DIENCEPHALON

epithalamus

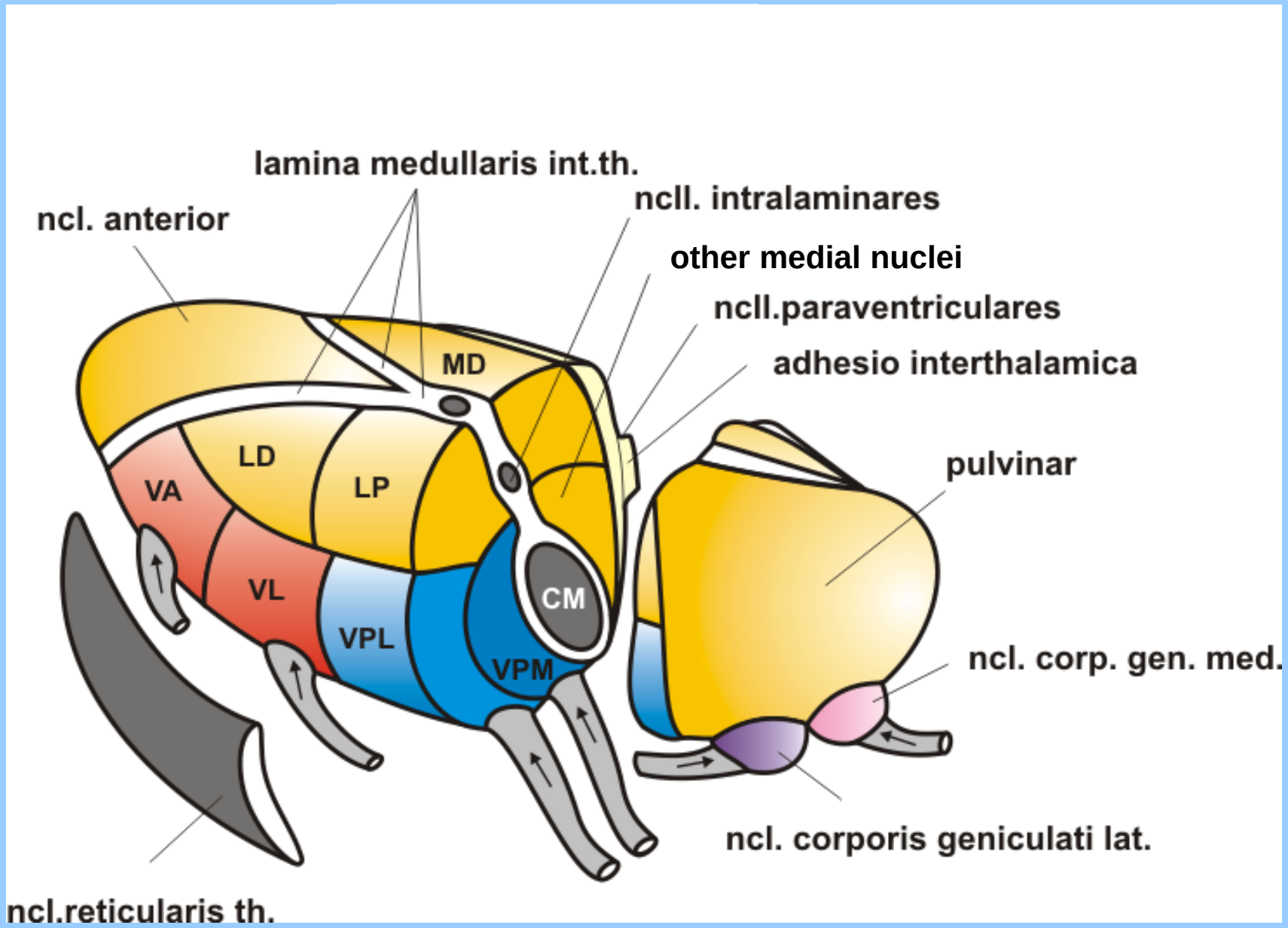
thalamus
(metathalamus)

sulcus hypothalamicus

hypothalamus

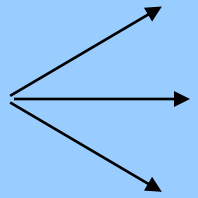
subthalamus

THALAMIC NUCLEI



FUNCTIONAL CLASSIFICATION OF THALAMIC NCLL.

specific ncll.

