

*Note: Disregard page numbers (highlighted in yellow), they have changed in this reformatting.*

## Index

Regular numbers refer to text pages; an entry such as ‘e12-e15’ means the structure is labeled in atlas series from e12 through e15 (see abbreviation lists at bottom of atlas pages for location). Note that *italicized* abbreviations in illustrations indicate presumptive structures (for example, *CTX* refers to the presumptive cerebral cortex).

abducens nucleus (VI) e20

accessory facial nucleus (ACVII) e20

accessory olfactory bulb [Balogh] (AOB) 17; e17, e20

accessory olfactory bulb, glomerular layer (AOBgl) e20

accessory olfactory bulb, mitral layer (AOBmi) e20

agranular insular area (AI) e20

alar plate (APL) 13, 27; e12

allantois (ALL) e9

allocortex 19

alveus [Burdach] (alv) e20

Ammon's horn [Noguez] (CA) e15, e20

Ammon's horn, pyramidal layer (CAsp) e20

Ammon's horn, stratum oriens (CAso) e20

amnion (AMN) 4, e9

amygdala [Burdach] (AMY) e12-e17

amygdalar ridge (AR) 18

amygdalar ridge, subventricular layer (ARsbv) e15

anatomical axes 4

annelid worms, segments 12

ansa peduncularis [Gratiolet] (apd) e15

anterior amygdaloid area (AAA) e20

anterior cingulate area (ACA) e20

anterior commissure [Riolan] (ac) 32; e17, e20

anterior commissure, olfactory limb (aco) e15

anterior hypothalamic area (AHA) e17

anterior hypothalamic nucleus, anterior part (AHNa) e20

anterior hypothalamic nucleus, central part (AHNc) e20

anterior hypothalamic nucleus, dorsal part (AHNd) e20

anterior hypothalamic nucleus, posterior part (AHNp) e20

anterior level, hypothalamus (ANT) 23-25

anterior nuclei, dorsal thalamus [Nissl] (ATN) e20

anterior olfactory nucleus [Kölliker] (AON) e13-e20

anterior olfactory nucleus, lateral part (AONl) e20

anterior olfactory nucleus, medial part (AONm) e20

anterior olfactory nucleus, posteroventral part (AONpv) e20

anterior periventricular nucleus hypothalamus (PVa) e20

anterior pretectal nucleus (APN) e20

anterior tegmental nucleus (AT) e20  
anterodorsal preoptic nucleus (ADP) e20  
anterolateral ridge (rostrolateral ridge) (alr) 18, 26  
anteroventral preoptic nucleus (AVP) e20  
aortic arch, first (aa1) 12  
arbor vitae (arb) e20  
archencephalon 28  
archenteron (arc) 4, e9  
arcuate nucleus hypothalamus [Clark] (ARH) e17, e20  
area intercalata [Hines] (ain) e12-e14  
area postrema (AP) 31; e17, e20  
atlas (ATL) e17  
auditory areas (AUD) e20  
Barrington's nucleus (B) e20  
basal ganglia, *see* basal nuclei  
basal nuclei (ganglia), telencephalon (BG) 14, 18  
basal nuclei, subventricular layer (BNSbv) e15, e17  
basal plate (BAP) 13, 27; e12, e17  
basal ridges 18  
basolateral complex amygdala (BLC) 19  
basolateral nucleus amygdala, anterior part (BLAa) e20  
basolateral nucleus amygdala, posterior part (BLAp) e20  
basomedial nucleus amygdala, anterior part (BMAa) e20

basomedial nucleus amygdala, posterior part (BMAp) e20

bed nuclei stria terminalis [Johnston] (BST) 19, 25; e13-e20

bed nuclei stria terminalis, posterior division, strial extension (BSTse) e20

bed nuclei stria terminalis, posterior division, principal nucleus (BSTpr) e20

bed nucleus accessory olfactory tract (BA) e20

bed nucleus anterior commissure [Gurdjian] (BAC) e20

bed nucleus stria medullaris [Risold & Swanson] (NSM) e20

bilateral symmetry 4, 10

birthdate, neuronal 13 ff., 17

bony labyrinth (Lb) e17

brachium of the inferior colliculus (bic) e17, e20

brachium of the superior colliculus (bsc) e17, e20

brain plate (BRP) 6, e9

brain vesicles 6, 9 ff.

