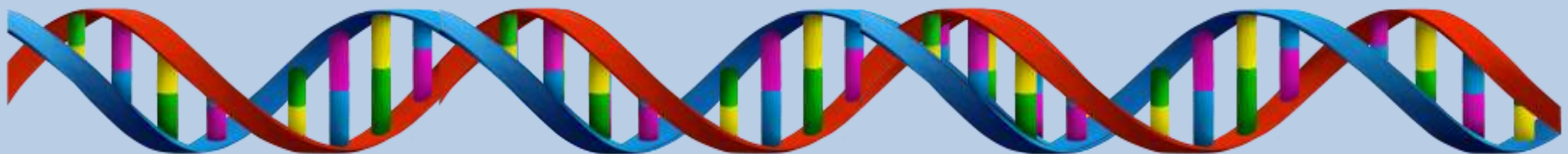


- 1. What is homeostasis?**
- 2. Why is maintaining homeostasis important?**
- 3. What determines function?**
- 4. Where do vesicles come from?**
- 5. What do lysosomes protect cells from?**
- 6. Is the nucleus the brain of the cell?**



Logistics

- **BRING YOUR EGG ON MONDAY**



Cells

- **Put everything away except a pencil**

Comparing Cell Structures

- Around the room there are 16 microscopes set up
- Go around the room and make observations of each type of cell
- On notebook **page 35** for each station:
 - Write the tissue type
 - Sketch a picture of what you are observing
 - Describe the cells;
 - How close together are they?
 - What shape do they have?

Comparing Cell Structures

- Through a microscope animal cells look like this... What organelles can you see?



Comparing Cell Structures

- On notebook **page 35** for each station:
 1. Write the tissue type
 2. Sketch a picture of what you are observing
 3. Describe the cells;
 - How close together are they?
 - What shape do they have?

Comparing Cell Structures

- **WHEN YOU ARE DONE MAKE SURE YOUR NOTEBOOK IS CAUGHT UP:**

Page	Title of Page	Check	Page	Title of Page	Check
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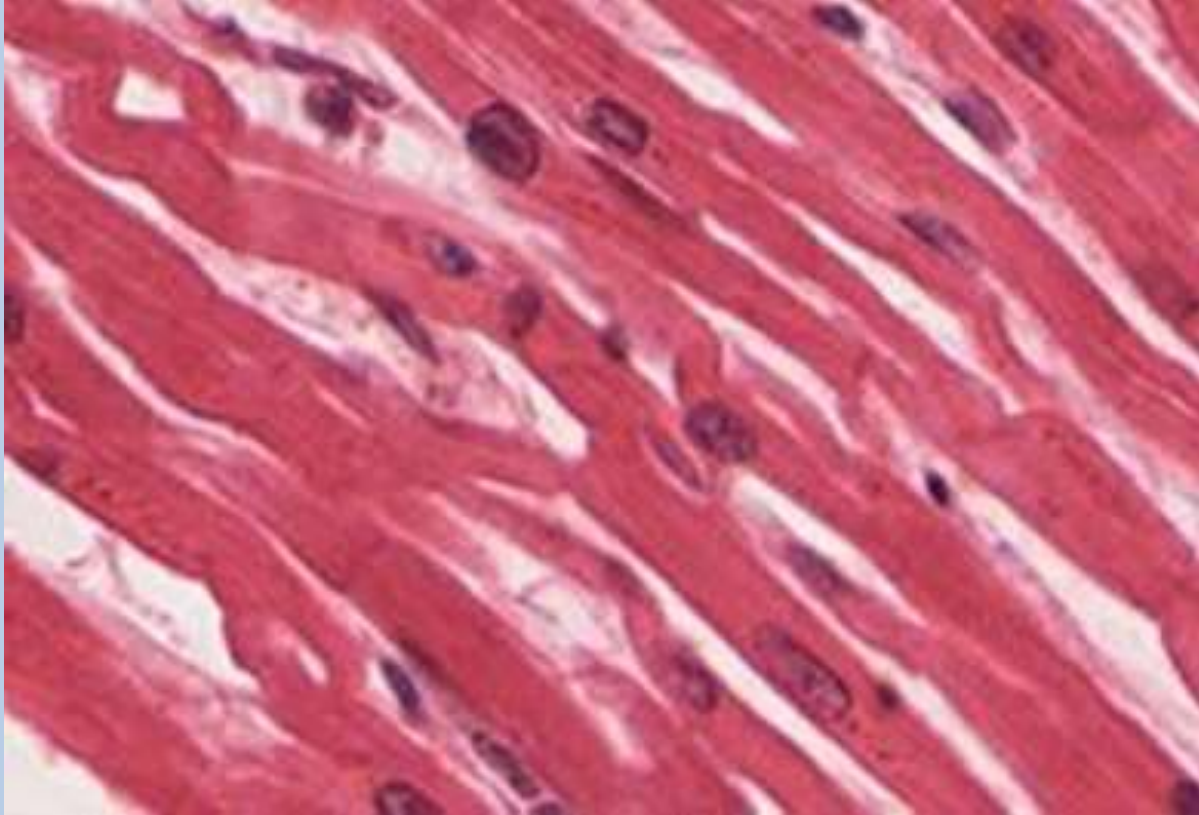
Comparing Cell Structures

