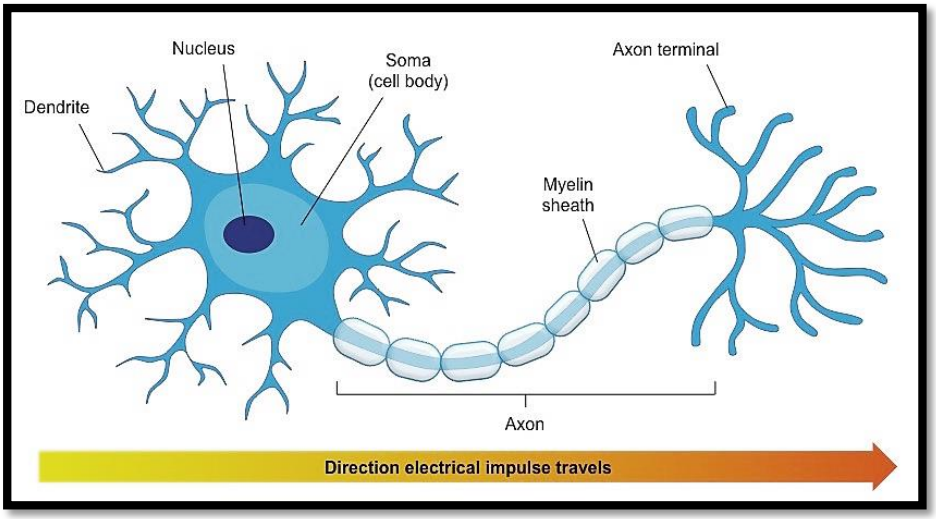
Shape of Animal Cell

Cells have different shapes because they do different functions. Each cell type has its own role to play in helping our bodies to work properly, and their shapes help them carry out these roles effectively. Animal cells in particular come in all kinds of shapes and sizes. The following cell types all have unusual shapes that are important for their function:

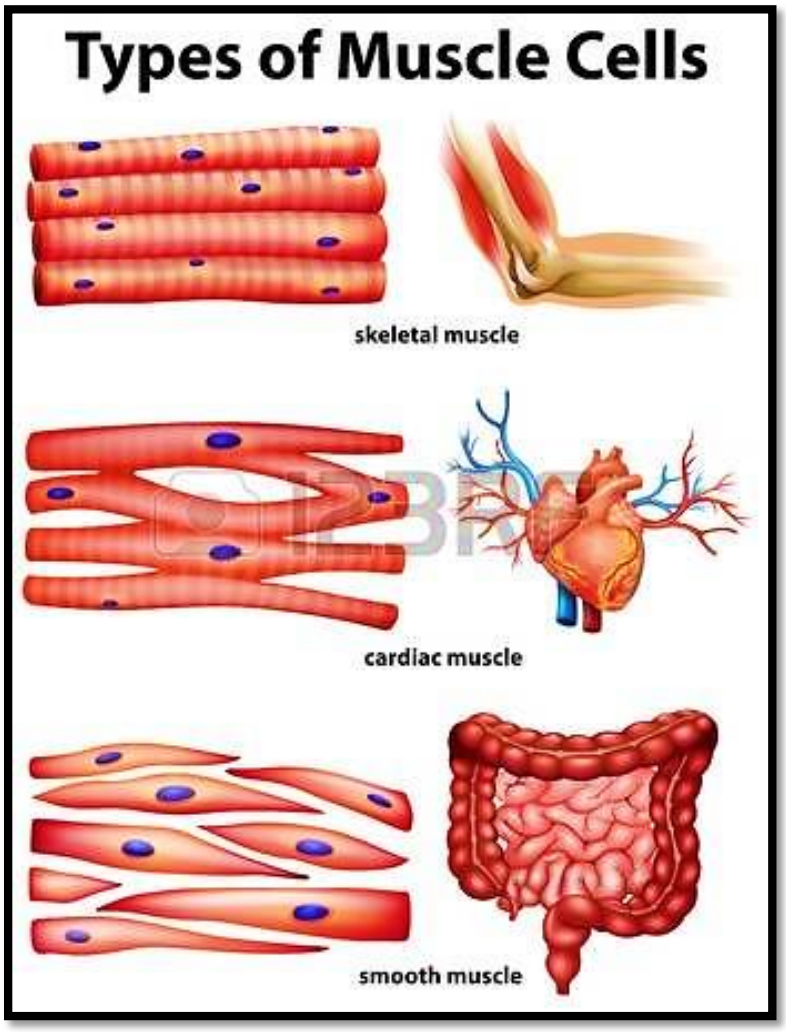
Neurons: are cells in the brain and nervous system. Their job is to carry electrical messages all the way from the brain to the rest of the body and back (almost like electrical wire), so they are very long, thin cells. They also need to connect with other neurons to form communication networks, so they have many long branches.



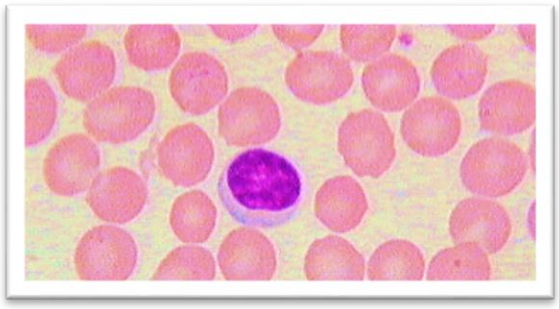
Muscle: There are different types of muscle cells :

- Skeletal muscle: striated, voluntary, shaped like long fibers, multinucleated. skeletal muscle functions will be divided into two general categories that is, **support and movement** and **homeostasis**.
- Smooth muscle: no striated, involuntary, shaped like almonds (tapered ends), one nucleus per cell. This type of muscle make up the walls of many internal organs and structures, it's found in digestive tract , blood vessels and bladder.
- Cardiac muscle: striated, involuntary, branched, shaped like fibers cross-linked to one another, typically one nucleus per cell. It has one job, keep our heart pumping,

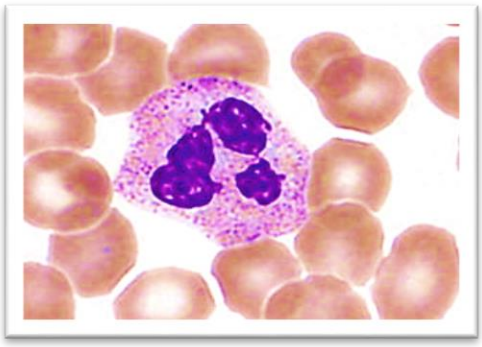
so blood moves throughout your body. When cardiac muscle contracts, your heart compresses pushing out blood. When it relaxes, blood is able to flow back in.



Immune cells: Are the cells that respond when the body is infected (by a bacterium, for instance). To do their job, they need to be able to change shape. For instance, lymphocytes may need to move through body tissue to get to the site of infection, so they change their shape to squeeze past tightly packed tissue cells. Some immune cells (such as neutrophils) engulf bacteria and viruses, so they need to change their shape to 'swallow' them.



Lymphocyte



Neutrophil

Neutrophil engulf bacteria