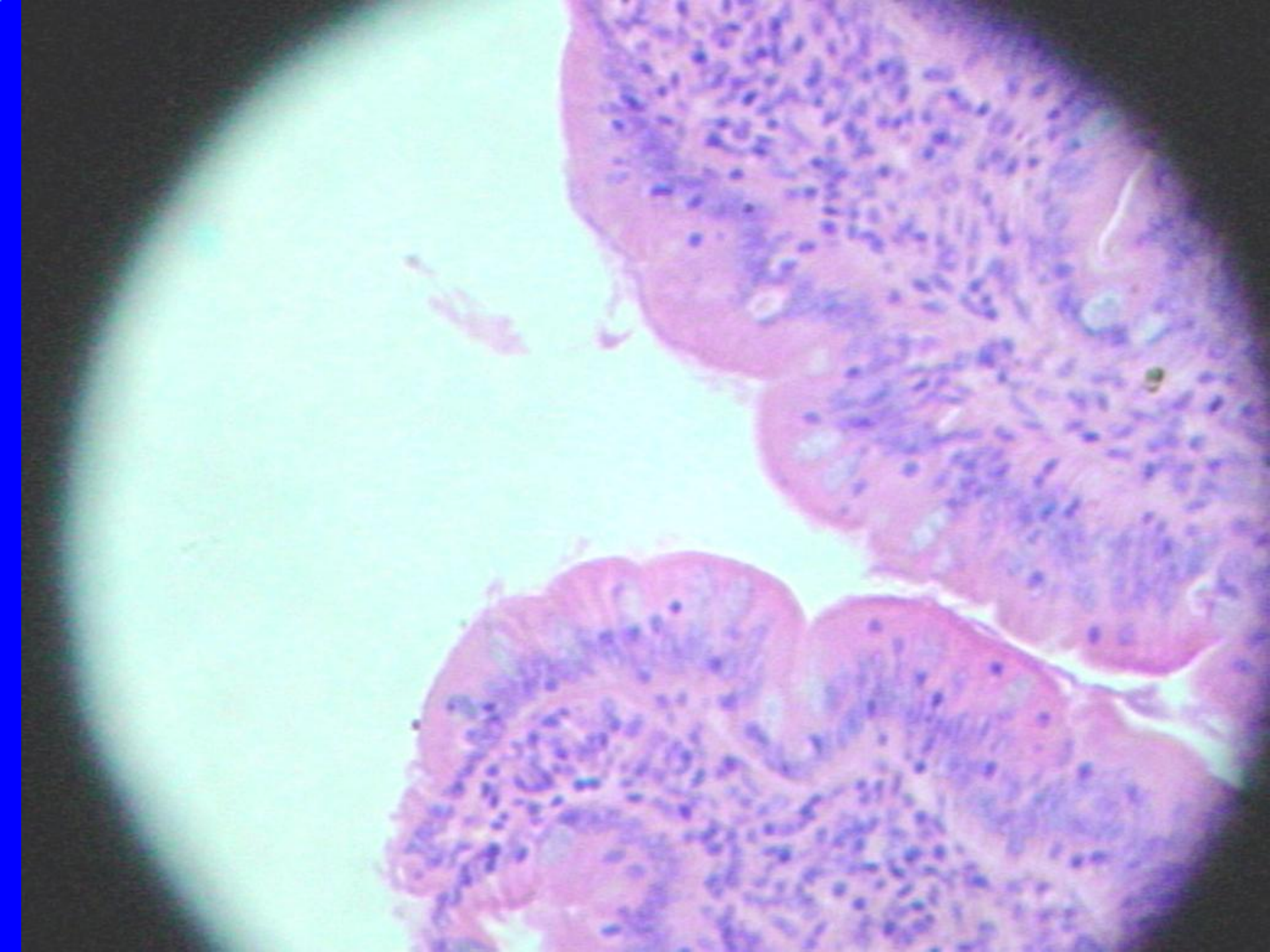


HISTOLOGY PRACTICE QUIZ

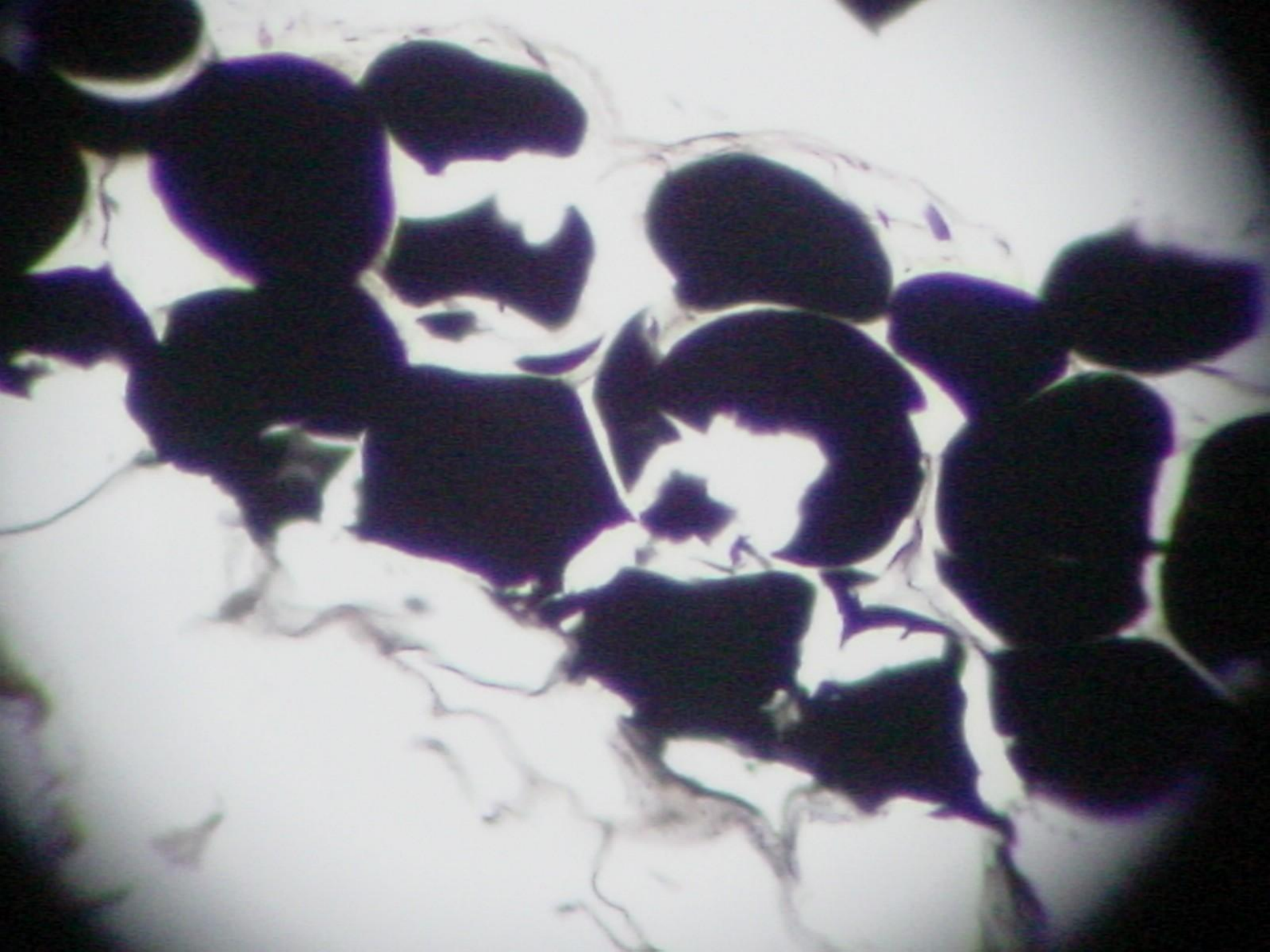
For each tissue:

- 1. be able to identify it (for lab).**
- 2. be able to name a location (lecture and lab)**
- 3. be able to name a function (for lecture)**



