

Atlas of *Dbx1* mouse (P4) medulla oblongata

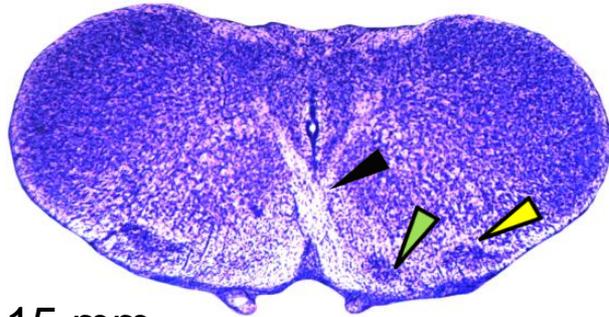
Ruangkittisakul A¹, Kottick A², Picardo MCD²,
Ballanyi K^{1*}, Del Negro CA^{2*}

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

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

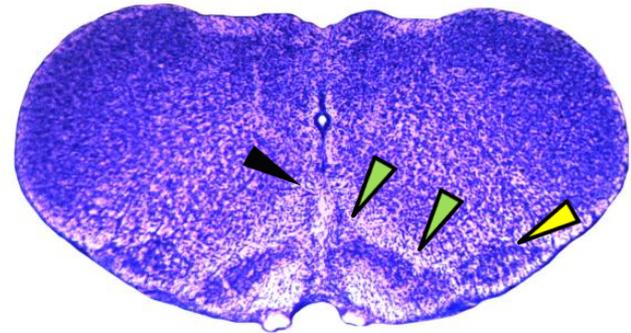
Abbreviations

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
VII _{lat}	lateral nucleus of the facial nucleus
XII	hypoglossal nucleus