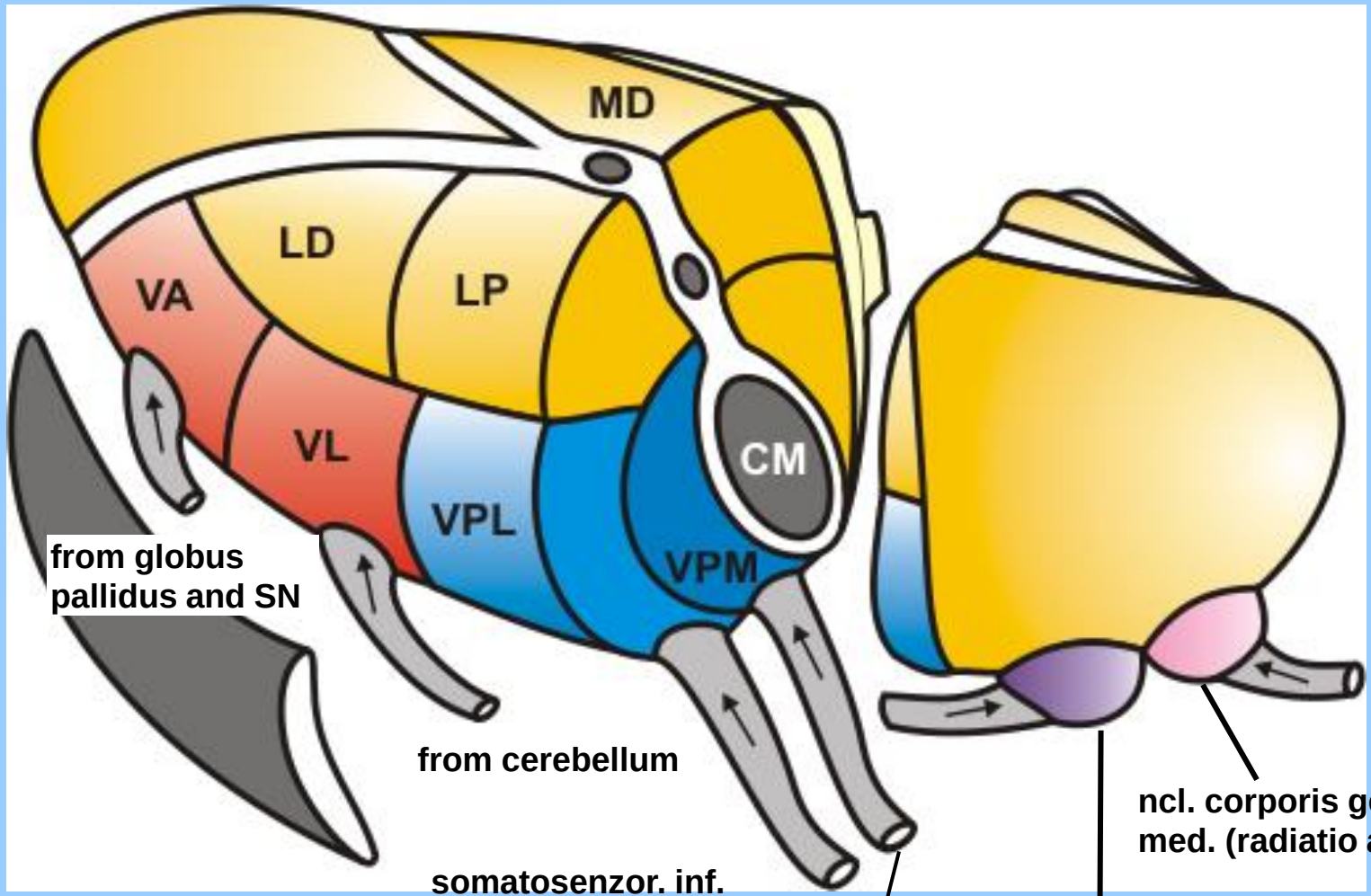


- **senzory**
- **somatosenzory**
- **motor**

