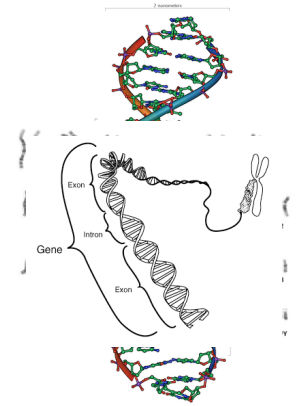


The Biological Bases of Behavior

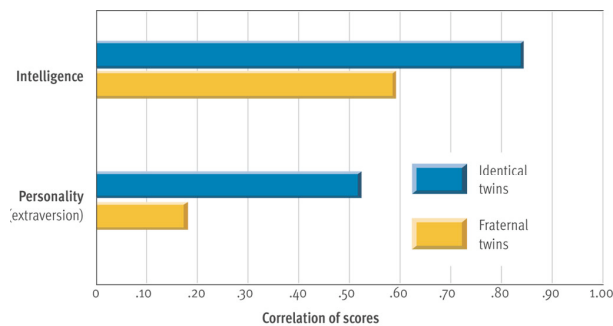
Chapter 3

Genetics

- DNA
- Chromosomes
- Genes
- Polygenic
- Twins
 - Identical (monozygotic)



Twin studies

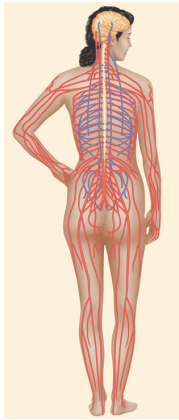


The Nervous System

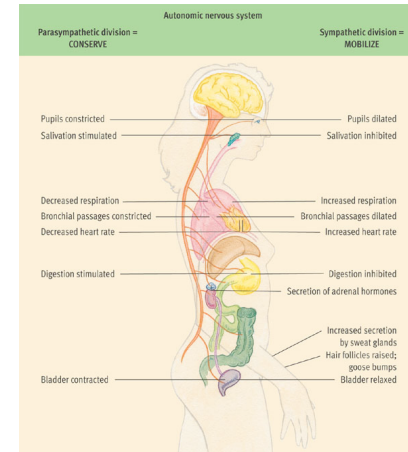
- Central nervous system
 - Brain, Spinal cord
- Peripheral nervous system
 - Somatic nervous system
 - Voluntary: Afferent, Efferent
 - Autonomic: Sympathetic, parasympathetic

Peripheral Nervous System

Somatic: Red
Autonomic: Blue

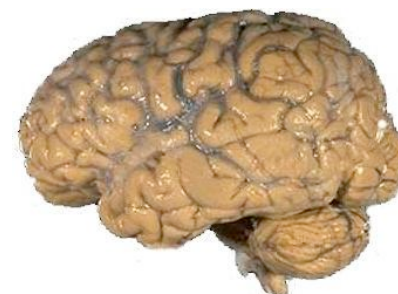
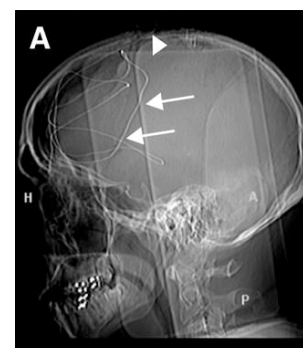


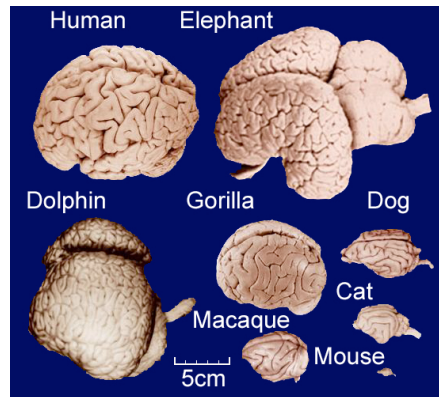
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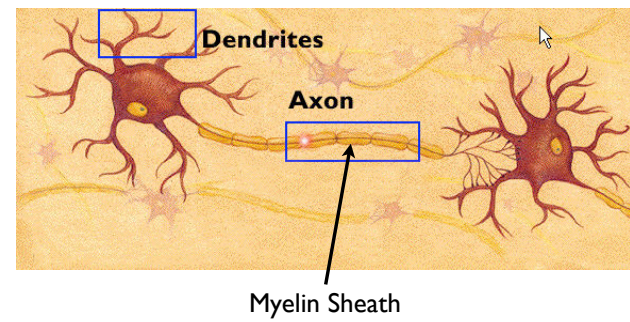
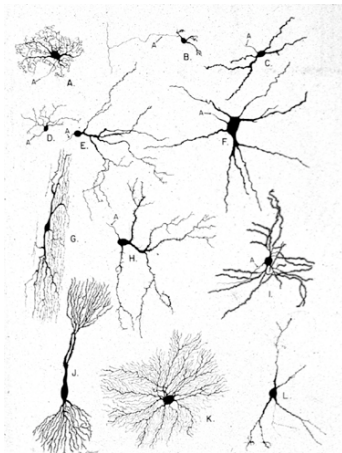
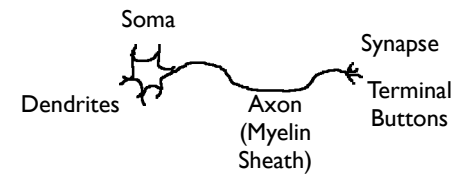
Phineas Gage