brainstem raphé (of the floor plate) (RAP) e12-e17

branchial arch, first (bar1) 12

branchial arches 11, 12, 28

branchial pouches 1-3 (bpo1-3) 12

Cajal-Retzius cells 20

callosal layer, cortical neural tube [Bayer and Altman] (cal) 20

caudal (Ca) 4

caudal medullary vellum [Tarin] (CMVE) 31

caudal neuropore (cnp) 8

caudoputamen (CP) e15-e20

central canal, spinal cord/medulla (C) e10-e20

central lateral nucleus thalamus (CL) e20

central linear nucleus raphé (CLI) e20

central medial nucleus thalamus (CM) e20

central nervous system (CNS), basic divisions **6**

central nucleus amygdala (CEA) **19**; e15-e20

cephalic flexure (cf) **6, 37**; e15, e17

cerebellar commissure (cbc) e20

cerebellar cortex (CBX) e20

cerebellar cortex, inner granule cell layer (CBXg) e20

cerebellar cortex, molecular layer (CBXm) e20

cerebellar cortex, outer granule cell layer (CBXog) e20

cerebellar cortex, Purkinje layer (CBXp) e20

cerebellopontine sulcus (cps) e12-e15

cerebellum (CB) 28; e11-e17

cerebellum, molecular layer (CBm) e17

cerebellum, outer granule cell layer (CBog) e17

cerebral aqueduct [Sylvius] (AQ) e10-e20

cerebral aqueduct, isthmal recess (AQir) e12

cerebral cortex (CTX) **14, 15, 17, 19 ff.**; e14-e17

cerebral cortex, cortical plate (CTXcpl) **20**; e15, e17

cerebral cortex, intermediate layer (CTXil) **20**; e15, e17

cerebral cortex, intermediate layer, deep sublayer (CTXild) 20; e17  
cerebral cortex, intermediate layer, superficial sublayer (CTXils) 20; e17  
cerebral cortex, lateral part (CTXl) 19  
cerebral cortex, layers 1-6 (1-6) 21  
cerebral cortex, layer 6b, *see* cerebral cortex, subplate  
cerebral cortex, molecular (plexiform) layer (CTX1) 20; e15, e17  
cerebral cortex, medial part (CTXm) 19  
cerebral cortex, preplate [Rickman-Wolff] (CTXppl) 20; e15  
cerebral cortex, subplate [Kostovic-Molliver] (CTXspl) 20, 21; e17  
cerebral cortex, subventricular layer (CTXsbv) 20; e15-e17  
cerebral cortex, ventricular layer (CTXven) 19; e15, e17  
cerebral hemisphere, *see* endbrain (telencephalon)  
cerebral peduncle (cpd) e15-e20  
cervical flexure 37  
choroid fissure (chf) e15  
choroid plexus (chp) 33; e12-e20  
choroidal area [Hines] (cha) 32  
cingulate region [Burdach] (CNG) 19  
cingulum bundle [Reil] (cing) e20  
circumventricular organs 31 ff.  
claustrum [Burdach] (CLA) e17, e20  
cochlear nuclei (CN) 28; e13-e17  
columns of the fornix (fx) e15-e20

commissure of the inferior colliculus (cic) e20  
commissure of the superior colliculus (csc) e20  
commissural plate 32  
computer graphics 35, 37  
conjunctival sac (cos) e12-e17  
cornea (cor) e12-e17  
corpus callosum [Galen] (cc) 32, e20  
corpus callosum, anterior forceps [Arnold] (fa) e20  
corpus callosum, genu (ccg) e20  
corpus callosum, posterior forceps [Arnold] (fp) e20  
corpus callosum, rostrum (ccr) e20  
corpus callosum, splenium [Burdach] (ccs) e20  
cortical neural tube, preplate (ppl), *see* cerebral cortex, isocortex  
cortical nucleus amygdala (COA) e14-e20  
cortical nucleus amygdala, posterolateral part (COApl) e20  
cortical nucleus amygdala, posteromedial part (COApm) e20  
cortical plate (cpl), *also see* cerebral cortex, isocortex 20  
corticobasal sulcus (cbs) 18  
corticomedial complex amygdala (CMA) 19  
corticospinal tract (cst) e17, e20  
corticostriatal sulcus (css) 14, 18; e12-e17  
cryptic boundary 25  
cuneate fascicle [Burdach] (cuf) e17, e20

cuneate nucleus [Burdach] (CU) e17, e20  
cuneiform nucleus [Castaldi] (CUN) e20  
decussation superior cerebellar peduncle [Wernekinck] (dscp) e20  
deep cerebellar nuclei (DNC) e17, e20  
deevagination **39**  
dentate gyrus [Tarin] (DG) **15, 21**; e15-e20  
dentate gyrus, granule cell layer (DGsg) e20  
dentate gyrus, lateral blade (DGlb) e20  
dentate gyrus, medial blade (DGmb) e20  
dentate gyrus, molecular layer (DGmo) e20  
dentate gyrus, polymorph layer (hilus, CA4) (DGpo) e17  
deuterencephalon **30**  
diencephalic roof plate (drp) **30 ff.**; e11-e15  
diencephalic vesicle, *see* interbrain vesicle  
diencephalon [Huxley] (DI), *see* interbrain  
dimesencephalic junction (dmj) e10-e12  
ditelencephalic junction (dtj) **22, 30**; e12-e14  
dorsal (Do) **4**  
dorsal aorta (DOA) e9  
dorsal arch, telencephalic vesicle (ard) e14-e17  
dorsal cochlear nucleus (DCO) e20  
dorsal column nuclei (DCN) **28**; e17  
dorsal columns (dc) e17



