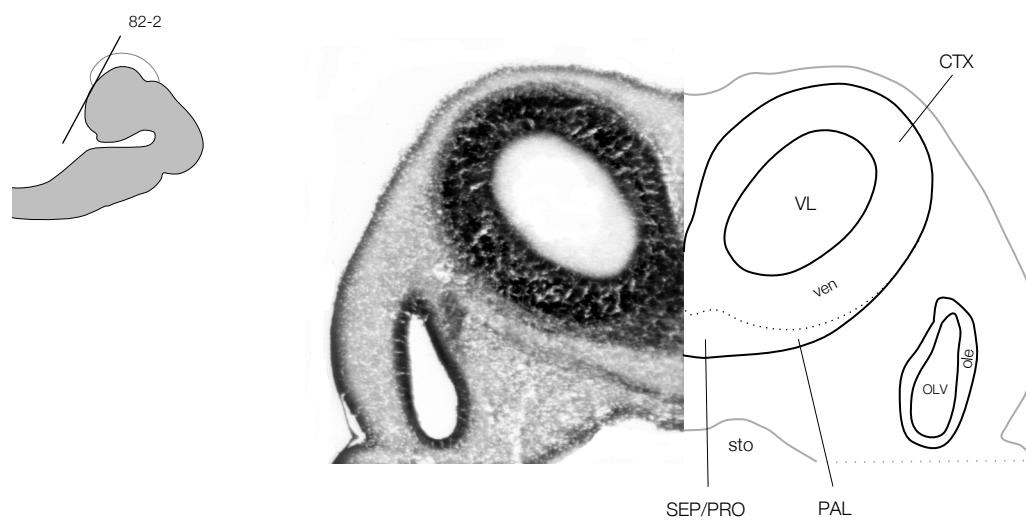
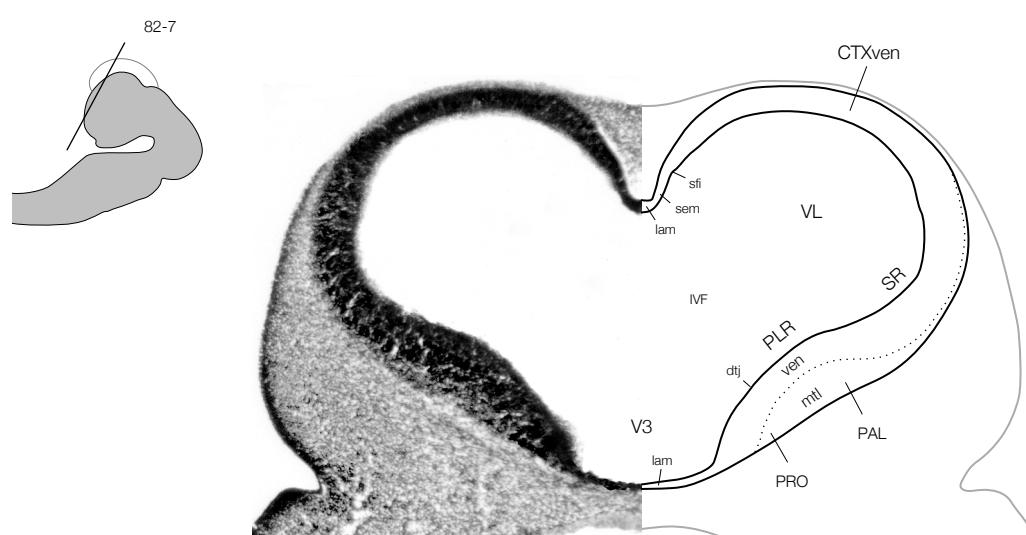


