

Fold

There are approximately 86 billion (86,000,000,000) neurons in the human brain. That's over 11 times the human population of the world (7.6 billion).

Neurons are special cells that transmit electrical signals at up to 200 mph. They communicate with each using an electrochemical process. Axons carry messages away from the cell body and transmit to dendrites that take information to cell bodies.

When two neurons meet, they do not make direct contact with one another. To pass a signal between neurons, chemicals must be passed across a small gap called a synapse. Neurons tend to have lots of branches so that they can send and receive messages with lots of other neurons. That means there are lots of synapses. In fact there are approximately 1 quadrillion synapses. That's 1,000,000,000,000,000, or the approximate number of ants living on the earth.

The brain is kept working properly due a balance between two different types of functional neurons. Excitatory neurons and inhibitory neurons. There are a lot more excitatory neurons in the brain than inhibitory neurons. Disorders in the brain such as epilepsy can be caused by an imbalance between these two types of cells.



Lighting the Way to a New Epilepsy Treatment

