

Atlas of *Dbx1* mouse (P0) medulla oblongata

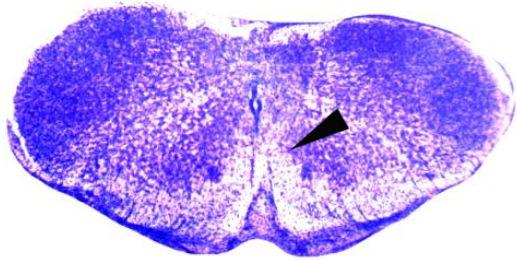
Ruangkittisakul A¹, Kottick A², Picardo MCD²,
Ballanyi K^{1*}, Del Negro CA^{2*}

¹ Department of Physiology, University of Alberta,
Edmonton, AB, Canada

² Department of Applied Science, The College of William & Mary,
Williamsburg, VA, USA

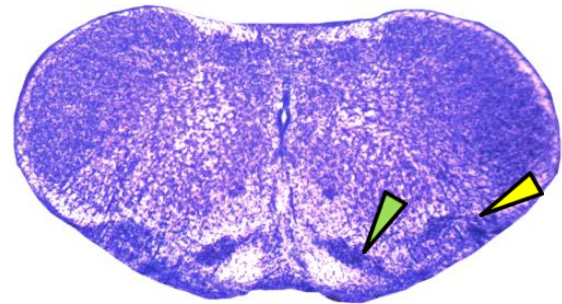
Abbreviations

| | |
|---------------------|--|
| AP | area postrema |
| IO | inferior olive |
| IOD | dorsal inferior olive |
| IOM | medial inferior olive |
| IOP | principal inferior olive |
| LRN | lateral reticular nucleus |
| NA | nucleus ambiguus, compact formation |
| NTB | nucleus of the trapezoid body |
| PD | pyramidal decussation |
| OBEX | Obex, the point where the central canal opens to the 4th ventricle |
| V4 | 4 th ventricle |
| VII | facial nucleus |
| VII _{dor} | dorsal nucleus of the facial nucleus |
| VII _{med} | medial nucleus of the facial nucleus |
| VIII _{lat} | lateral nucleus of the facial nucleus |
| XII | hypoglossal nucleus |

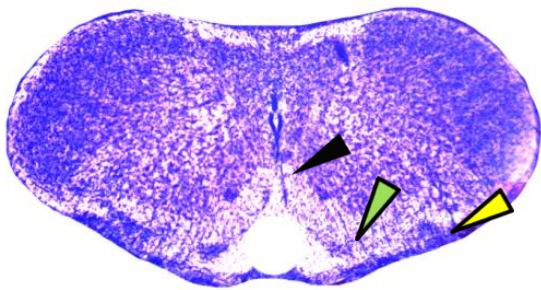


-0.95 mm

Spinal-medullary transition zone

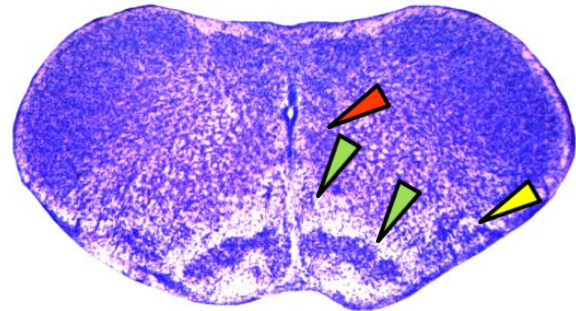


-0.85 mm



-0.90 mm

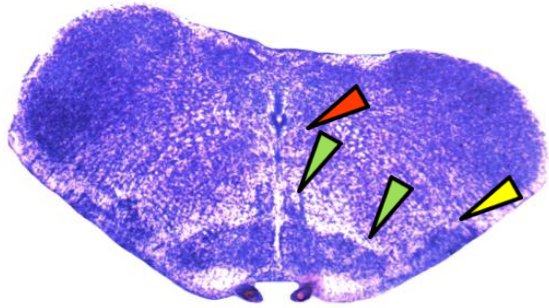
IOM: caudal end
LRN: caudal end
PD: rostral end



