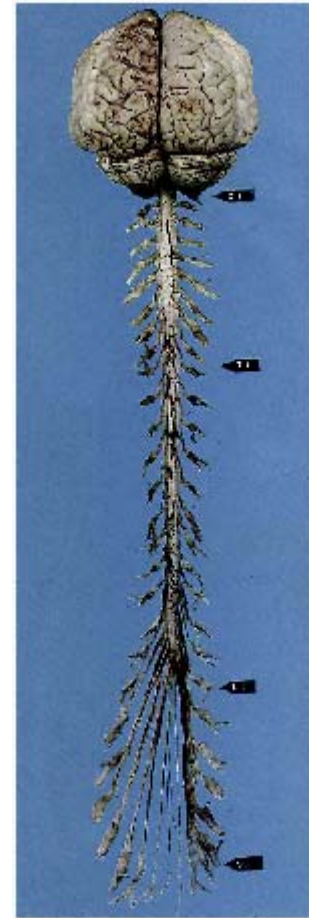
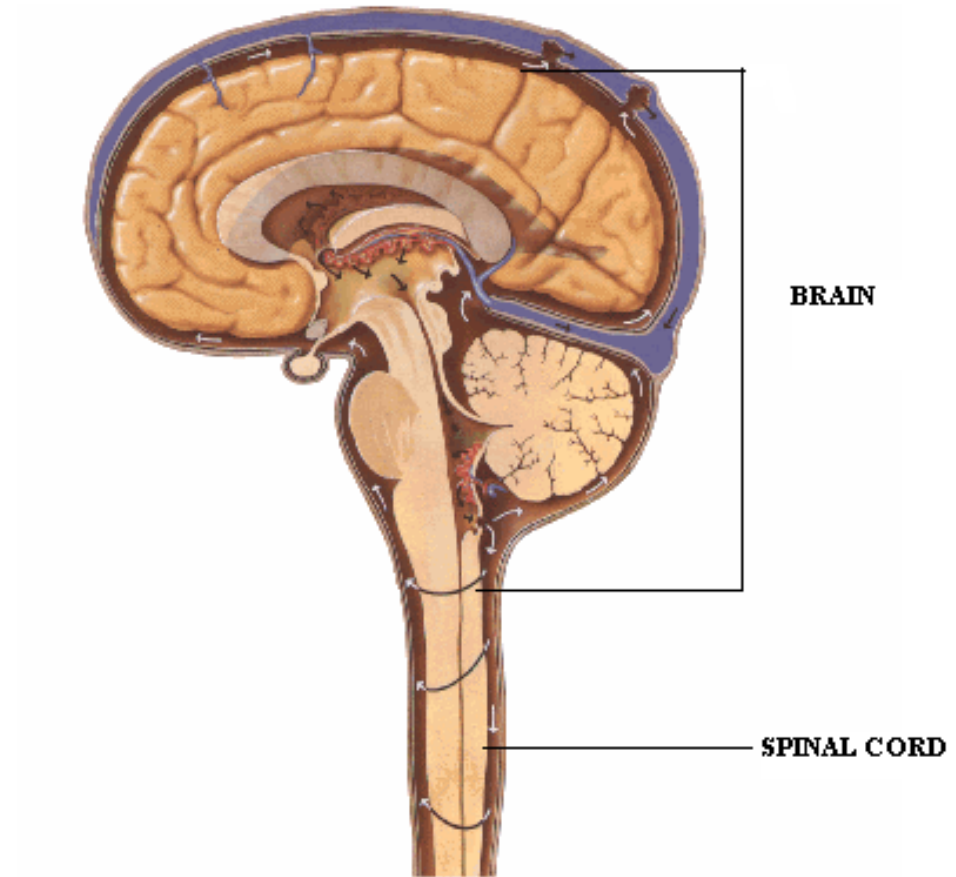


