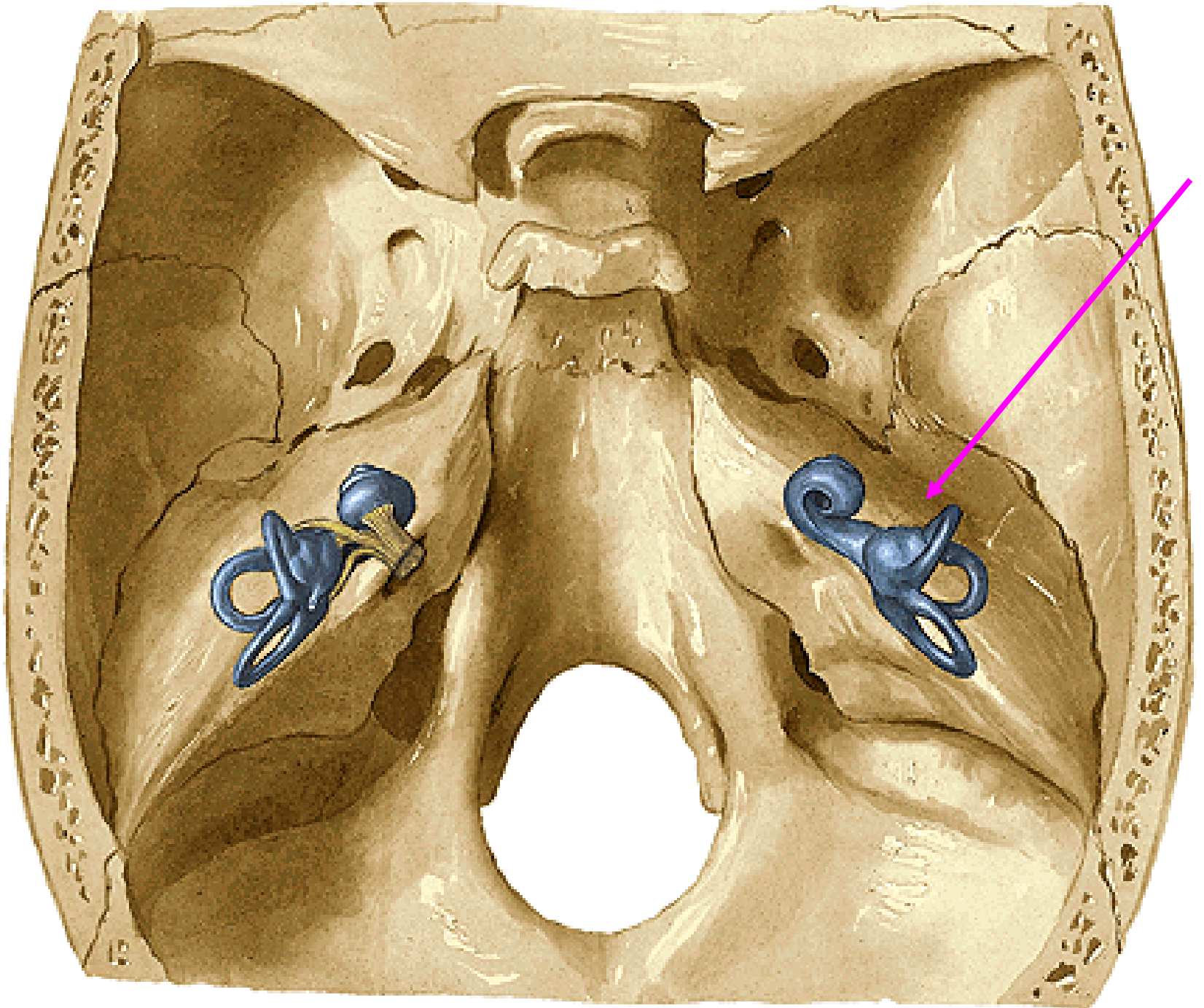
**A. TYMPANICA ANT.**

**A. STYLOMASTOIDEA**

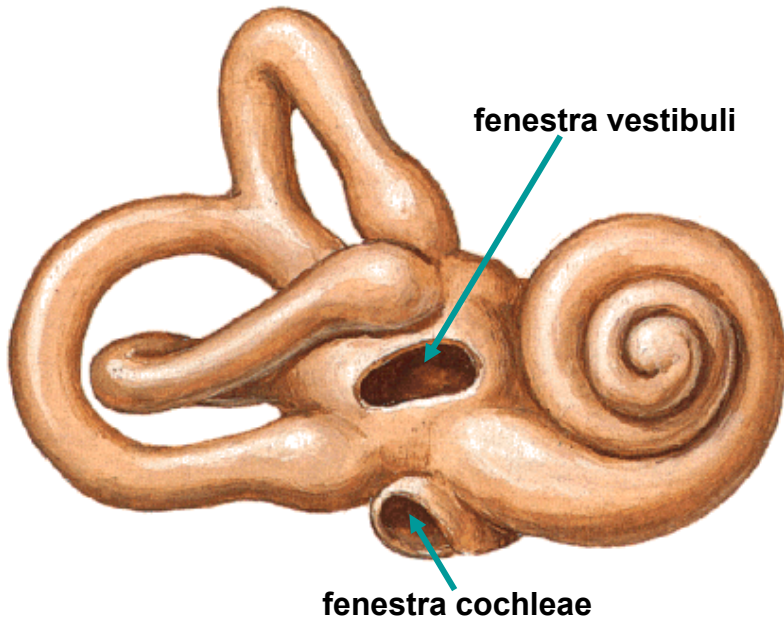
**A. AURICULARIS POST.**

**PLEXUS PTERYGOIDEUS**

**PLEXUS TYMPANICUS (CN VII,IX and cervical sympathetic  
CHORDA TYMPANI**



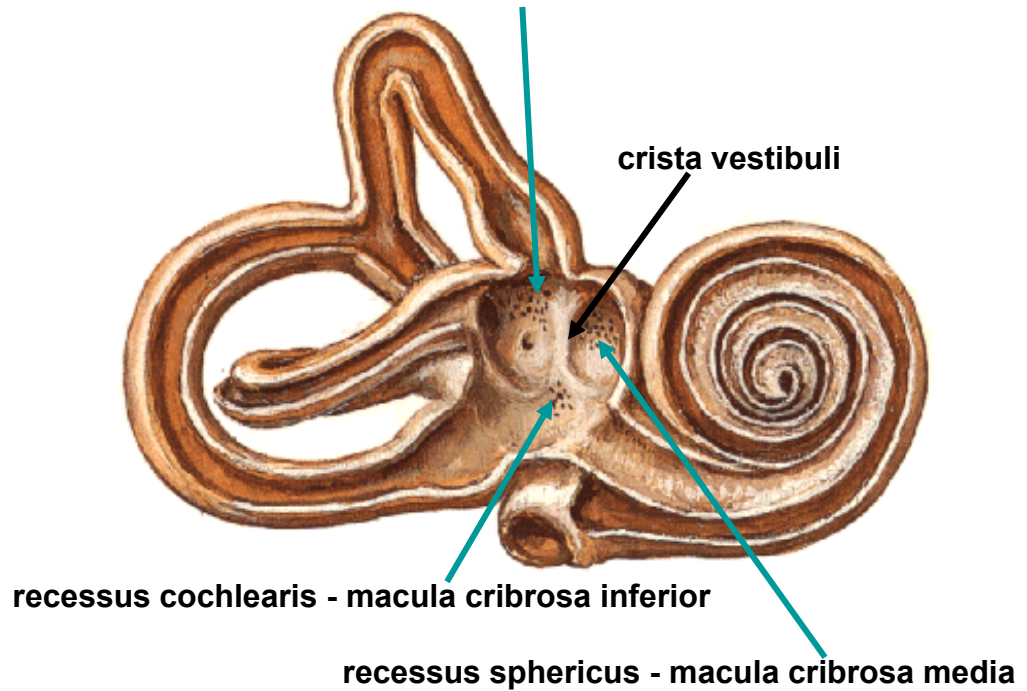
**Right Osseous Labyrinth**  
Anterolateral View



cochlea, vestibulum et canales semicirculares ossei

**Right Osseous Labyrinth - Dissected**  
Membranous Labyrinth Removed

recessus ellipticus - macula cribrosa superior



