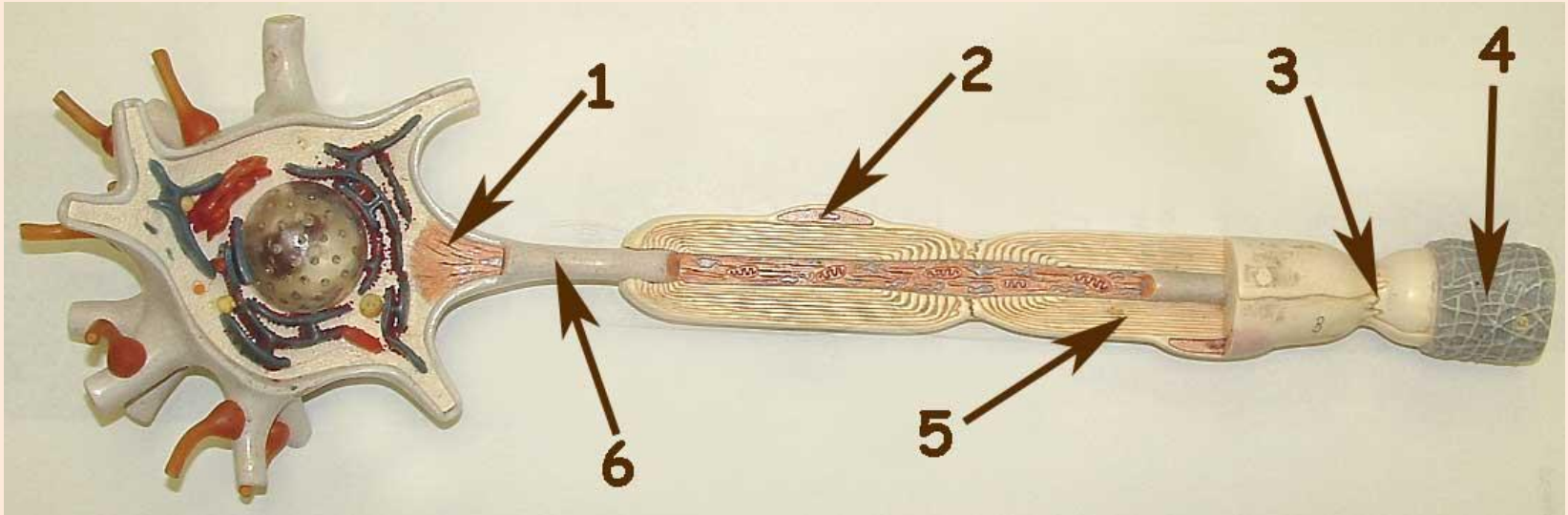


# Practical IV

BSC 2085

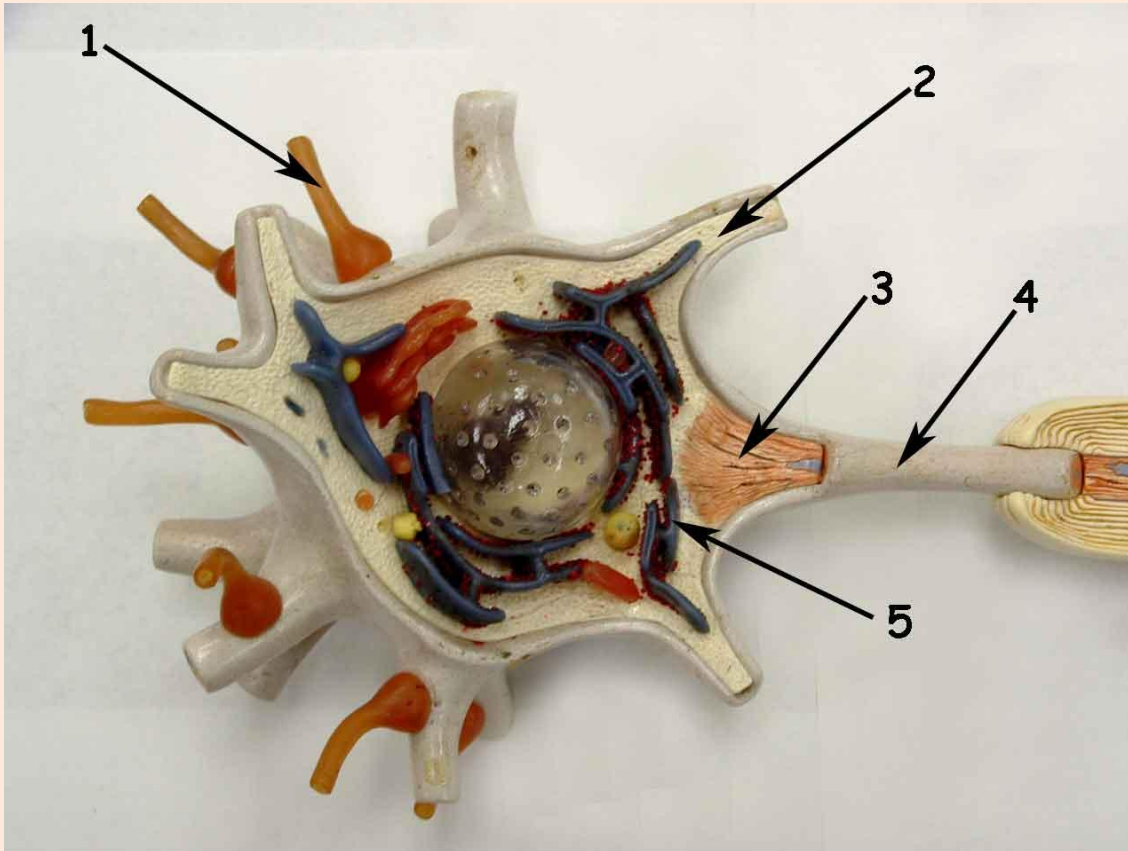
Study Images

# A Typical Multipolar Neuron



1. Axon Hillock
2. Nucleus of Schwann Cell
3. Node of Ranvier
4. Endoneurium
5. Schwann Cell
6. Initial Segment of Axon

# Cell Body of a Typical Motor Neuron



1. Axon Terminal

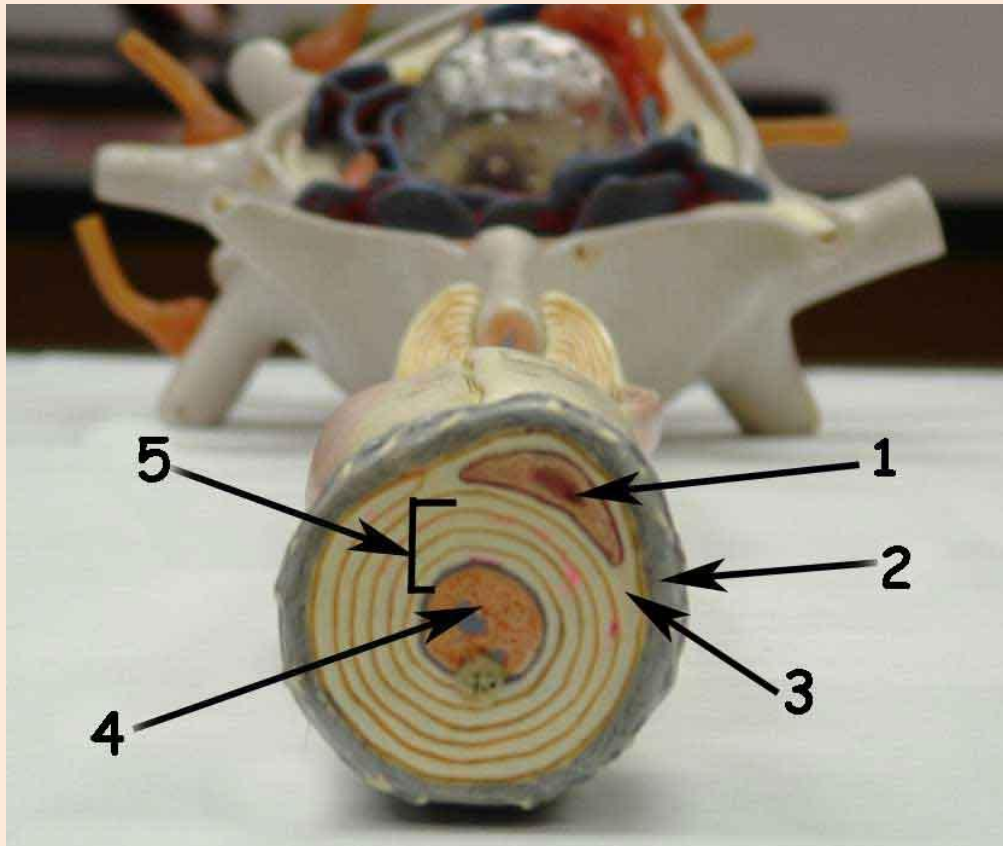
2. Dendrite

3. Axon Hillock

4. Axon (Initial Segment)

5. Nissl Bodies

