

What is acetylcholine?

Acetylcholine is a neurotransmitter released by neurons to activate muscles.

What is an action potential?

An action potential is a nerve impulse, which is a rapid change in electrical charge across the cell membrane.

What are the adrenal glands?

The adrenal glands are endocrine glands whose hormones arouse the body, regulate salt balance, adjust the body to stress, and affect sexual functioning.

What is adrenaline?

Adrenaline is a hormone produced by the adrenal glands that tends, in general, to arouse the body.

What does afferent mean?

Those neurons that approach the central nervous system are called afferent neurons.

What is aphasia?

Aphasia is a speech disturbance resulting from damage to language areas on the temporal lobes of the brain.

What is the association cortex?

All areas of the cerebral cortex that are not specifically sensory or motor in function are called the association cortex.

What is the autonomic nervous system?

The autonomic nervous system is the part of the neural system that connects the brain with the internal organs and glands.

What is an axon?

A thin fiber that conducts information away from the cell body of a neuron is called the axon.

What is a biochemical abnormality?

A biochemical abnormality is a disturbance of the body's chemical systems, especially in brain chemicals or neurotransmitters.

What does brain dominance mean?

Brain dominance is the concept that one of the hemispheres is stronger than the other.

What is the brain stem?

The brain stem is the lowest portions of the brain, including the cerebellum, medulla, and reticular formation.

What is Broca's area?

Broca's area is the language area in the brain related to grammar and pronunciation.

What is the central nervous system?

The central nervous system consists of the brain and spinal cord.

What is the cerebellum?

The cerebellum is a cauliflower-shaped projection at the base of the brain that controls posture and coordination.

What is the cerebral cortex?

The cerebral cortex is a layer of tissue that forms the outer layer and surface of the cerebrum.

What are the cerebral hemispheres?

The cerebral hemispheres consist of the right and left halves of the cerebrum.

What is the cerebrum?

The cerebrum consists of the two large hemispheres that cover the upper part of the brain.

What is the corpus callosum?

The corpus callosum is the large bundle of fibers connecting the right and left cerebral hemispheres.

What is a CT scan?

A CT scan is a computed topography scan; a computer-enhanced X-ray image of the brain.

What is deep lesioning?

Deep lesioning is the use of an electrode (electrified wire) to destroy small areas deep within the brain.

What are dendrites?

Dendrites are fibers projecting from nerve cells that receive information from other neurons and carry it to the cell body.

What is dopamine?

Dopamine is an important transmitter substance found in the brain, especially in the limbic system, an area associated with emotional response.

What does efferent mean?

Efferent neurons are those that leave the central nervous system.

What is an electroencephalograph (EEG)?

An electroencephalograph is a device designed to detect, amplify, and record electrical activity in the brain.

What is the endocrine system?

The endocrine system consists of glands whose secretions pass directly into the bloodstream or lymph system.

What are endorphins?

Endorphins are a class of chemicals produced by the pituitary gland that are similar in structure and painkilling effect to opiate drugs such as morphine.

What does EPSP stand for?

EPSP stand for Excitatory Post Synaptic Potential.

What is an fMRI scan?

An fMRI scan is a functional magnetic resonance imaging that records brain activity.

What is the forebrain?

The forebrain consists of the highest brain areas, including the hypothalamus, thalamus, corpus callosum, and cerebrum.

What is the frontal lobe?

The frontal lobes consist of the areas at the top front of the cerebral cortex that include sites associated with the control of movement, the processing of smell, and higher mental functions.

What is a frontal lobotomy?

The destruction of brain tissue in frontal areas of the brain.

What is functional MRI?

An MRI scan that records brain activity.

What is gaba?

Gaba is an inhibitory neurotransmitter.

What is handedness?

Handedness is a preference for using the right or left hand in most activities.

What are hormones?

Hormones are the glandular secretions that affects bodily functions or behavior.

What is hyperthyroidism?

Hyperthyroidism is a disorder where faster metabolism and excitability is caused by an overactive thyroid gland.

What is hypopituitary dwarfism?

Hypopituitary dwarfism is a disorder consisting of shortness or smallness caused by too little growth hormone.

What is the hypothalamus?

The hypothalamus is a small area at the base of the brain that regulates many aspects of motivation and emotion, especially hunger, thirst, and sexual behavior.

What is an ion?

An ion is an electrically charged molecule.

What does IPSP stand for?