recessus sphericus - macula cribrosa media

# COCHLEA

**Modiolus**

**Canalis spiralis cochleae**

**Cupula**

**Lamina spiralis ossea**

**Scala vestibuli**

**Scala tympani**

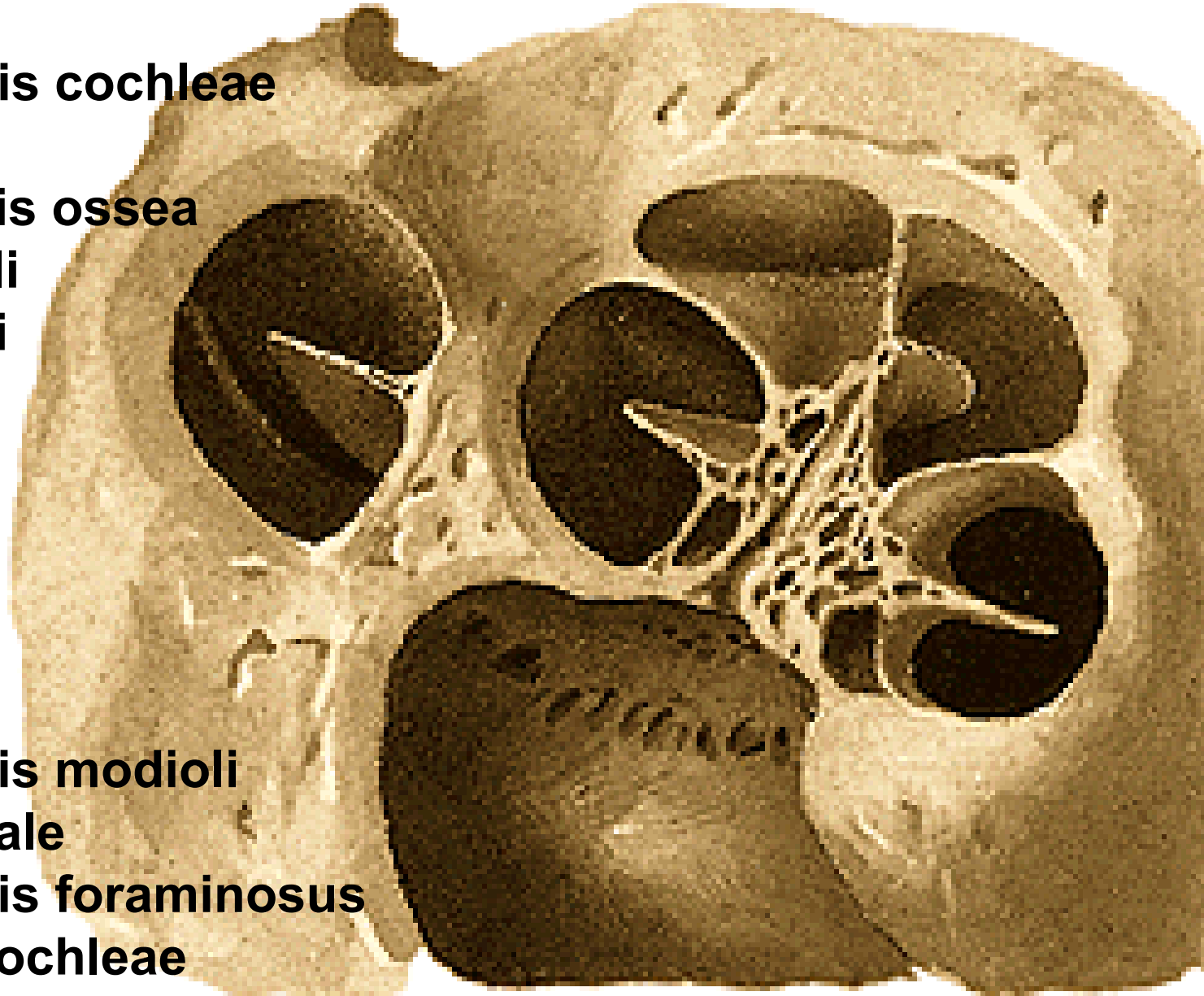
**Helicotrema**

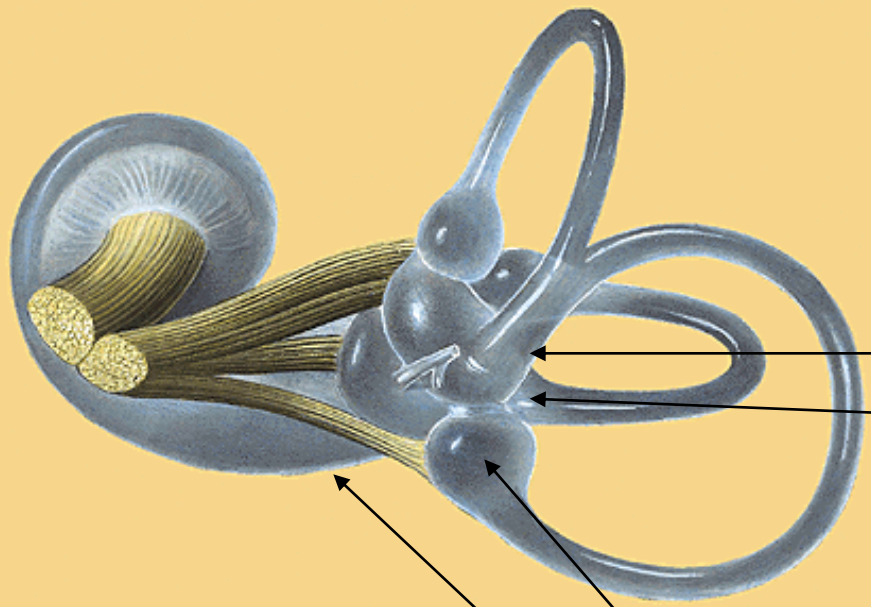
**Canalis spiralis modioli**

**Ganglion spirale**

**Tractus spiralis foraminosus**

**Canaliculus cochleae**





**Crista ampullaris ant.**  
**Crista ampullaris lat.**  
**Crista ampullaris post.**

Crus membranaceum commune  
 Crus simplex d.s.lat.