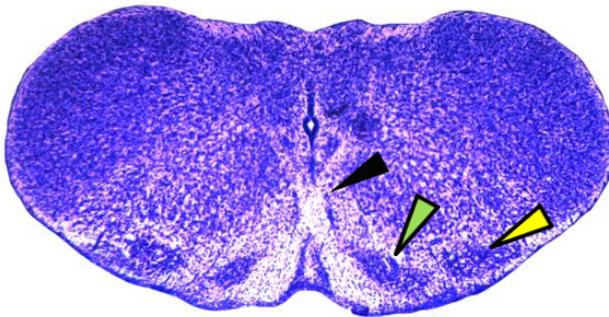
-1.15 mm

Spinal-medullary transition zone
IOM: caudal end
LRN: caudal end

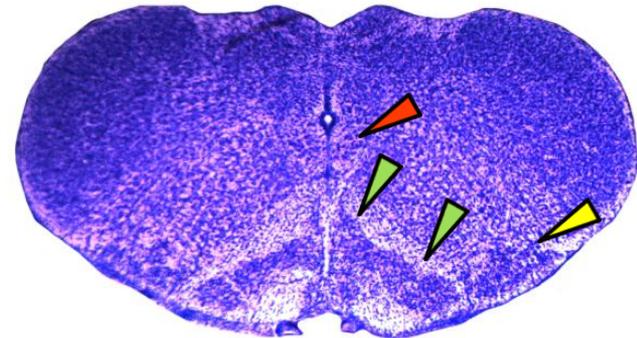


-1.05 mm

PD: rostral end
IOM: with dorsal cap



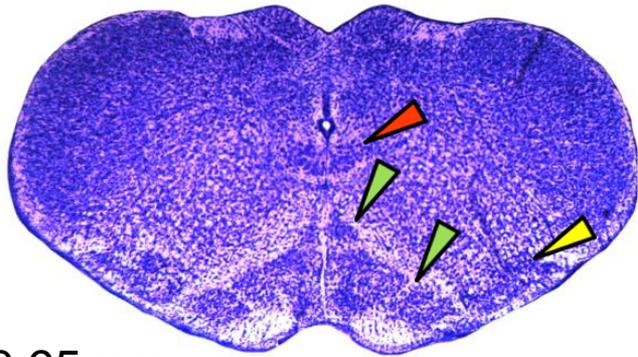
-1.10 mm



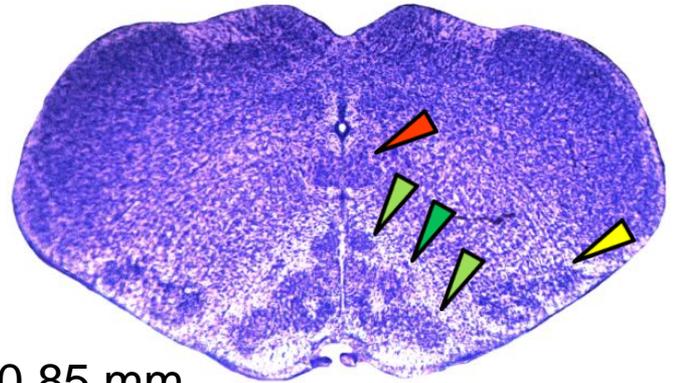
-1.00 mm

XII: caudal end

◀ PD ▶ LRN ▶ IOM ▶ XII