# Motor Neuron End View



1.Nucleus of Schwann Cell

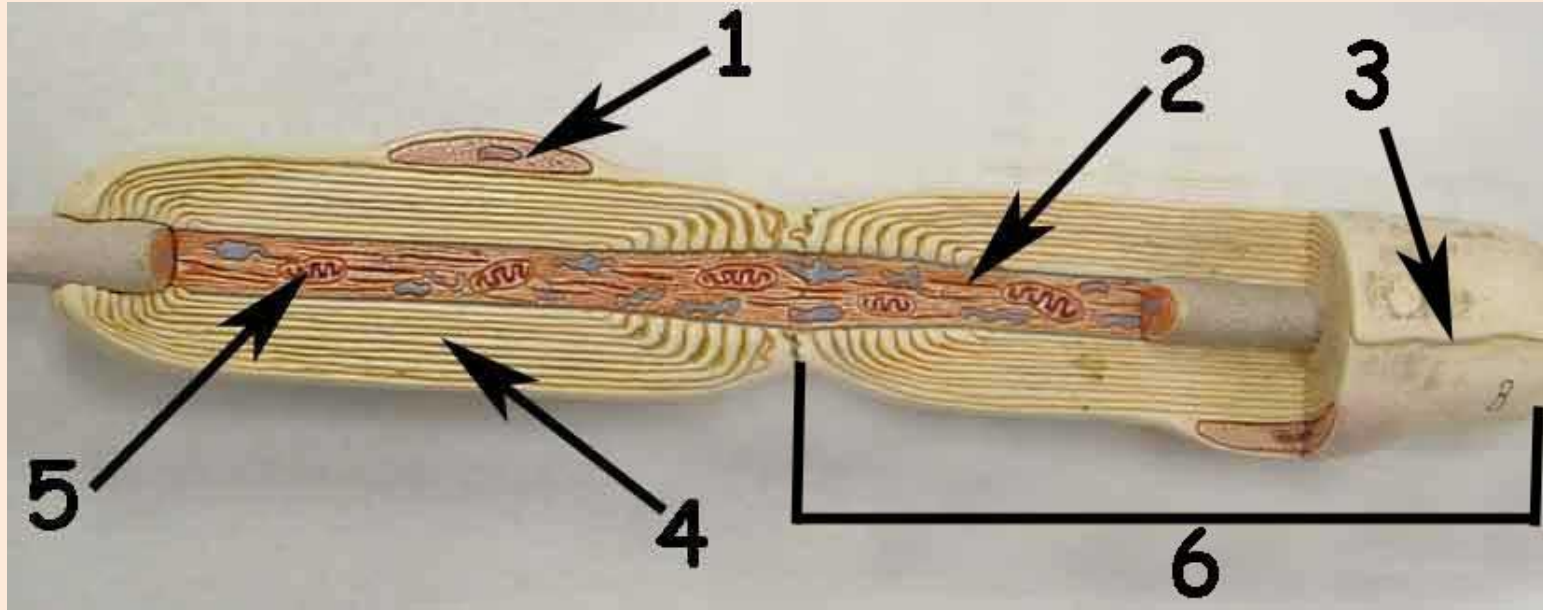
2.Endoneurium

3.Neurolemma (Sheath of Schwann)

4.Axon (Composed of Neurofibrils)

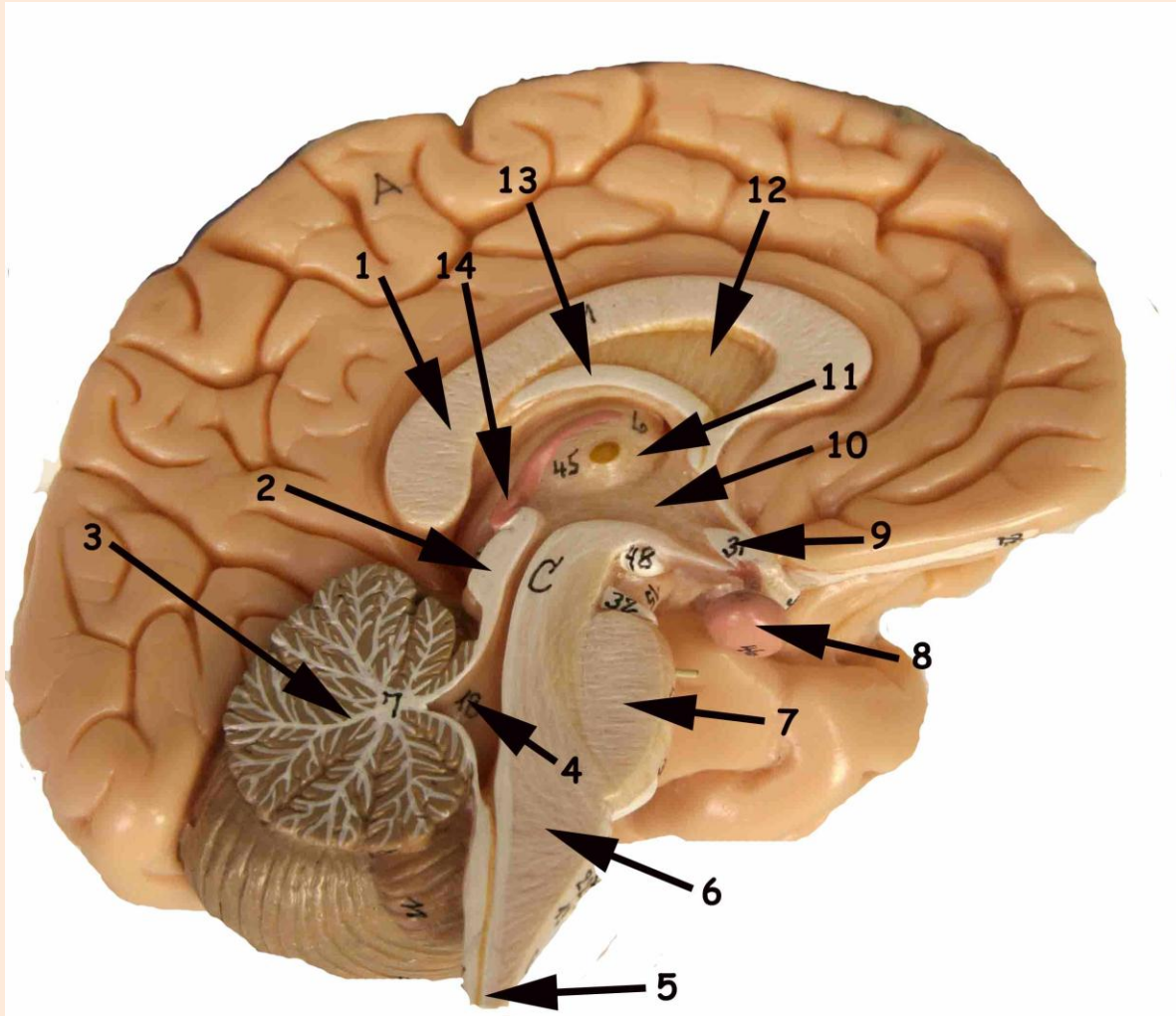
5.Myelin Sheath

# Motor Neuron Showing Schwann Cells



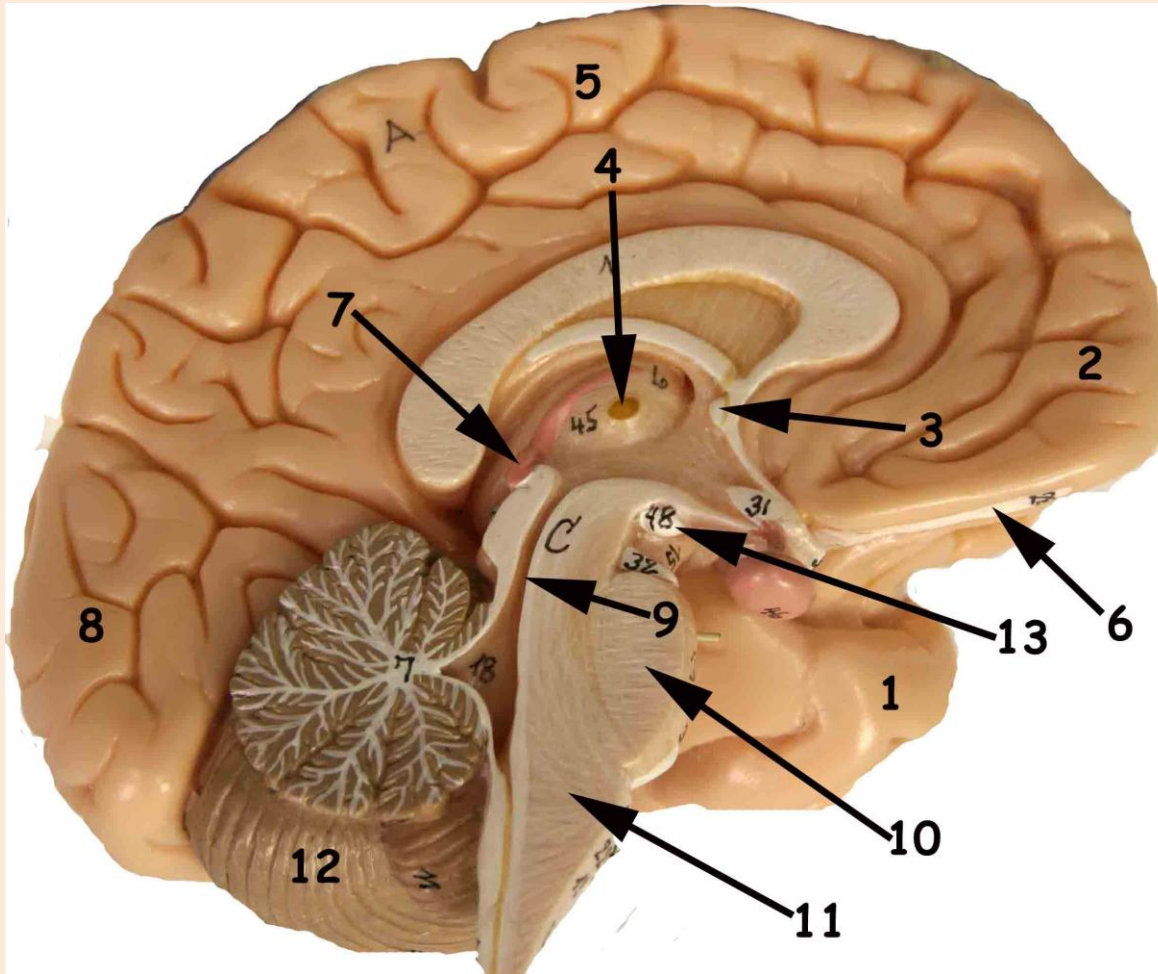
1. Nucleus of Schwann Cell
2. Axon
3. Neurolemma (Sheath of Schwann)
4. Myelin Sheath
5. Mitochondria
6. Schwann Cell