E. Embryonic Day 12: *extensive mantle layer formation*

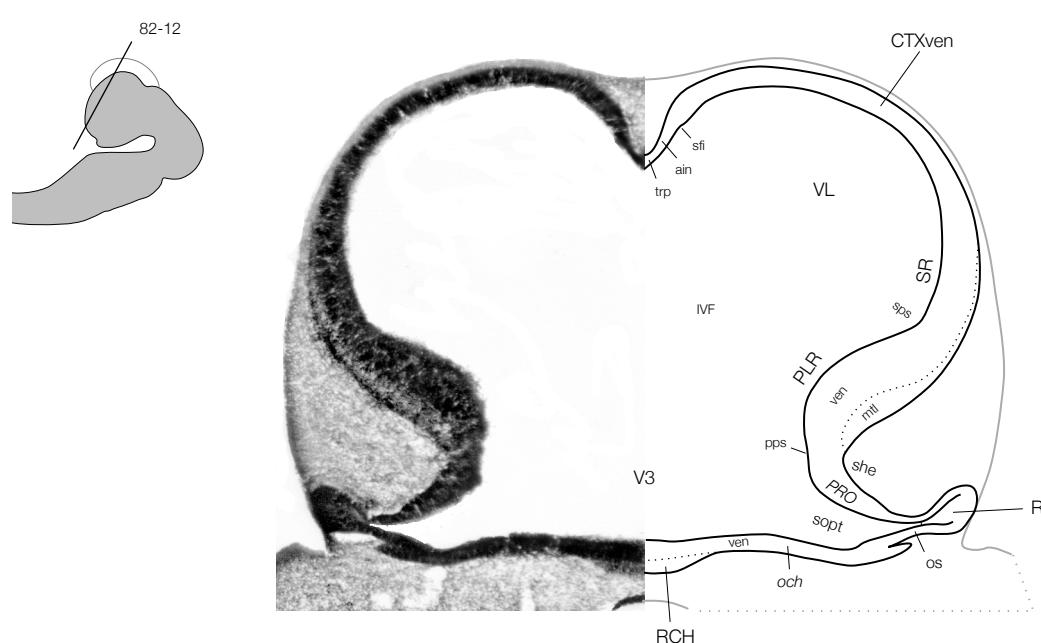
On e12 the brain mantle layer begins rapidly to grow, and the endbrain vesicle begins to evaginate. Relatively complete approximately horizontal and transverse series of sections have been chosen to illustrate this important age.



1



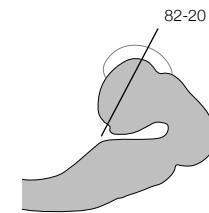
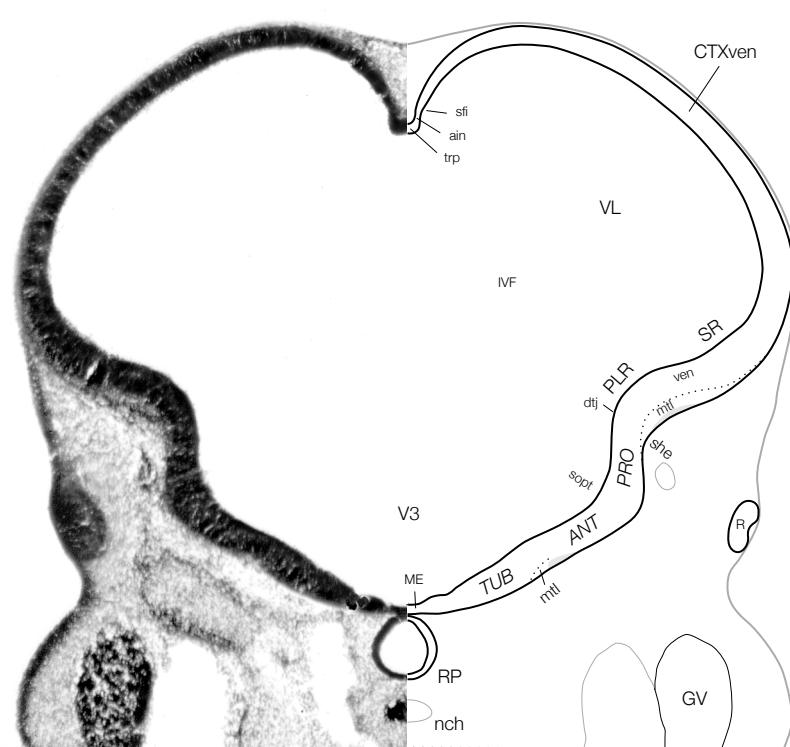
2