- In your groups discuss differences between the cell types that you observed

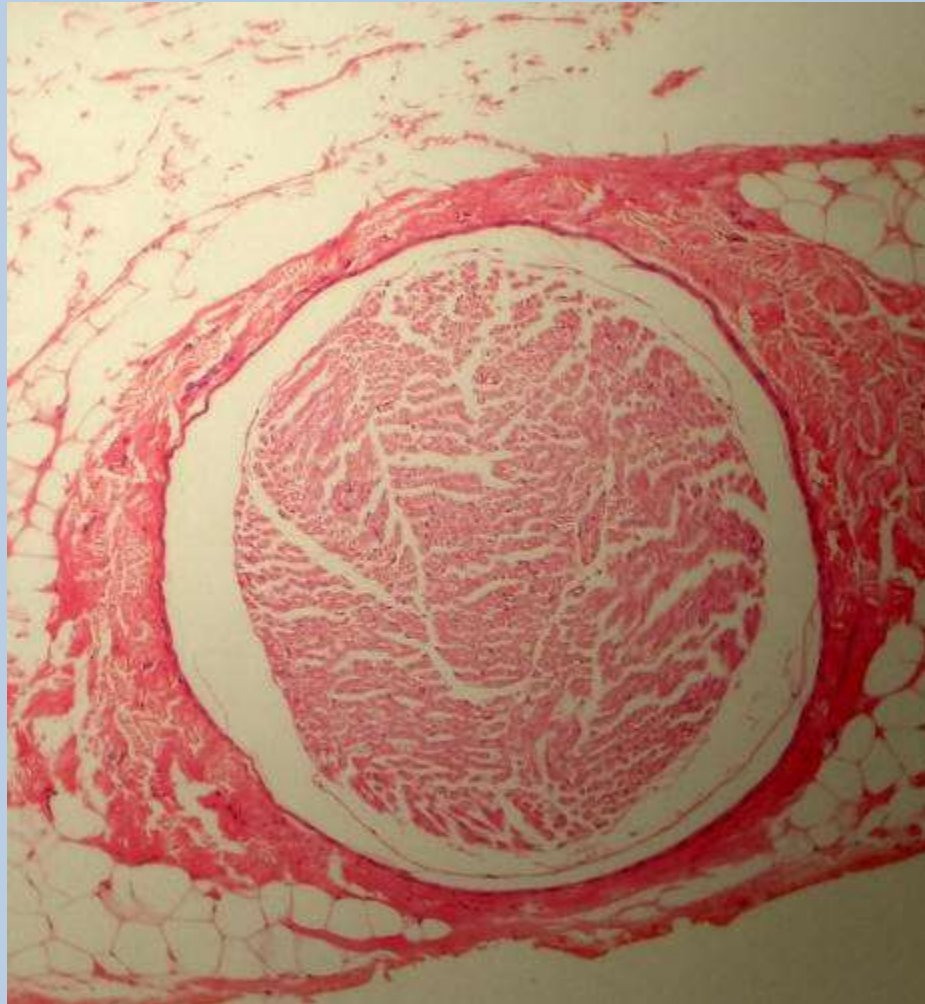
Comparing Cell Structures

- Write down the differences that you saw, and **PREDICT WHY THESE DIFFERENCES IN STRUCTURE EXIST**