# Brain Model One Midsagittal Section



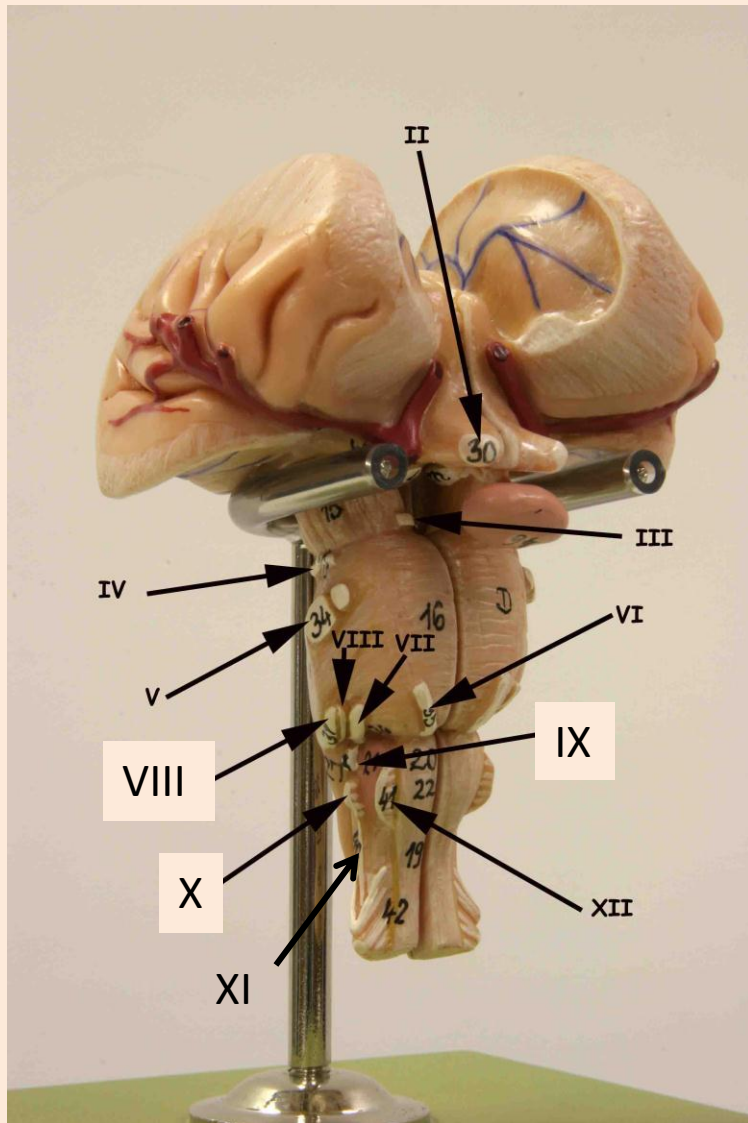
1. Corpus callosum
2. Corpora quadrigemina
3. Cerebellum (Arbor vitae)
4. Fourth ventricle
5. Spinal cord
6. Medulla oblongata
7. Pons
8. Pituitary gland
9. Optic chiasma
10. Hypothalamus
11. Thalamus
12. Septum pellucidum
13. Fornix
14. Pineal Body (Gland)

# Brain Model Two Midsagittal Section



1. Temporal lobe
2. Frontal lobe
3. Anterior Commissure
4. Interthalamic adhesion
5. Parietal lobe
6. Olfactory Nerve (I)
7. Pineal Body
8. Occipital Lobe
9. Cerebral aqueduct
10. Pons
11. Medulla oblongata

