

BRAIN & BEHAVIOR

I. What does the cortex do ?

Phrenology vs. Experimental Method: Different areas have different functions

- **FRONTAL:** Phineas Gage
- **PARIETAL:** Neglect Syndrome; Phantom Limb
- **OCCIPITAL:** Word Blindness; Blindsight
- **TEMPORAL:** Memory; Aggression

II. The TWO BRAINS: Lateralization of Function

A). Split Brain Studies

1. Left Hemisphere- Language; Sequential
2. Right Hemisphere- Emotional; Spatial Processing

B). Gender Differences

1. Corpus Callosum
2. Naming Center
3. Hypothalamus (POA & INAH): Sexual Preference

III. How Does the Brain Work?

A). Structures of Neurons: Neurons Process and Send Info

1. **DENDRITES:** Incoming
2. **SOMA:** Main CPU
3. **AXON:** Outgoing
4. **TERMINAL BUTTONS:** Synapse

B). Information Processing

Neurons communicate via electrical & chemical means

1. **ELECTRICAL:** Within a Neuron
 - **ACTION POTENTIAL**
2. **CHEMICAL:** Between Neurons
 - Neurotransmitter Release at Synapse
 - Can Inhibit or excite next neuron in circuit
 - Drugs Mimic Neurotransmitters to Produce Effects