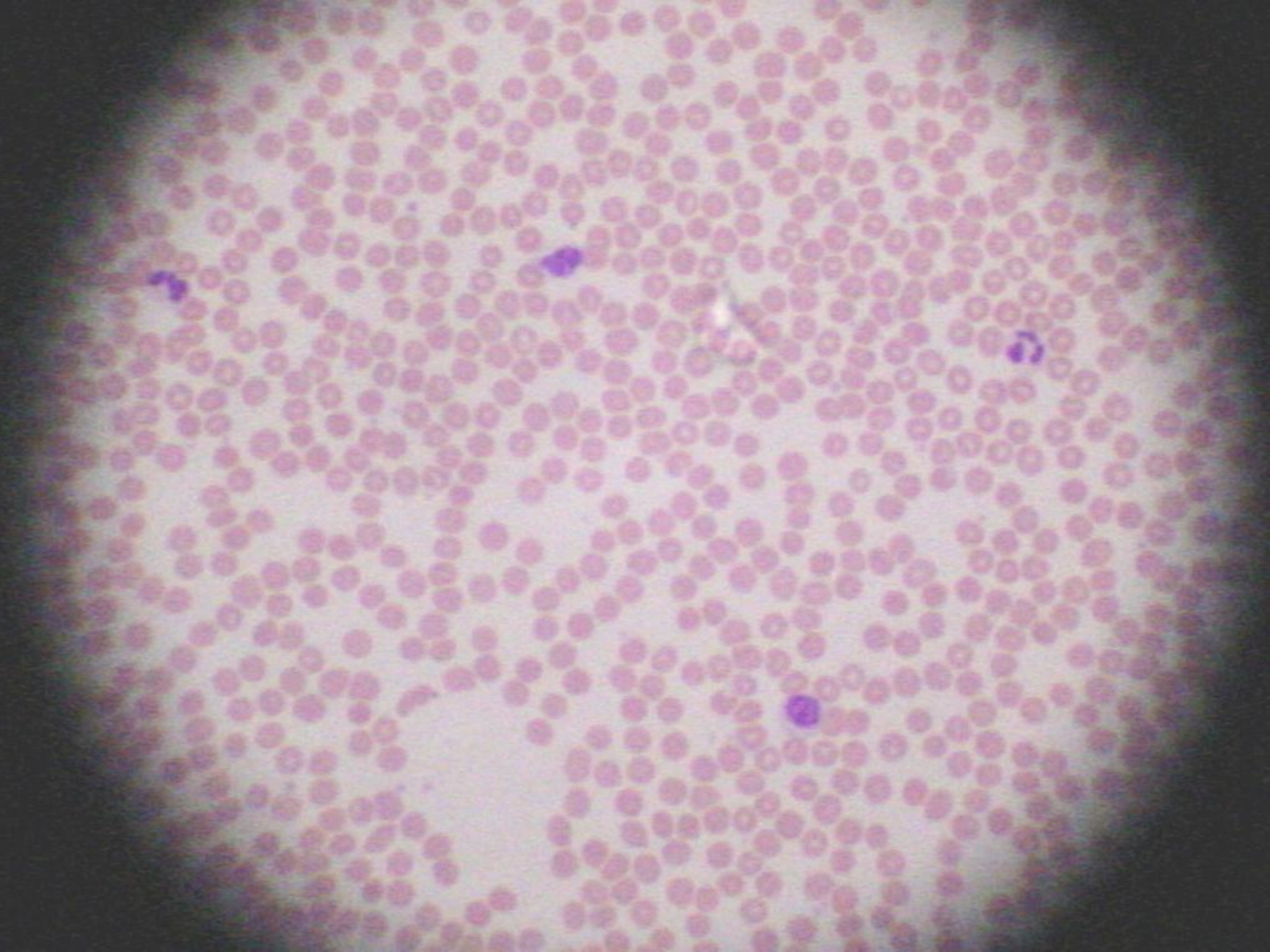
Simple Columnar Epithelium

- **A single layer of elongated cells, whose nuclei are located near the basement membrane**
- **Surface Modifications:**
 - **Goblet cells**
 - **Microvilli**
- **Location: Lining intestine**
- **Function:**
 - **Protection**
 - **Absorption**
 - **Secretion**



