

Biology 102 Lab Tissues

Animal Tissues

Epithelial tissue (covering and lining)

- A. simple squamous epithelium (kidneys, air sacs of lungs, blood vessels, body cavity)
- B. simple cuboidal epithelium (kidneys, secretory tubules, ovary surface)
- C. simple columnar epithelium (lining of digestive tract, some glands, parts of uterus)
- D. pseudostratified columnar epithelium (trachea, vas deferens, large glands)
- E. stratified squamous epithelium (esophagus, mouth, vagina, skin)
- F. stratified columnar epithelium (male urethra, some glands)
- G. transitional epithelium (ureters, bladder, part of urethra)

Connective tissue

I. Connective tissue proper

A. Loose connective tissue

- 1. areolar connective tissue (under epithelial linings of body)
- 2. adipose tissue (fatty tissue)
- 3. reticular connective tissue (lymph nodes, bone marrow, spleen)

B. Dense connective tissue

- 1. dense regular connective tissue (tendons, most ligaments, aponeuroses)
- 2. dense irregular connective tissue (dermis of skin, capsules of joints)

II. Cartilage

- A. Hyaline cartilage (ends of bones, costal cartilage of ribs, nose, trachea, larynx)
- B. Elastic cartilage (external ear, epiglottis)
- C. Fibrocartilage (intervertebral discs, knee joint, pubic symphysis)

III. Bone: osseous tissue (bones)

IV. Blood

Nervous tissue: neurons (brain, spinal cord and nerves)

Muscle tissue

- A. skeletal muscle tissue (skeletal muscles)
- B. cardiac muscle tissue (the heart)
- C. smooth muscle tissue (walls of hollow organs)

Plant Tissue Systems and Cell Types

Epidermis tissue

Vascular tissue

Ground tissue

Parenchyma cells

Collenchyma cells

Sclerenchyma cells

- A. fiber cells
- B. sclereids

Water conducting cells

- A. tracheids
- B. vessel elements

Food conducting cells

- A. sieve tube members
- B. companion cells