Saccus endolymphaticus

**Macula utriculi**  
**Macula sacculi**

Crus ampullare d.s.post.

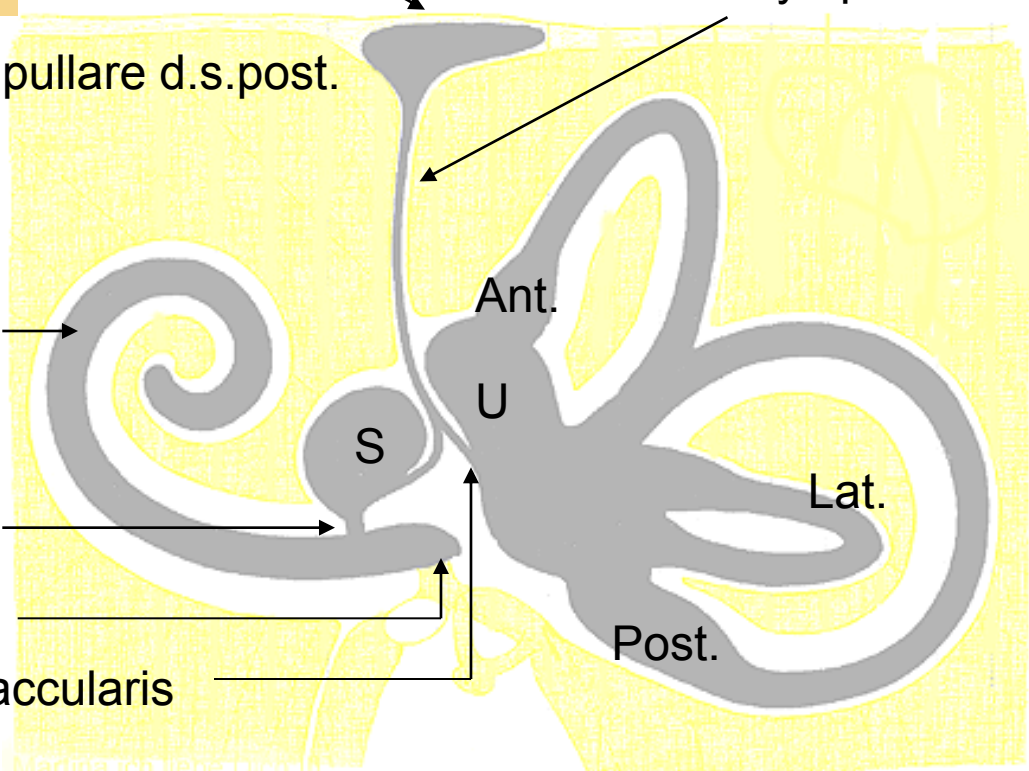
Ductus endolymphaticus

Ductus cochlearis

Ductus reuniens

Caecum vestibulare

Ductus utriculosaccularis



Ant.

U

S

Lat.

Post.



Caecum cupulare  
Caecum vestibulare

Scala vestibuli  
(perilymph)

Ductus  
cochlearis  
(endolymph)

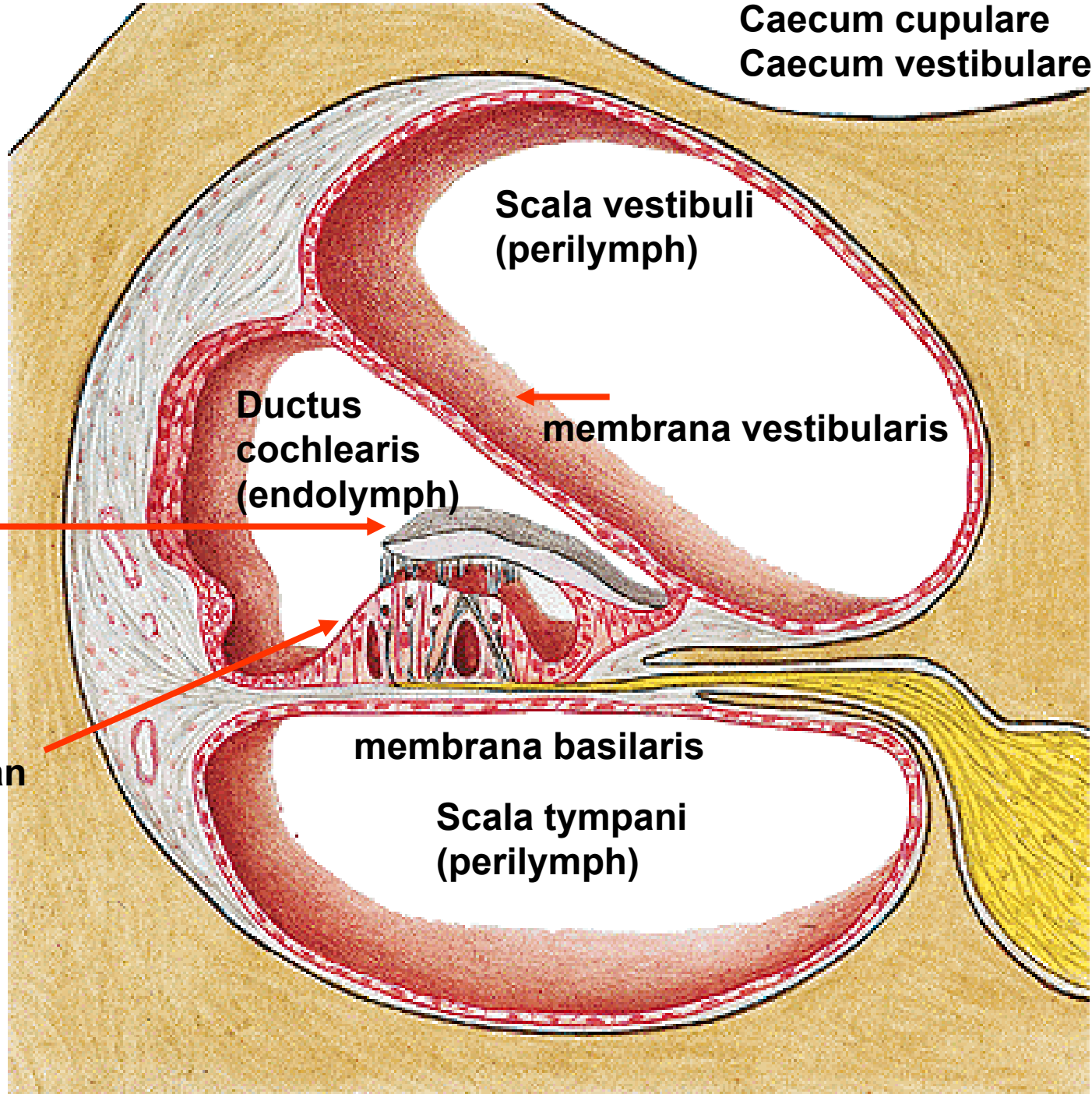
membrana vestibularis

Membrana  
tectoria

membrana basilaris

Scala tympani  
(perilymph)

