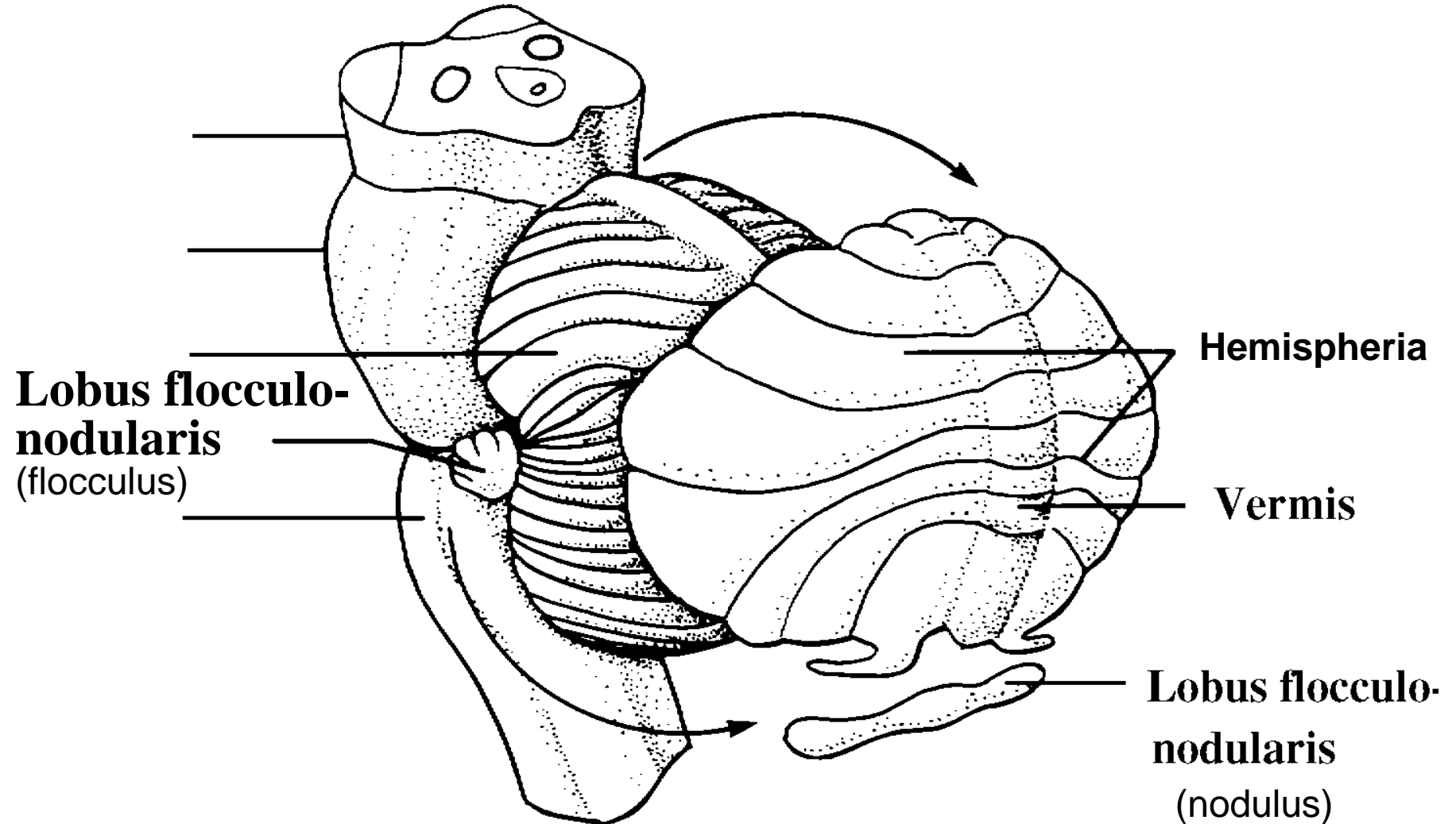