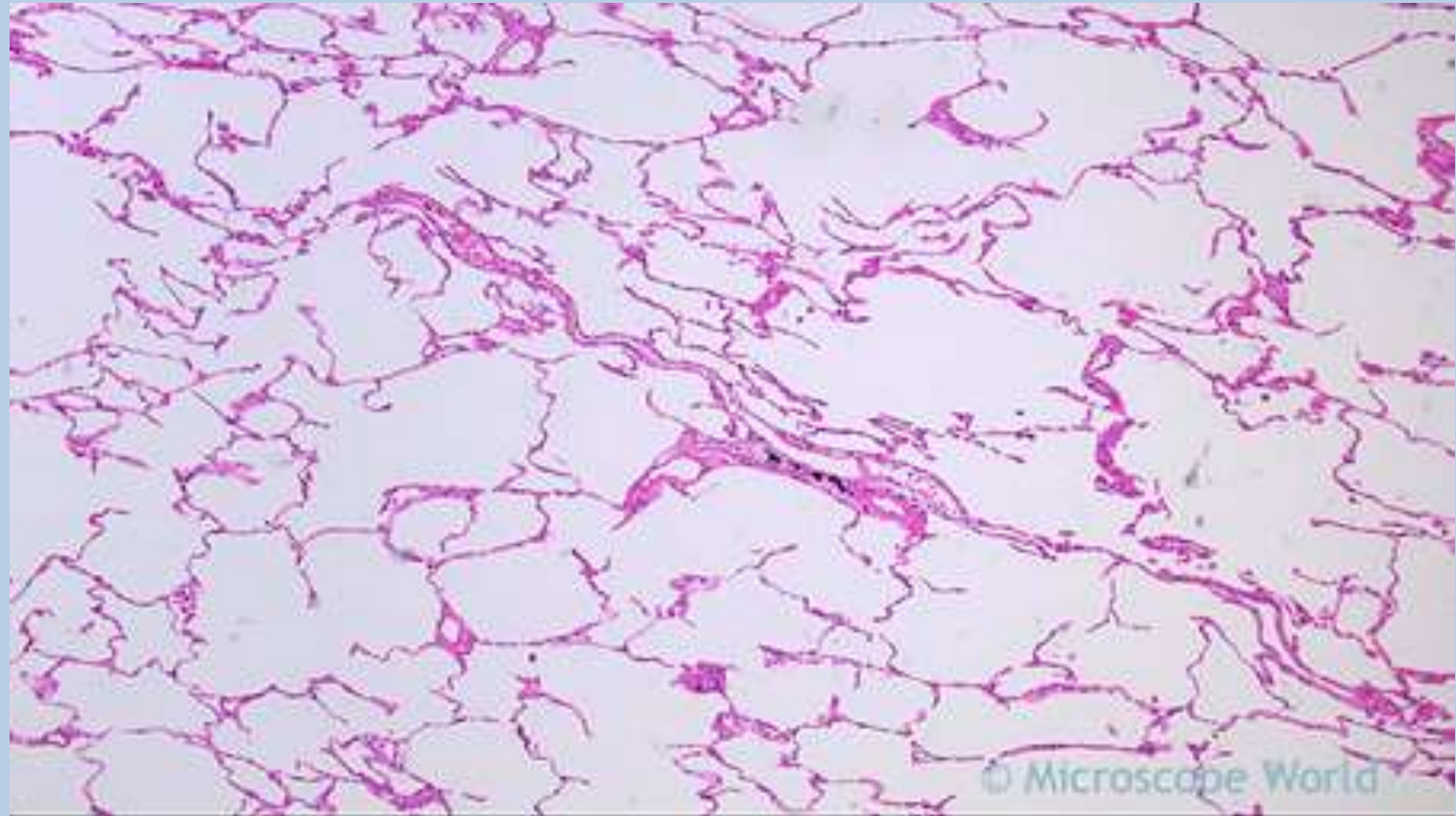
Human Heart Muscle



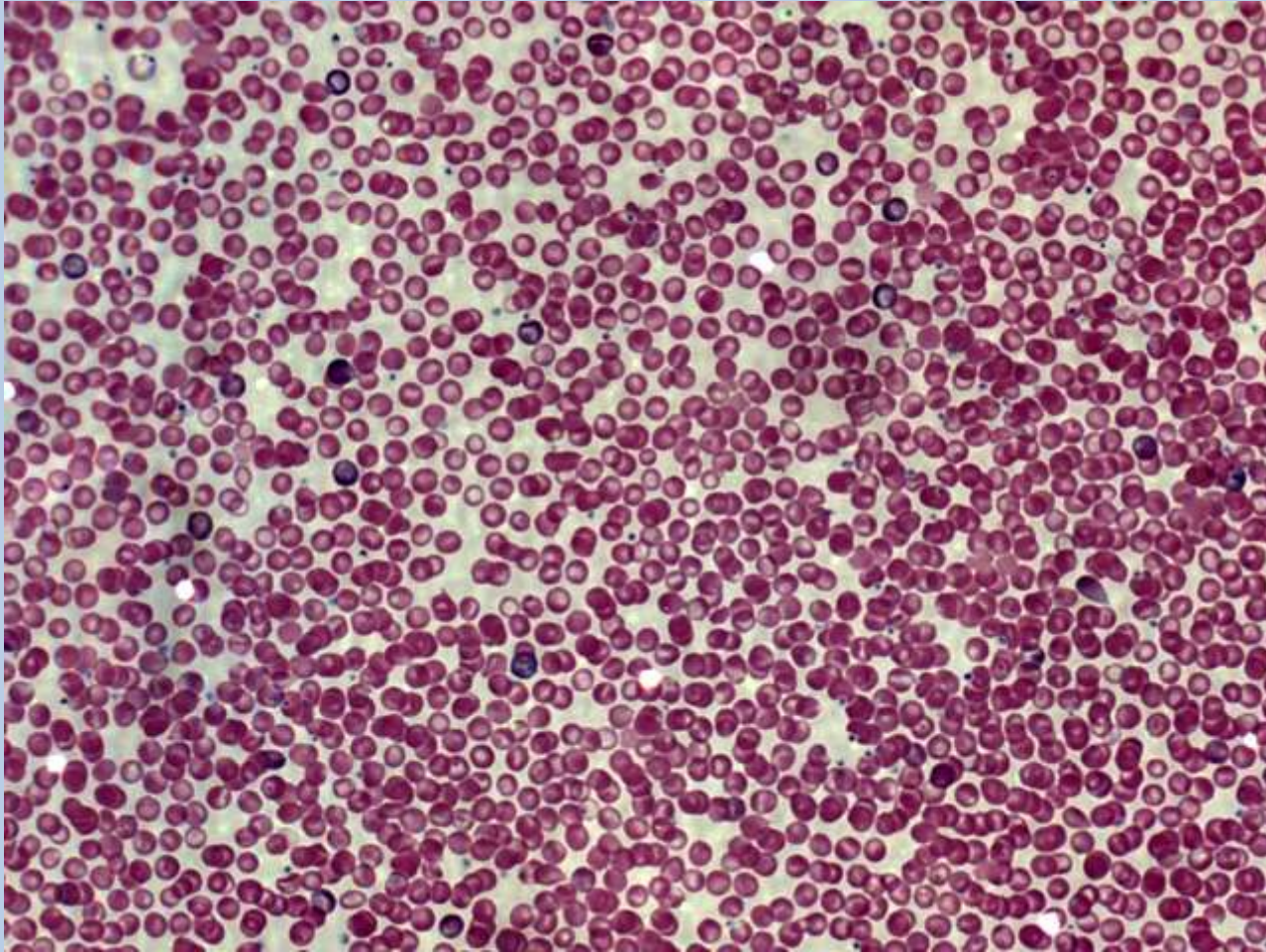