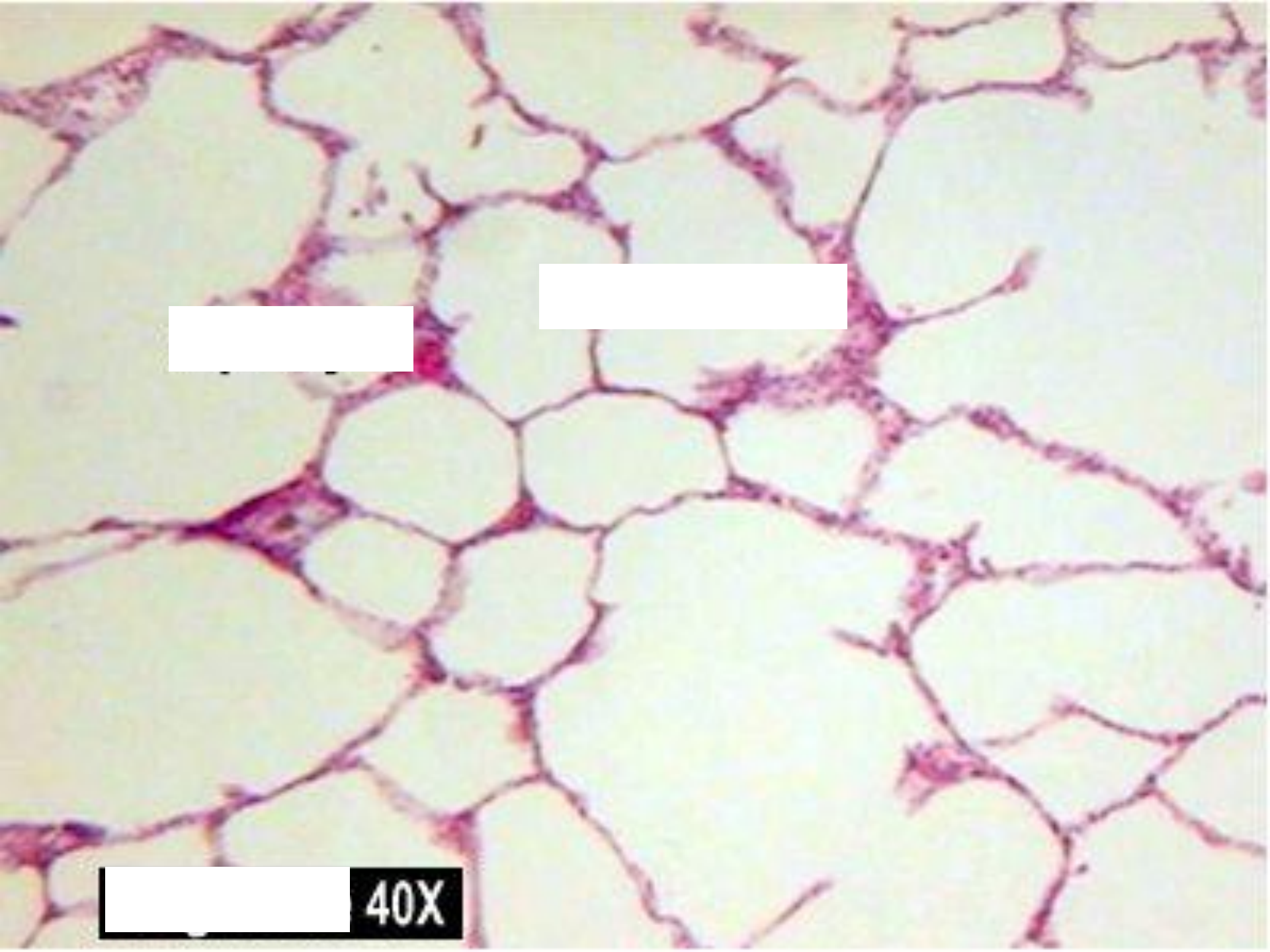
Adipose Tissue

- **Cells:** Adipocytes filled with fat globules
- **Locations:**
 - Subcutaneous layer
 - Breasts
 - Around kidneys and eyeballs
- **Functions:**
 - Energy Store