# Cranial Nerves II - XII



II. Optic

III. Oculomotor

IV. Trochlear

V. Trigeminal

VI. Abducens

VII. Facial

VIII. Vestibulocochlear

XI. Glossopharyngeal

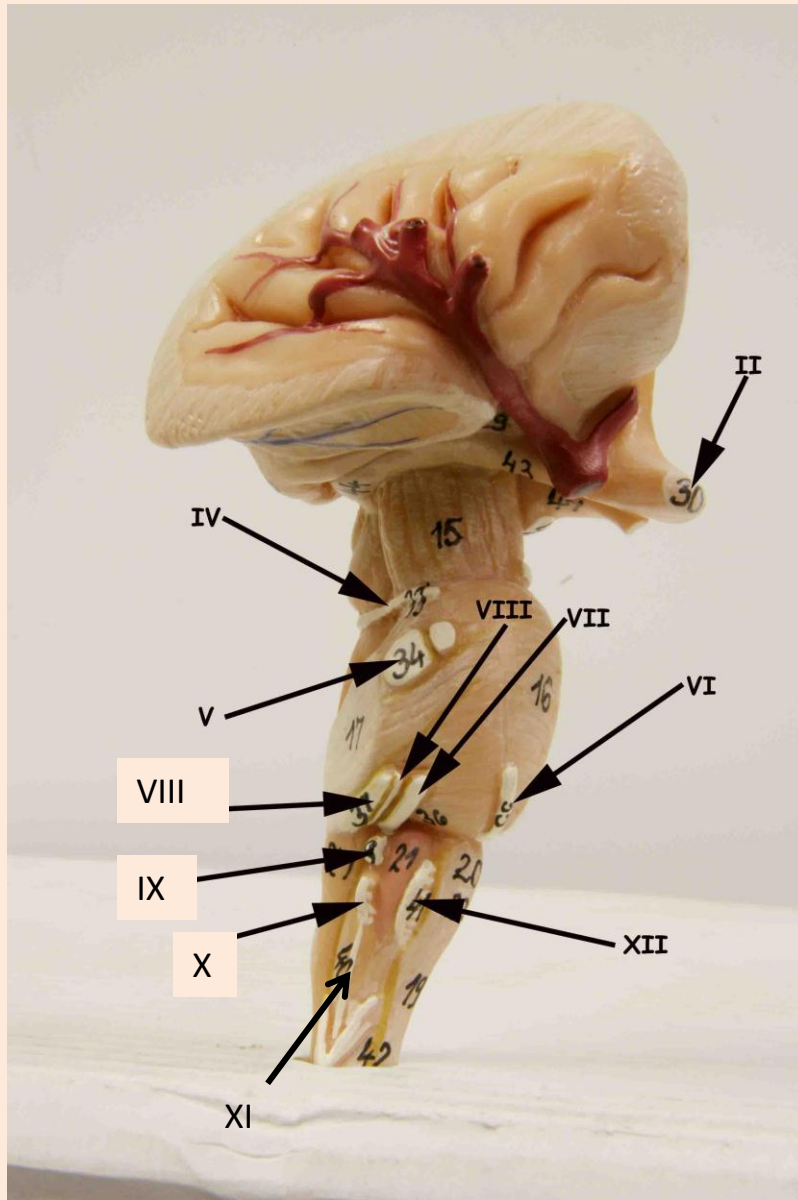
X. Vagus

XI. Spinal Accessory

XII. Hypoglossal



# Cranial Nerves II - XII



II. Optic

III. Oculomotor

IV. Trochlear

V. Trigeminal

VI. Abducens

VII. Facial

VIII. Vestibulocochlear

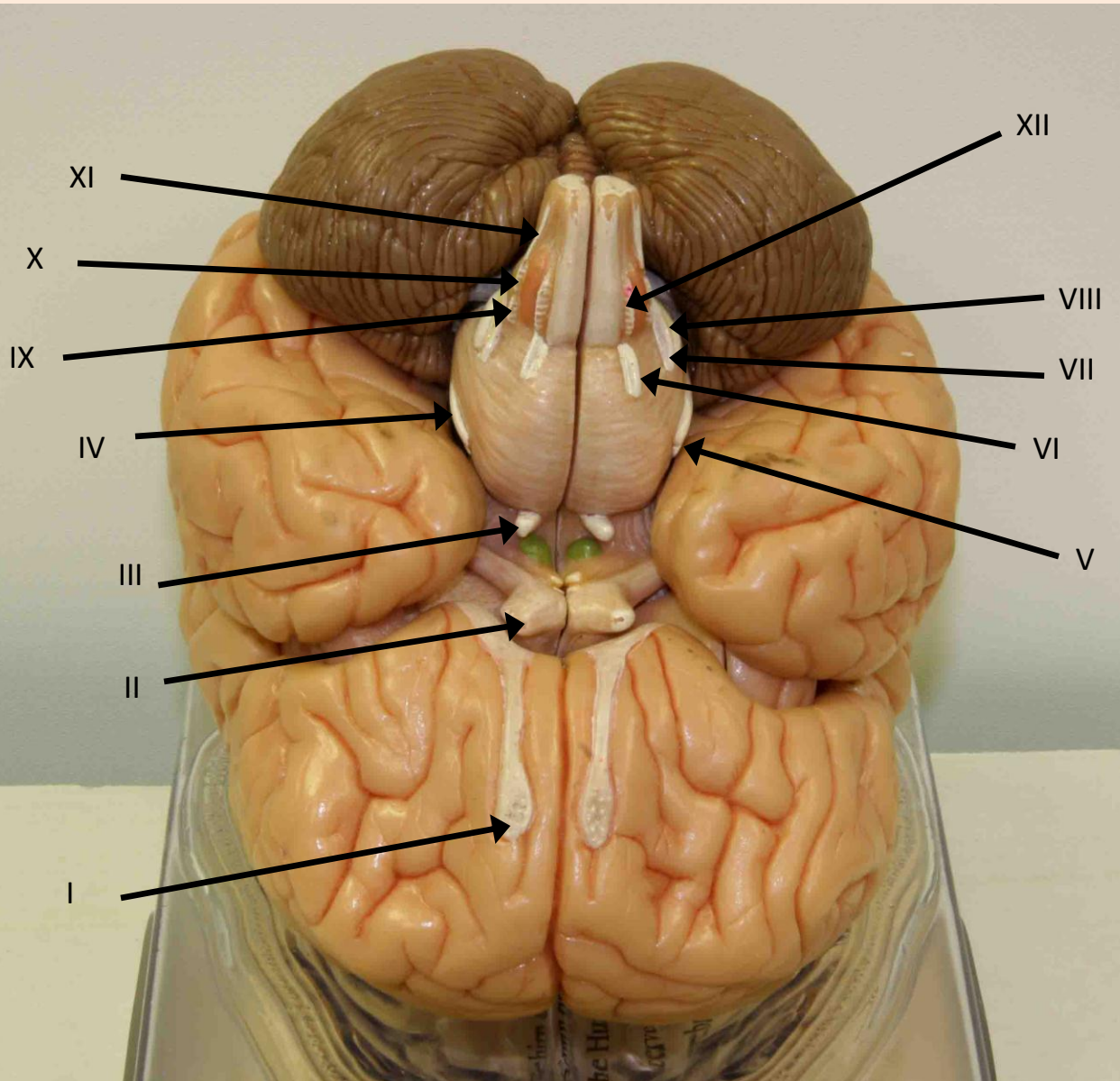
XI. Glossopharyngeal

X. Vagus

XI. Spinal Accessory

XII. Hypoglossal

# Cranial Nerves II - XII



I - Olfactory (bulb)

