

ATLAS OF THE DEVELOPING RAT BRAIN IN STEREOTAXIC COORDINATES

P21

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Atlas presents a series of microphotographs of coronal 200 micron brain sections of a P21 Wistar rat (weight 55 g). Sections were cut vertical to the horizontal plane extending from bregma to lambda. Therefore using this atlas requires position of the rat head with bregma and lambda adjusted to the same height. Sections at bregma and lambda levels are marked with Dil-trace. Additional Dil trace across the whole brain was used to control slicing vertical to the horizontal plane. Sections were prepared from the paraformaldehyde and glutaraldehyde fixed brains through vibroslicing. No coloration was used. Microphotographs were made from the wet sections in oblique light. Atlas starts with a list of abbreviations and an outline of the brain view from above.

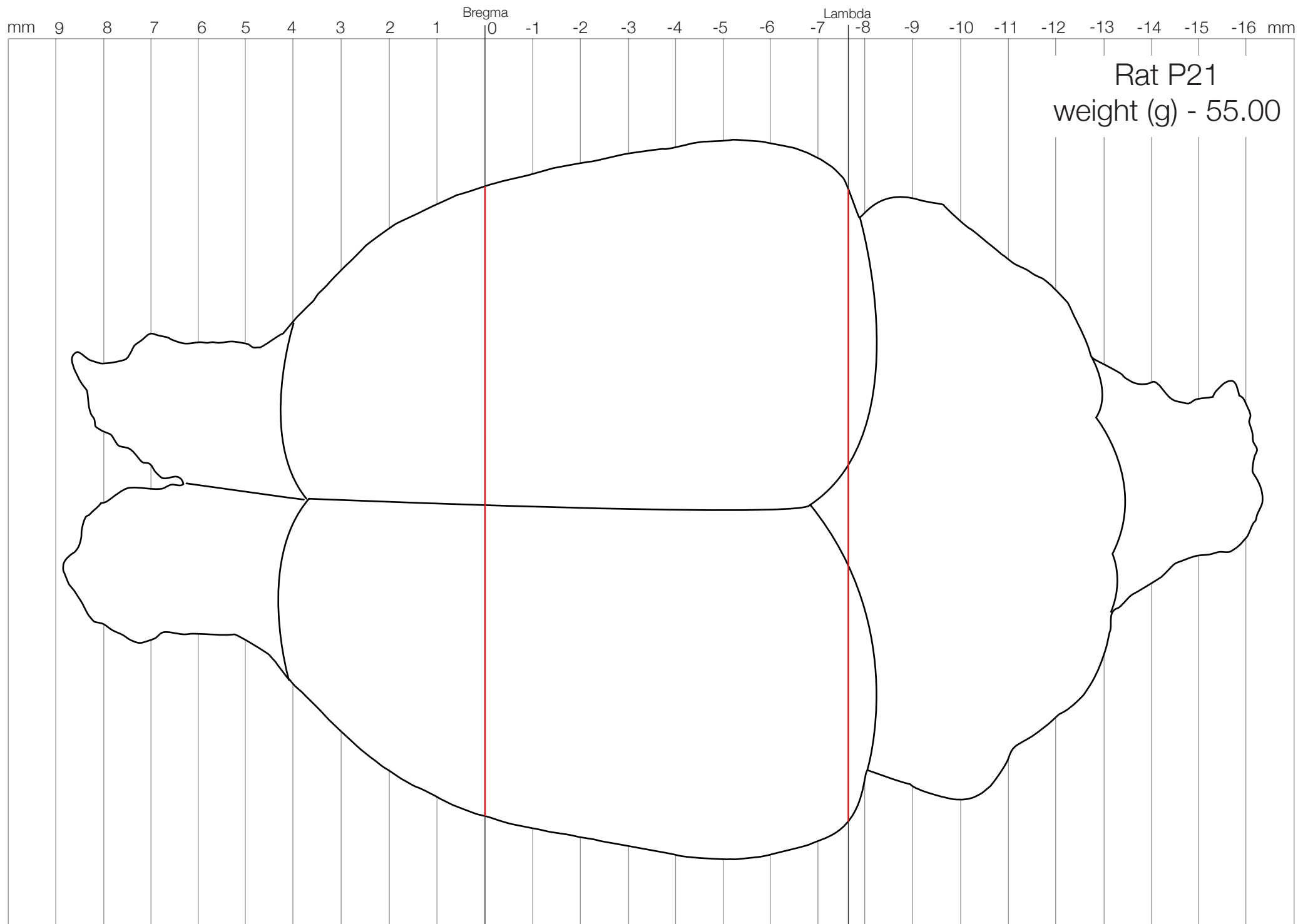
For additional information see (reference to the Frontiers in Neuroanatomy data report).

List of Structures

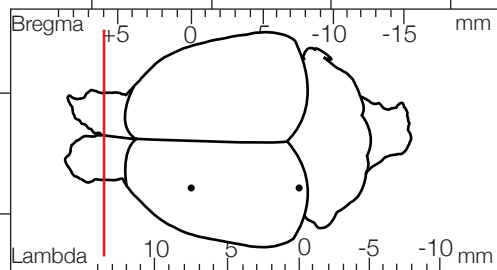
3V 3rd Ventricle
 4V 4th Ventricle
 Acb Accumbens nu
 Aq Aqueduct Sylvius
 Am Ambiguus nu
 A Amygdala
 ac anterior commissure
 Arc Arcuate hypothalamic nu
 Au Auditory cortex
 BL Basolateral amygdala nu
 CA1 CA1
 CA3 CA3
 CPu Caudate Putamen
 CC Central Canal
 cp cerebral peduncle
 Cg Cingulate cortex
 Cl Claustrum
 cc corpus callosum
 Cnf Cuneiform nu
 DG Dentate Gyrus
 DB Diagonal Band
 DR Dorsal Raphe nu
 DLG Dorso Lateral Geniculate
 End Endopyriform nu
 Ent Entorhinal cortex
 7n Facial nerve
 7 Facial nu
 fi fimbria
 f fornix

F Frontal cortex
 g7 genu of facial nerve
 Hb Habenula
 H Hilus
 12 hypoglossal nucleus
 hypo hypothalamus
 icp inferior cerebellar peduncle
 IC Inferior Colliculus
 IO Inferior Olive
 ic internal capsule
 IPR Interpeduncular nu
 La Lateral amygdala nu
 lo lateral olfactory tract
 LSD Lateral Septal Dorsal nu
 LSI Lateral Septum Intermediate
 LT Lateral Thalamus
 LV Lateral Ventricle
 LC Locus Coeruleus
 mt mamillothalamic tract
 MG Medial Geniculate nu
 MR Medial Raphe nu
 MS Medial Septal nu
 Me5 Mesencephalic trigemic nu
 mcp middle cerebellar peduncle
 M Motor cortex
 M2 Motor cortex
 m5 motor root trigeminus
 3 oculomotor n
 OB Olfactory Bulb
 ON Olfactory Nu
 Tu olfactory Tubercle

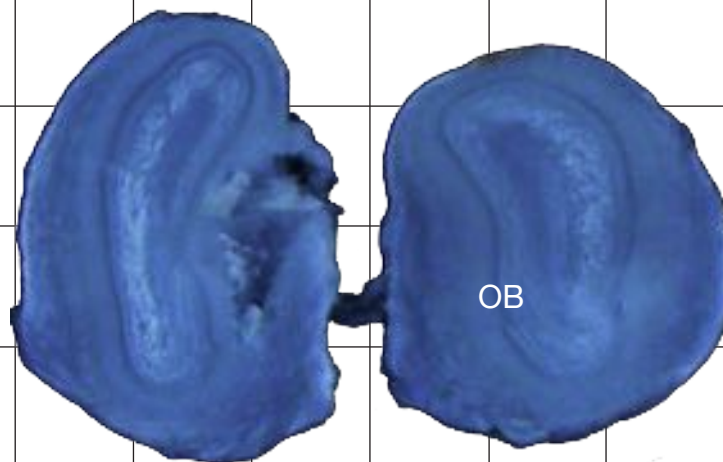
ox optic chiasma
 opt optic tract
 O Orbital cortex
 PB Parabraquial nu
 Par Parietal cortex
 PAG Periaqueductal Gray
 Pir Piriform cortex
 Pn Pontine nu
 PnR Pontine Raphe nu
 pc posterior commissure
 M1 primary Motor cortex
 py pyramidal tract
 RM Raphe Magnus nu
 RS Retrosplenial cortex
 rf rhinal fissure
 s5 sensory root trigeminus
 Sol Solitary nu
 S1 Somatosensory 1
 S1BF Somatosensory 1 Barrel Field
 S Subiculum
 SN Substantia Nigra
 SNC Substantia Nigra Compacta
 SNR Substantia Nigra Reticulata
 STh Subthalamic nu
 scp superior cerebellar peduncle
 SC Superior Colliculus
 SCh Suprachiasmatic nu
 VT Ventral Thalamus
 VLG Vento Lateral Geniculate nu
 Vi Visual cortex



mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



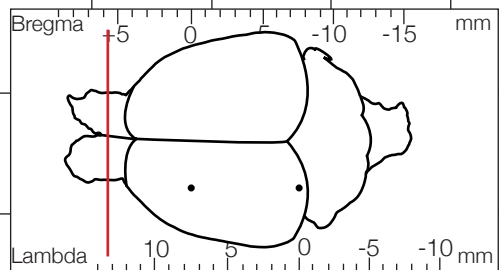
Rat P21 Figure 6



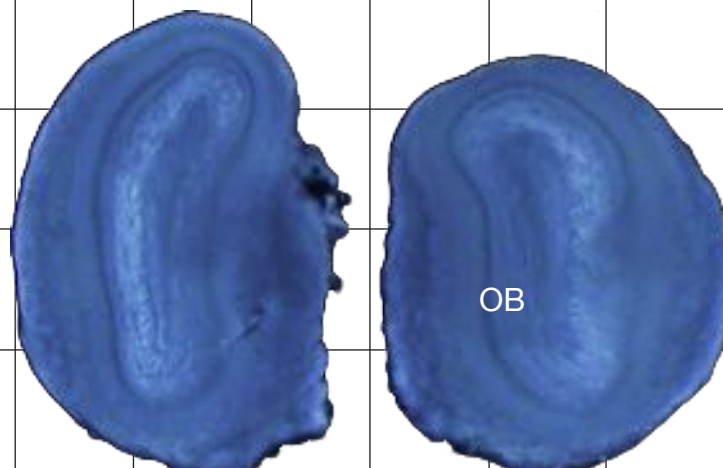
Bregma 6.00 mm
Lambda 13.60 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



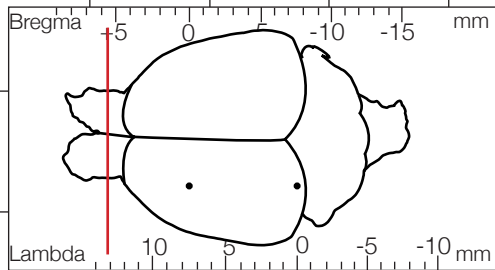
Rat P21 Figure 7



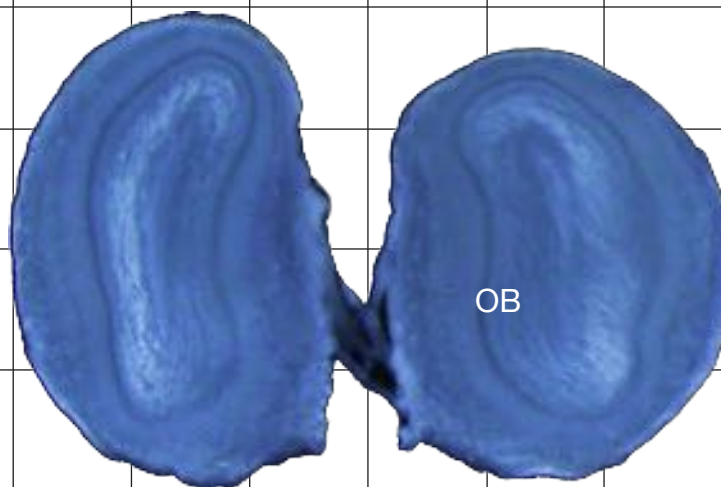
Bregma 5.80 mm
Lambda 13.40 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



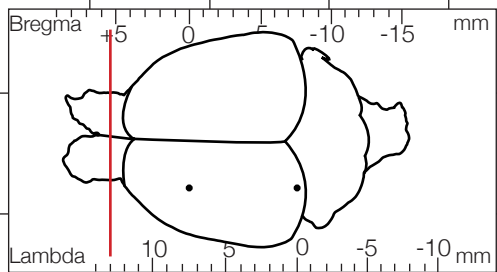
Rat P21 Figure 8



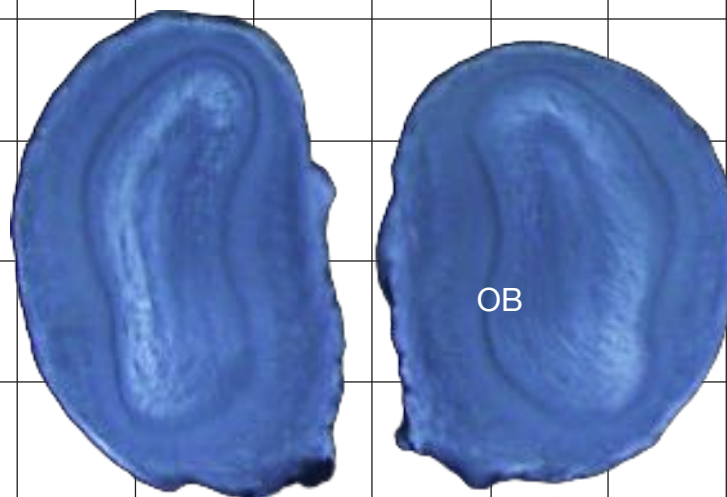
Bregma 5.60 mm
Lambda 13.20 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

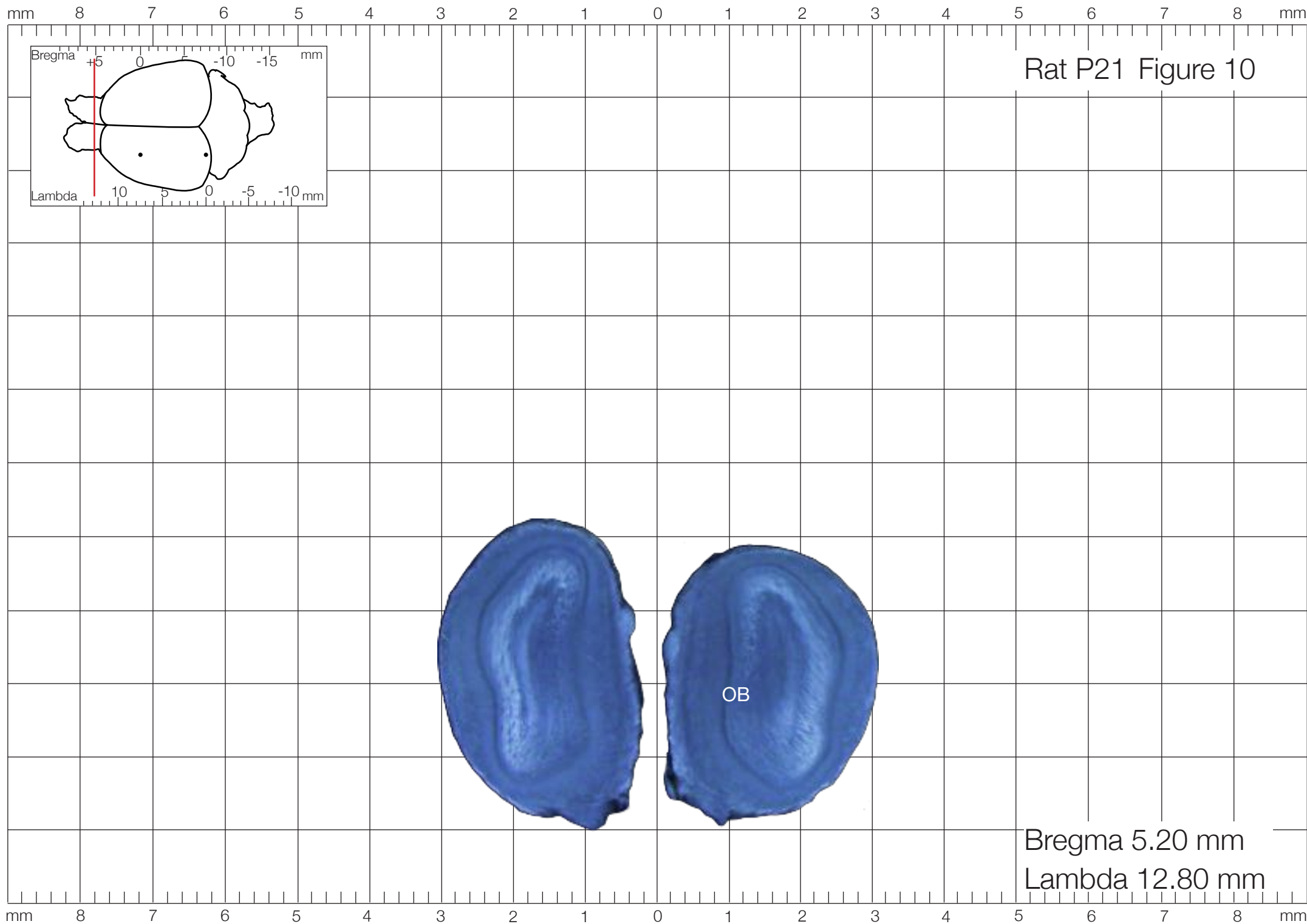


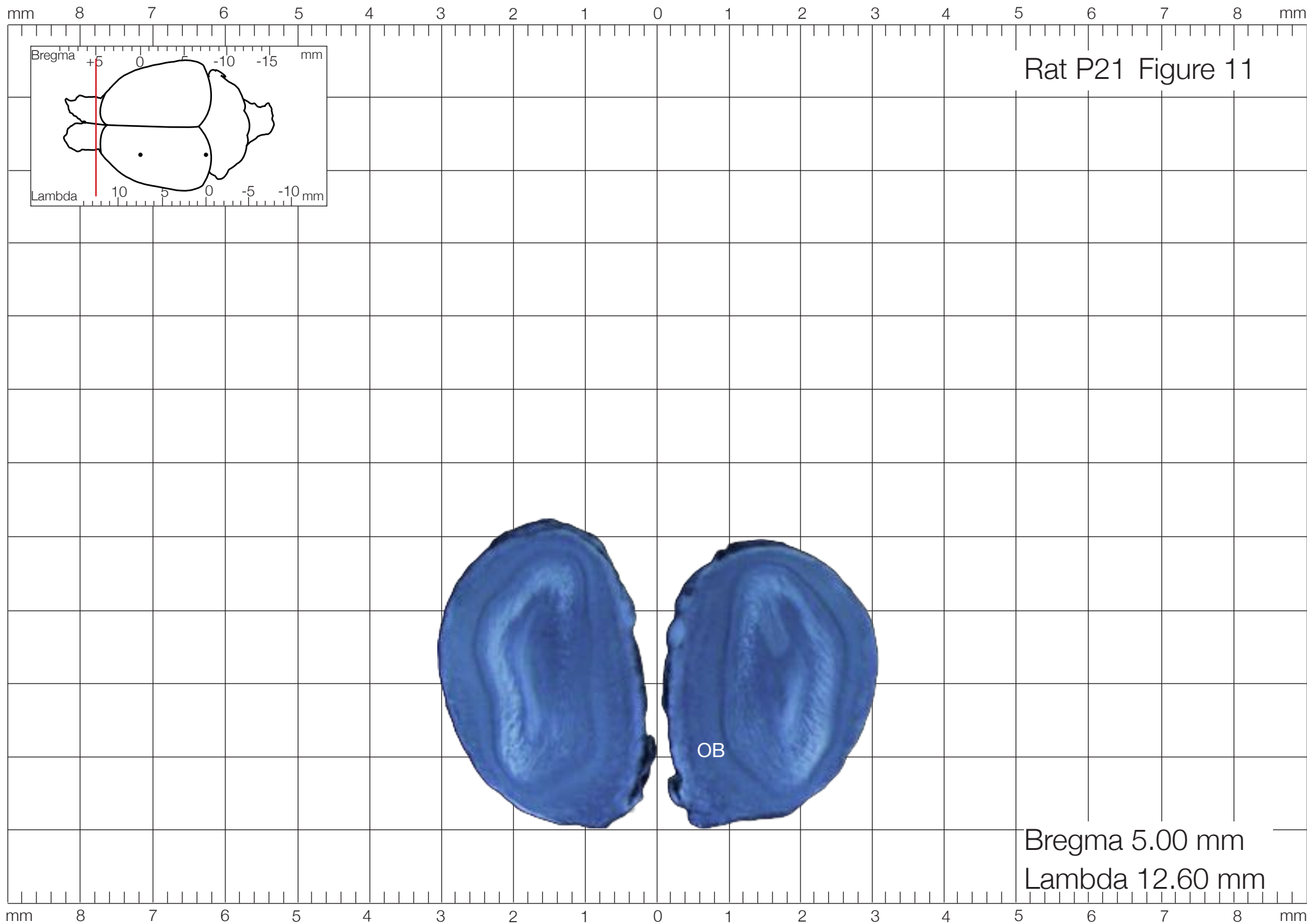
Rat P21 Figure 9

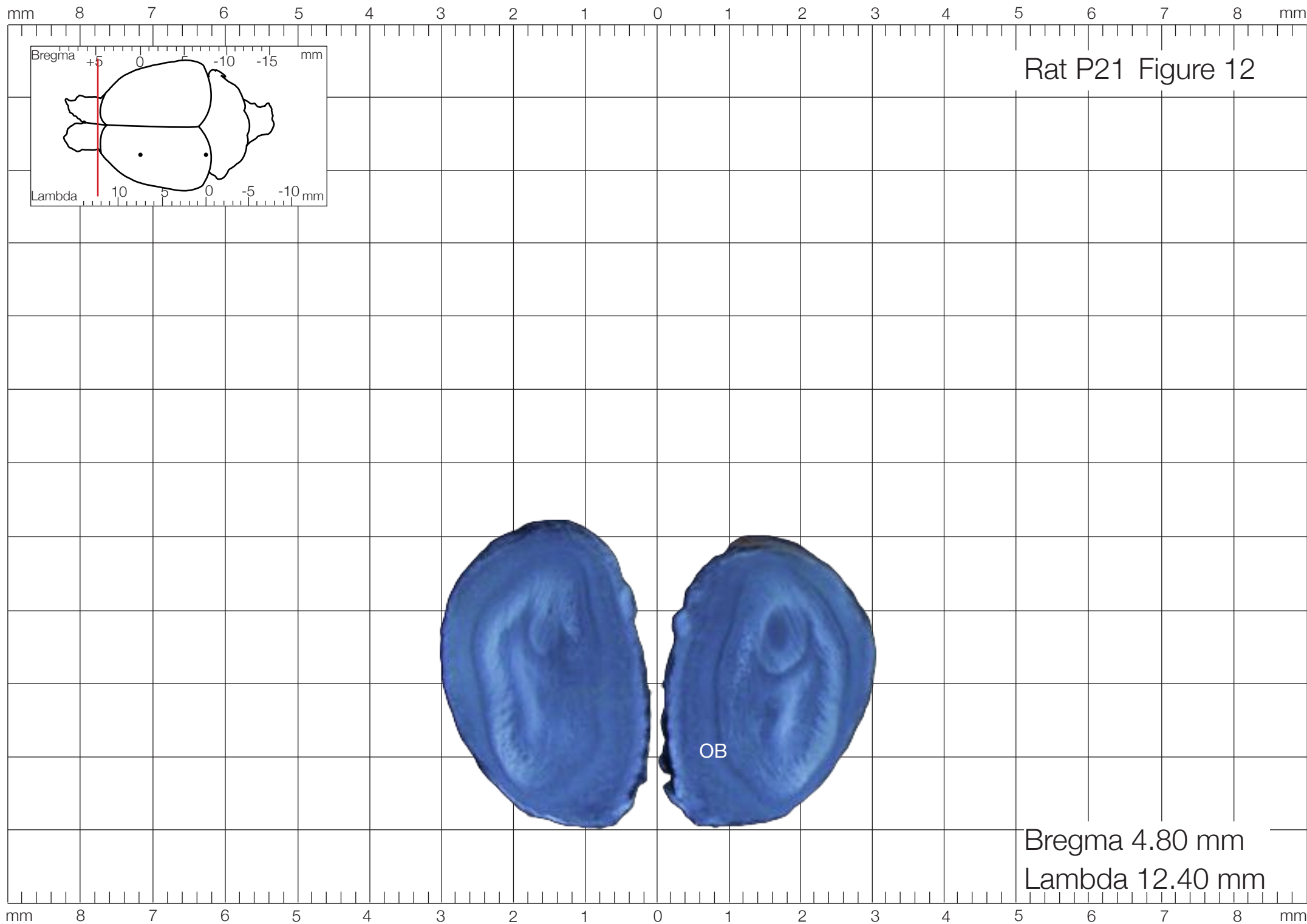


Bregma 5.40 mm
Lambda 13.00 mm

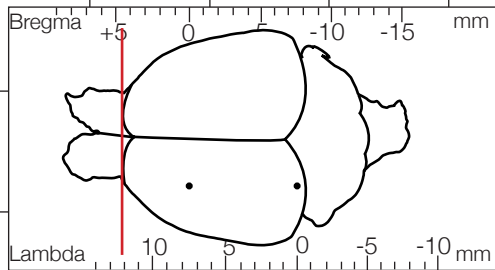
mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



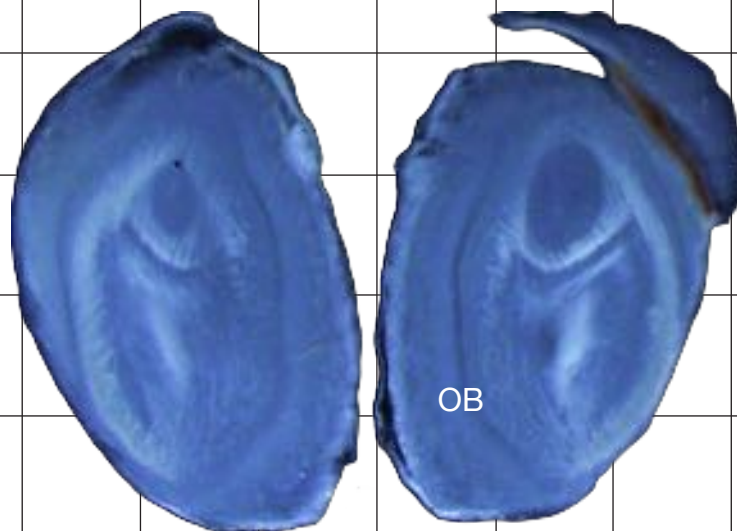




mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

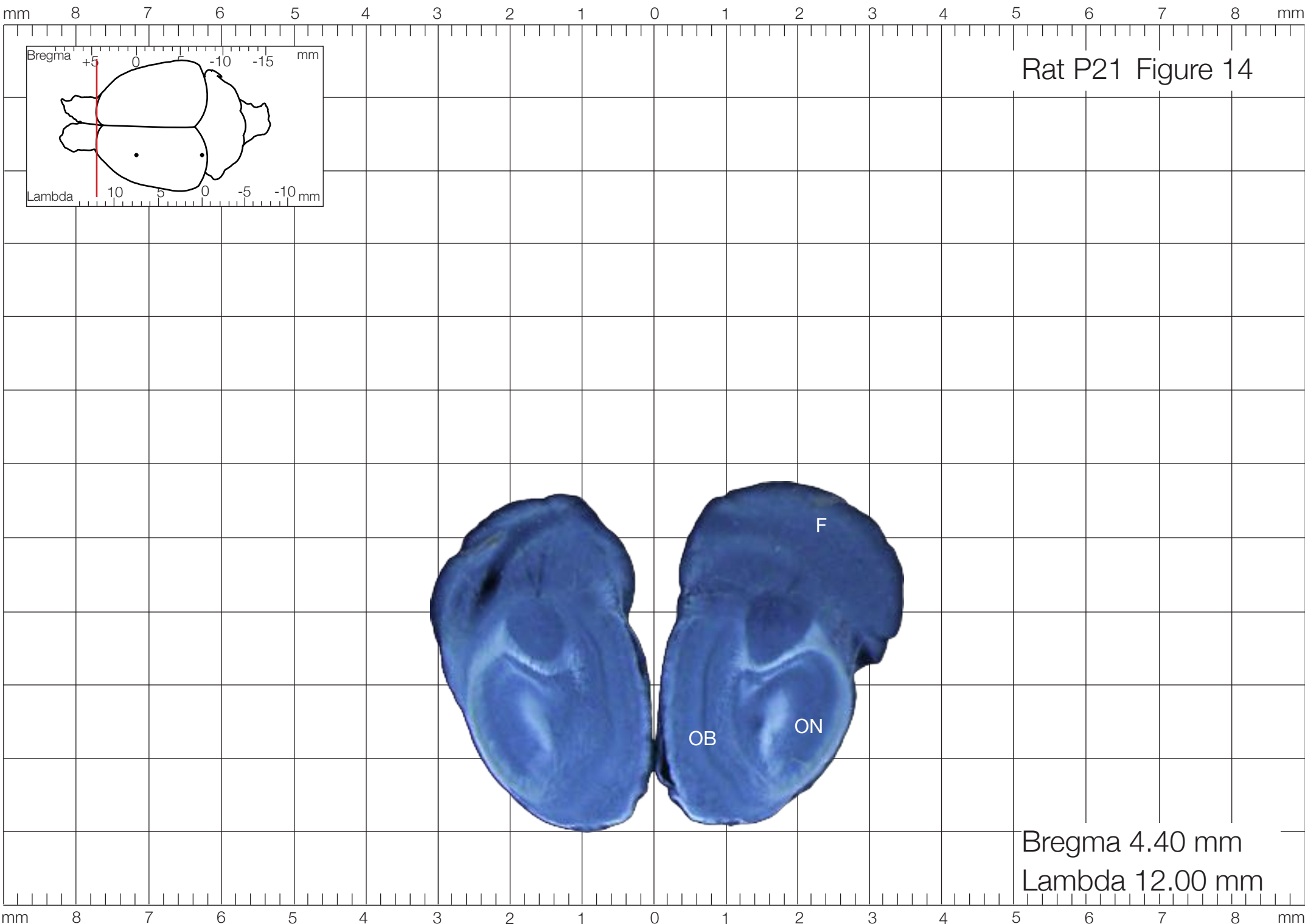


Rat P21 Figure 13



Bregma 4.60 mm
Lambda 12.20 mm

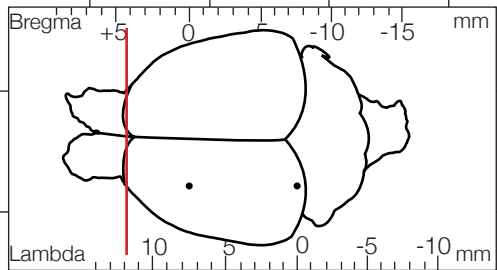
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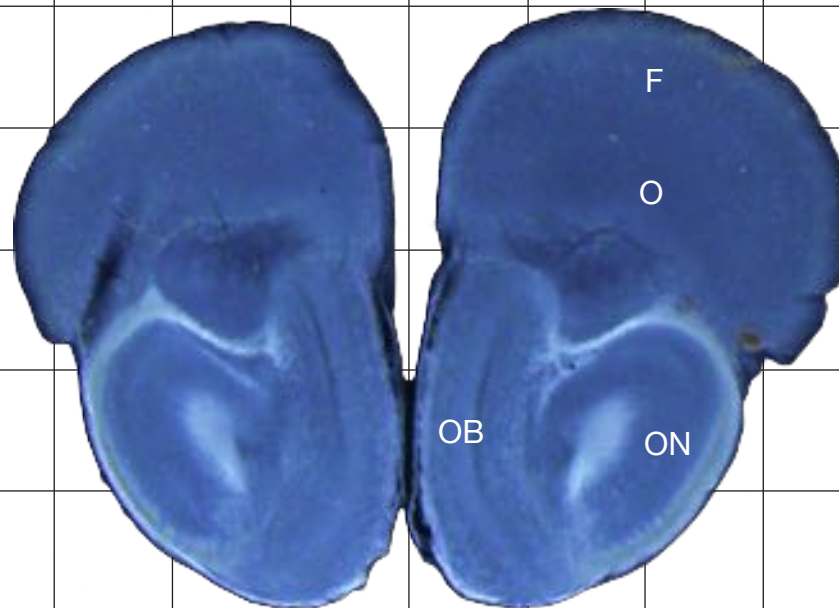
Rat P21 Figure 14

Bregma 4.40 mm
Lambda 12.00 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



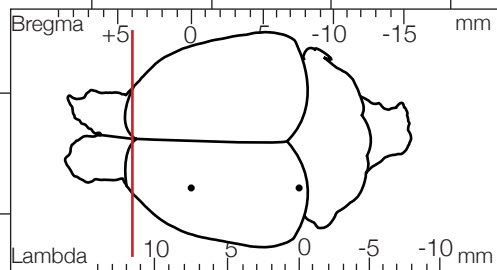
Rat P21 Figure 15



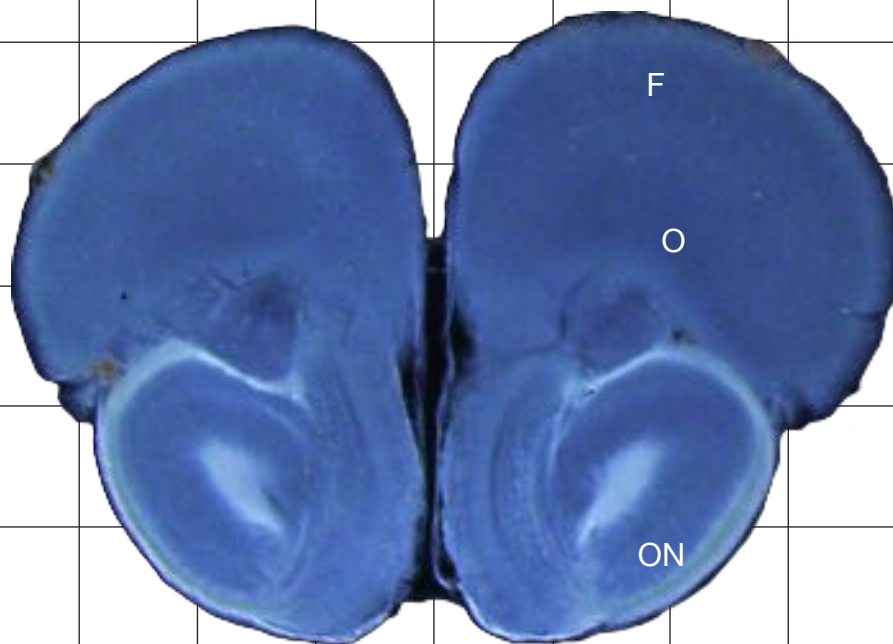
Bregma 4.20 mm
Lambda 11.80 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



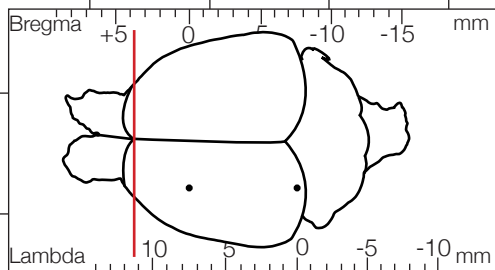
Rat P21 Figure 16



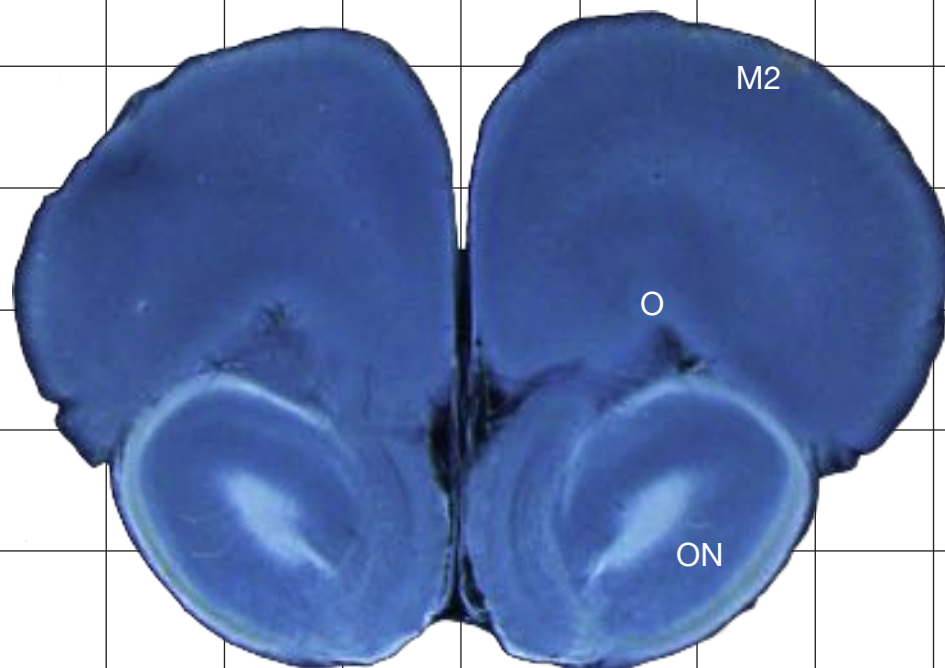
Bregma 4.00 mm
Lambda 11.60 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

