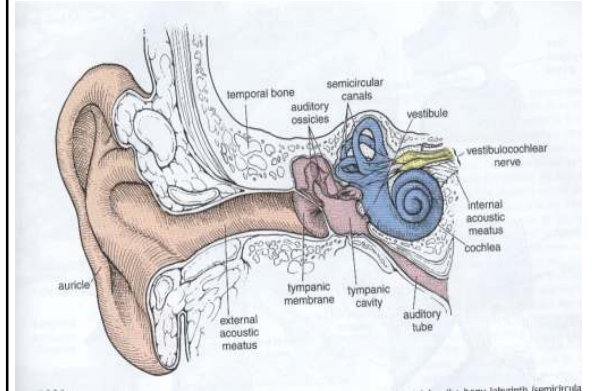


# Sense Organs

# The Ear

## Overview of the ear

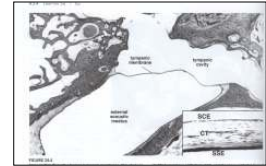


## Functions of the Ear

- The ear contains complex mechanoreceptors; motion of these mechanoreceptors is converted into electrical impulses.
- These impulses are transmitted to the brain where they are interpreted as:
  - sound
  - a sense of the body position in space or motion of the head.

## Middle Ear

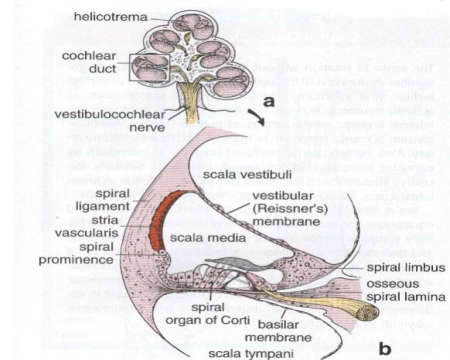
- Middle ear is made up of the:
  - Tympanic Cavity, &
  - Ear ossicles
    - Malleus
    - Incus, &
    - Stapes
- Auditory tube



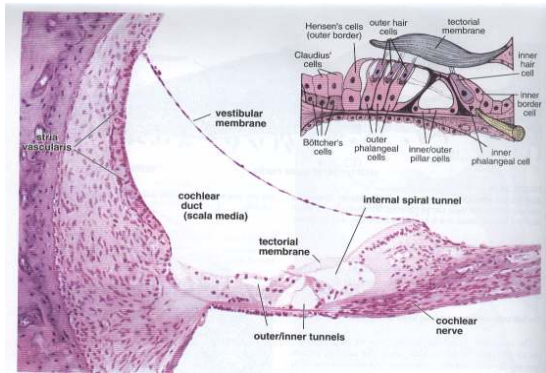
## Internal ear

- The internal ear occupies a complex cavity in the petrous portion of the temporal bone called the osseous labyrinth which is divided into two major cavities:
  - The vestibule contains the saccule, utricle, and three semicircular canals.
  - The cochlea contains the organ of Corti.

## Cochlea



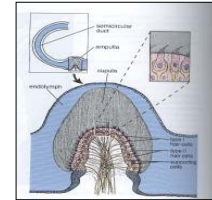
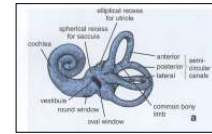
## Organ of Corti



## Vestibular apparatus

Vestibular apparatus is composed of:

- Semicircular canals
- Utricle and Saccule
- Endolymphatic sac



## Histophysiology of the ear

