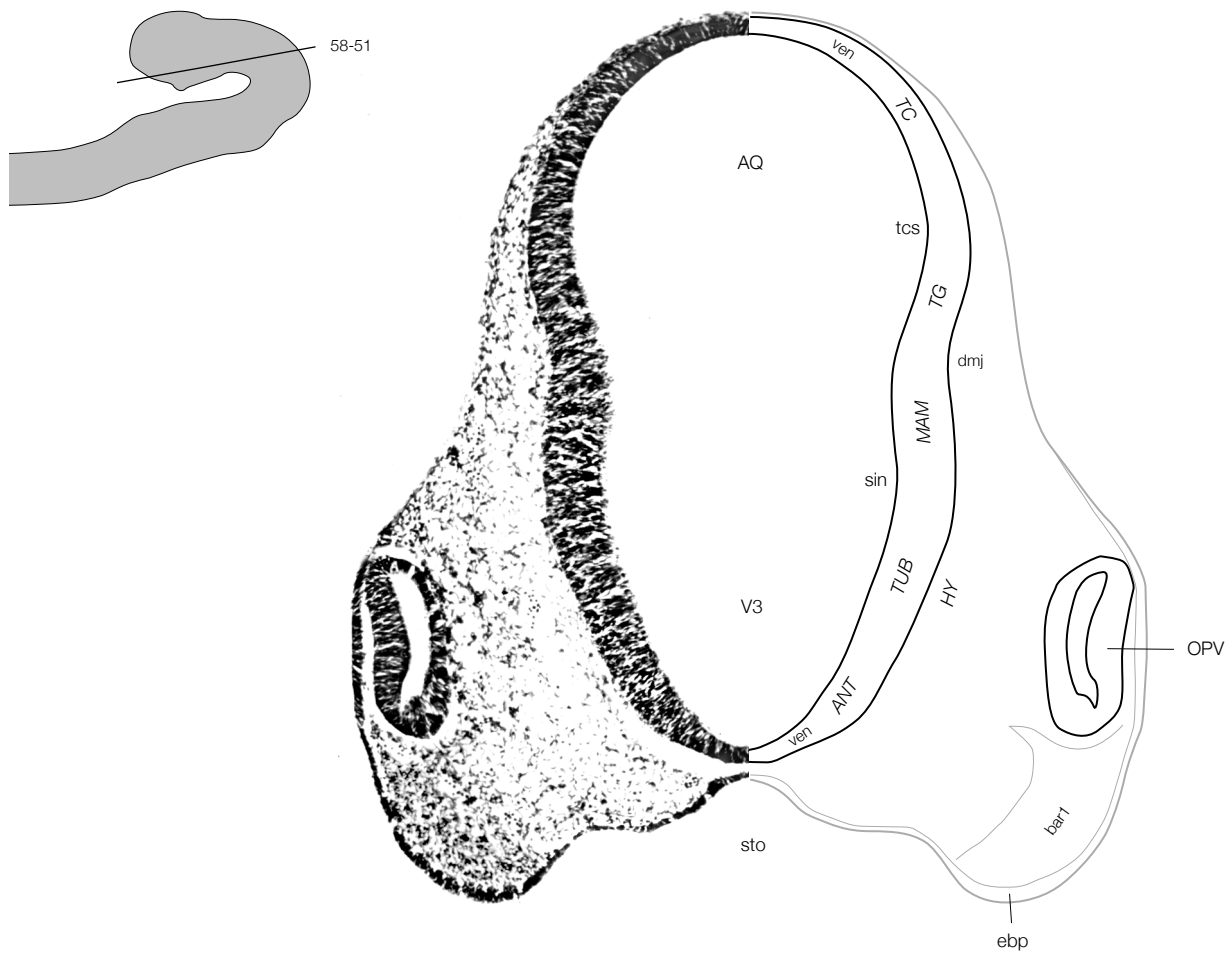


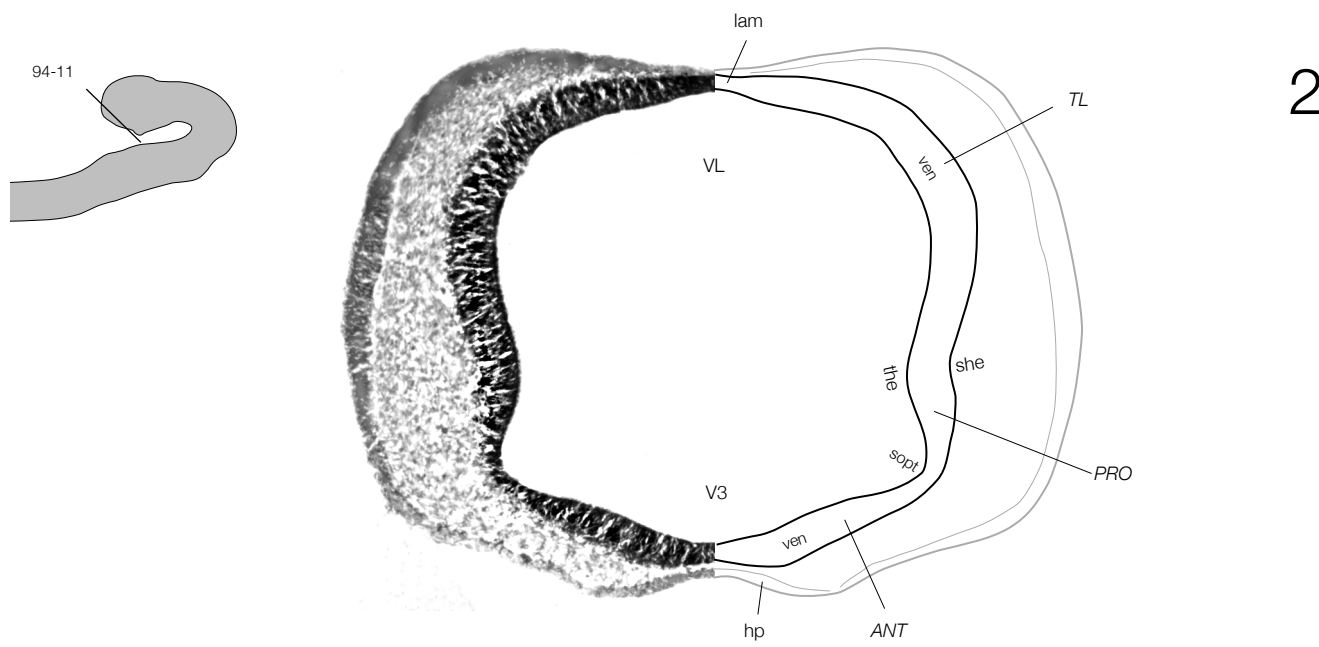
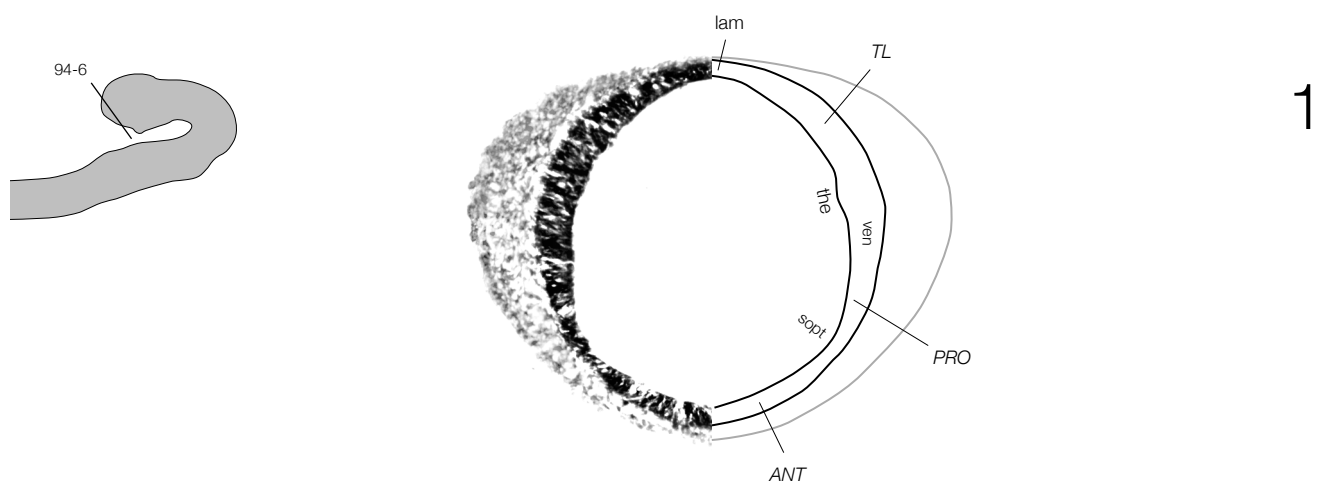
**D. Embryonic Day 11: *the 5 vesicle stage***

This day of rat brain development is characterized by the classical 5 secondary vesicles, and by the appearance of a mantle layer here and there in the neural tube. To illustrate this stage, we have chosen embryos from early on e11, before the appearance of a clear mantle layer in the forebrain (in the retrochiasmatic area and ventral