dorsal diencephalic sulcus [Herrick], *see* habenular sulcus

dorsal hippocampal commissure (dhc) e20

dorsal horn (DH) e17

dorsal motor nucleus vagus nerve (DMX) e17, e20

dorsal nucleus raphé (DR) e17, e20

dorsal premammillary nucleus (PMd) e20

dorsal root ganglion (DRG) e17

dorsal striatum, *see* caudoputamen

dorsal tegmental decussation [Meynert] (dtd) e20

dorsal tegmental nucleus [Gudden] (DTN) e20

dorsal thalamus [Herrick] (DOR) 14, 24; e11-e17

dorsal thalamus, caudodorsal part (DORc) e12

dorsal thalamus, rostroventral part (DORr) e12

dorsolateral fascicle [Lissauer] (dl) e17

dorsomedial nucleus hypothalamus (DMH) e17, e20

dorsomedial nucleus hypothalamus, anterior part (DMHa) e20

dorsomedial nucleus hypothalamus, posterior part (DMHp) e20

dorsomedial nucleus hypothalamus, ventral part (DMHv) e20

ectoderm (ECD) 4

ectoderm, extraembryonic e8

ectoderm, parietal e8

ectoplacental cone e8

Edinger-Westphal nucleus (EW) e20

efferent cochleovestibular bundle (cvb) e20

egg e8

endbrain (telencephalic) vesicle 9, 17

endoderm (END) e8

endolymphatic duct (edu) e12-e14

endopiriform nucleus [Loo] (EP) e15-e20

entorhinal area (ENT) 21; e17, e20

entorhinal area, lateral part (ENTl) 21; e20

entorhinal area, medial part (ENTm) 21; e20

entypy e8

ependymal layer (epe) 20

epithalamus [Edinger] (EPI) 23, 24; e12

epithelial area (area epithelialis) [Hines] (ae) 32; e12-e15

epithelial lamina (lamina epithelialis), telencephalon [Hines] (let) 22; e13-e15

external capsule [Burdach] (ec) e17, e20

external cuneate nucleus [Monakow, Blumenau] (ECU) 28; e17, e20

external medullary lamina thalamus [Burdach] (em) e17, e20

external mesencephalic-diencephalic sulcus (ems) e15

external thalamic sulcus (ets) e12

extraocular muscles (eom) 28; e14-e17

extreme capsule (ee) e20

eyelid (eyl) e15, e17

facial nucleus (VII) e15-e20

facial nerve (VIIIn) e17, e20

facial, vestibulocochlear ganglia (GVII, VIII) 12

fasciculus retroflexus [Meynert] (fr) e15-e20

fasciola cinerea (FC) 21

fate mapping 15

fertilized egg e8

fields CA1-CA3, Ammon's horn [Lorente de Nó] (CA1-3) 21; e20

fields CA1-CA3, Ammon's horn, pyramidal layer (CA1-3sp) e20

fields CA1-CA3, Ammon's horn, stratum lacunosum-moleculare (CA1-3slm) e20

fields CA1-CA3, Ammon's horn, stratum oriens [Sala] (CA1-3so) e20

fields CA1-CA3, Ammon's horn, stratum radiatum [Meynert] (CA1-3sr) e20

fields of Forel (FF) e20

fimbria [Vieussens] (fi) 22; e14-e20

fimbrial sulcus (sfi) 22, 33; e12-e17

flat maps, history 35

flat maps, generation 37 ff.

floor plate (fpl) 28 ff., e10-e17

forebrain (FB) 6, 7, 14, e9

forebrain, ventricular layer (FBven) e10

forebrain vesicle (FBV) 7, 8, 14, 17 ff.; e10

foregut (FG) 26, e9

fourth ventricle (V4) e10-e20

fourth ventricle, lateral recess (V4r) e12, e13

frontal pole (FRP) 40, 41; e17, e20  
frontal region (FRO) 42  
fundus of the striatum (FS) e17, e20  
ganglionic eminences, *see* basal ridges  
ganglionic ridges, *see* basal ridges  
geniculate nuclei, dorsal thalamus (GEN) e15, e17  
genu of the facial nerve (gVIIIn) e15-e20  
gigantocellular reticular nucleus (GRN) e17, e20  
globus pallidus [Burdach] (GP) 19; e13-e20  
globus pallidus, lateral segment (GPl) e17, e20  
globus pallidus, medial segment (GPm) e17. e20  
glossopharyngeal, vagal ganglia (GIX, X) e15, e17  
glossopharyngeal, vagus nerves (IX, Xn) 28; e15, e17  
gracile nucleus [Goll] (GR) e20  
gustatory area (GU) e20  
habenula 14, 24  
habenular commissure [Haller] (hbc) 31; e20  
habenular sulcus (shb) 14, 23, 24; e12-e14  
head fold 6, 8, 22  
heart (H) e9  
hemispheric sulcus [Grönberg] (she) 14, 22, 25; e11-e17  
Hensen's (primitive) node (Hn) 4, 10  
hepatic diverticulum (hd) 12

