

Lab 5: Integumentary System

The skin is the largest organ in the human body and it is comprised of many tissues, including epithelia, connective tissues, muscle, and nervous tissue. Review the basic structure of the skin using Figure 7.1 and the models provided. Examine slides of thick skin, thin skin, and Pacinian corpuscles. Identify as much detail as possible. You will not be responsible for the information about fingernails or hair follicles.

1. Name the *main* layers of the **skin** from the surface on inward.

2. Name the layers of the **epidermis** of *thick* skin from the outside in. What is different in the epidermis of *thin* skin?

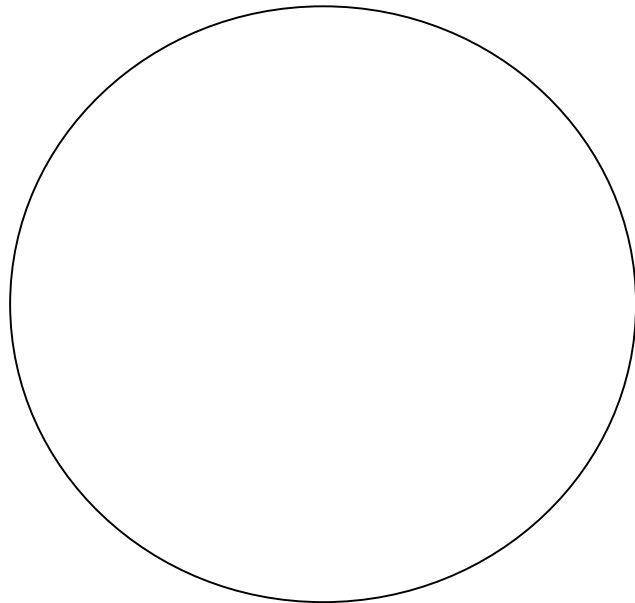
3. Name the small sense organs in the skin and where they are found.

Slide Assignment: Integumentary System

(Exercise 7 in Lab Text, Chapter 12 in Histology Text)

Draw the following slides using the figures in the lab and histology texts as a reference. Use whichever magnification works best to show all given structures. Please note that not every slide will show everything; you will need to look at multiple slides and/or sources. Your drawings should artistically combine views to include all structures.

- **Thick Skin** (Pacinian Corpuscle slide is also Thick Skin) - label and understand function of the following:
 - Epidermis (Stratified Squamous Keratinizing/Cornified Epithelia)
 - Stratum Corneum
 - Stratum Lucidum
 - Stratum Granulosum
 - Stratum Spinosum
 - Stratum Basale
 - Meissner's (Tactile) Corpuscle
 - Dermis (Dense Irregular CT)
 - Dermal Papillae (Papillary Layer)
 - Reticular Layer
 - Sweat Glands (Simple or Stratified Cuboidal Epithelia)
 - Hypodermis (Adipose Tissue)
 - Pacinian or Lamellar Corpuscle



- **Thin Skin** – label and understand function of the following:
 - Epidermis (Stratified Squamous Keratinizing/Cornified Epithelia)
 - Stratum Corneum
 - Stratum Granulosum
 - Stratum Spinosum
 - Stratum Basale
 - Meissner's (Tactile) Corpuscle
 - Hair Follicle
 - Sebaceous Gland
 - Arrector Pili Muscle
 - Dermis (Dense Irregular CT)
 - Dermal Papillae (Papillary Layer)
 - Reticular Layer
 - Sweat Glands (Simple or Stratified Cuboidal Epithelia)
 - Hypodermis (Adipose Tissue)
 - Pacinian or Lamellar Corpuscle

