

Connective Tissue

Chapter Three:

What are the 4 major classes of CT?

- CT Proper, Cartilage, Osseous, Blood

What makes a CT?

- Vascularity, ECM, Ground Substance, Extracellular Fibers, Cells
Dense, Derived from Mesenchymal Stem Cell.

What is ECM?

- The space between cells, is a mixture between extracellular fibers and ground substance.

What is Ground Substance?

- The medium where cells exchange waste and nutrients with the bloodstream.

What are the major differences between CT and ET?

- CT is Vascular ET is Avascular
- CT has a Extracellular Matrix that includes ground substance and a extracellular fibers, that means a lack of nutrients in ET,
- CT has wide variety of cells while ET does not

What is the most common type of Connective Tissue and what does it do?

- Loose CT- Adipose and Areolar
- Supports organs and vasculature, and cushions organs, insulates body, and stores energy.

What are the six properties of Connective Tissue (they all have in common)?

- CT is cell poor, extracellular matrix rich, has either a high or limited vascularity, most are dense, rigid in structures, but some can be flexible and fluid, service to Connect, Protect and Support.

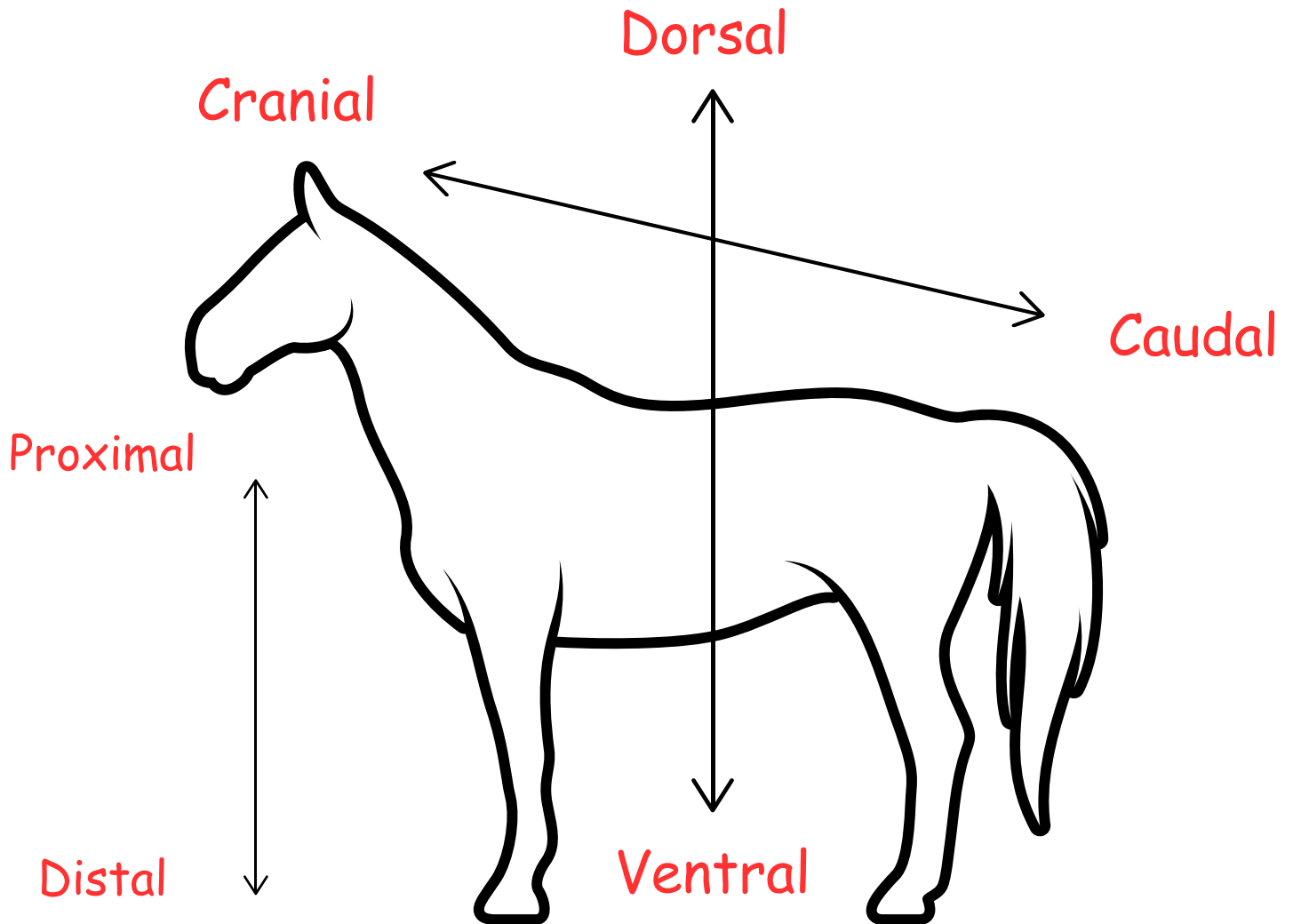
Name the different cell types found in Connective Tissue.