hindbrain (HB) e9

hindbrain-midbrain junction (hmj) 8, 31

hindbrain roof plate (hrp) 30, 31; e10-e15

hindbrain vesicle (HBV) 9, 11, 13

hindgut (HG) e9

hippocampal commissures 32

hippocampal fissure [Gratiolet] (hf) 22; e13-e15

hippocampal formation (HPF) 19, 21, 22

hippocampal formation, ventral region (HPFv) e20

hippocampal region [Aranzi] (HIP) 21; e13-e17

hippocampal sulcus [Hines] (hs) 22; e17, e20

histological artifact (art) e17

homeobox genes 7, 11, 25, 45

hydrocephalus 35

hypoglossal nucleus (XII) e14-e20

hypophysial placode (hp) 18, 26

hypothalamic sulcus [Rose] (shy) 14, 23; e12-e20

hypothalamohypophysial portal system 27, 32

hypothalamus [His] (HY) 14, 23, 24

induction 7

induseum griseum (IG) 21; e20

inferior cerebellar peduncle (icp) e15-e20

inferior colliculus (IC) e14-e20

inferior olivary complex [Vieussens] (IO) 15, 28; e13-e20

inferior olivary complex, dorsal accessory olive (IOda) e20

inferior olivary complex, medial accessory olive (IOma) e20

inferior olivary complex, principal olive (IOpr) e20

inferior salivatory nucleus (ISN) e20

infralimbic area (ILA) e20

infundibular sulcus (sin) 25, 31; e11

infundibulum [Galen] (INF) 6, 8, 25 ff., 30 ff.; e10-e15

insects, segments 12

insular region (INS) e15-e20

interanterodorsal nucleus thalamus (IAD) e20

interbrain (diencephalic) vesicle 9, 22

intercalated nuclei amygdala (IA) e20

interfascicular nucleus (IF) e17, e20

intermediate gray spinal cord (IH) e17

intermediate periventricular nucleus hypothalamus (PVi) e20

internal capsule [Burdach] (int) e14-e20

internal medullary lamina thalamus [Burdach] (im) e20

interpeduncular nucleus [Gudden] (IPN) e17, e20

interstitial nucleus of Cajal (INC) e17, e20

interstriatal sulcus, *see* striatopallidal sulcus

interventricular foramen [Monro] (IVF) 33; e12-e20

intra-embryonic coelomic cavity (icc) e9

invertebrate delamination 7

inverted germ layers e8

islands of Calleja (olfactory tubercle) (isl) e20

isocortex [Vogt and Vogt] (ISO) 19

isocortex, cortical plate (ISOcpl) e17

isocortex, intermediate layer, deep sublayer (ISOild) e17

isocortex, intermediate layer, ventral extension (ISOilv) e17

isocortex, layer 1 (ISO1) e17

isocortex, preplate (ISOppl) e17

isocortex, subplate (ISOspl) e17

isocortex, subventricular layer (ISOsbv) e17

isocortex, ventricular layer (ISOven) e17

isthmus (IS) 31

lamina terminalis (terminal lamina or plate) (lam) 8, 30, 32; e10-e12

lateral dorsal nucleus thalamus (LD) e20

lateral funiculus (lf) e17

lateral geniculate complex [Santorini] (LG) e15-e20

lateral geniculate complex, dorsal part (LGd) 24; e17, e20

lateral geniculate complex, intergeniculate leaflet (IGL) e20

lateral geniculate complex, ventral part (LGv) e15-e20

lateral habenula [Nissl] (LH) 24; e15-e20

lateral hypothalamic area [Nissl] (LHA) e15-e20

lateral lemniscus [Reil] (ll) e17, e20

lateral mammillary nucleus [Gudden] (LM) e17, e20

lateral mesencephalic sulcus [Palmgren], *see* midbrain sulcus

lateral nucleus amygdala (LA) e20

lateral olfactory tract (lot) e14-e20

lateral posterior nucleus thalamus (LP) e20

lateral preoptic area (LPO) e15-e20

lateral reticular nucleus (LRN) 28; e17, e20

lateral reticular nucleus, magnocellular part (LRNm) e20

lateral reticular nucleus, parvicellular part (LRNp) e20

lateral septal nucleus [Cajal] (LS) 19; e15-e20

lateral septal nucleus, dorsal part (LSd) e20

lateral septal nucleus, intermediate part (LSI) e20

lateral septal nucleus, ventral part (LSv) e20

lateral striatal sulcus, *see* corticostriatal sulcus

lateral tectal sulcus [Palmgren], *see* tectal sulcus

lateral terminal nucleus accessory optic tract (LT) e20

lateral ventricle (VL) e11-e20

lateral ventricle, olfactory part (rhinocele) (VLo) e14-e20

lateral vestibular nucleus [Deiters] (LAV) e14-e20

lateral zone, hypothalamus (LZ) 24

laterodorsal tegmental nucleus (LDT) e20

lens (le) e12-e15

limbic region, cerebral cortex 19



limiting sulcus, *see* sulcus limitans

locus coeruleus [Vic d'Azyr] (LC) e15-e20

magnocellular basal system **19**

magnocellular preoptic nucleus [Loo] (MA) e17-e20

magnocellular reticular nucleus (MARN) e15-e20

main olfactory bulb [Soemmerring] (MOB) e13-e20

main olfactory bulb, glomerular layer (MOBgl) e17, e20

main olfactory bulb, granule cell layer (MOBgr) e17, e20

