Cerebral Cortex, Intellectual Functions of the Brain, Learning, and Memory

Physiological Anatomy of the Cerebral Cortex

Association Areas

Parieto-occipitotemporal Association Area

“Wernicke's Area” (a General Interpretative Area)

Language Input and Language Output

Aphasia

Angular Gyrus

Prefrontal Association Area

prefrontal lobotomy

 “Working Memory.”

Limbic Association Area

Area for Recognition of Faces

Memory

Positive and Negative Memory

Classification of Memories

*declarative memory*

Short-Term Memory

Intermediate Long-Term Memory

Molecular Mechanism of Intermediate Memory

Consolidation of Memory

Rehearsal

Long-Term Memory

Learning

Anterograde Amnesia

Retrograde Amnesia

*skill memory*

Limbic System and the Hypothalamus

*limbic cortex*

*medial forebrain bundle,*

Hypothalamus

Vegetative and Endocrine Control Functions of the Hypothalamus

Hypothalamic Control of Endocrine Hormone Secre­tion by the Anterior Pituitary Gland

Behavioral Functions of the Hypothalamus and Associated Limbic Structures

“Reward” and “Punishment”

Rage

Hippocampus

Amygdala

Klüver-Bucy

Sleep

Reticular Excitatory Area of the Brain Stem

Excitation of the Excitatory Area by Peripheral Sensory Signals

Reticular Inhibitory Area

Neurohormonal Control of Brain Activity

REM (Paradoxical, Desynchronized) Sleep

Slow-Wave Sleep

Neuronal Centers, Neurohumoral Substances, and Mechanisms That Can Cause Sleep

Sleep Physiological Functions

Brain Waves

Effect of Varying Levels of Cerebral Activity on the Frequency of the EEG

Changes in the EEG at Different Stages of Wakefulness and Sleep