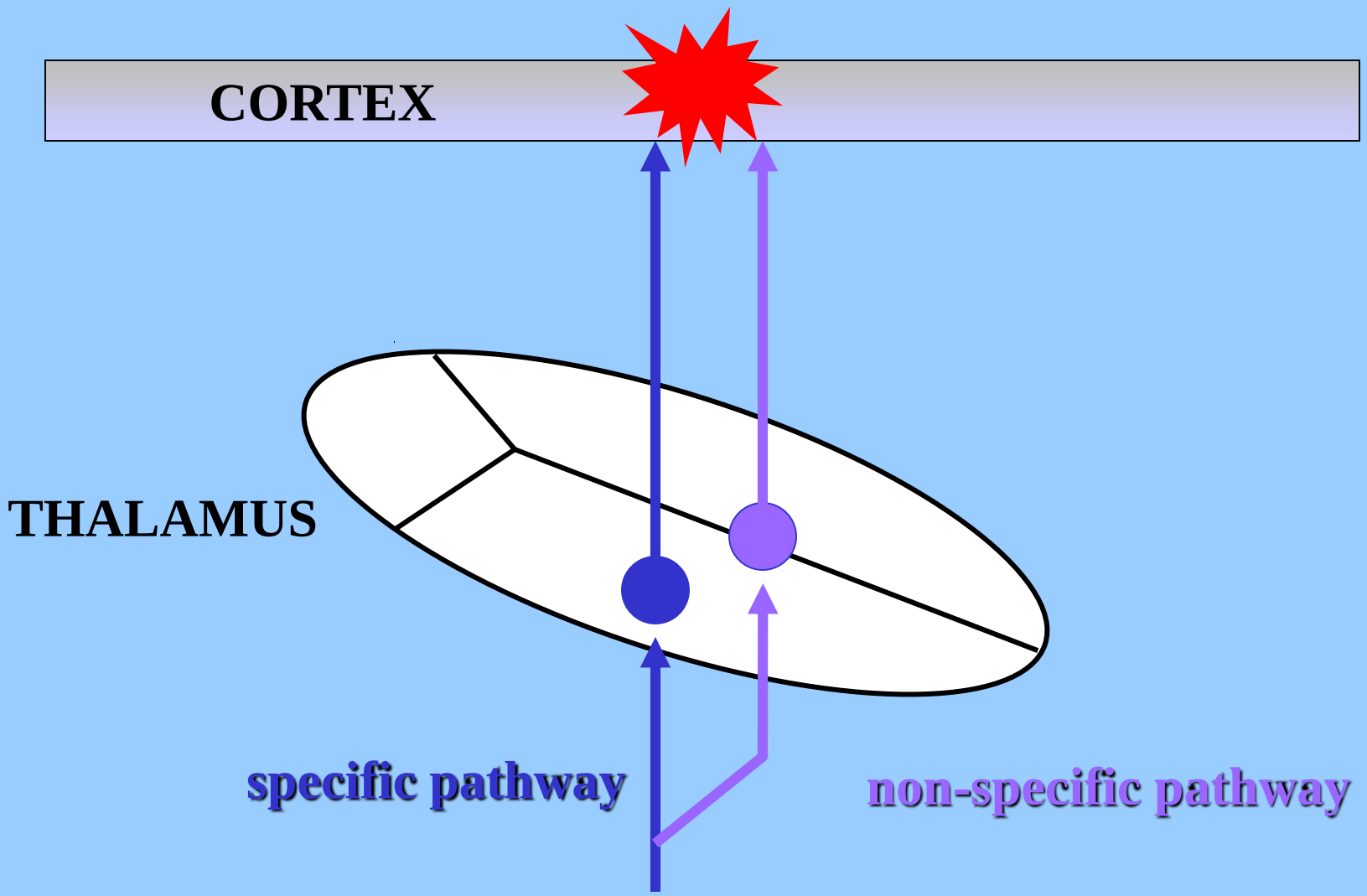
non-specific ncll.

association ncll.