- Fibroblast, Chondroblast, Osteoblast, Hematopoietic Stem Cells, Adipose and Adipocytes, White Blood Cells, Mast Cells, Macrophages

Fiber	Function	Composed Of	Example
Collagen Fiber	single, strong thick strands of collagen Tensile strength in one direction	single, strong thick strands of collagen	Tendons and Ligaments
Elastic Fiber	Branched fibers of elastin, elastic quality, stretch and contract	Branched fibers of elastin,	Lungs, Blood vessels, vocal cords
Reticular Fiber	Thin, delicate branched fiber of collagen, provides support around organ complex	Thin, delicate branched fiber of collagen	Endocrine gland, Liver, Nerves, Muscle Fibers, Capillaries

Week 1 Lab:

Label the directional terms then give the definition .



Cranial: Towards the head

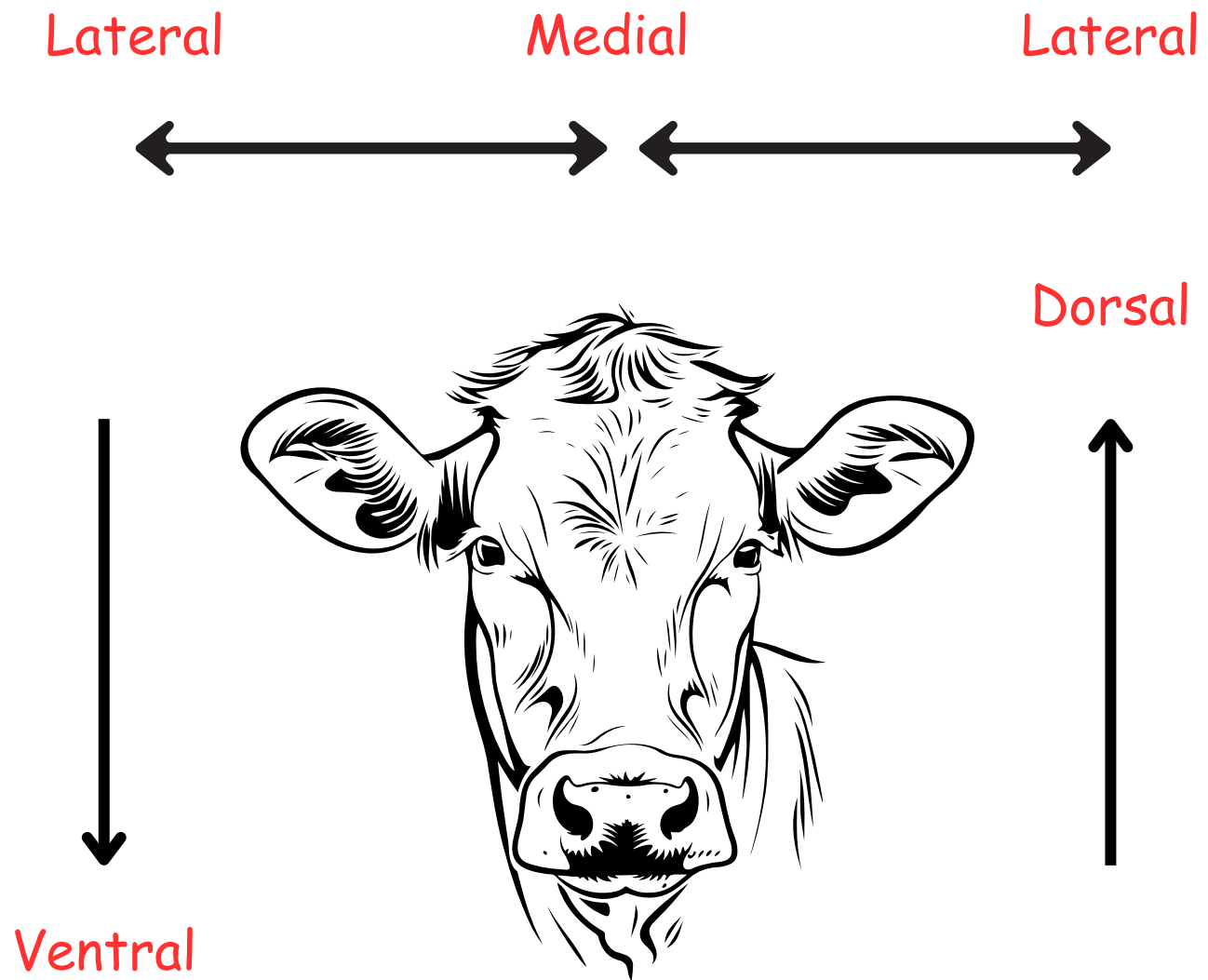
Caudal: Towards the rump

Dorsal: Towards the spine

Ventral: Towards the belly

Proximal: Closer to the body.

Distal: Further than the body



Lateral: Further from the midline.

Medial: Closer to the midline

Dorsal: Towards the spine

Ventral: Towards the belly