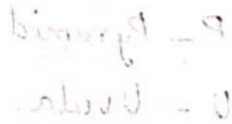


■ - Archi (oldest) Cerebellum

■ - Paleo cerebellum.

■ - Neocerebellum.
(Advanced).

③ parts of Cerebellum	Components	Responsible for
Archi/Vestibular Cerebellum	Lingula ⊕ flocculoNodular lobe	Tone & posture of Trunk m/s (Axial eqm.)
paleo/spinal cerebellum	Ant. lobe ⊕ pyramid & Uvula	Crude mvmt. of limbs.
Neo/cerebral Cerebellum	post lobe except P & U	Coordinat ⁿ of skilled vol. mvts. (COMPARATOR FUNC.).



i) Cerebellar Cortex:

Histology: (3 layers) & (5 cells).

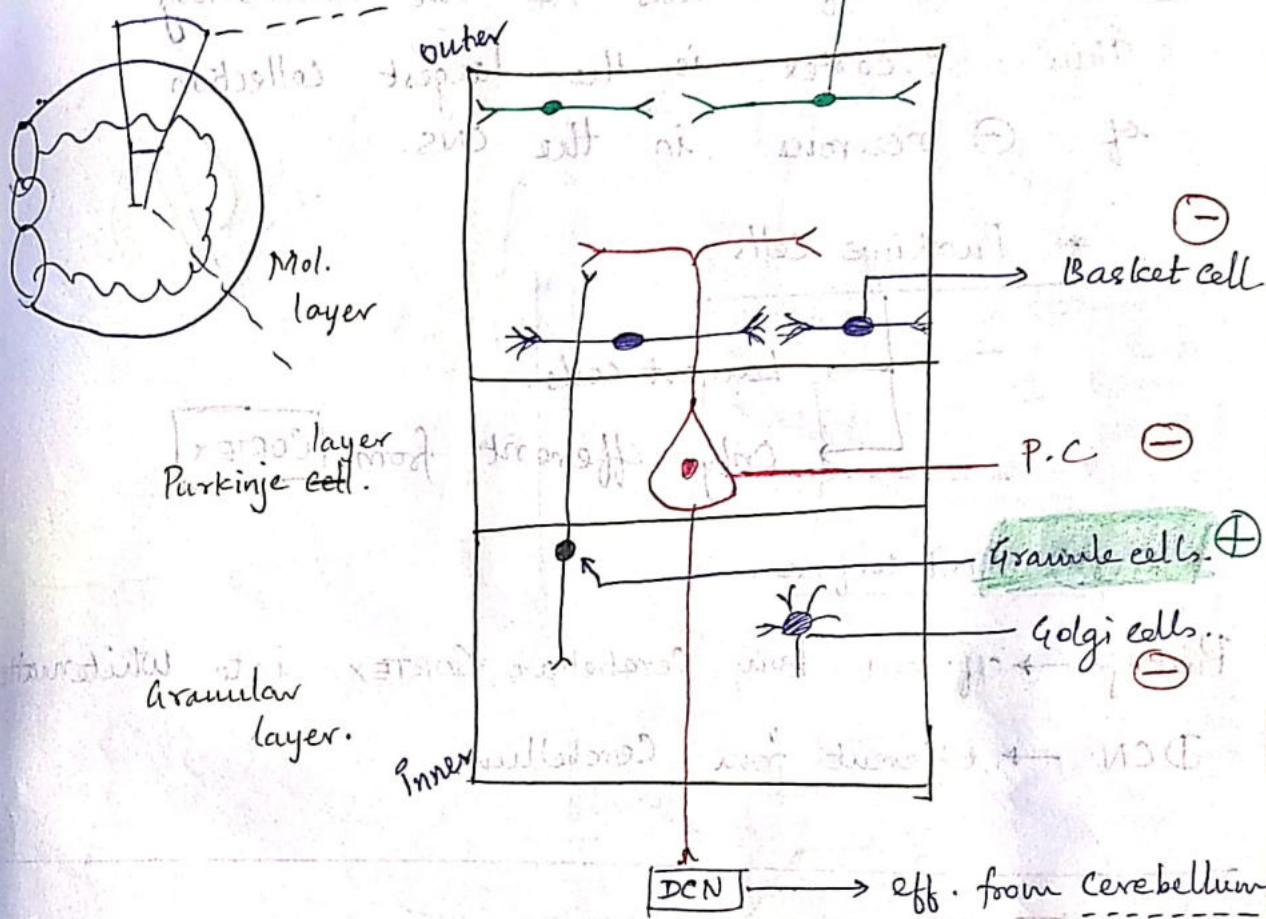
- Outer
- * Molecular layer. $\left\{ \begin{array}{l} \text{Stellate cells. (-)} \\ \text{Basket cells. (-)} \end{array} \right.$
 - * Purkinje layer. \rightarrow Purkinje cells. (-)
 - * Granular layer. $\left\{ \begin{array}{l} \rightarrow \text{Granule cells (+)} \\ \rightarrow \text{Golgi cells. (-)} \end{array} \right.$

Note: i) stars are in the sky

iii) Stellate cells are at the top of cerebellar cortex.