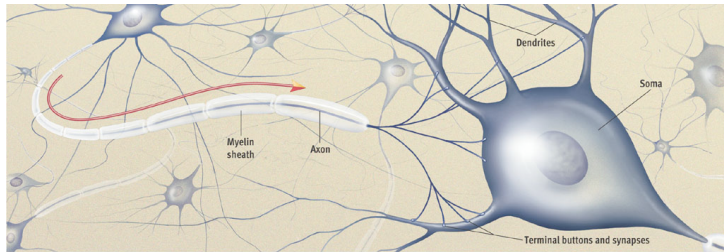




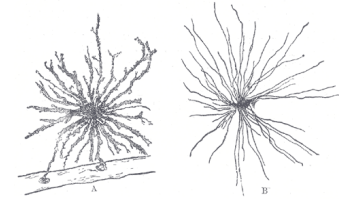


The Neuron



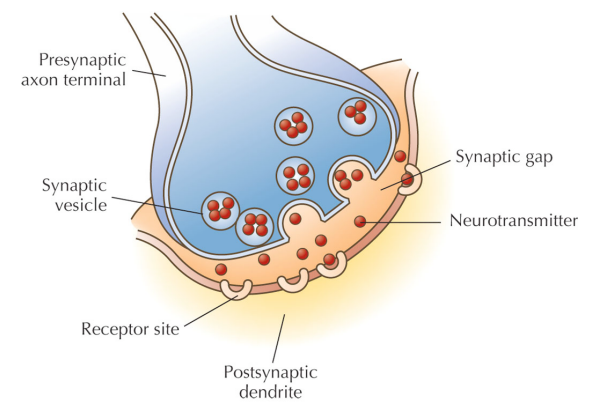


Glia



Neural communication

- Resting potential
- Action potential
- All-or-none law
- Refractory period
- Presynaptic neuron => postsynaptic neuron

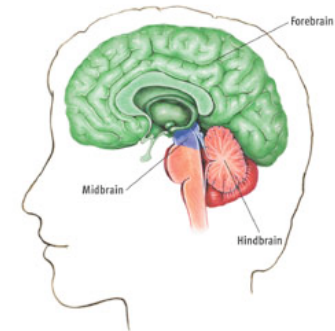
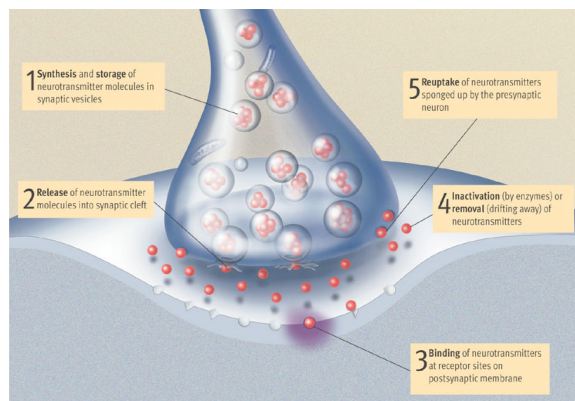