thalamus). Thus, the hypothalamic and middle diencephalic sulci are not yet visible, and the interbrain is poorly differentiated, except for the optic vesicle. This age is illustrated primarily by a series of 19 approximately transverse sections taken from four different embryos, although one approximately horizontal section through the forebrain and midbrain vesicles is presented for orientation purposes.



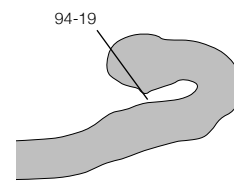
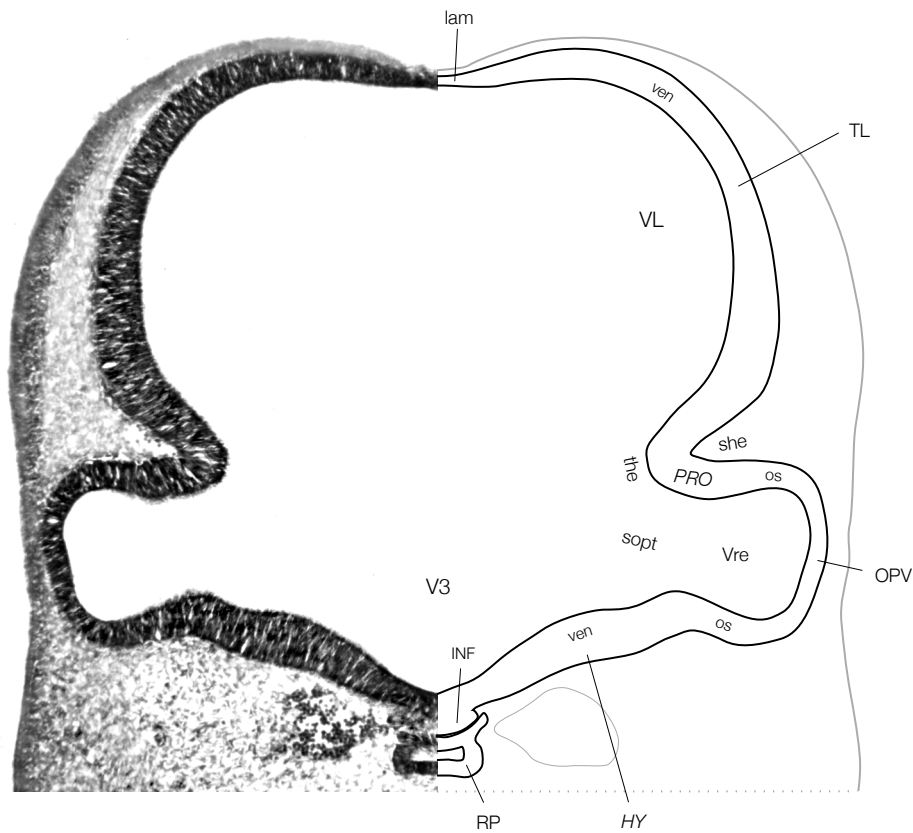
e11 horizontal