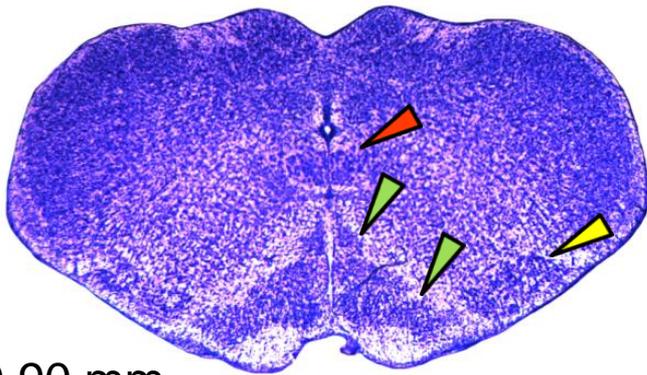


-0.95 mm

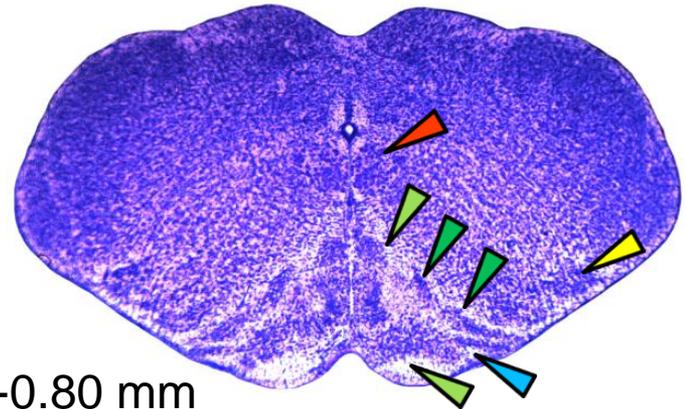


-0.85 mm

IOD: caudal end



-0.90 mm

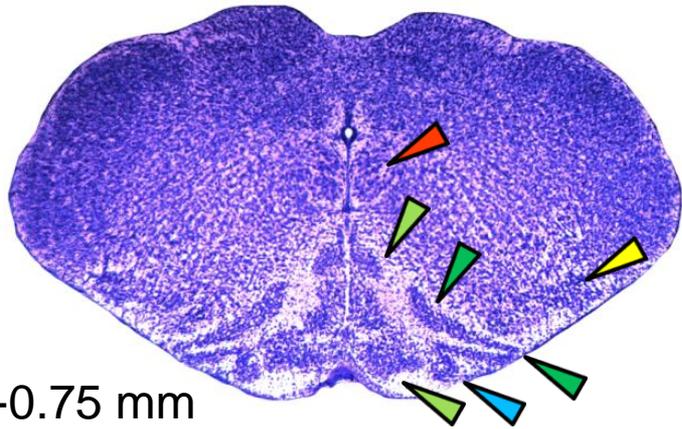


-0.80 mm

IOP: caudal end

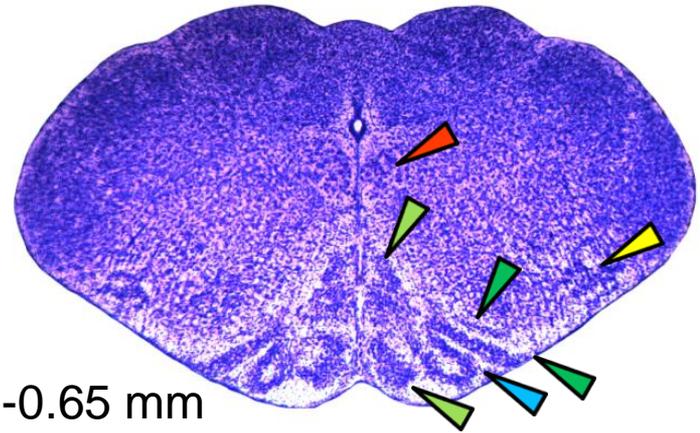
IOD: broken band toward ventral surface

◀ IOD ◀ IOM ◀ IOP ◀ LRN ◀ XII



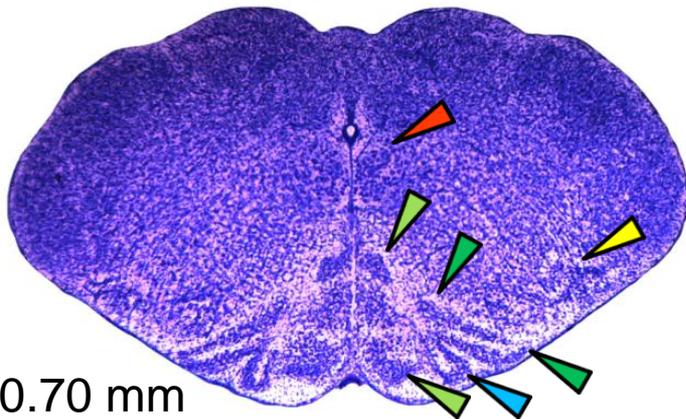
-0.75 mm

IOP: caudal end of 1st loop
