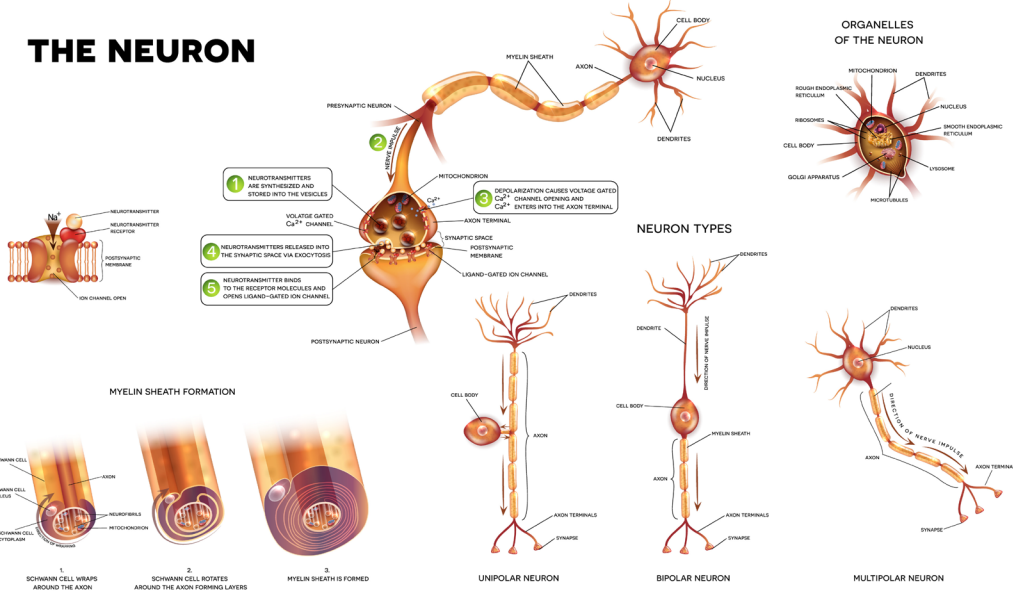


THE NEURON



NeuRA
Discover. Conquer. Cure.

SCHIZOPHRENIA LIBRARY

SCHIZOPHRENIA Factsheet

October 2020

What is a neuron?

Most neurons have a cell body, an axon, and dendrites. Neurons communicate with other cells over synapses, or gaps between the neurons. Usually, axons send out signals and dendrites receive signals across the synapse, although synapses can also connect an axon to another axon or a dendrite to another dendrite. This process is partly electrical and partly chemical and can be excitatory or inhibitory. A group of connected neurons is called a neural circuit, involving sensory, motor, and interneurons.

Studies have shown grey matter reductions in people with schizophrenia, which may involve a loss of neurons and/or changes in synaptic density. This topic presents the results of studies assessing changes in neuronal structure.

What is the evidence for changes in neurons in people with schizophrenia?

Moderate to high quality evidence finds a small to medium-sized effect of decreased density of postsynaptic elements in people with schizophrenia, mainly in cortical regions and in dendritic spine density. There is also a small effect of reduced parvalbumin interneuron density in the pre-frontal cortex of people with schizophrenia.

For more information see the technical table

NeuRA
Discover. Conquer. Cure.

NeuRA (Neuroscience Research Australia) is one of the largest independent medical and clinical research institutes in Australia and an international leader in neurological research.

Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.

Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical benefits for all patients.

While we hope you find this information useful, it is always important to discuss any questions about schizophrenia or its treatment with your doctor or other health care provider.

HOW YOUR SUPPORT HELPS

We are able to make significant advances due to the generosity of countless people. Your donation allows us to continue to work towards transforming lives. For information on how you can support our research, phone **1300 888 019** or make a secure donation at neura.edu.au/donate/schizophrenia.