 - Protection
 - Cushion



Blood

- **Erythrocytes, leukocytes, and thrombocytes in matrix of plasma**
- **Location: within heart and blood vessels**
- **Function: transport**



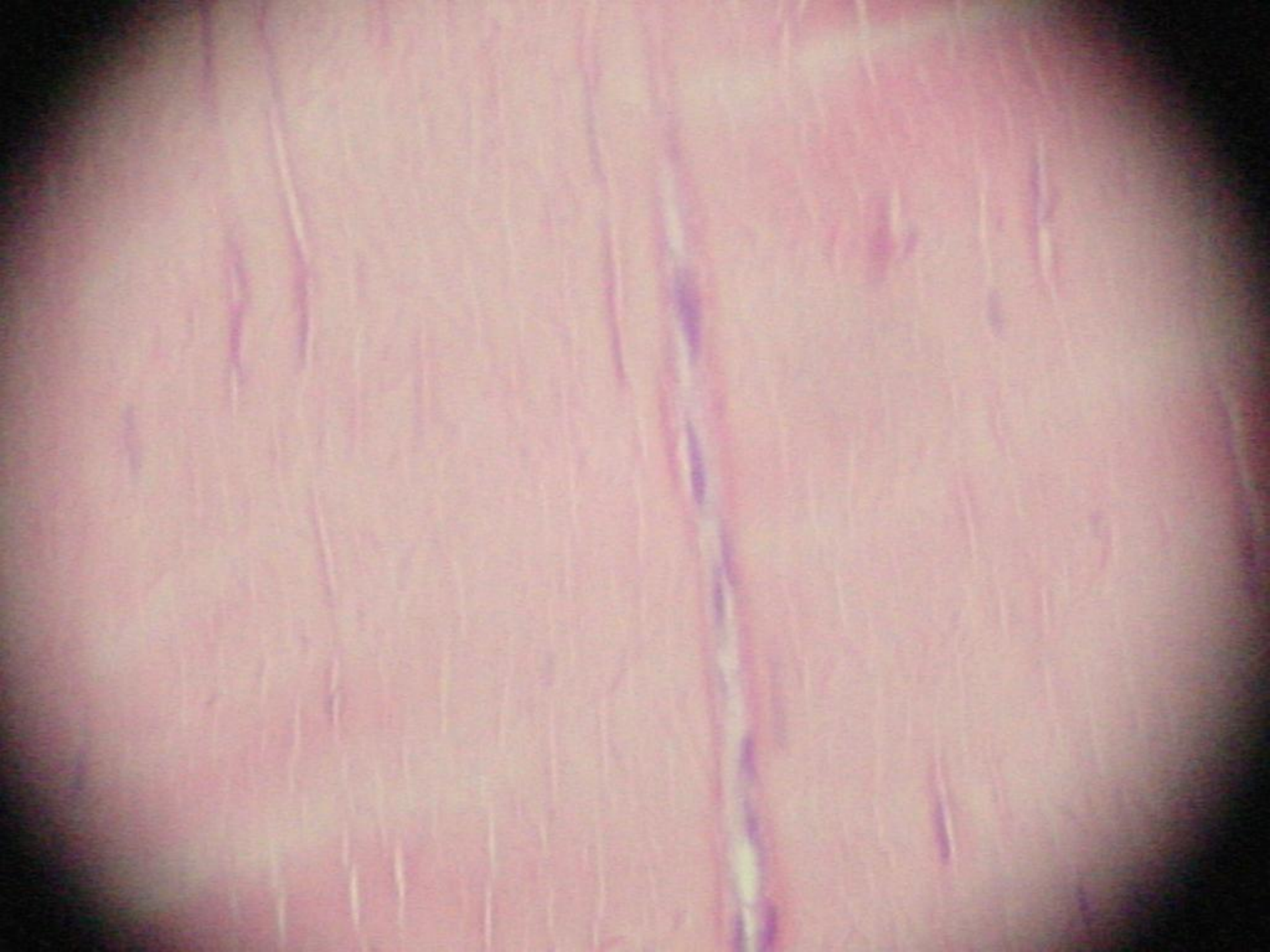
[Redacted]