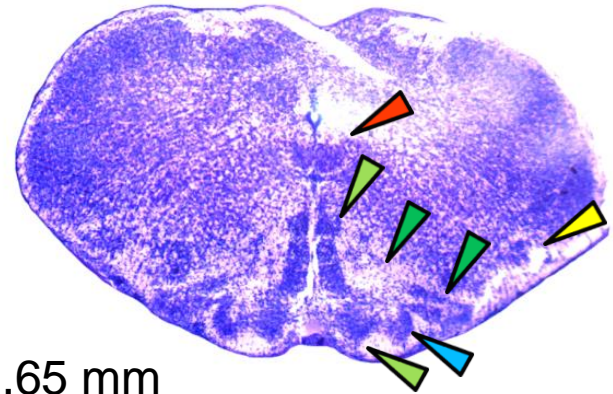
-0.80 mm

XII: caudal end

◄ PD ◄ LRN ◄ IOM ◄ XII

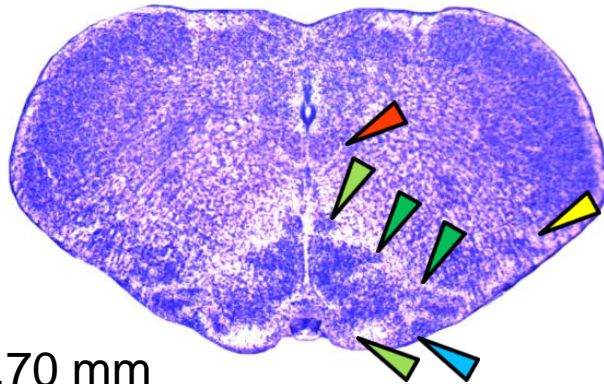


-0.75 mm



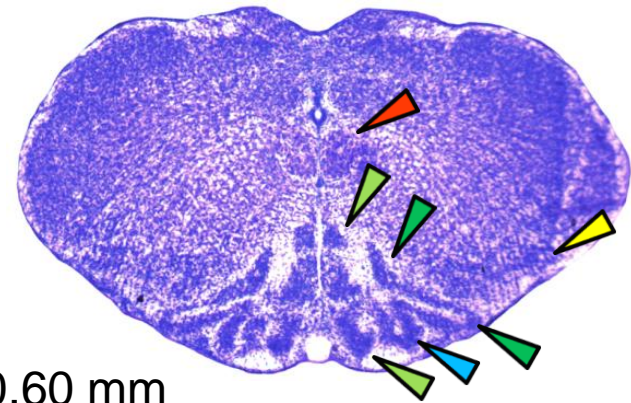
-0.65 mm

IOP: caudal end of 1st loop
 IOD: broken band toward ventral surface
 LRN: small



-0.70 mm

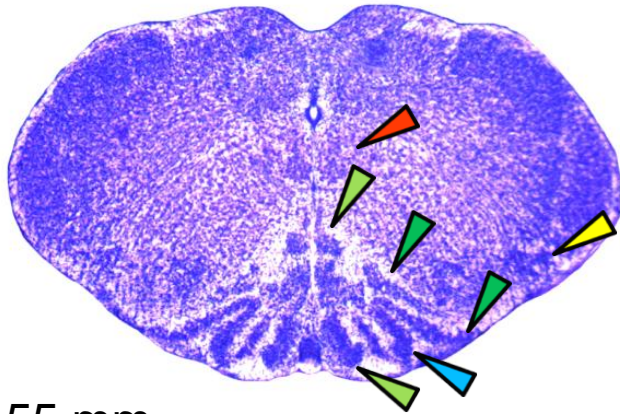
IOD: caudal end
 IOP: caudal end



-0.60 mm

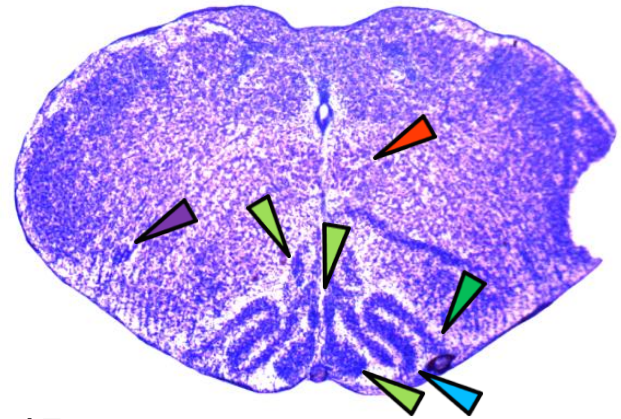
IOP: small 1st loop
 IOD: big dorsal band, forms 2nd loop

