

THE NEURON

The Basic Unit of the brain

Synapse

The electrical signal transmission continues by triggering a release of chemicals that travel across the synapse (the gap between the axon of one neuron and the dendrites of the next).

Dendrites

The dendrites are where the signal from other neurons enter. The transmission of chemicals from the other neuron, across the synapse, and into the next neuron triggers the electrical transmission across this neuron.

Myelin Sheath

Glial cells produce myelin around the axon. The myelin is produced by glial cells called oligodendrocytes in the brain and brain stem (central nervous system) or Schwann cells in the nerves of the rest of the body (peripheral nervous system). Myelin sheath allows for quick transmission.

Cell

Body (Soma)

The cell body contains the DNA that defines the neuron as one of your cells.

Nodes of Ranvier

The Nodes of Ranvier are in between the myelin sheath. The signal transmits very quickly by jumping along these nodes. In fact, diseases like multiple sclerosis result when the myelin sheath is broken down not allowing these signals to jump.

Axon

When the signal is transmitted within the neuron, it leaves from the axon and triggers a chemical response across the synapse allowing the signal to flow in the next neuron.