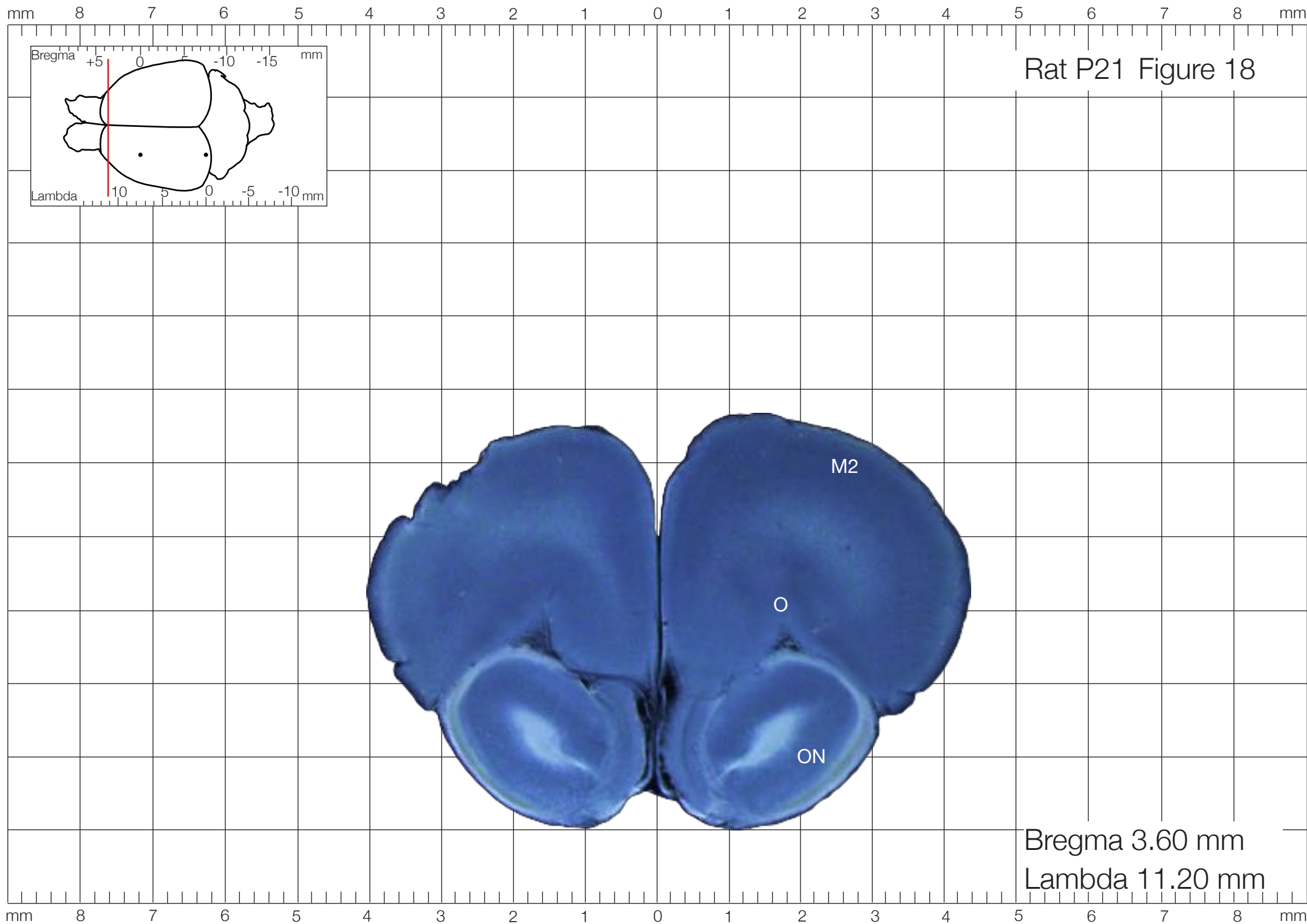


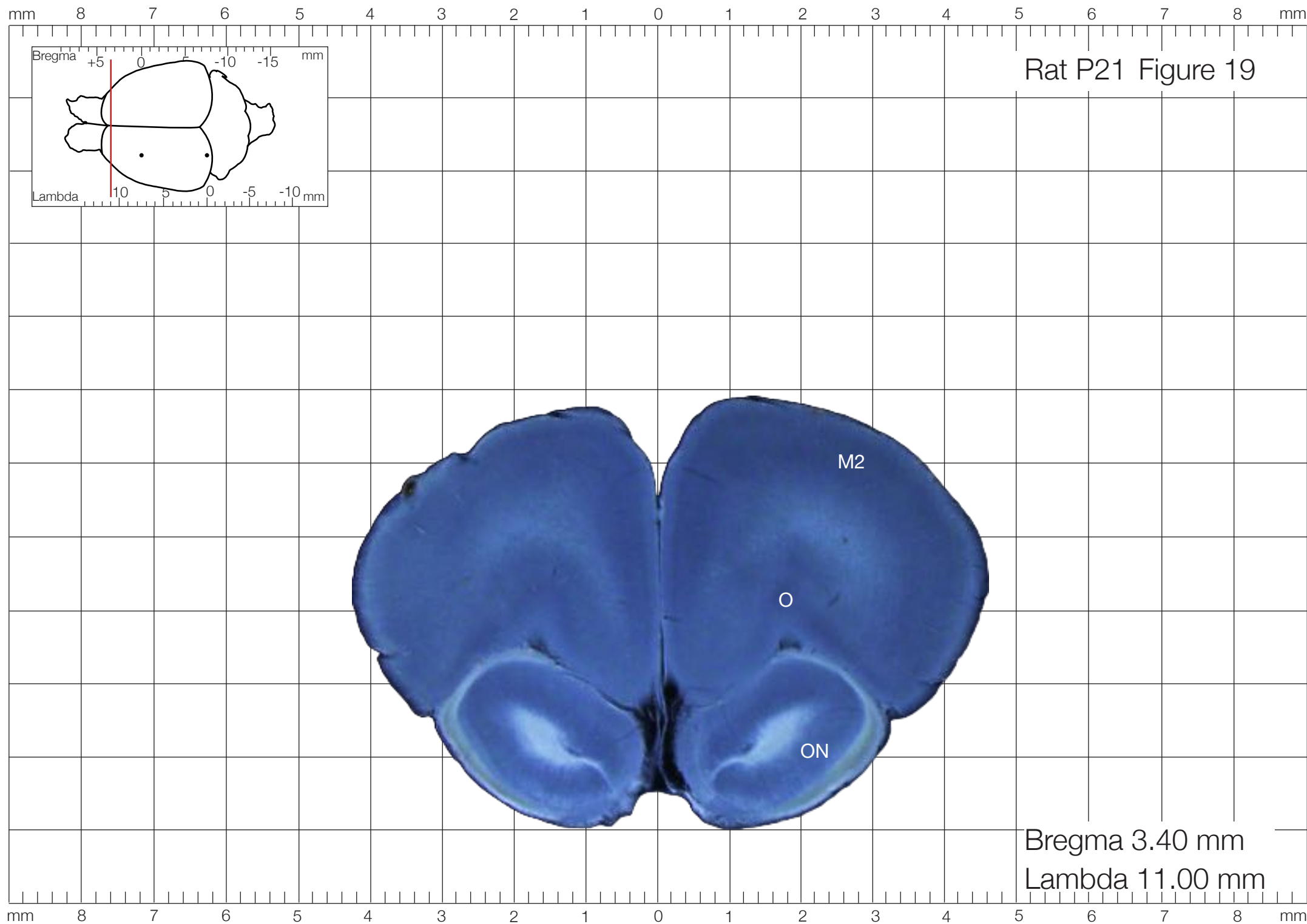
Rat P21 Figure 17



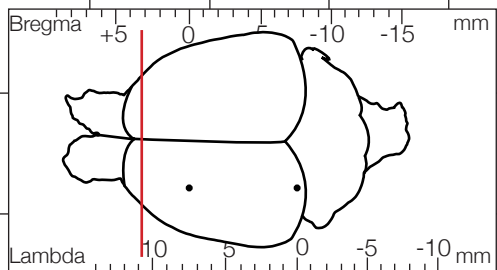
Bregma 3.80 mm
Lambda 11.40 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

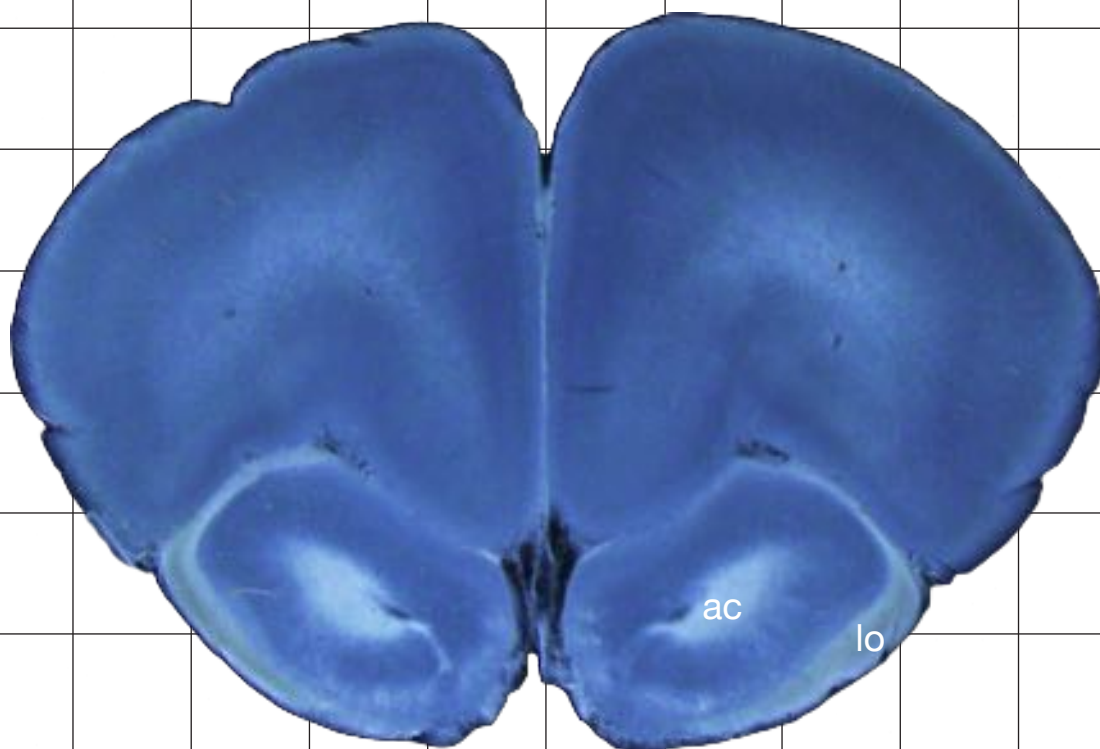




mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

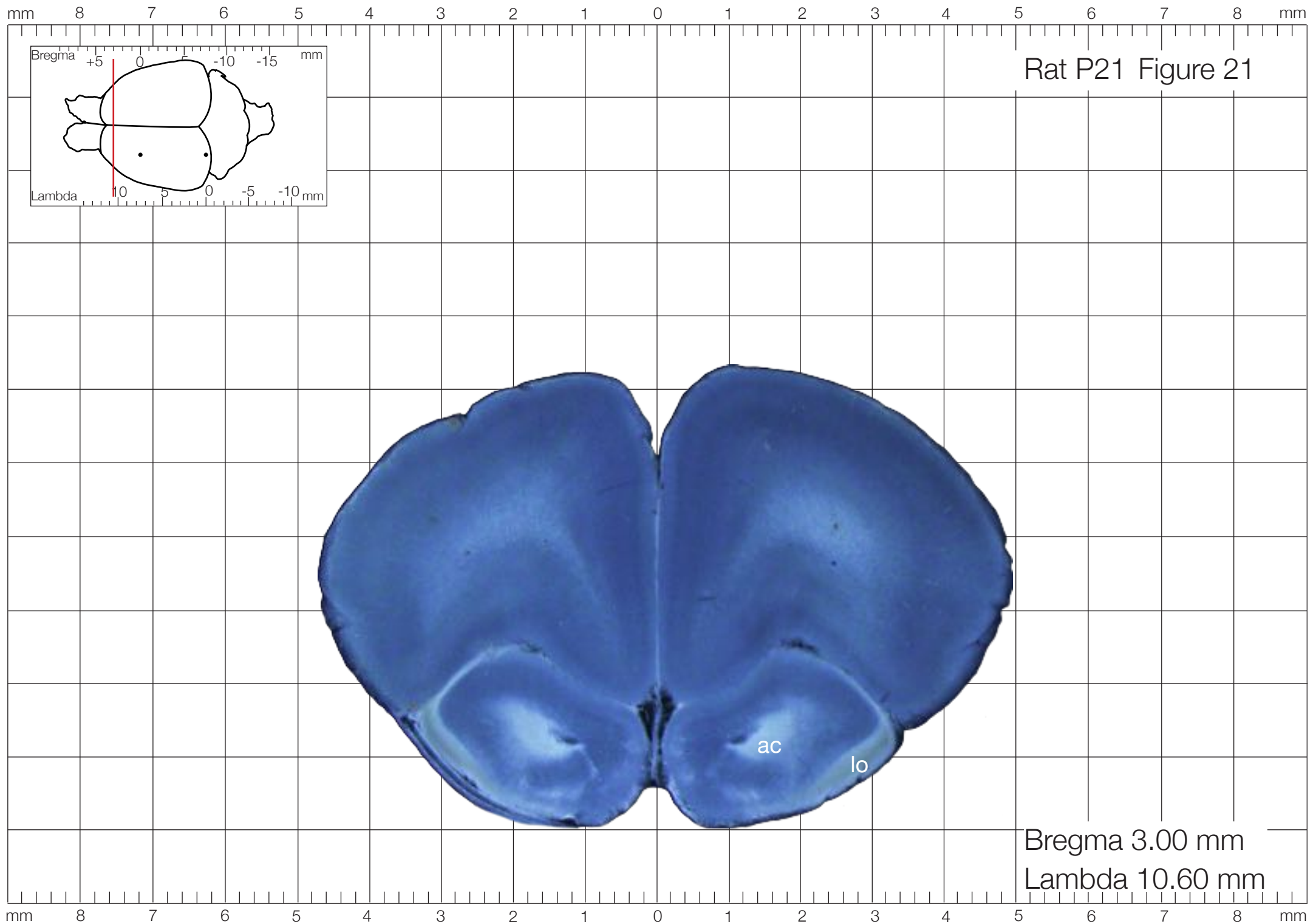


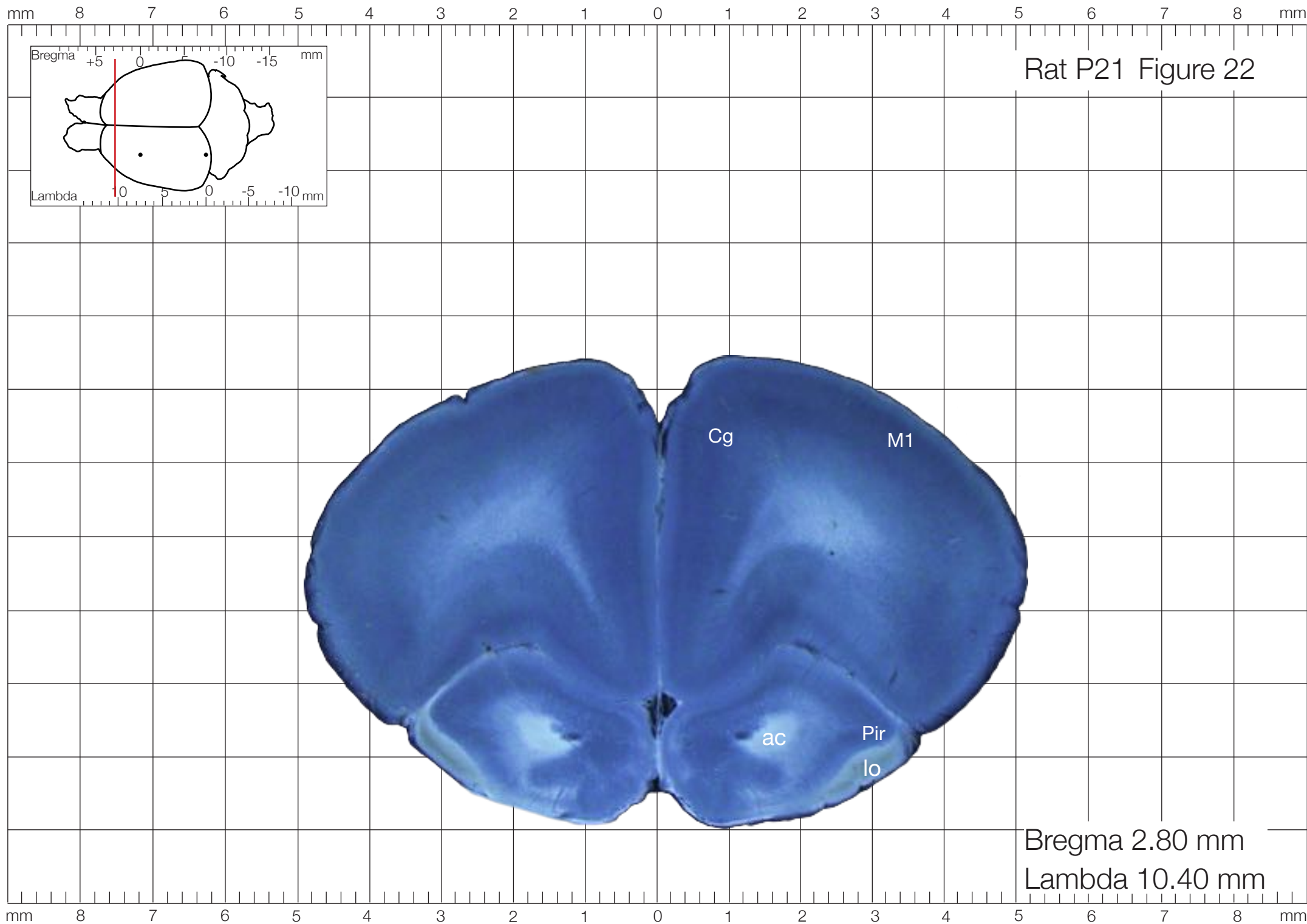
Rat P21 Figure 20



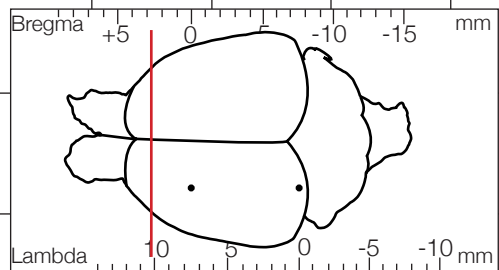
Bregma 3.20 mm
Lambda 10.80 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

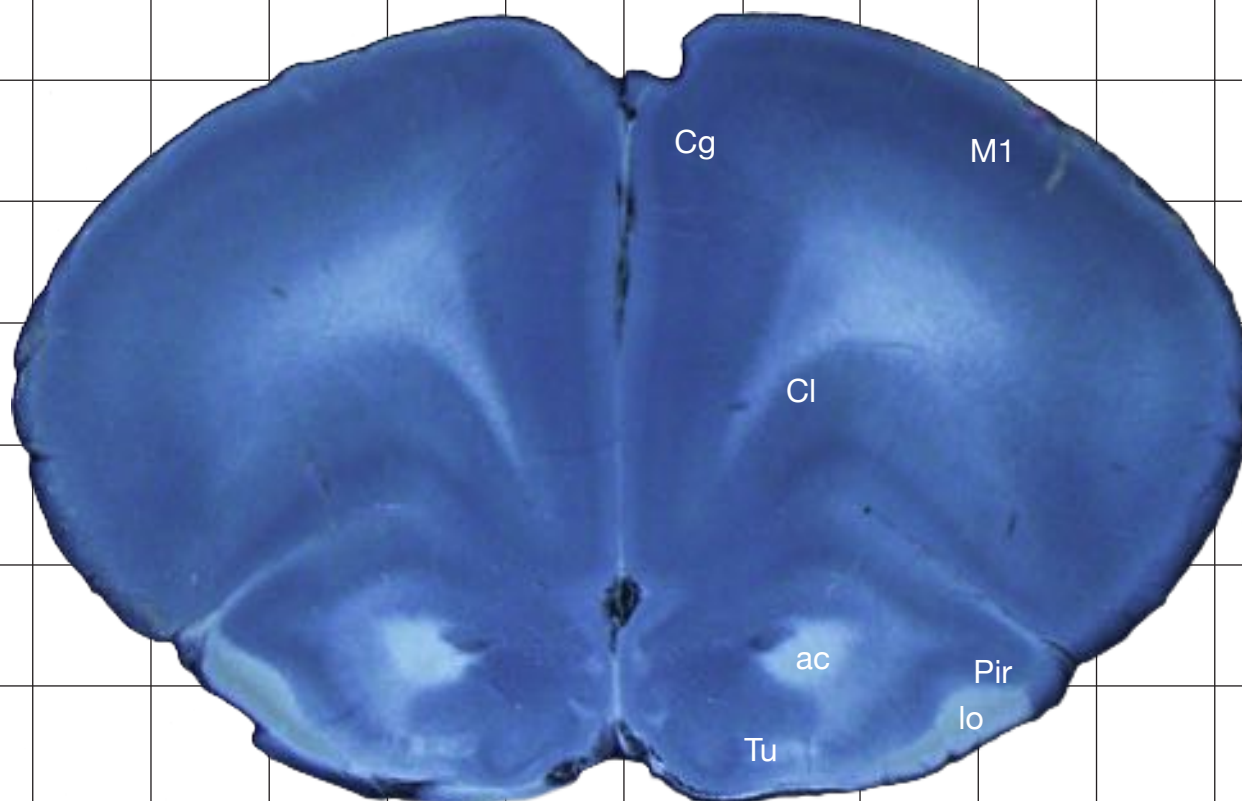




mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

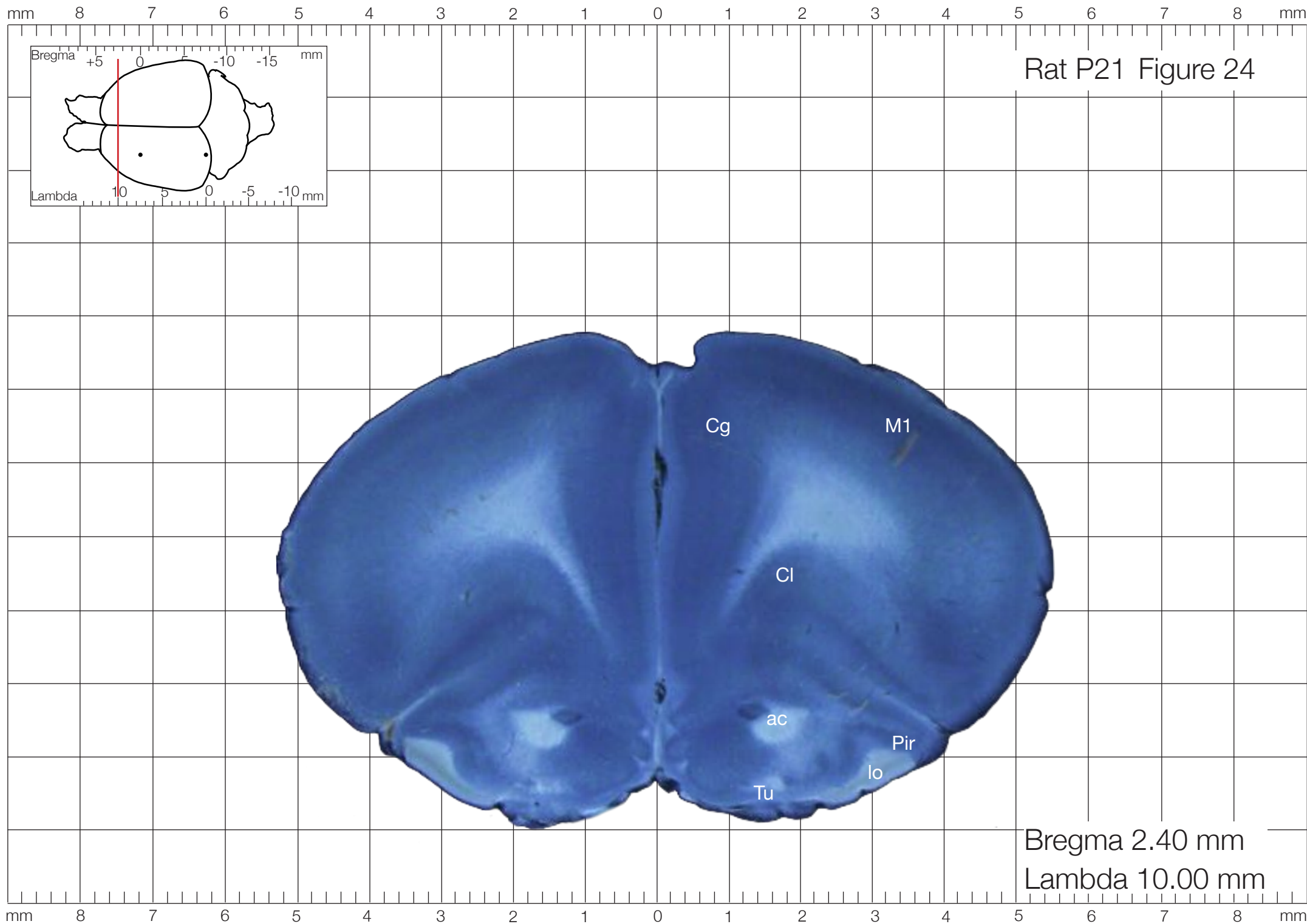


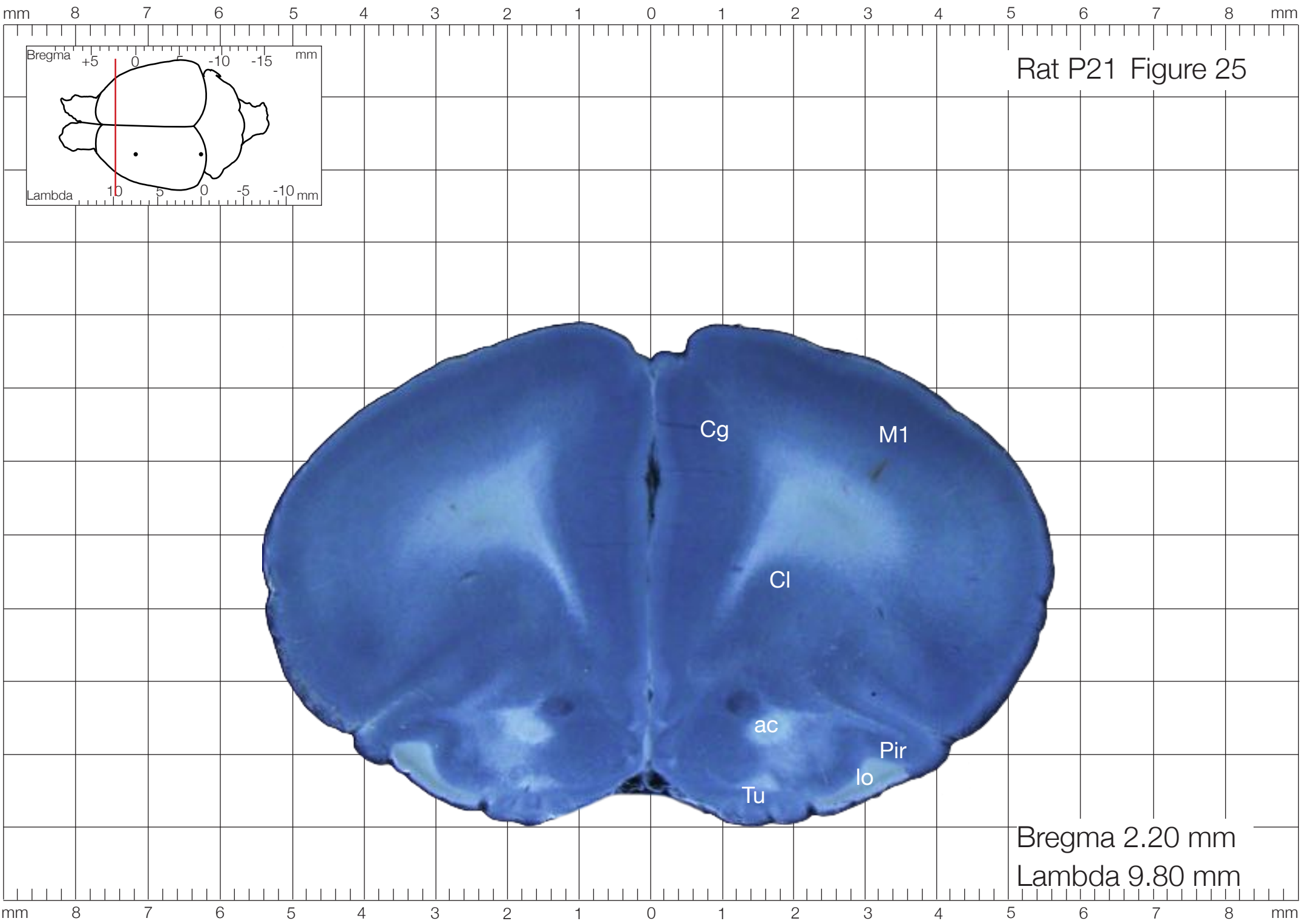
Rat P21 Figure 23



Bregma 2.60 mm
Lambda 10.20 mm

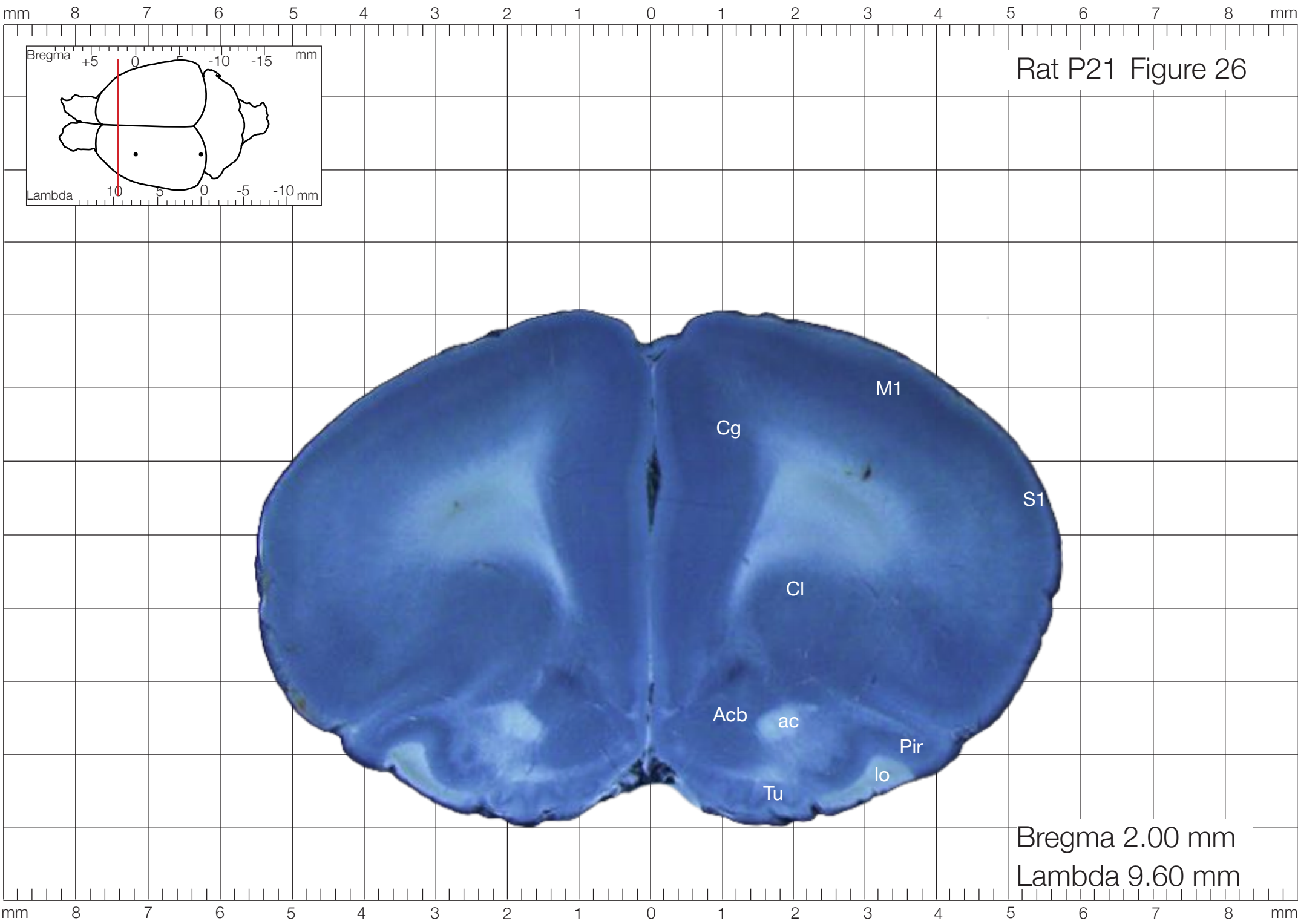
mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

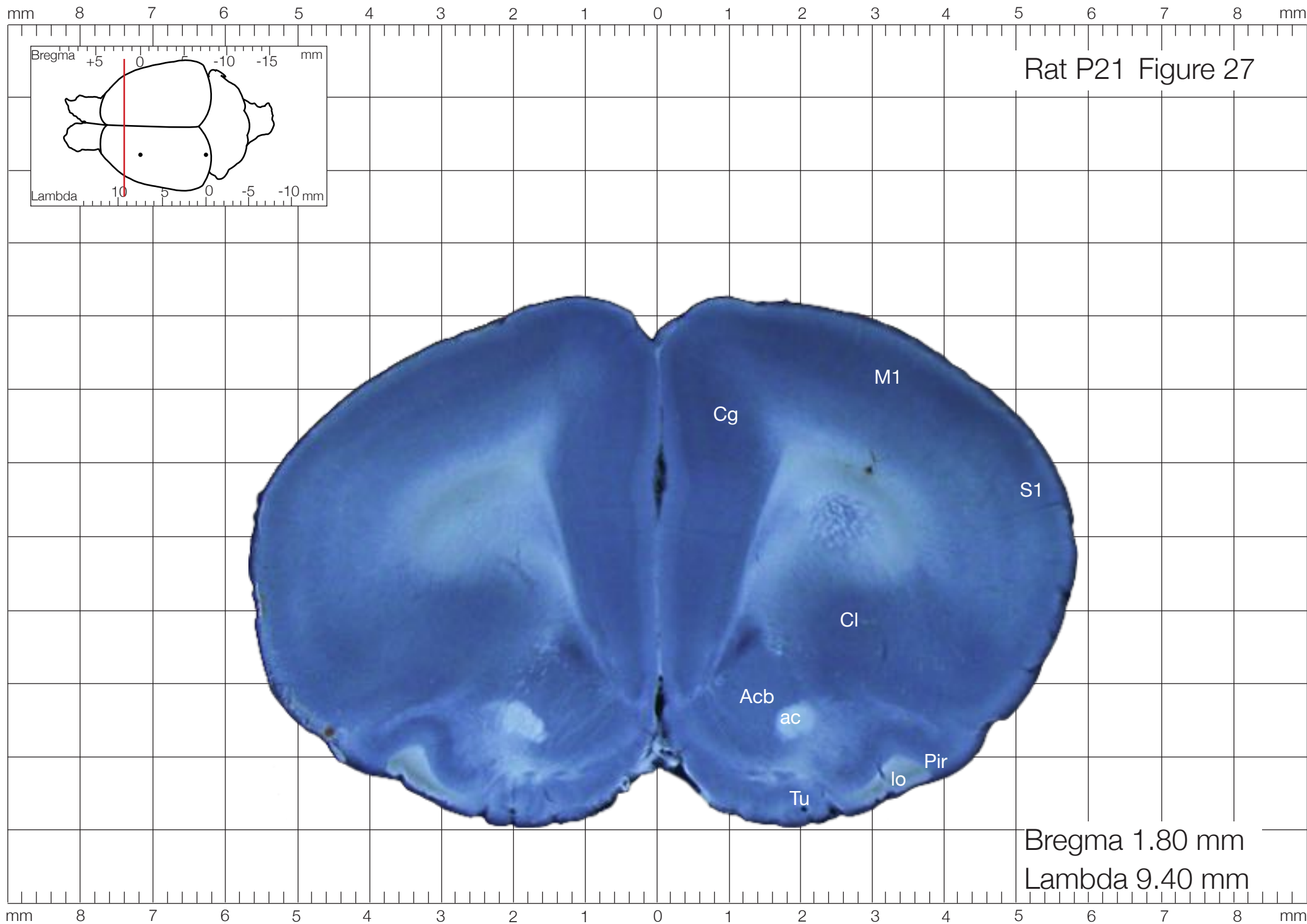




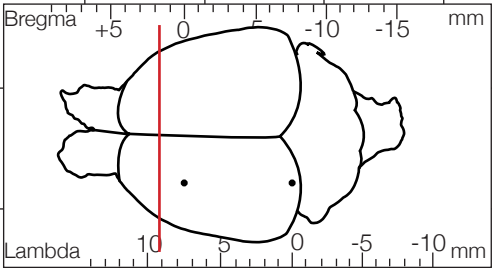
Rat P21 Figure 25

Bregma 2.20 mm
Lambda 9.80 mm

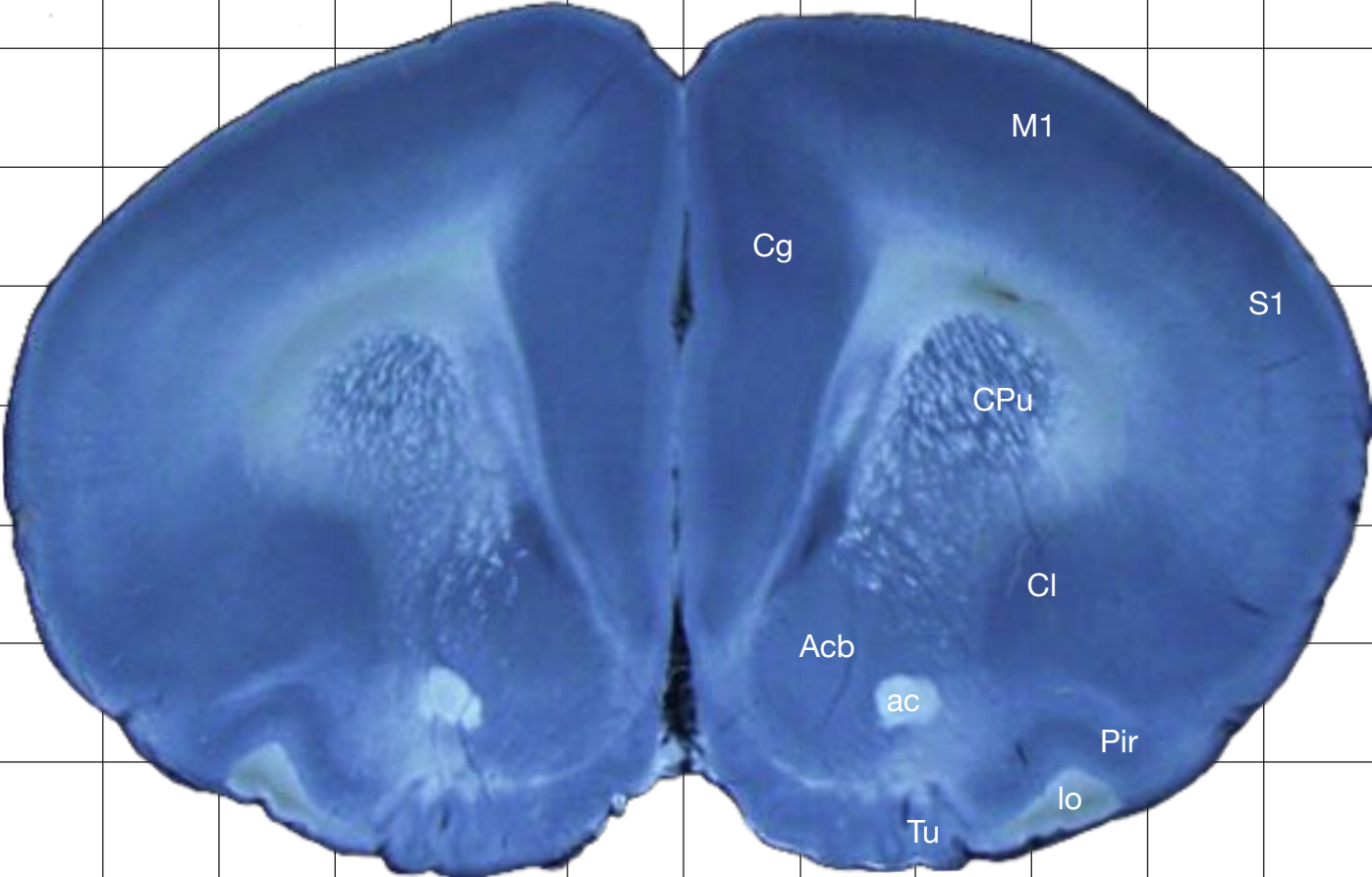




mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



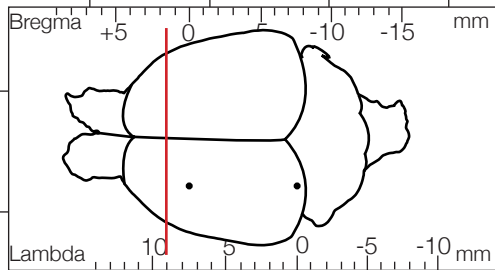
Rat P21 Figure 28



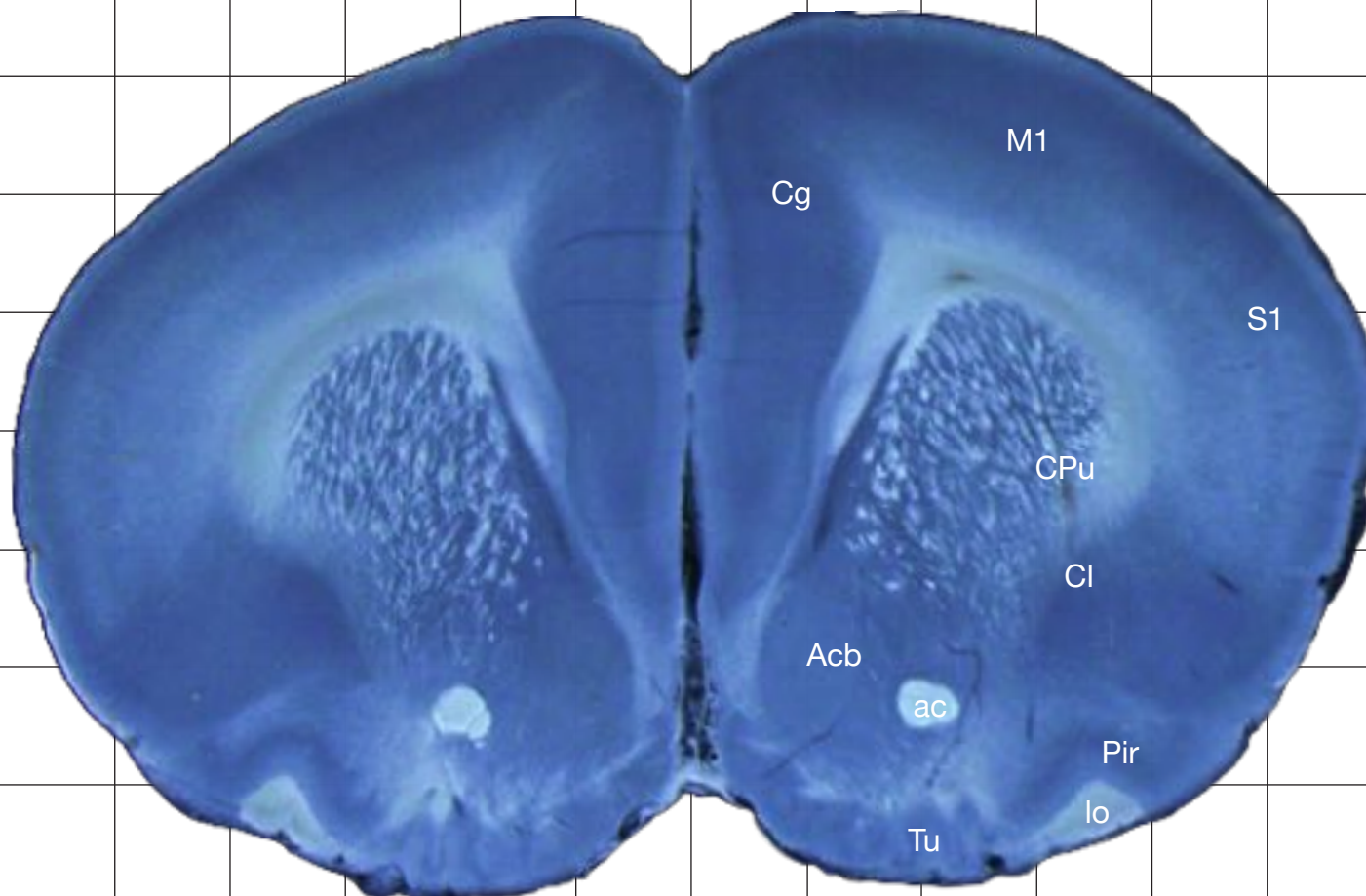
Bregma 1.60 mm
Lambda 9.20 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