main olfactory bulb, inner plexiform layer (MOBipl) e20

main olfactory bulb, mantle layer (MOBmtl) e15

main olfactory bulb, marginal layer (MOBmar) e15

main olfactory bulb, mitral layer (MOBmi) e17, e20

main olfactory bulb, outer plexiform layer (MOBopl) e17, e20

main olfactory bulb, subventricular layer (MOBsbv) e15-e20

main olfactory bulb, ventricular layer (MOBven) e15

major island of Calleja (ism) e20

mammillary body [Gall and Spurzheim] (MBO) e17

mammillary level, hypothalamus (MAM) **25, 30**; e11-e15

mammillary peduncle [Meynert] (mp) e15-e20

mammillotegmental tract [Gudden] (mtg) e14-e20

mammillothalamic tract [Vic d'Azyr] (mtt) e20

mandibular process (MN) **26**

mantle layer, neural tube (mtl) **13, 19**

map projections 40

marginal layer, neural tube (mar) 19

maxillary process (MAX) e12

medial corticohypothalamic tract (mct) e20

medial forebrain bundle [Edinger] (mfb) e13-e15

medial geniculate complex (MG) 24; e17, e20

medial habenula [Nissl] (MH) 24

medial lemniscus [Reil] (ml) e17, e20

medial longitudinal fascicle (mlf) e12-e20

medial mammillary nucleus [Gudden] (MM) e20

medial mammillary nucleus, median part (MMme) e20

medial nucleus amygdala (MEA) e14-e20

medial nucleus amygdala, anterior part (MEAa) e20

medial nucleus amygdala, posterior part (MEAp) e20

medial nucleus amygdala, posterodorsal part (MEApd) e20

medial preoptic area (MPO) e17, e20

medial preoptic nucleus (MPN) e20

medial preoptic nucleus, central part (MPNc) e20

medial septal complex (MSC) 19; e13

medial septal nucleus [Cajal] (MS) e15-e20

medial vestibular nucleus [Schwalbe] (MV) e20

medial zone, hypothalamus (MEZ) 24

median eminence (ME) 23, 25, 31; e12-e20

median hinge-point cells 28

median preoptic nucleus [Loo] (MEPO) 32; e17, e20

median sulcus, telencephalon medium (Rakic & Yakovlev) (mns) 39

mediodorsal nucleus thalamus (MD) e20

medulla (MY) 9; e11, e12

medullary reticular nucleus (MDRN) e15-e20

medullary reticular nucleus, dorsal part (MDRNd) e20

medullary reticular nucleus, ventral part (MDRNv) e20

medullary vellum [Vieussens] (MVE) 31; e13

membranous labyrinth (Lme) e13-e17

mesencephalic nucleus of the trigeminal (MEV) e15-e20

mesencephalic reticular nucleus (MRN) e15-e20

mesencephalic reticular nucleus, retrorubral area (RR) e20

mesencephalic tract of the trigeminal (mtV) e17, e20

mesencephalic-diencephalic sulcus (mds) e12

mesencephalon [Huxley], *see* midbrain

mesoderm (MES) 4, 26, e8

mesomere [Meek] (mem) 10, 12

mesomere 1 (mem1) 12

mesomere 2 (mem2) 12

metameres 12

metathalamus [Edinger] 24

metencephalon [Huxley], *see* pons

midbrain (MB) 9, e9; e10-e12

midbrain, ventricular layer (MBven) e10

midbrain-diencephalic sulcus (mds) e12

midbrain-forebrain junction (mfj) 31

midbrain roof plate (mrp) 31; e10-e12

midbrain sulcus (lateral midbrain sulcus) (mbs) 14; e11-e14

midbrain vesicle (MBV) 9, 14

middle cerebellar peduncle (mcp) e17, e20

middle diencephalic sulcus [Herrick] (smi) 14, 23; e11-e14

midline nuclei, dorsal thalamus (MID) e20

migration, neuronal 15

morphogens 7, 10

motoneuron pools, cranial nerves 11, 13

motor areas (MO) e20

motor root of the trigeminal nerve (moV) e17, e20

motor nucleus of the trigeminal nerve (V) e17, e20

mouth (oral cavity) (M) 26

myelencephalon [Huxley], *see* medulla

neocortex, *see* isocortex

neostriatum, *see* caudoputamen

neural crest (NCR) 6, 18, 26

neural fold (nfo) 4, 7, e9

neural groove (ng) 4, e9

neural plate (NPL) 10, 9, 25, e9  
neural plate, diencephalic part (NPLdi) 26  
neural retina (Rne) e12, e14  
neural retina, mantle layer (Rne-mtl) e15, e17  
neural retina, ventricular layer (Rne-ven) e15, e17  
neural tube 6, 7 ff.  
neuroectoderm 4  
neuroepithelium (NE) 9,19  
neurogenesis, patterns 13 ff.  
neuromere [Orr] 6, 11 ff.  
neuromerism 10  
neurulation 7  
notochord (nch) 4, 10, 26, e9  
notochordal plate (ncp) 4, 8, 25, 26, e9  
nucleus accumbens (ACB) e15-e20  
nucleus ambiguus (AMB) e15-e20  
nucleus ambiguus, dorsal division (AMBd) e17, e20  
nucleus ambiguus, ventral division (AMBv) e17, e20  
nucleus incertus [Streeter] (NI) e20  
nucleus intercalatus [Staderini] (NIS) e20  
nucleus of Darkschewitsch (ND) e20  
nucleus of Roller (NR) e17, e20  
nucleus of the brachium, inferior colliculus (NB) e17, e20