II. Optic

III. Oculomotor

IV. Trochlear

V. Trigeminal

VI. Abducens

VII. Facial

VIII. Vestibulocochlear

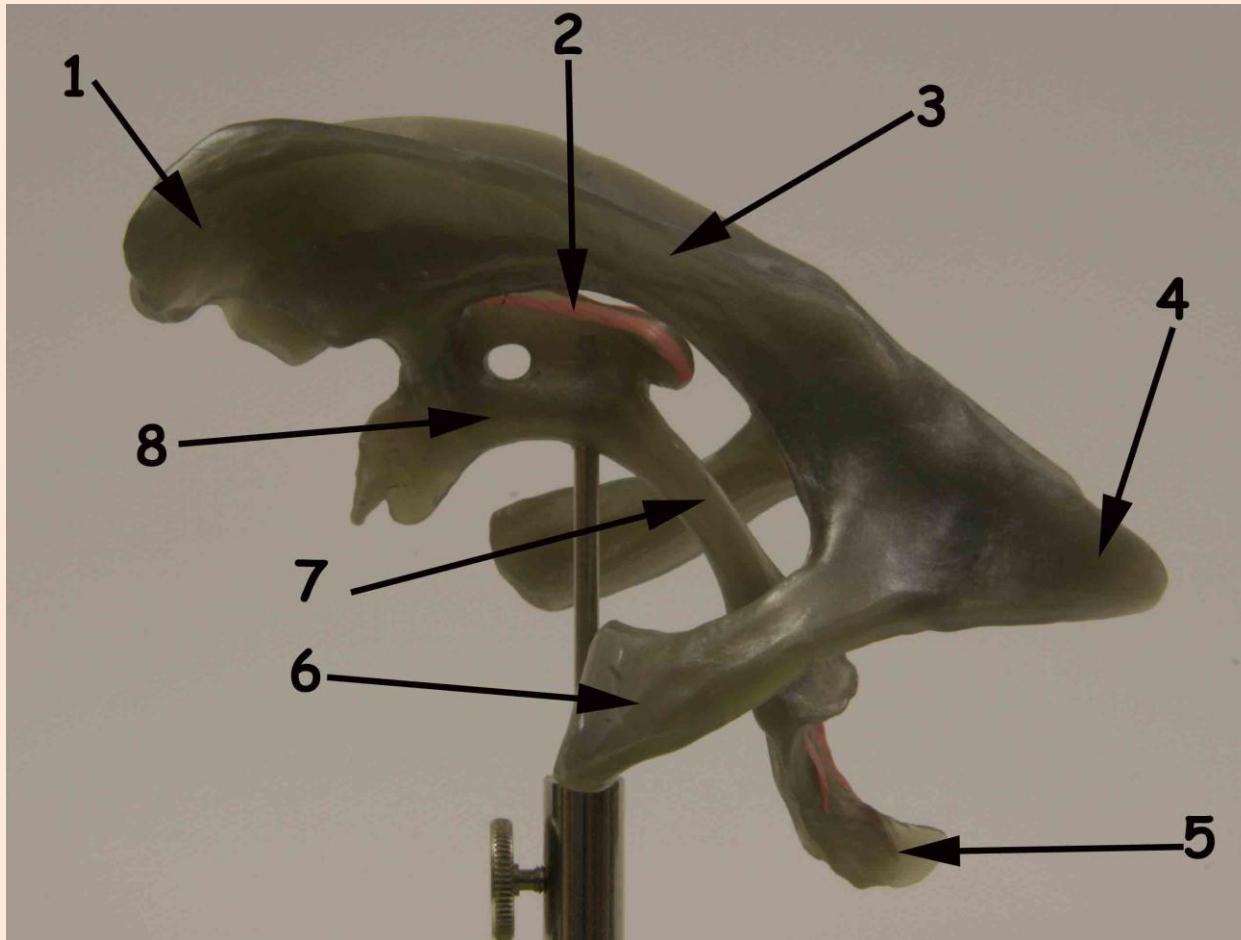
XI. Glossopharyngeal

X. Vagus

XI. Spinal Accessory

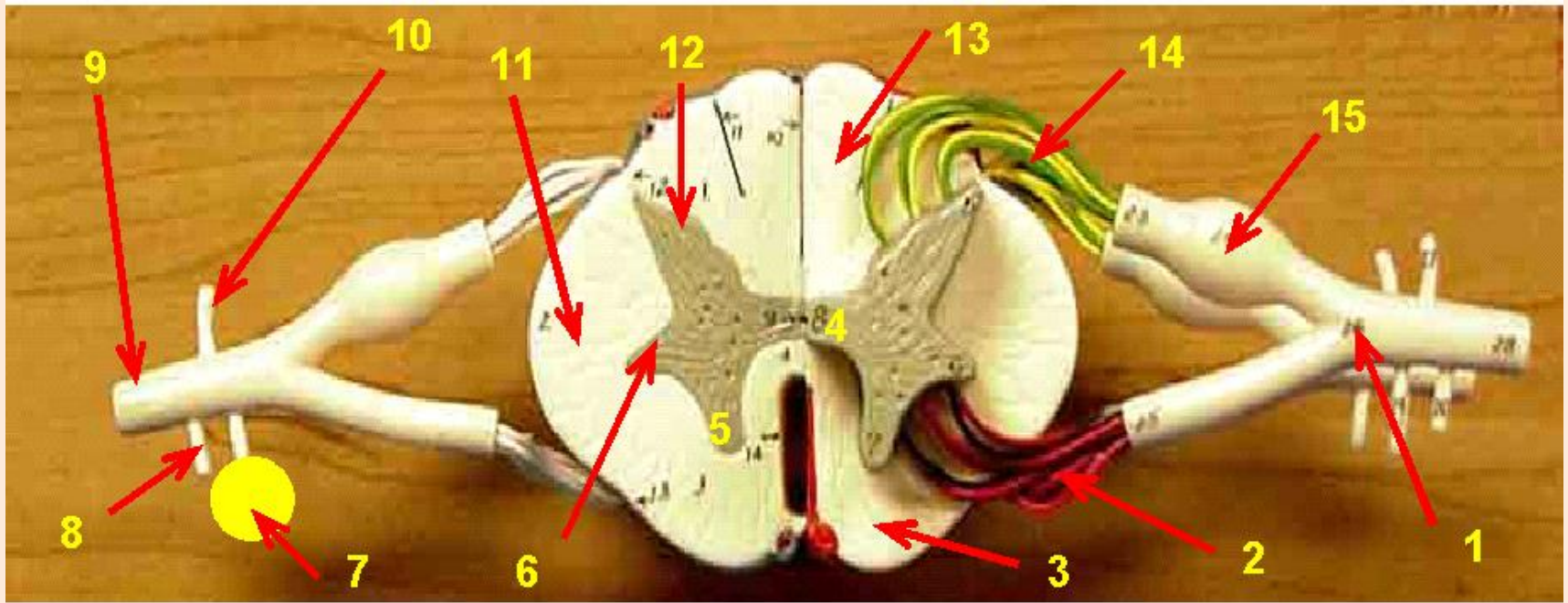
XII. Hypoglossal

# Silver Ventricle Model (Lateral View)



1. Anterior Horn
2. Choroid Plexus
3. Lateral Ventricle
4. Posterior Horn
5. Fourth Ventricle
6. Inferior Horn
7. Cerebral Aqueduct
8. Third Ventricle

# Spinal Cord XS



1. Spinal Nerve

3. Ventral White Columns

5. Ventral Horn

7. Sympathetic Chain Ganglia

9. Ventral Ramus

11. Lateral White Columns

13. Dorsal White Columns

15. Dorsal Root Ganglia

2. Ventral Root

4. Gray Commissure

6. Lateral Horn

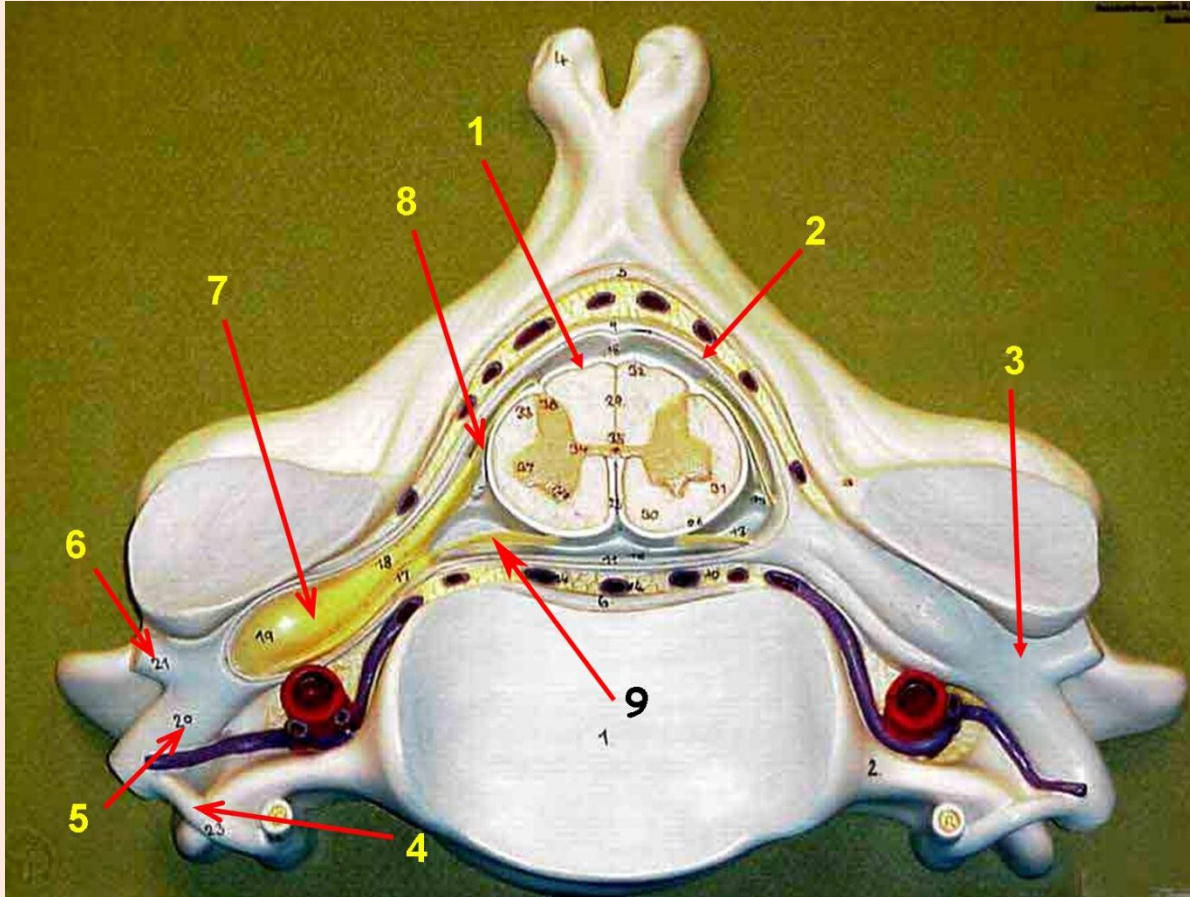
8. Rami Communicans

10. Dorsal Ramus

12. Dorsal Horn

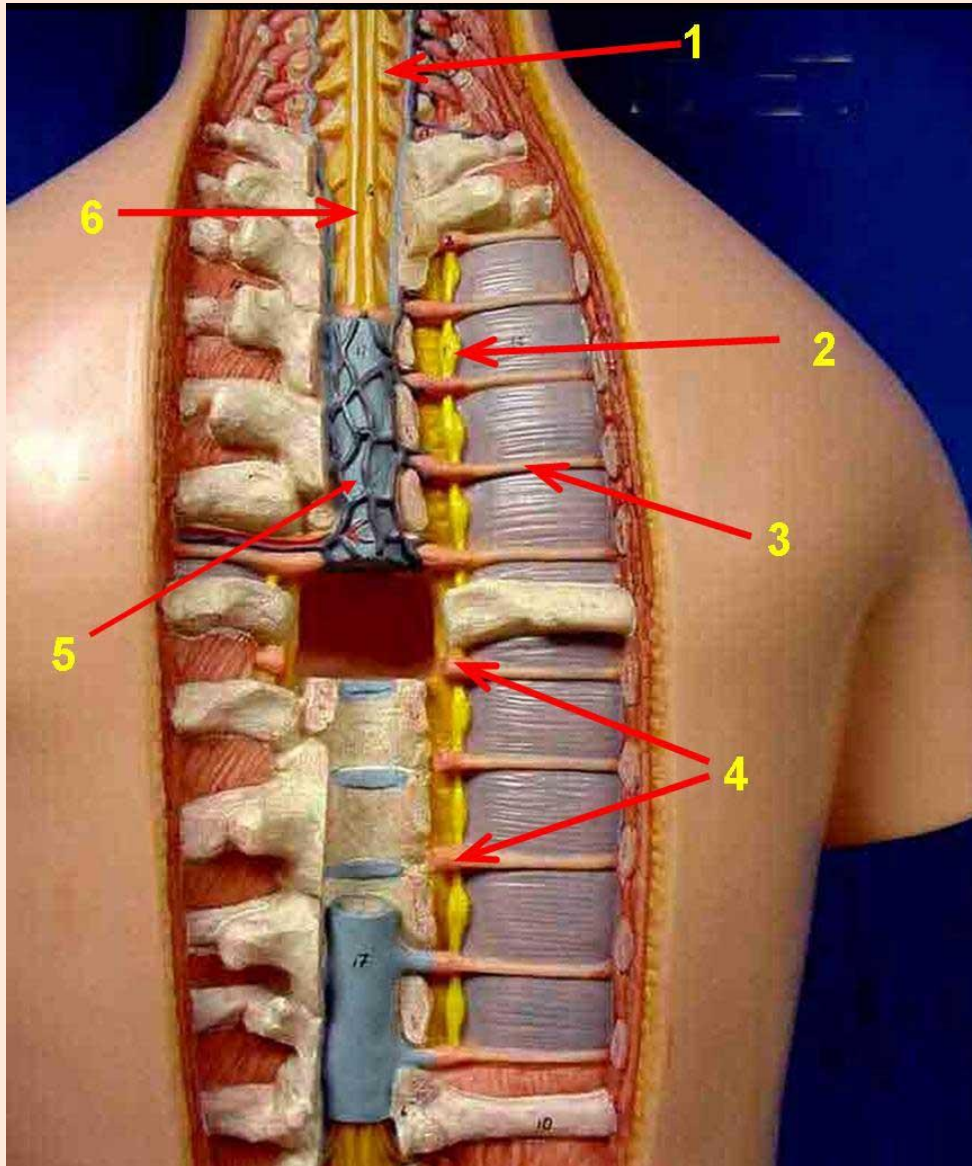
14. Dorsal Root

# Spinal Cord XS With Vertebrae



1. Pia Mater
2. Dura Mater
3. Spinal Nerve
4. Rami Communicans
5. Ventral Ramus
6. Dorsal Ramus
7. Dorsal Root Ganglion
8. Dorsal Root
9. Ventral Root