- ii) Annular layer \rightarrow
- (i) Gomerali of cerebellum
 - (ii) Granule cell.
 - (iii) Golgi cell.

C. CORTEX IS THE LARGEST COLLECTION OF \ominus NEURONS IN THE ENTIRE CNS.



- 1) Purkinje cell:
 * cell body in P. layer
 * dendrites in Mol. layer
 * axon Travel out from C. cortex to DCN.

- 2) Stellate & Basket cell:
 * Both are Supporting cells.

- 4) Granule cells (only excitatory cells in cerebellum)
 Conn. to Purkinje cells & "Mossy" fibres.

- 5) Golgi cells:
 Conn. to Granule cells.

* Out of 5 cells 1/4 are inhibitory

Thus C. cortex is the largest collection of \ominus neurons in the CNS.

* Purkinje cells

→ Largest cells.

→ Only efferent from **CORTEX**

⊗ Don't confuse:

Purkinje → efferent from Cerebellar CORTEX into white matter

DCN → efferent from Cerebellum

DCN (4)



Largest Nu.

D - Dentate Nu.

ONLY Nu. of Neocereb

E - Emboliform Nu.

F - Fastigial Nu.

Nu. of Paleocerebellum

G - Globose Nu.

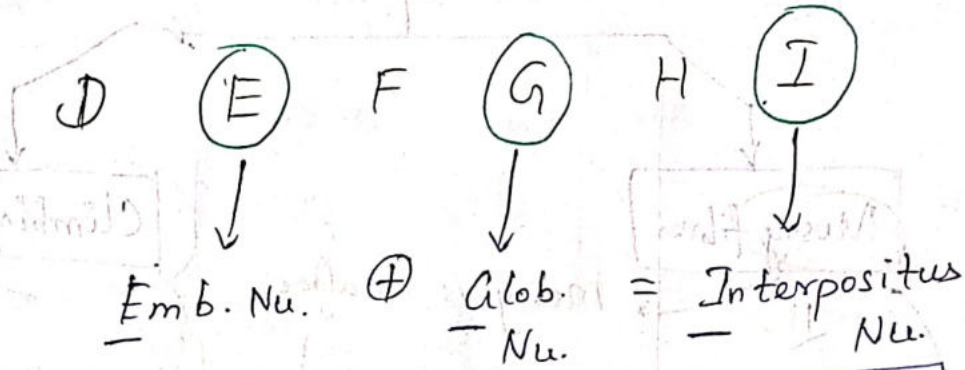
Also Nu. of Archicerebellum

Dor → Dentate → Neo/cortico

Ezhi → Emboliform } Interposit → Paleo

Gist → Globose

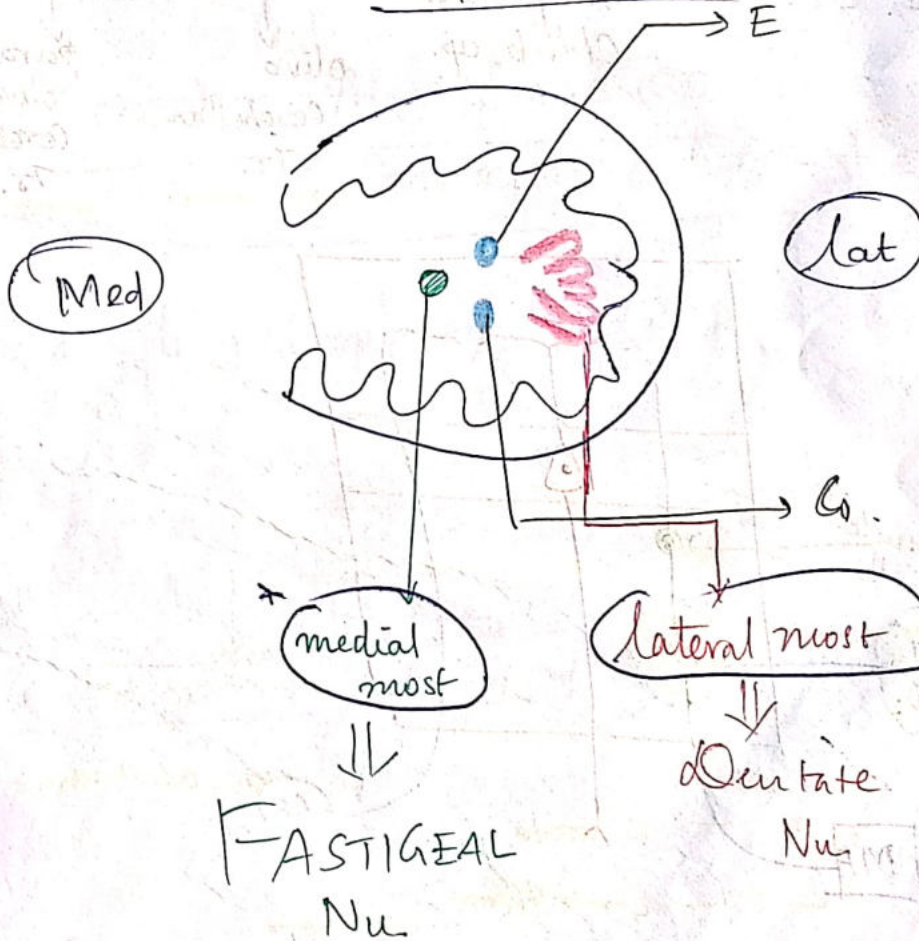
Friend → Fastigial → Archi/Vestib

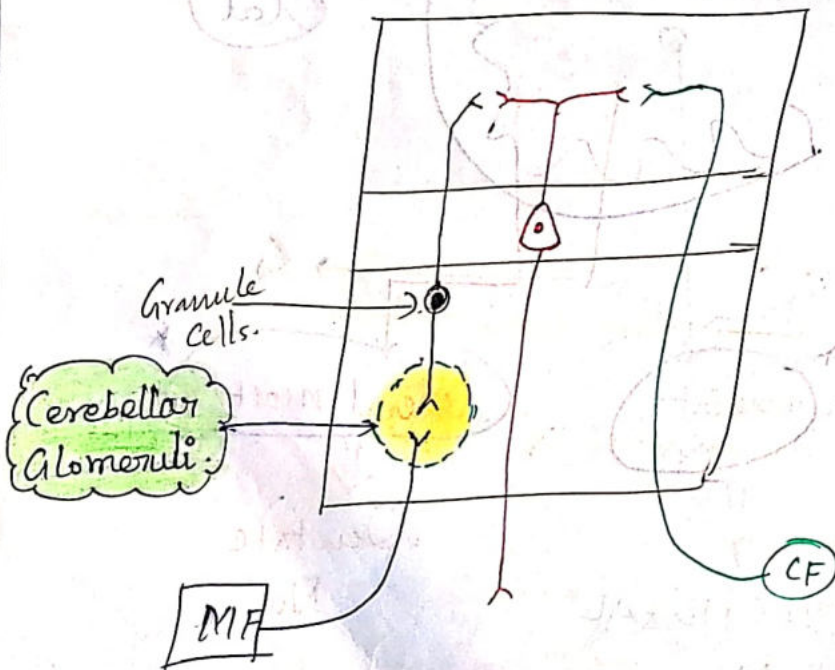
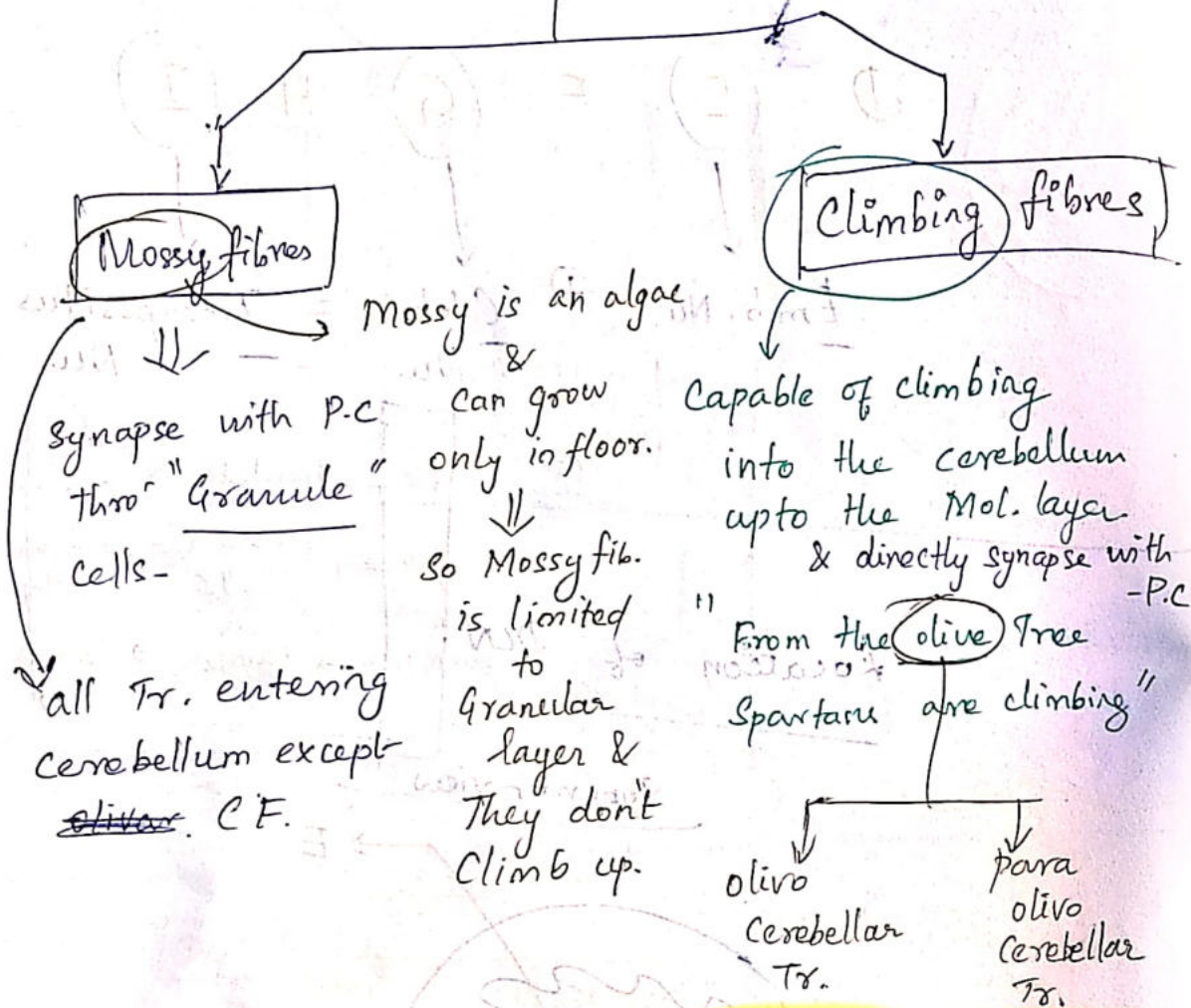


