4. OBTAIN A PREPARED SLIDE LABELED SMOOTH MUSCLE. Examine the slide and compare with the illustration and the model. Smooth, or visceral, muscle is involuntary. Note the spindle-shaped cells with single nuclei. You may need to focus carefully and adjust the light contrast to make out the boundaries of the different cells.

   Smooth muscle is found in the wall of the intestine and in the walls of blood vessels and many other places.

   When finished with the slide, return it to its source.

PART B — NERVOUS TISSUE

The brain and spinal cord are made up of cells called **neurons** plus support cells collectively named **neuroglia**.

2. OBTAIN A PREPARED SLIDE OF NERVE TISSUE. Examine the slide, looking for irregularly shaped, dark-staining neuron cell bodies. The fibers or long extensions growing out from the body are often obscured on the slide. They have been cut off in Figure 2. These processes, or fibers, are called **dendrites** if they carry impulses toward the cell body and **axons** if they carry impulses away from the cell body.

   When finished with the slide, return it to its source.

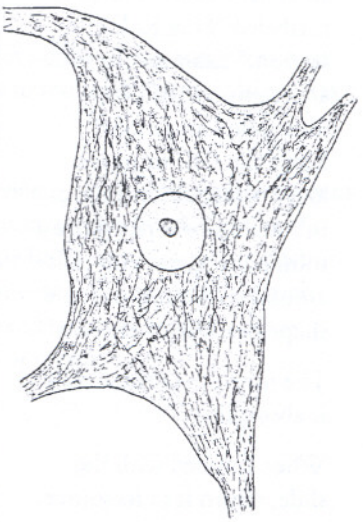

Figure 2. Cow neuron.

PART C — EPITHELIAL TISSUE

This tissue is named for the locations it lines and covers. It forms the outer cover of our bodies and lines most of its inner cavities. It has a number of functions, depending on form and location.

There are three categories of epithelium, named for their proportions: **squamous** or scale-like, **cuboidal,** and **columnar**.

Each may be **simple epithelium**, with just a single layer, or **stratified epithelium**, with many layers. Epithelium may have hairlike extensions called **cilia** or cellular extensions called **microvilli**.

1. OBTAIN A PREPARED SLIDE OF SIMPLE SQUAMOUS EPITHELIUM. Examine the prepared slide and compare it with the illustration and model. In low power, note the close packing of the flat cells. What is the shape of the cells?

   In high power, examine an individual cell and identify cell membrane, cytoplasm, and nucleus.

   Try to estimate the size of an epidermal cell.

   Recall your observation of human cheek cells. What type of tissue lines the mouth?