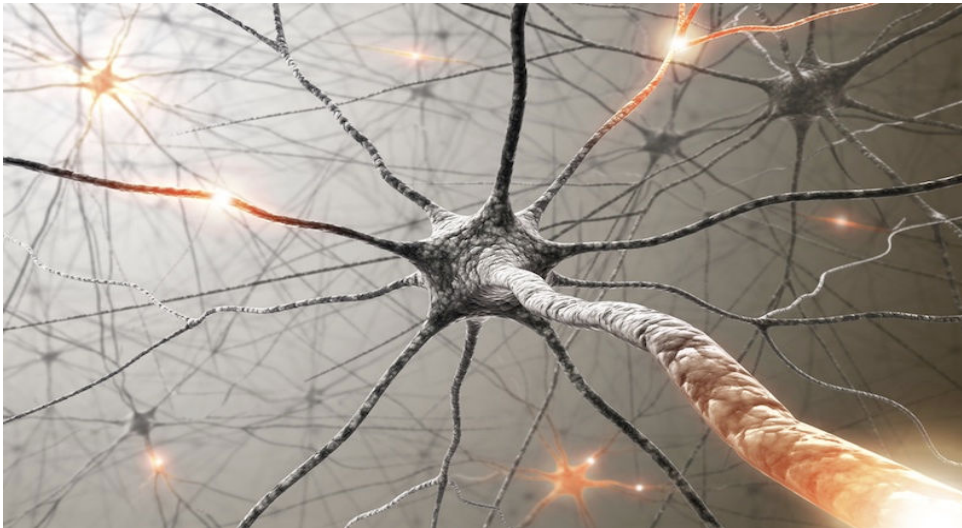


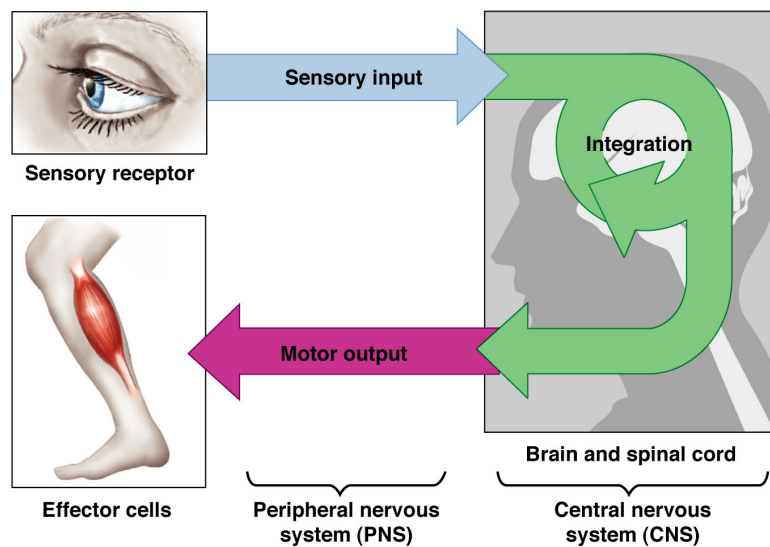
The Nervous System

7.1: Organization of the Nervous System



Three Basic Functions

- 1) Sensory Input - gathers information
- 2) Integrative - information is brought together
- 3) Motor - responds to signals; homeostasis



Structural Classification

Central Nervous System

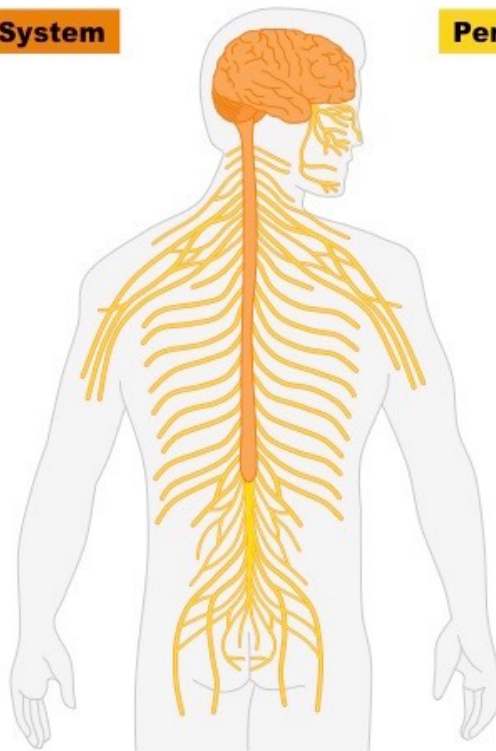
Composed of:

- Brain
- Spinal cord

Peripheral Nervous System

Composed of:

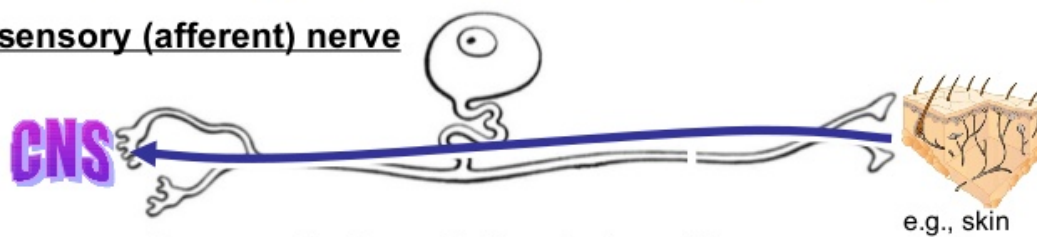
- Cranial nerves (12 pairs)
- Spinal nerves (31 pairs)
- Peripheral nerves



