

# Connective Tissue

## Chapter Three:

**What is the function of Dense Connective Tissue?**

- Functions to reinforce and bind body structures

**What are the types of Dense Connective Tissue? and their function?**

- Regular- Tightly bound, minimally vascular collagen fibers with few elastic fibers. Unidirectional Force tensile strength
- Irregular- Collagen bundles denser than regular dense CT, can withstand force from many directions
- Elastic- Mostly elastic and collagen, found in areas of the body that require stretching

**What are Tendons and Ligaments?**

- Tendons - connect muscle to bone and enhance locomotion
- Ligaments - connect bone to bone and limit locomotion

**What are the types of Cartilage and where can you find them, what is their function?**

- Hyaline - Maintains Integrity, Long Bones
- Fibrocartilage - Shock Absorption, Knee, Pelvis, Between Vertebrae
- Elastic - ability to change shape then return to original shape Epiglottis and Ear

**Why is blood a connective tissue? Describe the 6 CT Characteristics.**

- Yes, derived from mesenchymal cells, has blood cells (cellular) surrounded by fluid matrix (plasma), Has soluble protein molecules, which allow for clotting factors (fibers)

### **What is Osseous Tissue and its Function?**

- Two Types, Compact and Spongy, have a combination of collagen fibers and calcium salts. Is utilized for structure and protection.

### **What are the 4 types of Membranes? What are their functions?**

- Mucous - Lines organs that have a connection to outside environment, defied by air exposure
- Serous - Lines closed body cavities, never exposed to outside environment
- Cutaneous - Lines organs exposed to outside environment
- Synovial - Joints and synovial fluid

### **What is the Tissue Membrane function?**

- Thin, Protective layer that lines body cavities, separates organs, and covers surfaces.

### **What is Nervous Tissue and its function?**

- Has a role in body communication, work with internal and external stimuli.

### **What is Muscle Tissue and its function?**

- Is heavily vascular and innervated, muscle allows for locomotion and internal bodily movements.

### **There are 3 types of Muscles what are they?**

- Skeltal, Cardiac, and Smooth,

### **What gives the Cell shape and support**

- Microtubules
- Microfilaments - Which uses Actin and Myosin

# Week 2 Lab

**What gives the Cell shape and support**

- Microtubules
- Microfilaments - Which uses Actin and Myosin

**What does the Mitochondria do?**

- Mitochondria produces energy in the form of ATP by breaking down Glucose

**Smooth ER does what?**

- Synthesis and storage of Lipids

**Rough ER does what?**

- Production of Proteins

**Where can you find Ribosomes, and what do they do?**

- Either Free or Bound to Rough ER
- translation of proteins

**What does Golgi Apparatus do to Proteins ?**

- Modifications of proteins, add sugar or lipid to make lipoprotein and glycoprotein.

**What do Lysosomes do?**

- Phagocytosis, is a digestive vesicle

**Where is the site of transcription?**

- Nucleus

**What is also referred to as a phospholipid bilayer, what does it do?**

- Plasma Membrane - Separates cells from outside environment, controls what exits and enters.