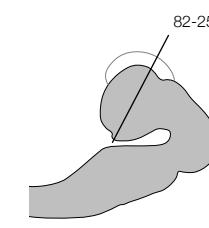
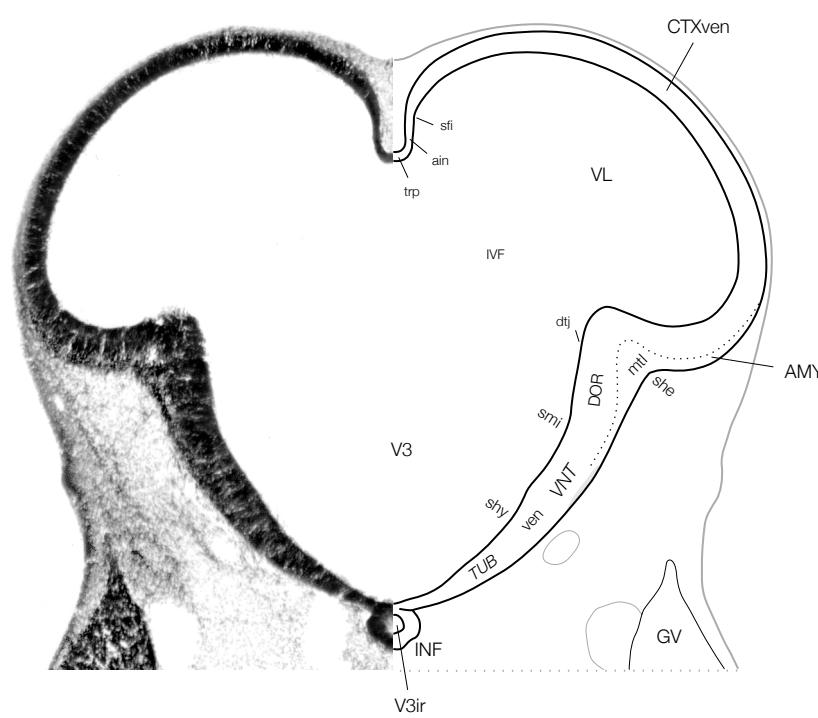
3

e12 transverse

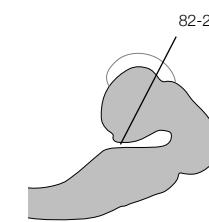
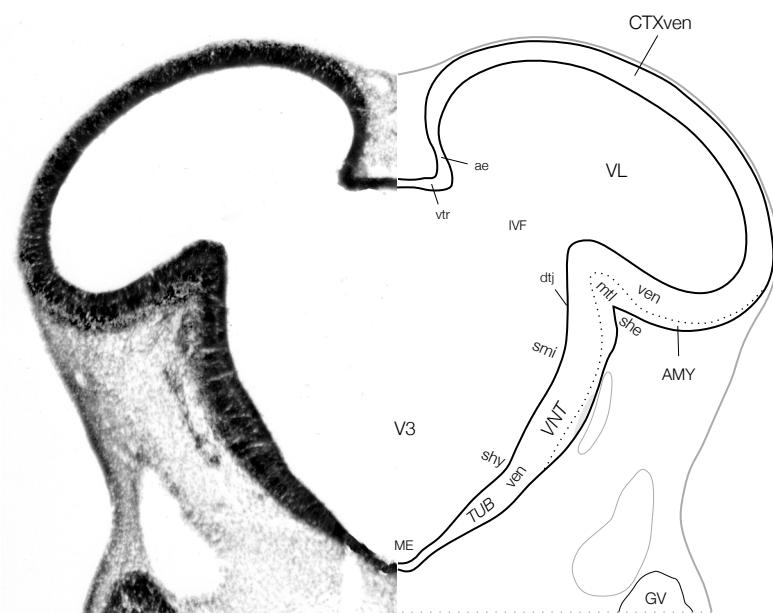
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5