0.25 mm

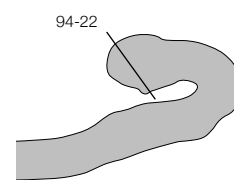
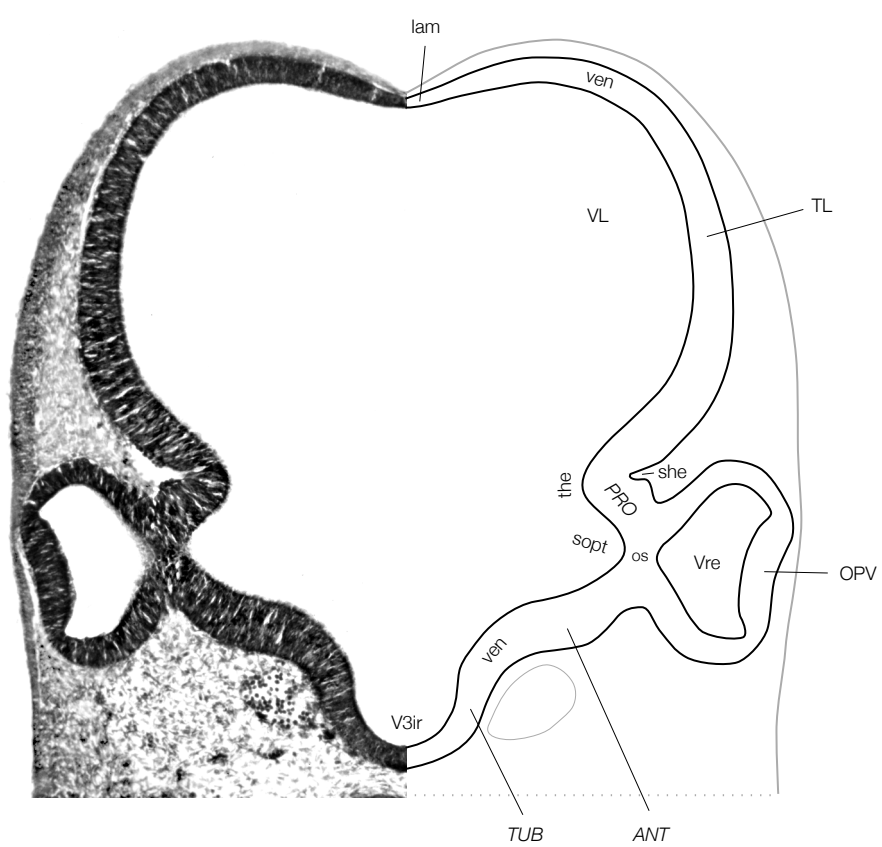


e11 transverse

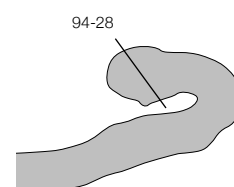
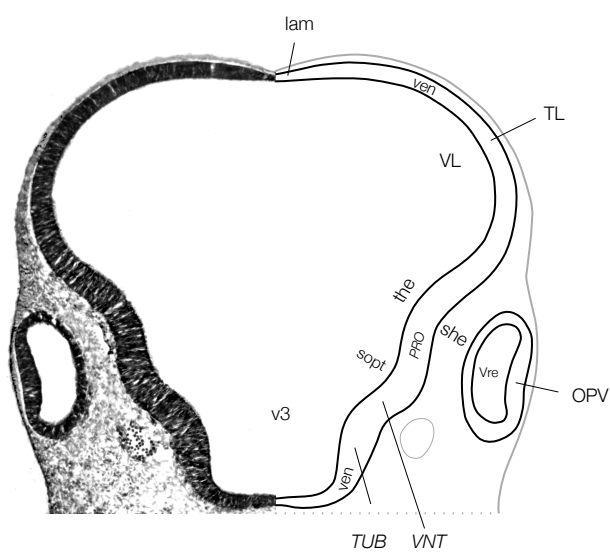
3