nucleus of the diagonal band [Broca] (NDB) e15-e20

nucleus of the lateral lemniscus [Bechterew] (NLL) e17, e20

nucleus of the lateral olfactory tract (NLOT) e20

nucleus of the optic tract [Ganser] (NOT) e20

nucleus of the posterior commissure (NPC) e20

nucleus of the solitary tract (NTS) e17, e20

nucleus of the solitary tract, commissural part [Cajal] (NTSco) e20

nucleus of the solitary tract, gelatinous part (NTSge) e20

nucleus of the solitary tract, lateral part (NTSl) e20

nucleus of the solitary tract, medial part (NTSm) e20

nucleus of the trapezoid body (NTB) e20

nucleus prepositus [Marburg] (PRP) e17, e20

nucleus raphé magnus (RM) e17, e20

nucleus raphé obscurus (RO) e17, e20

nucleus raphé pallidus (RPA) e17, e20

nucleus reuniens [Malone] (RE) e20

nucleus reuniens, median part [Gurdjian] (REm) e20

nucleus sagulum (SAG) e17, e20

nucleus x [Brodal and Pompeiano] (x) e20

nucleus y [Brodal and Pompeiano] (y) e20

occipital bone (OCB) e17

occipital pole (OCP) 40-42

occipital region (OCC) 42

oculomotor nucleus (III) 14; e15-e20

olfactory bulb (OB), *also see* main, accessory olfactory bulbs 17; e15

olfactory bulb, mantle layer (OBmtl) e15

olfactory bulb, subventricular layer (OBsbv) e15

olfactory (rhinal) cortex (OLF) 42

olfactory epithelium (ole) e12-e17

olfactory nerve (In) 18; e12-e17

olfactory pit (olpi) e14

olfactory placode (olp) 17

olfactory tubercle [Ganser] (OT) 19; e15-e20

olfactory tubercle, layer 3 (OT3) e20

olfactory vesicle (OLV) e12

olivary pretectal nucleus (OP) e20

optic chiasm (och) 23, 25, 30, 32; e15-e20

optic cup 23

optic fovea (optic fossa) (opf) e9

optic nerve (In) e14-e20

optic pit (opi) 6, 10, 22

optic stalk (os) 6, 22; e11-e15

optic sulcus [Grönberg] (sopt) 14, 22, 23, 25; e10-e15

optic tract (opt) e17, e20

optic vesicle (OPV) e10, e11

orbital area (ORB) e20

oropharyngeal membrane (opm) 4, 8, 25 ff., e9

otic placode (VIIIp) 12

otic rhombomere (rhB) 6, 10

otic vesicle (VIIIv) e10-e12

pallidal migratory zone (pmz) e15

pallidal ridge (PLR) 18; e12-e15

pallidal ridge, subventricular layer (PLRsbv) e15

pallidopreoptic sulcus (pps) e12-e15

pallidothalamic sulcus (pts) e13-e15

pallidum (PAL) e12

pallium (PALL), *see* cerebral cortex

parabigeminal nucleus [Bechterew] (PBG) e20

parabrachial nucleus (PB) e17, e20

paracentral nucleus thalamus (PCN) e20

parafascicular nucleus [Vogt] (PF) e20

paragigantocellular reticular nucleus, dorsal part (PGRNd) e17, e20

paragigantocellular reticular nucleus, lateral part (PGRNl) e17, e20

paraphysial arch (ppa) 31

parasolitary nucleus (PAS) e20

parasubiculum (PAR) 21; e20

parataenial nucleus (PT) e20

paratrigeminal nucleus (PAT) e20

paraventricular nucleus hypothalamus [Malone] (PVH) 45; e17, e20



paraventricular nucleus hypothalamus, dorsal parvicellular part (PVHdp) e20  
paraventricular nucleus hypothalamus, forniceal part (PVHf) e20  
paraventricular nucleus hypothalamus, lateral parvicellular part (PVHlp) e20  
paraventricular nucleus hypothalamus, medial parvicellular part (PVHmp) e20  
paraventricular nucleus hypothalamus, periventricular part (PVHpv) e20  
paraventricular nucleus hypothalamus, posterior magnocellular part (PVHpm) e20  
paraventricular nucleus thalamus (PVT) e20  
parietal bone (PAB) e17  
parietal region (PTL) 19, 42  
parietal region, posterior association areas (PTLp) e20  
parvicellular reticular nucleus (PARN) e17, e20  
pattern formation 3, 35 ff.  
pedunculopontine nucleus (PPN) e17, e20  
periaqueductal gray (PAG) 24; e15-e20  
periolivary region (POR) e20  
peripeduncular nucleus (PP) e20  
peripheral nervous system (PNS) 6  
perireuniens nucleus [Brittain] (PR) e20  
perirhinal area (PERI) e20  
periventricular nucleus hypothalamus (PV) e20  
periventricular zone, hypothalamus (PVZ) 24  
pheromonal information 19  
pineal gland [Galen] (PIN) 31; e13-e15

piriform area (PIR) e14-e20

piriform-amygdaloid area (PAA) e20

pituitary gland [Galen] (PIT) 25

pituitary gland, anterior lobe (AL) 2

pituitary gland, anterior lobe, stem cell region (stm) 27

pituitary gland, intermediate lobe (IL) 27; e13-e17

pituitary gland, neural lobe (NL) 25 ff.; e12-e17

pituitary gland, posterior lobe, *see* pituitary gland, neural lobe

placodes 6

polarity 4

pons [Varoli] (P) 9; e11, e12

pontine central gray (PCG) e17, e20

pontine flexure (pof) 37

pontine gray (basal) (PG) 15, 28; e17, e20

pontine reticular nucleus (PRN) e15-e20

pontobulbar body (PBB) e15, e17

pontomesencephalic sulcus (poms) e11

posterior commissure [Lieutaud] (pc) 31; e14-e20

posterior complex thalamus (PO) e20

posterior hypothalamic nucleus (PH) e17, e20

posterior limiting nucleus thalamus (POL) e20

posterior nucleus amygdala (PA) e20

posterior periventricular nucleus hypothalamus (PVp) e20

postneuromeres 10

postoptic commissures, *see* supraoptic commissures

postotic groove [Adelmann] (pog) 6, e9

postpiriform transition area (TR) e20

postsubiculum (POST) e20

POU-domain genes 7, 25

prechordal plate (pch) 8, 26, 30

precommissural fornix [Elliot Smith] (fxpr) e20

prefrontal region (PFR) 42

prelimbic area (PL) e20

preammillary nuclear complex (PMC) e17

preoptic periventricular nucleus (PVpo) e20

preoptic level, hypothalamus [Edinger] (PRO) 23-25; e11-e15

preoptic region, *see* preoptic level, hypothalamus

preotic sulcus (pos) 6, e9

preplate, *see* cerebral cortex, preplate

presubiculum [Cajal] (PRE) 21; e20

presubiculum, layer 2 (PRE2) e20

pretectal region [Edinger] (PRT) 24, 31; e12-e20

primary brain vesicles 9

primary motor area (MOp) e20

primary rhombomeres 11

primary rhombomere A (rhA) 11

primary rhombomere A1 (rhA1) 11

primary rhombomere B (otic) (rhB) 11

primary rhombomere C (rhC) 11

primary somatosensory area (SSp) e20

primitive node, *see* Hensen's node

primitive streak (prs) 4

principal mammillary tract [Kölliker] (pm) e17, e20

principal sensory nucleus of the trigeminal (PSV) e12-e20

proamniotic cavity e8

prochordal plate, *see* prechordal plate

proliferation zones 10, 13, 20, 22

proliferation zone, dentate gyrus 22

proneuromeres 10

prosencephalon, *see* forebrain

prosomere [Meek] 10, 12

pseudostratified columnar epithelium 7, 9

pyramidal decussation [Pourfour du Petit] (pyd) e17, e20

pyramidal tract (pyramid) [Vieussens] (py) e17, e20

radial glial cells 13, 15, 18, 22

raphé nuclei 15, 28

Rathke's pouch (RP) 8, 27; e11, e12

red nucleus [Burdach] (RN) e15-e20

Reissner's fiber 31

reticular formation (RET) 28

regionalization of neuroepithelium 9 ff., 13 ff., 15 ff.