6

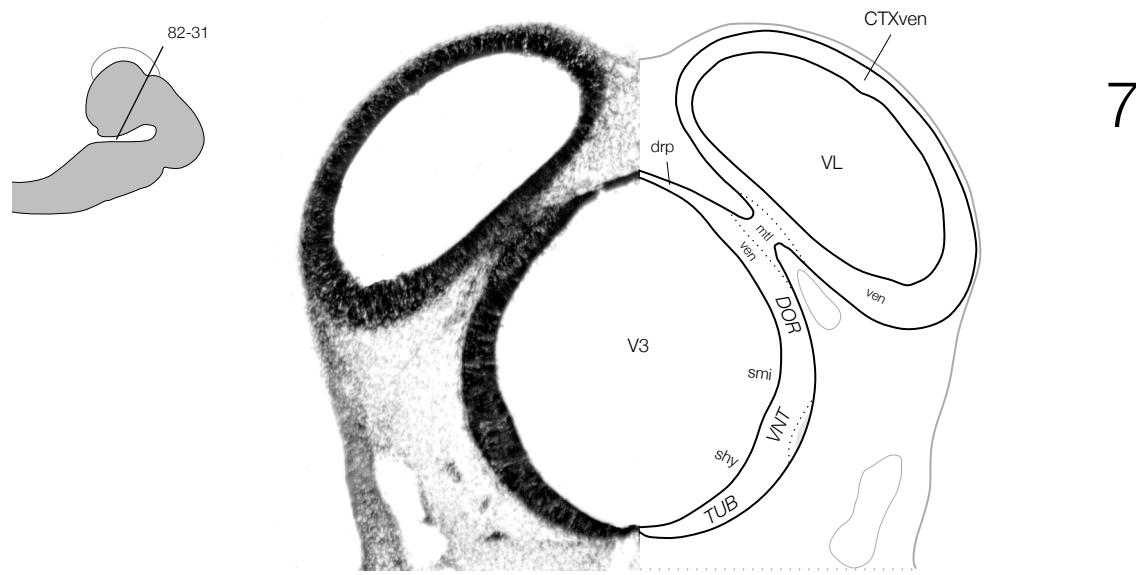


0.5 mm

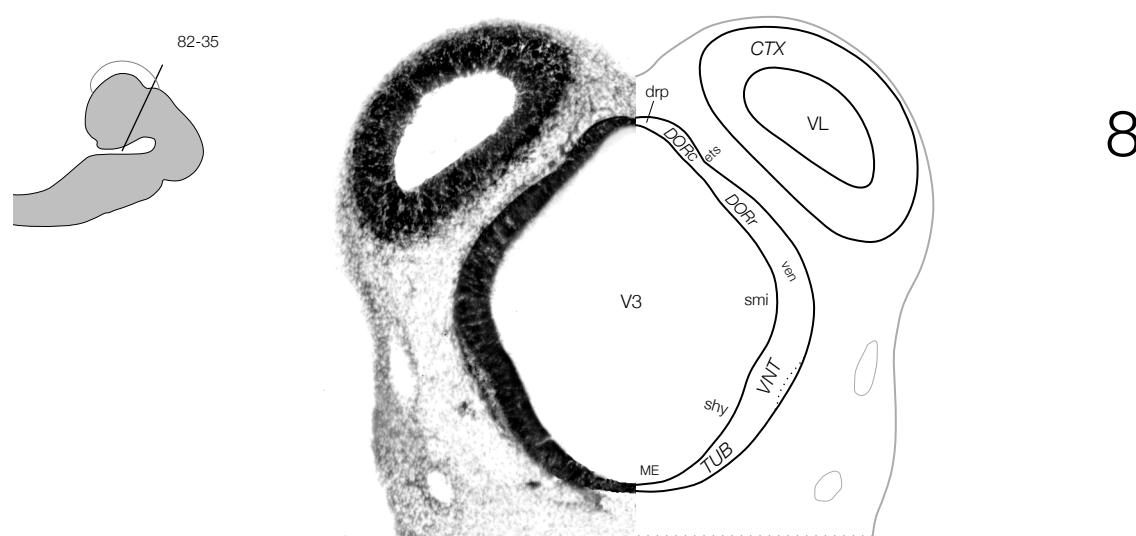
ae area epithelialis
ain area intercalata
AMY amygdala
ANT anterior level, hypothalamus
CTX cerebral cortex
CTXven cerebral cortex, ventricular layer
dtj diencephalic junction
GV trigeminal ganglion
INF infundibulum
IVF interventricular foramen
lam lamina terminalis
ME median eminence
mtl mantle layer, neural tube
nch notochord
och optic chiasm
ole olfactory epithelium
OLV olfactory vesicle
os optic stalk
PAL pallidum

PLR pallidal ridge
pps pallidopreoptic sulcus
PRO preoptic level, hypothalamus
R retina
RCH retrochiasmatic area
RP Rathke's pouch
sem septum ependymale
SEP septal region
sfi fimbrial sulcus
she hemispheric sulcus
shy hypothalamic sulcus
smi middle diencephalic sulcus
sopt optic sulcus
sps striatopallidal sulcus
SR striatal ridge
sto stomodeum (stomatodeum)
trp telencephalic roof plate
TUB tuberal level, hypothalamus
V3 third ventricle