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Simple Squamous Epithelium

- **A single layer of flattened cells**
- **Locations:**
 - **Lining air sacs (in lungs)**
 - **Lining capillaries**
- **Function:**
 - **Adapted for diffusion
(exchange of gases, nutrients,
wastes)**



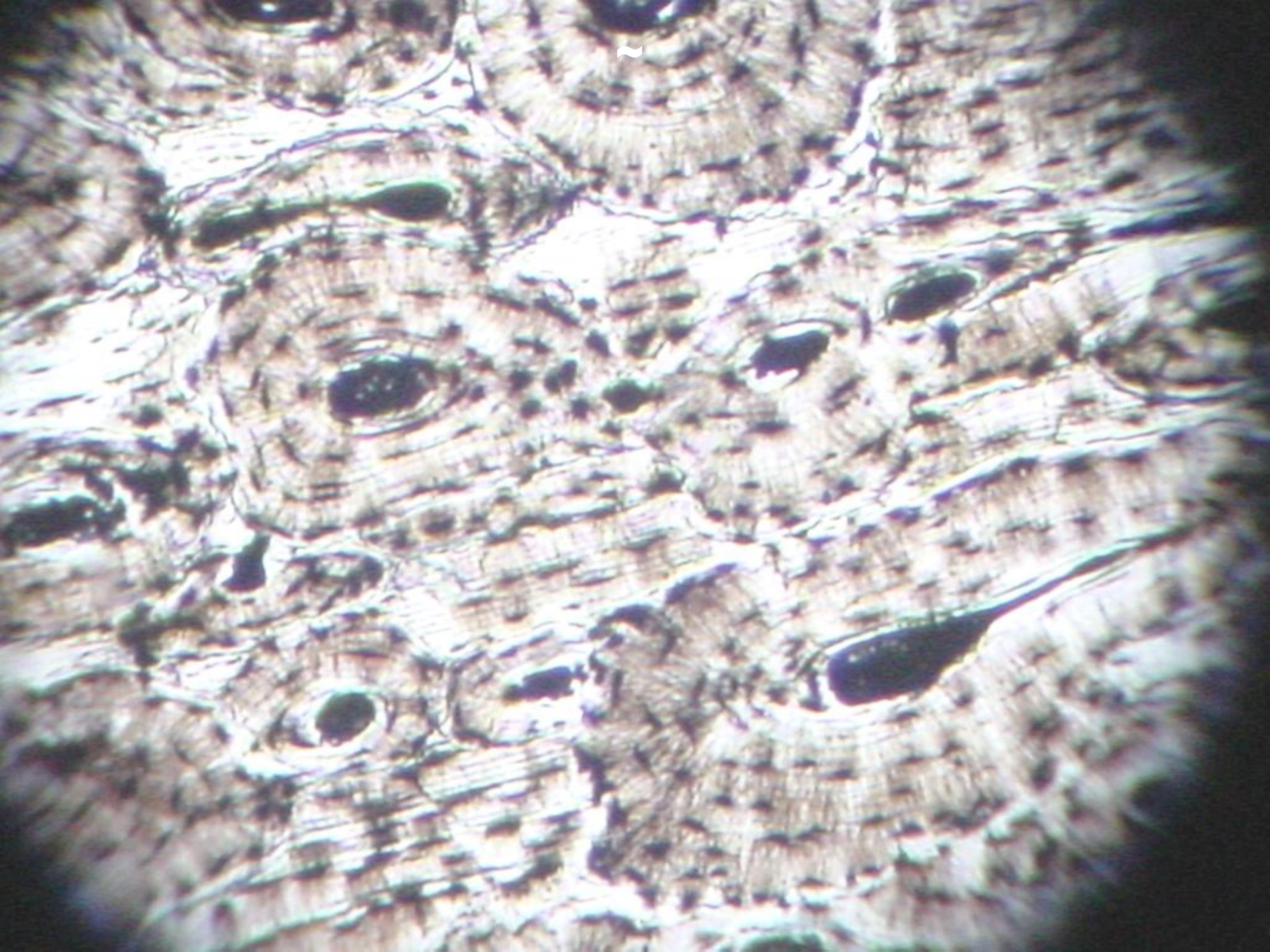
Dense Regular Connective Tissue

- **Matrix of collagen fibers**
- **Locations:**
 - **Tendons**
 - **Ligaments**
- **Function:**
 - **Attachment/ High tensile strength**
- **Lacks direct blood supply**