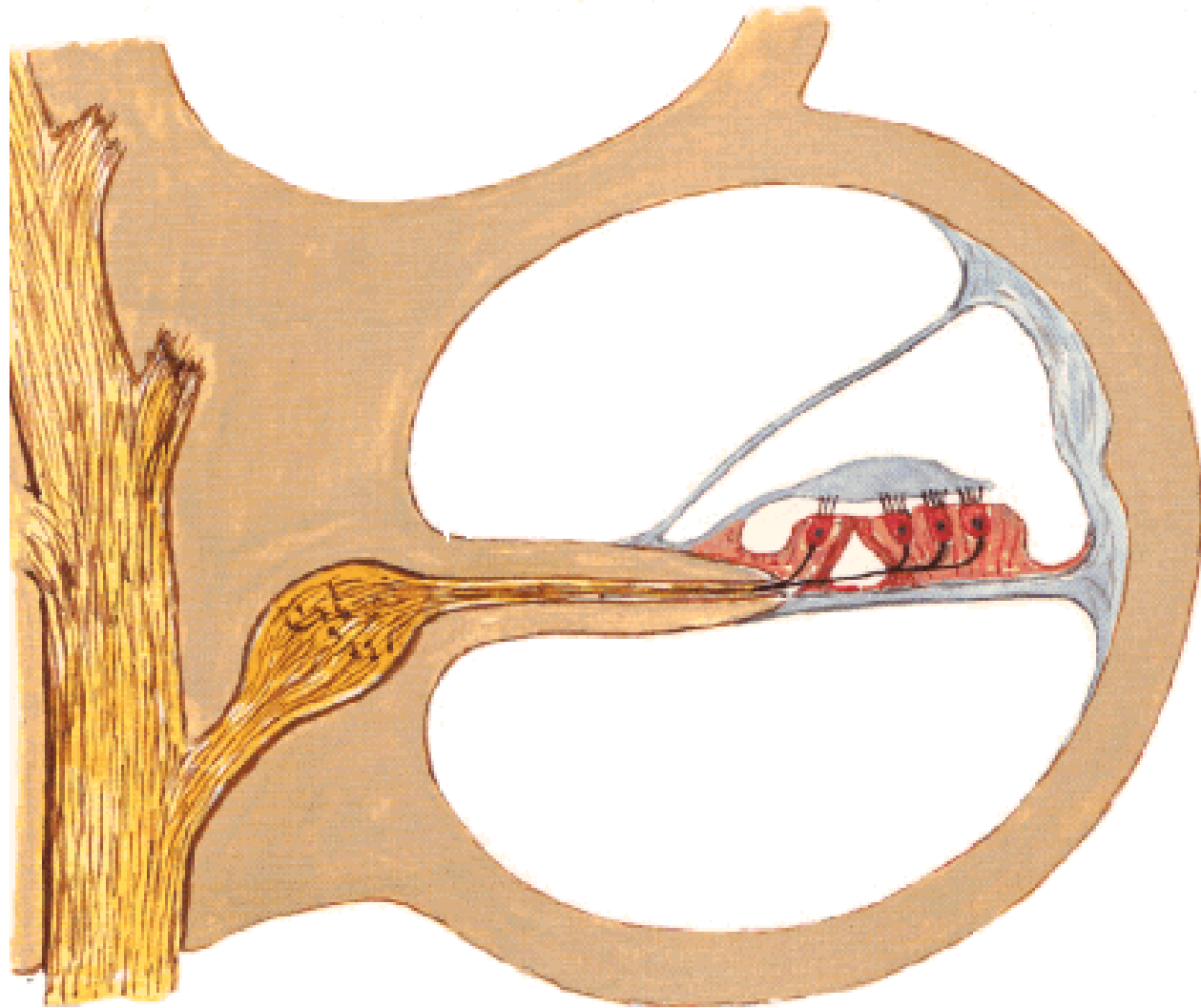
Spiral organ  
of Corti



# Osseous and Membranous Labyrinths

## Section Through Turn of Cochlea

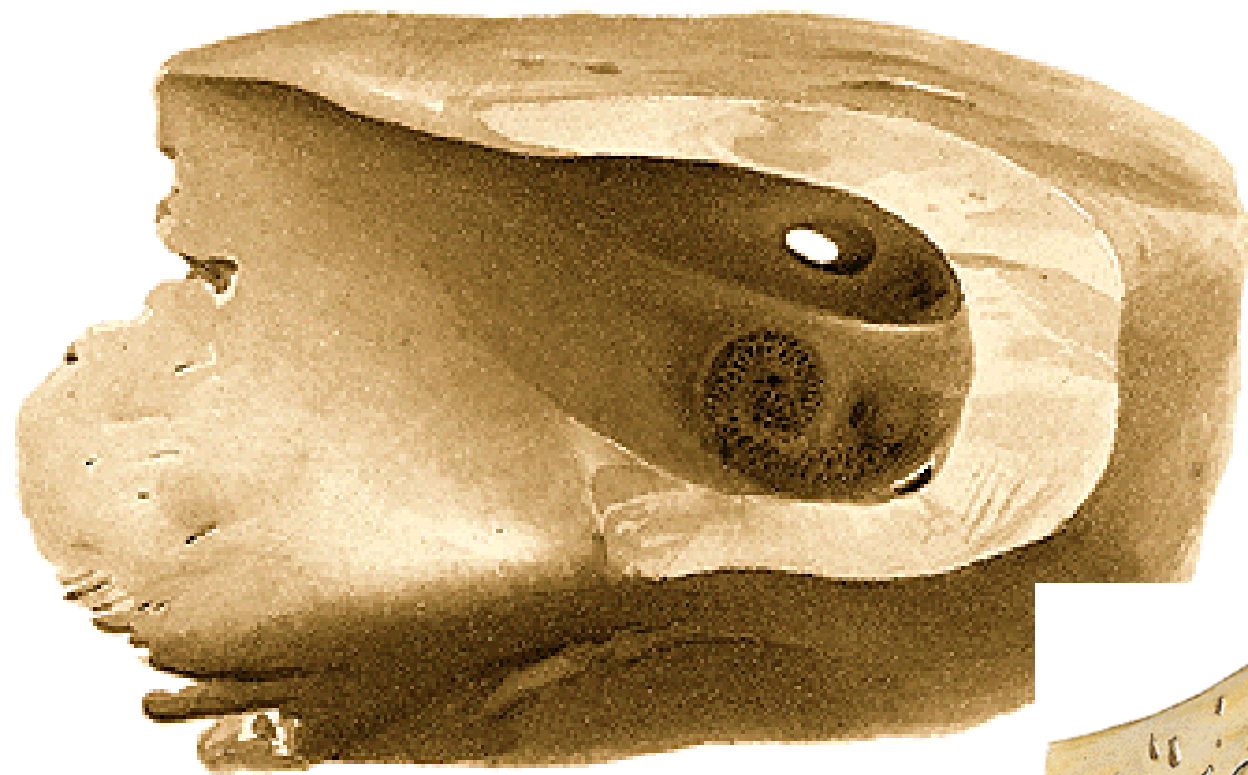
20-20000Hz



## **N. VESTIBULOCOCHLEARIS**

- **PARS COCHLEARIS**
- **PARS VESTIBULARIS**
  - **N. utriculoampullaris**
    - **n. utricularis**
    - **n. ampullaris ant.**
    - **n. ampullaris lat.**
  - **N. saccularis**
  - **N. ampullaris post.**