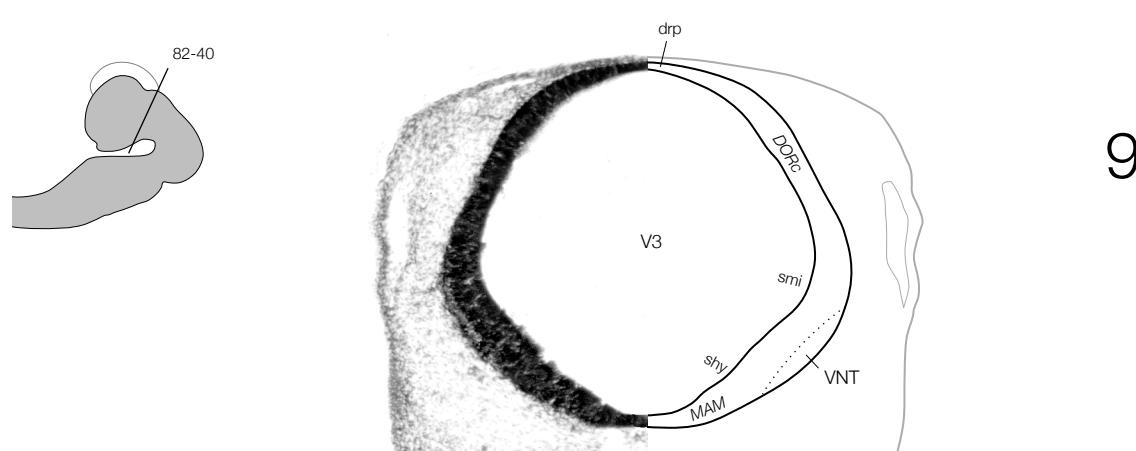
V3ir third ventricle, infundibular recess
ven ventricular layer, neural tube
VL lateral ventricle
VNT ventral thalamus
vtr velum transversum