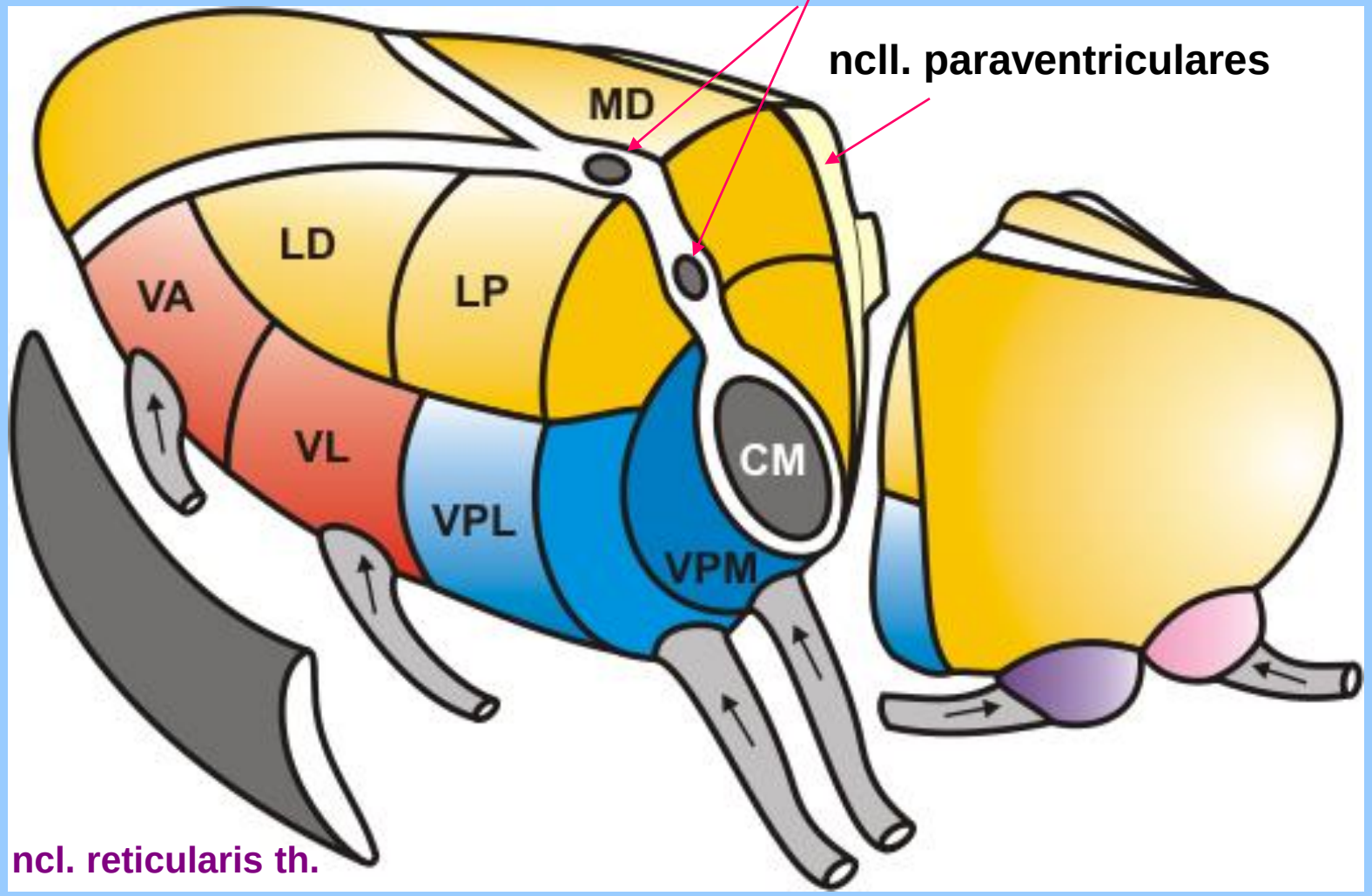
SPECIFIC THALAMIC NUCLEI



AFFERENTATION OF CORTEX BY SPECIFIC AND NON-SPECIFIC THALAMIC NCLL.