reticular nucleus spinal cord (RS) e17

reticular nucleus thalamus [Arnold] (RT) e15-e20

reticular promontory (Altman and Bayer) (rep) e14

retina (R) e12

retina, pigmented layer (Rpi) e14-e17

retinal ventricle (Vre) e14-e17

retrochiasmatic area (RCH) 17, 23, 24, 31, 32; e14-e20

retrosplenic area (RSP) e20

rhinal fissure (rf) e17, e20

rhinal incisure (ri) e15-e20

rhombencephalon, *see* hindbrain

rhombic lip (RHL) 10, 14, 15, 27, 28

rhomboid nucleus [Cajal] (RH) e20

rhombomere [Meek], *also see* primary, secondary rhombomere 10 ff., e9

roof plate (rpl) 11, 28 ff.; e10

rostral (Ro) 4

rostral linear nucleus raphé (RL) e20

rostral medullary vellum [Vieussens] (RMVE) 31

rostral neuropore (rnp) 8, 26, 31

rostrolateral ridge, *see* anterolateral ridge

rubrospinal tract [Monakow] (rust) e17, e20

secondary brain vesicles 9

secondary neuronal migrations 15

secondary motor areas (MOs) e20

secondary rhombomeres 1-7 (rh1-7) 11, e9

Seessle's pouch (SPO) 27

segment, segmentation 12

sensory nuclei, cranial nerve 13

septa, rhombomeres 10

septal region [Meynert] (SEP) 32; e12-e15

septal ridge (SPR) 18; e13-e15

septal ridge, subventricular layer (SPRsbv) e15

septal sulcus (ses) e15, e17

septofimbrial nucleus (SF) e17, e20

septohippocampal nucleus SH e17, e20

septum ependymale [Hines] (sem) e12

solitary tract (ts) e13-e20

somatic ectoderm (SE) 4, 8, 26, 27

somatosensory area (SS) e20

somite, first, ... (som1...) 7, 8, 11, e9

somitomeres e8

sphenoid cartilage (SPC) 26

spinal cord (SP) e10, e11

spinal cord, ventricular layer (SPven) e10

spinal nucleus of the trigeminal (SPV) e13-e20  
spinal nucleus of the trigeminal, caudal part (SPVc) e14-e20  
spinal (cord) plate (SPP) 6, e9  
spinal tract of the trigeminal nerve (sptV) e15-e20  
spinal tract of the vestibular nerve (sptVIII) e14, e15  
spinal vestibular nucleus (SPIV) e20  
spinocerebellar tracts (sct) e17, e20  
stratum zonale thalamus (sz) e17, e20  
stomodeum (stomatodeum) (sto) e11, e12  
stria medullaris (sm) e14-e20  
stria terminalis [Wenzel and Wenzel] (st) e13-e20  
striatal ridge (SR) 18; e12-e15  
striatal ridge, subventricular layer (SRsbv) e15, e17  
striatopallidal sulcus (sps) 18; e12-e15  
striatum (STR) 19; e12  
subcephalic pocket (supo) e9  
subcommissural organ (SCO) 31; e17, e20  
subfornical organ [Pines] (SFO) 33; e17, e20  
subicular complex (SBC) 21  
subiculum [Burdach] (SUB) 21; e20  
subiculum, dorsal part, pyramidal layer (SUBd-sp) e20  
subiculum, ventral part, pyramidal layer (SUBv-sp) e20  
sublaterodorsal nucleus (SLD) e20