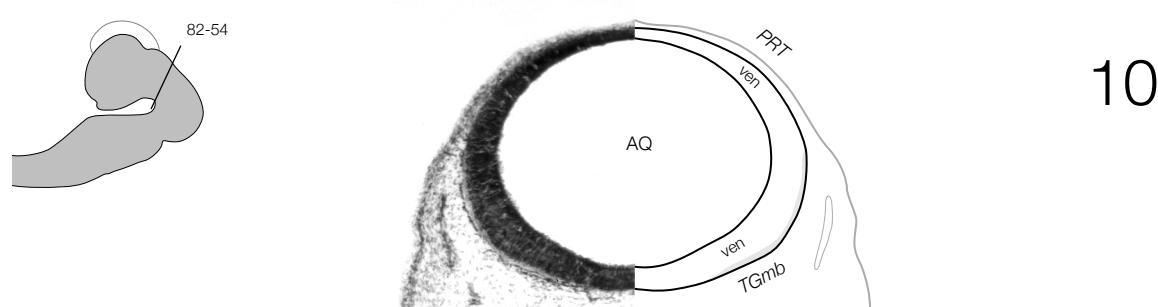
7



8



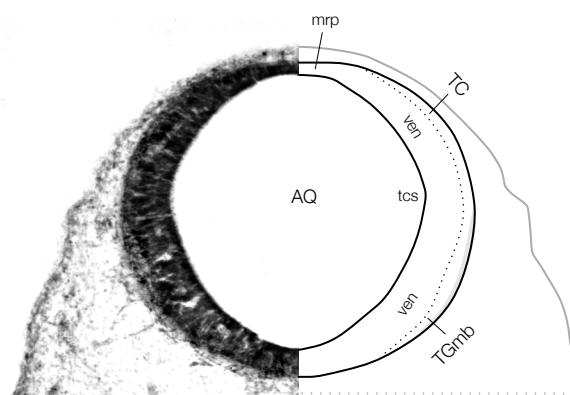
9



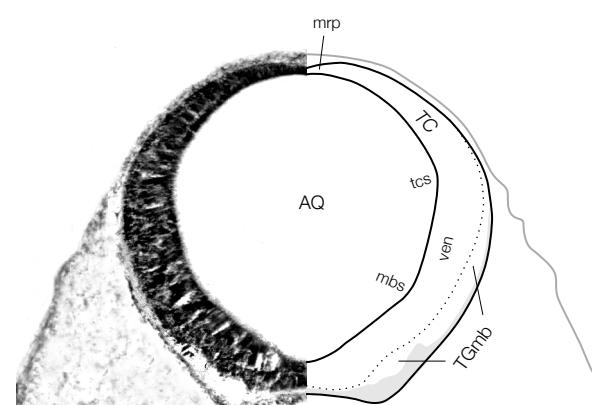
10

e12 transverse

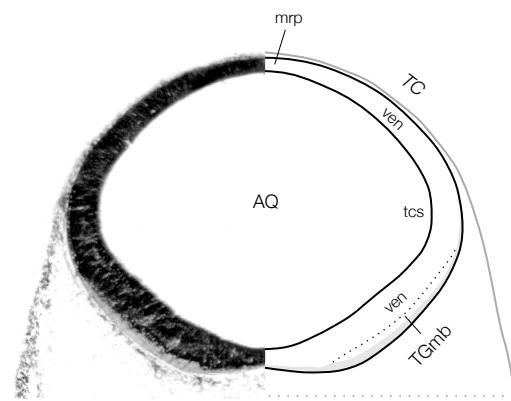
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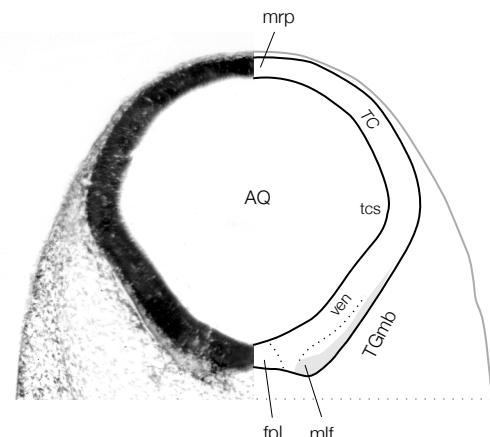
12



