
BIO308/508 Comparative Anatomy
The Nervous System

The nervous system consists of two major divisions:
Types of Cells

1. Neuroglia

2. Neuron
The Neuron

Ganglion (nucleus)
Perikaryon
Axon hillock
Axon
Nerve fibers or processes
Dendrite
Nerve (tract)
Schwann cell (oligodendroglial cell)
Node of Ranvier
Myelin sheath
Peripheral Nervous System

2 basic divisions:
Further Divisions

- somatic and visceral can be divided into sensory and motor components

Sensory (afferent)

Motor (efferent)
Functional Types of Neurons

1. Somatic sensory
2. Somatic motor
3. Visceral sensory
4. Visceral motor
Somatic nerves

CNS

Sensory (afferent)

Motor (efferent)

Integument

Striated muscles

Visceral nerves

CNS

Sensory (afferent)

Motor (efferent)

Viscera

Glands
Spinal Cord

Meninges

Spinal cord
Cerebrospinal Fluid
Spinal Nerves

Roots
Dorsal –
Ventral –

- Dorsal ramus –
- Ventral ramus –