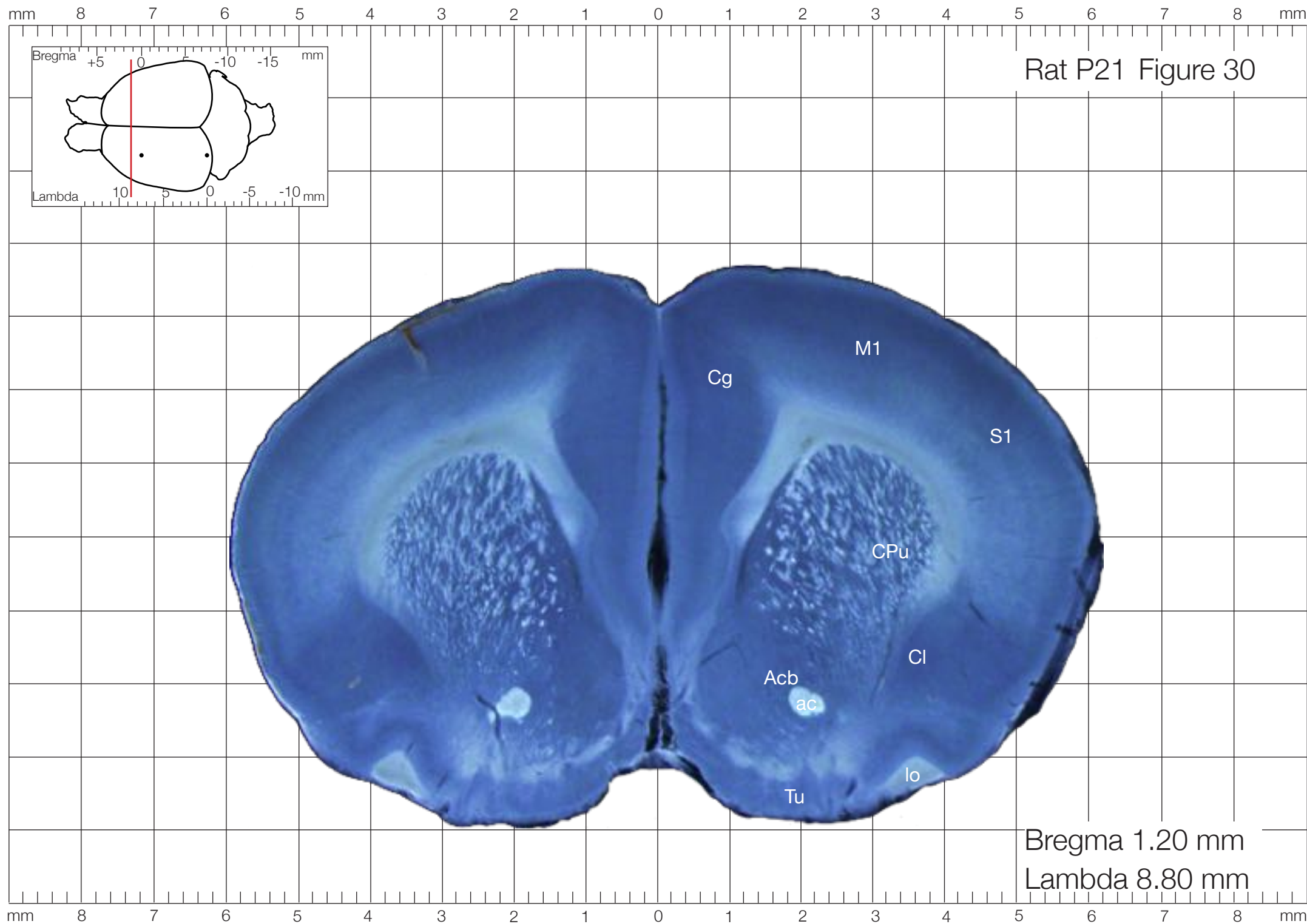


Rat P21 Figure 29

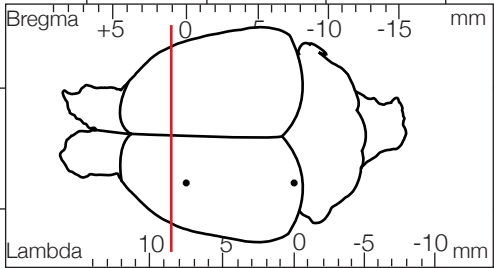


Bregma 1.40 mm
Lambda 9.00 mm

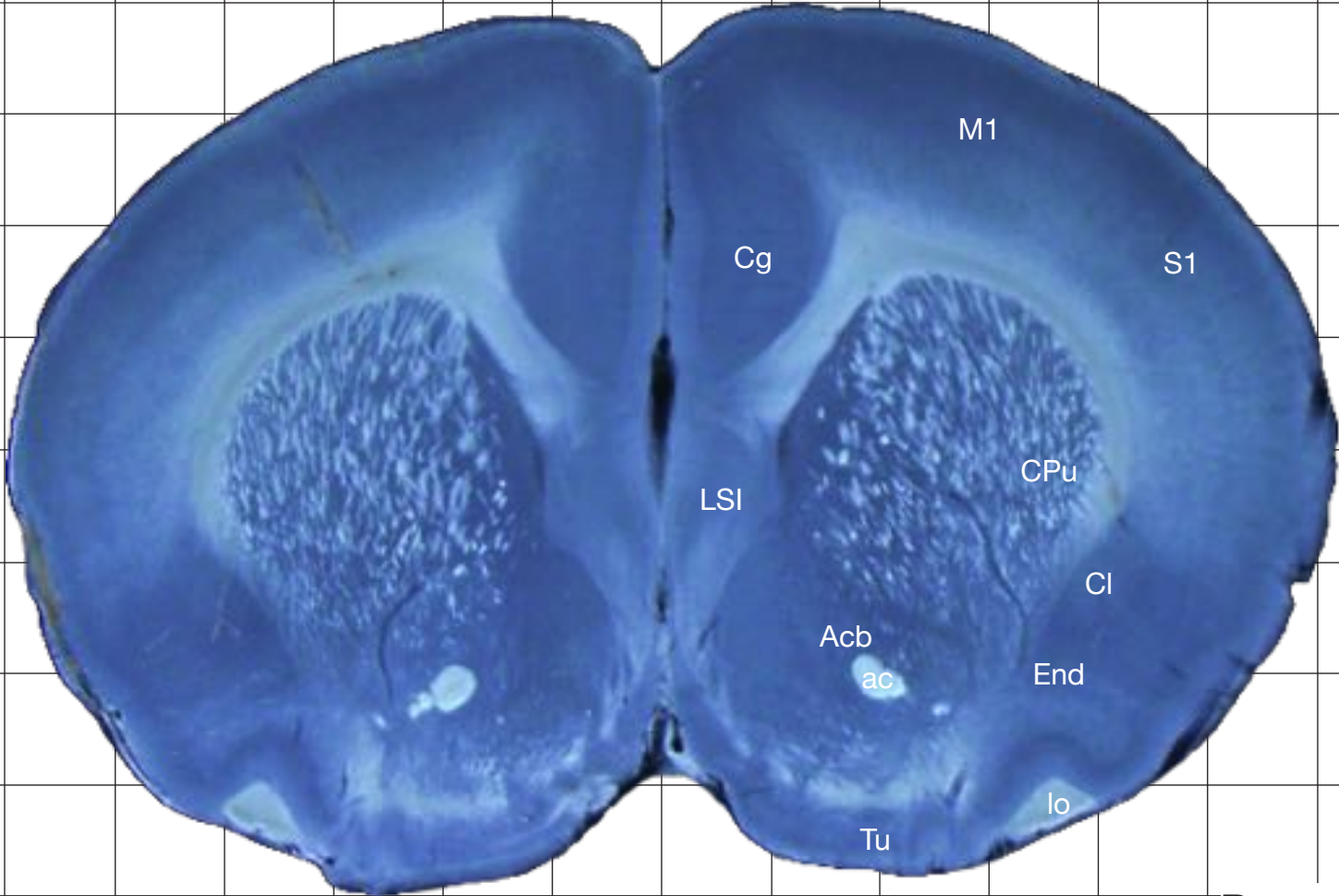
mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

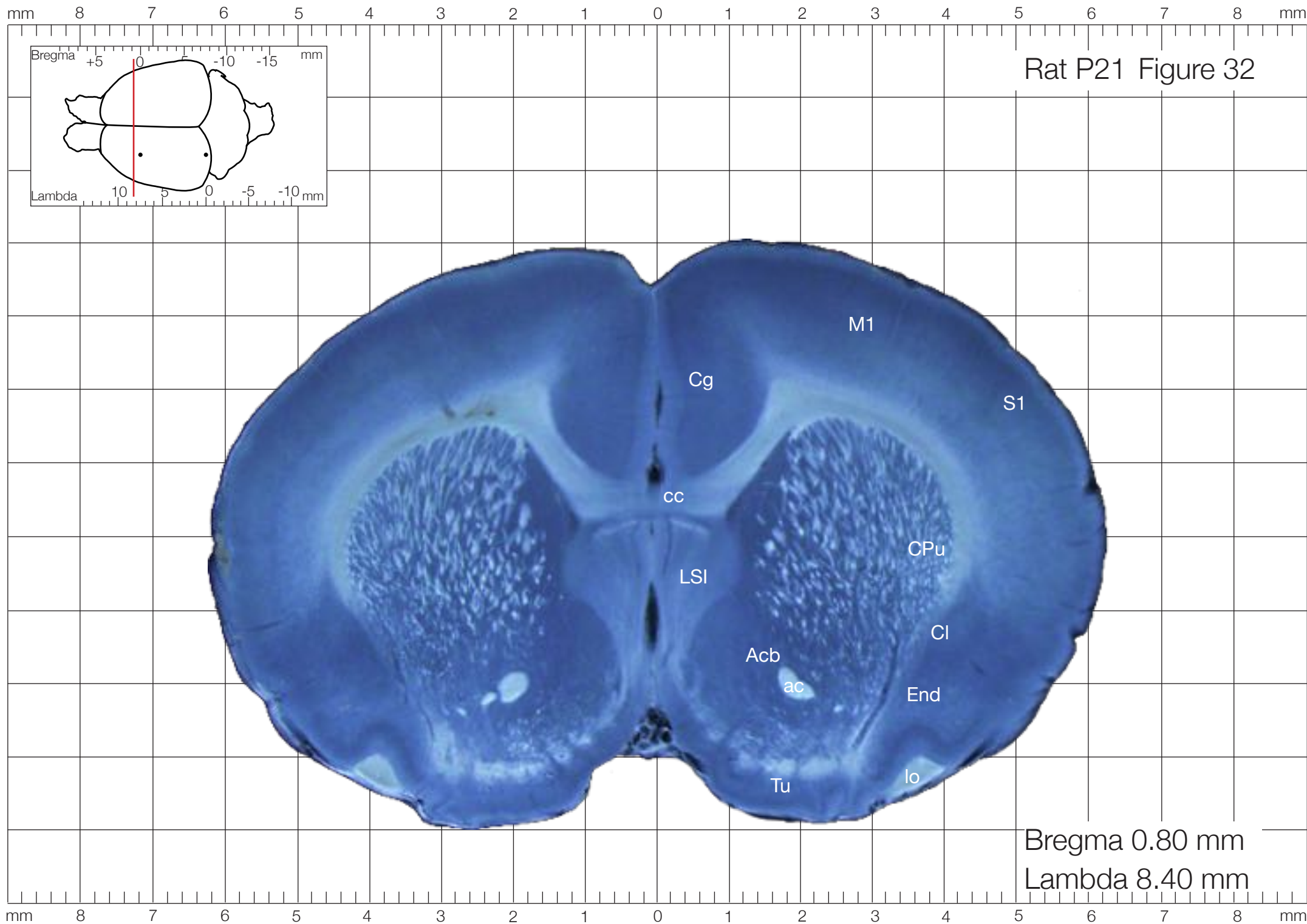


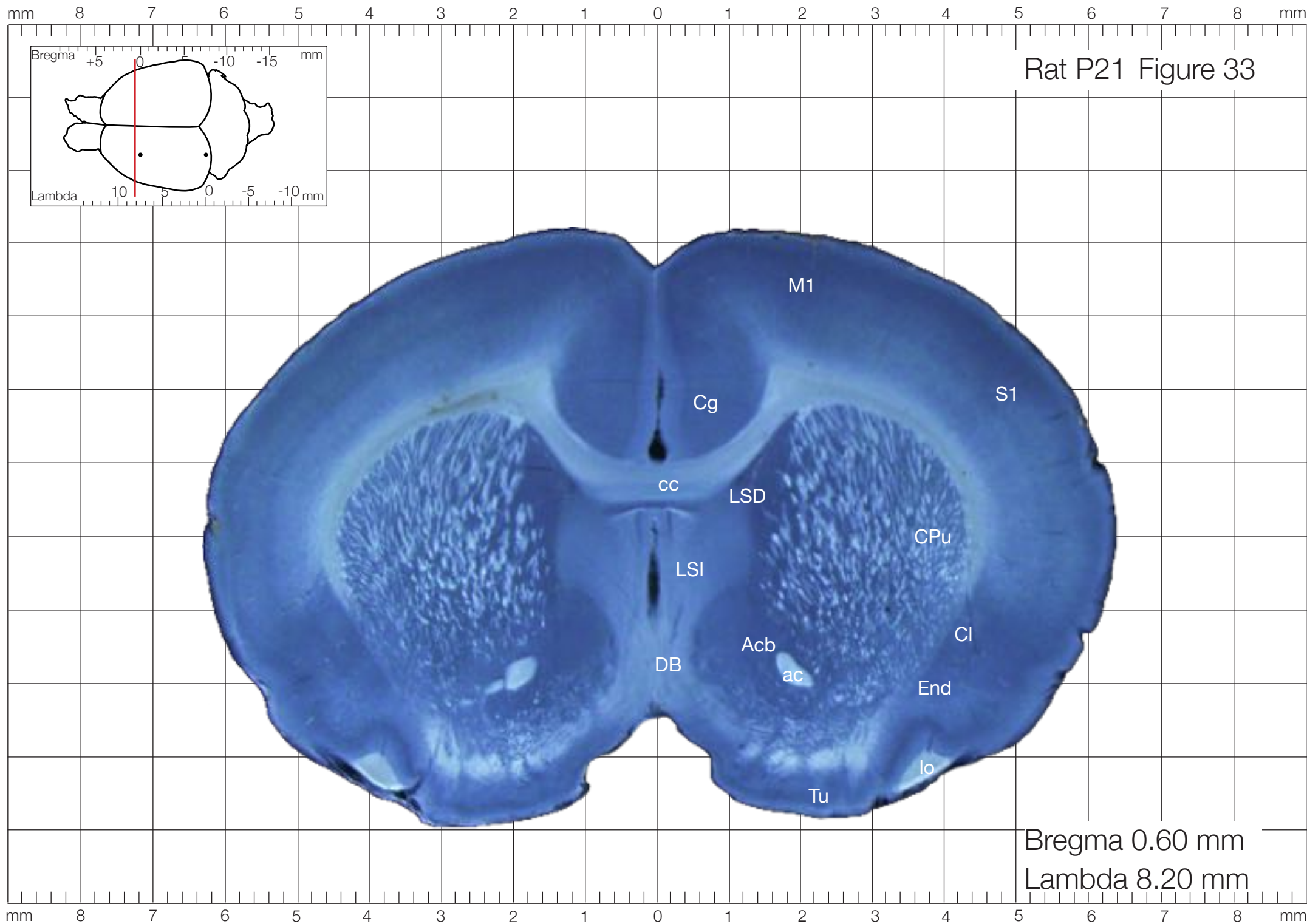
Rat P21 Figure 31



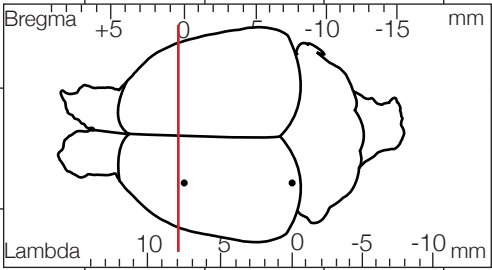
Bregma 1.00 mm
Lambda 8.60 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

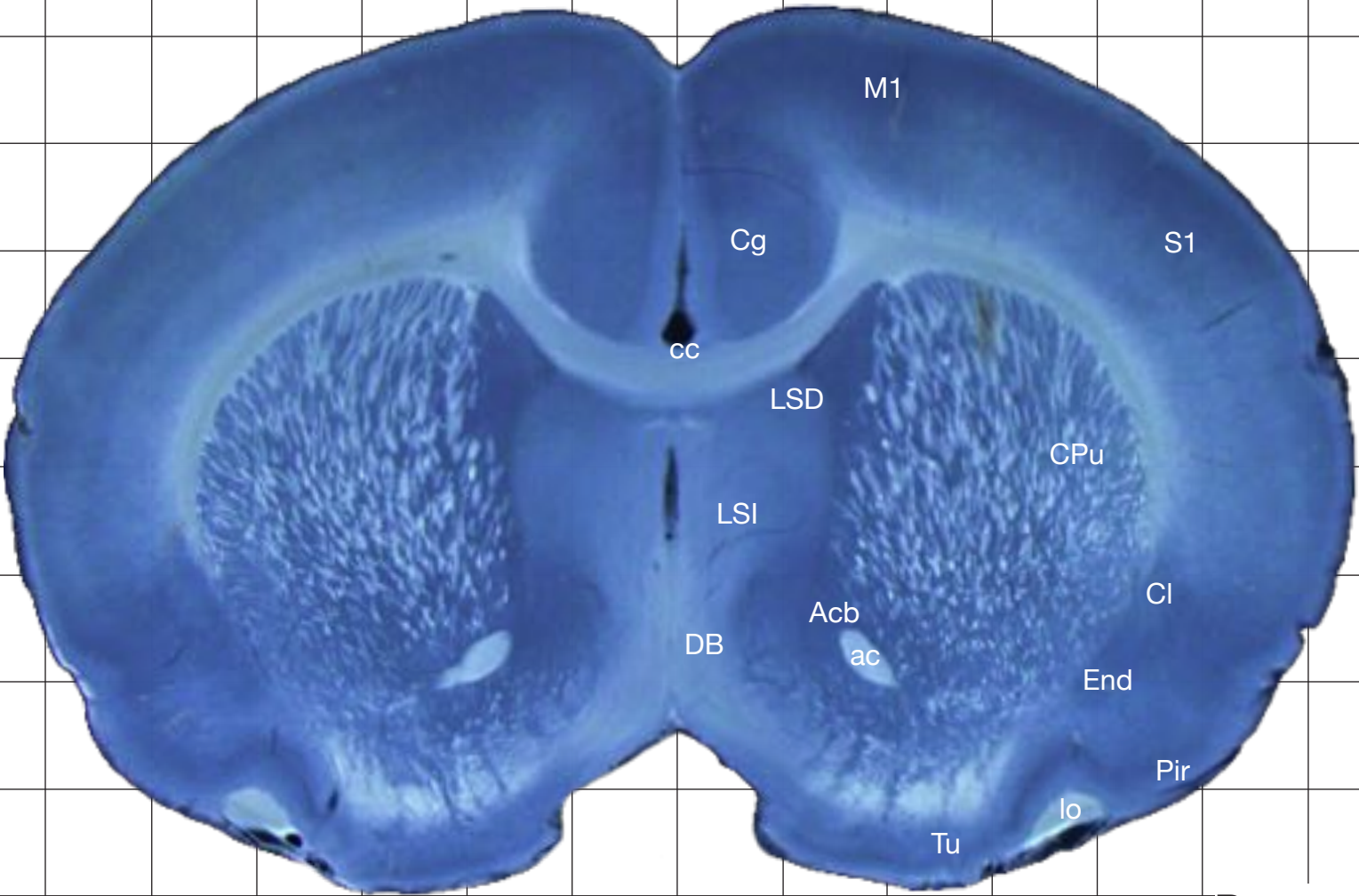




mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

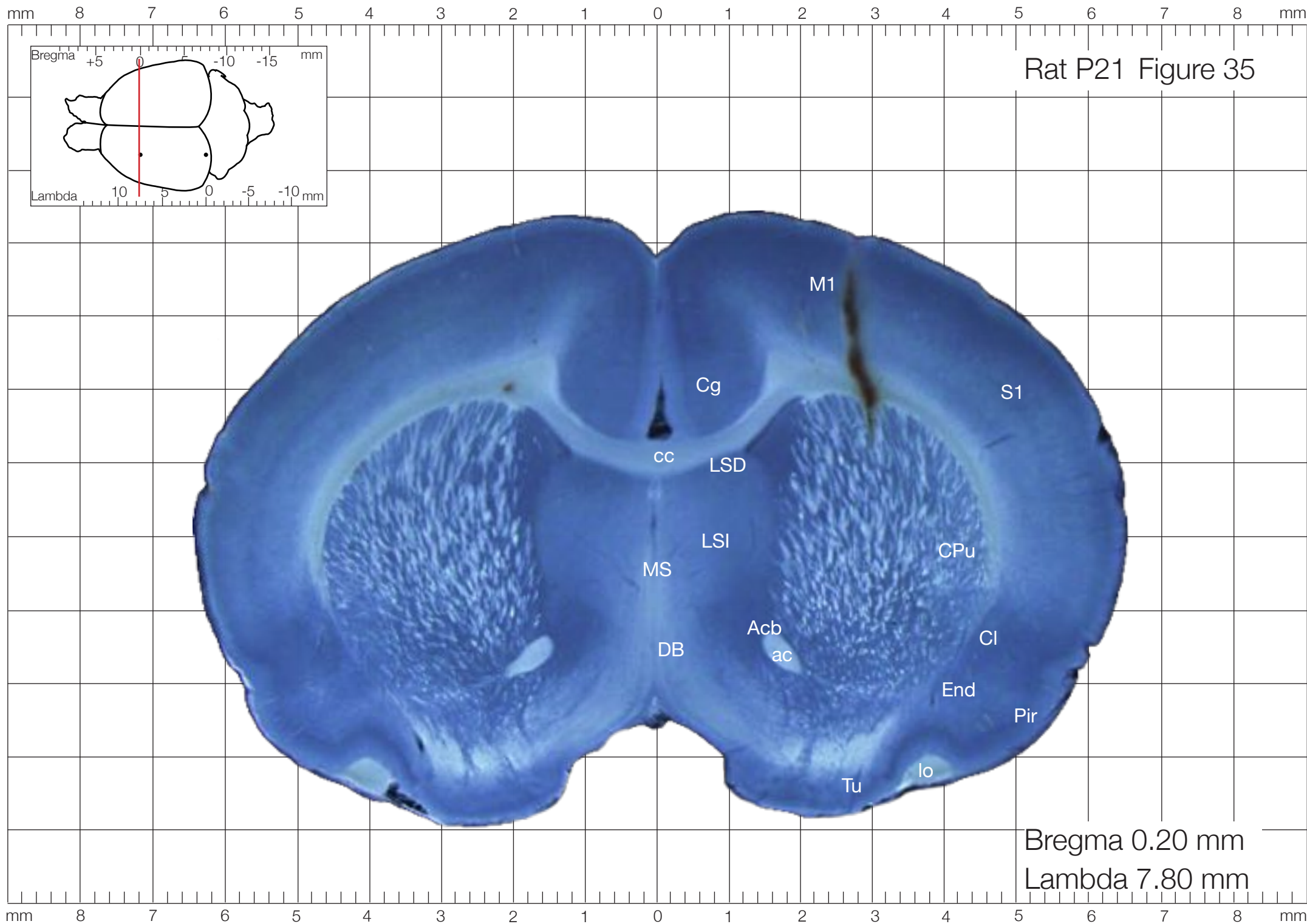


Rat P21 Figure 34

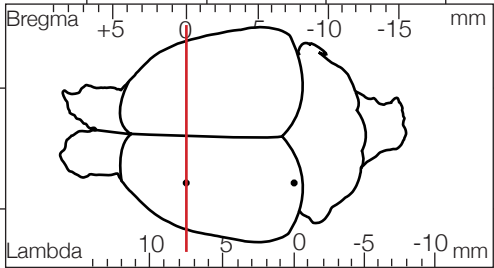


Bregma 0.40 mm
Lambda 8.00 mm

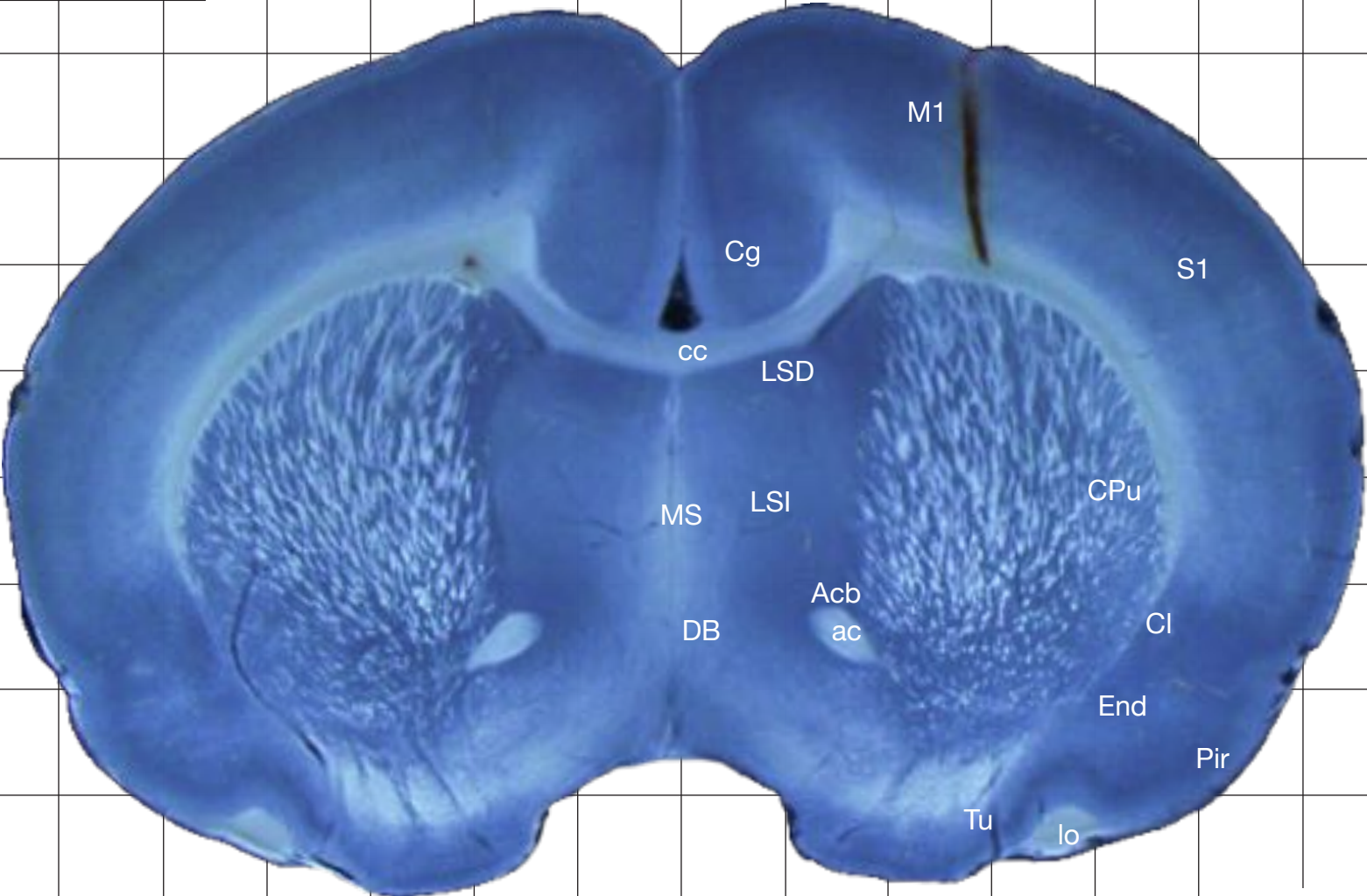
mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



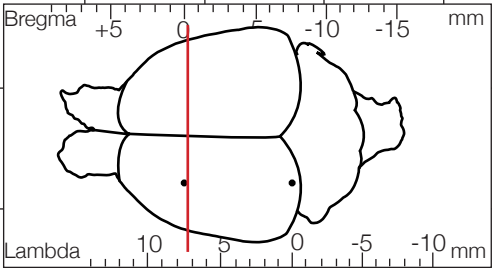
Rat P21 Figure 36



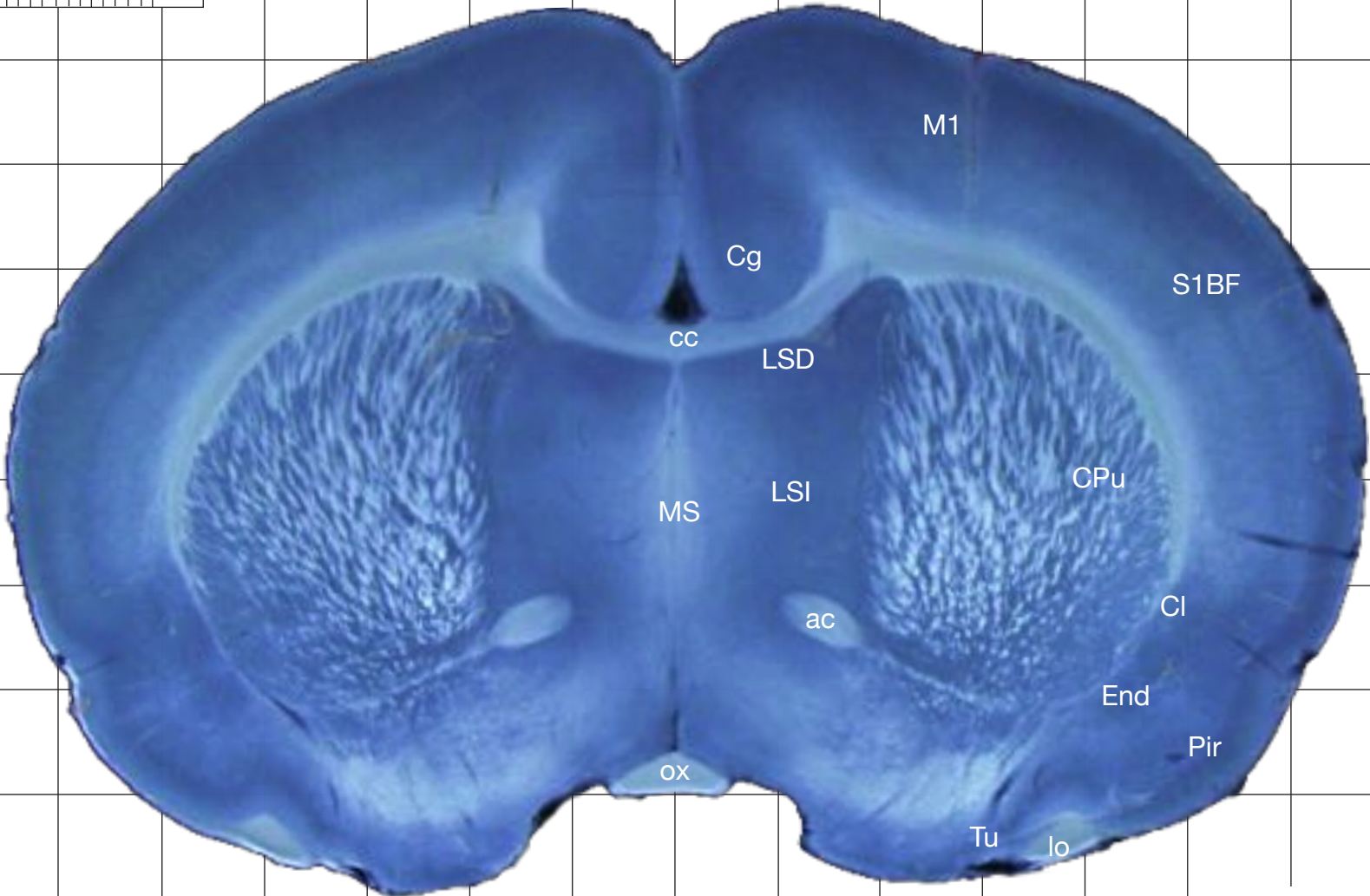
Bregma 0.00 mm
Lambda 7.60 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