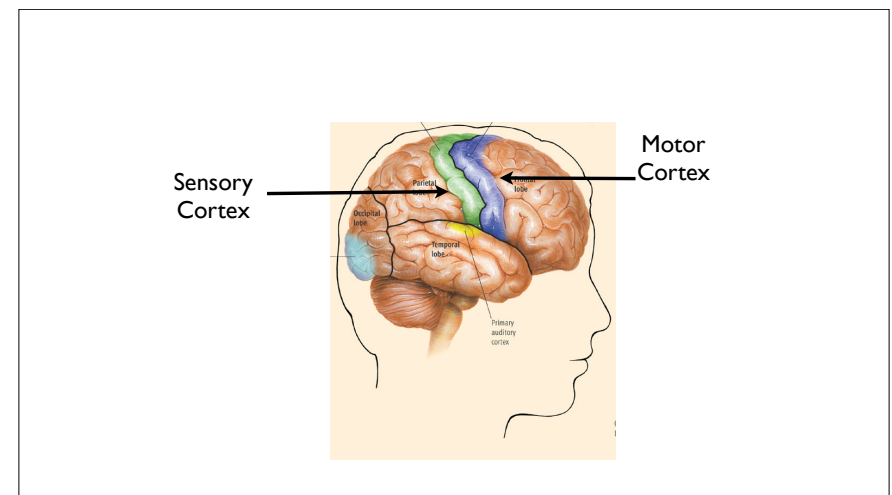
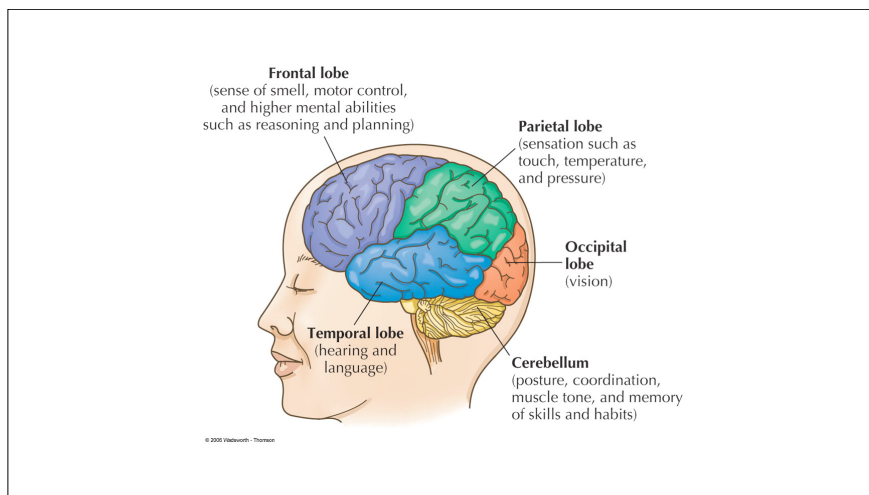
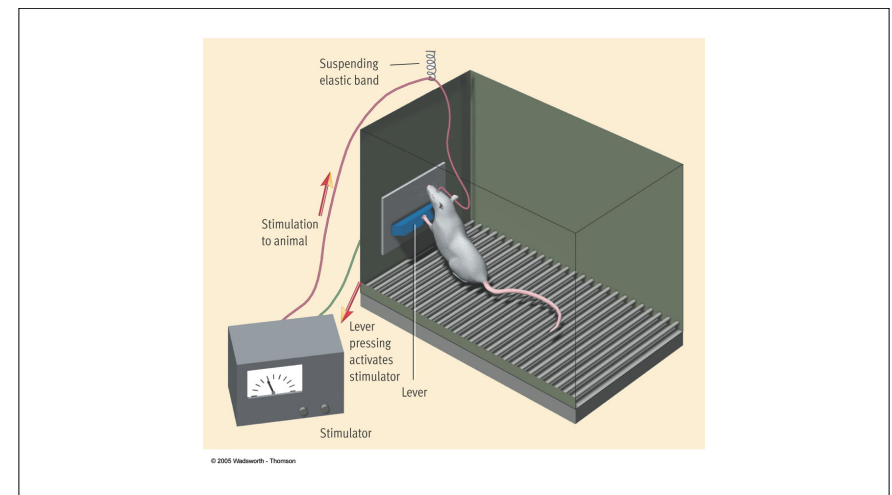
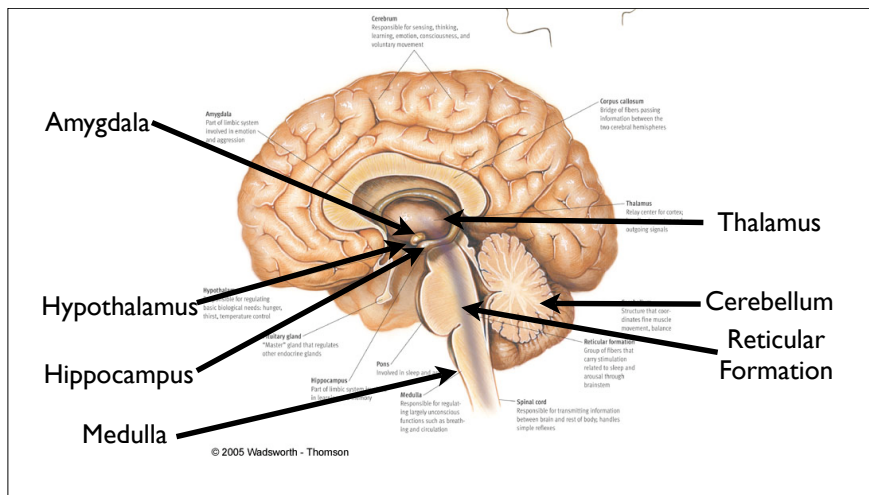
Neurotransmitters