NEUROANATOMY

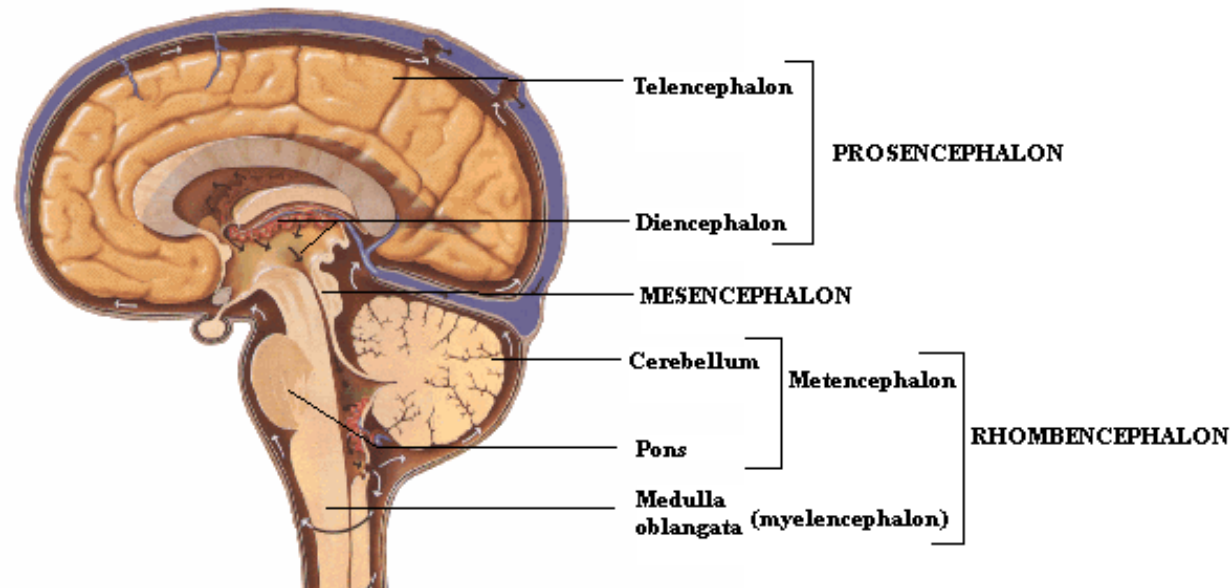
- Study of morphological aspect of nervous system
- NERVOUS SYSTEM
 - Central nervous system (CNS)
 - Peripheral nervous system (PNS)



- CNS
- Brain
 - Spinal cord



PARTS OF BRAIN



- **Telencephalon** – cerebrum
- **Diencephalons** – Thalamus
Hypothalamus
Epithalamus
Subthalamus