4



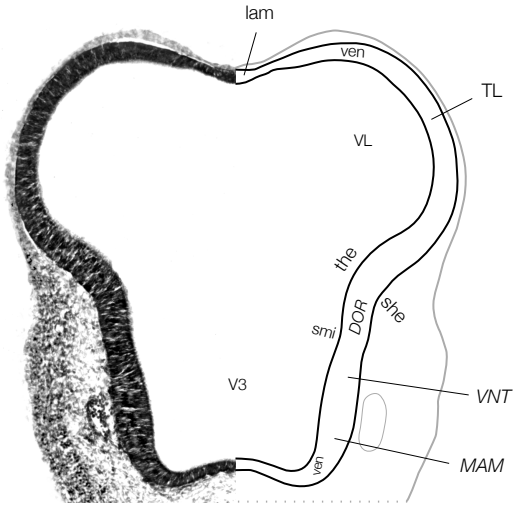
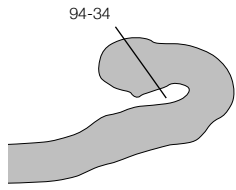
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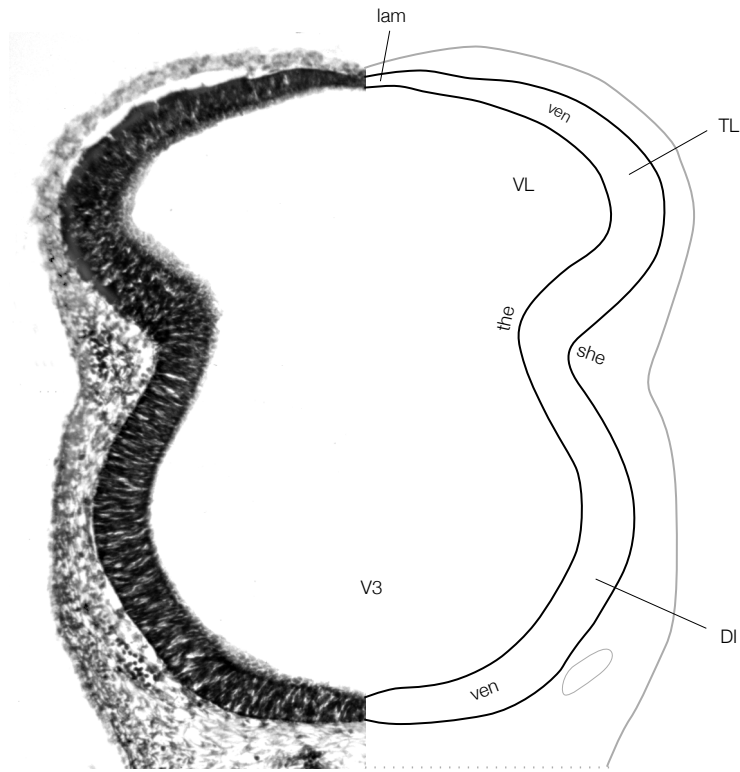
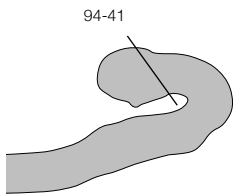
0.25 mm

ANT anterior level, hypothalamus  
 AQ cerebral aqueduct  
 bar1 first branchial arch  
 DI diencephalon  
 dmj dimesencephalic junction  
 ebp epibranchial placode  
 hp hypophysial placode  
 HY hypothalamus  
 INF infundibulum  
 lam lamina terminalis  
 MAM mammillary level, hypothalamus  
 MB midbrain  
 OPV optic vesicle  
 os optic stalk  
 PRO preoptic level, hypothalamus  
 RP Rathke's pouch  
 she hemispheric sulcus  
 sin infundibular sulcus  
 sopt optic sulcus

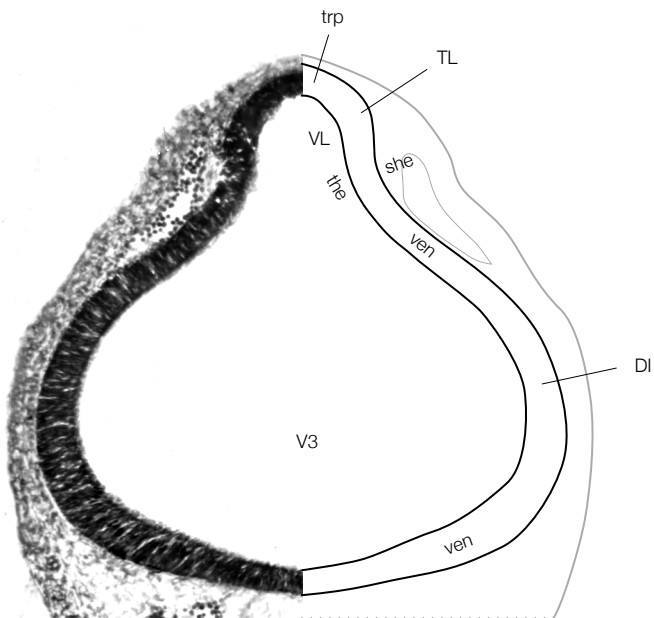
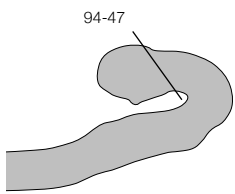
sto stomodeum (stomatodeum)  
 TC tectum  
 tcs tectal sulcus  
 TG tegmentum  
 the torus hemisphericus  
 TL telencephalon  
 TUB tuberal level, hypothalamus  
 V3 third ventricle  
 ven ventricular layer, neural tube  
 VL lateral ventricle  
 VNT ventral thalamus  
 Vre retinal ventricle