# Human Torso Showing Structure of Spinal Cord



1. Dorsal Root

2. Sympathetic Chain Ganglia

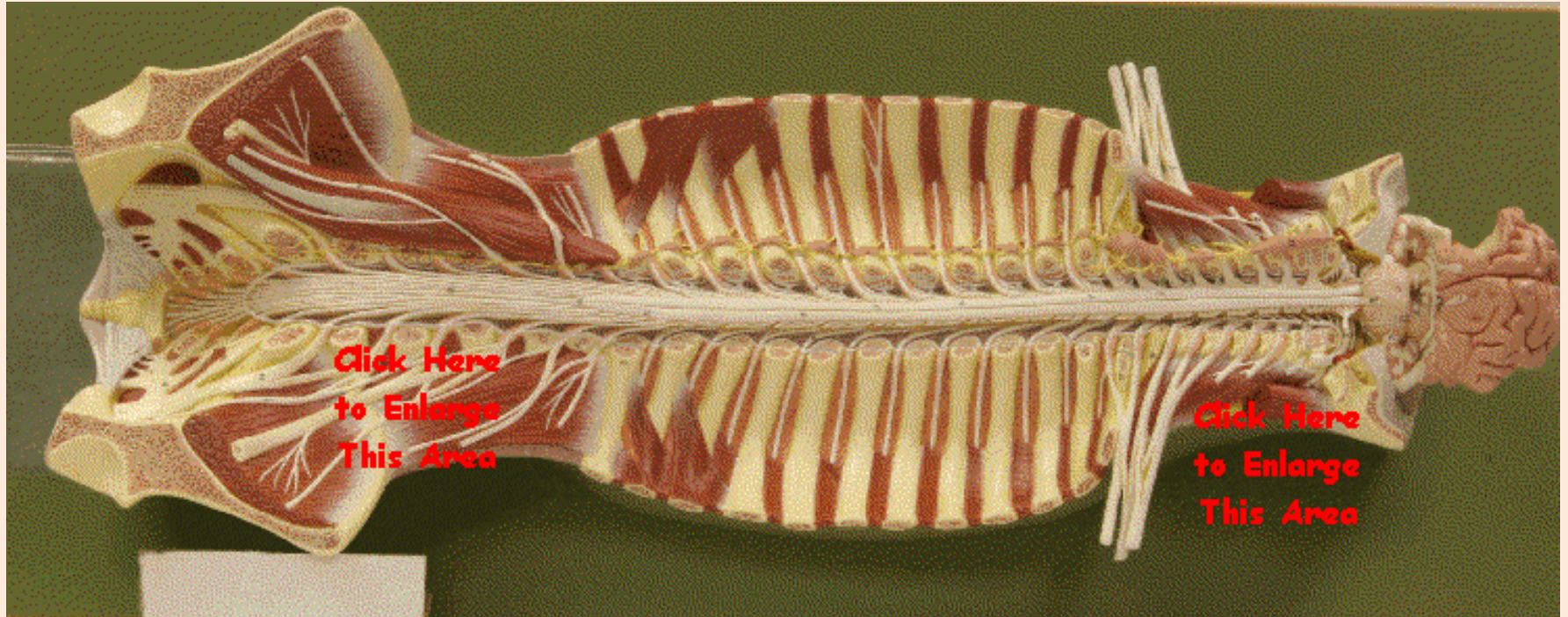
3. Intercostal Nerve

4. Dorsal Root Ganglion

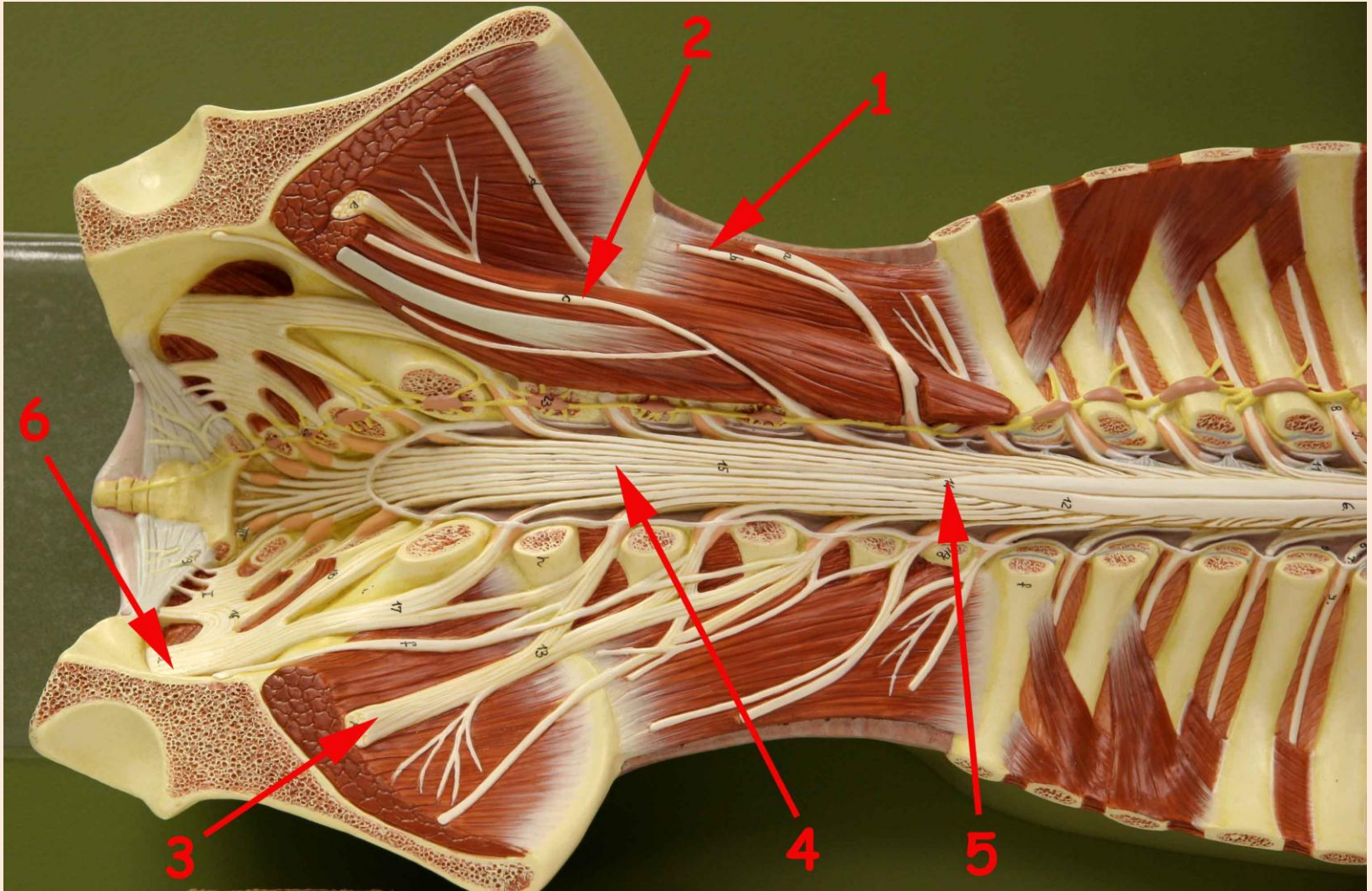
5. Dura Mater

6. Posterior Median Sulcus

# Spinal Cord with Spinal Canal



# Spinal Cord Inferior



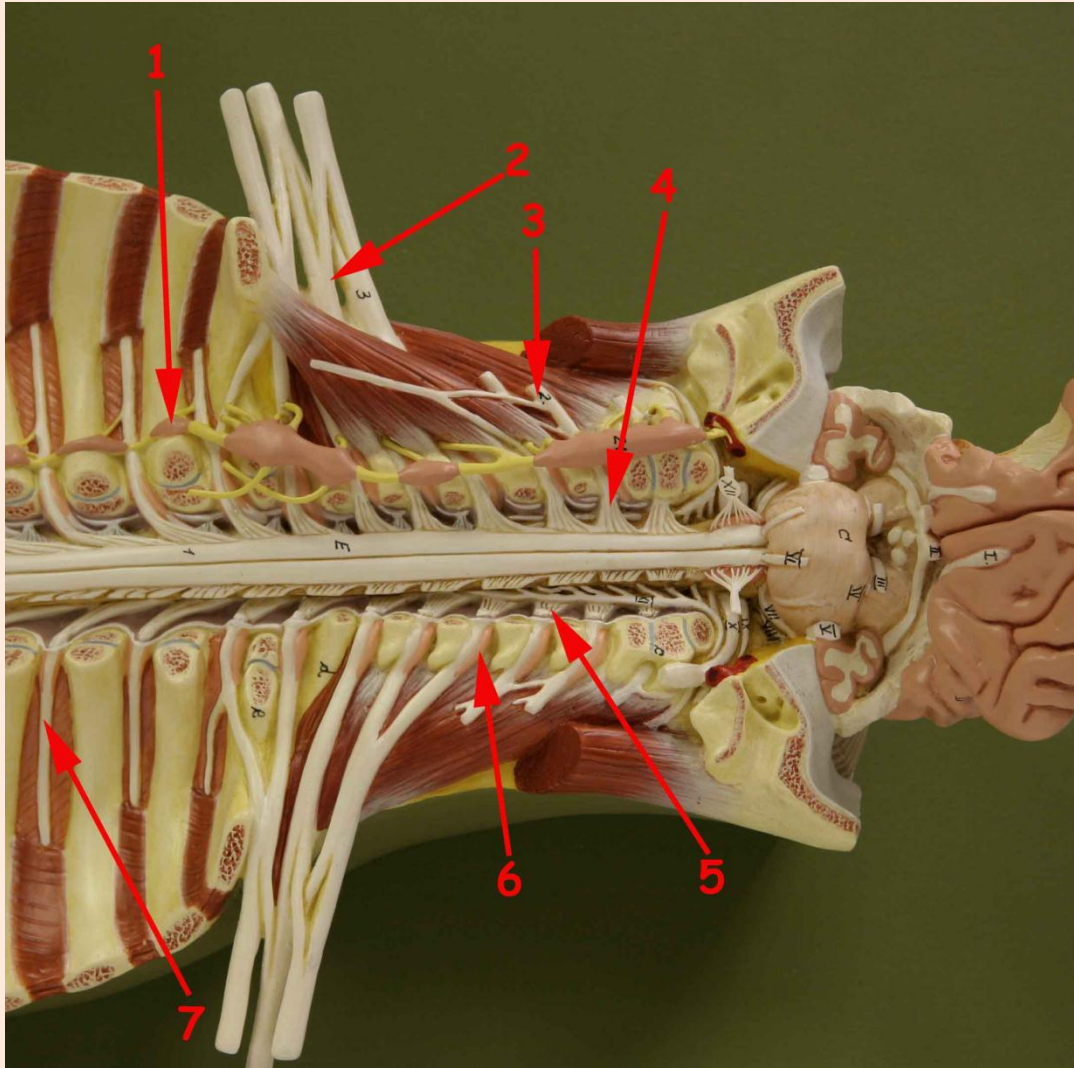
1. Ilioinguinal nerve  
4. Cauda equina

2. Genitofemoral nerve  
5. Conus medullaris

3. Femoral nerve  
6. Sciatic nerve