 IOD
  IOM
  IOP
  LRN
  XII



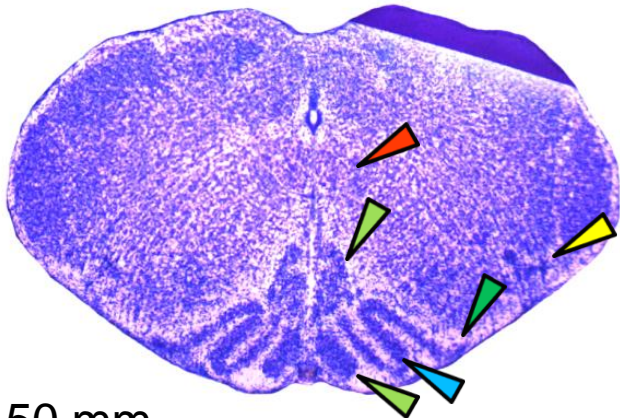
-0.55 mm

IOD: small dorsal band,
rostral end of 2nd loop



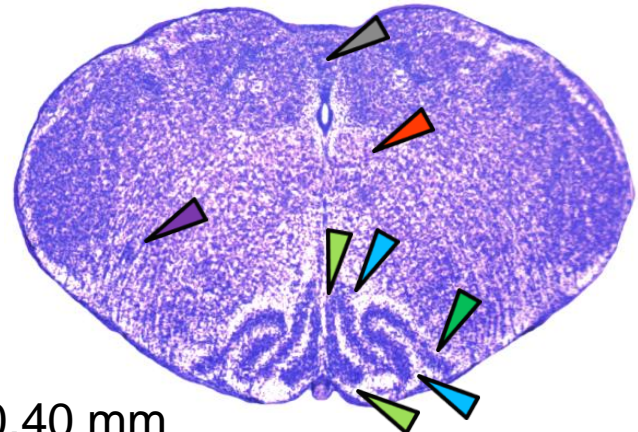
-0.45 mm

IOM: rostral end of dorsal part,
dorsal tip elongated



-0.50 mm

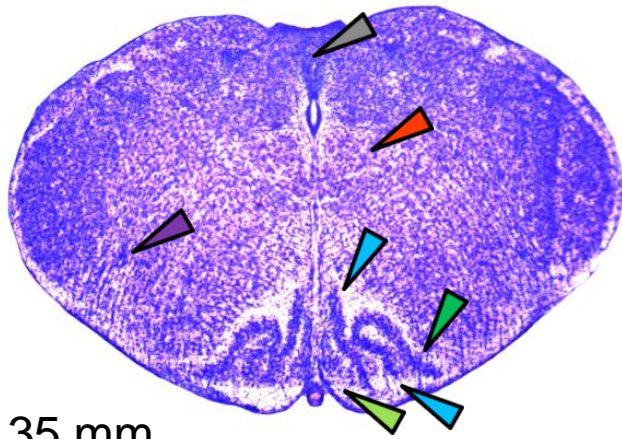
IOM: sharp dorsal cap
IOP: prominent 1st loop
IOD: lateral part flat
LRN: rostral end



-0.40 mm

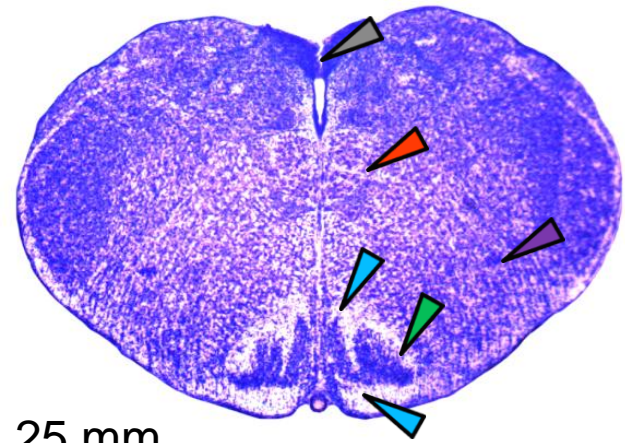
IOM: dorsal tip narrowed
IOP: dorsal part straight edge
AP: caudal end. Obex.