6

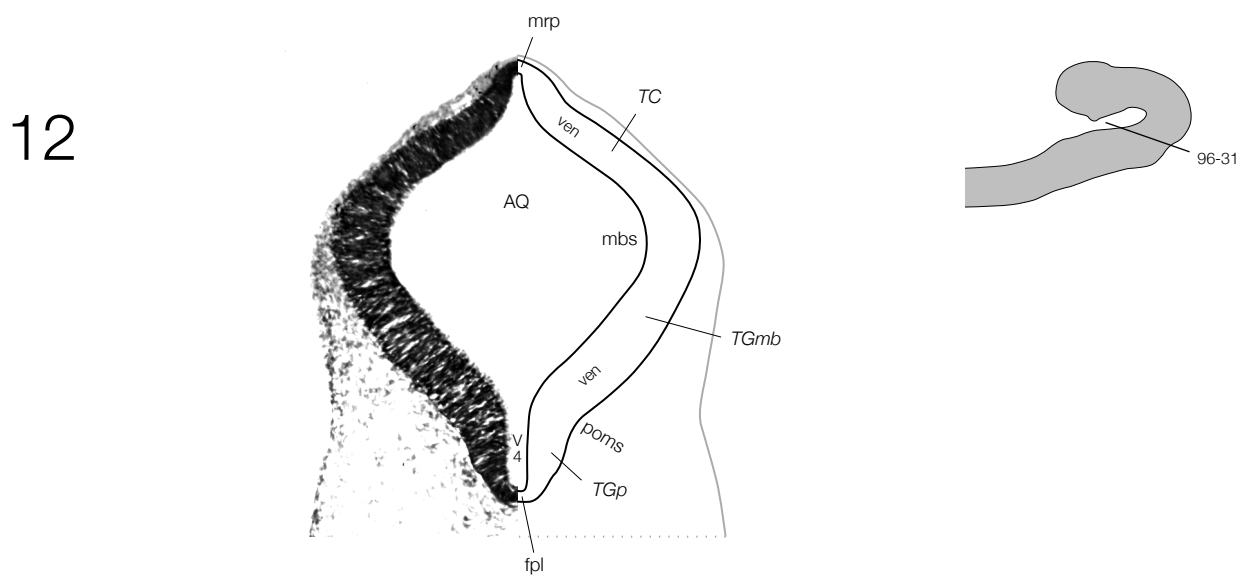
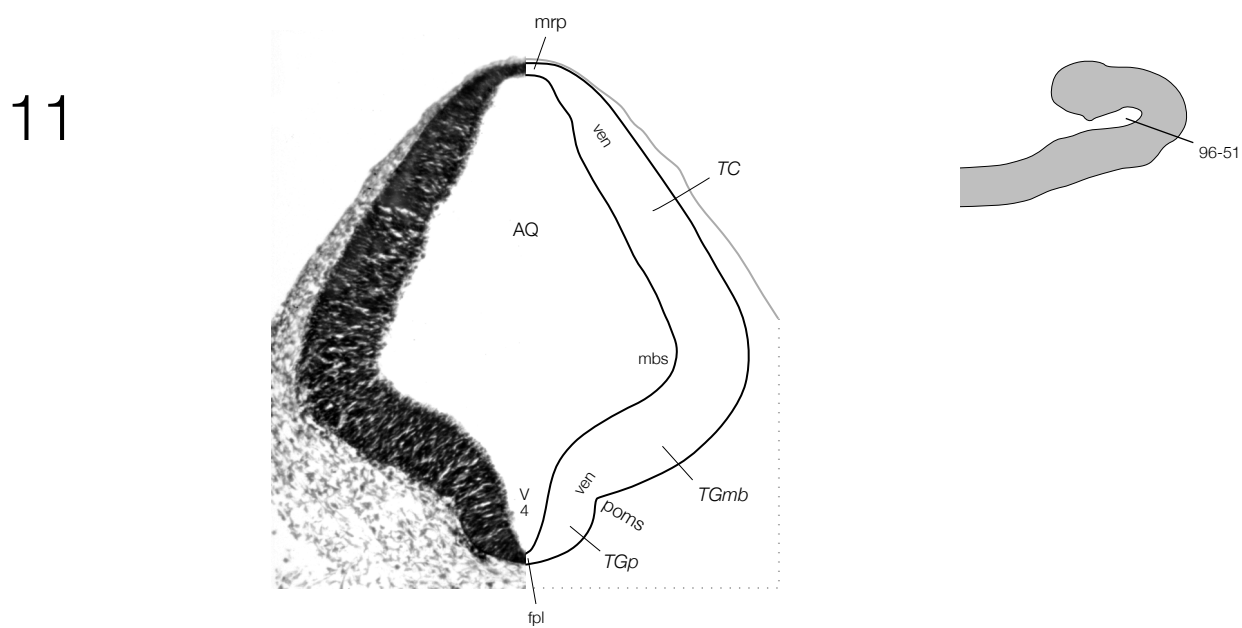