 IOD: big dorsal band, forms 2nd loop



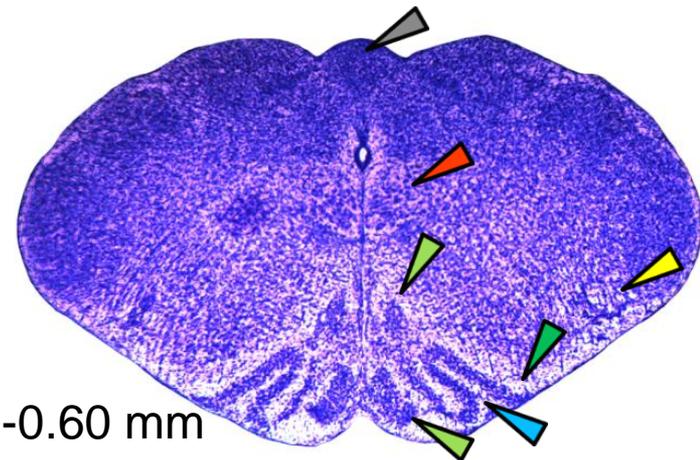
-0.65 mm

IOD: rostral end of dorsal band and 2nd loop
 IOM: sharp dorsal cap



-0.70 mm

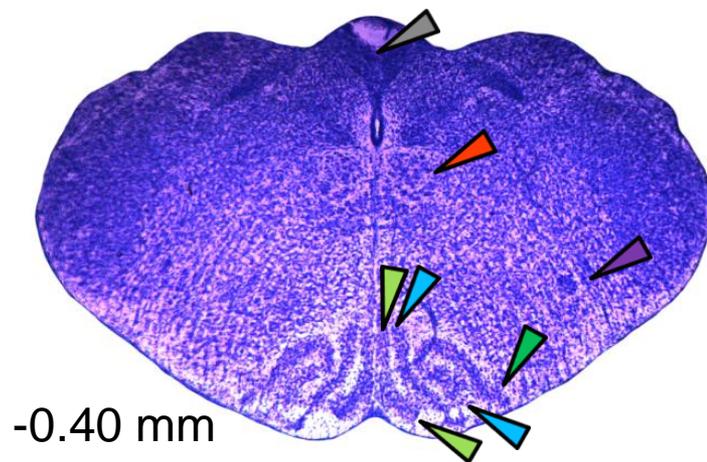
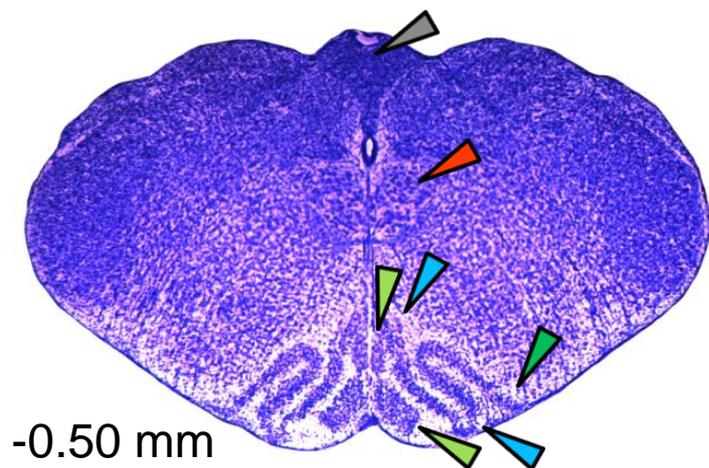
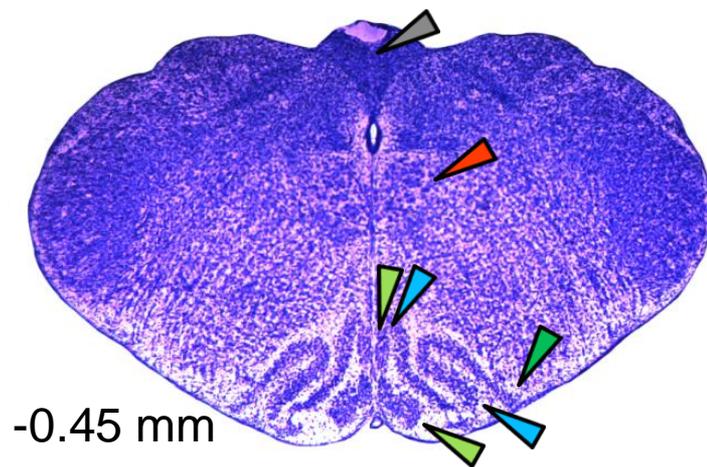
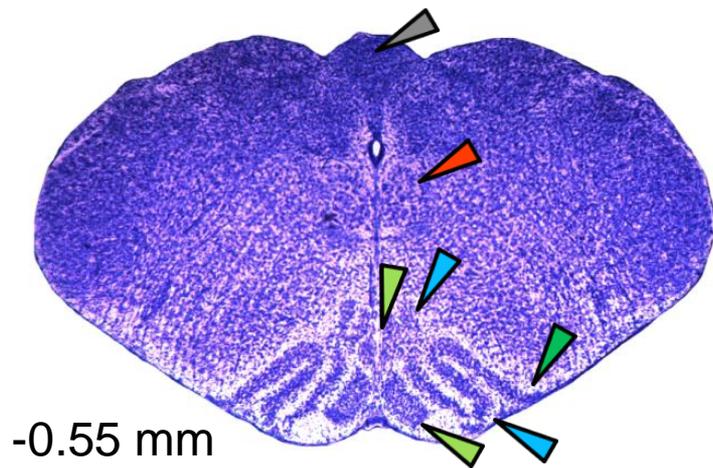
IOD: smaller dorsal band