## **FUNDUS MEATUS ACUSTICI INTERNI**

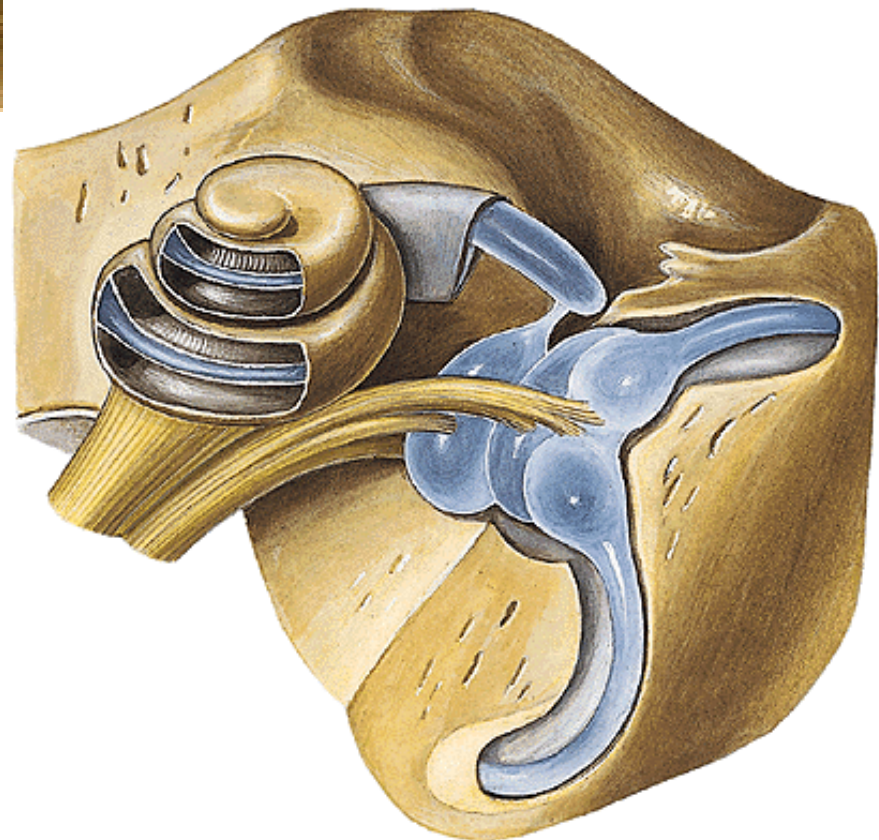
**Introitus can. n. VII**