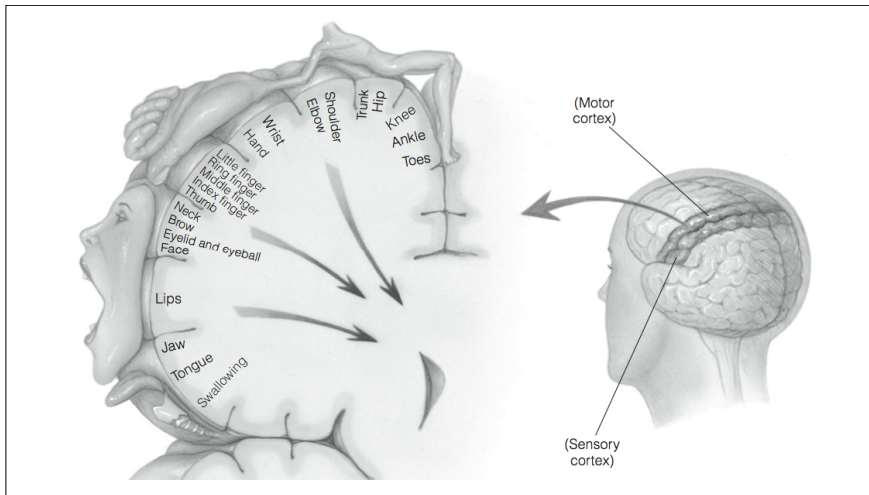
- Acetylcholine
- Monoamines
 - Serotonin
 - Norepinephrine
 - Dopamine
- Endorphins

Drugs

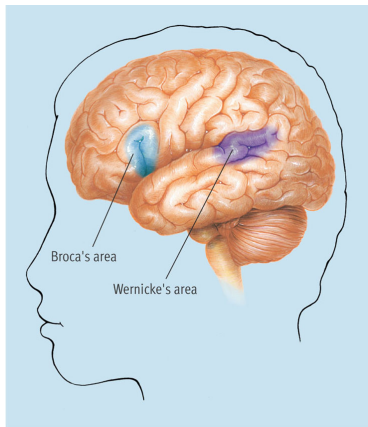
- Agonist
- Antagonist
- Reuptake inhibitor
 - Selective serotonin reuptake inhibitor





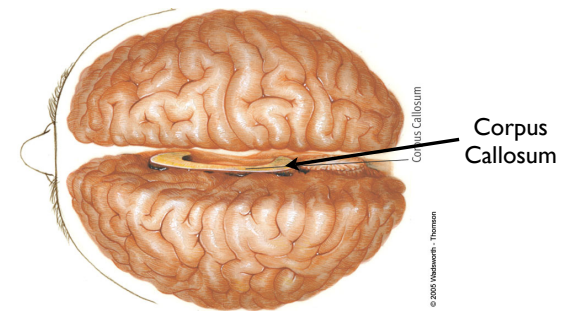


Sensory Homunculus



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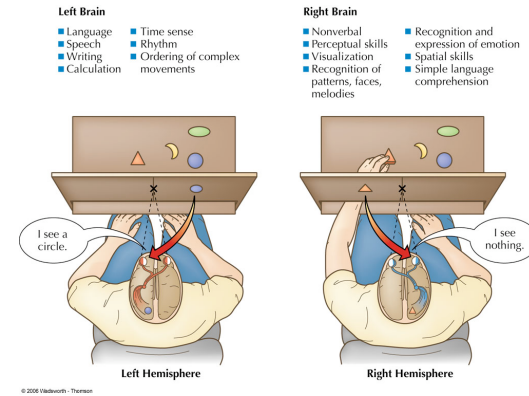
Cerebral Hemispheres



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Gazzaniga and a Split-Brain Patient

Introductory Psychology



Hemispheric Specialization

- Left hemisphere
 - Right side of body
 - Language, verbal skills
 - Math, logic
- Right hemisphere
 - Left side of body
 - Visual and spatial skills