submedial nucleus thalamus (SMT) e20

subparafascicular nucleus thalamus (SPF) e20

subparafascicular nucleus thalamus, magnocellular part (SPFm) e20

subparafascicular nucleus thalamus, parvicellular part (SPFp) e20

subparaventricular zone hypothalamus (SBPV) e20

subplate, cortical neural tube (sbp), *see* cerebral cortex, isocortex

substantia innominata [Reil, Reichert] (SI) 19; e13-e20

substantia nigra [Soemmerring, Vic d'Azyr] (SN) 14, 24, 45; e17, e20

subtectal region 14

subthalamic nucleus [Luys] (STN) e14-e20

subventricular layer (sbv) e12-e20

sulcus intraencephalicus anterior [Kupffer], *see* optic sulcus

sulcus limitans (sl) 13; e12-e15

sulcus medullaris (sme) 31, 33; e13-e17

sulcus terminalis (ste) 33; e13-e17

sulcus ventralis, *see* fimbrial sulcus

superior central nucleus raphé [Bechterew] (CS) e17, e20

superior central nucleus raphé, lateral part (CSl) e20

superior central nucleus raphé, medial part (CSm) e20

superior cerebellar peduncle (scp) e15-e20

superior colliculus (SC), *also see* tectum e15-e20

superior colliculus, deep gray layer (Scdg) e17, e20

superior colliculus, deep white layer (SCdw) e20



superior colliculus, intermediate gray layer (SCig) e17, e20  
superior colliculus, intermediate white layer (SCiw) e20  
superior colliculus, optic layer (SCop) e20  
superior colliculus, superficial gray layer (SCsg) e17, e20  
superior colliculus, zonal layer (SCzo) e20  
superior longitudinal fascicle (slf) e20  
superior olivary complex [Schroeder van der Kolk] (SOC) e15-e20  
superior olivary complex, lateral part (SOCl) e20  
superior olivary complex, medial part (SOCm) e20  
superior vestibular nucleus [Bechterew] (SUV) e20  
supplemental somatosensory area (SSs) e20  
suprachiasmatic nucleus [Spiegel and Zwiég] (SCH) e17, e20  
suprachiasmatic preoptic nucleus (PSCH) e20  
suprageniculate nucleus (SGN) e20  
supramammillary decussation (smd) e20  
supramammillary nucleus [Cajal] (SUM) e20  
supramammillary nucleus, lateral part (SUMl) e20  
supramammillary nucleus, medial part (SUMm) e20  
supraoptic commissures (sup) 25, 31, 32; e15-e20  
supraoptic nucleus [Lenhossék] (SO) e15-e20  
supratrigeminal nucleus (SUT) e20  
synencephalon [Kupffer] (SYN) 24, 31  
taenia fornicis et fimbriae, *see* fimbrial sulcus

taenia tecta (TT) e17, e20

taenia tecta, dorsal part (TTd) e20

taenia tecta, ventral part (Ttv) e20

tectal sulcus (tcs) 14; e11-e14

tectospinal pathway (tsp) e15-e20

tectum (TC) 14; e11-e14

tegmental reticular nucleus, (basal) pontine gray [Bechterew] (TRN) e20

tegmentum (TG) 14; e11

tegmentum, midbrain (TGmb) e12-e14

tegmentum, medulla (TGmy) e13, e14

tegmentum, pons (TGp) e13, e14

tela choroidea telencephalon medii [Hines], *see* telencephalic roof plate

telencephalic roof plate (trp) 32; e11-e17

telencephalic vesicle, *see* endbrain vesicle

telencephalon [Huxley] (TL), *also see* endbrain e11

telencephalon medium [Hines] 30

temporal bone, petrous part (TEBp) e17

temporal pole (TEP) e17

temporal region (TE) 42

temporal region, ventral association areas (TEv) 42

terminal angle [Hines] 30

terminal lamina or plate, *see* lamina terminalis

thalamic eminence (TEM) 23; e13, e14

thalamic peduncles (tp) e14-e17

thalamus (TH) e13-e15

third ventricle (V3) e11-e20

third ventricle, infundibular recess (V3ir) e12, e15

third ventricle, mammillary recess (V3m) e20

third ventricle, periventricular recess (V3r) e20

third ventricle, pineal recess (V3pi) e17

tongue 28

torus hemisphericus [Kuhlenbeck] (the) 14, 25, 32; e11

torus transversus 32

trapezoid body [Treviranus] (tb) e17, e20

triangular nucleus septum [Cajal] (TRS) e17, e20

trigeminal ganglion [Vieussens, Gasser] (GV) e12--e17

trigeminal nerve (Vn) 28; e12-e17

trigeminal nerve, motor root (Vn-m) e13

trigeminal nerve, ophthalmic branch (Vn1) 12

trigeminal nerve, sensory root (Vn-s) e13

trilaminar embryonic (germ) disc 4, 25, e8

trochlear nerve (IVn) e20

trochlear nucleus (IV) e20

tuberal level, hypothalamus (TUB) 24, 25; e11-e15

tuberal nucleus, hypothalamus [Canteras et al.] (TU) e17, e20

tuberomammillary nucleus (TM) e17, e20

vascular organ of the lamina terminalis (OV) 32

velum interpositum (VIP) e17, e20

velum transversum (vtr) 33; e12

ventral (Ve) 4

ventral angle, caudal (avec) e13-e17

ventral angle, rostral (aver) e13-e17

ventral anterior-lateral complex thalamus (VAL) e20

ventral cochlear nucleus (VCO) e20

ventral diencephalic sulcus [Herrick], *see* hypothalamic sulcus

ventral funiculus (vf) e17

ventral hippocampal commissure (vhc) e20

ventral horn spinal cord (VH) e12, e13, e17

ventral longitudinal sulcus (slv) e13, e14

ventral medial nucleus thalamus (VM) e20

ventral pallidum, *see* substantia innominata

ventral posterior complex thalamus (VP) e20

ventral posteromedial nucleus thalamus (VPM) e20

ventral posteromedial nucleus thalamus, parvicellular part (VPMpc) e20

ventral premammillary nucleus (PMv) e20

ventral ridge (from alr) (vr) e10

ventral spinocerebellar tract [Gowers] (sctv) e17, e20

ventral striatum, *see* nucleus accumbens, olfactory tubercle, fundus of the striatum

ventral tegmental area [Tsai] (VTA) 45; e17, e20

ventral tegmental decussation [Forel] (vtd) e20

ventral tegmental nucleus [Gudden] (VTN) e17, e20

ventral thalamus [Herrick] (VNT) 14, 23; e11-e17

ventricular eminences, *see* basal ridges

ventricular layer, neural tube (ven) 19, e9

ventricular ridges, *see* basal ridges

ventromedial nucleus hypothalamus (VMH) e17, e20

vestibular ganglion [Scarpa] (GvVIII) e14-e17

vestibular nerve (vVIIIIn) e17

vestibular nuclei (VNC) 28; e13-e17

vestibulocochlear nerve (VIIIIn) e13, e17

visceral area (VISC) e20

visual areas (VIS) e20

vomeronasal nerve (von) 17

vomeronasal organ [Jacobson] (VO) e12

yolk sac (YOS) e9

zona incerta (ZI) e17, e20

zona incerta, dopaminergic group (ZIda) e20