

# TISSUES AND SKIN

## INTRODUCTION

In this lab you will examine prepared slides of human skin and several different types of tissue. A **TISSUE** is defined as a group of similar cells and associated intercellular material (= **MATRIX**) that function together to carry out specific activities. There are **FOUR BASIC TYPES** of human tissue: (1) **EPITHELIAL TISSUE**, (2) **CONNECTIVE TISSUE**, (3) **MUSCLE TISSUE**, and (4) **NERVOUS TISSUE**. Within each of the four basic tissue types there are several **SPECIFIC TISSUE** types that will be discussed later.

**EPITHELIAL TISSUE** covers body surfaces and/or lines hollow organs, body cavities and ducts, and can form certain types of glands.

**CONNECTIVE TISSUE** is a diverse grouping of tissues that protects and supports the body or specific parts of the body, secures organs to other structures, serves as an energy reserve (fat), or provides immunity and transports substances throughout the body (blood).

**MUSCLE TISSUE** functions in movement of the body, body parts, or substances within the body

**NERVOUS TISSUE** initiates and transmits nerve impulses to coordinate bodily functions.

An **ORGAN** is defined as two or more tissues that function together to perform specific activities. **SKIN** is composed of several types of tissues and therefore, is considered an organ.

## PROCEDURE

- 1) Remove a prepared tissue slide from the file folder at your bench.
- 2) Use caution when focusing the microscope (as explained in the previous lab) to avoid crushing the slide.
- 3) Look at the tissues using all objective lenses, but note that most structural details are best seen under higher magnification.
- 4) From each slide identify (1) the basic tissue type, (2) the specific tissue type and (3) the cellular structures of the prepared slide using the tables.
- 5) When you are finished with the slide, put it back in the correct place in the slide folder and select another slide.
- 6) **DO NOT LEAVE THE SLIDE ON THE STAGE WHEN STORING THE MICROSCOPE.**