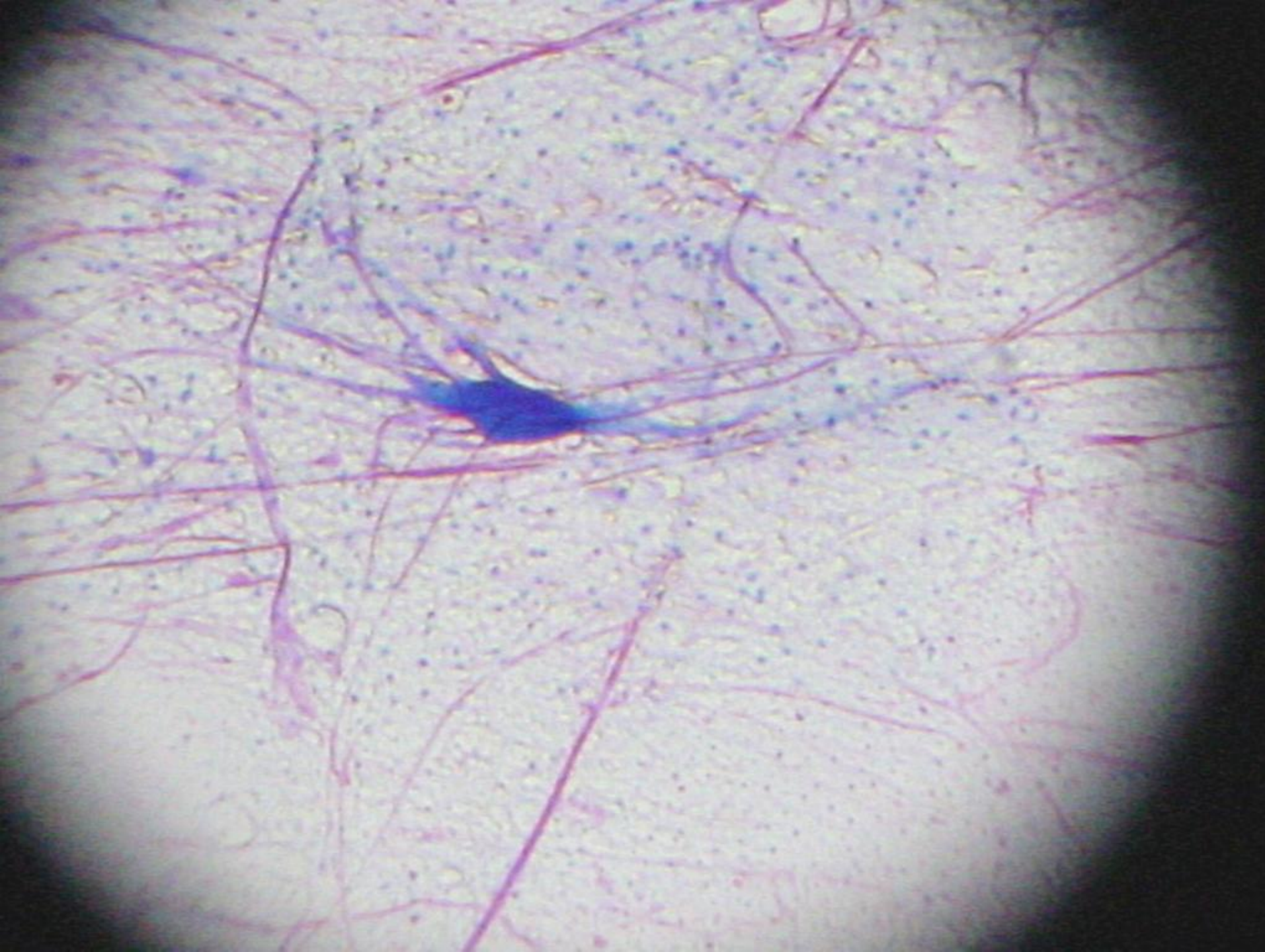
Pseudostratified Columnar Epithelium

- **A single layer of elongated cells whose nuclei are dispersed throughout the cytoplasm**
- **Surface modifications:**
 - **Cilia**
 - **Goblet cells**
- **Location: Lining of trachea**
- **Functions:**
 - **Secretion**
 - **Protection**



