

# Lab Exam 2 Objectives

## Nervous System

### Nervous Tissue (note: boldface headings are NOT objectives)

Basic neuron components	Types of neurons & components
Neurofibrils	Interneuron
Nissl bodies	Axon
Nucleus of neuron	Cell body
<b>Glial cells</b>	Dendrites
Myelin sheath	Motor (efferent) neuron
Neurilemma (alt sp. Neurolemma)	Axon
Neurolemmocyte (Schwann cell)	Cell body
Node of Ranvier (neurofibrils node)	Dendrites
Nucleus of neurolemmocyte (Schwann cell)	Sensory (afferent) neuron
<b>Synapse</b>	Axon
Synaptic knob	Cell body
	Dendrites

### Histology

Identify the following on a slide of nerve tissue.

Cell body of neuron	Nucleus of neuron
Neuroglia	Processes of neuronal cell body

### Spinal Cord, Spinal Nerves & Reflex Arcs (note: boldface headings are NOT objectives)

Spinal Cord	Meninges & associated spaces
Anterior (ventral) root	Arachnoid mater
Anterior median fissure	Denticulate ligament
Cauda equina	Dura mater
Central canal	Epidural space
Conus medullaris	Pia mater
Dorsal root (spinal) ganglion (pl. ganglia)	Subarachnoid space
Gray matter	Subdural space
Intervertebral foramen (pl. foramina)	Subdural space
Posterior (dorsal) root	
Posterior median sulcus (pl. sulci)	
Spinal (vertebral) foramen	
Spinal nerve	
White matter	

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## Reflex Arc

Effector
Interneuron
Motor (efferent) neuron
Sensory (afferent) neuron
Sensory receptor

## Brain Anatomy (note: boldface headings are NOT objectives)

<b>Parts of Brain</b>	Subdural space
Brainstem	Superior sagittal sinus
Cerebellum	<b>Cerebral structures</b>
Cerebrum	Corpus callosum
Hypothalamus	Choroid plexus of each ventricle
Medulla oblongata	Frontal lobe
Midbrain	Fornix
Pons	Gray matter
Thalamus	Lateral ventricles
<b>Brainstem structures</b>	Occipital lobe
Cerebral aqueduct (of Sylvius)	Olfactory bulb
Corpora quadrigemina	Olfactory tract
Inferior colliculus (pl. colliculi)	Optic chiasma
Superior colliculus (pl. colliculi)	Optic nerve
Fourth ventricle	Optic tract
<b>Diencephalon structures</b>	Parietal lobe
Hypophysis (pituitary gland)	Septum pellucidum
Infundibulum	Temporal lobe
Intermediate mass of thalamus	White matter
Mamillary body	<b>Fissures</b>
Pineal gland (body)	Lateral fissure (sulcus)
Third ventricle	Longitudinal cerebral fissure
<b>Meninges &amp; associated spaces</b>	Transverse fissure
Arachnoid mater	
Arachnoid villus (pl. villi)	
Dura mater	
Pia mater	
Subarachnoid space	

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## Sheep's Brain

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

## Autonomic Nervous System

Celiac ganglion (pl. ganglia)
Inferior mesenteric ganglion
Postganglionic efferent neuron
Preganglionic efferent neuron
Superior mesenteric ganglion
Vertebral autonomic (sympathetic chain) ganglion

## Sense Organs

### Anatomy of the Ear

Auditory (Eustachian) tube	Scala tympani
Auricle (pinna)	Scala vestibuli
Cochlea	Semicircular canals
Cochlear duct	Spiral organ (organ of Corti)
Cochlear nerve	Stapes
External auditory (acoustic) canal	Temporal bone
Incus	Tympanic membrane
Labyrinth (membranous and osseous)	Vestibular nerve
Malleus	Vestibule

## Lab Exam 2 Objectives

Oval window	Vestibulocochlear nerve
Round window	

### Anatomy of the Eye

Anterior cavity	Lacrimal sac
Aqueous humor	Lens
Blind spot (optic disk)	Macula lutea
Choroid	Nasolacrimal duct
Ciliary body	Optic nerve
Ciliary process	Posterior cavity
Conjunctiva	Pupil
Cornea	Retina
Fovea centralis	Sclera
Iris	Suspensory ligaments
Lacrimal duct (canal)	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)

### Endocrine System

Adenohypophysis (anterior pituitary)	Parathyroid glands
Adrenal cortex	Pineal gland (body)
Adrenal medulla	Testis (pl. testes)
Neurohypophysis (posterior pituitary)	Thymus gland
Ovary	Thyroid gland
Pancreas	