13



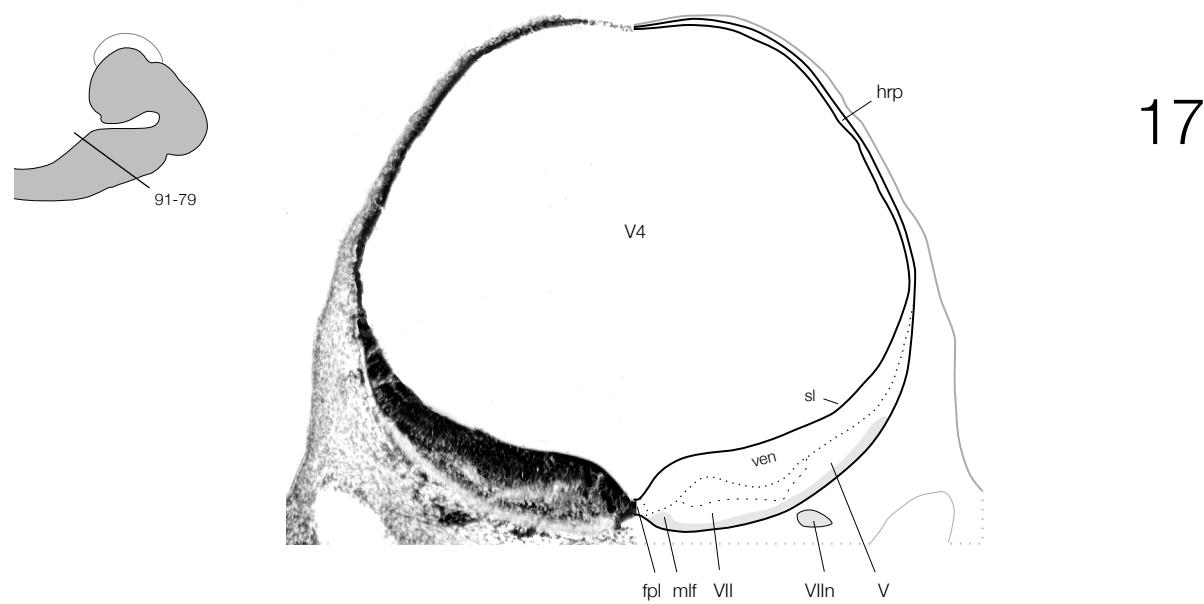
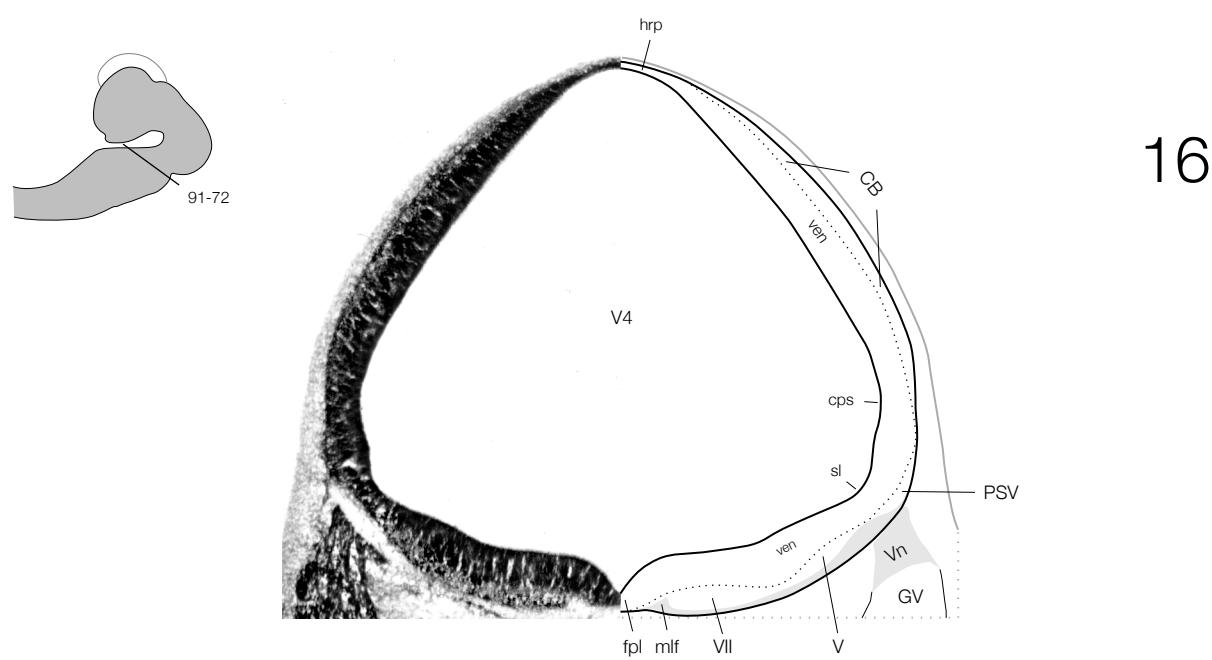
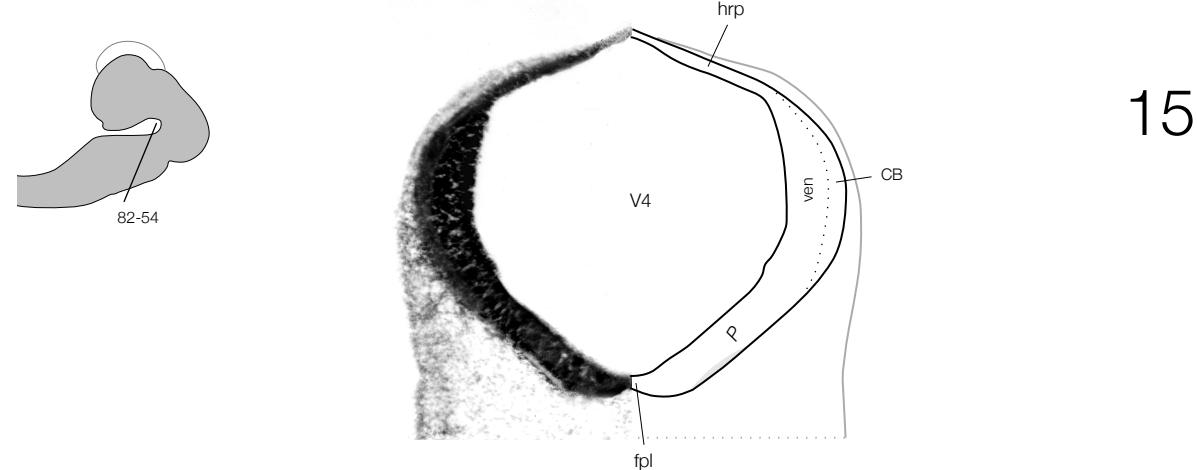
14