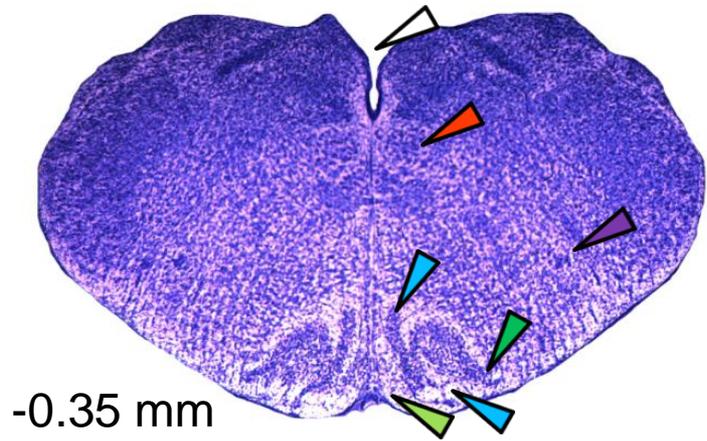
-0.60 mm

IOM: rostral end of dorsal part
 IOP: prominent 1st loop
 IOD: lateral part flat.
 LRN: rostral end. AP: caudal end. Obex.

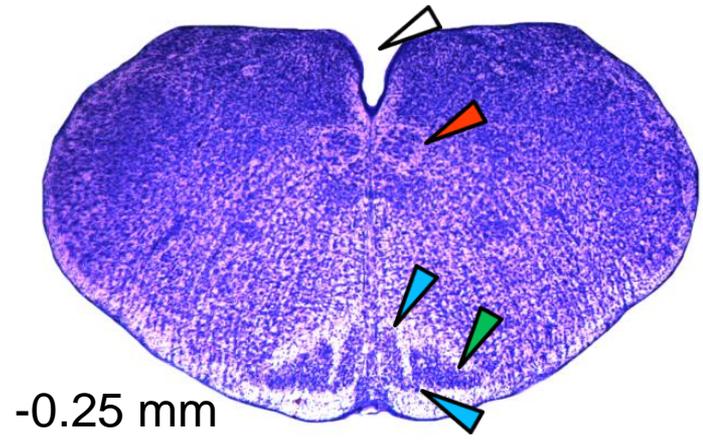
AP
 IOD
 IOM
 IOP
 LRN
 XII



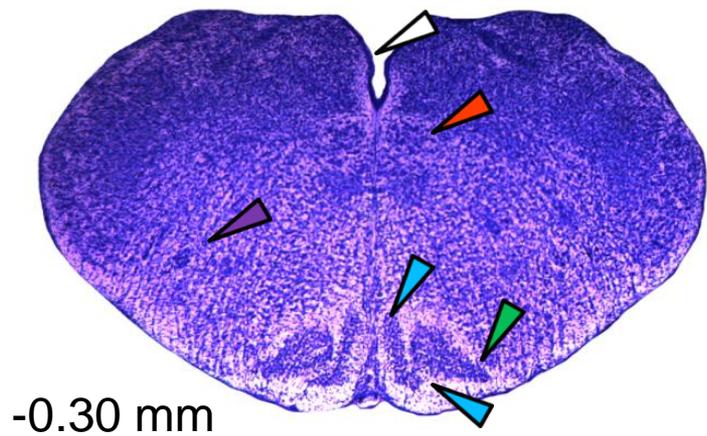
◄ AP ◄ IOD ◄ IOM ◄ IOP ◄ NA ◄ V4 ◄ XII



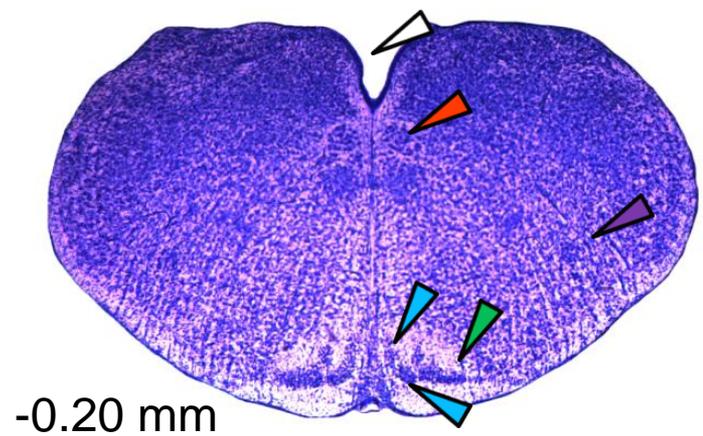
IOM: small, rostral end
IOP: 1st loop small



IOP: small, dorsal part round
IOD: small

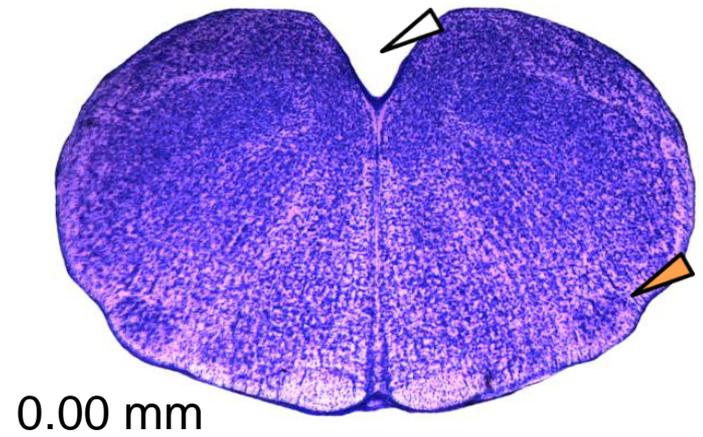
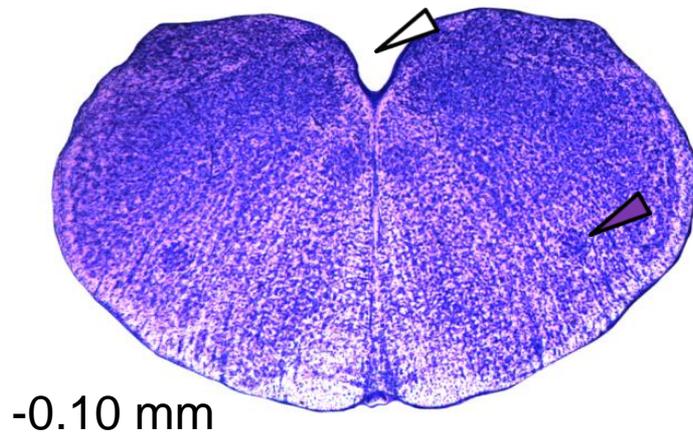
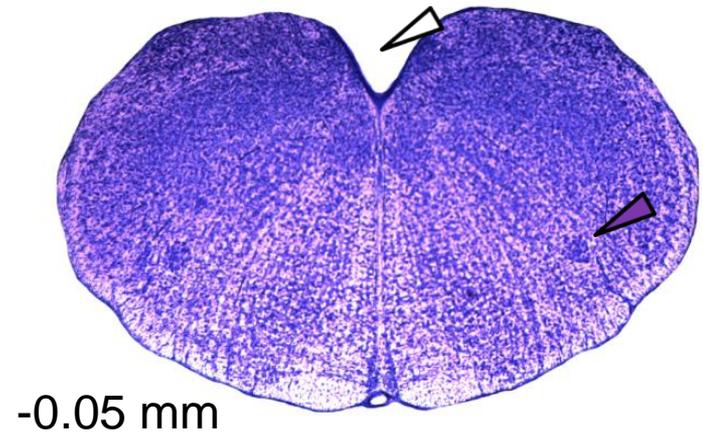
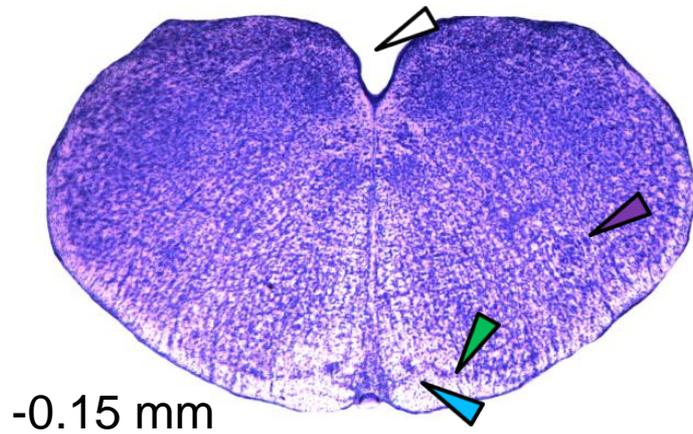