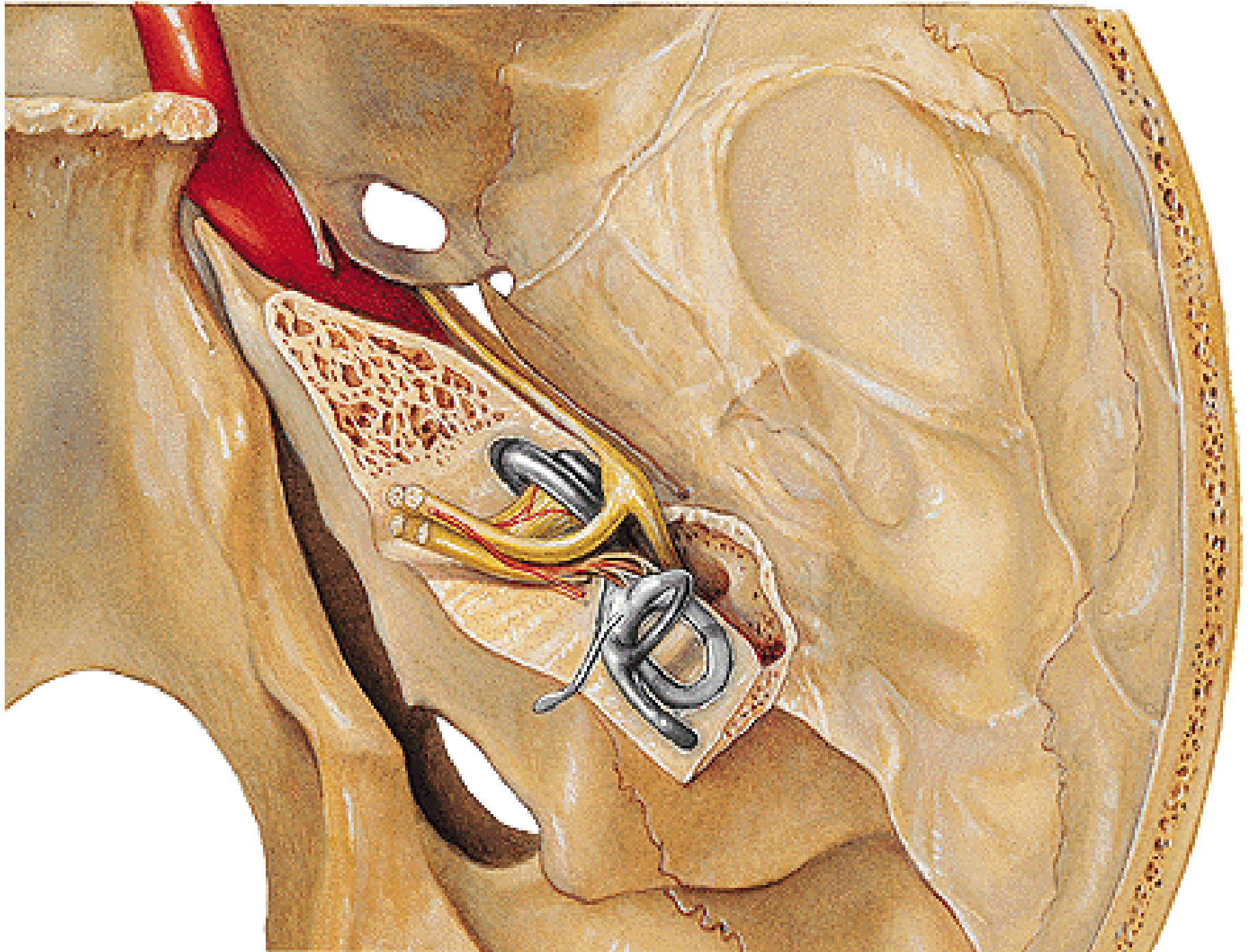
**Area cochlea**

**Area vestibularis sup.**

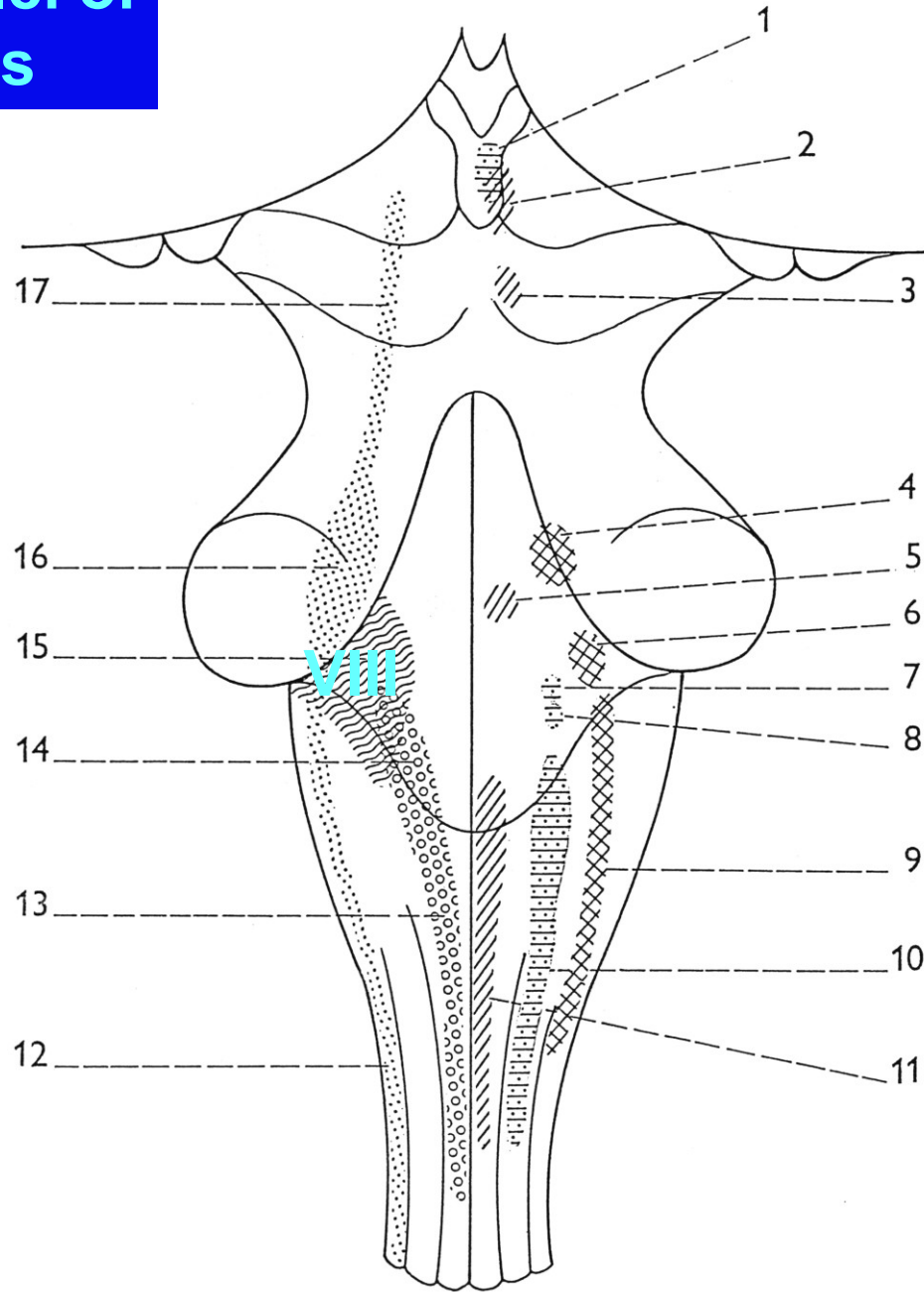