◀ AP
 ◀ IOD
 ◀ IOM
 ◀ IOP
 ◀ LRN
 ◀ NA
 ◀ XII



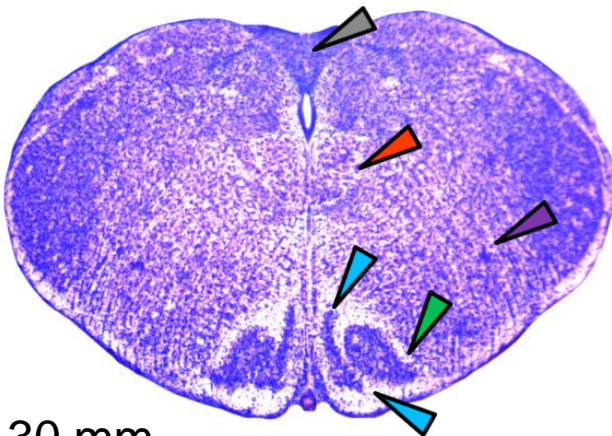
-0.35 mm

IOM: small, rostral end



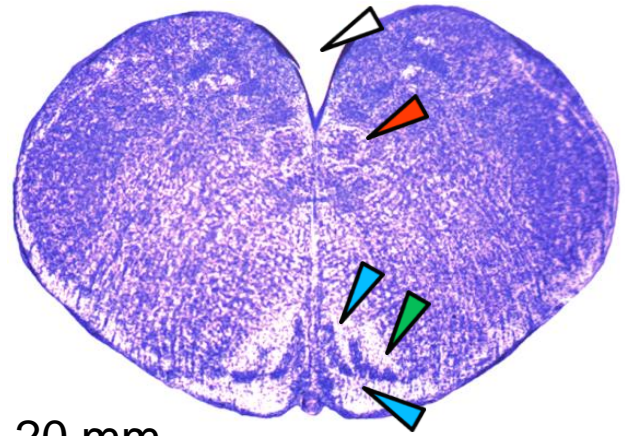
-0.25 mm

IOP: dorsal part reaches midline
IOP, IOD: small



-0.30 mm

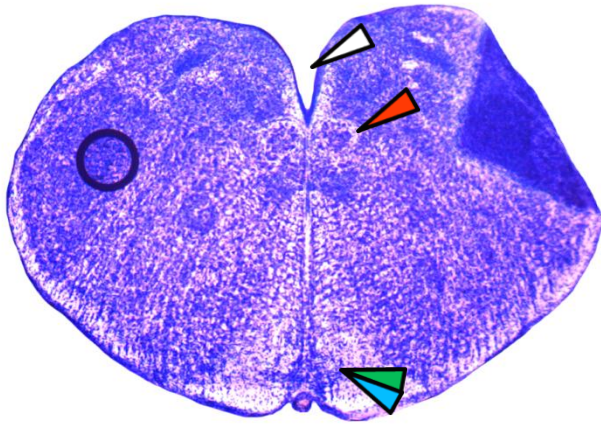
IOP: rostral end of 1st loop
IOD: thick, unites with IOP