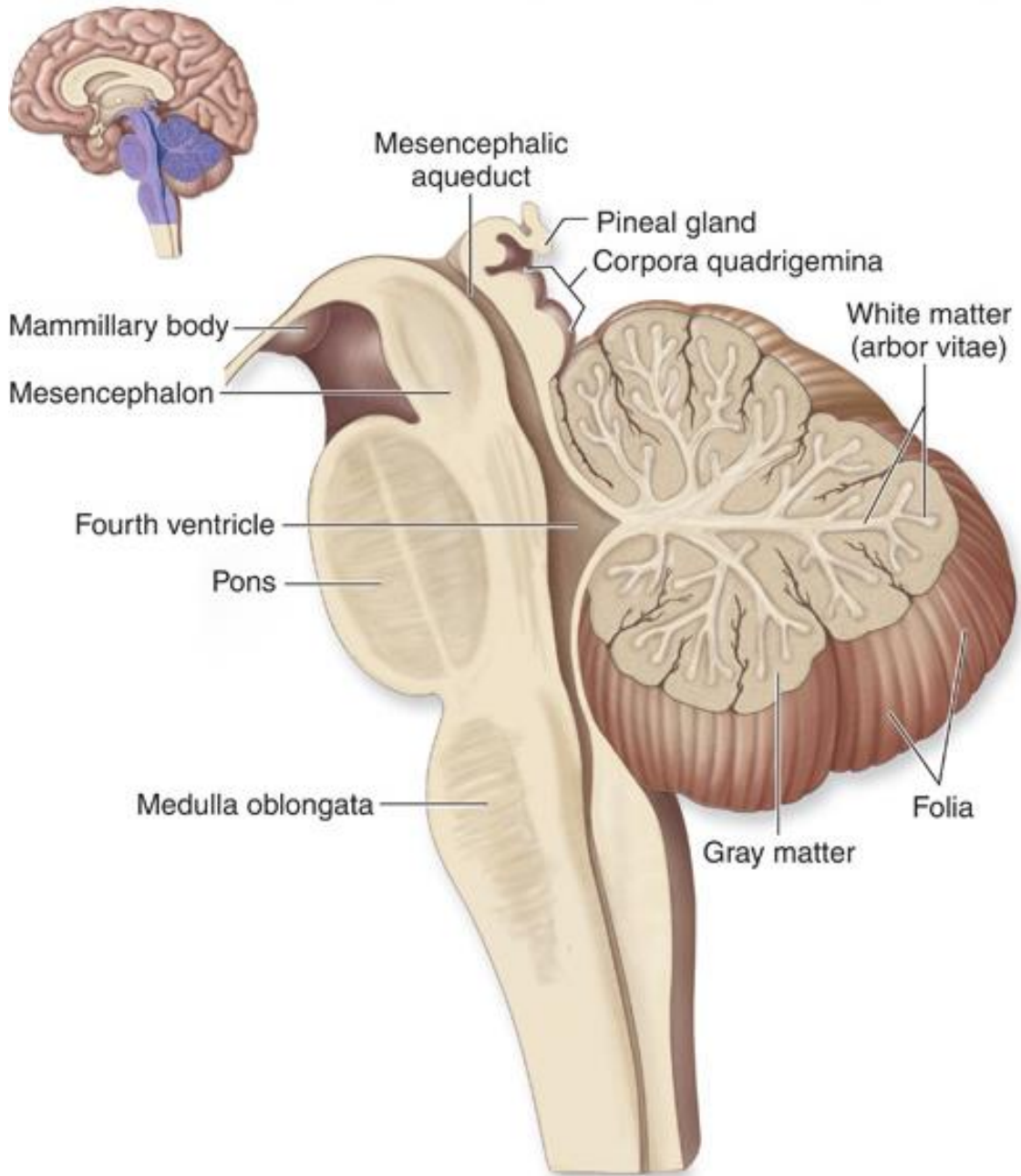