Bone (compact)

- **Osteocytes (in lacunae) surrounded by matrix of calcium phosphate and collagen**
- **Location: bones of skeleton**
- **Functions:**
 - **Support**
 - **Protection**
 - **Movement**
 - **Hematopoiesis**
 - **Calcium (mineral) Store**



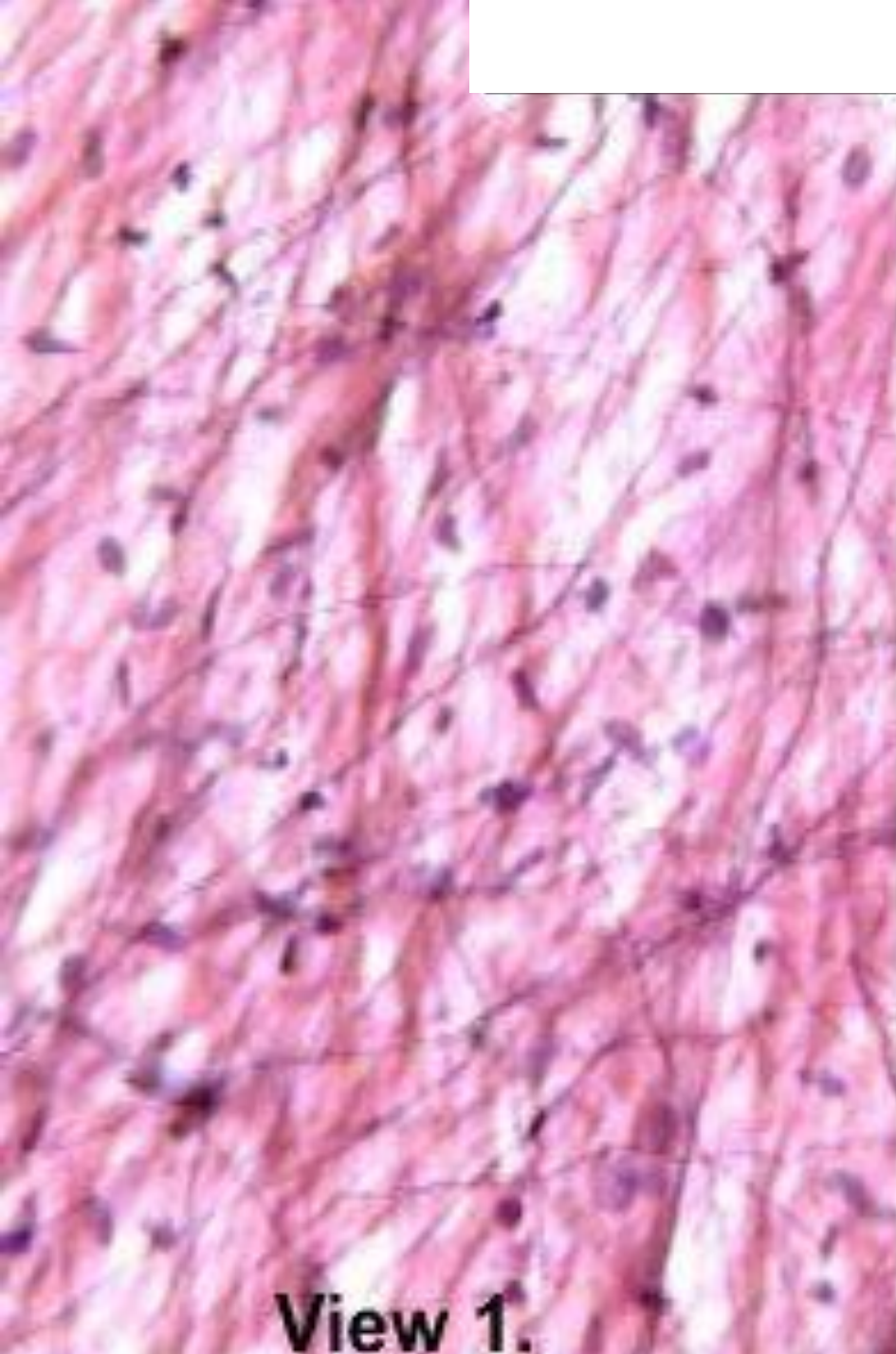
Nervous Tissue

- **Neurons with multiple extensions surrounded by neuroglial cells.**
- **Locations:**
 - **Brain and spinal cord (CNS)**
 - **Nerves (PNS)**
- **Function: Integration of all body parts**
- **No reproduction of cells.**
- **See page 165 in text.**