# Spinal Cord Superior



1. Sympathetic chain ganglia
2. Brachial Plexus
3. Cervical Plexus
4. Ventral Root
5. Dorsal Root
6. Dorsal Root ganglion
7. Intercostal nerve

# Nerveman Showing Plexuses



1. Brachial Plexus

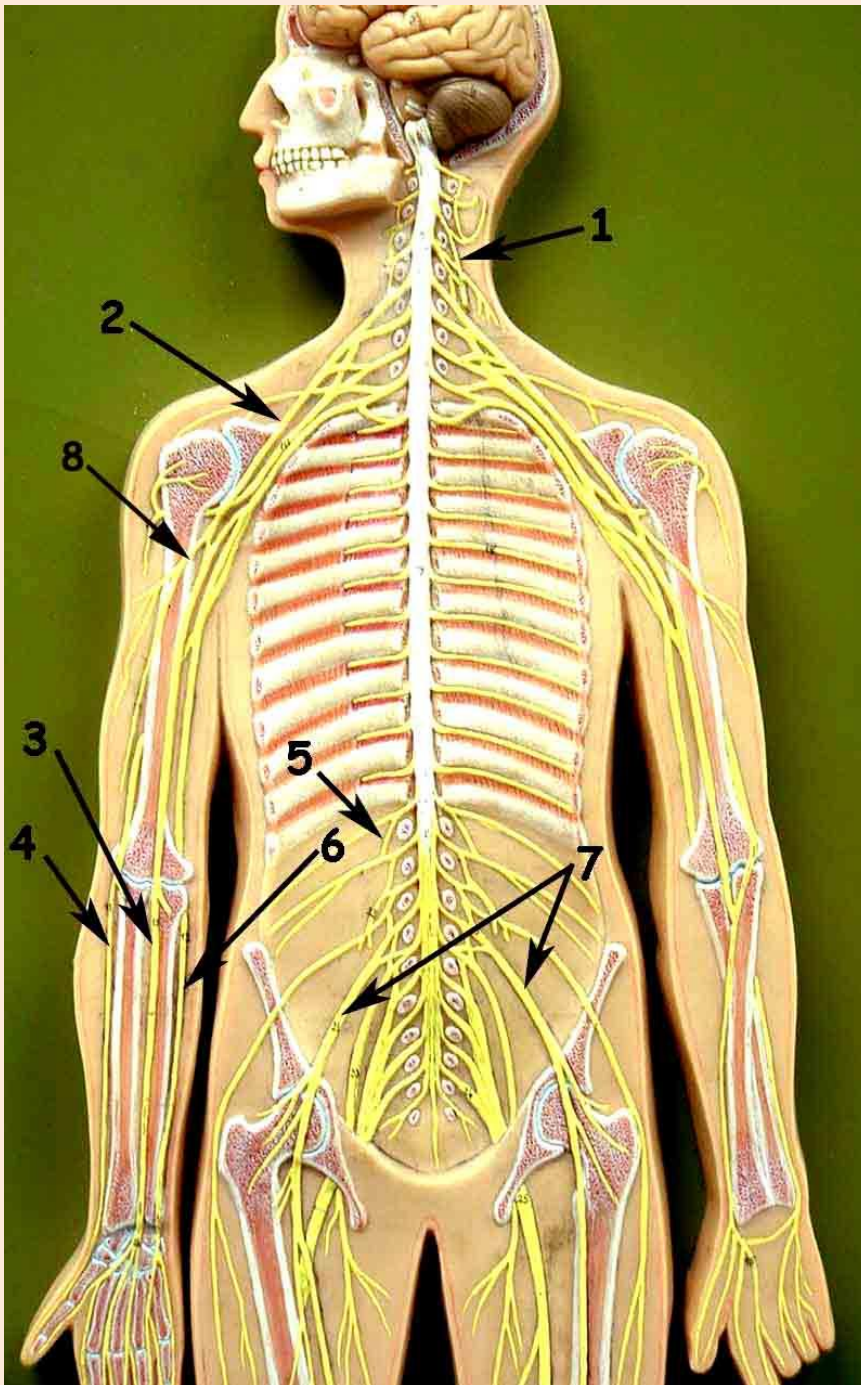
2. Cervical Plexus

3. Lumbar Plexus

4. Sacral Plexus

*The ventral Rami of spinal nerves T2 - T12 pass anteriorly as the Intercostal nerves. The ventral rami of all the other spinal nerves form complex networks of nerves called plexuses.*