IOP: rostral end of 1st loop
IOD: thick, unites with IOP

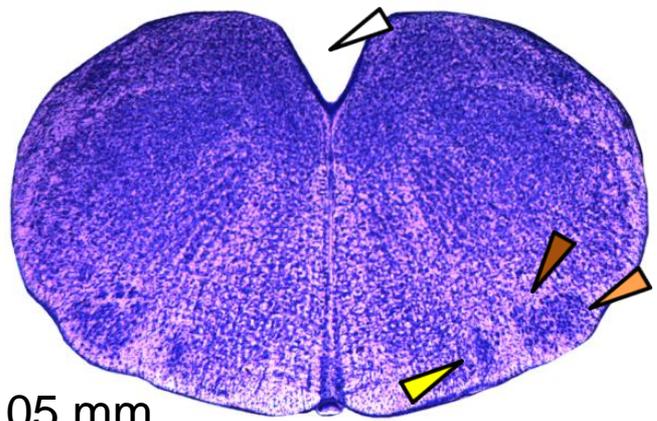


IOD and IOP small

 IOD
  IOM
  IOP
  NA
  V4
  XII

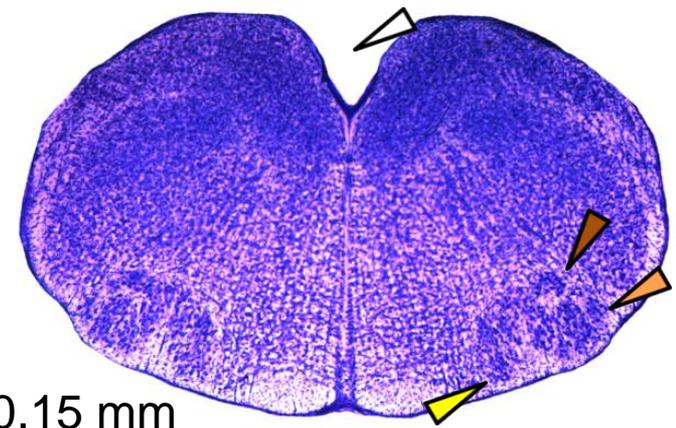


▶ IOD ▶ IOP ▶ NA ▶ VII_{lat} ▶ V4

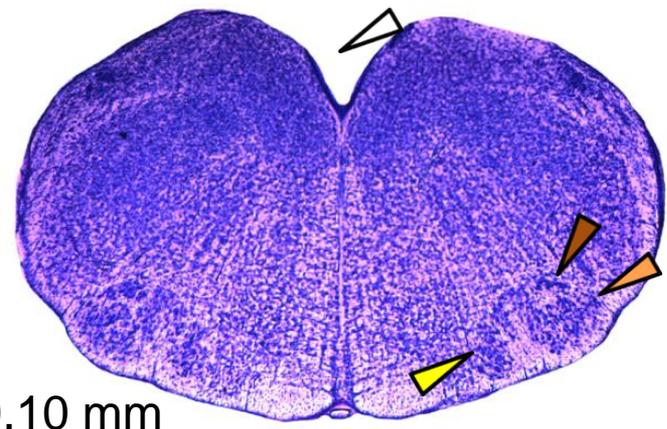