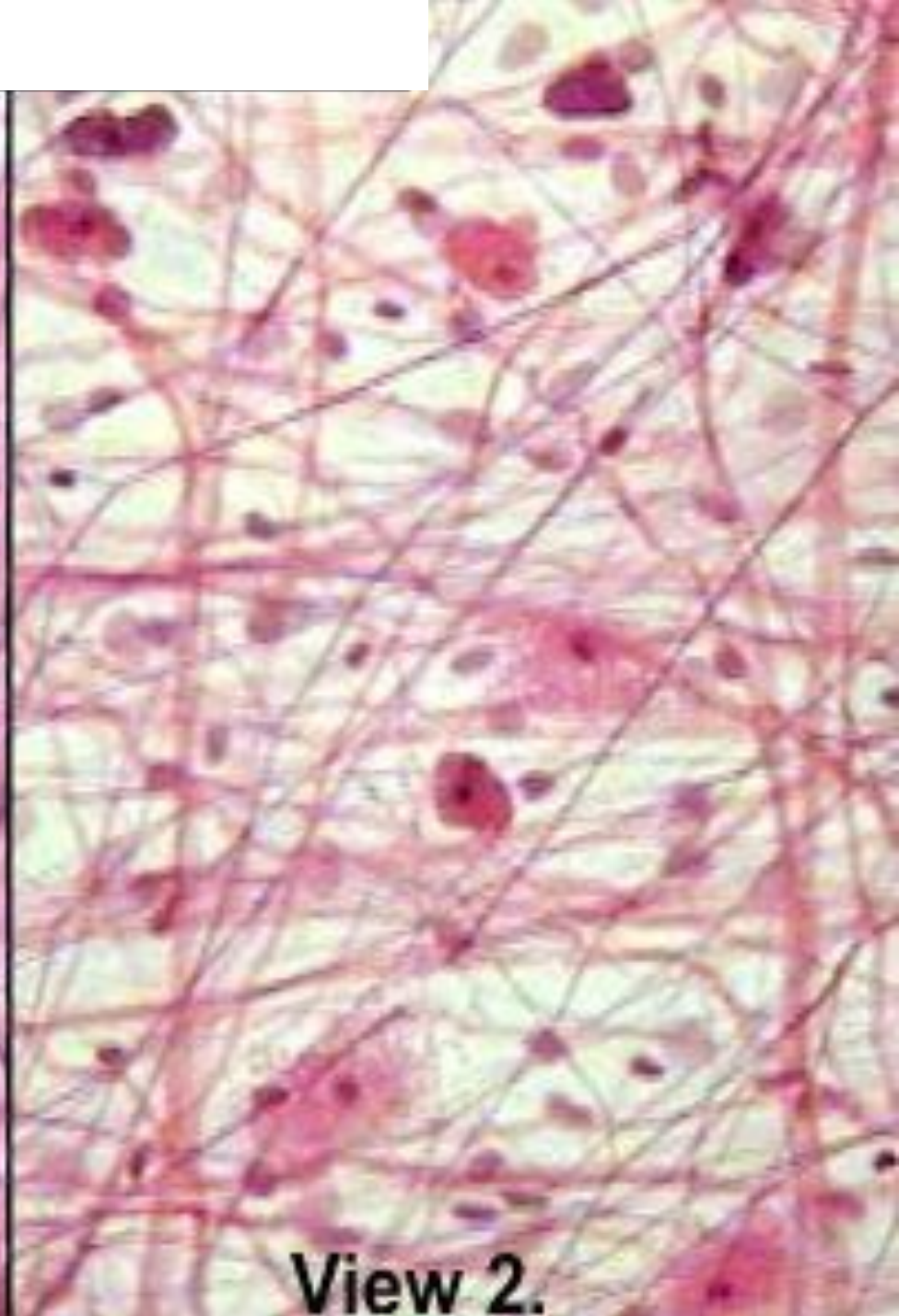


Transitional Epithelium

- **Many layers of cells that change shape due to pressure**
- **Locations:**
 - **Lining of Urinary bladder**
 - **Lining of Ureter**
- **Function:**
 - **distensibility**



View 1.



View 2.

Loose Areolar Connective Tissue

- **Cells: Fibroblasts**
- **Fibers:**
 - **Collagen (stained pink)**
 - **Elastic (stained purple)**
- **Ground Substance**
- **Location: beneath epithelium**
 - **As epithelial membranes**
- **Functions: sappy tissue that lubricates & nourishes epithelial tissue;**



Hyaline Cartilage

- **Cells: Chondrocytes (in lacunae)**
- **Matrix: Chondroitin sulfate and glucosamine in amorphous mix**
- **Locations:**
 - **Wall of trachea and larynx**
 - **Embryonic Skeleton**
- **Function: Structural and flexible support**
- **No direct blood supply**



400X



lumen

Simple Cuboidal Epithelium

- **A single layer of cube-shaped cells with large prominent nuclei**
- **Locations:**
 - **Glands (*)**
 - **Lining kidney tubules**
- **Functions:**
 - **Secretion (*only function)**
 - **Absorption**

Good luck, studying!!!