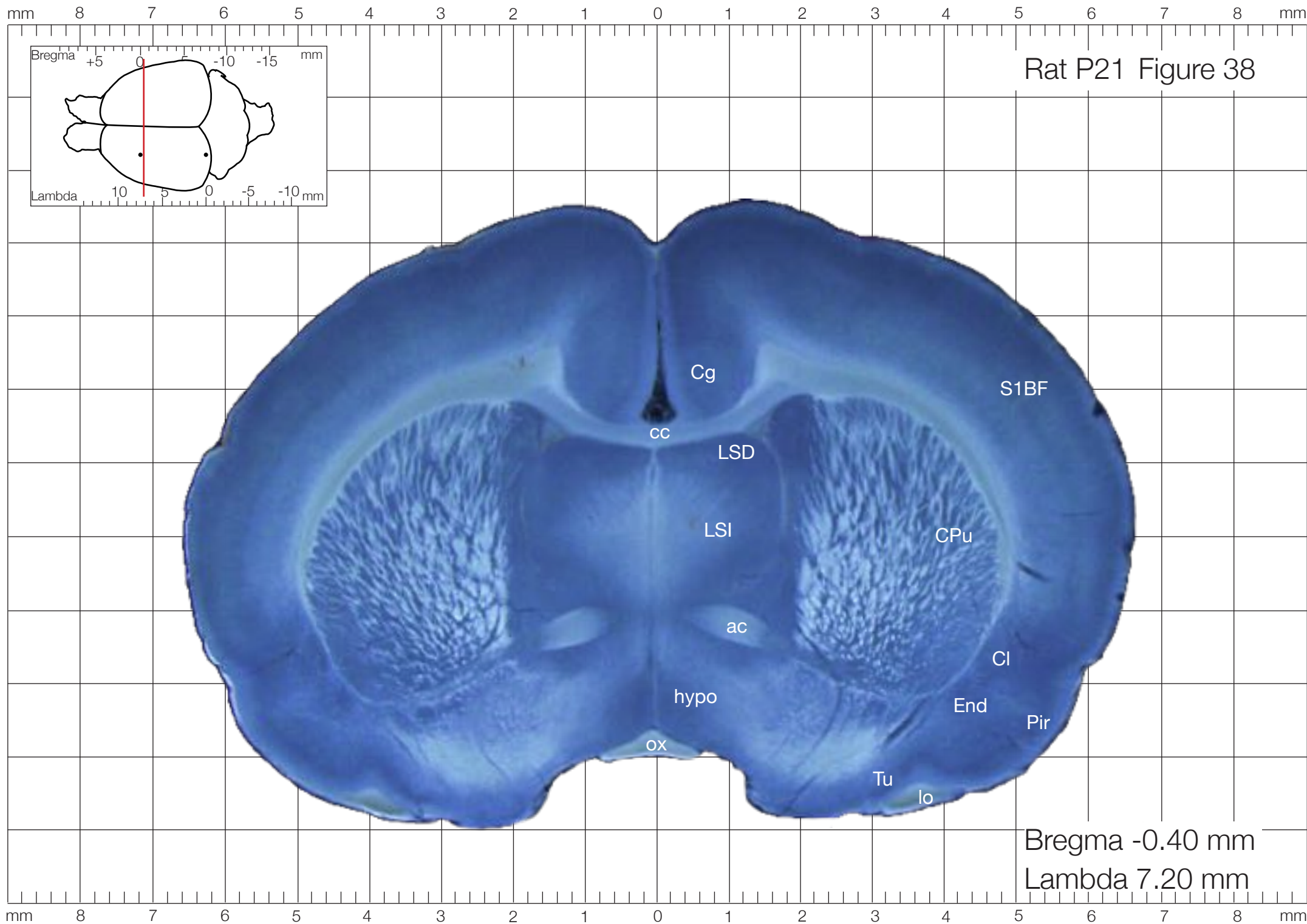


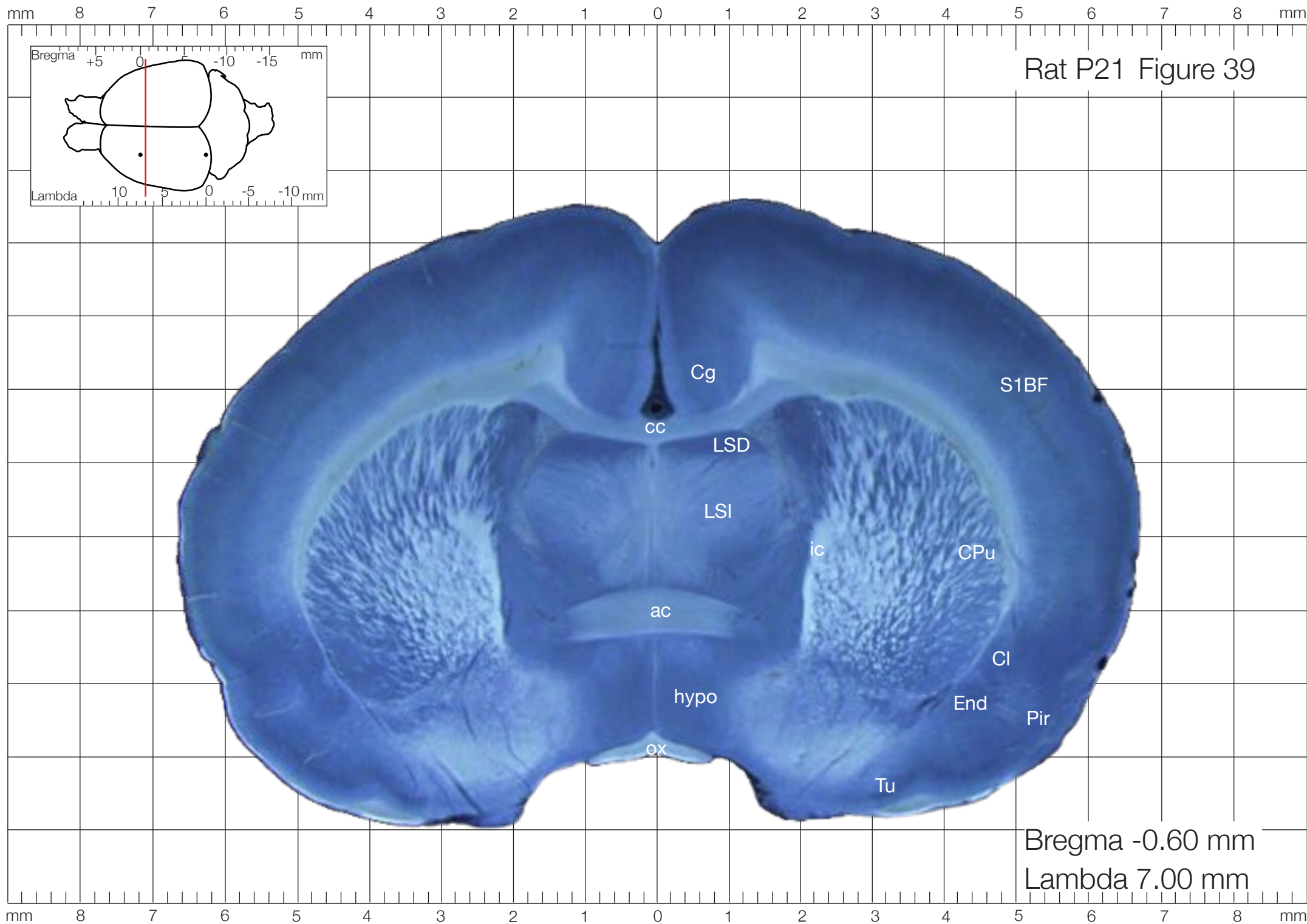
Rat P21 Figure 37

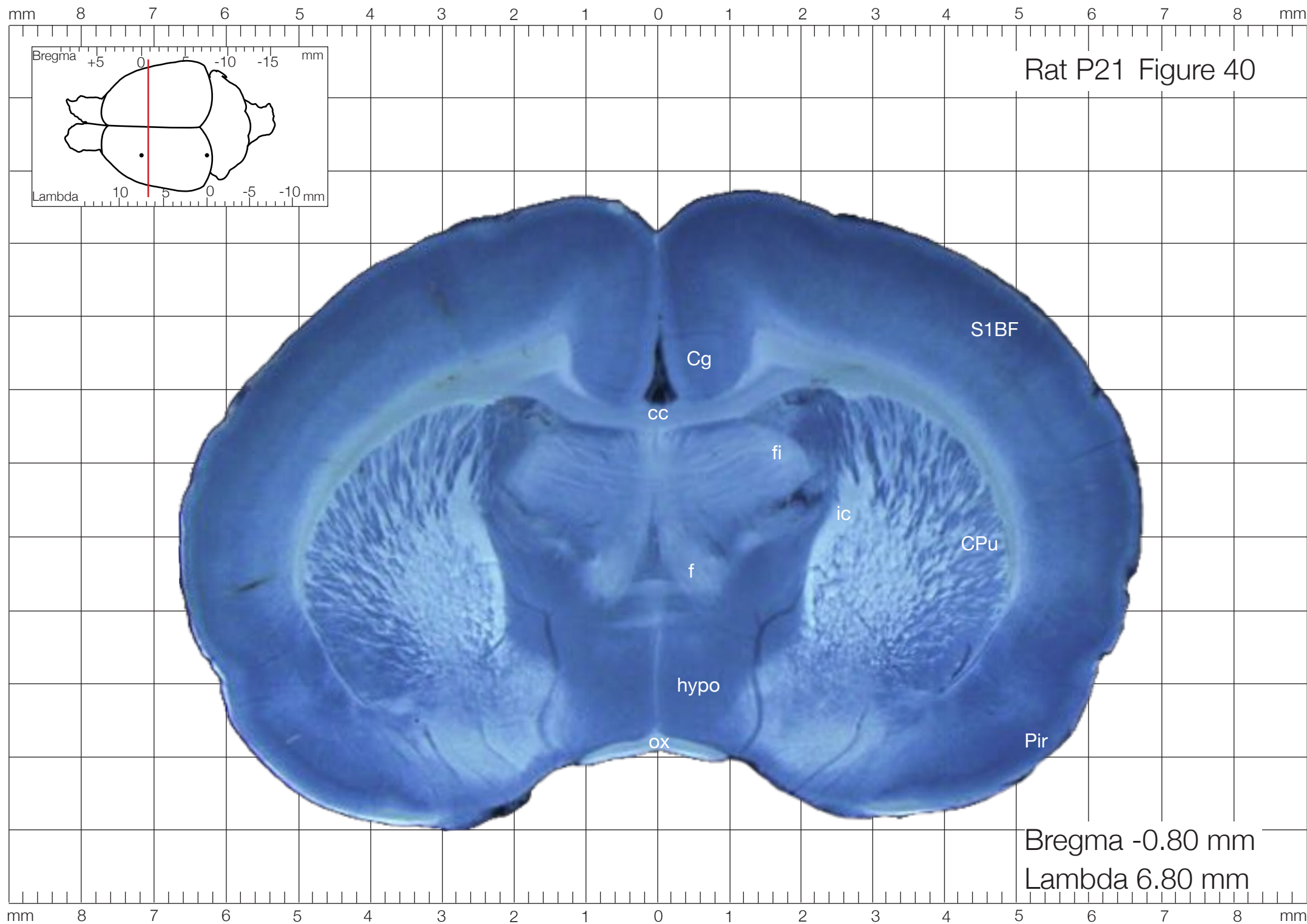


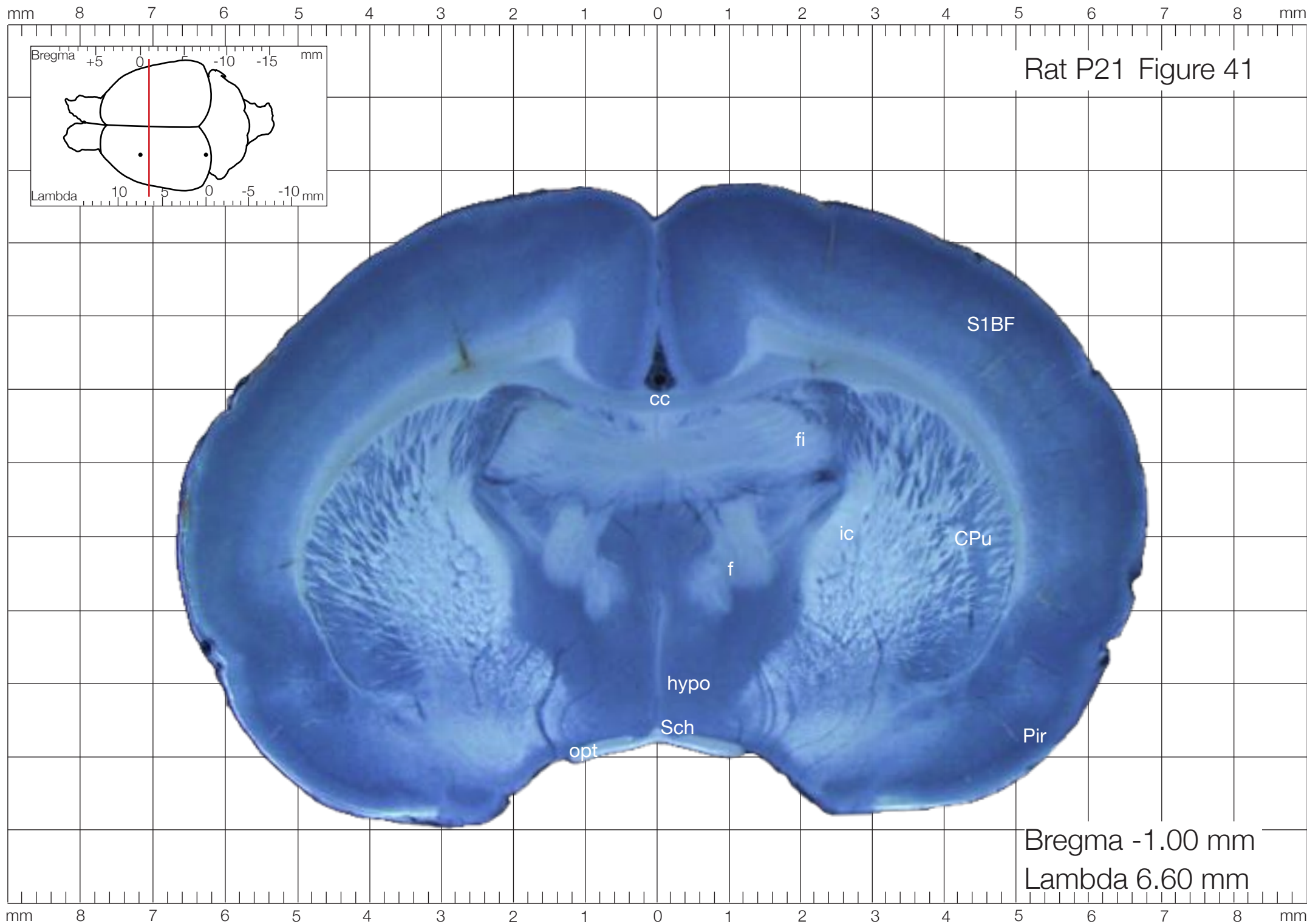
Bregma -0.20 mm
Lambda 7.40 mm

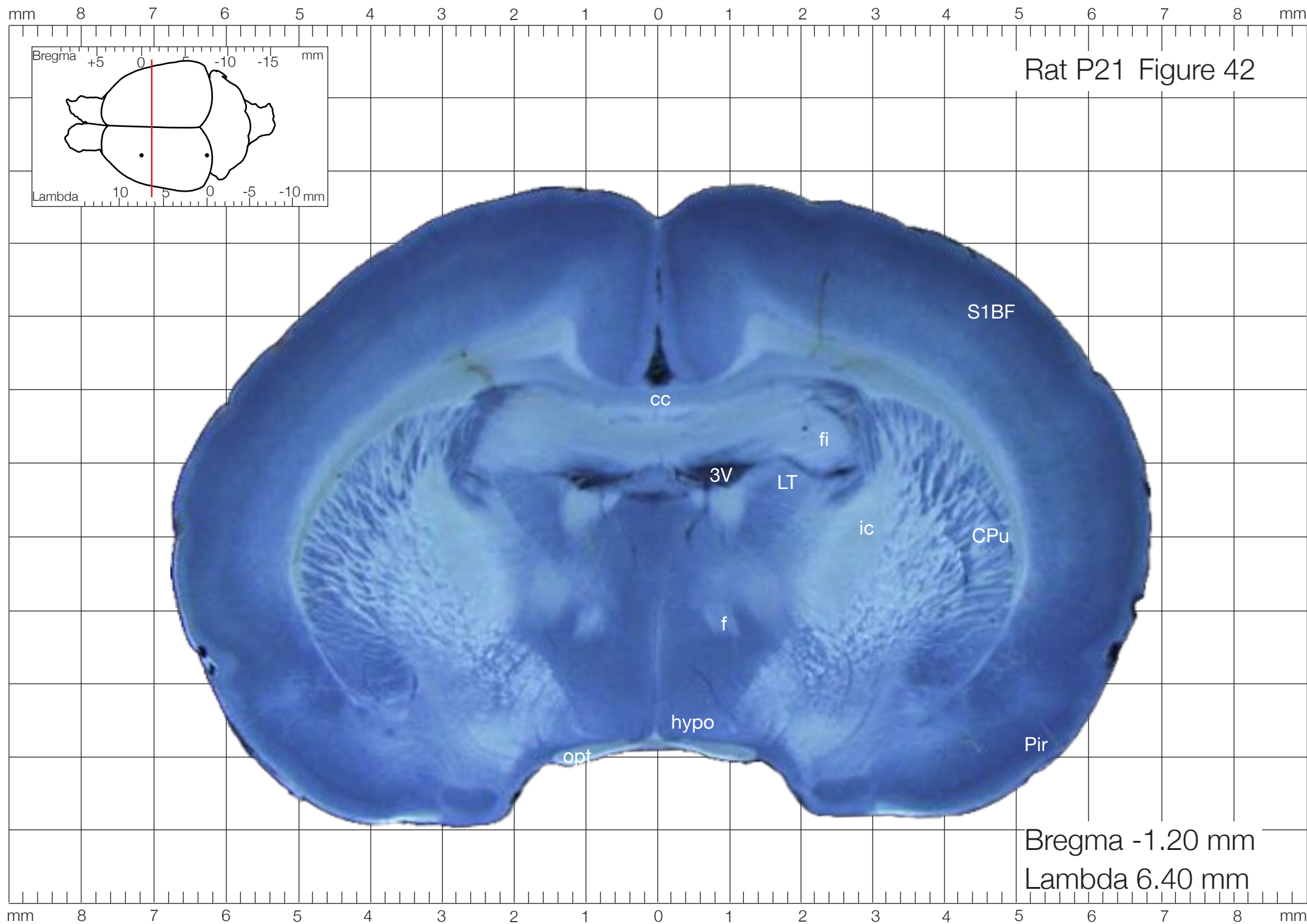
mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