0.05 mm

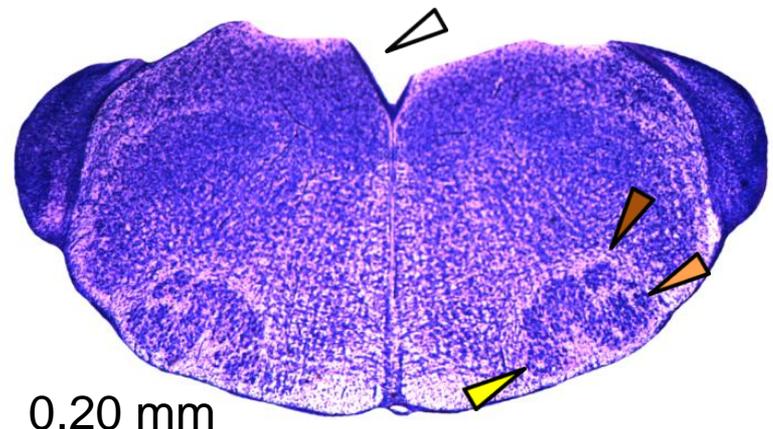
VII_{dor}, VII_{med}: caudal end



0.15 mm

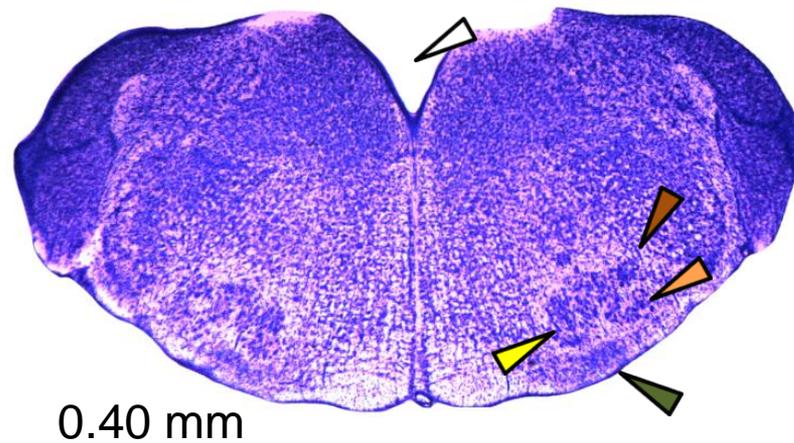
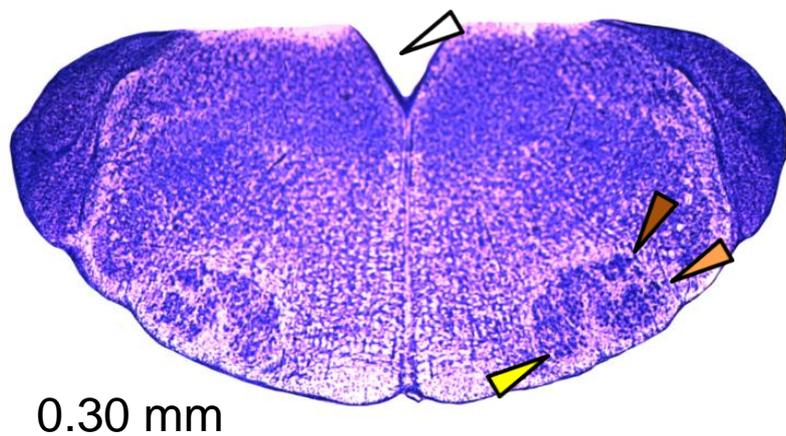
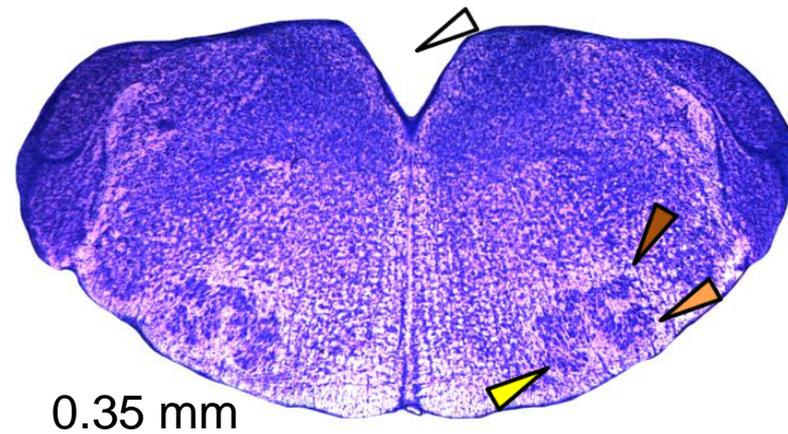
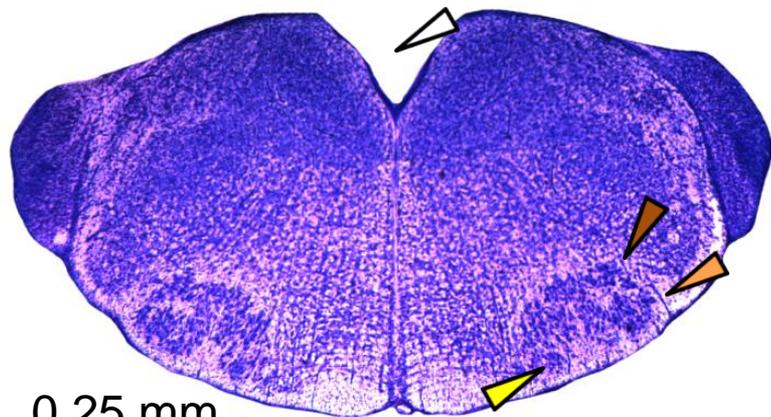