0.5 mm

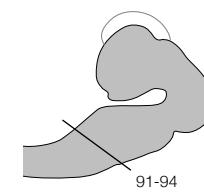
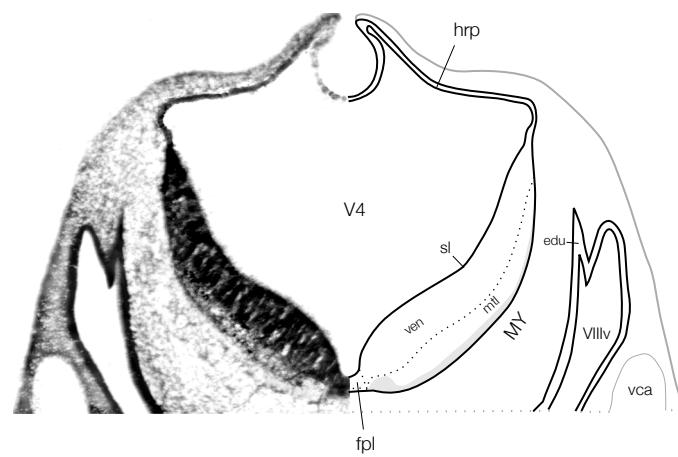
AQ	cerebral aqueduct
CTX	cerebral cortex
CTXven	cerebral cortex, ventricular layer
DOR	dorsal thalamus
--c	--, caudodorsal part
--r	--, rostroventral part
drp	diencephalic roof plate
ets	external thalamic sulcus
fpl	floor plate
MAM	mammillary level, hypothalamus
mbs	midbrain sulcus
ME	median eminence
mlf	medial longitudinal fascicle
mrp	midbrain roof plate
mtl	mantle layer, neural tube
PRT	preoptic region
shy	hypothalamic sulcus
smi	middle diencephalic sulcus
TC	tectum

tcs	tectal sulcus
TGmb	tegmentum, midbrain
TUB	tuberal level, hypothalamus
V3	third ventricle
ven	ventricular layer, neural tube
VL	lateral ventricle
VNT	ventral thalamus

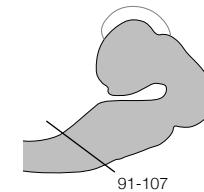
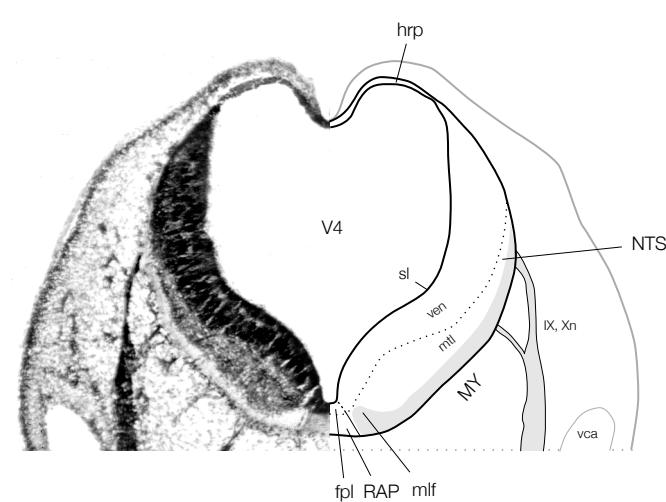


e12 transverse

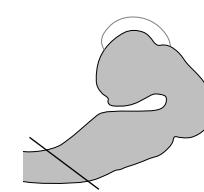
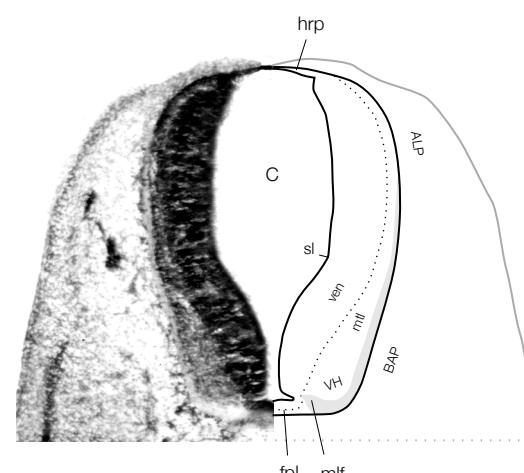
18



19



20



0.5 mm

ALP alar plate
BAP basal plate
C central canal, spinal cord/medulla
CB cerebellum
cps cerebellopontine sulcus
edu endolymphatic duct
fpl floor plate
GV trigeminal ganglion
hrp hindbrain roof plate
IXn glossopharyngeal nerve
mlf medial longitudinal fascicle
mtl mantle layer, neural tube
MY medulla
NTS nucleus of the solitary tract
P pons
PSV principal sensory n. of the trigeminal
RAP brainstem raphe
sl sulcus limitans
V motor nucleus of the trigeminal

V4 fourth ventricle
vca anterior cardinal vein
ven ventricular layer, neural tube
VH ventral horn
VII facial nucleus
Vllv otic vesicle
Vlln facial nerve
Vn trigeminal nerve
Xn vagus nerve