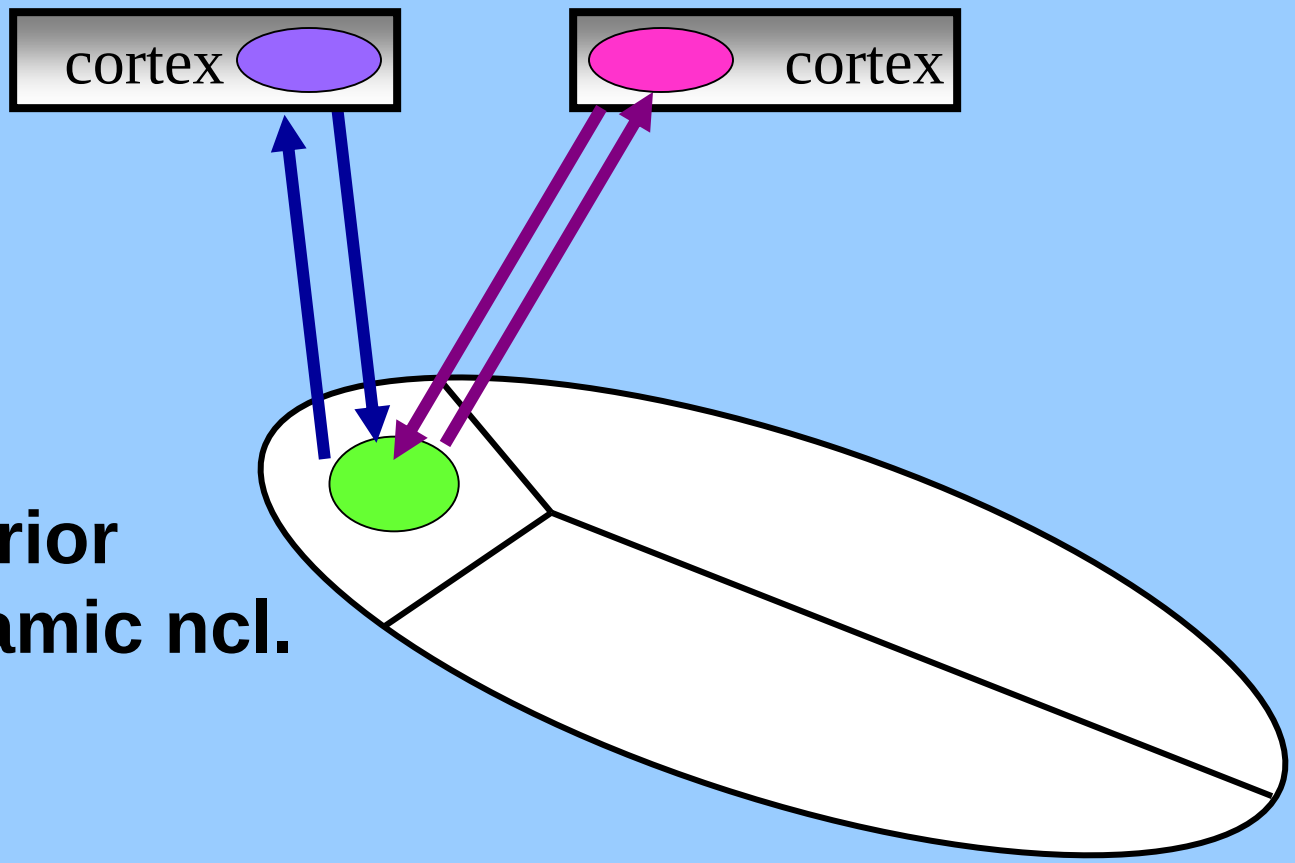


NON-SPECIFIC THALAMIC NUCLEI



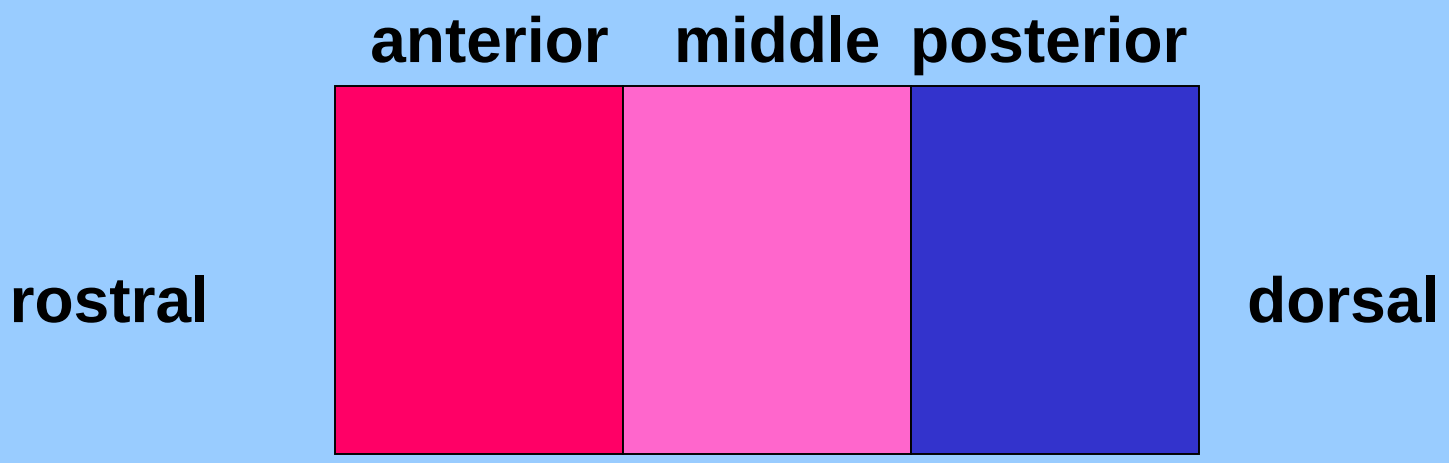
CM= ncl. centromedianus

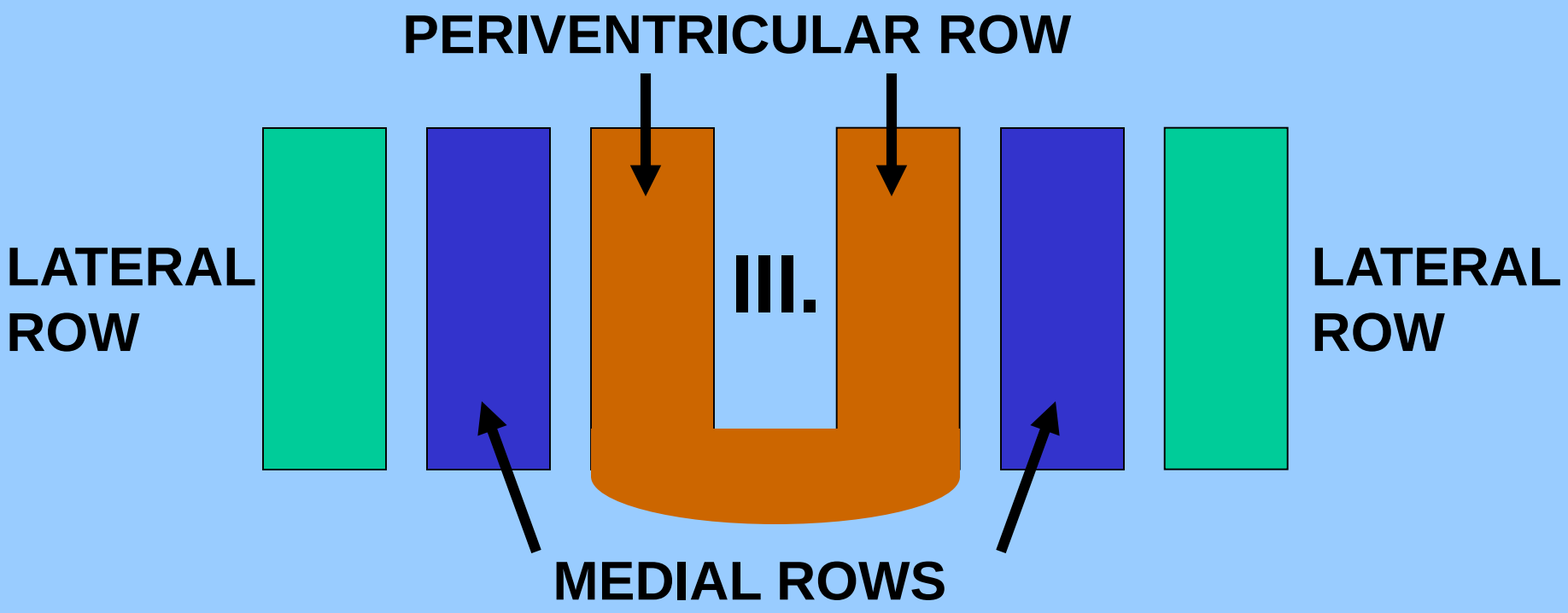
FUNCTIONAL PATHWAYS OF ASSOCIATION THALAMIC NUCLEI



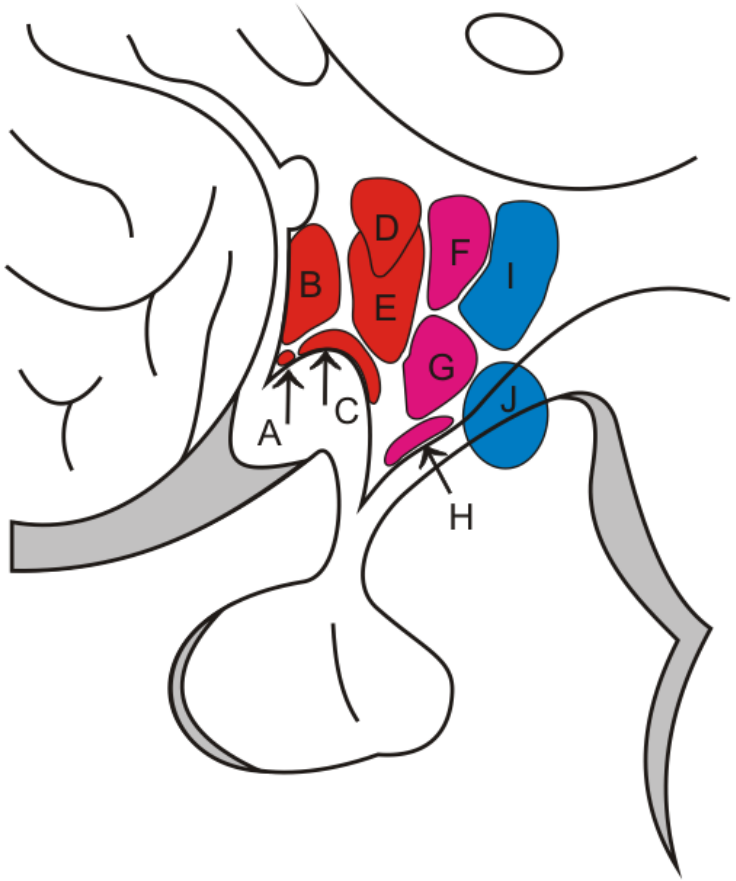
anterior thalamic ncl.

HYPOTHALAMIC NCLL.





Basic arrangement of hypothalamic nuclei



ANTERIOR GROUP
Periventricular row

A - ncl. suprachiasmaticus

Medial row

B - ncl. preopticus

C - ncl. supraopticus

D - ncl. paravetricularis

E - ncll. anteriores

MIDDLE GROUP

F - ncl. dorsomedialis

G - ncl. ventromedialis

H - ncl. arcuatus

POSTERIOR GROUP

I - ncl. posterior

J - ncl. mamillaris

ANTERIOR HYPOTHALAMUS

***Ncl. suprachiasmaticus** – afferentation from retina - generator of circadian rhythms*

***Ncl. preopticus** – different structure in female and male – control of individual sexual behavior, behavior associated with maternity; regulation of body temperature*

***Ncl. supraopticus and paraventricularis (magnocellular component)** – tractus hypothalamo-hypophysialis – transport of hormones into neurohypophysis*

***Ncl. paraventricularis (parvocellular component)** - capillary network in eminentia medialis – control of adenohypophysis - hypothalamo-hypophysial portal pathway*