-0.20 mm

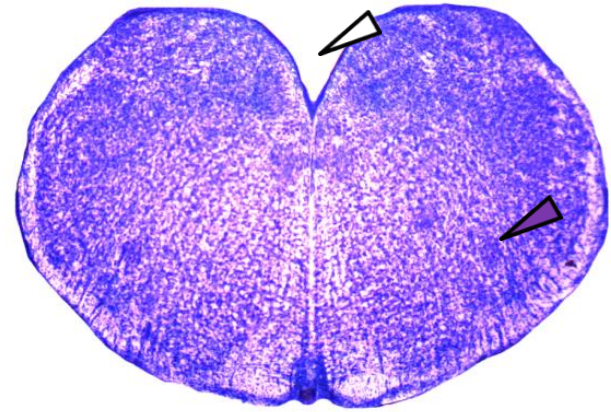
IOP, IOD: small
XII: small

AP
 IOD
 IOM
 IOP
 NA
 V4
 XII



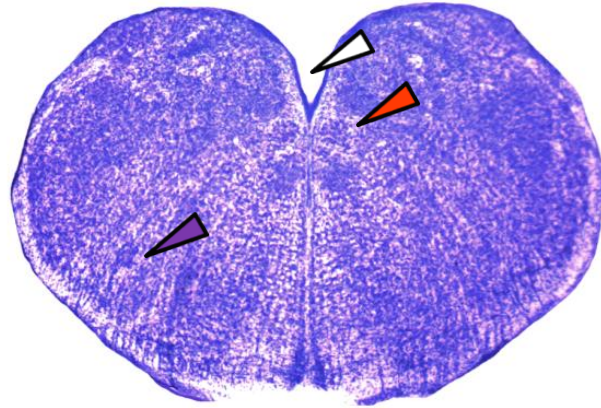
-0.15 mm

IOD and IOP united, rostral end



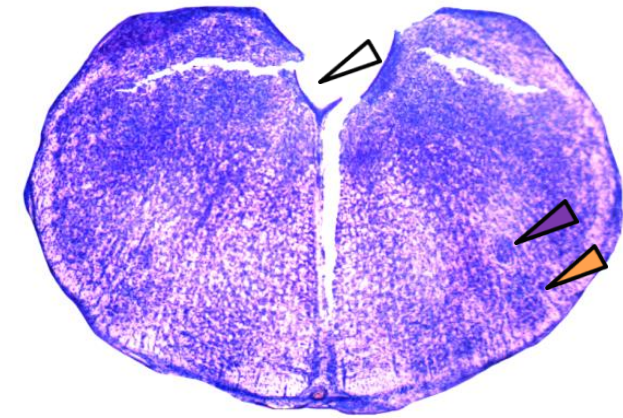
-0.05 mm

No IOP/IOD, no VII



-0.10 mm

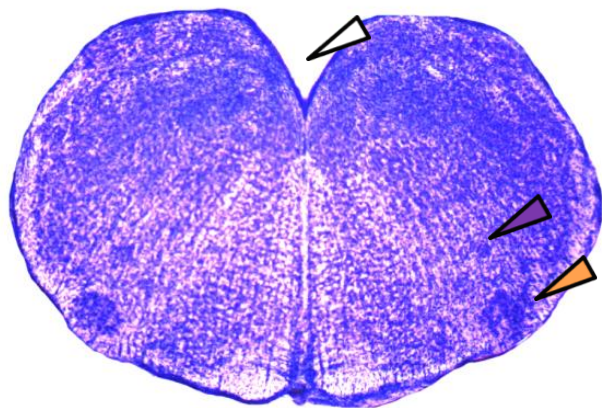
XII: rostral end
No IOP/IOD, no VII



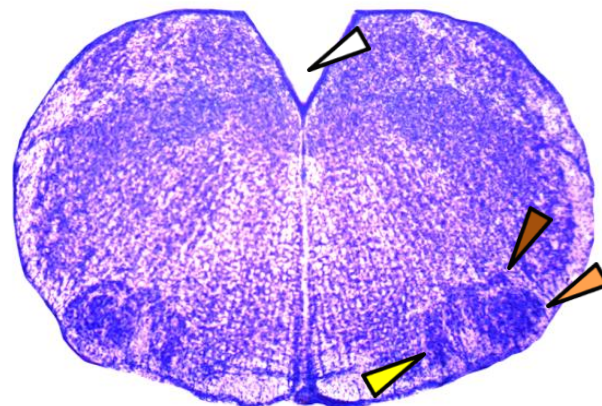