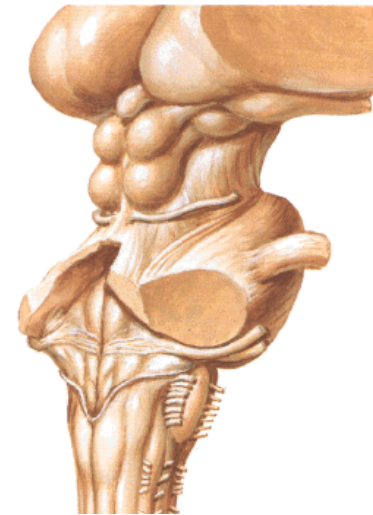
- **BRAINSTEM**

- MIDBRAIN
- PONS
- MEDULLA

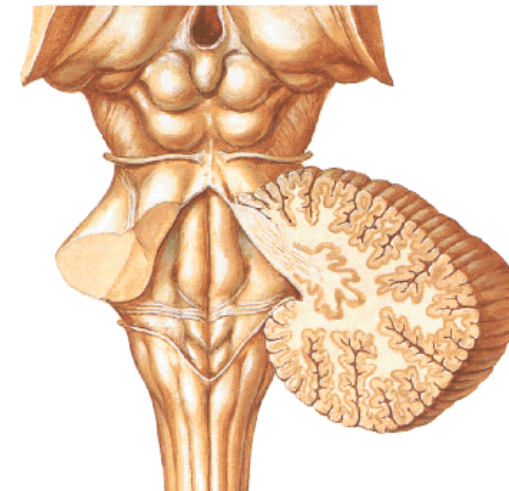
- **HIND BRAIN**

- PONS
- MEDULLA
- CEREBELLUM

Brainstem
Posterolateral View

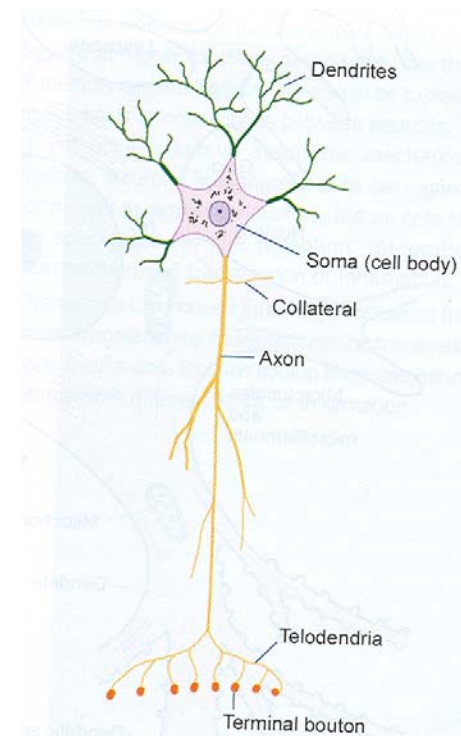
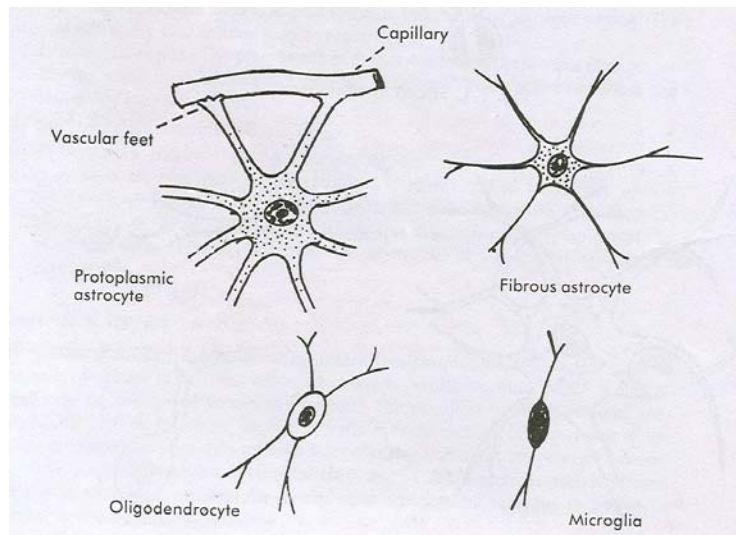