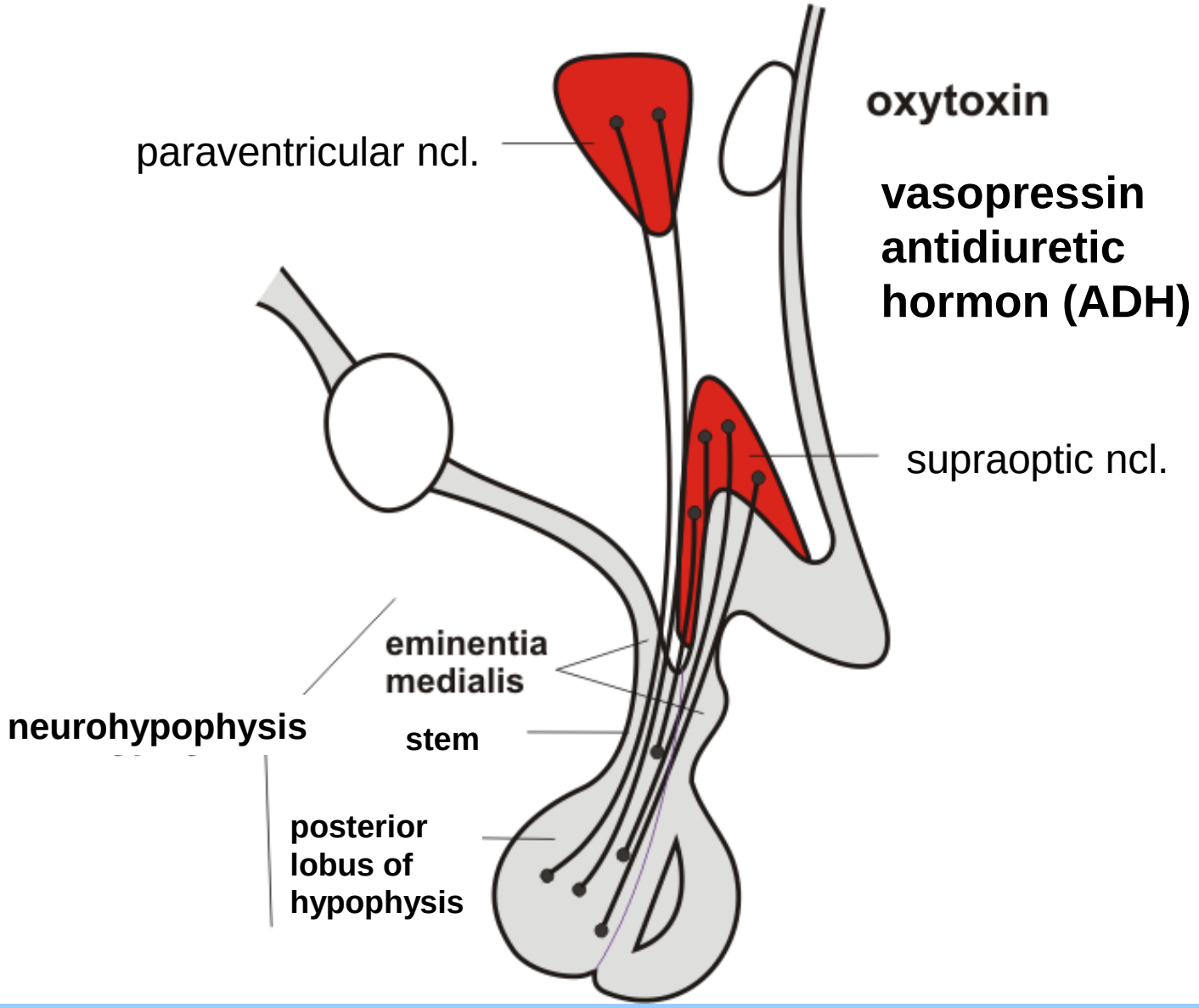
MIDDLE HYPOTHALAMUS

Ncl. arcuatus* - *capillary network in eminentia medialis – control of adenohypophysis - hypothalamo-hypophysial portal pathway

Ncl. ventromedialis* – *control of food intake (apestat)

Ncl. tuberales* - *capillary network in eminentia medialis – control of adenohypophysis - hypothalamo-hypophysial portal pathway

Hypothalamo-hypophysial pathway



Hypothalamo-hypophysial portal pathway