0.00 mm

VII_{lat}: caudal end

◀ IOD ◀ IOP ◀ NA ◀ VII_{lat} ◀ V4 ◀ XII

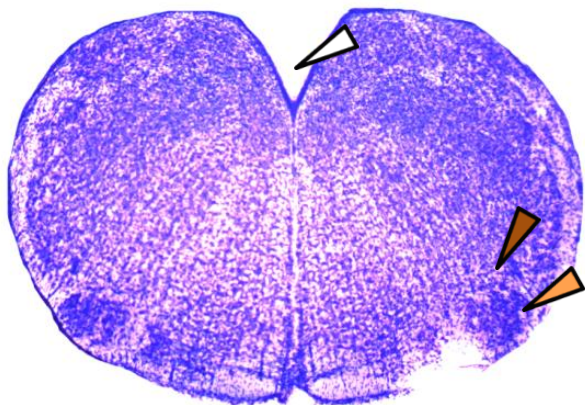


0.05 mm



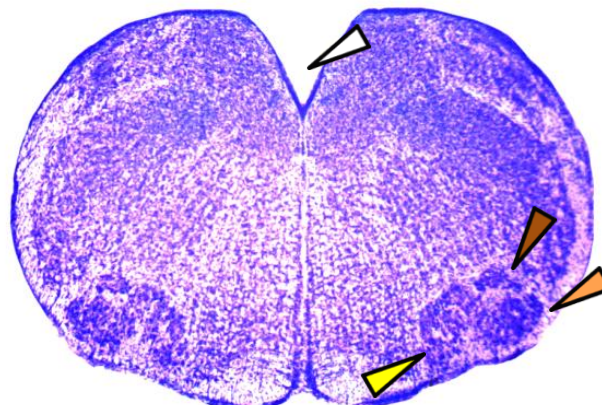
0.15 mm

VII_{med}: caudal end



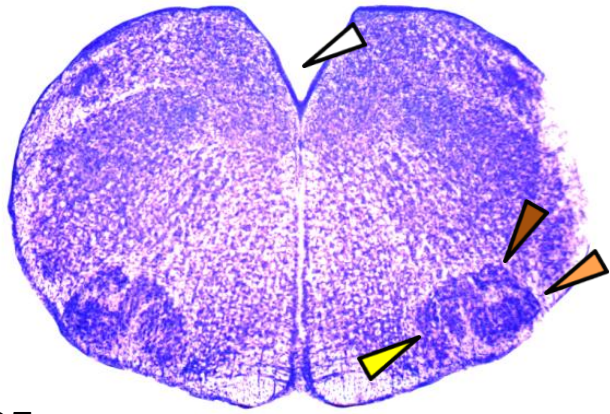
0.10 mm

VII_{dor}: caudal end

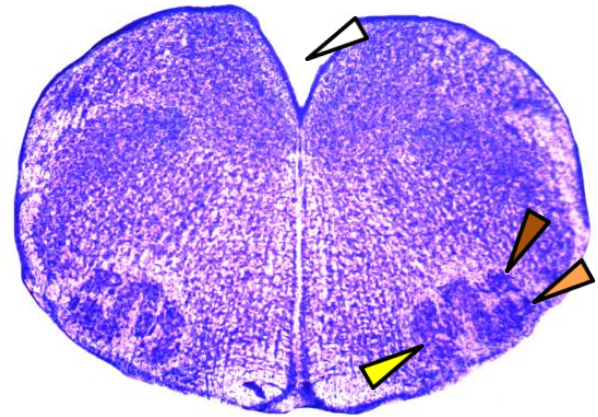


0.20 mm

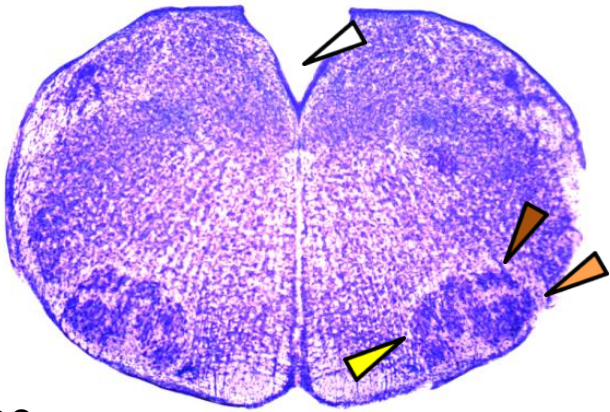
NA VII_{lat} VII_{dor} VII_{med} V4