Fourth Ventricle and Cerebellum
Posterior View

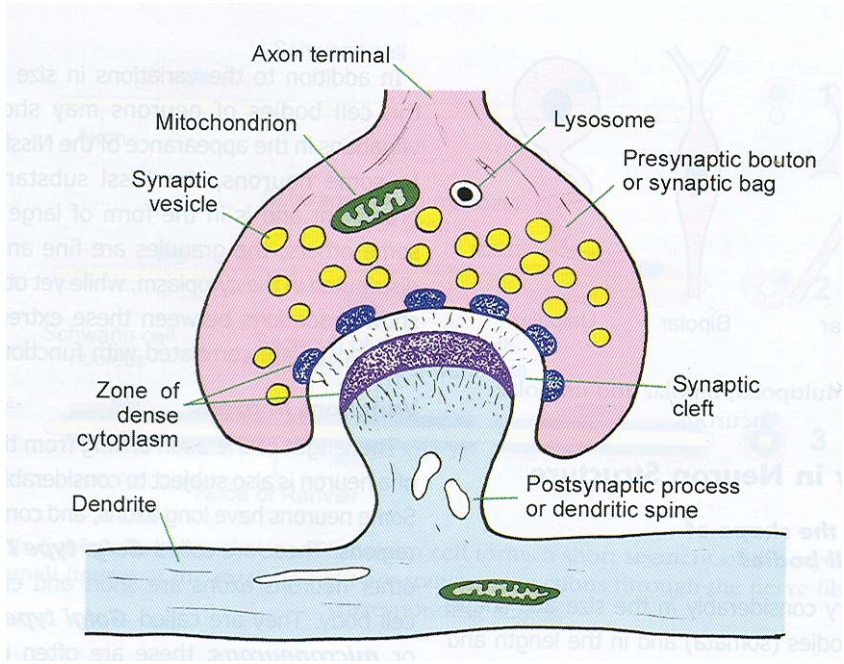


STRUCTURAL COMPONENTS OF NERVOUS SYSTEM

1. Neurons
2. Neuroglial cells
3. Processes of 1&2



Synapse



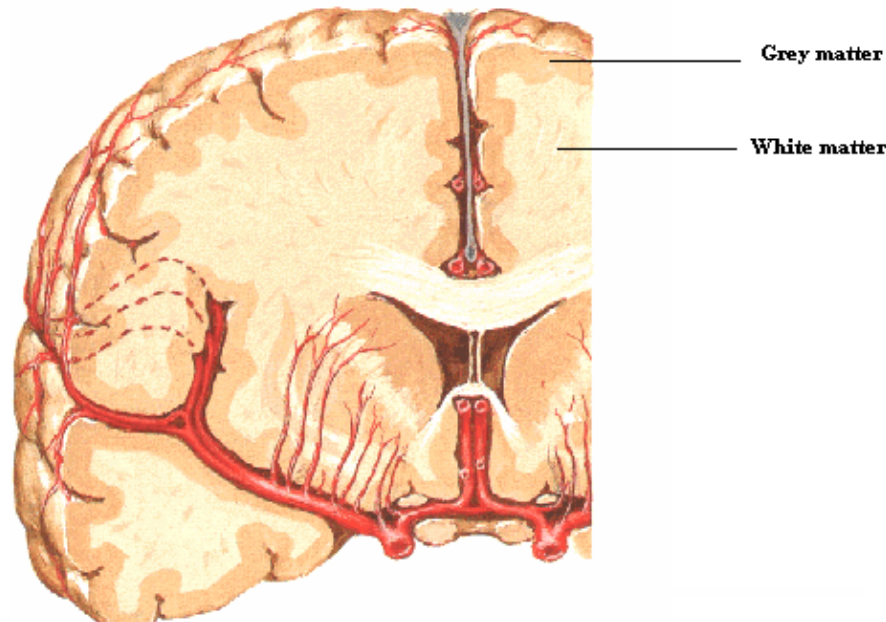
BASIC STRUCTURAL ORGANISATION

GREY MATTER – CELL BODIES OF NEURONS
DENDRITES (PART
CLOSE TO CELL)

AXONS (PART CLOSE TO
CELL)

