

Lab Exam 2 Objectives

(8/7/2012)

Nervous System

Nervous Tissue

Basic neuron components	Types of neurons & components
Neurofibrils (NU-rah-FYE-brils)	Interneuron
Nissl (NIS-ahl) bodies	Axon
Nucleus of neuron	Cell body
Glial cells	Dendrites (DEN-drytes)
Myelin (MY-ah-lin) sheath	Motor (efferent) neuron
Neurilemma (alt sp. Neurolemma)	Axon
Neurolemmocyte (NU-rah-LEM-mah-site) (Schwann (SHWAHN) cell)	Cell body
Node of Ranvier (RON-vee-ay)/neurofibrils node	Dendrites (DEN-drytes)
Nucleus of neurolemmocyte (Schwann cell)	Sensory (afferent) neuron
Synapse	Axon
Neuromuscular junction	Cell body
Receptor	Dendrites (DEN-drytes)
Synaptic (SINAP-tik) knob	

Brain Anatomy

Parts of Brain	Cerebral structures
Brainstem	Corpus callosum (KOR-pus kah-LO-sum)
Cerebellum (ser-e-BELL-um)	Frontal lobe
Cerebrum (SER-e-brum)	Fornix (FOR-niks)
Hypothalamus (HY-po-TAL-ah-mus)	Lateral ventricles
Medulla oblongata (mah-DUL-ah OB-long-GAH-tah)	Occipital lobe
Midbrain	Olfactory bulb
Pons (PONZ)	Olfactory tract
Thalamus (THAL-ah-mus)	Optic chiasma (OP-tik ki-AZ-mah)
Brainstem structures	Optic nerve
Cerebral aqueduct (of Sylvius) (SUREE-bral AH-kwah-duct)	Optic tract
Corpora quadrigemina (KOR-pour-ah KWAH-dri-JEM-i-nah)	Parietal lobe
Fourth ventricle	Septum pellucidum (SEP-tum pah-LOO-si-dum)
Inferior colliculus (ko-LIK-you-lus) (pl. colliculi)	Superior sagittal sinus
Superior colliculus (pl. colliculi)	Temporal lobe
Diencephalon (DYE-en-SEF-ah-lon) structures	Fissures
Choroid plexus (KO-roid PLEK-sus) of third ventricle	Lateral fissure (sulcus) Lateral fissure (sulcus)
Hypophysis (hi-POF-i-sis) (pituitary gland)	Longitudinal cerebral fissure
Infundibulum (in-fun-DIB-u-lum)	Transverse fissure
Intermediate mass of thalamus	Gray matter
Mamillary (MAM-ah-LAR-e) body	White matter

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Pineal (PIN-e-al) gland (body)	
Third ventricle	

Sheep's Brain

Brainstem	Midbrain
Cerebellum	Occipital lobe
Cerebral aqueduct (of Sylvius)	Olfactory bulb
Cerebrum	Optic chiasma
Corpora quadrigemina	Optic nerve
Corpus callosum	Parietal lobe
Fornix	Pineal gland (body)
Fourth ventricle	Pons
Frontal lobe	Septum pellucidum
Hypophysis (pituitary gland)	Superior colliculus
Hypothalamus	Temporal lobe
Inferior colliculus	Thalamus
Longitudinal cerebral fissure	Third ventricle
Mamillary body	Transverse fissure
Medulla oblongata	

Spinal Cord, Spinal Nerves & Reflex Arcs

Spinal Cord	Autonomic nervous system
Anterior (ventral) root	Celiac (SEE lee ak) ganglion (pl. ganglia)
Anterior median fissure	Inferior mesenteric (MEZ in TER ik) ganglion
Cauda equina (KAW-da -KWAY-nah)	Postganglionic efferent neuron
Central canal	Preganglionic efferent neuron
Dorsal root (spinal) ganglion (pl. ganglia)	Superior mesenteric ganglion
Gray matter	Vertebral autonomic (sympathetic chain) ganglion
Intervertebral foramen (pl. foramina)	Reflex Arc
Posterior (dorsal) root	Effector
Posterior median sulcus (pl. sulci)	Interneuron
Spinal (vertebral) foramen	Motor (efferent) neuron
Spinal nerve	Receptor
Vertebral body	Sensory (afferent) neuron
White matter	
Meninges	
Arachnoid (ah-RAK-noyd) mater	
Denticulate (den-TIK-you-late) ligament	
Dura mater (DOO-rah MAY-ter)	
Epidural space	
Meninges (meh-NIN-jes)	
Pia (PEE-ah) mater	
Subarachnoid space	
Subdural space	

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Histology

Identify the following on a slide of nerve tissue

Cell body	Nucleus
Neuroglia	Processes of cell body

Sense Organs

Anatomy of the Ear

Auditory (Eustachian) (u-STAY-shun) tube	Scala tympani (SKAY-la TIM-pa-nee)
Auricle (AW-ri-kl) (pinna) (PIN-a)	Scala vestibuli (SKAY-la ves-TIB u-lee)
Cochlea (KOK-lee-ah)	Semicircular canals
Cochlear duct	Spiral organ (organ of Corti)
Cochlear nerve	Stapes (STAY-pež)
External auditory (acoustic) canal	Temporal bone
Incus (ING-kus)	Tympanic (tym-PAN-ik) membrane
Labyrinth (osseous & membranous)	Vestibular nerve
Malleus (MAL-ee-us)	Vestibule (VES-ti-bool)
Oval window	Vestibulocochlear nerve
Round window	

Anatomy of the Eye

Anterior cavity	Lacrimal sac
Aqueous humor	Lens
Blind spot (optic disk)	Macula lutea (MAK-u-lah LOO-tee-a)
Choroid (KO-royd)	Nasolacrimal duct
Ciliary body (SIL-ee-ar-ee)	Optic nerve
Ciliary process	Posterior cavity
Conjunctiva (con-junk-TIE-vah)	Pupil
Cornea (KOR-nee-ah)	Retina
Fovea centralis (Fo-vee-ah)	Sclera (SKLER-ah)
Iris	Suspensory ligaments
Lacrimal duct (canal) (LAK-ri-mahl)	Vitreous humor (body)
Lacrimal gland	

Cow's Eye

Aqueous humor	Lens
Blind spot (optic disk)	Optic nerve
Choroid	Pupil
Ciliary body	Retina
Cornea	Sclera
Iris	Vitreous humor (body)

Lab Exam 2 Objectives

Endocrine System

Adenohypophysis (AD no hi-POF-i-sis) (anterior pituitary)	Parathyroid glands
Adrenal cortex	Pineal gland (body)
Adrenal medulla	Testis (pl. testes)
Neurohypophysis (NEU ro hi-POF-i-sis) (posterior pituitary)	Thymus gland
Ovary	Thyroid gland
Pancreas	