Location of DCN

Neo	→ Dentate	→ Red Nu & Thalam
Paleo	→ Globose & embolif	→ Red Nu only
Archi	→ Fastigiat	→ Vertib. Nu

Superior view







Glomeruli : (present in Granular layer).

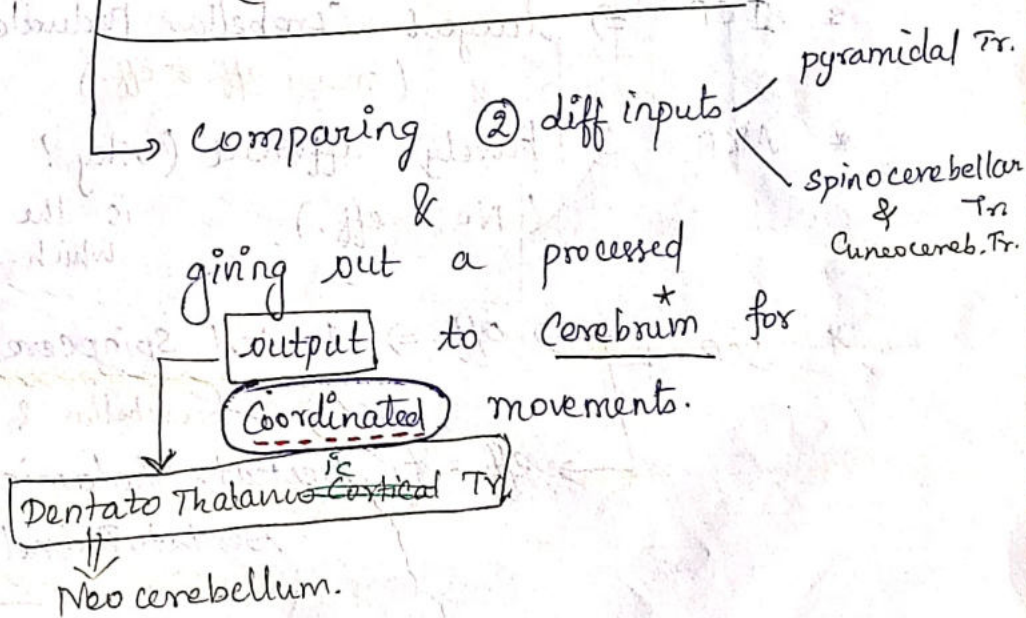
* ∴ Mossy fib. Can't reach P.C.
They need a lift.

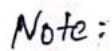
* Granule cells synapse with Mossy fib.
& then end at P.C.

* Synapse b/w MF & Granule cell
is called cerebellar glomeruli.

Comparator Function

(Cerebellar Peduncles)





- www.FirstRanker.com**

Trigemino Cerebellar Tr. \Rightarrow pass. both th
but NOT

LESIONS of Cerebellum.