CEREBELLUM

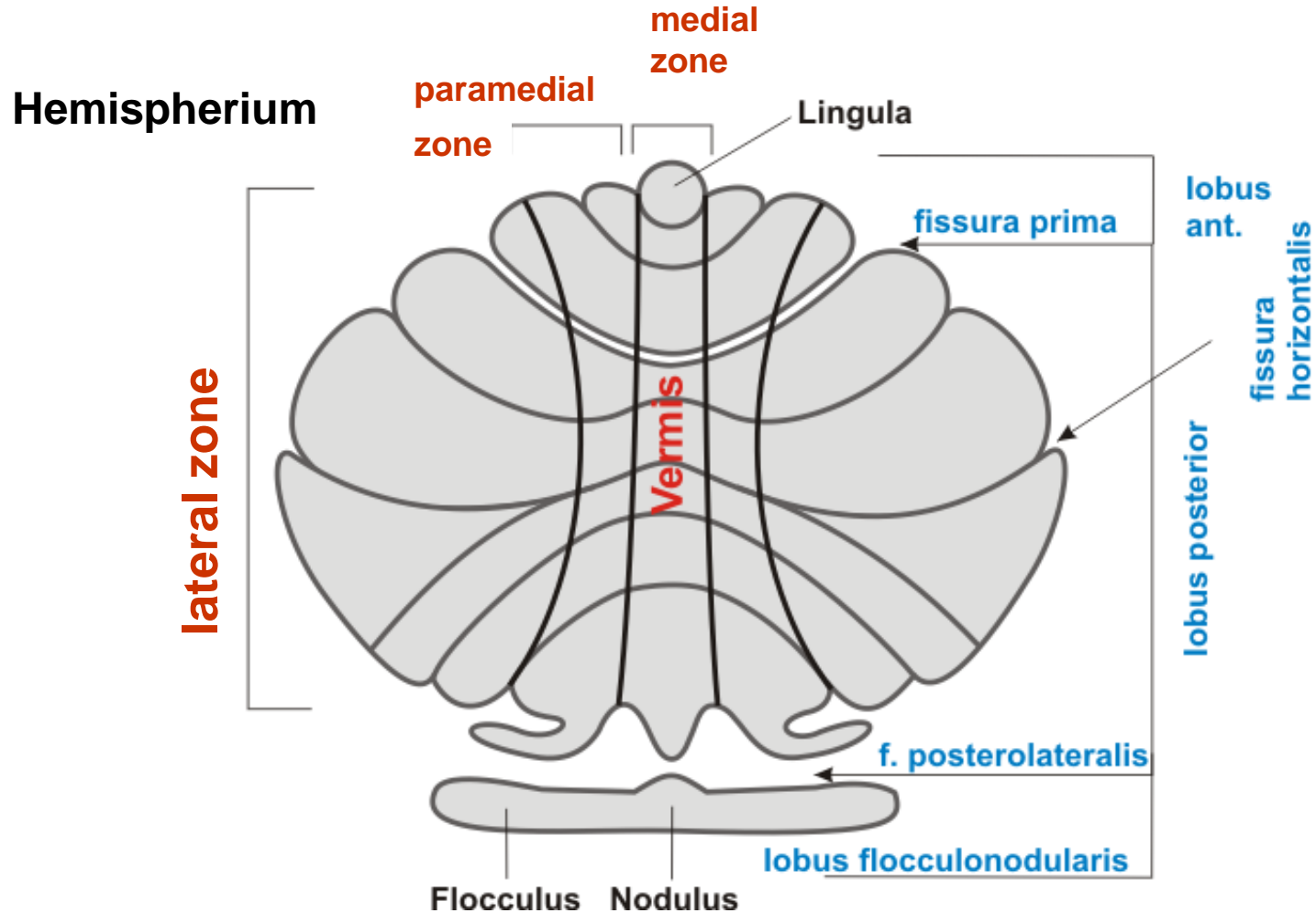
A





CEREBELLUM

basic horizontal and vertical arrangement



CORTEX AND CEREBELLAR NUCLEI

Gray mater (cortex + ncll.) and white mater (including pedunculi cerebellares)