**Area vestibularis inf.**

**Foramen singulare**

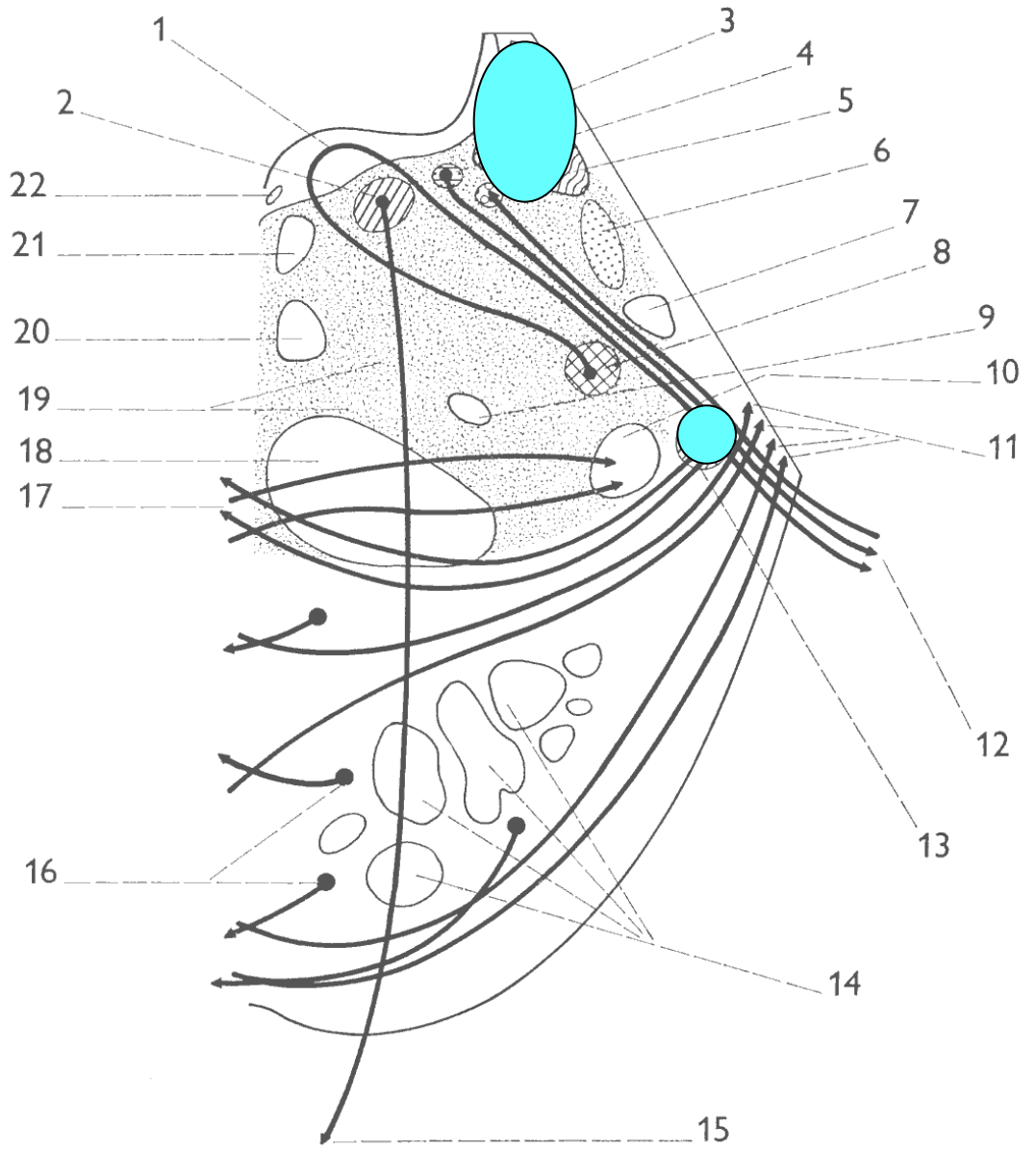
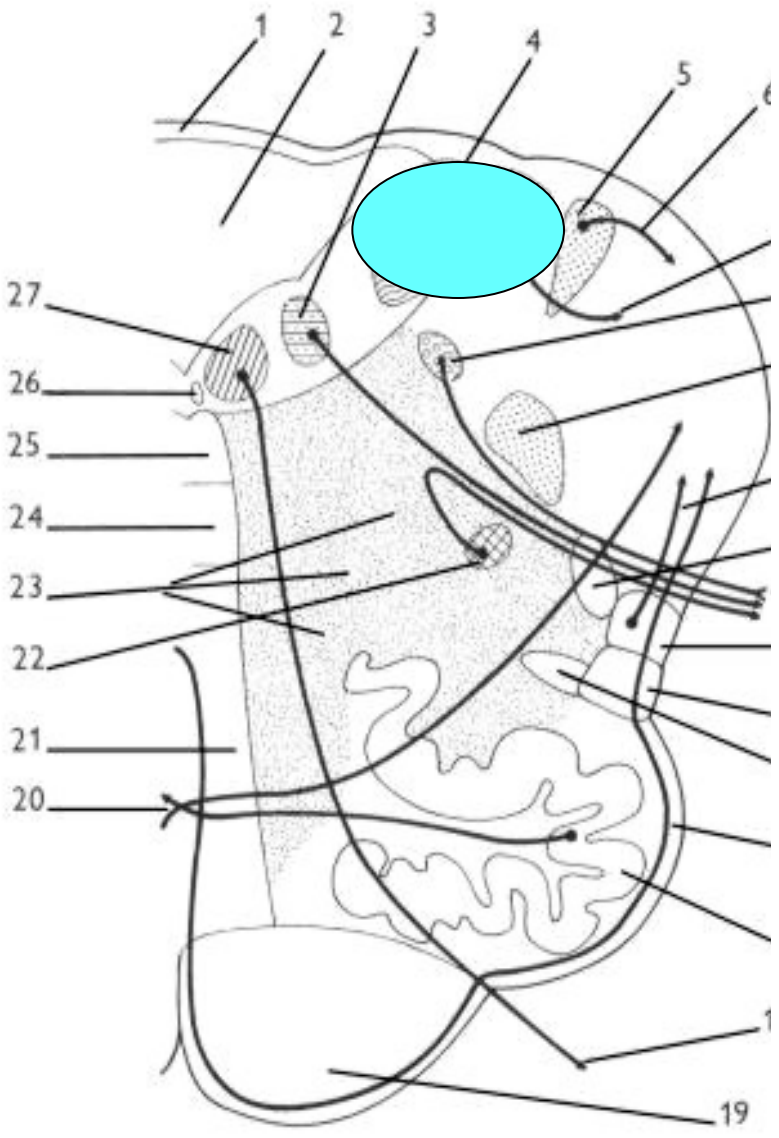


