

## Chapter 13

### Nervous System

#### **Neuron Anatomy**

Neuron  
Soma/cell body  
Nucleus  
Nucleolus  
Dendrites  
Axon  
Myelin sheath  
Nodes of Ranvier  
Synaptic knobs/bulbs/terminals  
Schwann cell

#### **Types of Neurons**

Bipolar neuron  
Multipolar neuron  
Pseudounipolar neuron  
Anaxonic neuron

#### **Neural Tissue (microscope)**

Soma  
Nucleus  
Nucleolus  
Dendrites  
Axon  
Neuroglia

## Chapter 14

### Spinal Cord & Spinal Nerves

#### **Meninges**

Dura mater  
Arachnoid mater  
Subarachnoid space  
Pia mater  
Denticulate ligament  
Epidural space

#### **Spinal cord structures**

Central canal  
Gray commissure  
Anterior median fissure  
Posterior median sulcus  
Posterior/dorsal column  
Anterior/ventral column  
Posterior/dorsal horn  
Lateral horn  
Anterior/ventral horn

Posterior/dorsal root  
Dorsal root ganglion  
Anterior/ventral root  
Dorsal ramus  
Ventral ramus  
Conus medullaris  
Cauda equina  
Filum terminale  
Sympathetic chain ganglia

#### **Peripheral Nerve Structures/Layers**

Fascicle  
Endoneurium  
Perineurium  
Epineurium

#### **Spinal Nerves**

Cervical plexus  
    Phrenic nerve  
Brachial plexus  
    Axillary nerve  
    Median nerve  
    Musculocutaneous nerve  
    Radial nerve  
    Ulnar nerve  
  
Thoracic nerves (no plexus)  
Lumbar plexus  
    Obturator nerve  
    Femoral nerve  
    Saphenous nerve  
  
Sacral plexus  
    Gluteal nerve  
    Sciatic nerve  
    Tibial nerve  
    Common fibular nerve

## Chapter 16

### Brain & Cranial Nerves

#### **Brain Regions**

- Telencephalon
- Diencephalon
- Mesencephalon
- Metencephalon
- Myelencephalon

#### **Meninges**

- Dura mater
- Superior sagittal sinus/dural sinus
- Falx cerebri
- Falx cerebelli
- Tentorium cerebelli
- Arachnoid mater
- Subarachnoid space
- Arachnoid villi
- Pia mater

#### **Ventricles**

- Choroid plexus
- Lateral ventricles
- Interventricular foramen
- Third ventricle
- Cerebral aqueduct
- Fourth ventricle

#### **Brain Anatomy**

- Gyrus/gyri
- Sulcus/sulci
- Cerebral cortex
- Frontal lobe
- Parietal lobes
- Temporal lobes
- Occipital lobes
- Longitudinal fissure
- Precentral gyrus
- Postcentral gyrus
- Central sulcus
- Lateral sulcus
- Transverse fissure
- Olfactory bulbs
- Corpus callosum
- Anterior commissure
- Internal capsule
- Basal nuclei

- Epithalamus
- Pineal gland
- Thalamus
- Hypothalamus
- Infundibulum
- Pituitary gland
- Mammillary bodies
- Optic chiasm
- Cerebral peduncles
- Corpora quadrigemina
  - Superior colliculi
  - Inferior colliculi
- Cerebral aqueduct
- Pons
- Cerebellum
- Arbor vitae
- Cerebellar cortex
- Vermis
- Medulla oblongata

#### **Cranial Nerves**

- Olfactory nerve
- Optic nerve
- Oculomotor nerve
- Trochlear nerve
- Trigeminal nerve
- Abducens nerve
- Facial nerve
- Vestibulocochlear nerve
- Glossopharyngeal nerve
- Vagus nerve
- Accessory nerve
- Hypoglossal nerve

Chapter 18  
Special Senses

**Olfaction (smell)**

- Olfactory bulb
- Olfactory tract
- Olfactory foramina
- Olfactory receptors

**Gustation (taste)**

- Filiform papillae
- Fungiform papillae
- Circumvallate papillae
- Foliate papillae

**Tongue (microscope)**

- Taste bud
  - Gustatory receptor cells
- Taste pore
- Papilla

**Vision (sight)**

- Fibrous tunic
  - Sclera
  - Cornea
- Vascular tunic
  - Choroid
  - Ciliary body
  - Iris
  - Pupil
- Nervous tunic
  - Retina
    - Rods & Cones
    - Bipolar cells
    - Ganglion cells
  - Optic disc
  - Fovea
- Anterior cavity
  - Aqueous humor
  - Anterior chamber
  - Posterior chamber
  - Canal of Schlemm
- Lens
  - Suspensory ligaments
- Posterior cavity
  - Vitrous humor/body

- Lacrimal gland
- Punctum
- Lacrimal sac
- Nasolacrimal duct
- Eyelids

**Eye (microscope)**

- Retina\*
- Rods and cones\*
- Bipolar cells\*
- Ganglion cells\*
- Choroid\*
- Sclera\*

\* Be prepared to identify which tunic each of the above structures/cells belongs to

**Audition (hearing)**

- Auricle
- External acoustic meatus
- Tympanic membrane
- Malleus
- Incus
- Stapes
- Auditory tube/Eustachian tube
- Cochlear nerve
- Cochlea\*\*
  - Vestibular duct
  - Cochlear duct
  - Tympanic duct
  - Perilymph
  - Endolymph
  - Vestibular membrane
  - Tectorial membrane
  - Basilar membrane
  - Organ of corti
  - Hair cells

\*\* Identify all structures listed under cochlea (including cochlea) on the microscope as well as the models.

**Equilibrium (balance)**

- Vestibule
  - Utricle
  - Saccule
- Semicircular canals
  - Ampullae