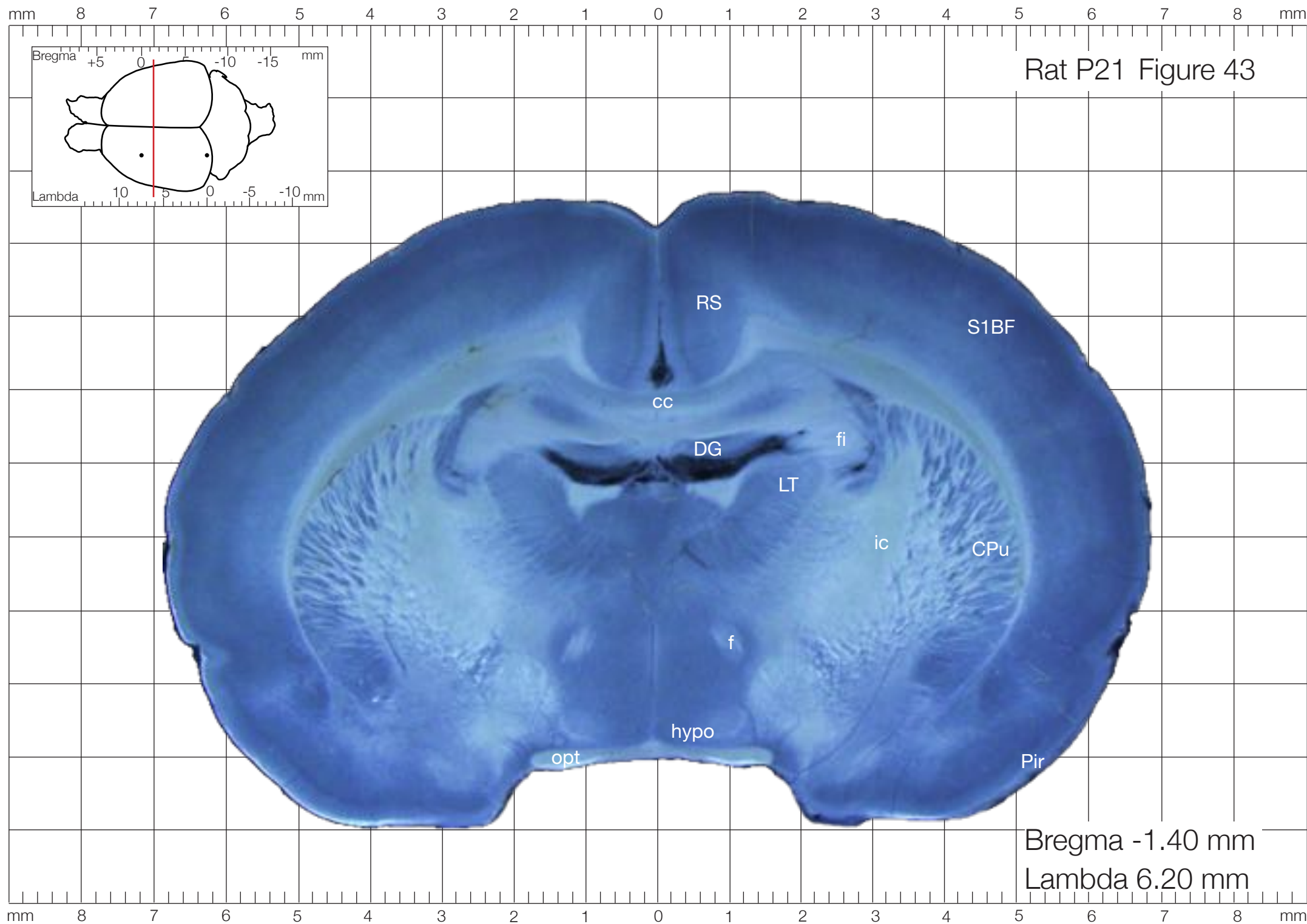


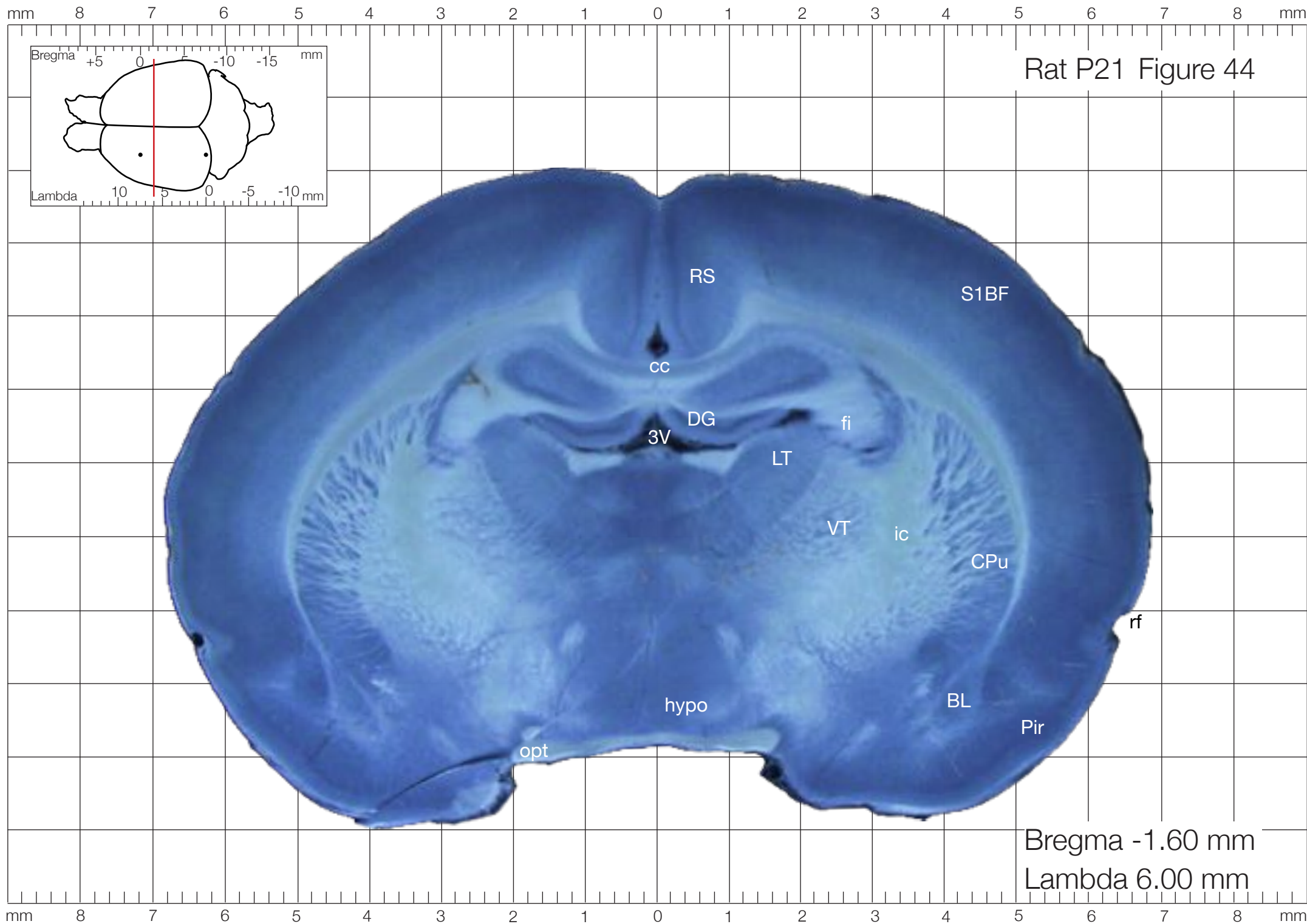


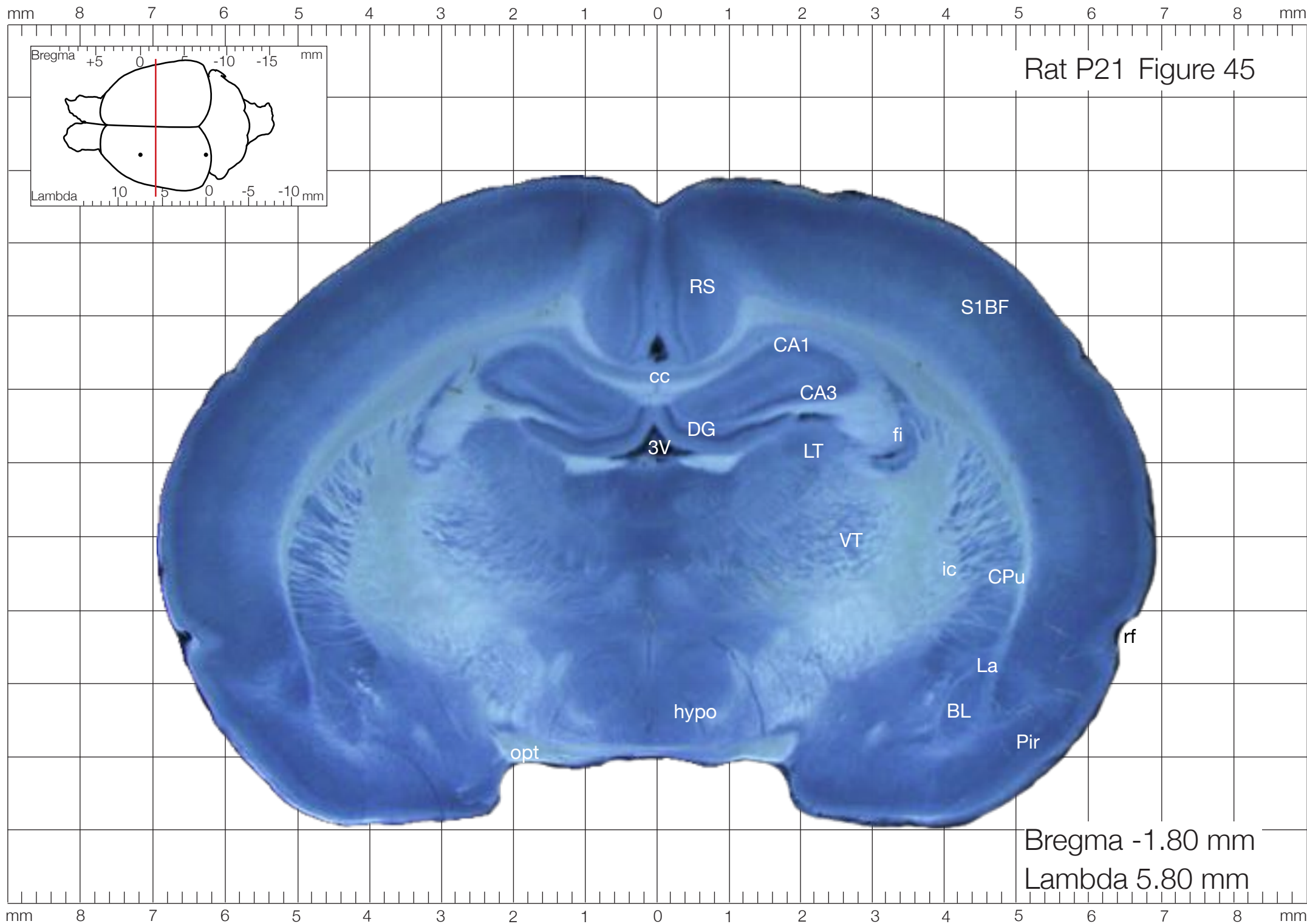


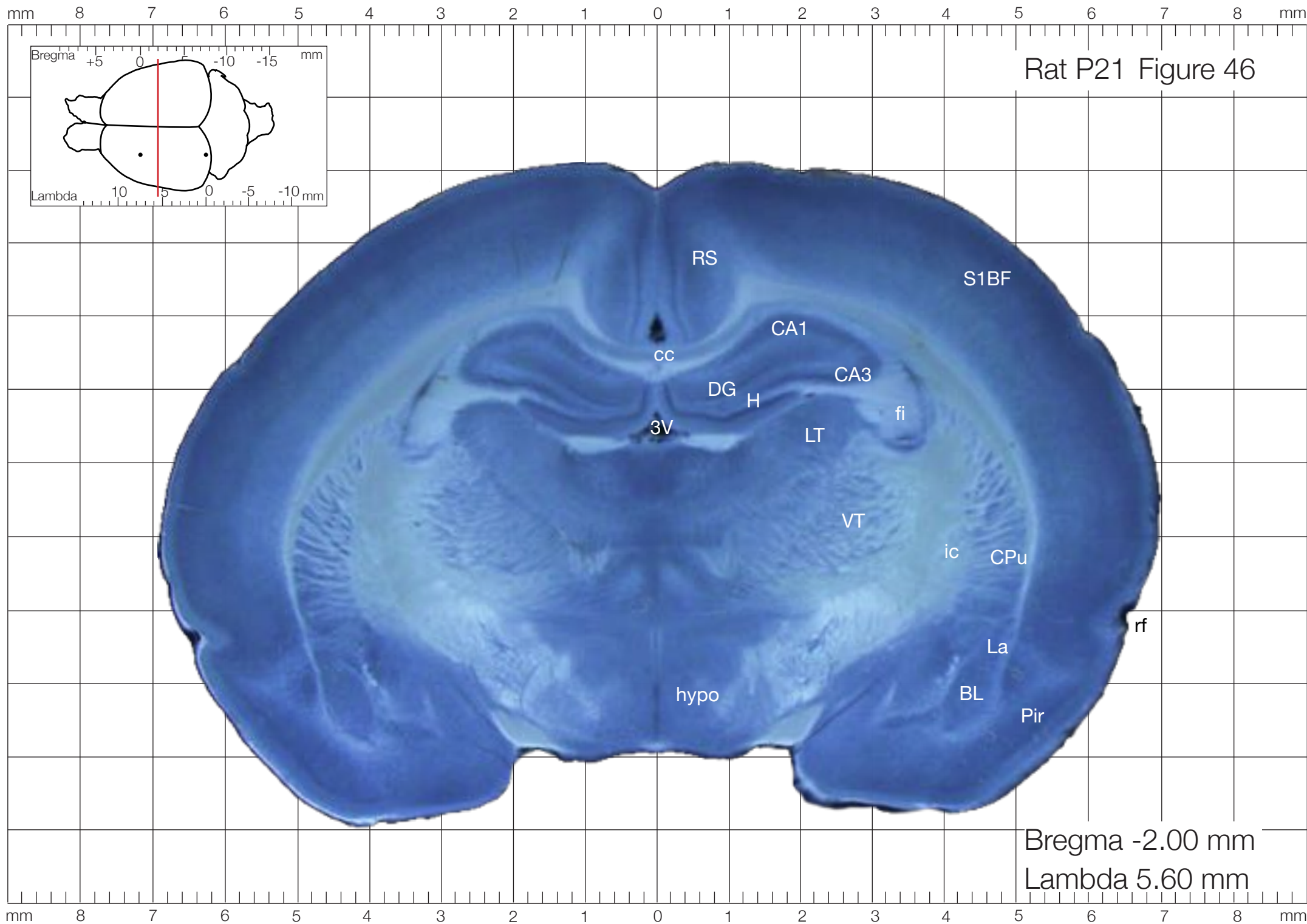


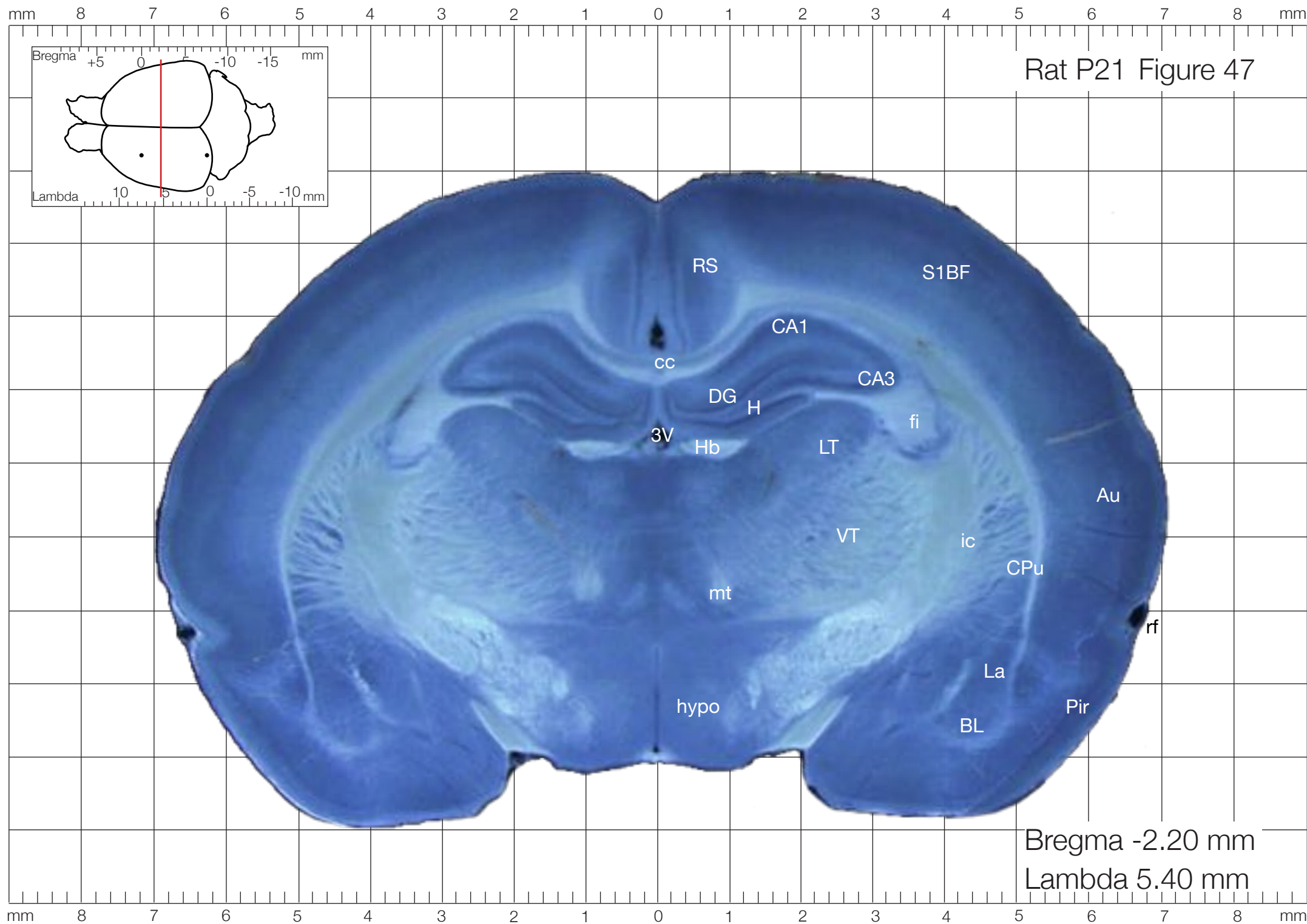


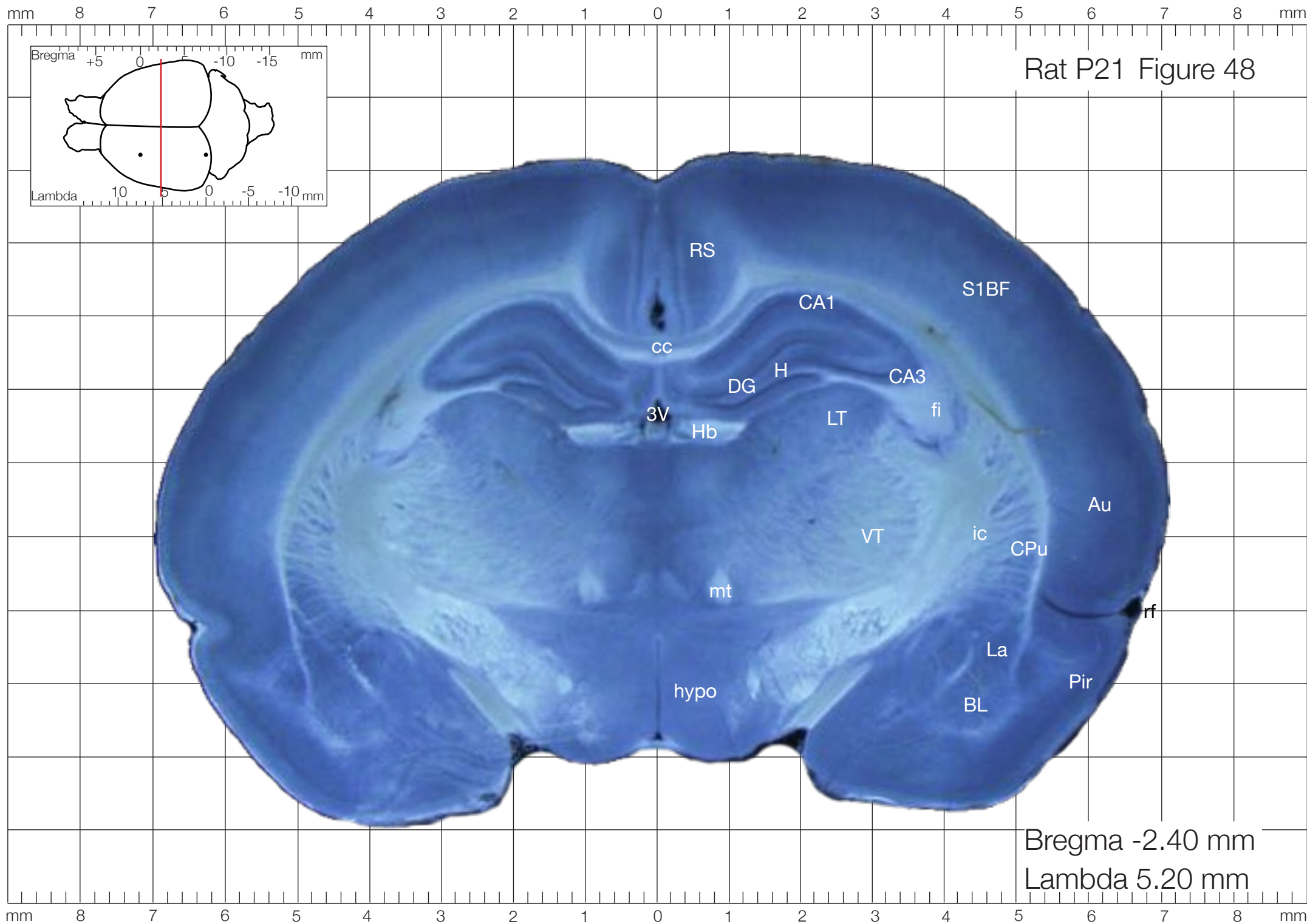


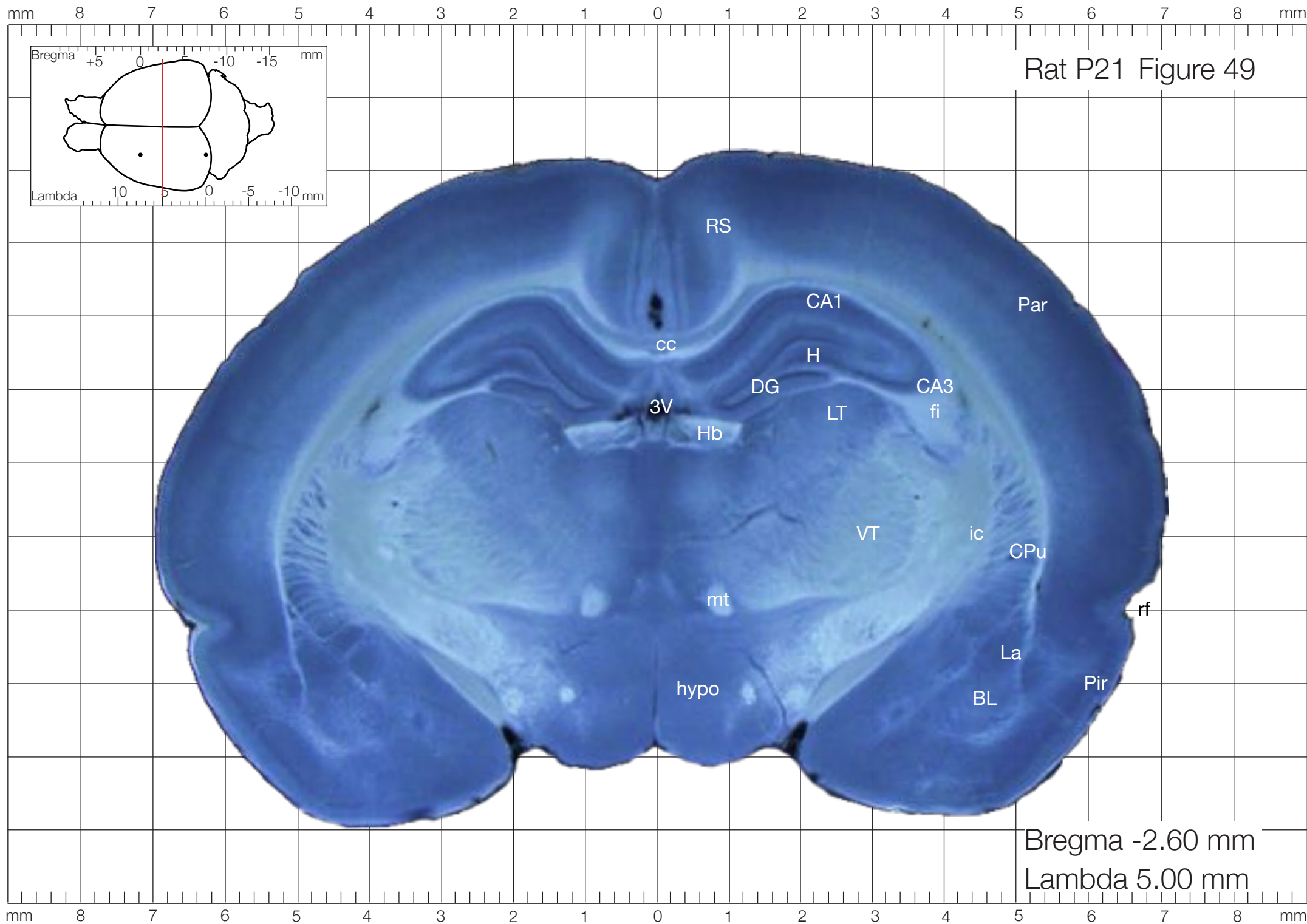


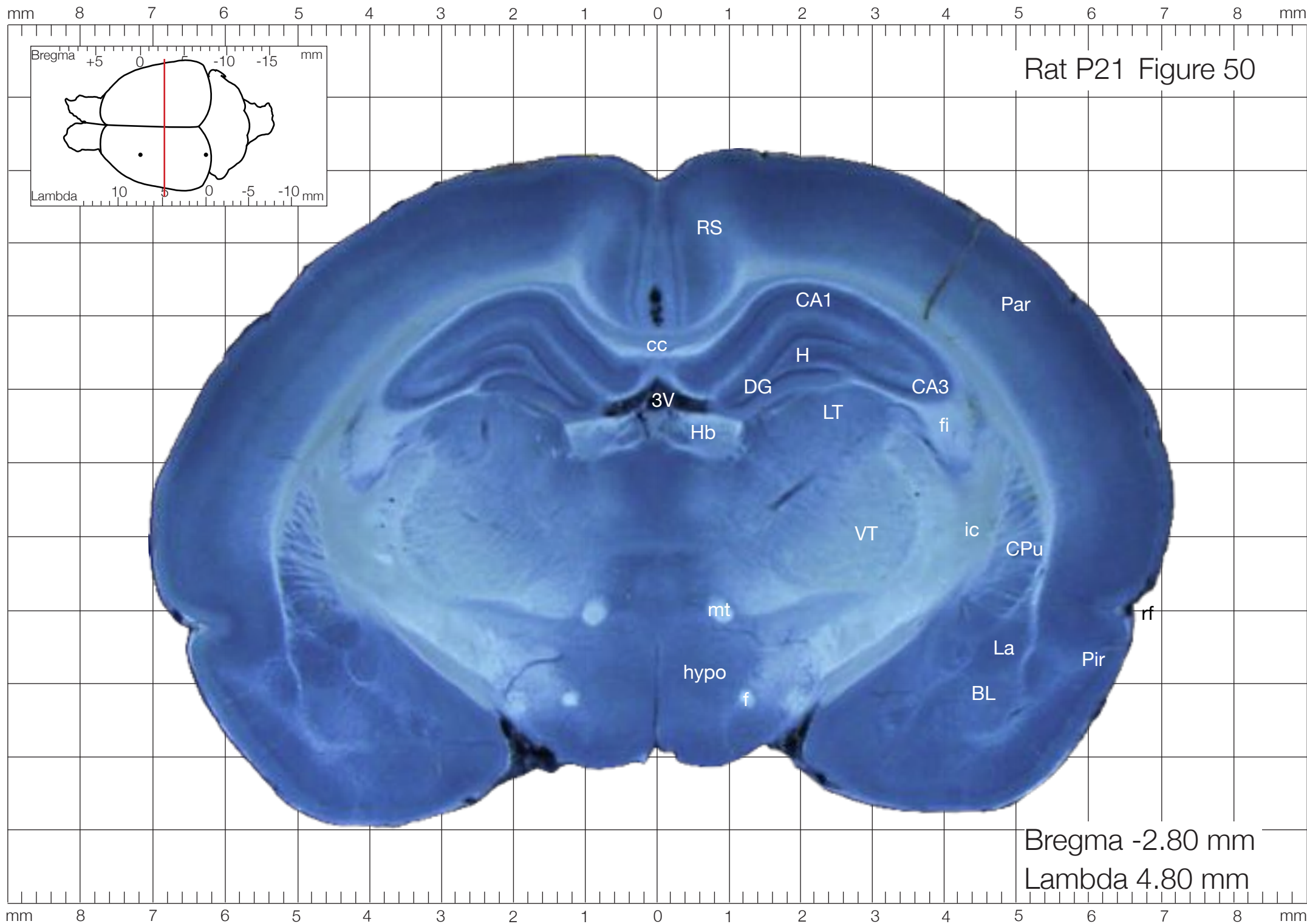


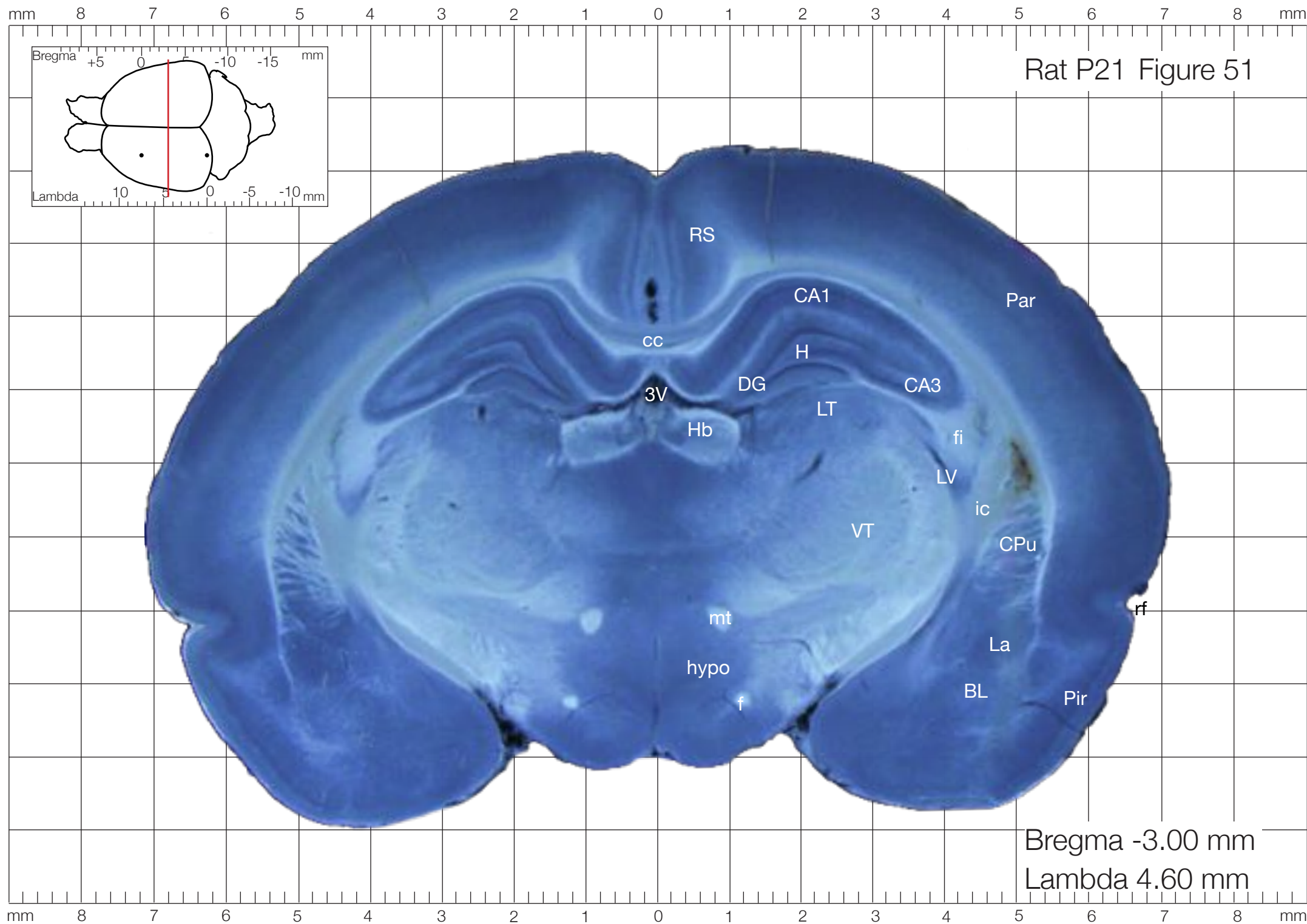


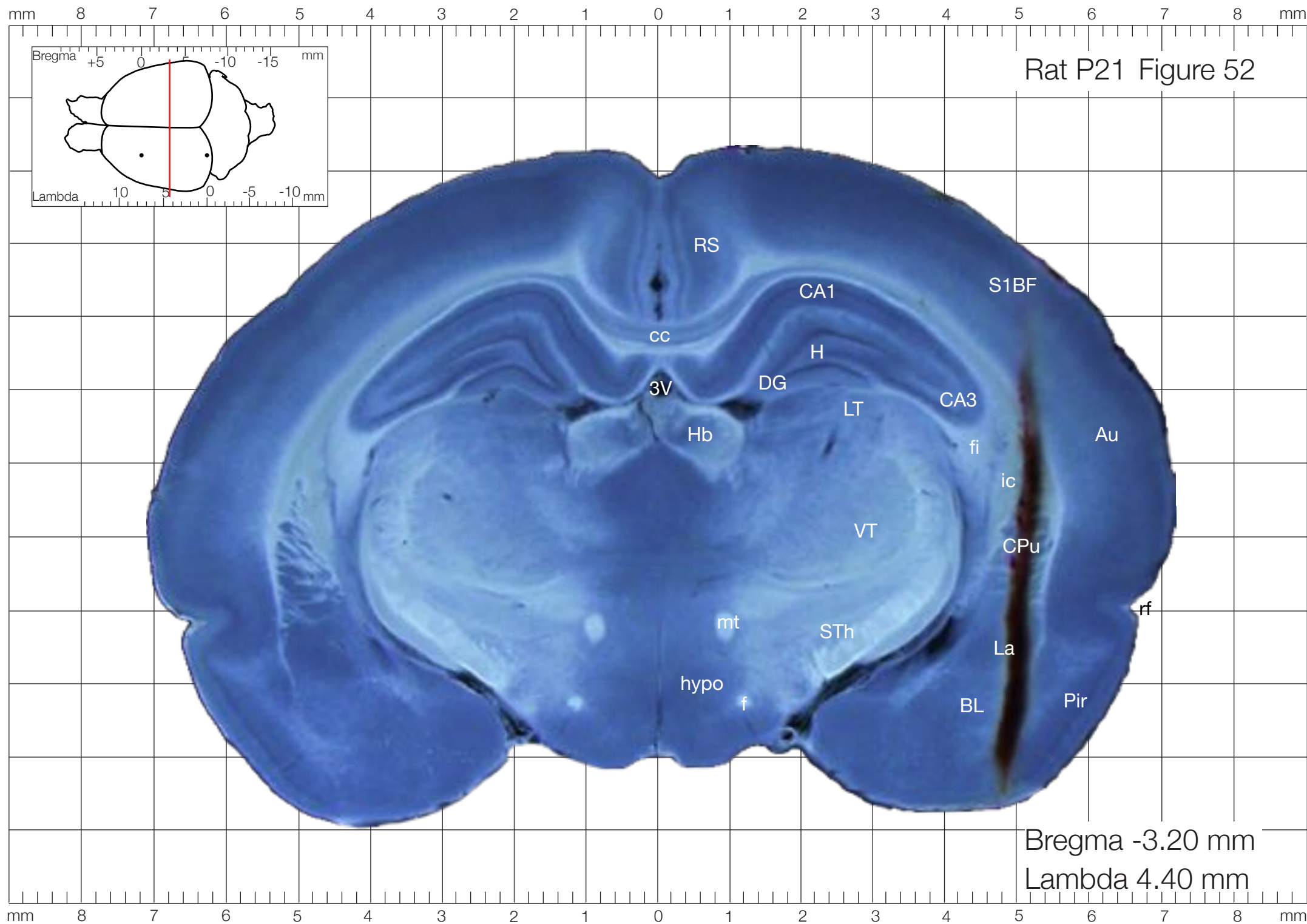


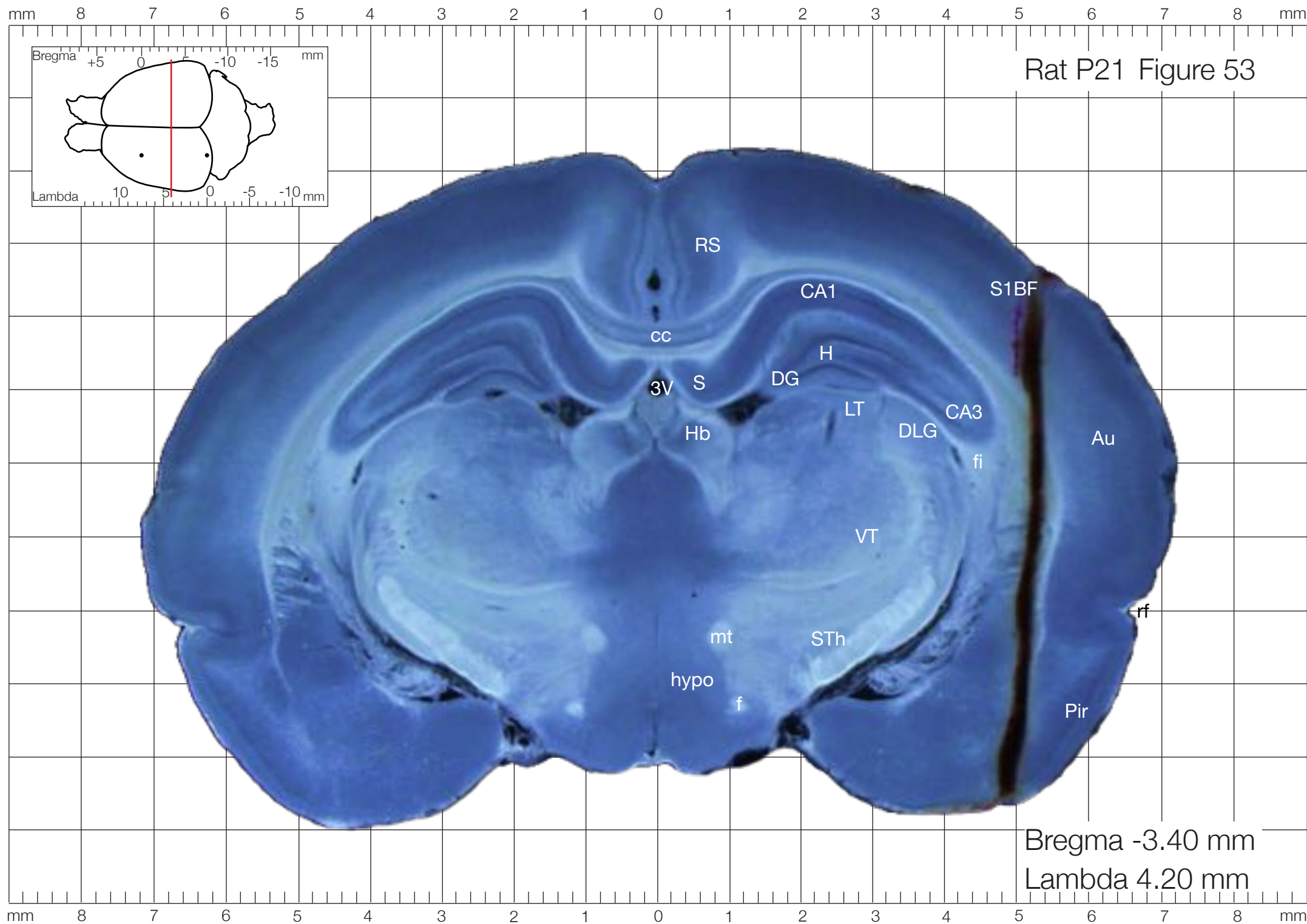


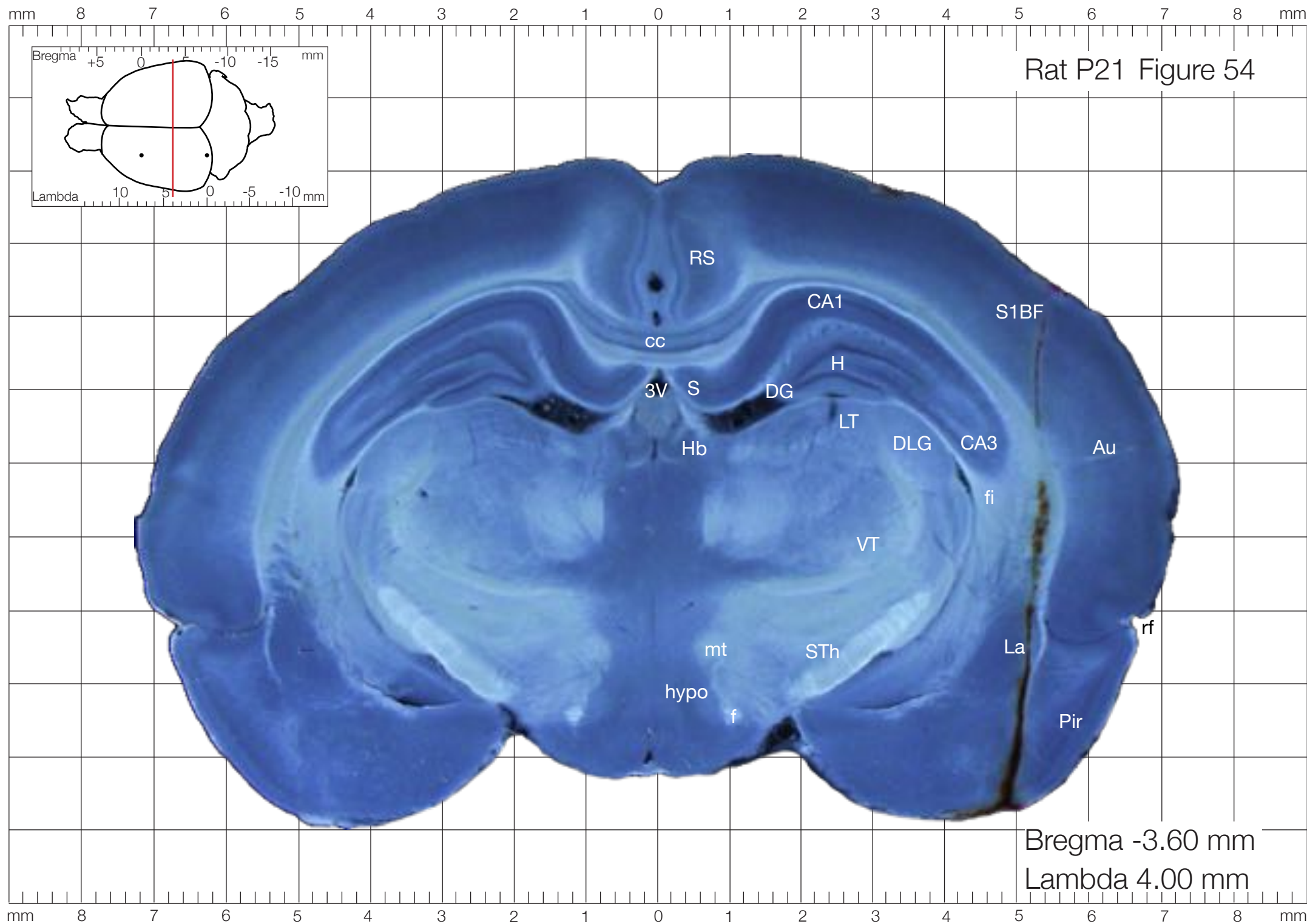


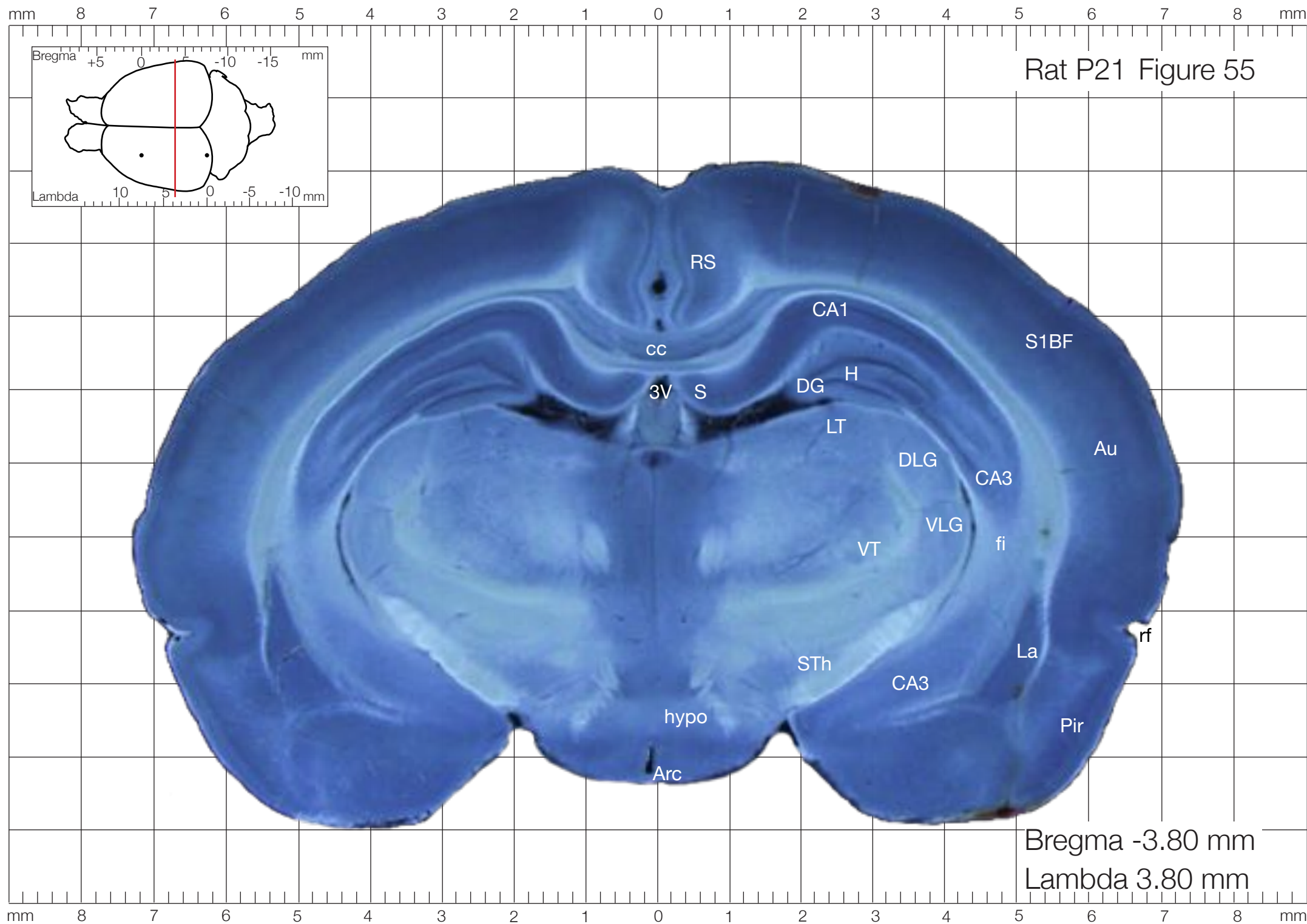


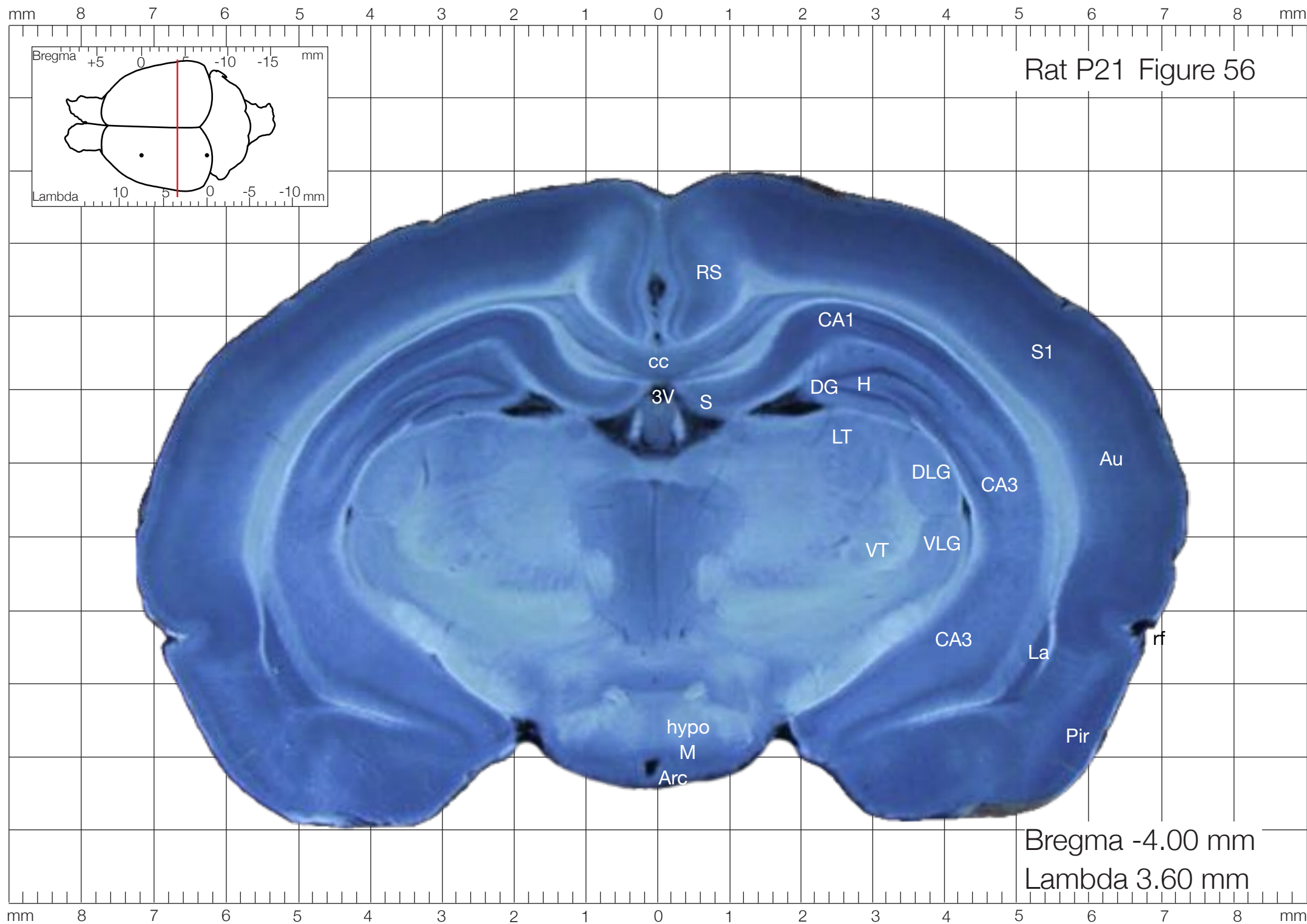


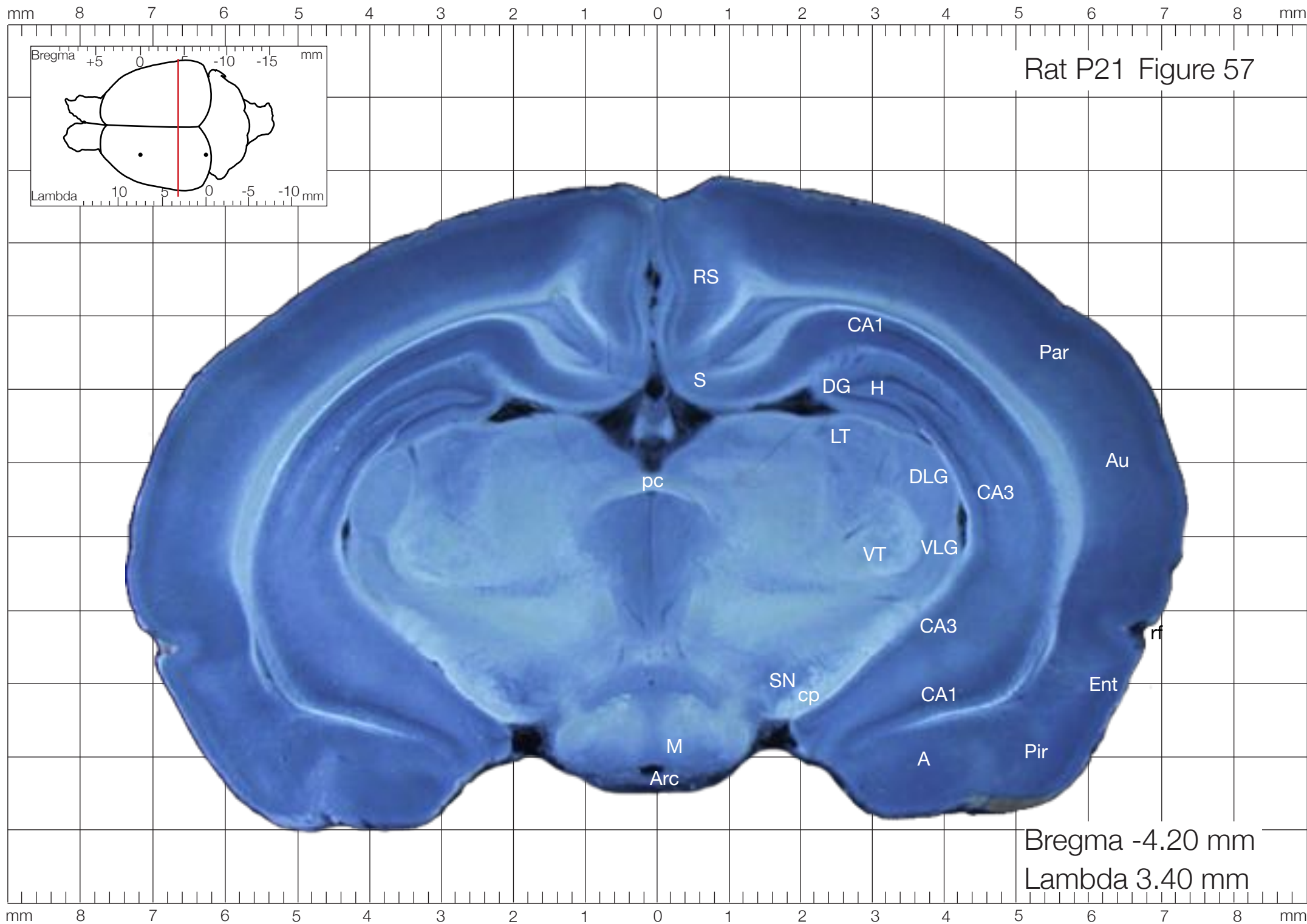


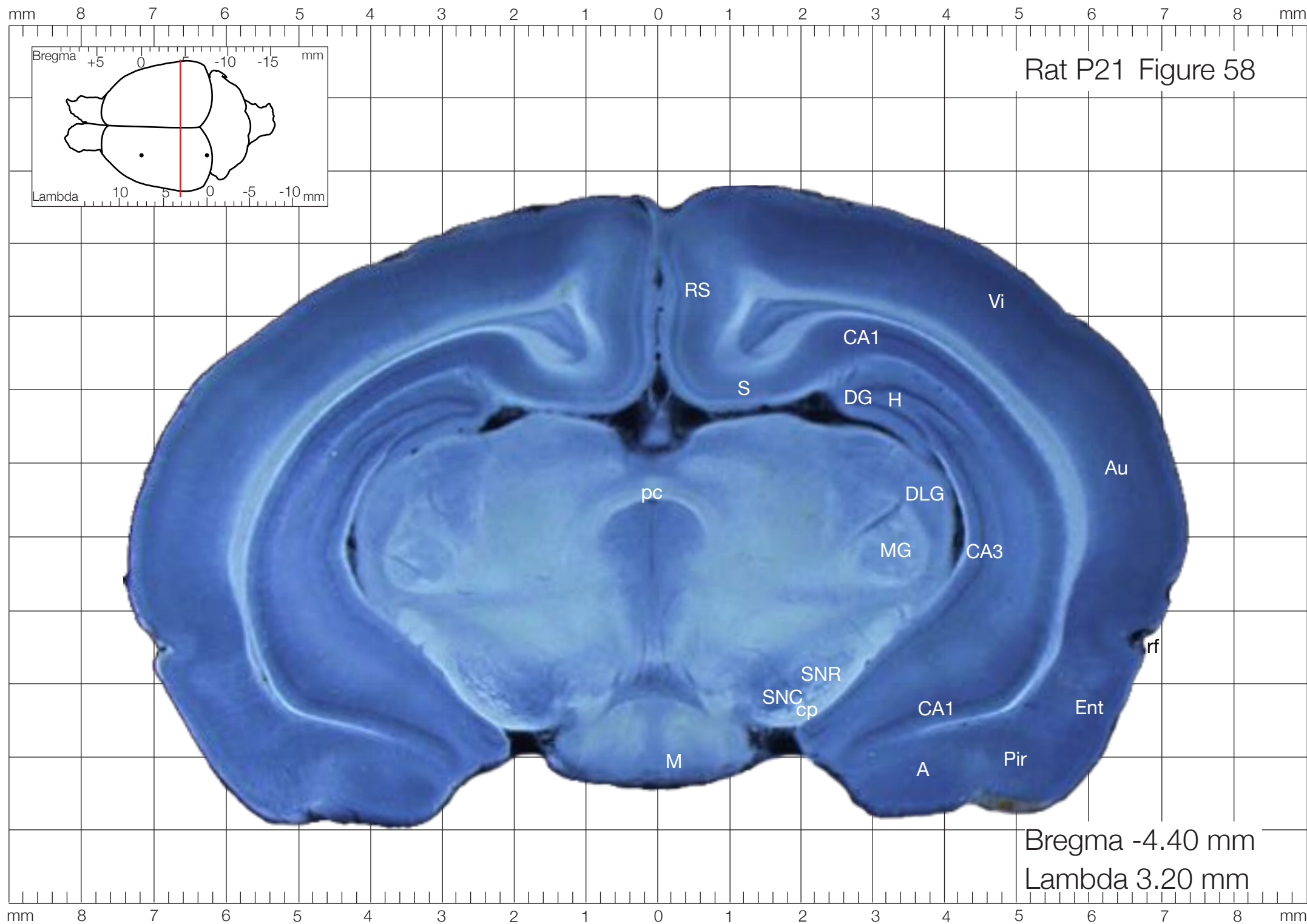




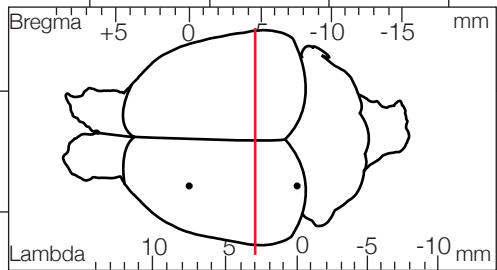




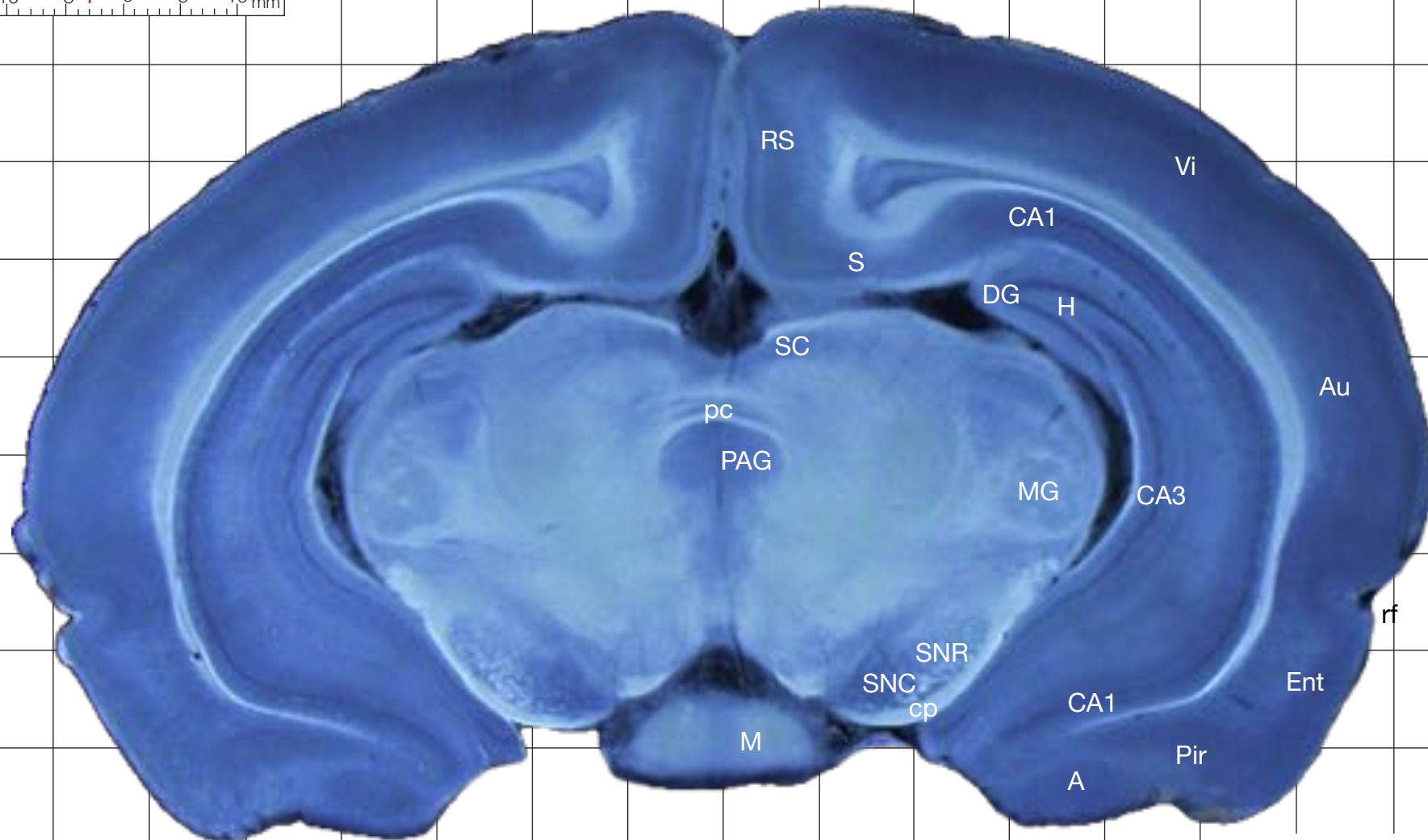




mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



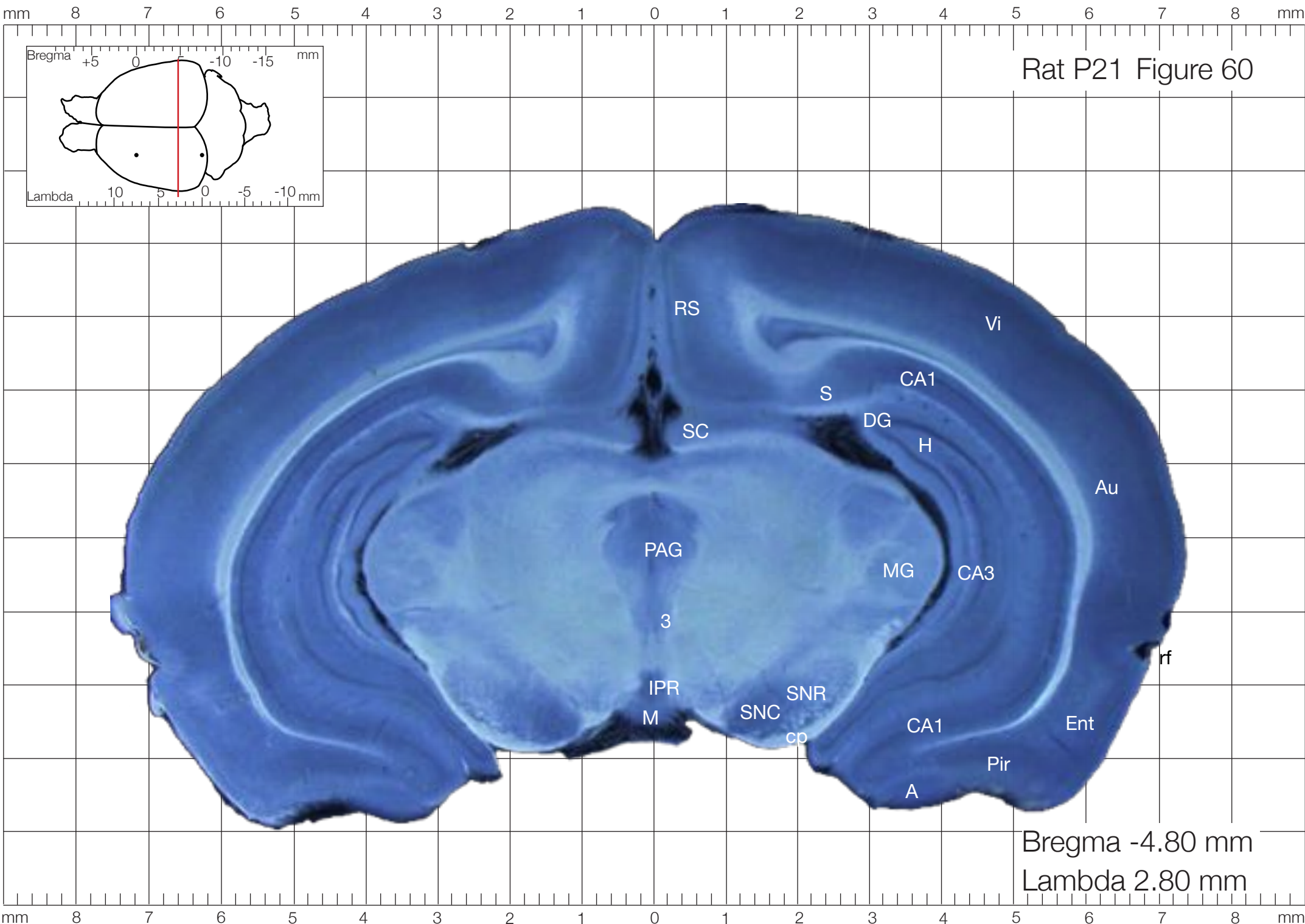
Rat P21 Figure 59



Bregma -4.60 mm