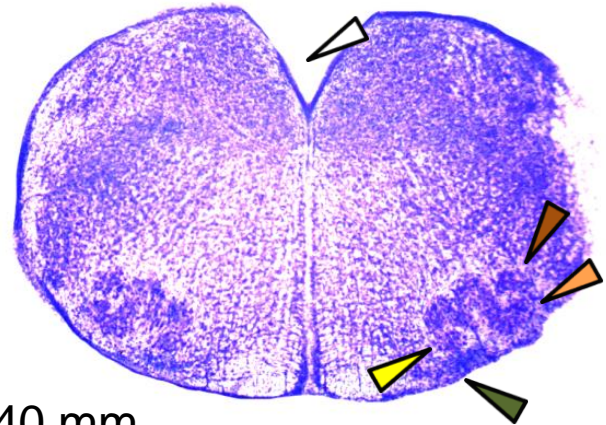
0.25 mm



0.35 mm



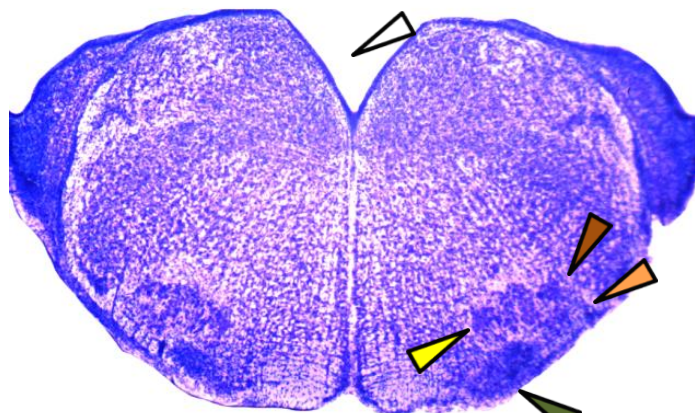
0.30 mm



0.40 mm

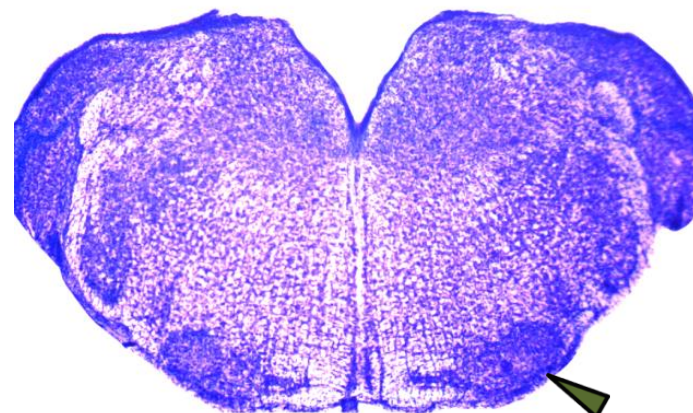
NTB: caudal end

NTB VII_{lat} VII_{dor} VII_{med} V4

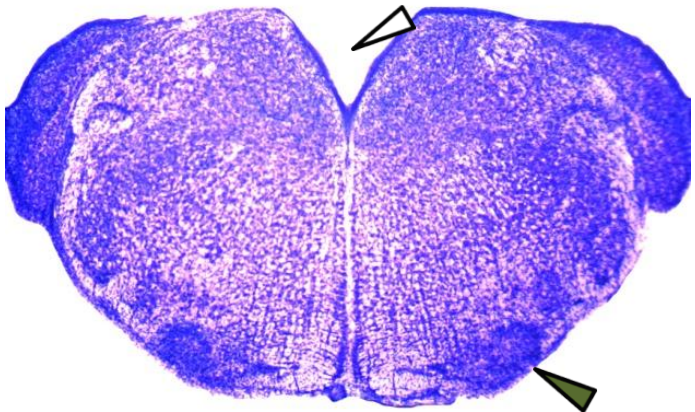


0.45 mm

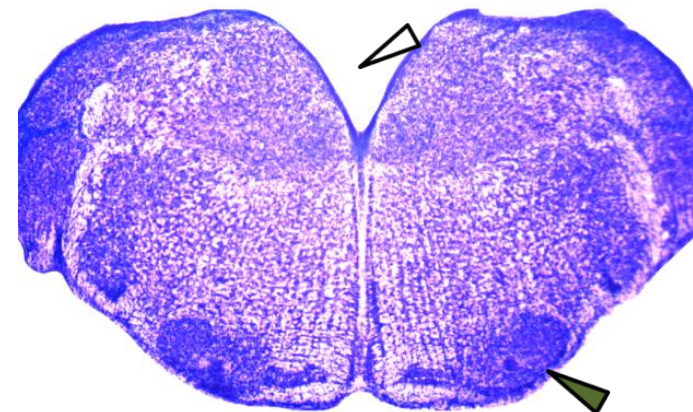
VII: rostral end



0.55 mm



0.50 mm



0.60 mm

NTB VII_{lat} VII_{dor} VII_{med} V4