WHITE MATTER – MYELINATED AXONS
NEUROGLIAL CELLS

Blood vs. are seen in both

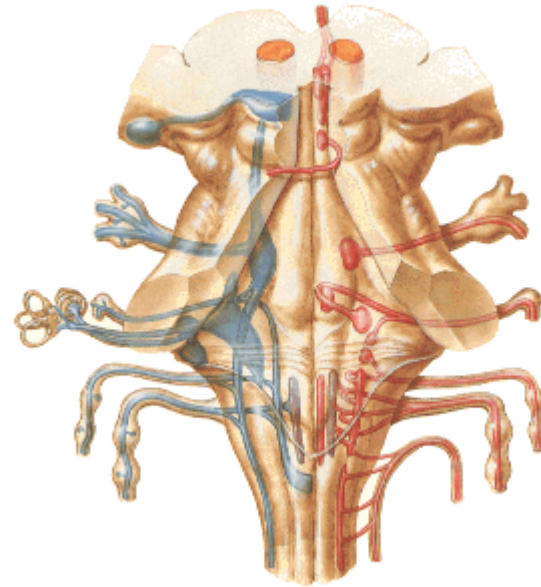


- GROUP OF NEURONS
 - NUCLEUS – CNS
 - GANGLION – PNS

- GROUP OF FIBERS
 - TRACT – CNS
 - NERVE – PNS

NUCLEI

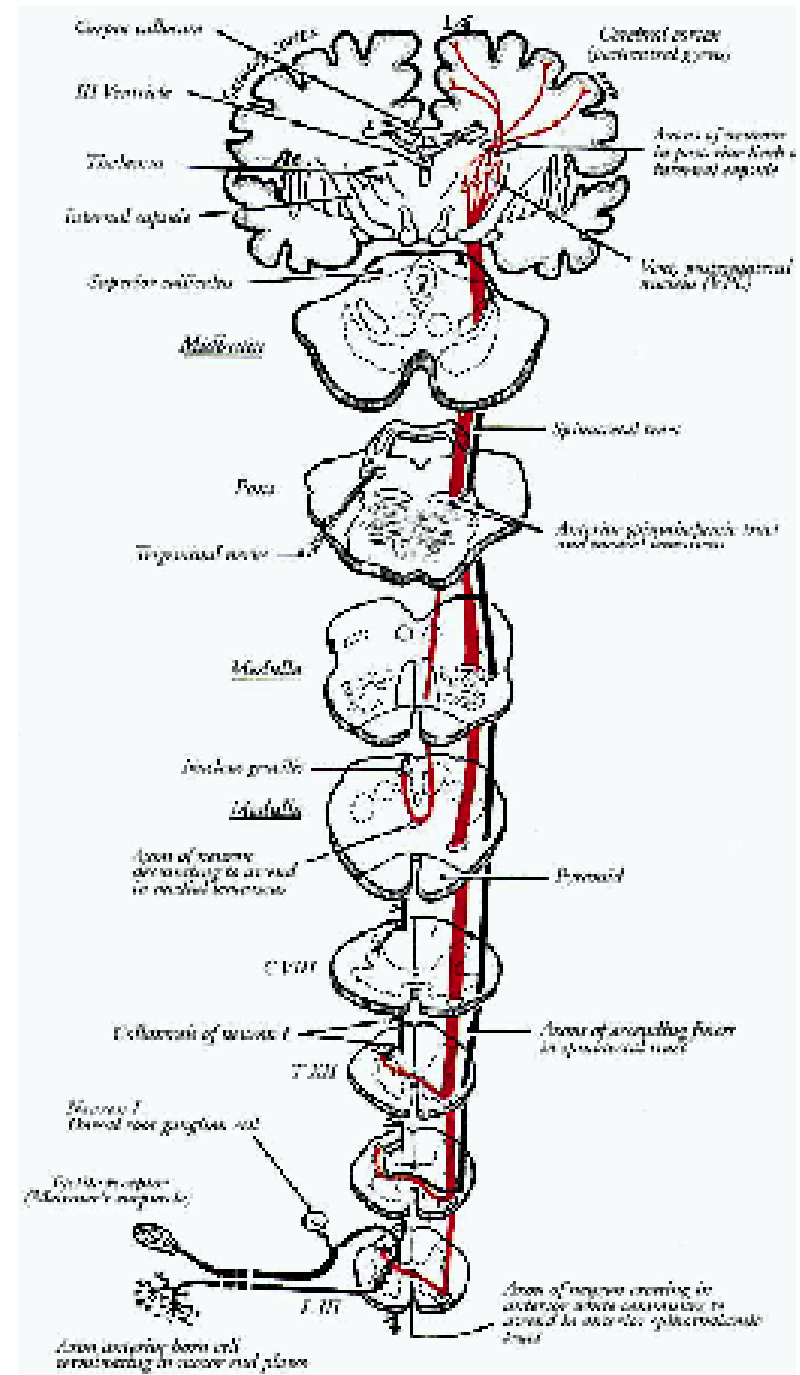
- Cranial nerve nuclei
- Others e.g. Olivary nucleus, Red nucleus, Basal nuclei etc.



TRACTS/ PATHWAYS

ASCENDING
(SENSORY)

DESCENDING
(MOTOR)