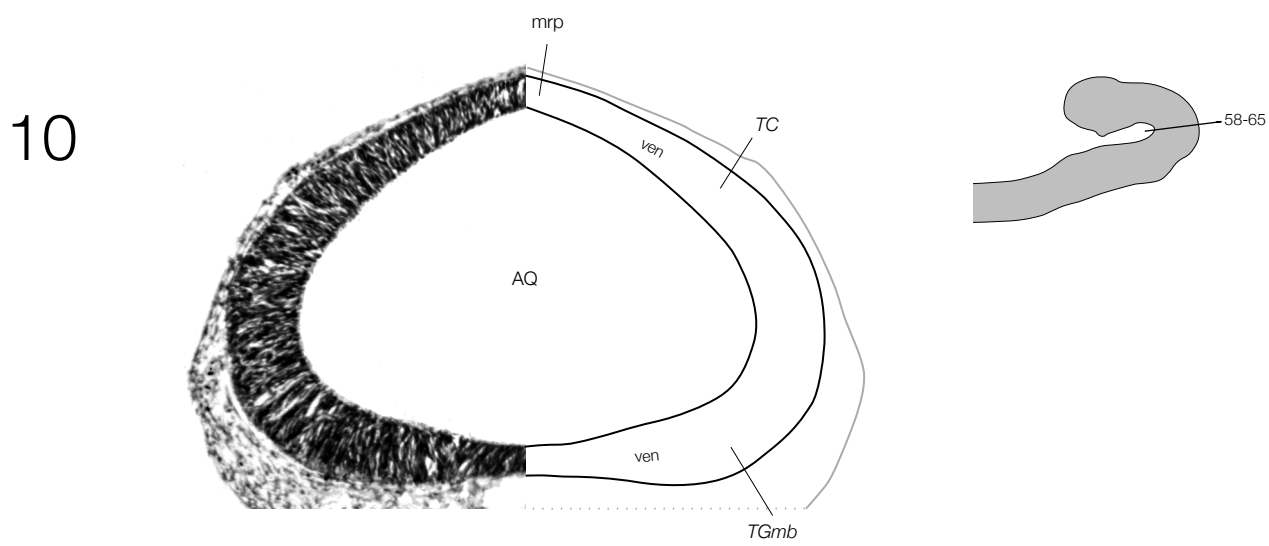
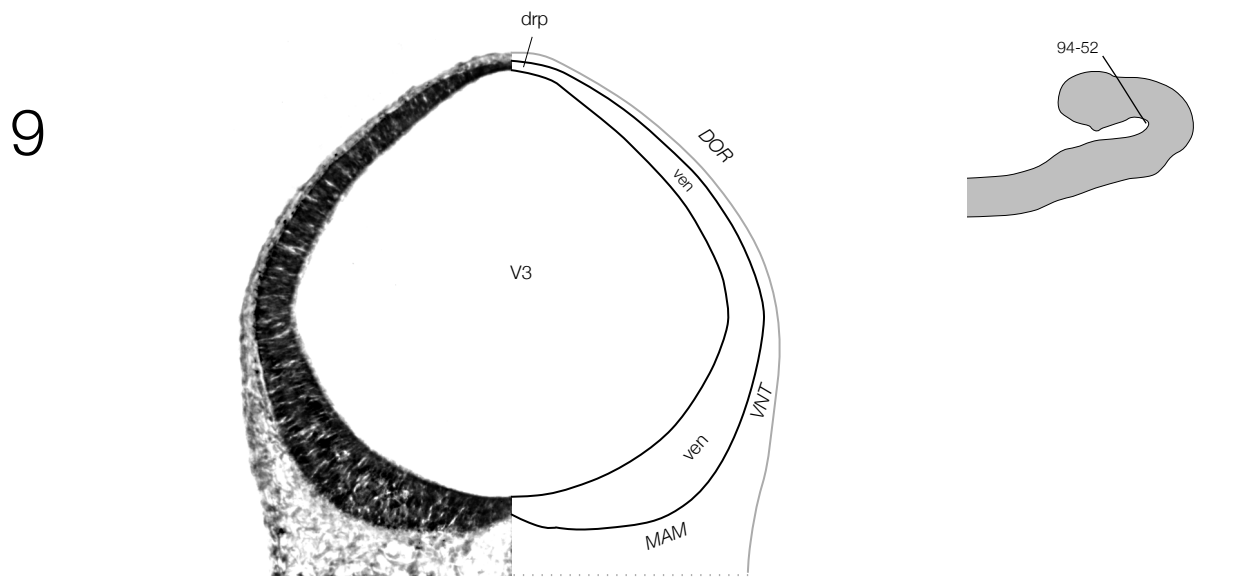