Lambda 3.00 mm

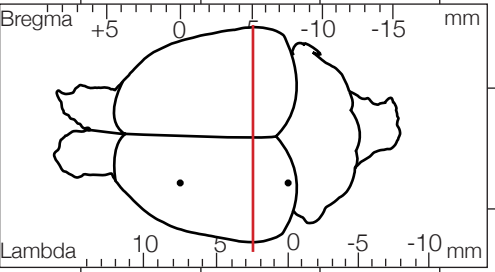
mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



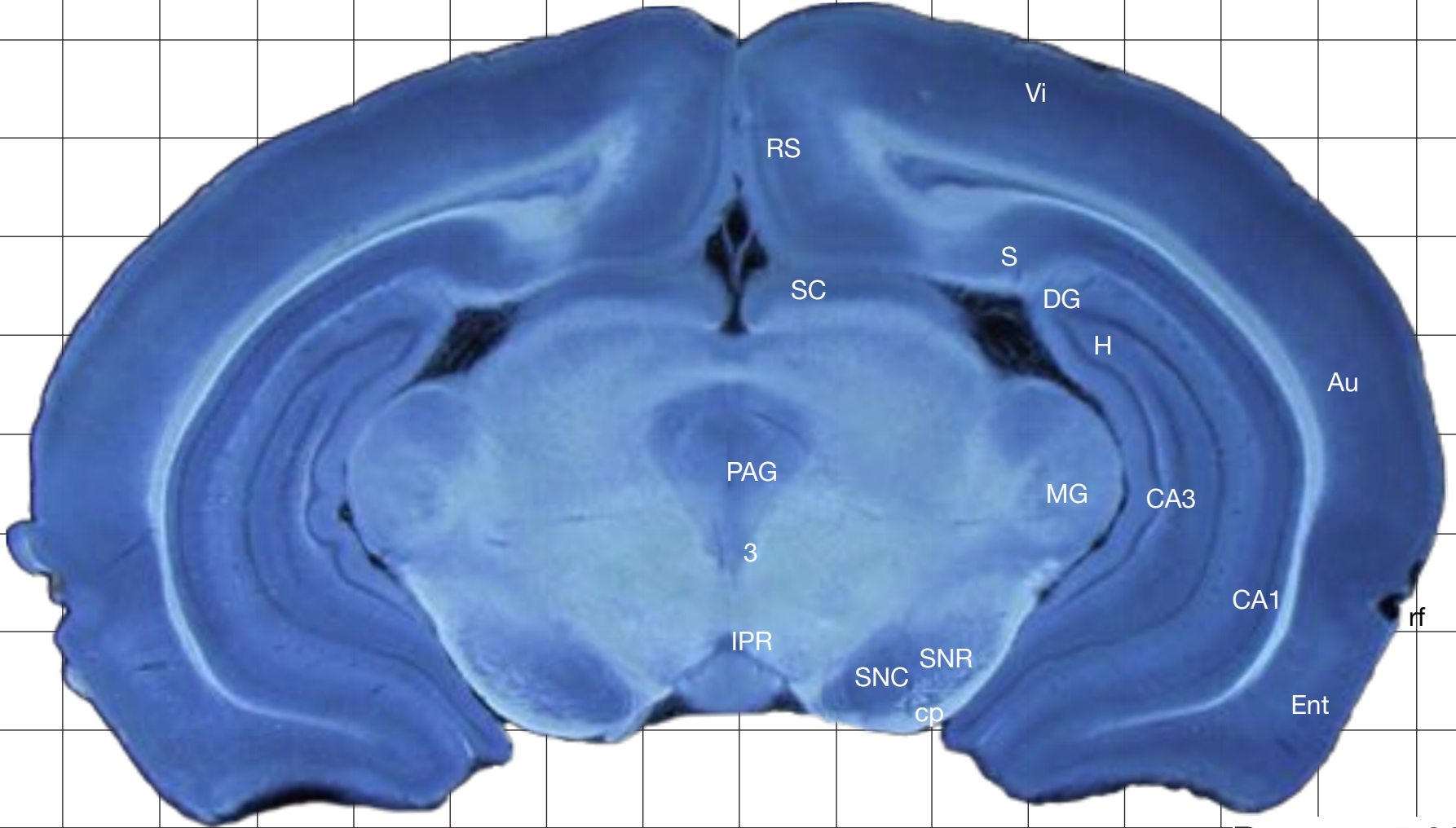
Rat P21 Figure 60

Bregma -4.80 mm
Lambda 2.80 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

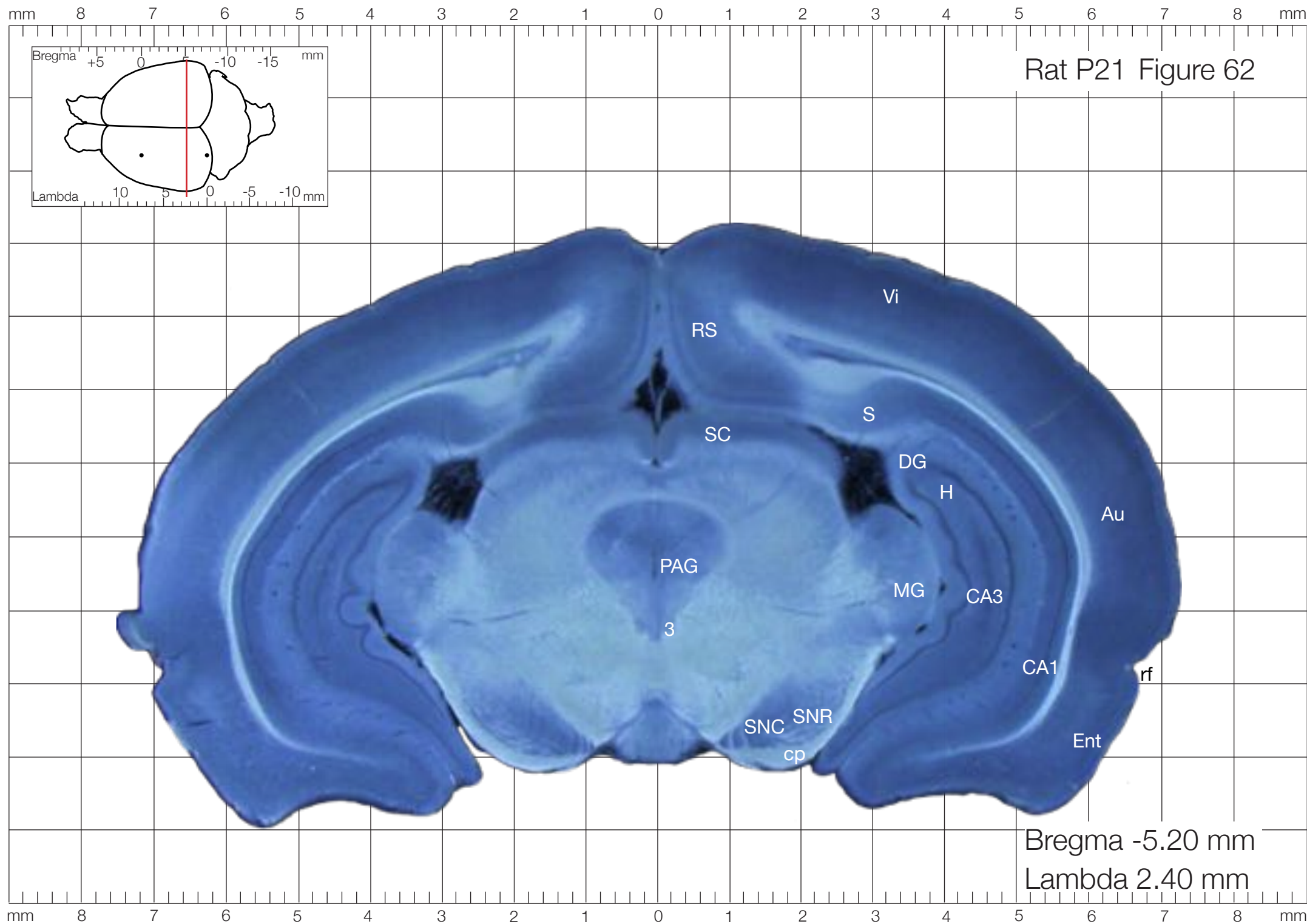


Rat P21 Figure 61

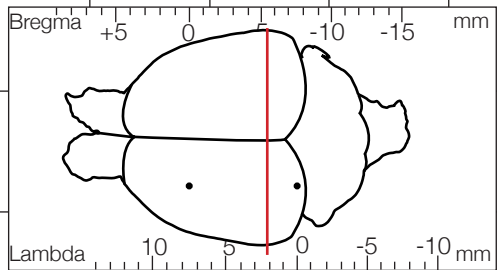


Bregma -5.00 mm
Lambda 2.60 mm

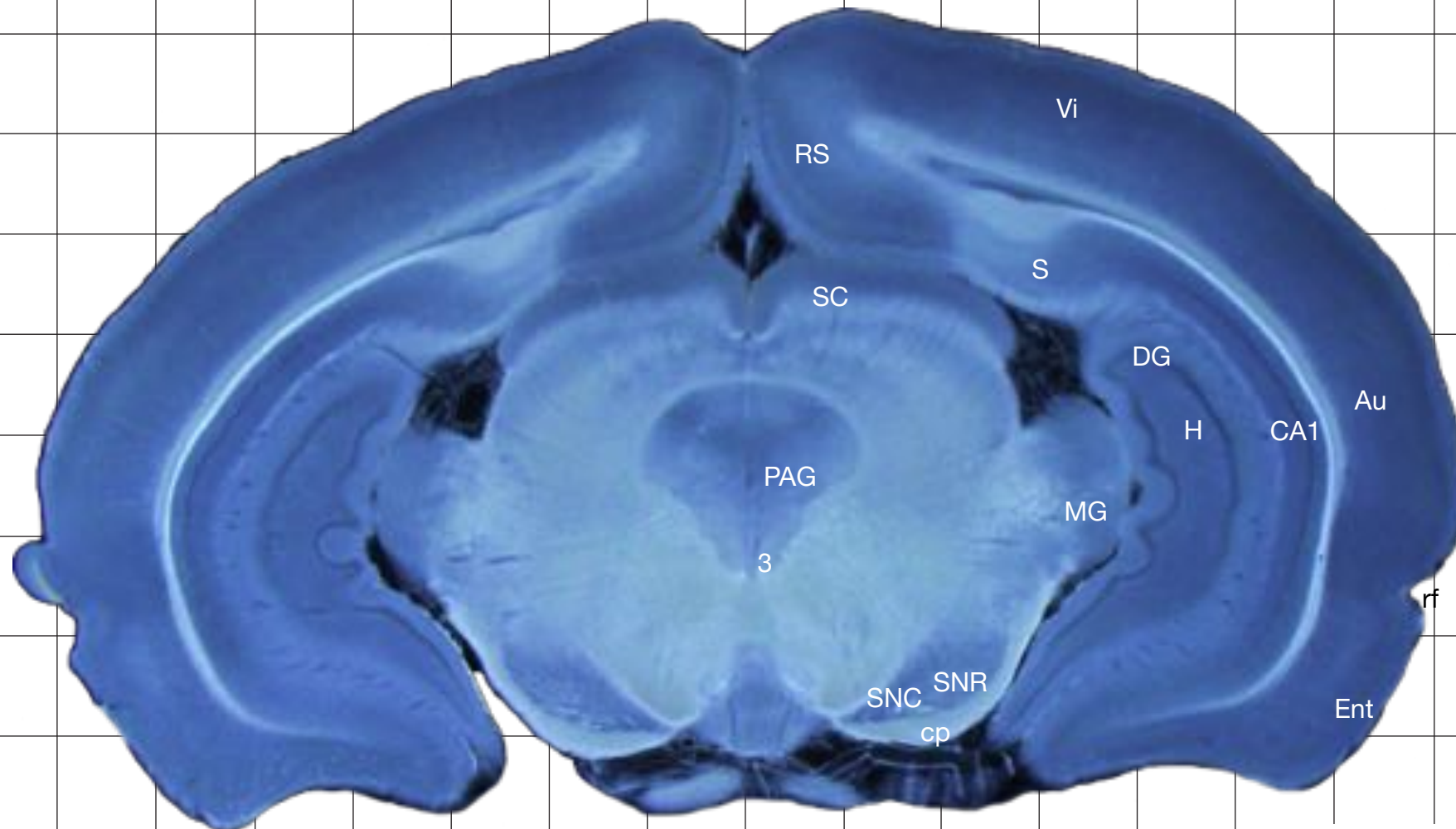
mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



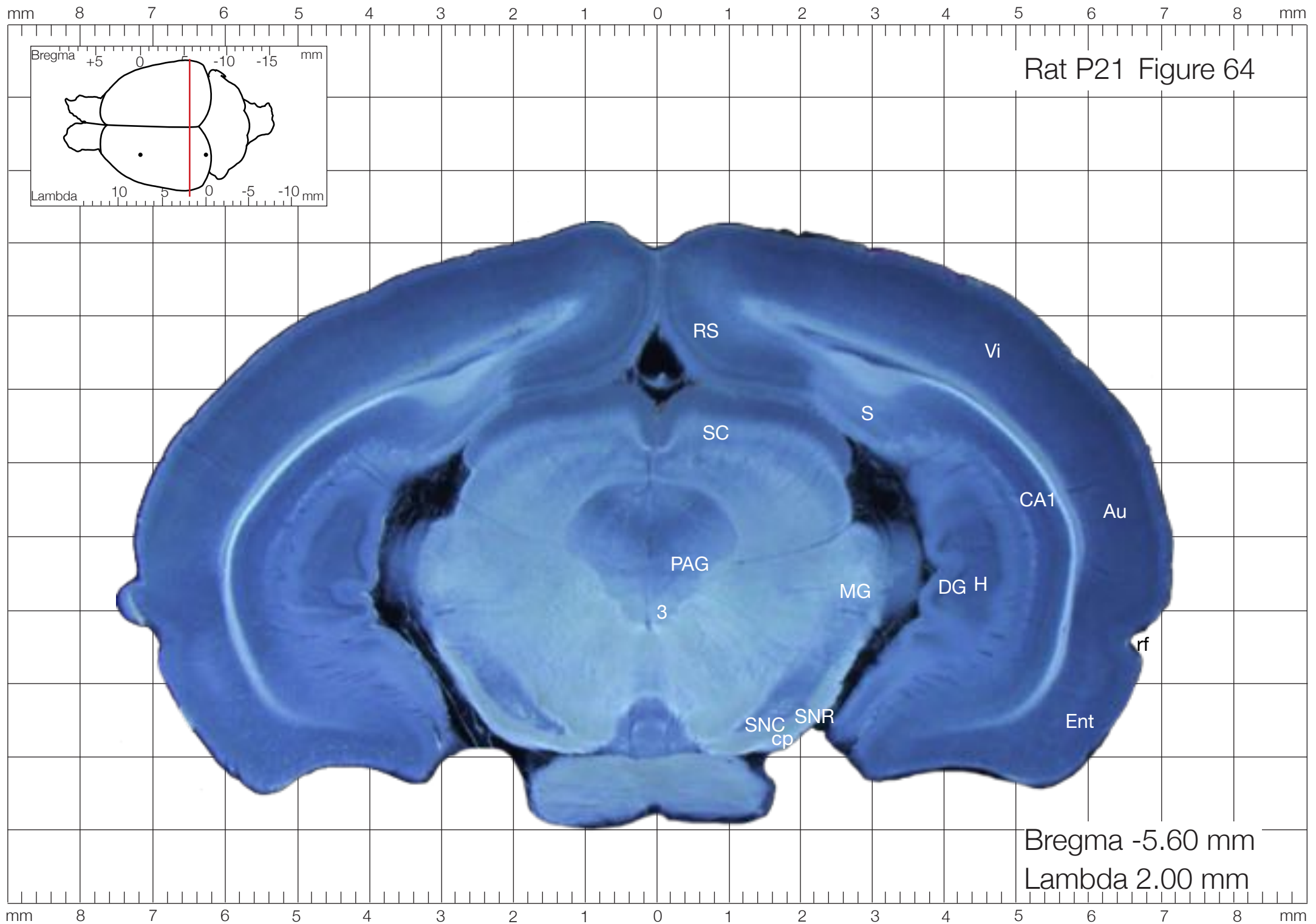
Rat P21 Figure 63



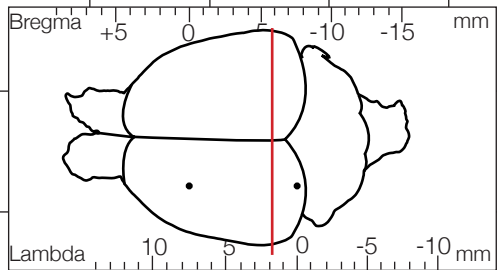
Bregma -5.40 mm

Lambda 2.20 mm

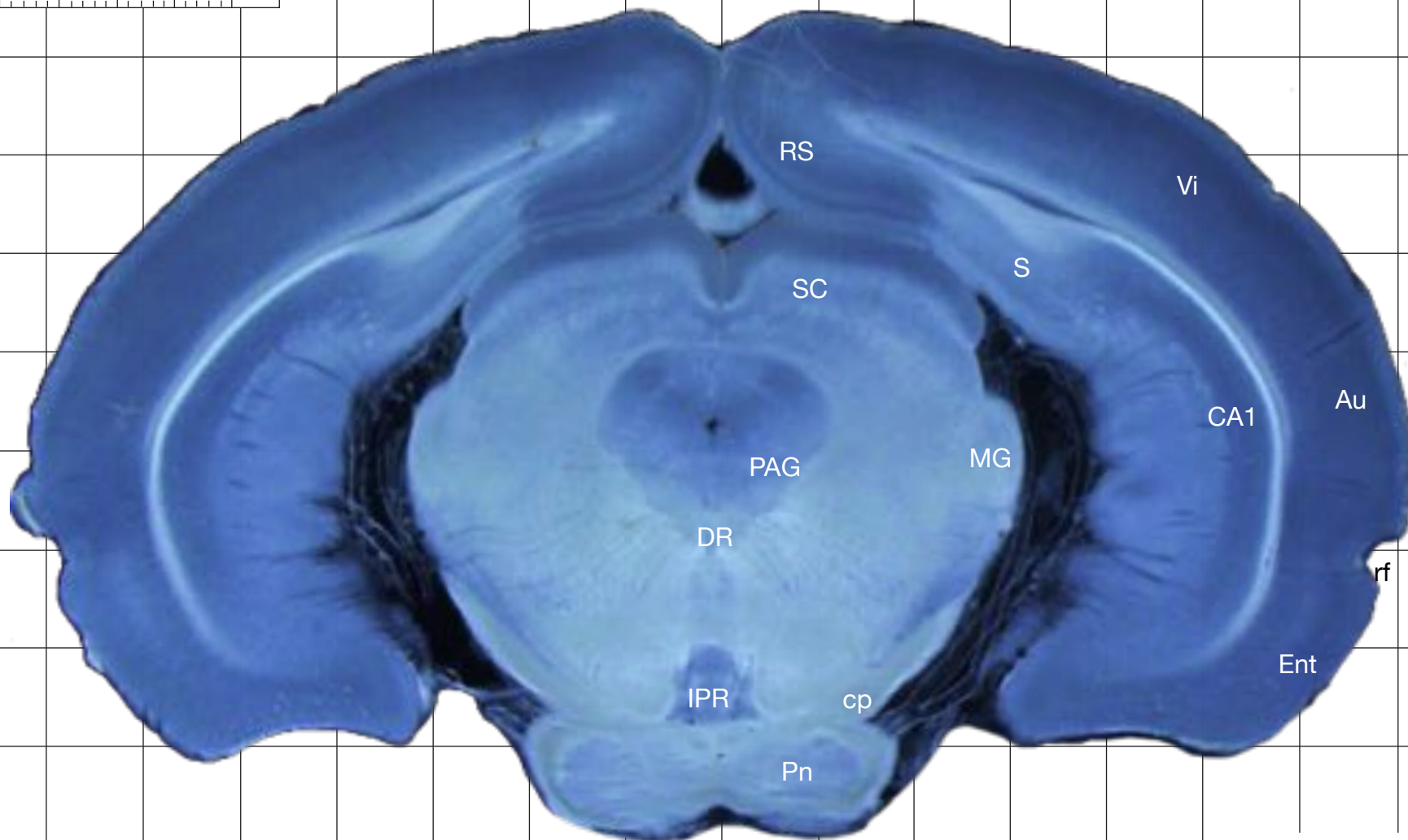
mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



Rat P21 Figure 65

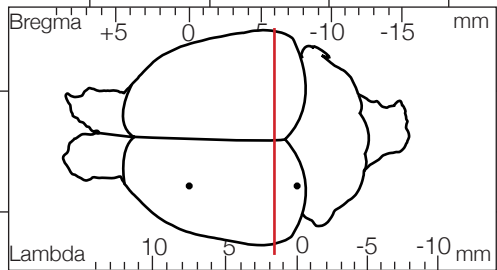


Bregma -5.80 mm

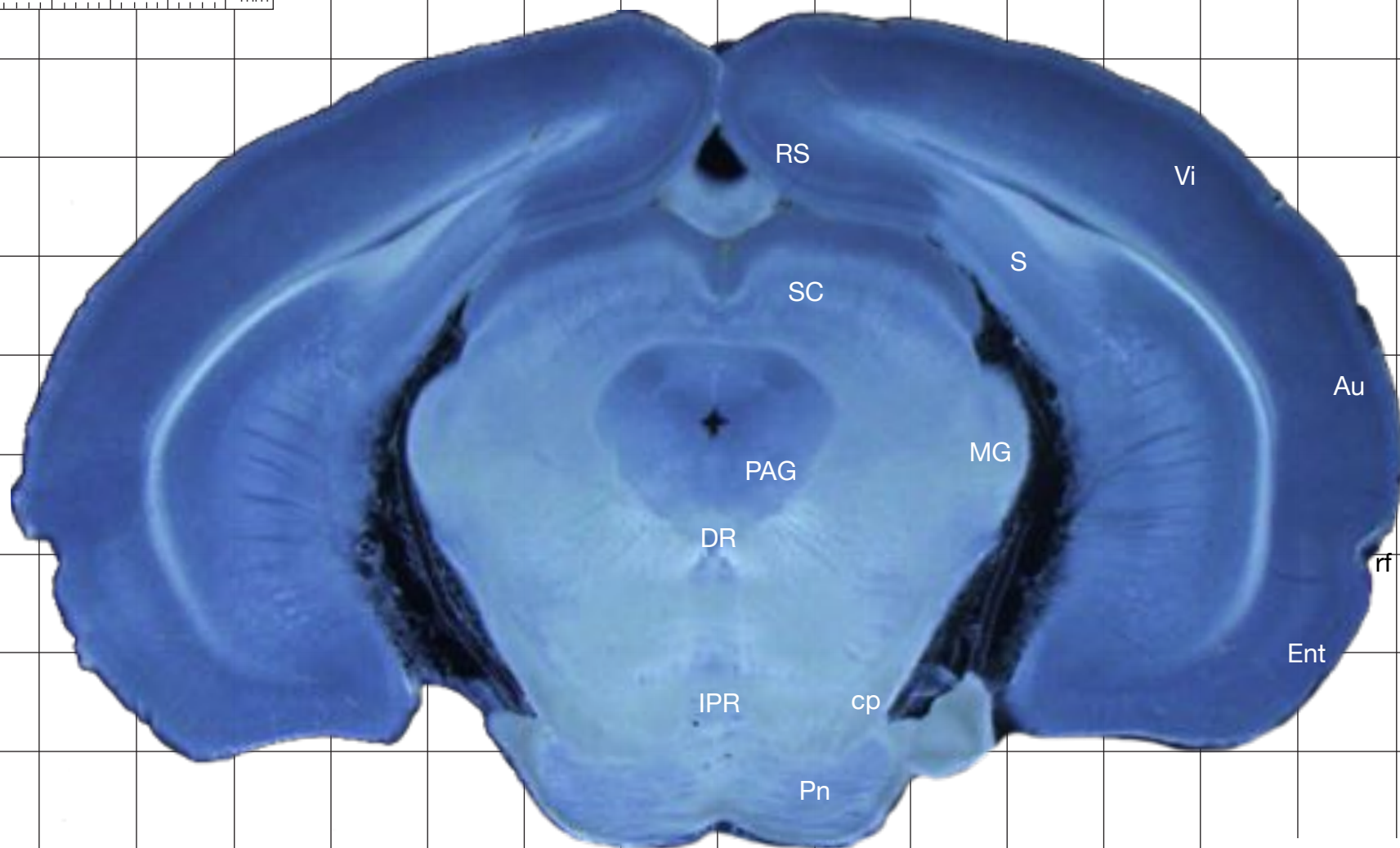
Lambda 1.80 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