# Nerveman Superior View



1. Phrenic Nerve

2. Cord (Lateral)

3. Median Nerve

4. Radial Nerve

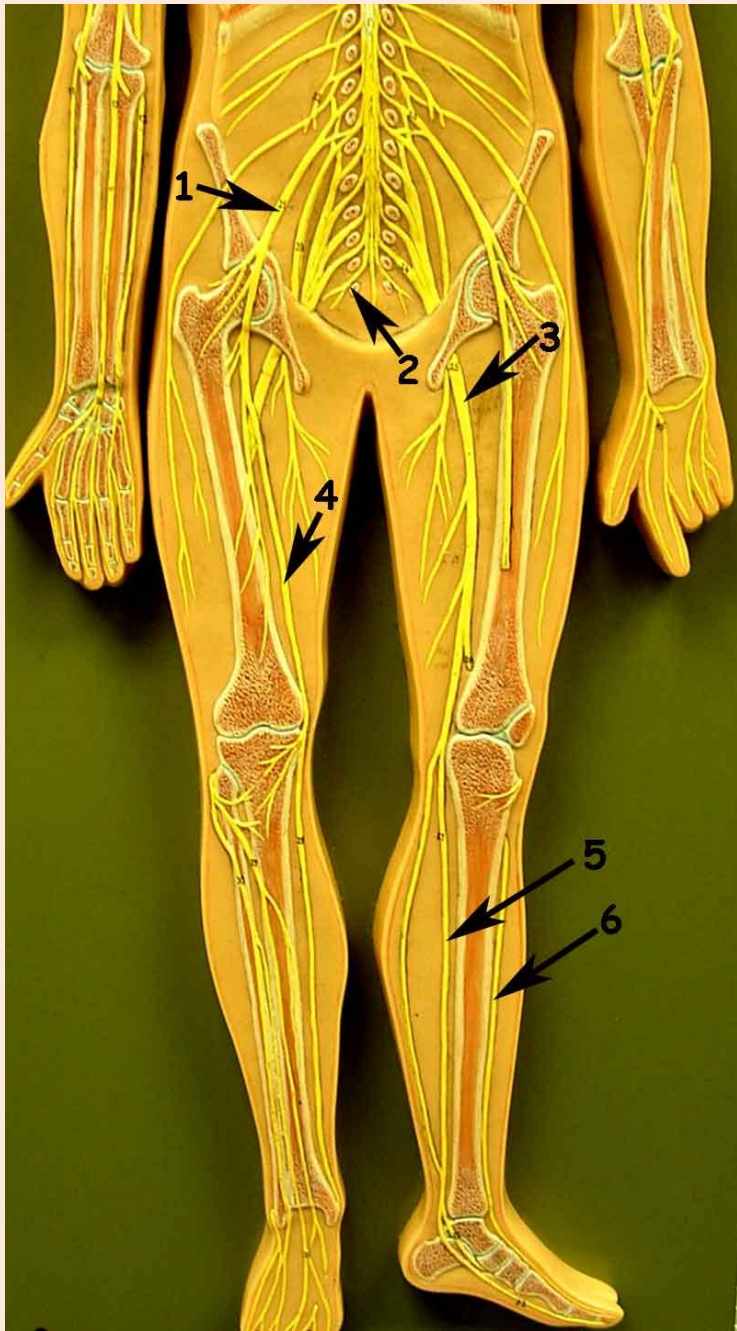
5. Ilioinguinal Nerve

6. Ulnar Nerve

7. Femoral Nerve

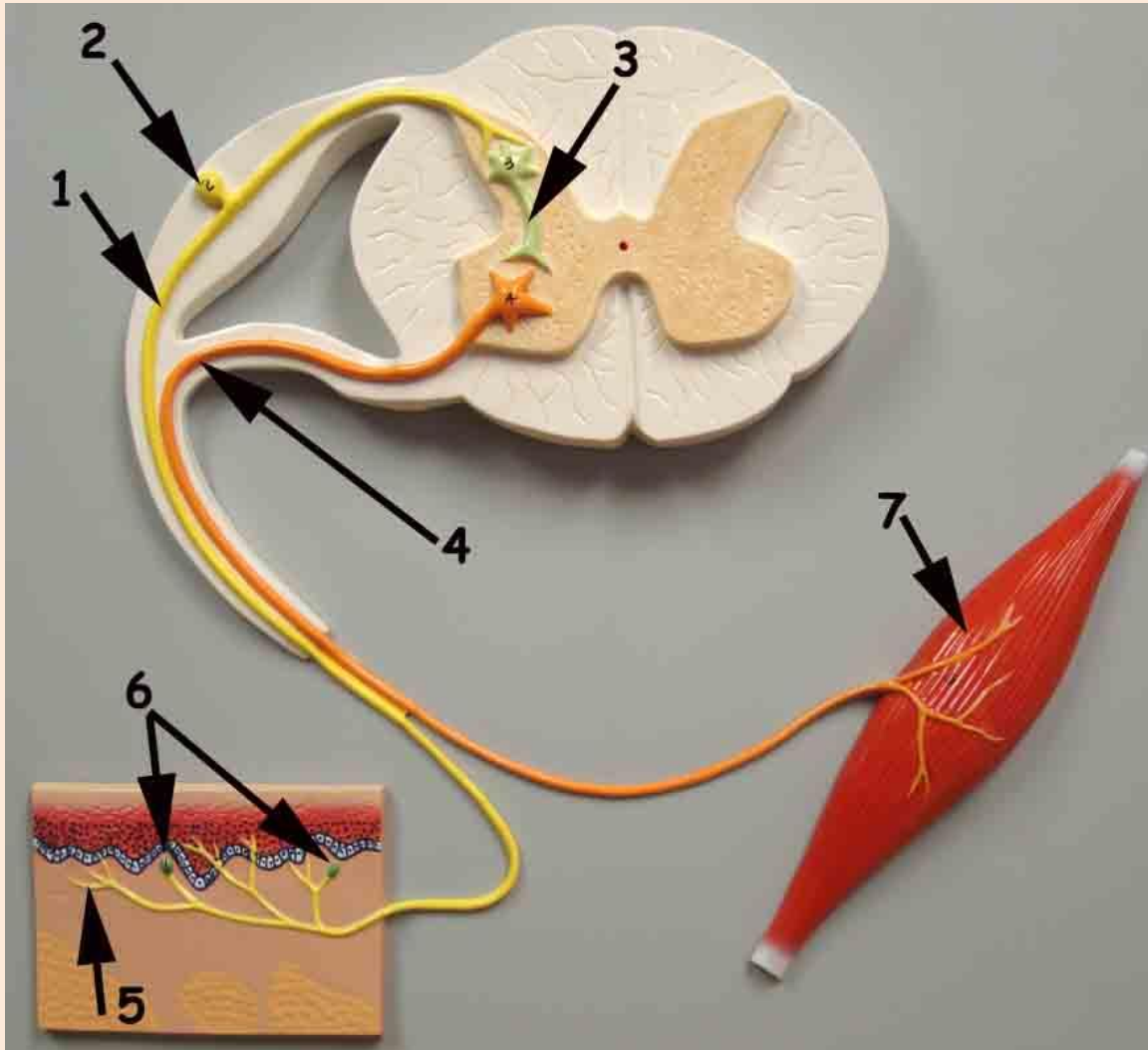
8. Musculocutaneous Nerve

# Nerveman Inferior View



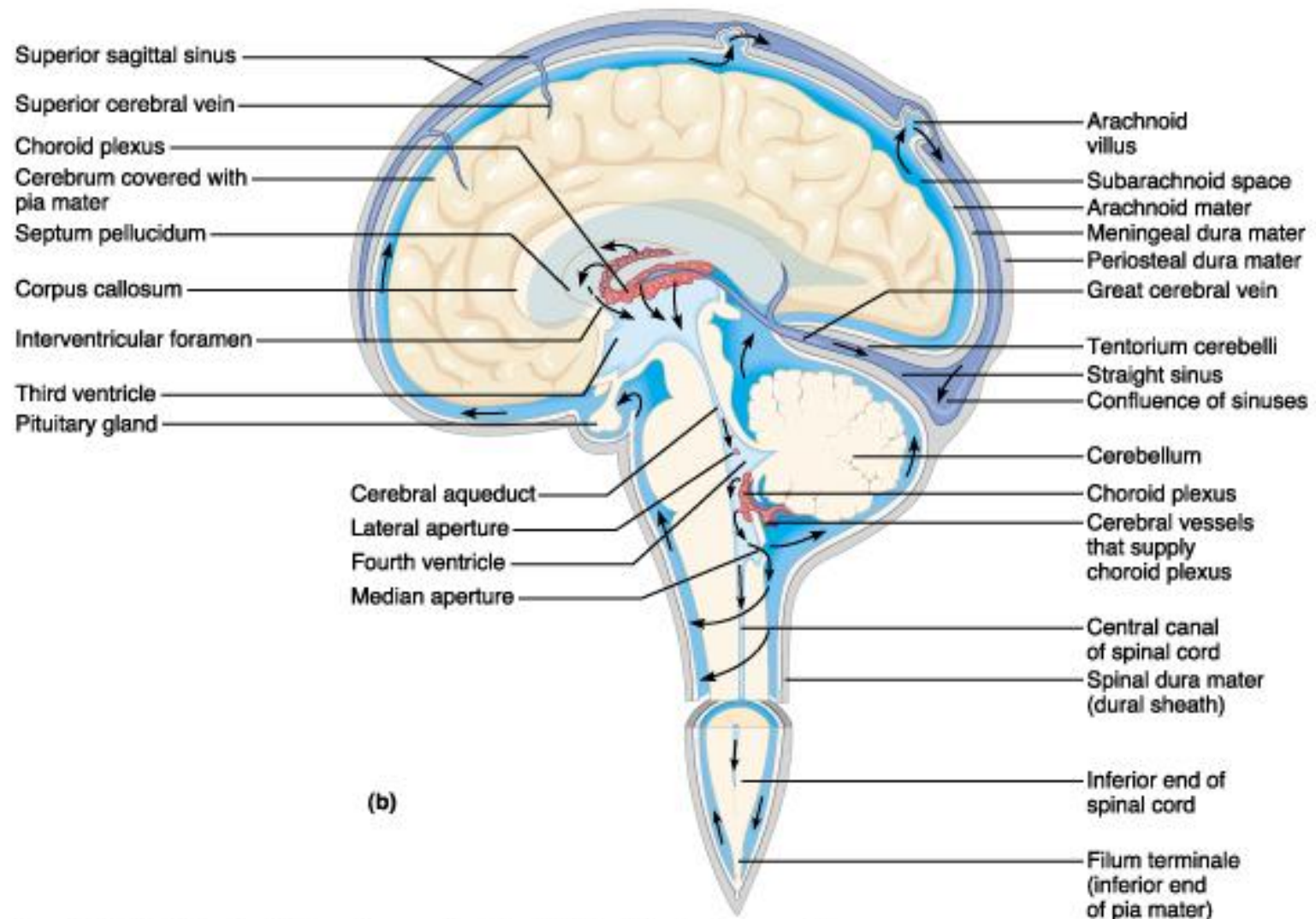
1. Femoral Nerve
2. Pudendal Nerve
3. Sciatic Nerve
4. Saphenous Nerve
5. Tibial Nerve
6. Common Fibular Nerve

# Neurons on Basis of Function



1. Sensory Neuron (Afferent)
2. Ganglion
3. Association Neuron (Interneuron)
4. Motor Neuron (Efferent)
5. Dendrites
6. Receptors
7. Effector (Muscles and Glands)

# Cerebrospinal Fluid (Production and Circulation)



# Nerve Coverings

**Structure of a Nerve – Note that all nerves contain both myelinated and unmyelinated sensory and motor fibers (axons)**