7



8

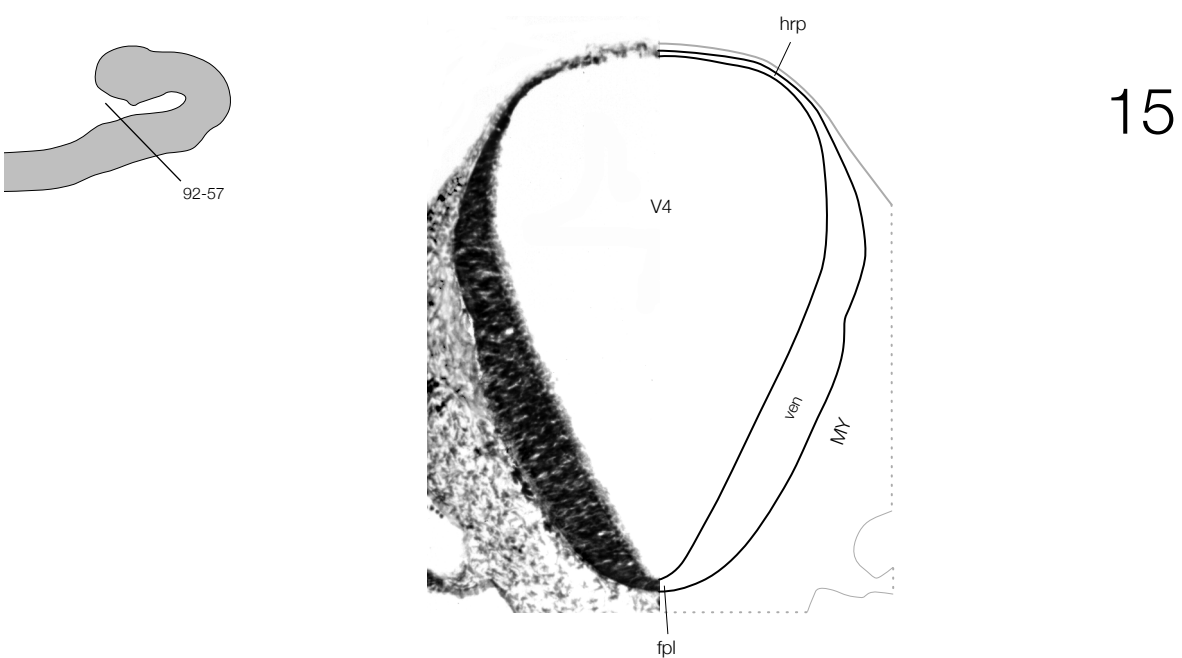
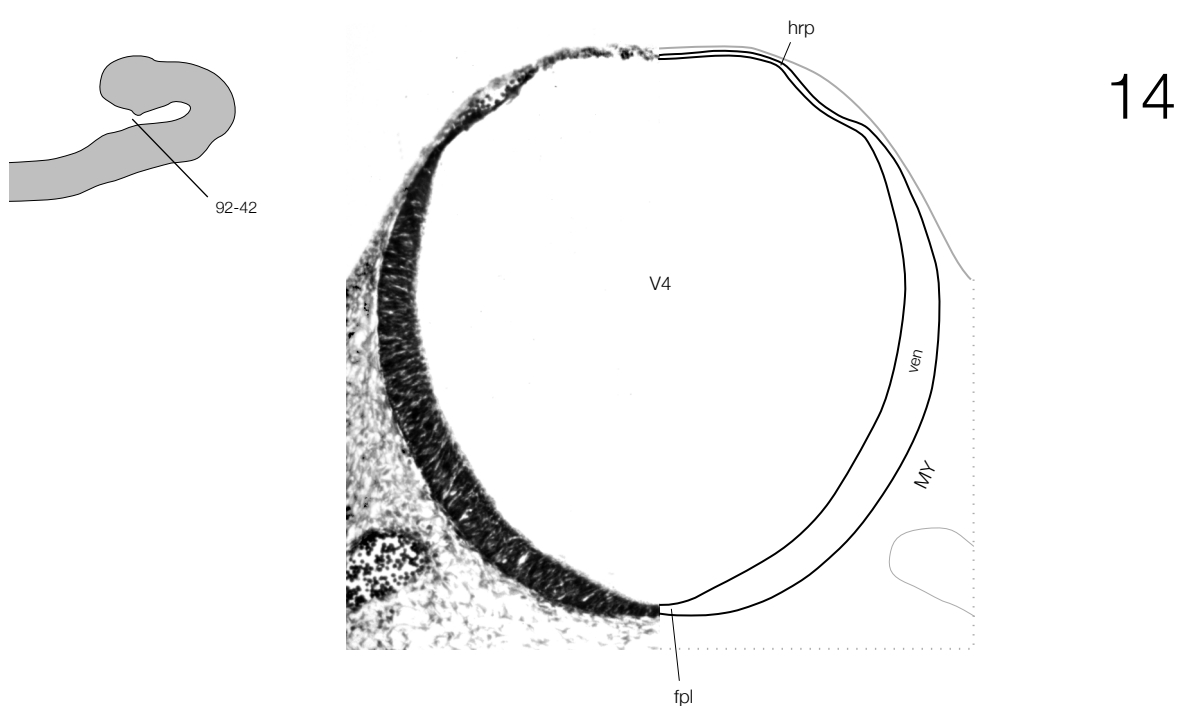
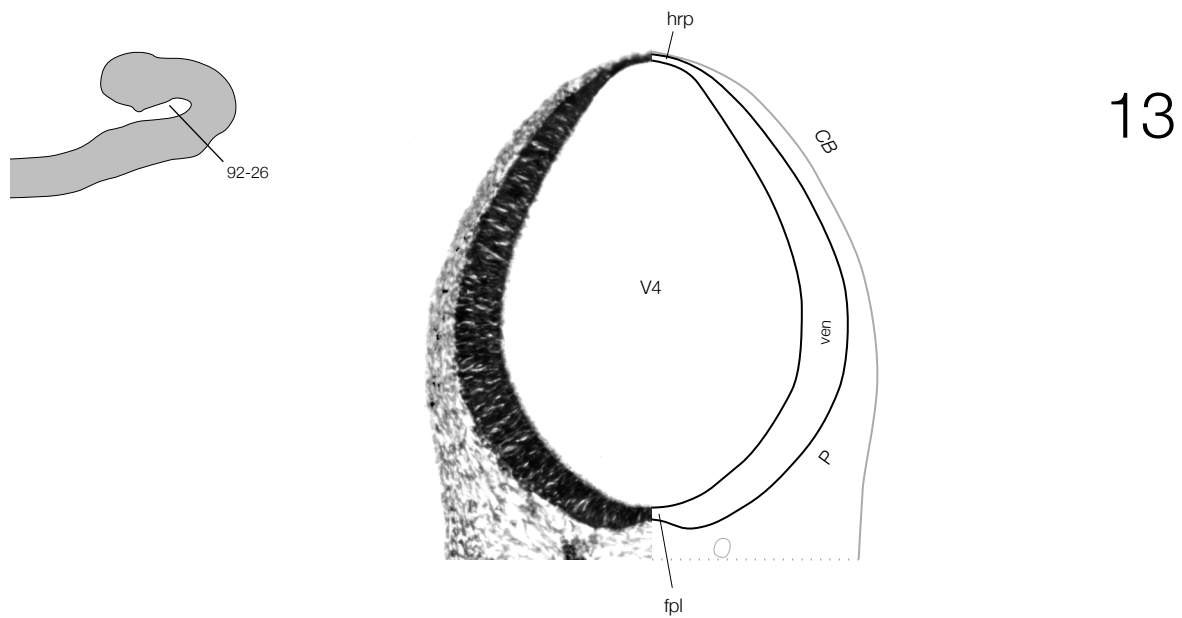
e11 transverse