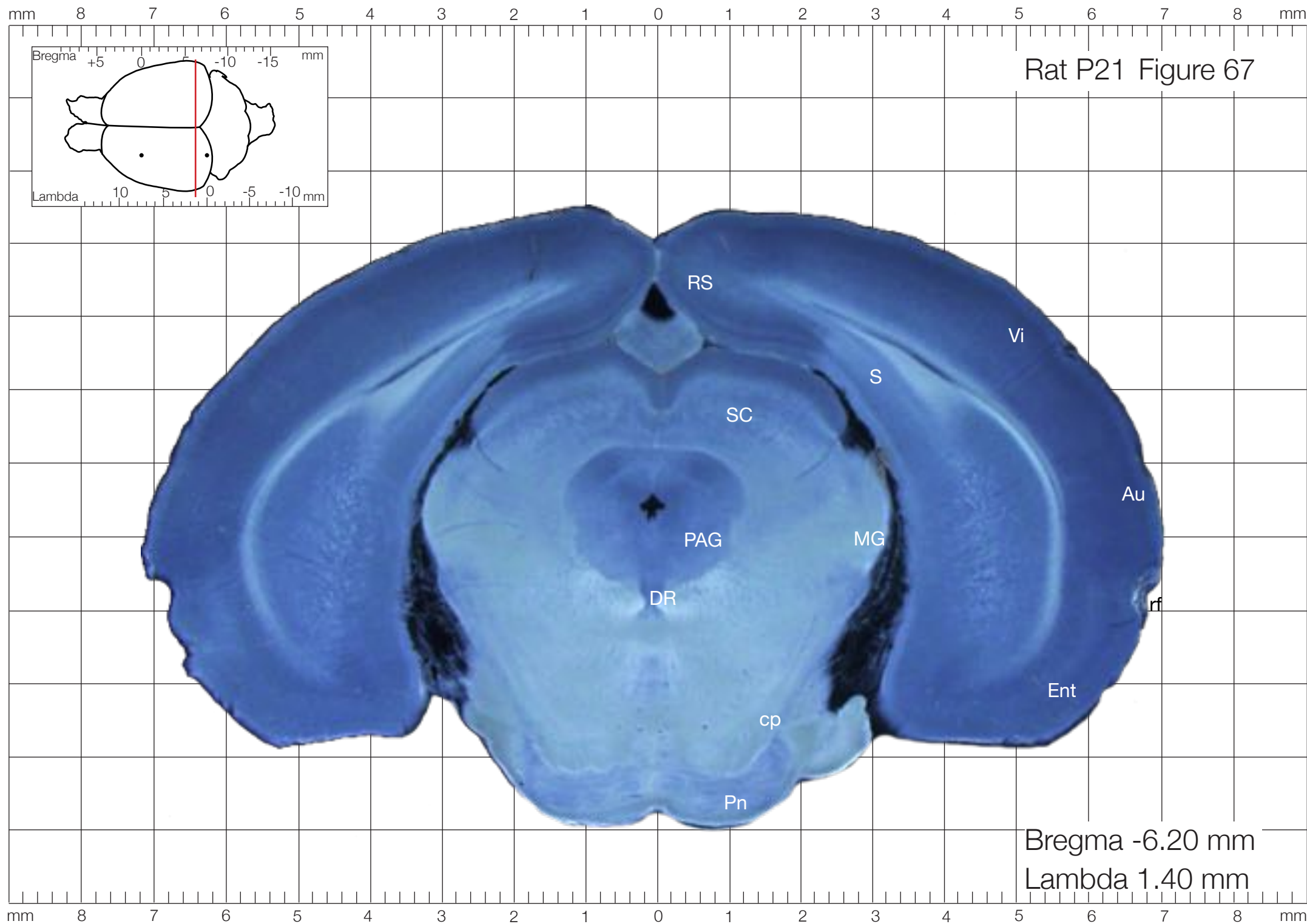
Rat P21 Figure 66

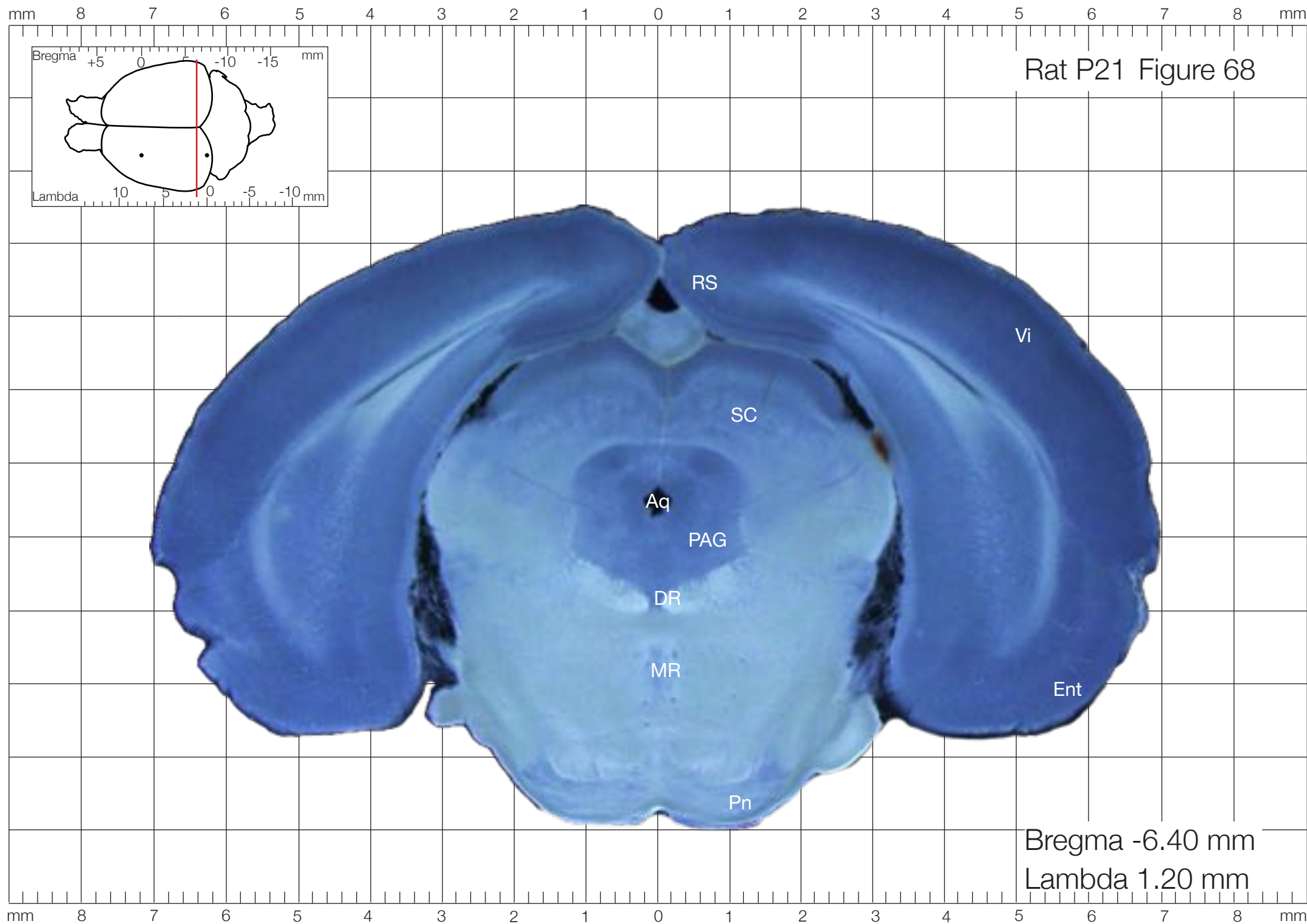


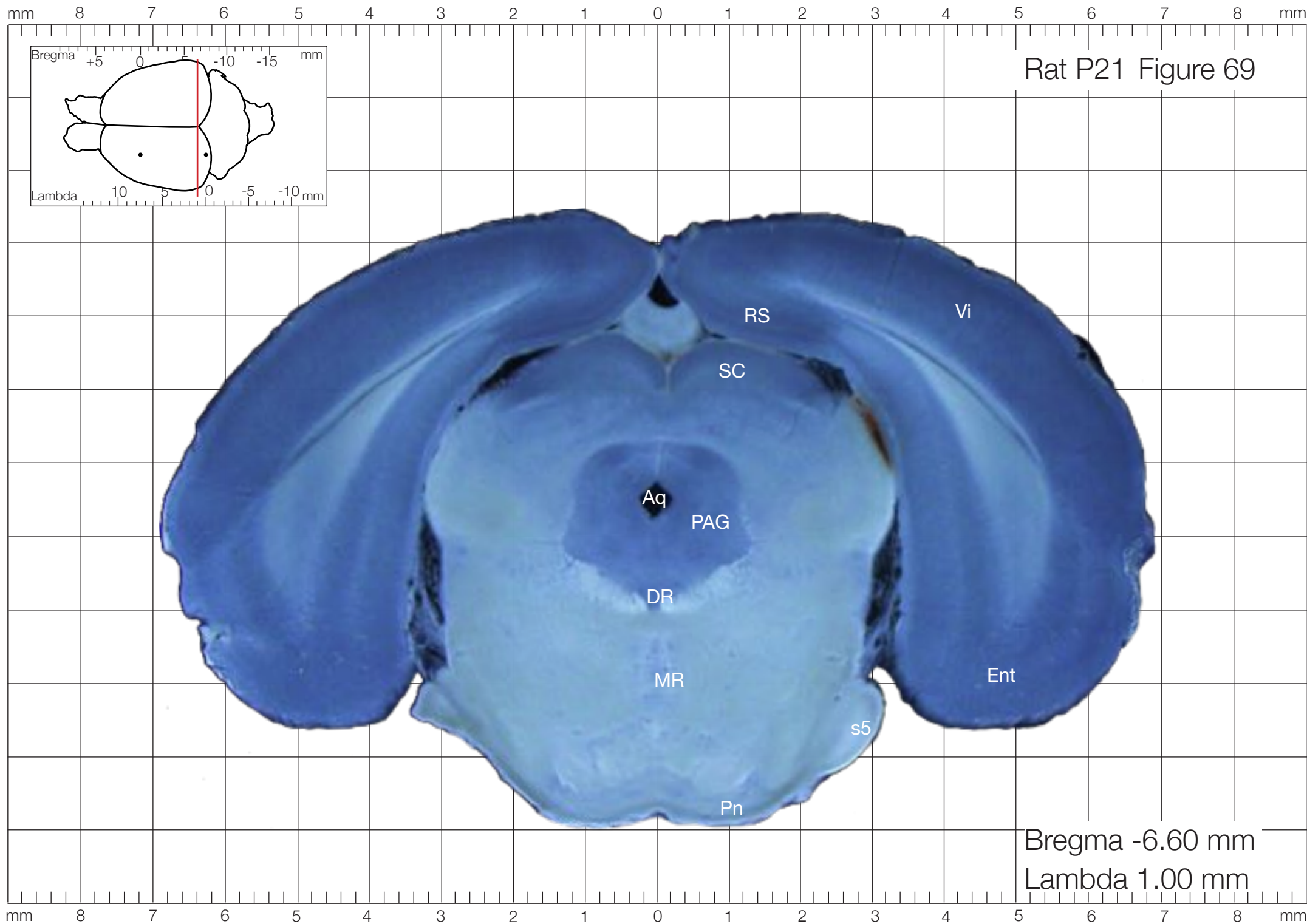
Bregma -6.00 mm

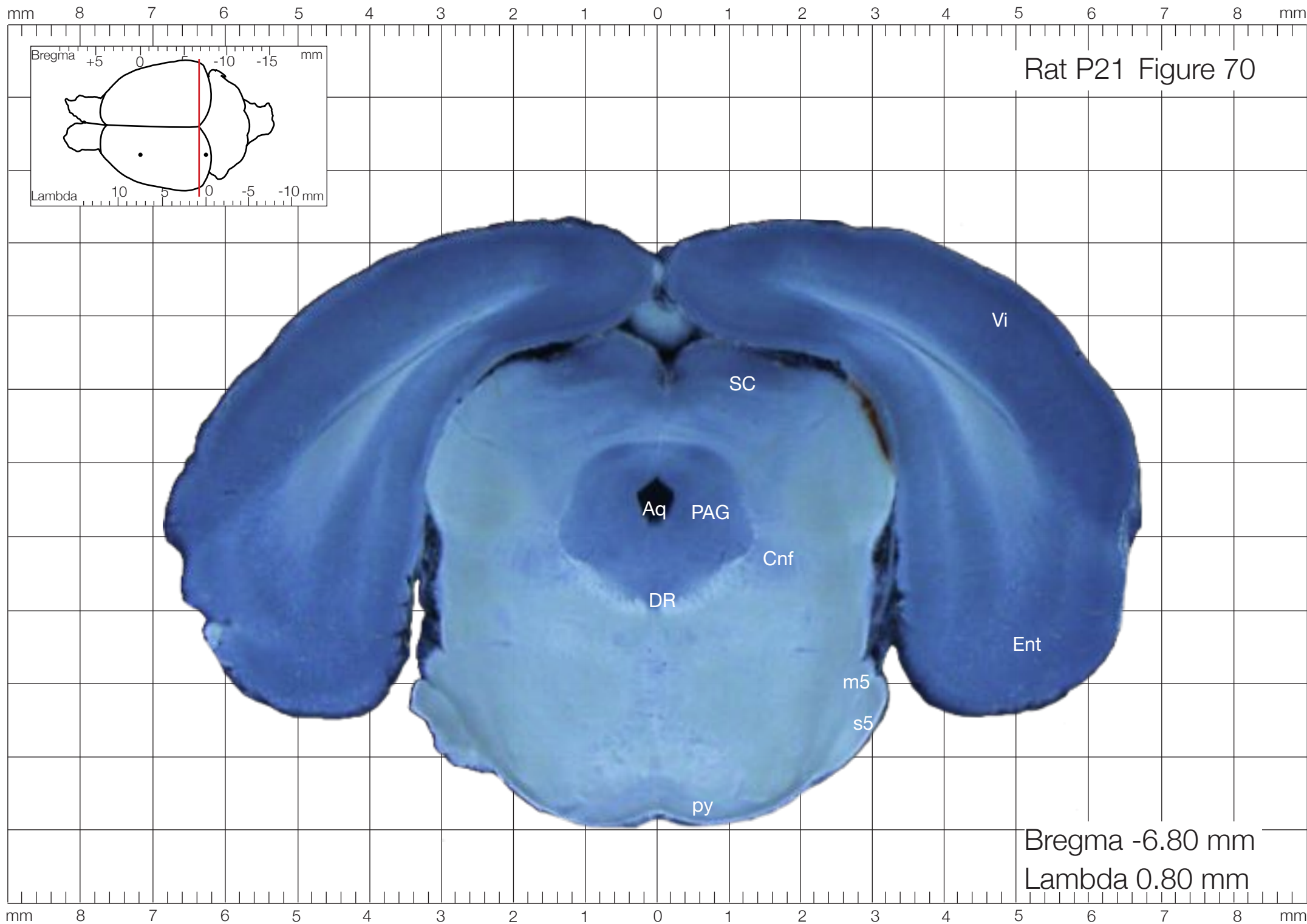
Lambda 1.60 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

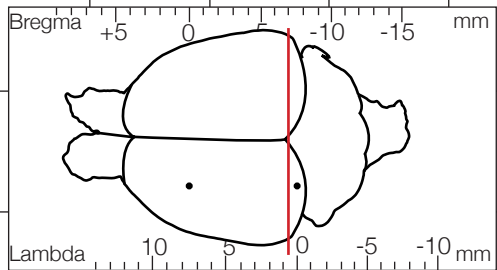




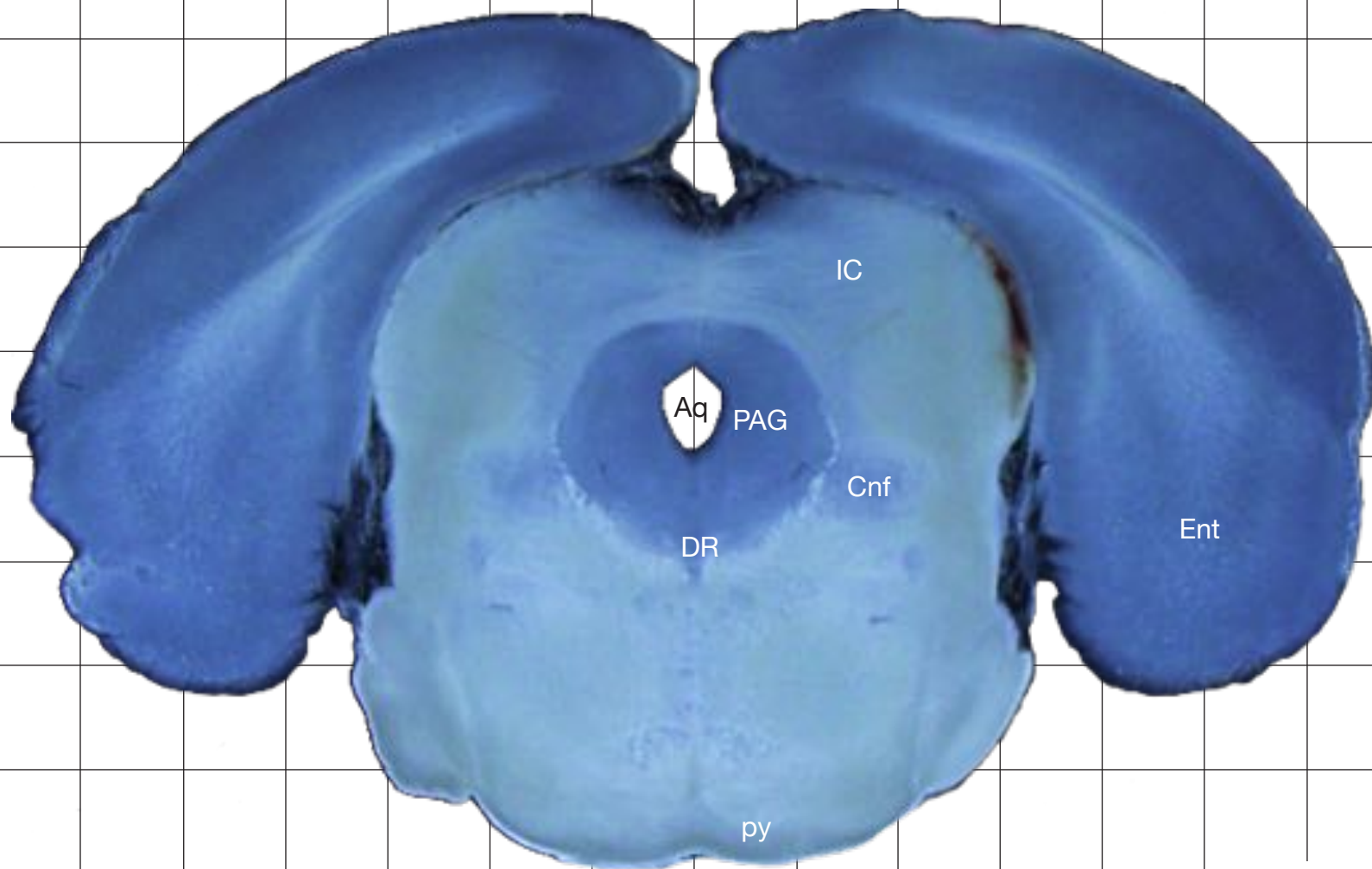




mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



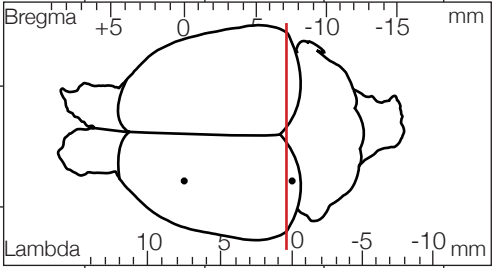
Rat P21 Figure 71



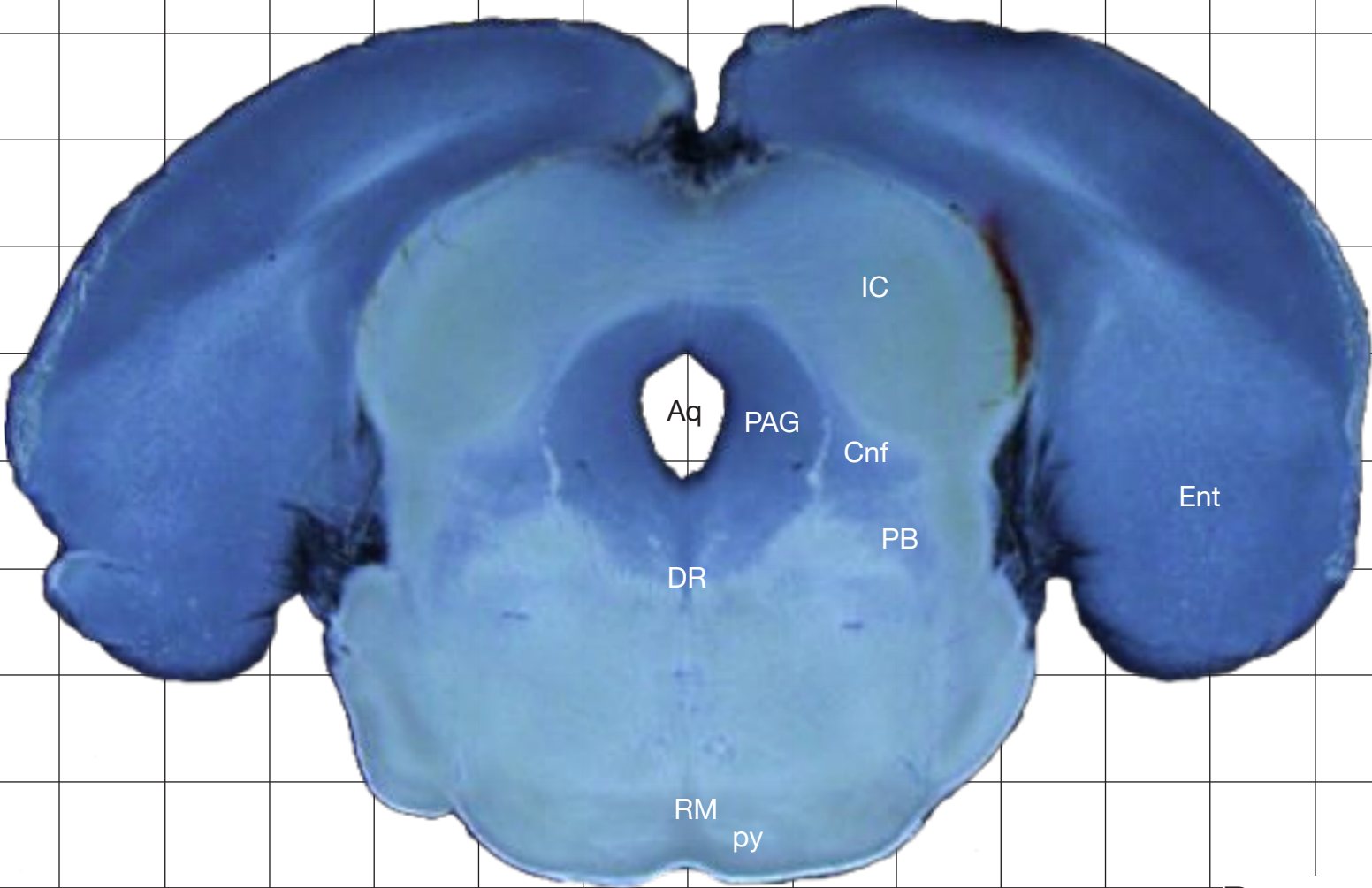
Bregma -7.00 mm
Lambda 0.60 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

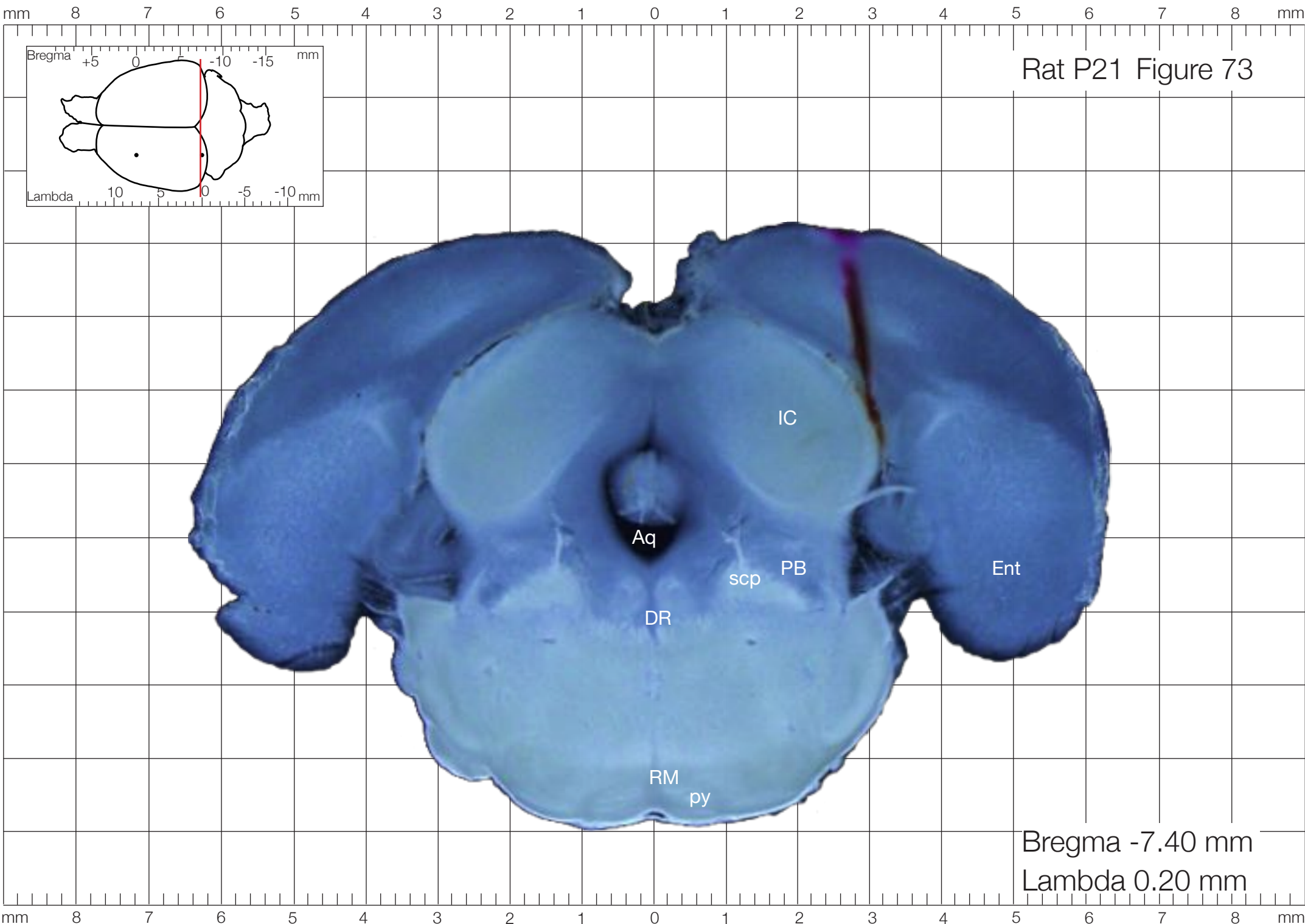


Rat P21 Figure 72



Bregma -7.20 mm
Lambda 0.40 mm

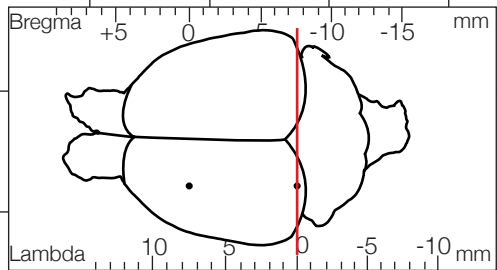
mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



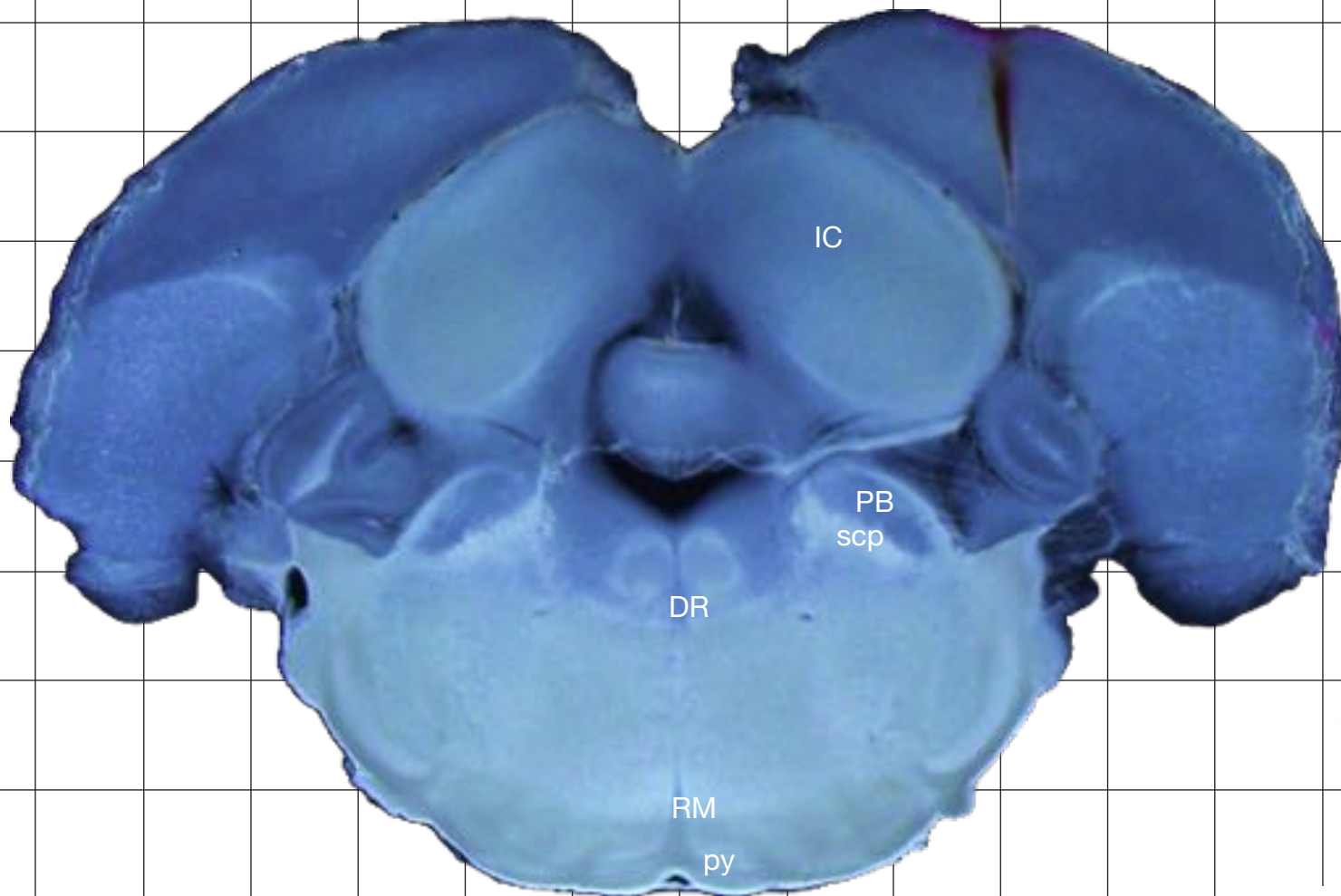
Rat P21 Figure 73

Bregma -7.40 mm
Lambda 0.20 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

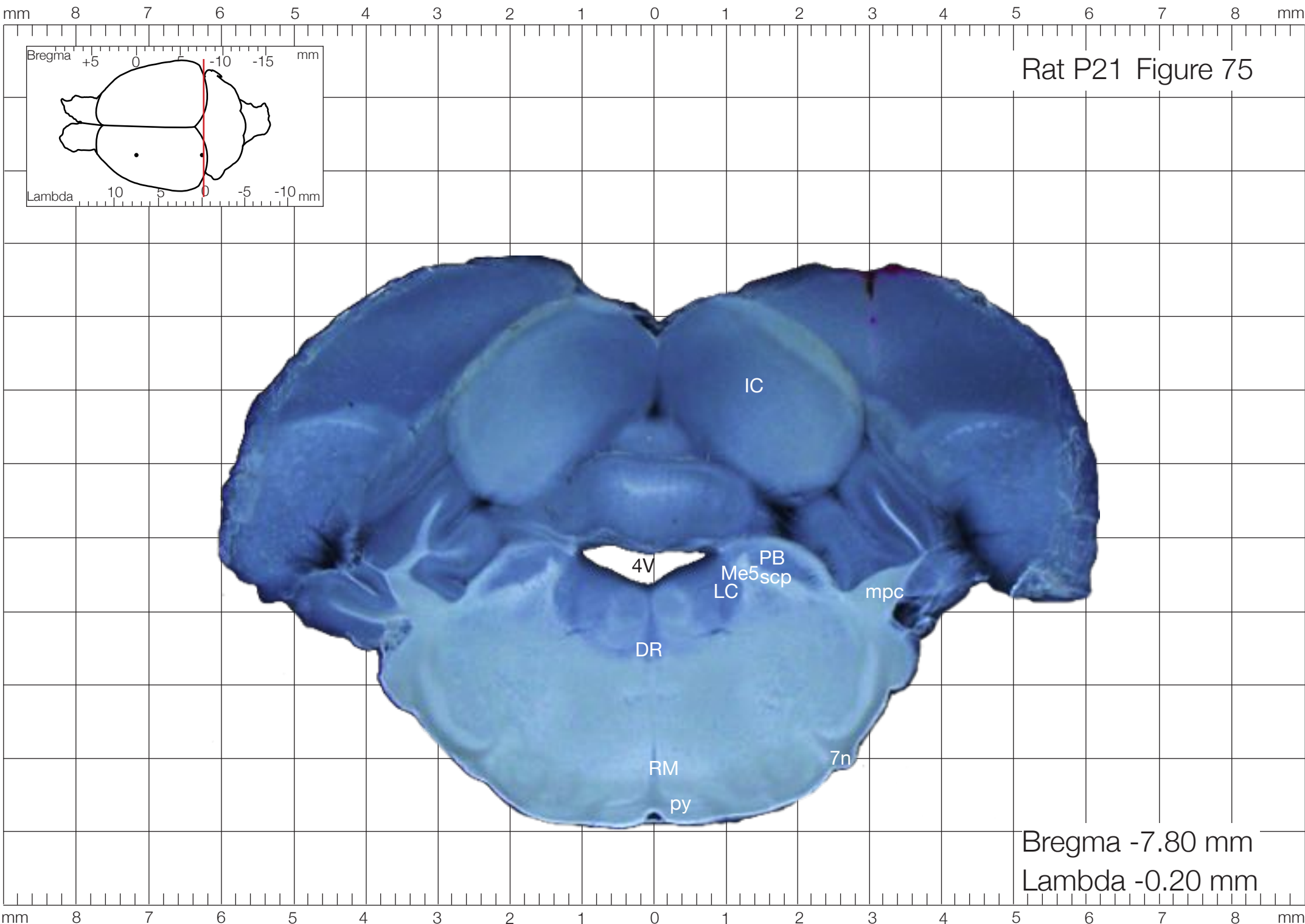


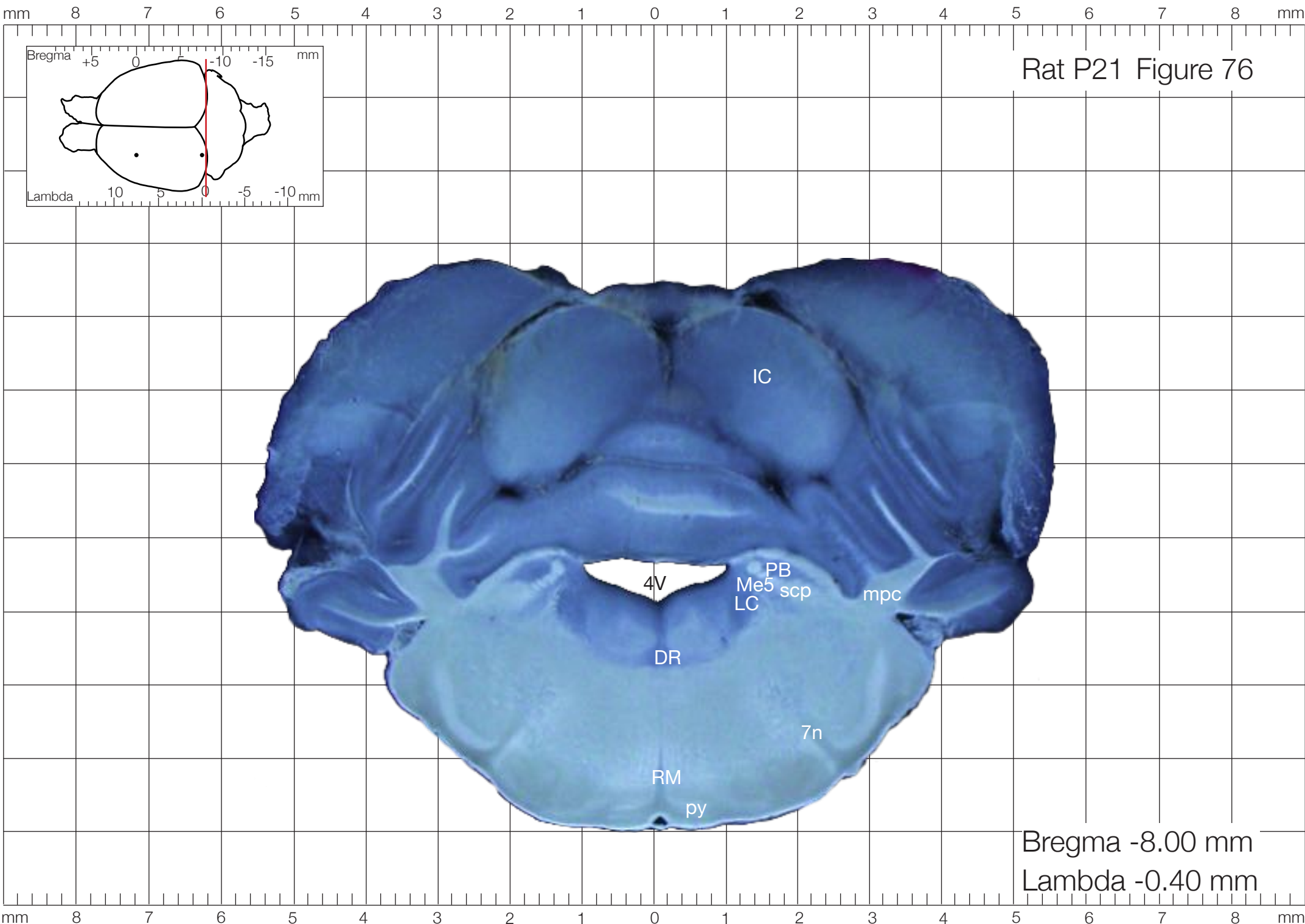
Rat P21 Figure 74



Bregma -7.60 mm
Lambda 0.00 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

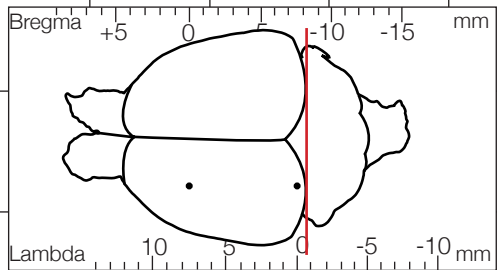




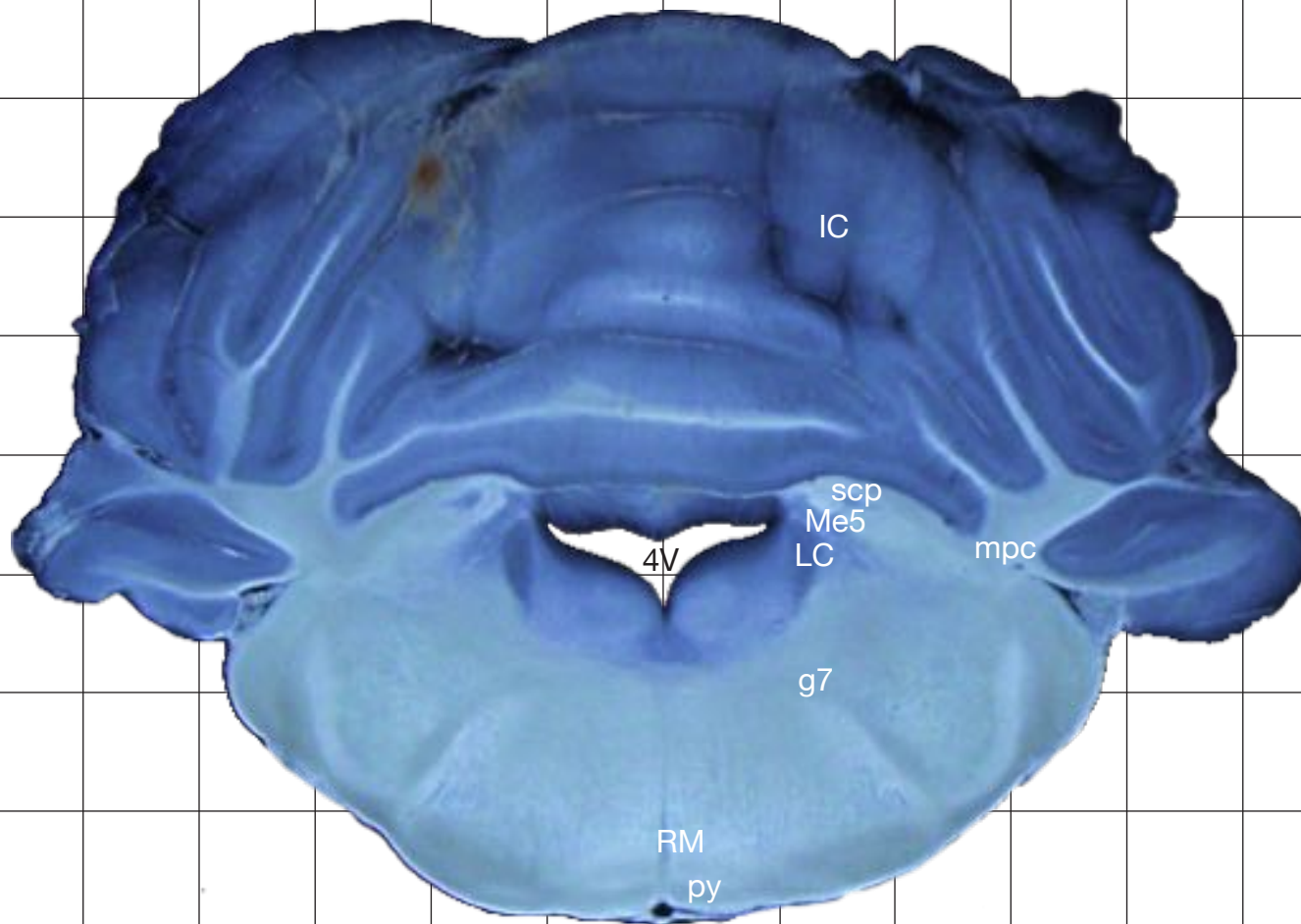
Rat P21 Figure 76

Bregma -8.00 mm
Lambda -0.40 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