Functional Classification

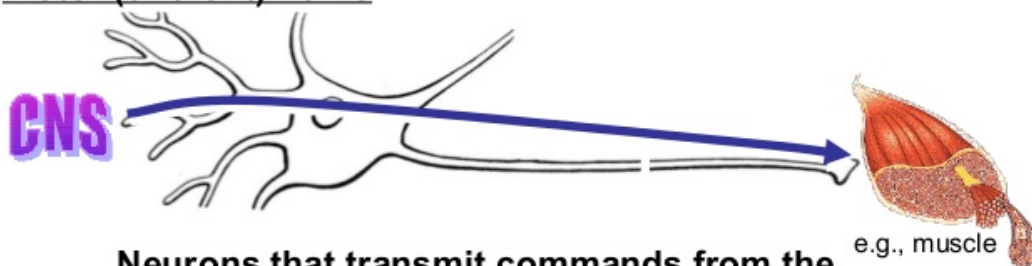
Sensory (Afferent) vs. Motor (Efferent)

sensory (afferent) nerve



Neurons that send signals from the senses, skin, muscles, and internal organs to the CNS

motor (efferent) nerve

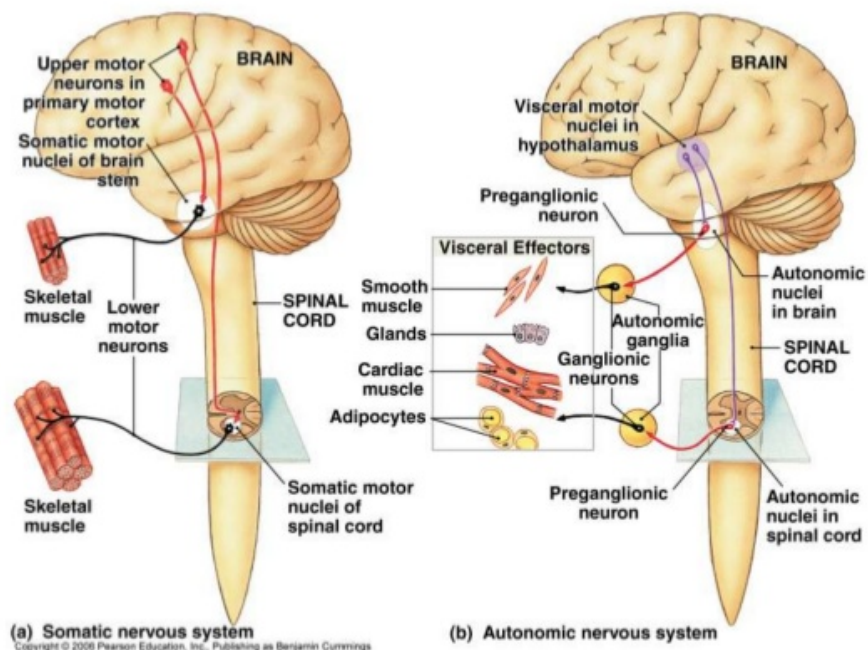


Neurons that transmit commands from the CNS to the muscles, glands, and organs

Gray's Anatomy 38 1999

Motor Division has 2 Subdivisions

Somatic vs. Autonomic



Autonomic Division has 2 Subdivisions

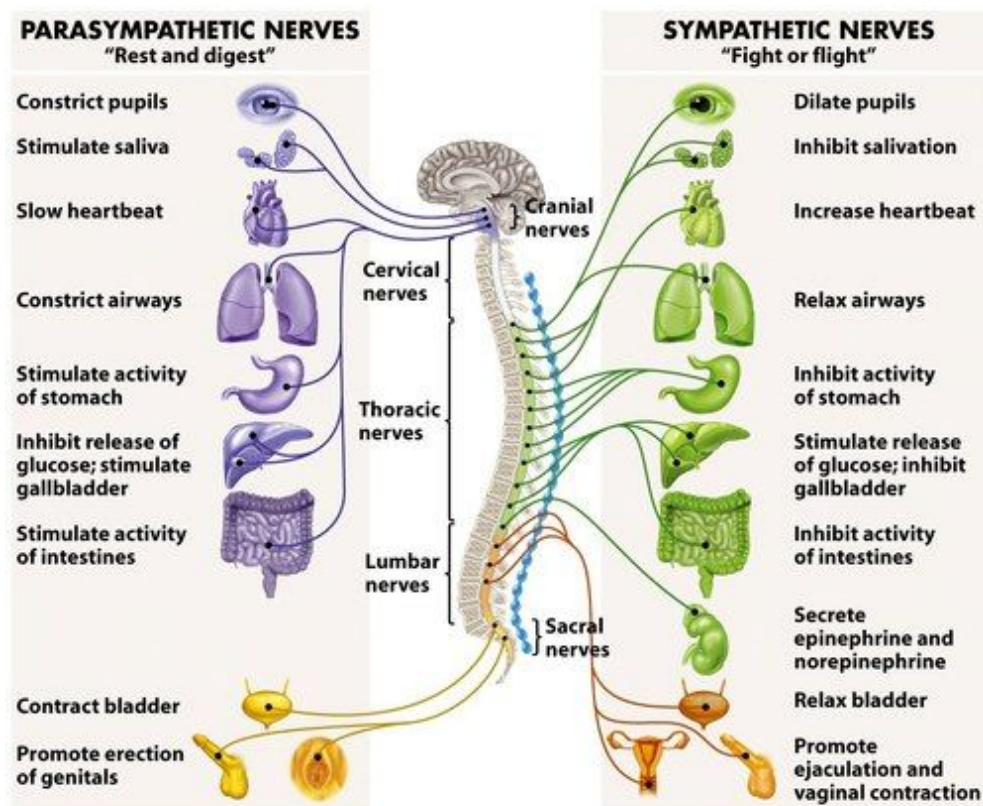


Figure 45-20 Biological Science, 2/e
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