- **MOTOR PATHWAYS**

- **PYRAMIDAL**

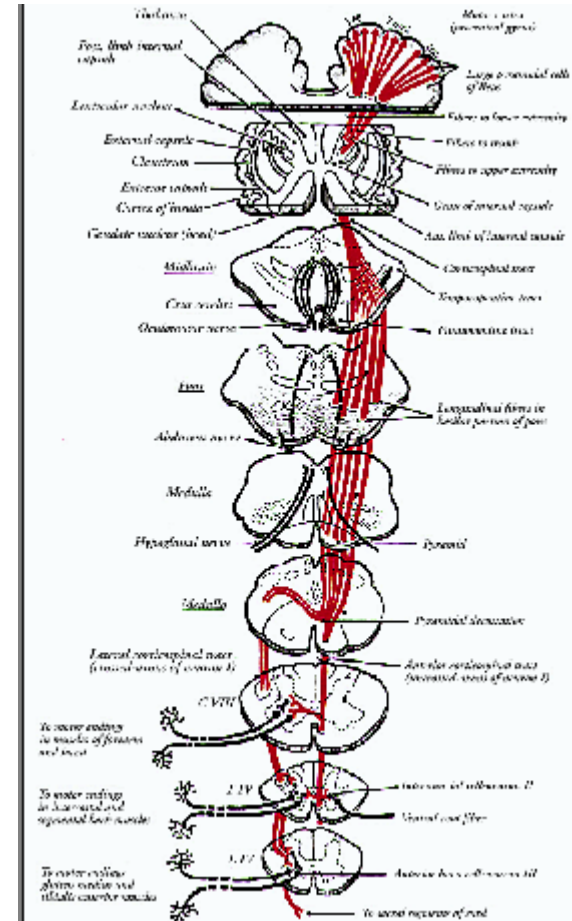
- CORTICOSPINAL

- CORTICONUCLEAR

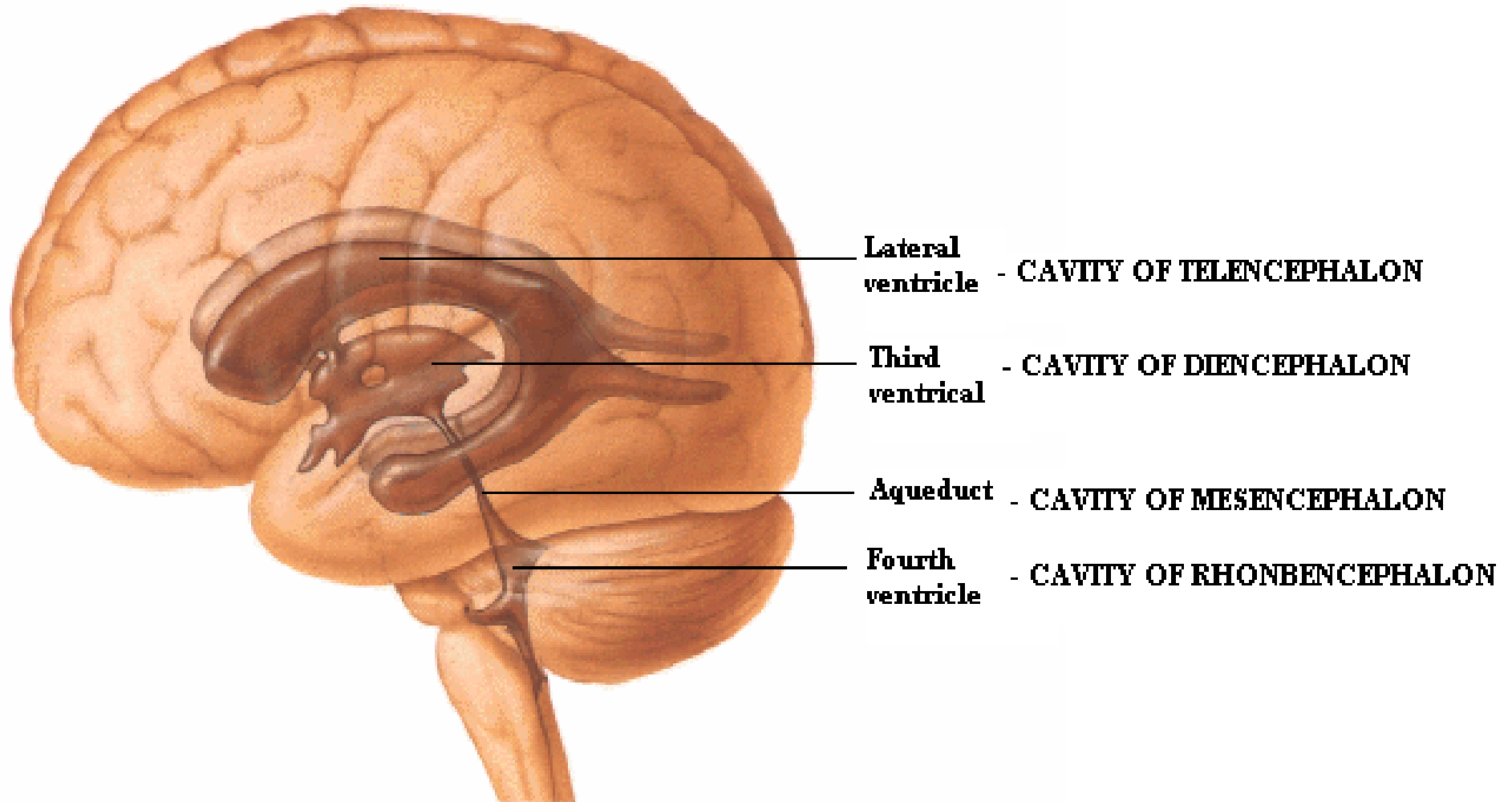
- **EXTRAPYRAMIDAL**

- **SENSORY PATHWAYS**

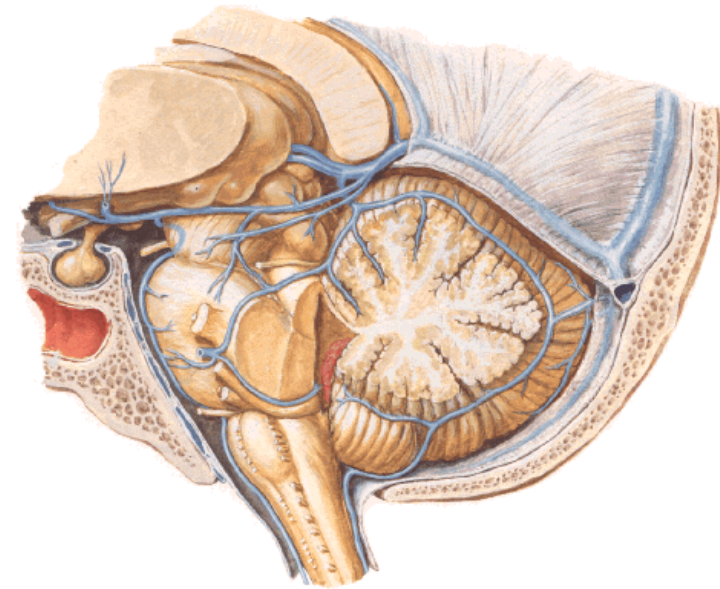