0.10 mm



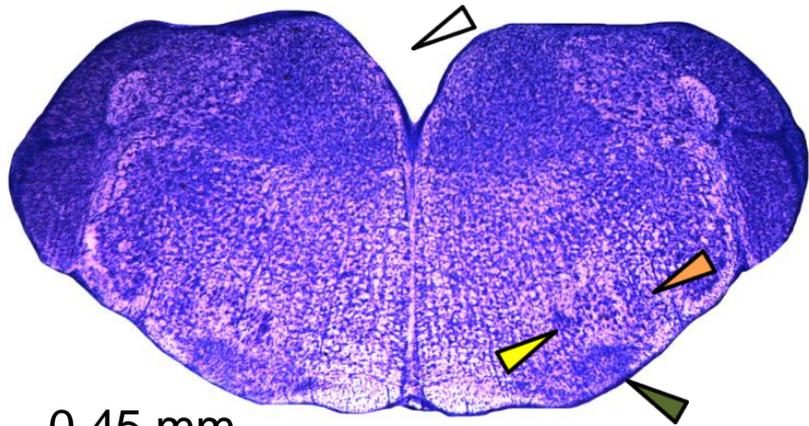
0.20 mm

◀ VII_{lat} ◀ VII_{dor} ◀ VII_{med} ◀ V4



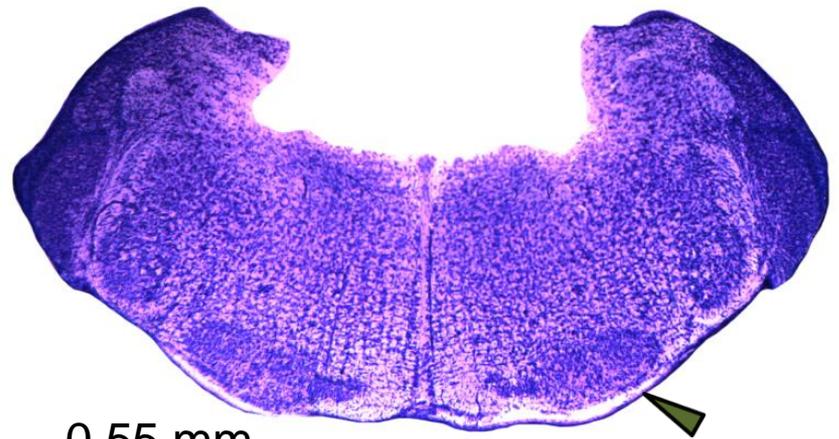
NTB: caudal end
VII_{dor}: rostral end

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

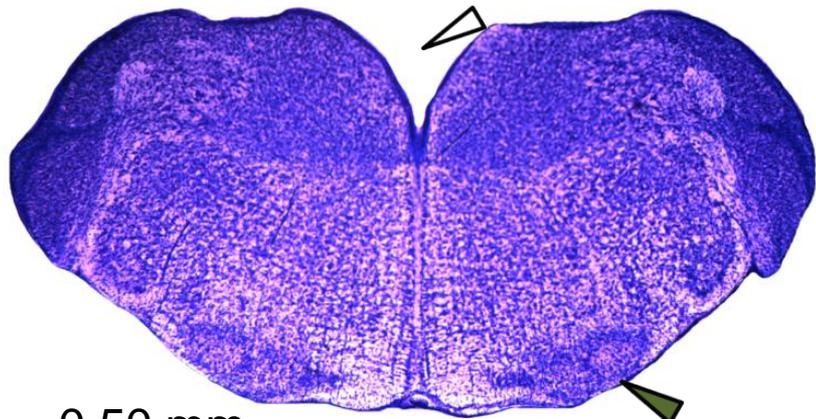


0.45 mm

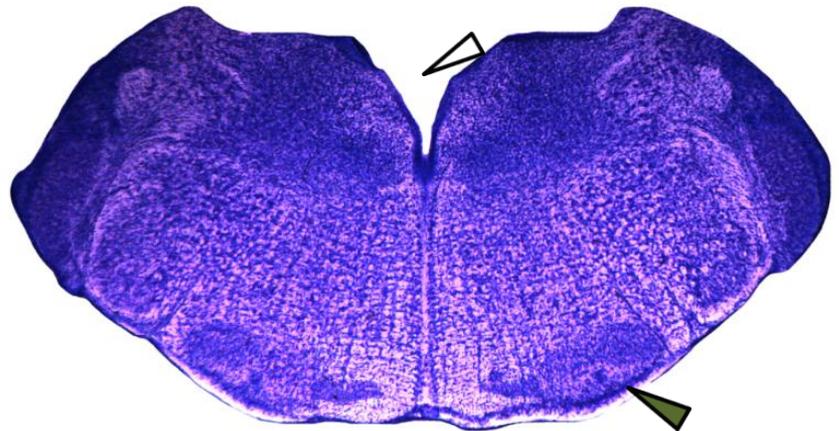
VII_{lat}, VII_{med}: rostral end



0.55 mm



0.50 mm



0.60 mm

NTB VII_{lat} VII_{med} V4