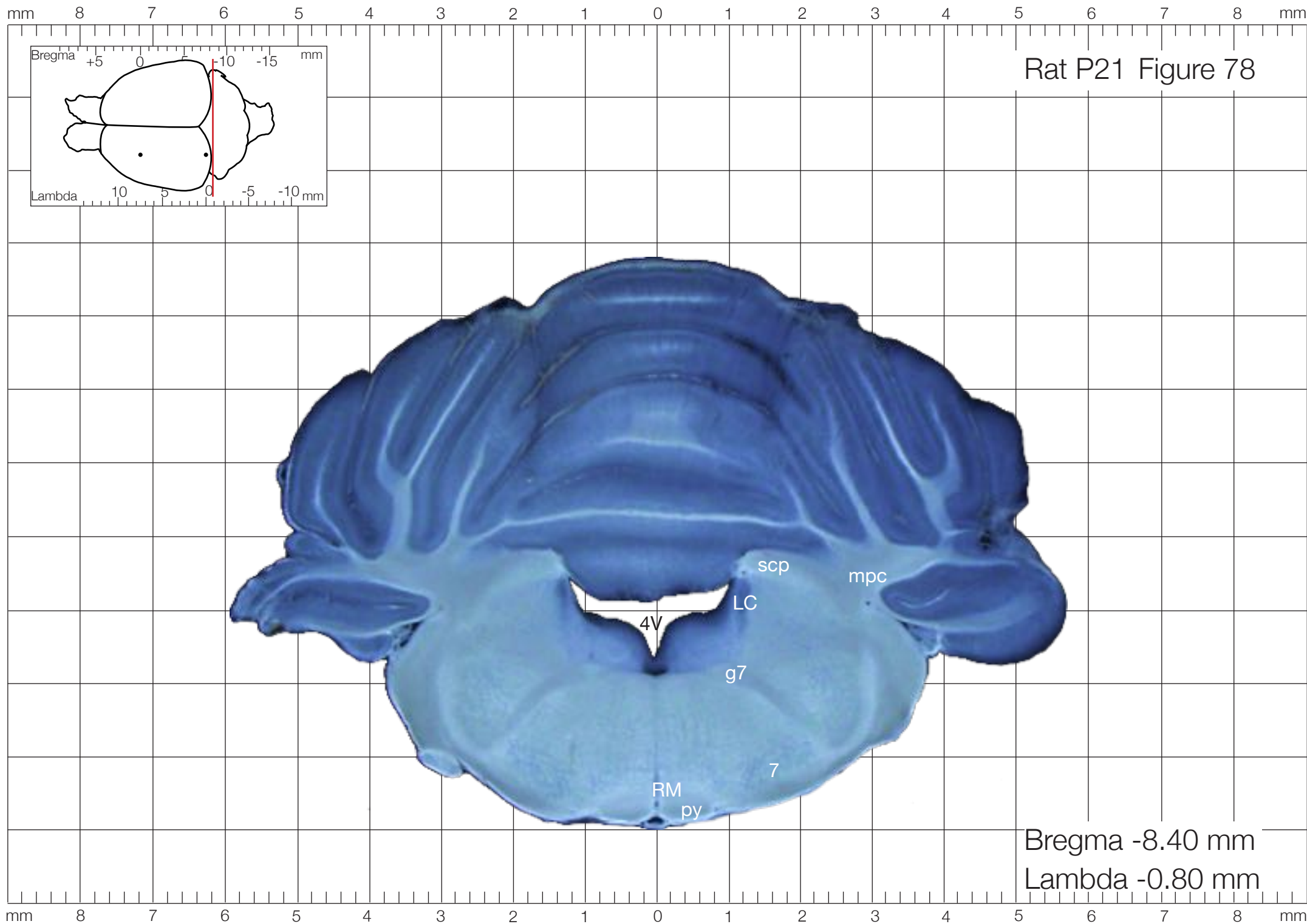
Rat P21 Figure 77

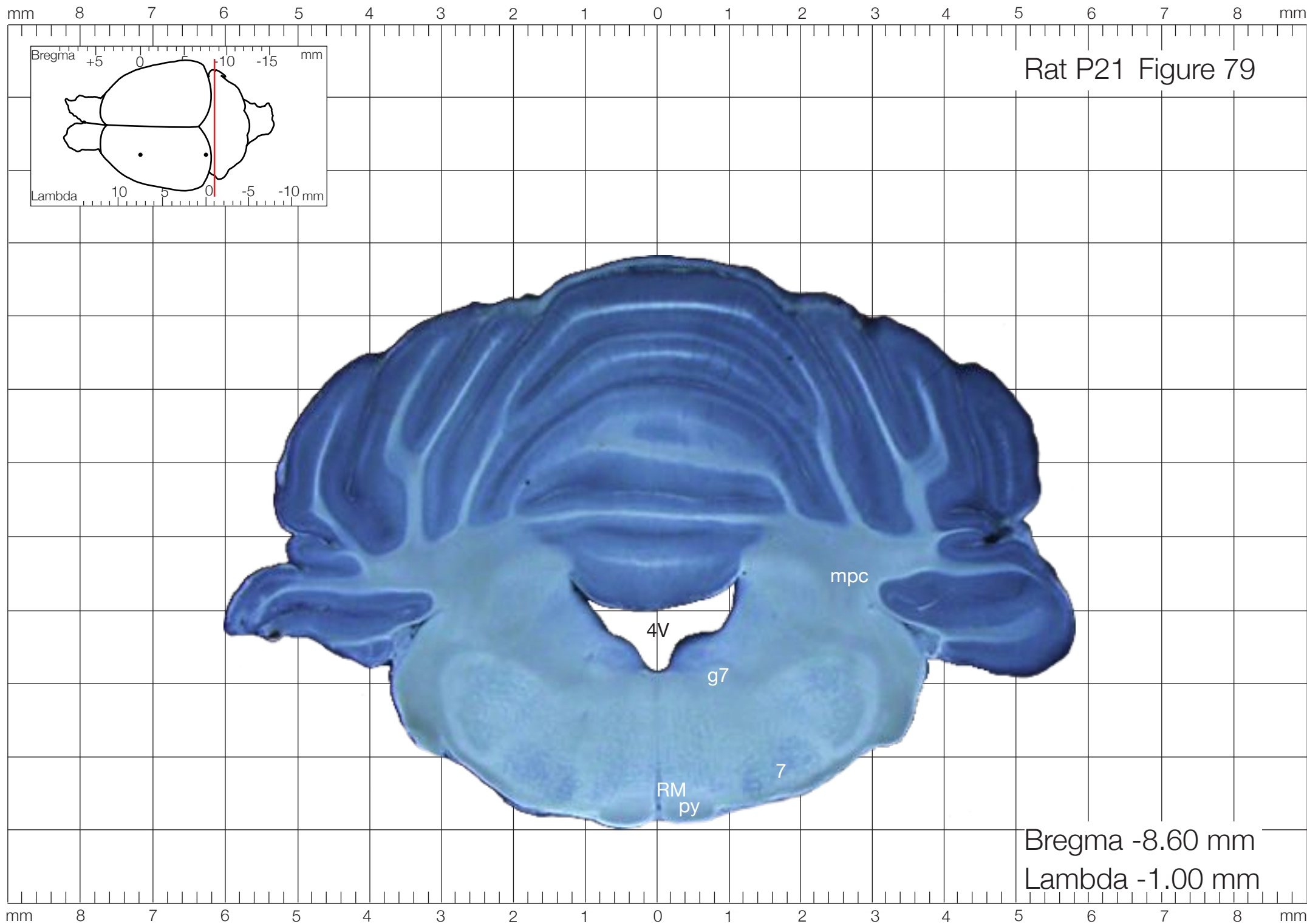


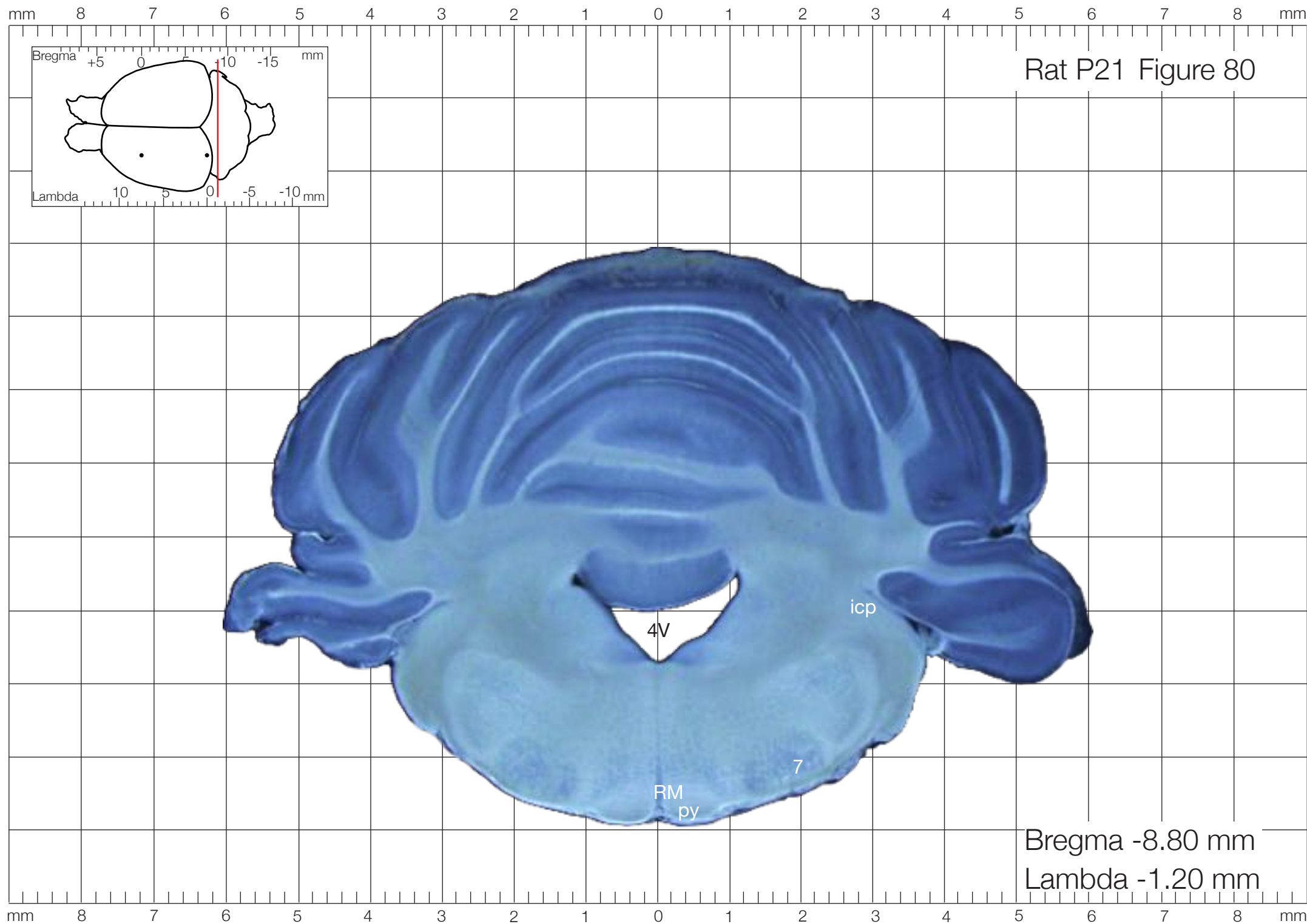
Bregma -8.20 mm

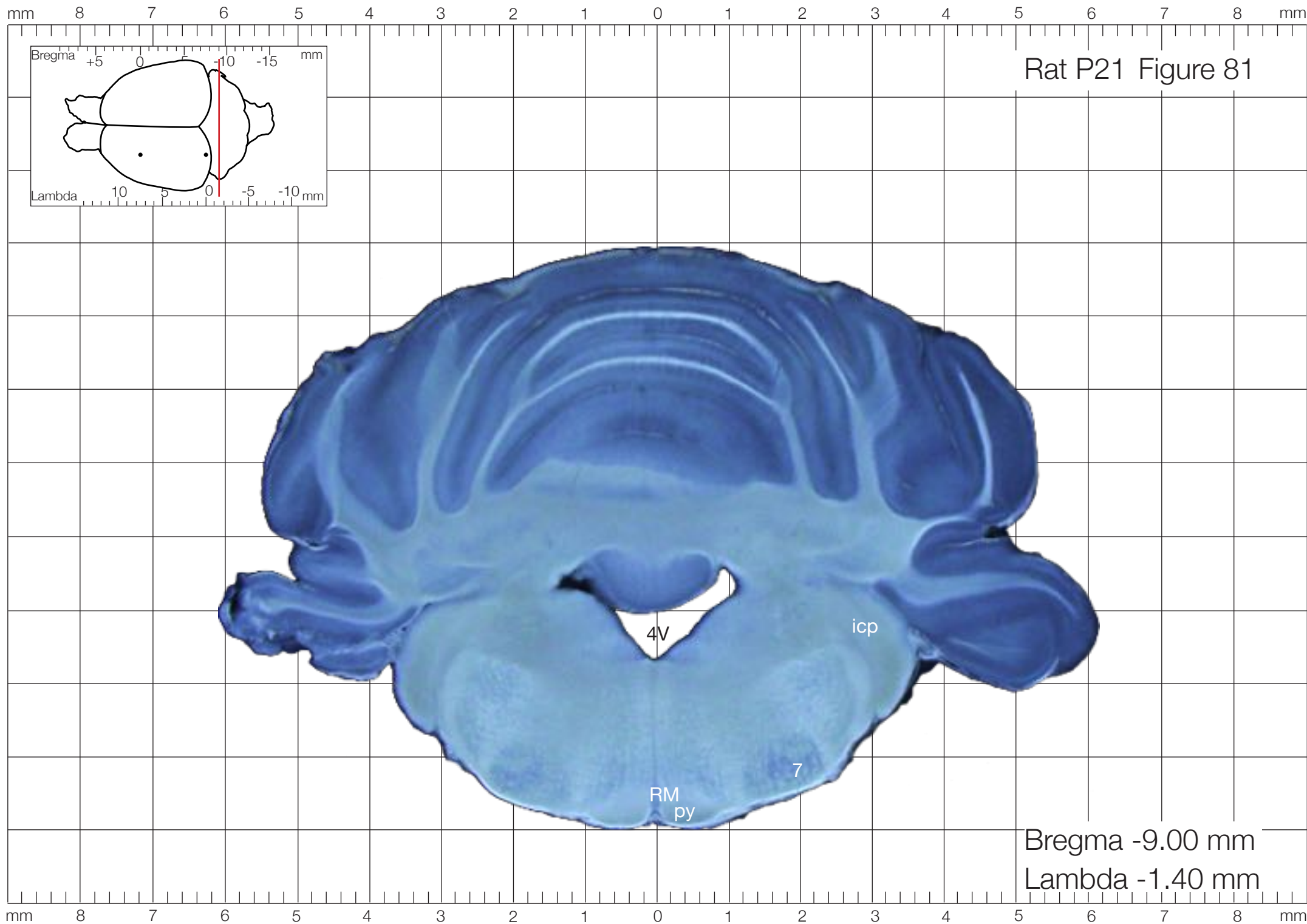
Lambda -0.60 mm

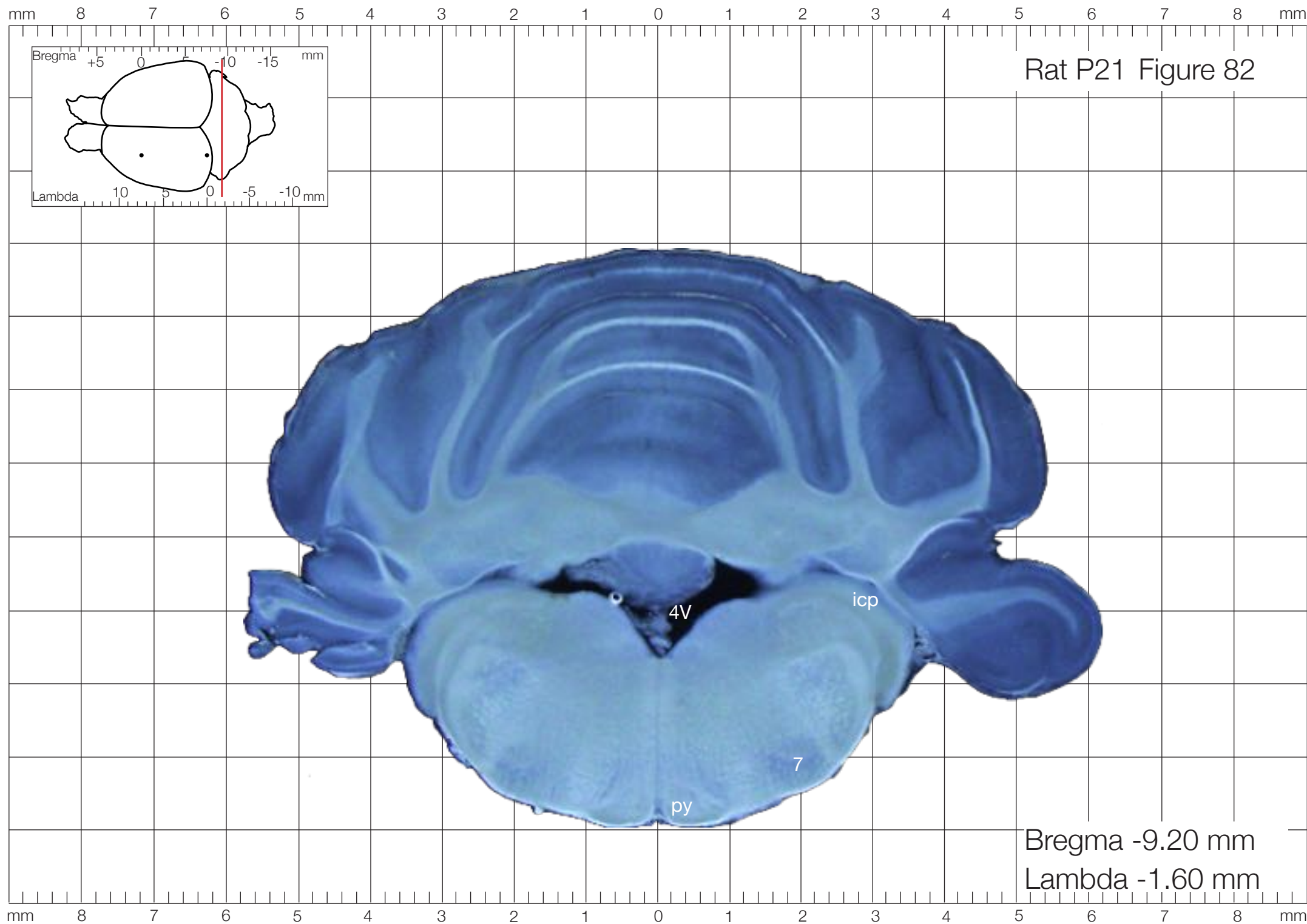
mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

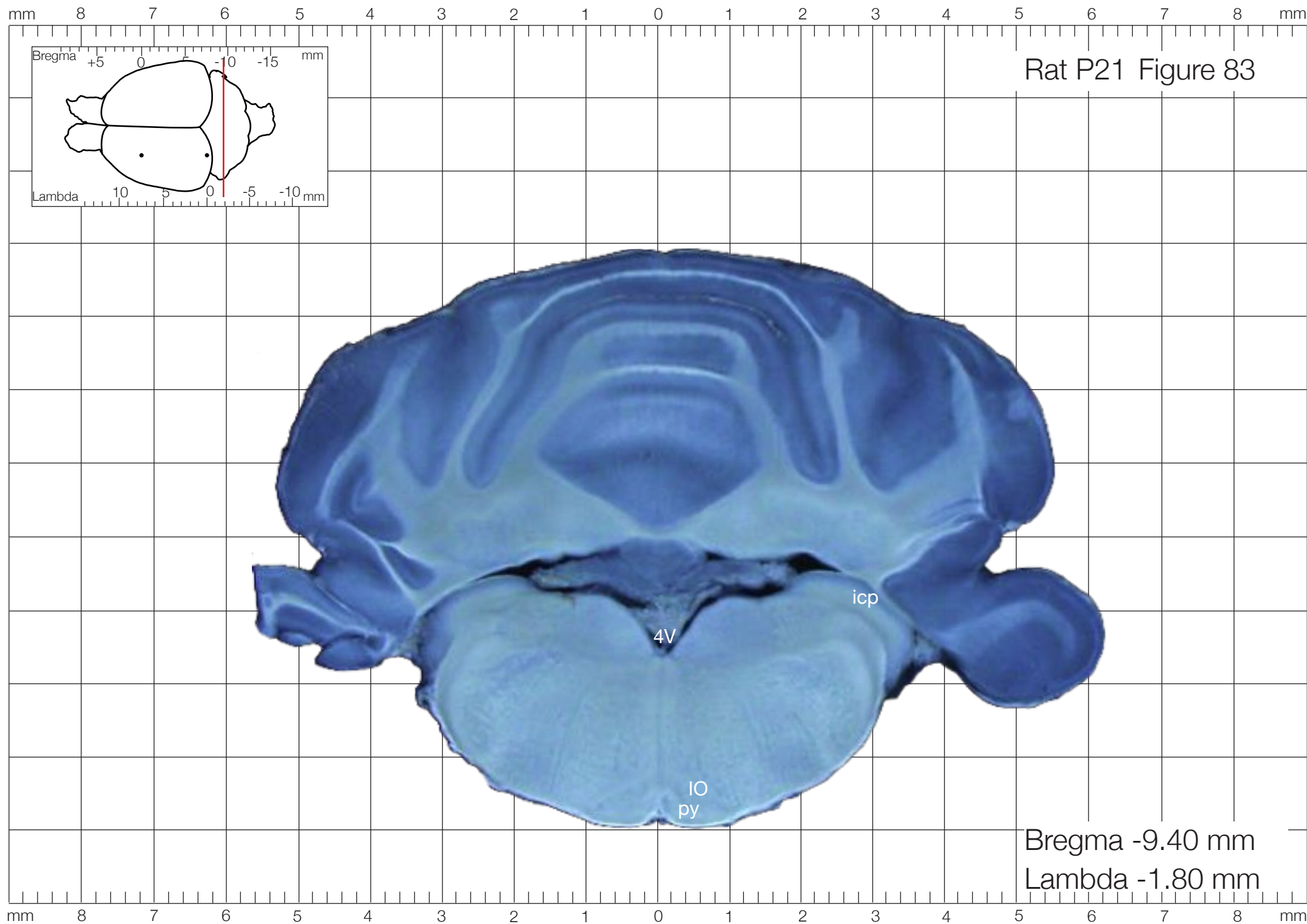


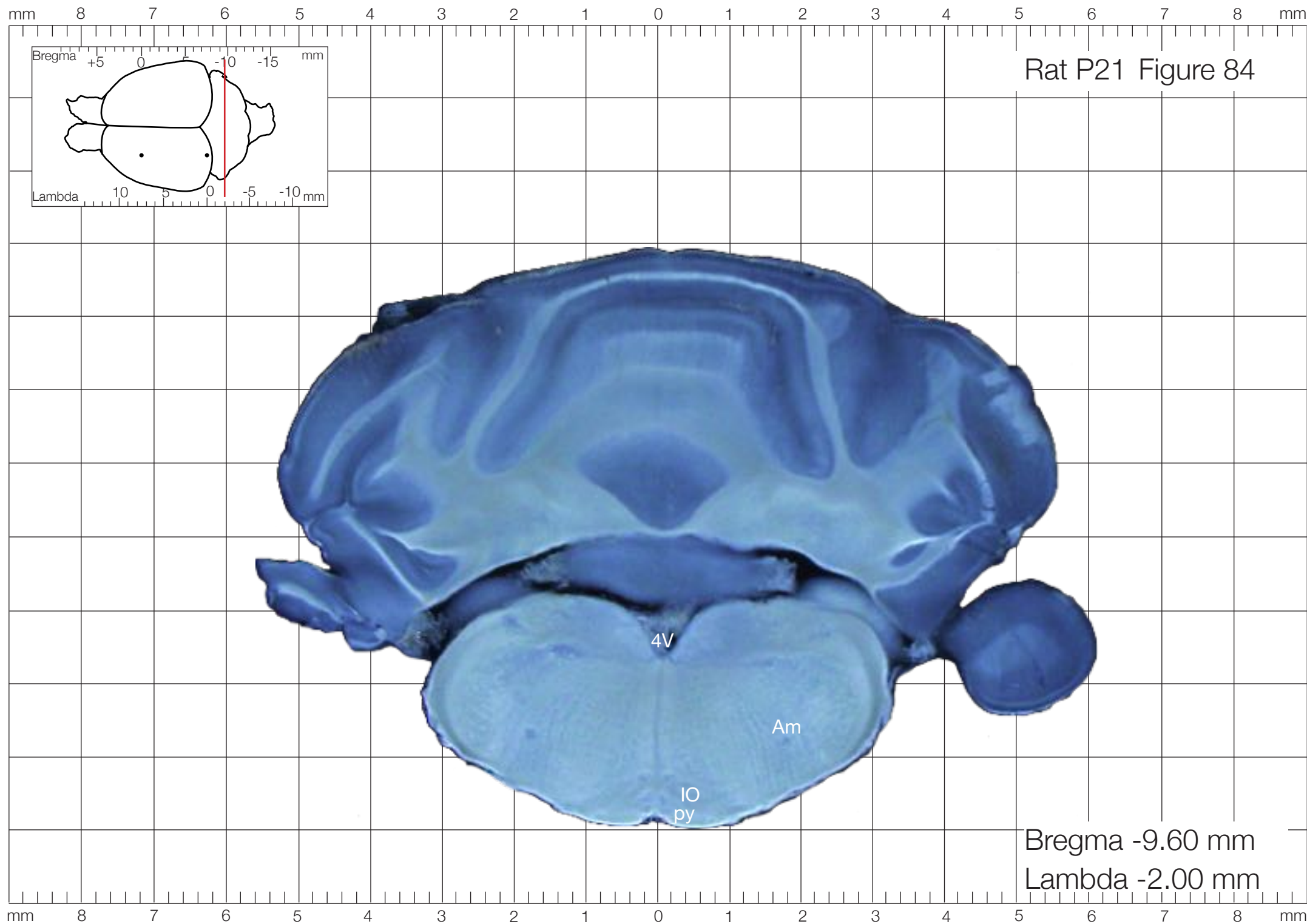


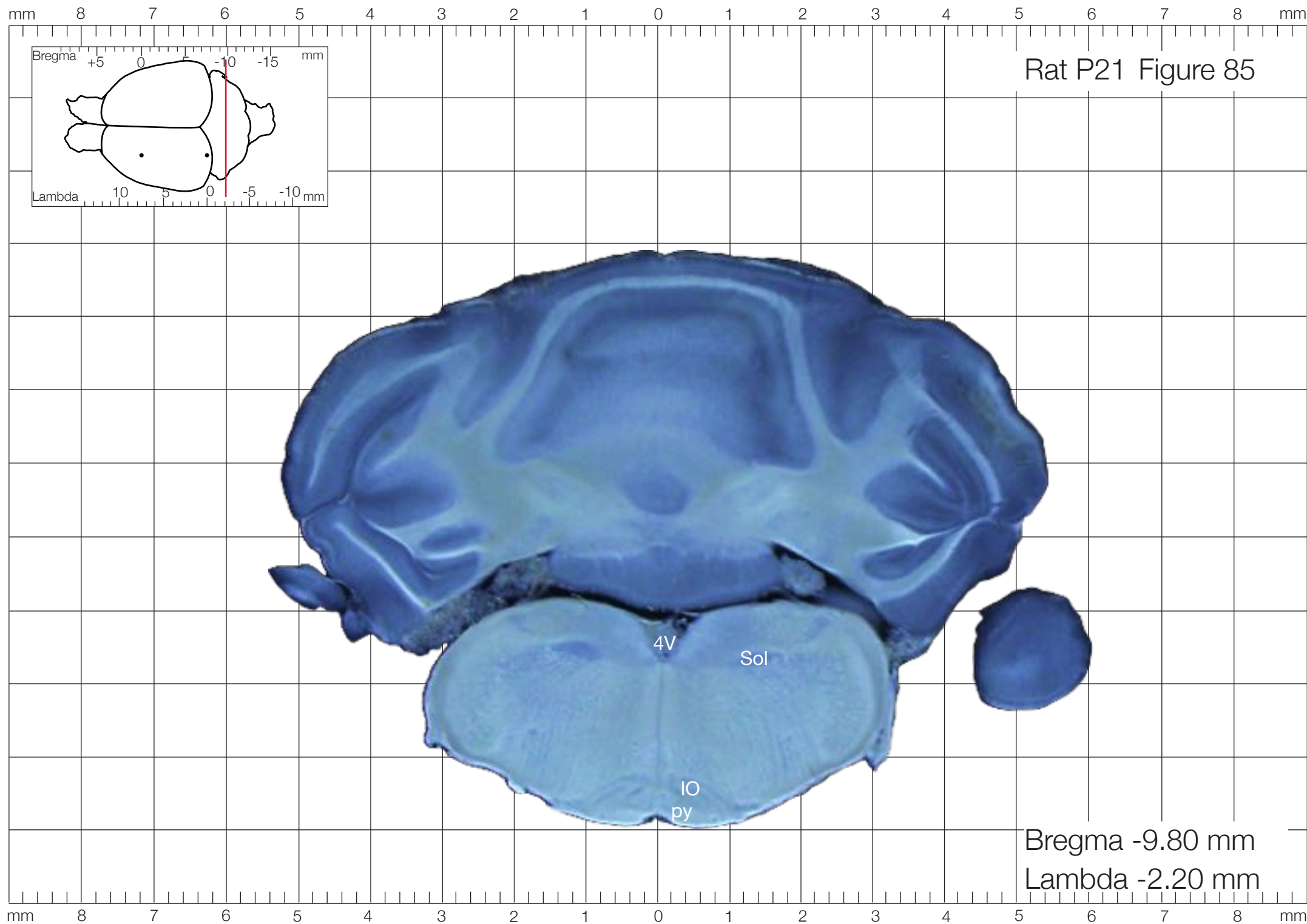


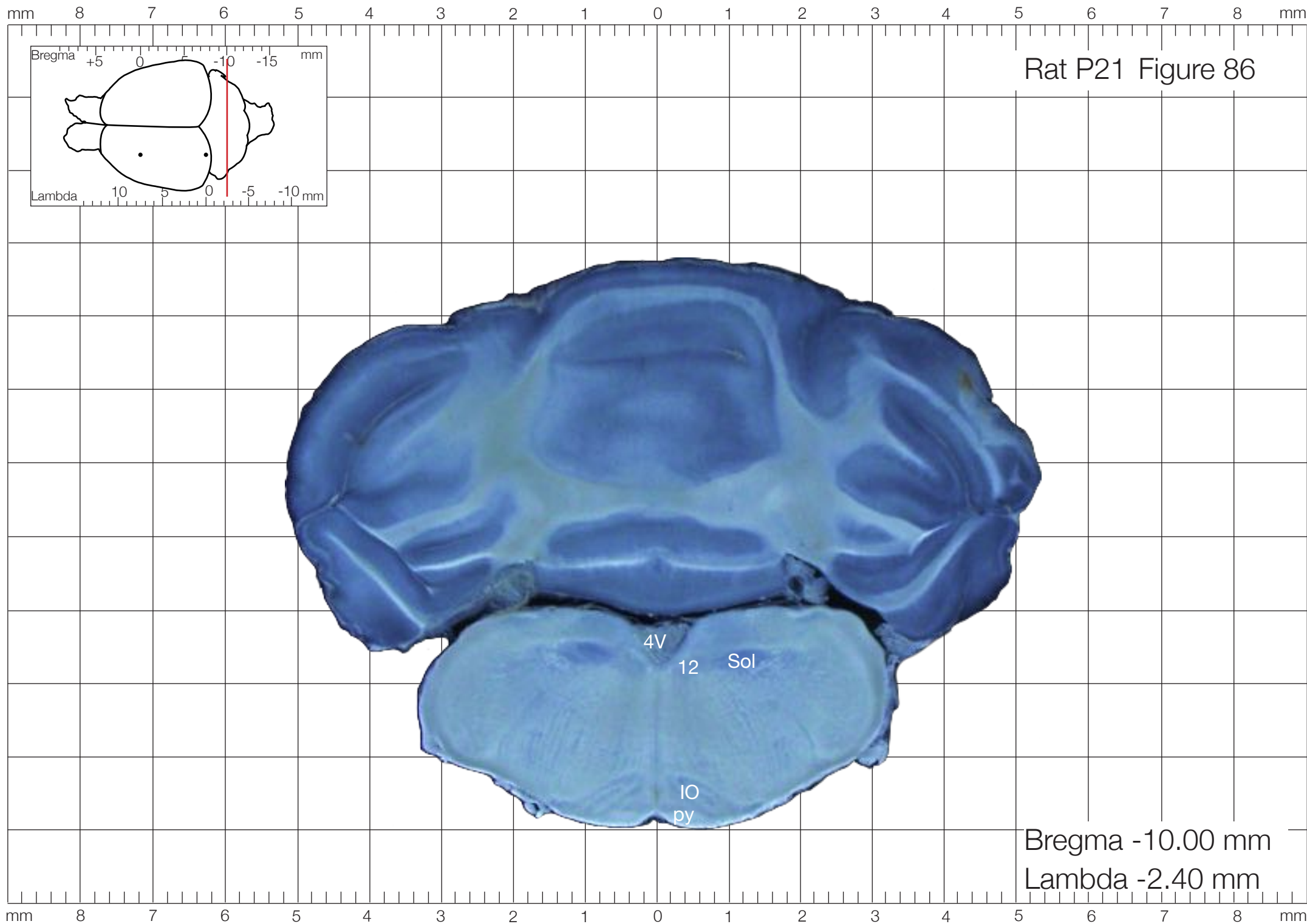


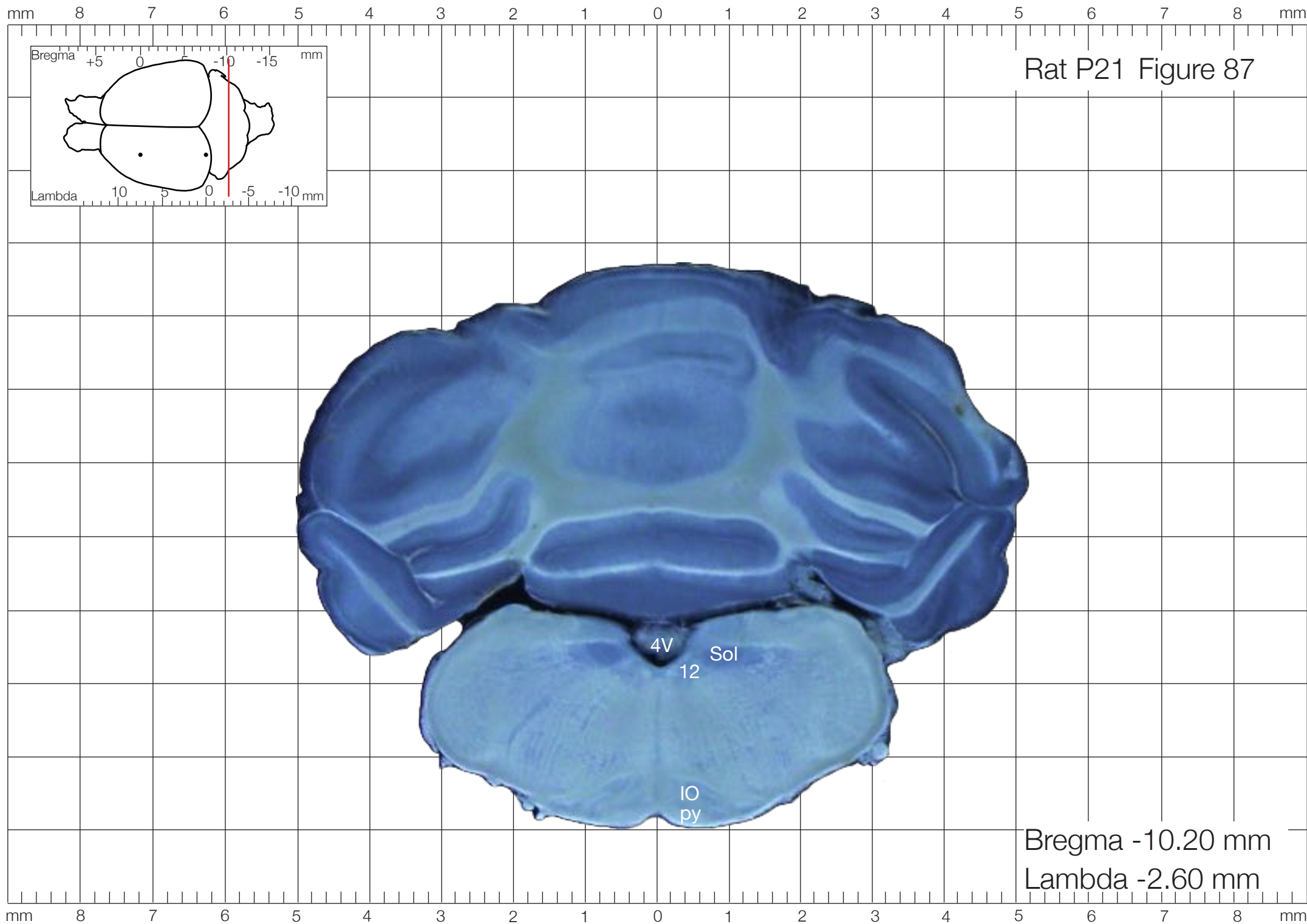




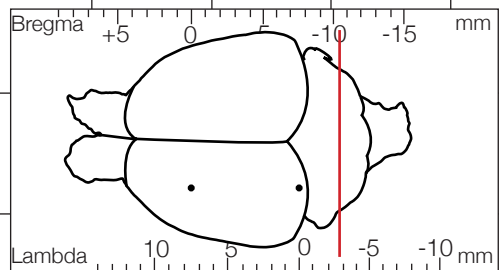




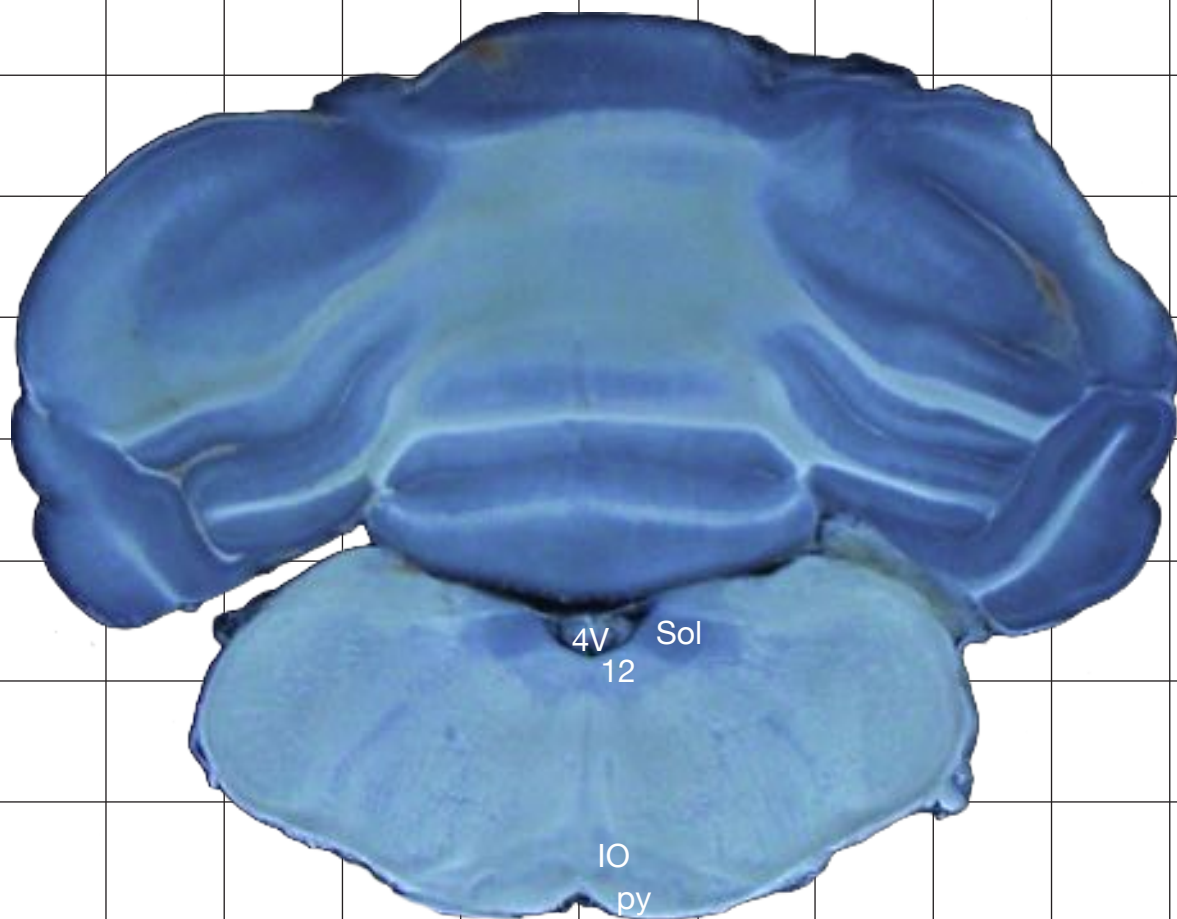




mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm



Rat P21 Figure 88



Bregma -10.40 mm

Lambda -2.80 mm

mm 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 mm