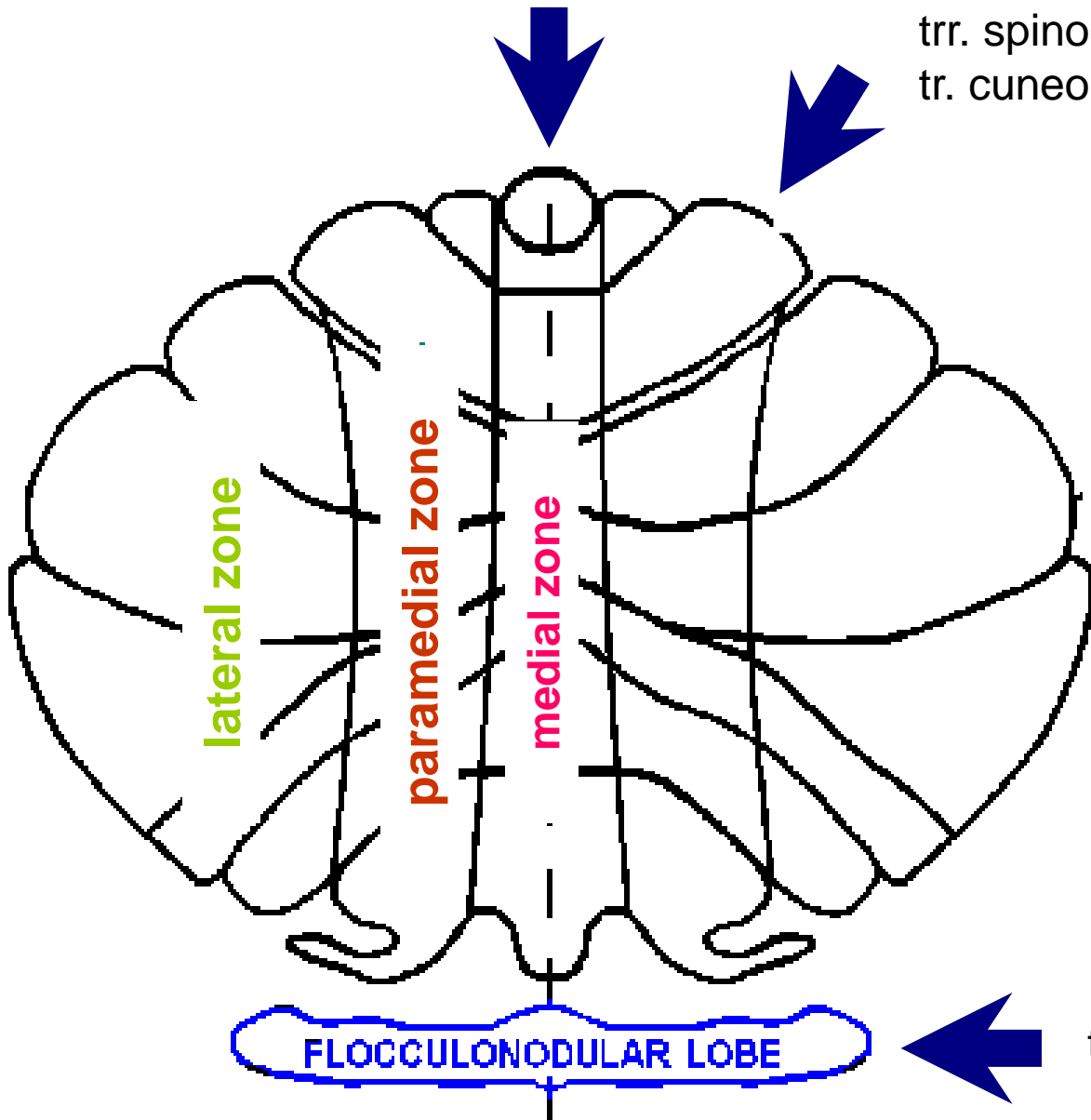
Medial zone - cortex covering vermis + ncll. fastigii

Paramedial zone - paramedial cortex + ncll. emboliformes et globosi

Lateral zone – lateral cortex + ncl. dentatus

trr. spinocerebellares

trr. spinocerebellares
tr. cuneocerebellaris



tr. pontocerebellaris

tr. vestibulocerebellaris

FUNCTION OF VESTIBULAR CEREBELLUM

- **basic significance for maintenance of balance - trr. vestibulospinales**
- **influence to lower motoneurons for axial muscles**
- **a role during control of eye movement and their coordination with movement of head**

FUNCTION SPINAL CEREBELLUM – MEDIAL ZONE

- **control of axial muscles at keeping of upright posture through cortex and tr. corticospinalis ant.**

FUNCTION OF SPINAL CEREBELLUM - PARAMEDIAL ZONE

- **control of spinal cord motoneurons for distal muscles of extremities through cortex and tr. corticospinalis lat.**

FUNCTION OF PONTOCEREBELLUM

- **control of motor planning and target movement**
- **non-motor function (cognition) - solution of problem and linguistics phrasing**