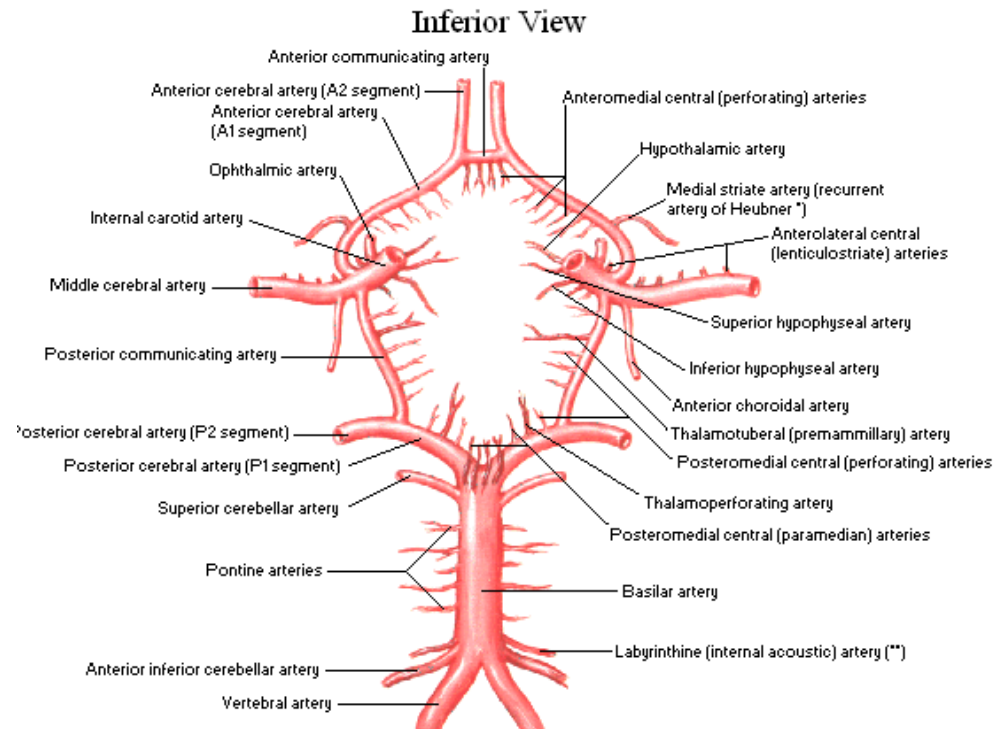
Involves various neurons to reach main sensory area in brain



- **CAVITY IN BRAIN - VENTRICLE**



BLOOD SUPPLY



IMAGING TECHNIQUES

- Computerized tomography (CT)
- Magnetic resonant imaging (MRI)

