

Neuroanatomy class notes - U.C.
1941 - Dr. Bartelmez. ^{#10} Few diagrams
Reason or sources for text

Comparative Physiology U.C. 1941
Dr. Brown from N. U. Diss. of texts
& references for reading. Some lab
results

zool 331 Exams
" " Lectures author's &
" " Lab
" " Reading references

zool 331 - Exams given

Uca - Hormones Control of
Chromatophores - lab. Questions,

Name of Tract or Nerve	Location of Cell Bodies (Cells of origin, perikarya)	Termination of Tract or Nerve
1. Dorsal spino-cerebellar	post. column of spinal cord	cortex of cerebellum (same side) ^{mainly}
2. Medial lemniscus	cun. & gracil. nuclei	thalamus (opposite side)
3. Trapezoid body	cochlear & sup. olivary nuclei	inf. colliculus nucleus & med. geniculate (crossed)
4. Mesencephalic Vth tract	mesencephalic nucleus	prop. muscle spindles in tracheal & masticatory (same side) mus.
5. Pyramidal tract	motor cortex (+ other higher centers) (crossed)	grey matter ventral column of spinal cord, some directly on motor neurons
6. Uncinate fasciculus of Russell		
7. Tractus solitarius	gang. nodosum, petrosal, & geniculate	nucleus of sol. tract.
8. Rubrospinal tract	red nucleus (uncrossed)	grey column of spinal cord.
9. Lateral spino-thalamic	substantia gelatinosa mostly + post. column	thalamus on opposite side
10. Brachium conjunctivum	dentate nucleus + emboliform & fastigial (other fibers from spinotectal also in opp. direct.)	red nucleus opp. side
11. Brachium of inferior colliculus	nucleus of inf. collic	thalamus & cortex same side ^{med. genic}
12. Restiform body	post. column spinal cord, olivary nucleus	cerebellar cortex same side mostly
13. Vestibulo-spinal	main medial vestibular nuclei (same side)	ventral grey col. of spi. canal.
14. Ventral spino-thalamic	post. column, sp. cord	thalamus oppo side
15. Abducens nerve	abducens nuc. in facial colliculus.	ext. rectus m.

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Name of Tract or Nerve	Location of Cell Bodies (Cells of origin, perikarya)	Termination of Tract or Nerve
16. Dorsolateral tract of Lissauer	spinal ganglia.	substantia gel., Rolando
17. Brachium pontis	pons + cerebellum ^{contax}	cerebellum ^{nuclei} + pons
18. Fasciculus gracilis	<u>lower</u> spinal ganglia	nucleus gracilis.
19. Peduncle of superior olive	sup. olive	inf. collic. & med. gen
20. Vestibular nerve	vest. gang.	vestib. nuclei
21. Portio minor (Vth)	motor n. V	masticatory m.'s
22. Spinal Vth tract	gaserician gang.	nucleus of sp. V. tract
23. Optic tract	gang. layer retina	lat. gen. (and sup. cells)
24. Ventral white commissure (spinal cord)	^{post} grey columns of cord	^{opposite ant.} grey columns of cord in same or nearby segs.
25. Nervus intermedius	sup & inf. saliv. nucleus & geniculate gang.	saliv. glands submax & nuc. optitarius

Name of Gray Centers (Nuclei, Ganglia)	Function	Fiber Bundle (tract or nerve) in which Axons of these cells lie
1. Spinal Vth nucleus	pain & some tactile sensibility for face forehead, nose etc.	Trigem., lemniscus
2. Nucleus cuneatus	propriocept. & some tactile for upper segments	med. lemniscus + restiform
3. Superior olive	hearing	lateral lemniscus
4. Intermedio-lateral column	visceral motor	trapezoid body white rami communicantes
5. Nucleus of Edinger-Westphal	contract pupil relax lens	oculomotor n.

Name of Gray Centers (Nuclei, Ganglia)	Function	Fiber Bundle (tract or nerve) in which Axons of these cells lie.
6. Nucleus ambiguus	motor to striated m. of pharynx, larynx, esoph. etc.	X nerve, IX nerve, XI
7. Inferior olive	correlation vestibular, respiratory proprioceptors & others	olivo-cerebellar peduncle.
8. Ganglion petrosus (IX)	visceral sensation includes taste part of tongue	tractus solitarius
9. Inferior colliculus	hearing	brachium of inf. collic.
10. Nucleus hypoglossi	motor to tongue ext. int. muscles,	XII nerve
11. Superior vestibular nucleus	posture, muscle tone, possibly hearing to some extent.	vestibulo-tectal tract med. III
12. Nucleus fastigii	correlation postural reflexes.	brachium conjunct.
13. Nucleus of solitary tract	visceral sensation branch gustatory mainly	arcuate fibers to motor n. of med.
14. Chief sensory nucleus of Vth	tactile	trig. lemniscus arcuate fibers to med. con nuclei
15. Inferior salivatory nucleus	increase flow ^{parotid} saliva	IX n.
16. Spinal vestibular nucleus	postural reflexes & muscle tone.	vestibulo-spinal tract. vestib. olivary fibers
17. Nucleus dentatus	postural reflexes, m. tone.	brach. conjunct.
18. Lateral cell column of ventral horn of spinal cord	movements of distal (medial) segments of limbs not axial fin's	brachial & lumbar motor roots.
19. Dorsal motor Xth nucleus	visceral motor to thoracic & abdominal viscera	X, vagus n.
20. Dorsal cochlear nucleus	hearing	acustico-stria medullares

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Name of Gray Centers (Nuclei, Ganglia)	Function	Fiber Bundle (tract or nerve) in which Axons of these cells lie
21. Trochlear nucleus	contr. sup. oblique of oppos. side	trochlear nerve
22. Geniculate ganglion (VII)	taste ant. $\frac{1}{3}$ tongue & other sensibility " " " "	tract solitarius
23. Clarke's column	maybe prop. fibers from n.s. of expression proprioception	spino-cerebellar tract
24. Spiral ganglion (VIII)	hearing	cochlear n.
25. Nucleus of oculomotor nerve	innervation to extrinsic eye m's, except lat. rect. & sup. oblique (also V. nucleus see above)	III nerve