IPSP stands for Inhibitory Post Synaptic Potential.

What is lateralization?

Specialization in the abilities of the brain hemispheres is called lateralization.

What is the limbic system?

The limbic system consists of interconnected structures in the forebrain that are closely associated with emotional response.

What are lobes (cerebral cortex)?

The lobes are the areas on the cortex bordered by major fissures or associated with particular functions.

What does localization of function mean?

Localization of function is the principle stating that sensations are determined by the area of the brain that is activated.

What is the medulla?

The medulla is the enlarged stalk at the base of the brain that connects to the spinal cord and controls vital life functions.

What is melatonin?

Melatonin is a hormone produced by the pineal gland in response to cycles of light and dark.

What is the midbrain?

The midbrain is the area of the brain consisting of structures linking the forebrain and the brainstem.

What is the motor cortex?

The motor cortex is the area on the top of the brain directly associated with control of voluntary movements.

What is a motor neuron?

Motor neurons are those that carry motor commands from the central nervous system to muscles and glands.

What is an MRI scan?

MRI stands for magnetic resonance imaging; a computer-enhanced three-dimensional representation of the brain or body, based on the body's response to a magnetic field.

What is myelin?

Myelin is the fatty layer coating some axons that increases the rate at which nerve impulses travel along the axon.

What is negative after-potential?

A drop in electrical charge below the resting potential is called negative after potential.

What is a nerve?

A nerve is a bundle of neuron fibers supported by connective tissue; nerves can be seen with the unaided eye; neuron fibers are microscopic projections from single cells.

What are neurons?

Neurons are individual nerve cells.

What are neurotransmitters?

Neurotransmitters are any of a number of chemical substances secreted by neurons that alter activity in other neurons.

What are the occipital lobes?

The occipital lobes are portion at the back of the cerebral cortex that includes areas where vision registers in the brain.

What is the parasympathetic system?

The parasympathetic system is a branch of the autonomic system responsible for quieting the body and conserving energy.

What are the parietal lobes?

The area at the top of the brain that includes sites where bodily sensations register in the brain are the parietal lobes.

What is the peripheral nervous system?

The peripheral nervous system consists of all parts of the nervous system lying outside the brain and spinal cord.

What is a PET scan?

The term PET Scan stands for positron emission tomography; a computer-generated image of brain activity, based on glucose consumption in the brain.

What does plasticity mean?

The brain's capacity for revising its organization is called plasticity.

What is positron emission tomography?

Positron emission tomography consists of imaging of brain activity based on glucose consumption.

What is the primary auditory area?

The primary auditory area is the main area on the temporal lobes where hearing registers.

What is the primary visual area?

The primary visual cortex is the main area of the cerebral cortex that processes visual information.

What are receptor sites?

Receptor sites are areas on the surface of neurons and other cells that are sensitive to neurotransmitters or hormones.

What is a reflex?

A reflex is an innate, automatic response to a stimulus; for example, an eye blink, knee jerk, or dilation of the pupil.

What does resting potential mean?

The electrical charge that exists between the inside and outside of a neuron at rest is called resting potential.

What is the reticular activating system (RAS)?

A part of the reticular formation that activates the cerebral cortex.

What is Reuptake?

Reuptake, also called the refractory period is the time needed for neurotransmitters to return to the neuron from which they came.

What is a soma?

The main body of a neuron or other cell is called the soma.

What is the somatic system?

The somatic system is the system of nerves linking the spinal cord with the body and sense organs.

What is the somatosensory area?

The part of the parietal lobes that serves as a receiving area for bodily sensations is called the somatosensory area.

What is a split-brain operation or commissurotomy?

The surgical technique in which the corpus callosum is cut, functionally disconnecting the two cerebral hemispheres is called the commissurotomy.

What is the sympathetic system?

The sympathetic system is a branch of the autonomic system responsible for arousing and activating the body at times of stress.

What is a synapse?

The microscopic space, between an axon terminal and another neuron, over which neurotransmitters pass is called the synapse.

What are the temporal lobes?

The temporal lobes are areas on each side of the cerebral cortex that include the sites where hearing registers in the brain.

What is thalamus?

The thalamus is a structure at the center of the brain that relays sensory information to the cerebral cortex.

What does the thyroid gland do?

The endocrine gland whose hormones help regulate metabolism is called the thyroid.

What is Wernicke's area?

Wernicke's area is the area of the brain related to language comprehension