0.25 mm

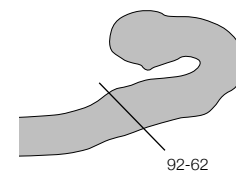
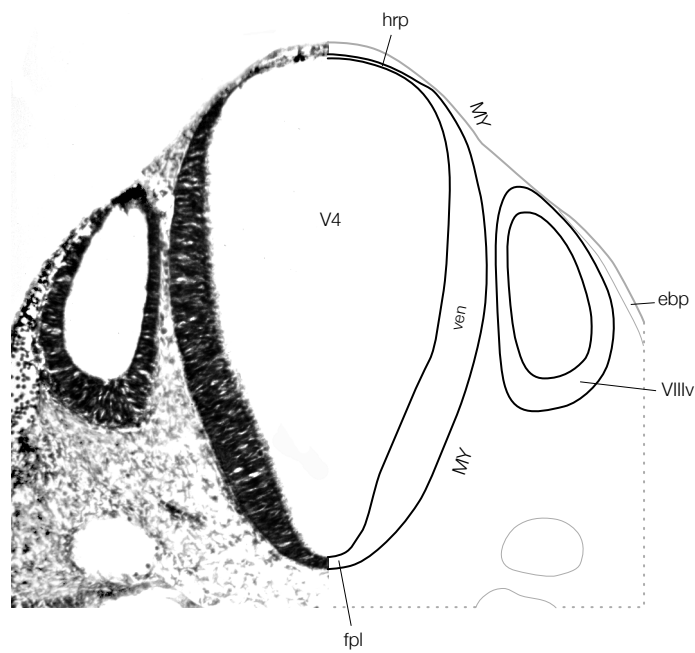
AQ cerebral aqueduct  
 DI diencephalon  
 DOR dorsal thalamus  
 drp diencephalic roof plate  
 fpl floor plate  
 lam lamina terminalis  
 MAM mammillary level, hypothalamus  
 mbs midbrain sulcus  
 mrp midbrain roof plate  
 poms pontomesencephalic sulcus  
 she hemispheric sulcus  
 smi middle diencephalic sulcus  
 TC tectum  
 TGmb tegmentum, midbrain  
 TGp tegmentum, pons  
 the torus hemisphericus  
 TL telencephalon  
 trp telencephalic roof plate  
 V4 fourth ventricle

ven ventricular layer, neural tube  
 VL lateral ventricle  
 VNT ventral thalamus



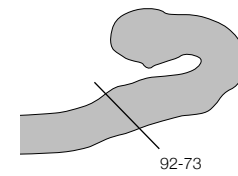
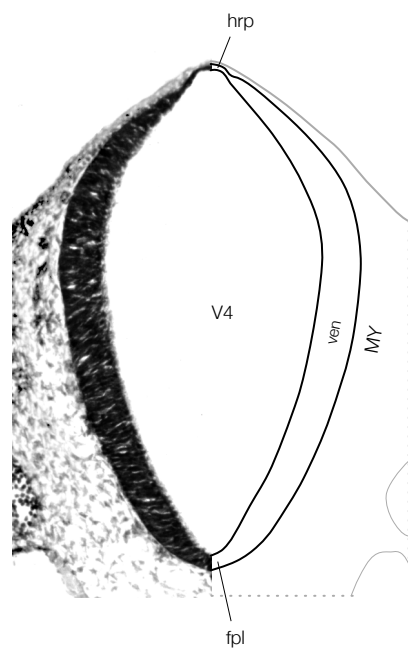
e11 transverse

16



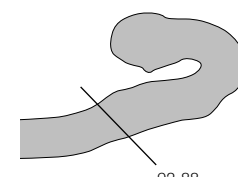
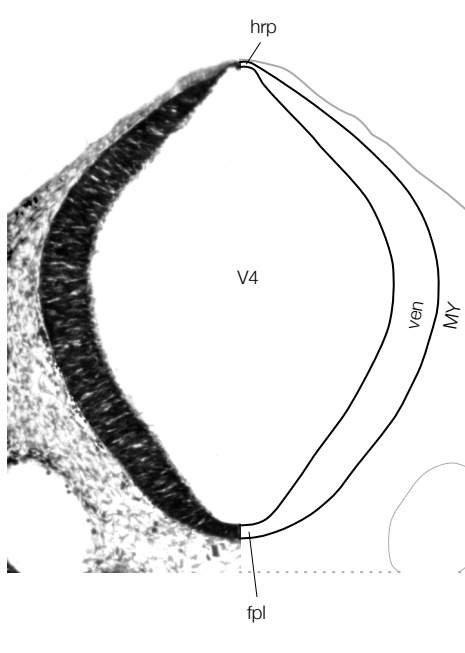
92-62

17



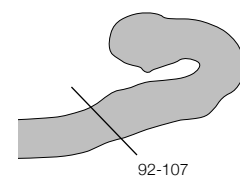
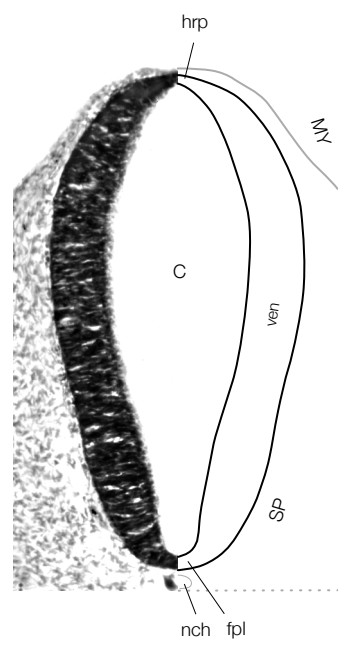
92-73

18



92-88

19



92-107

0.25 mm

- C central canal, spinal cord/medulla
- CB cerebellum
- ebp epibranchial placode
- fpl floor plate
- hrp hindbrain roof plate
- MY medulla
- nch notochord
- P pons
- SP spinal cord
- V4 fourth ventricle
- ven ventricular layer, neural tube
- VIIIv otic vesicle