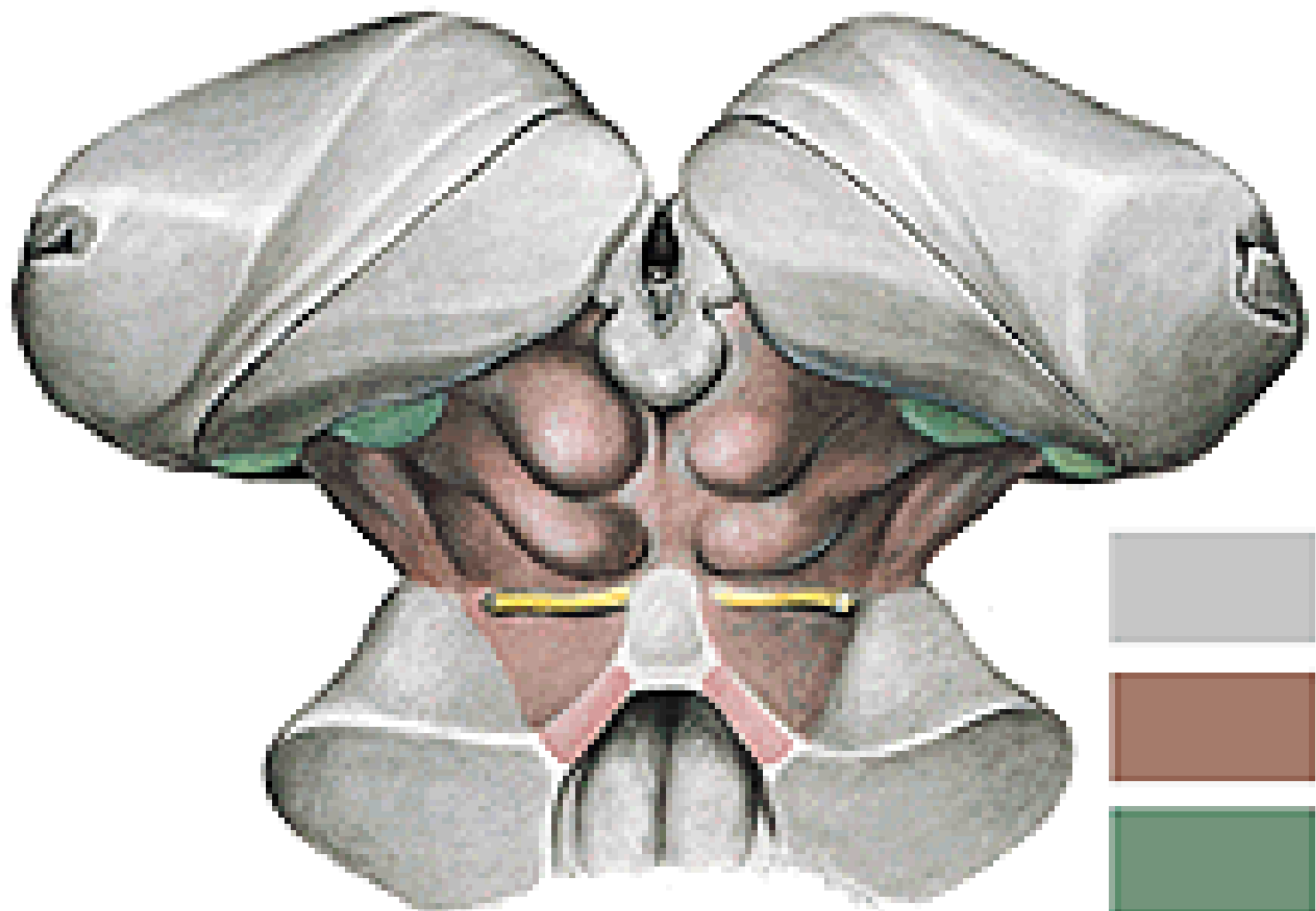


# Sensory nuclei of cranial nerves



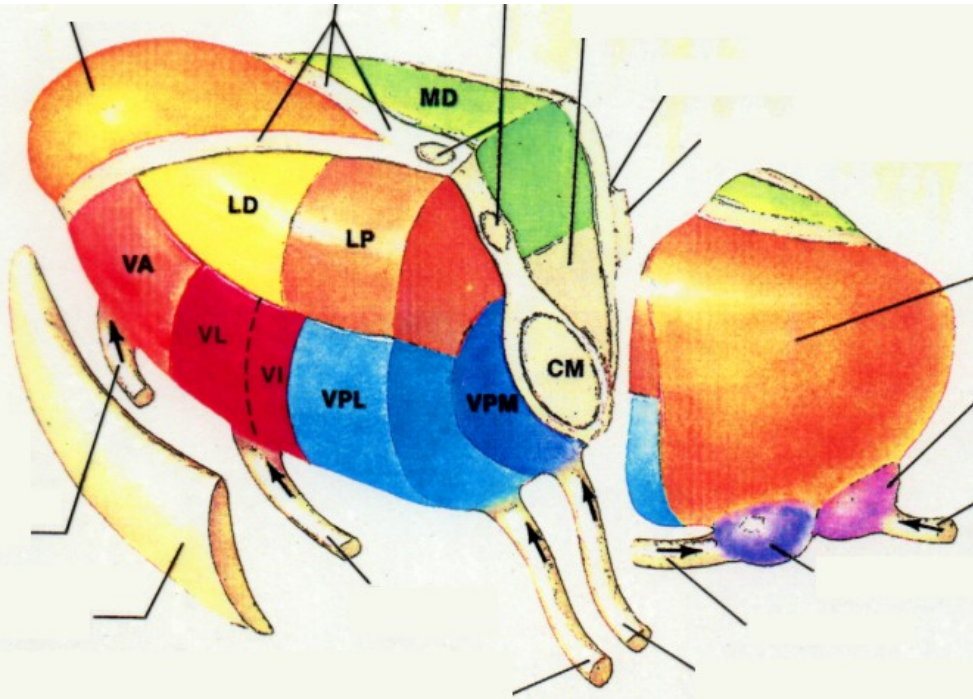
# NCLL. COCHLEARES ET VESTIBULARES



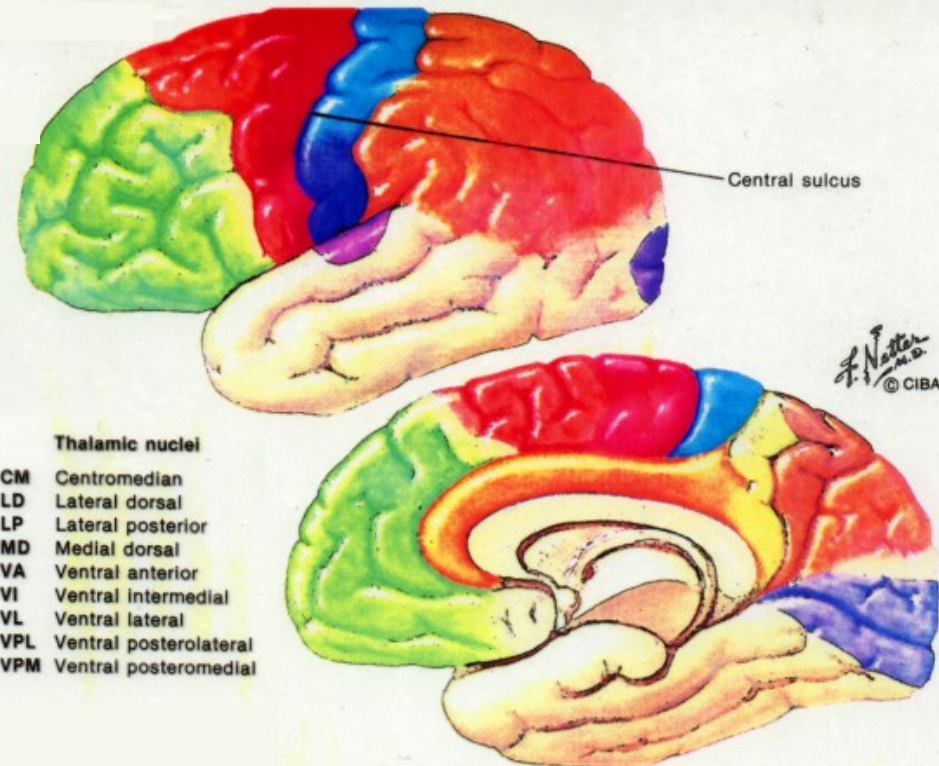




# THALAMUS



# CORTEX



## Thalamic nuclei

- CM Centromedian
- LD Lateral dorsal
- LP Lateral posterior
- MD Medial dorsal
- VA Ventral anterior
- VI Ventral intermedial
- VL Ventral lateral
- VPL Ventral posterolateral
- VPM Ventral posteromedial