Human Artery



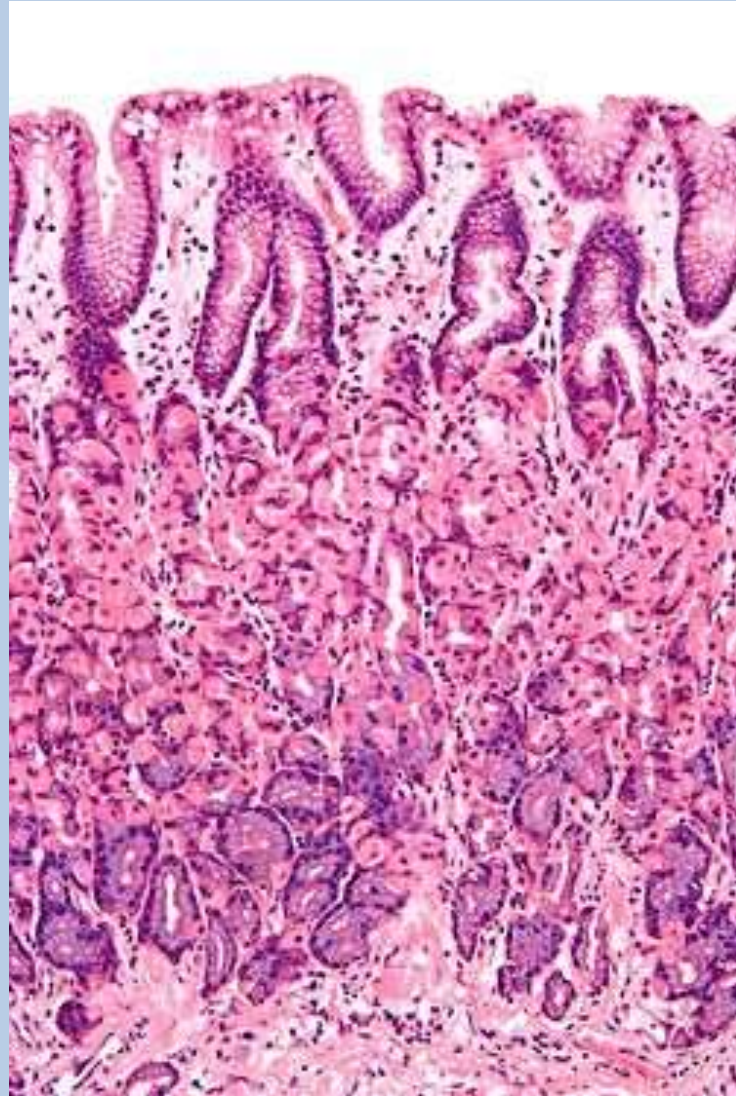
Human Lung



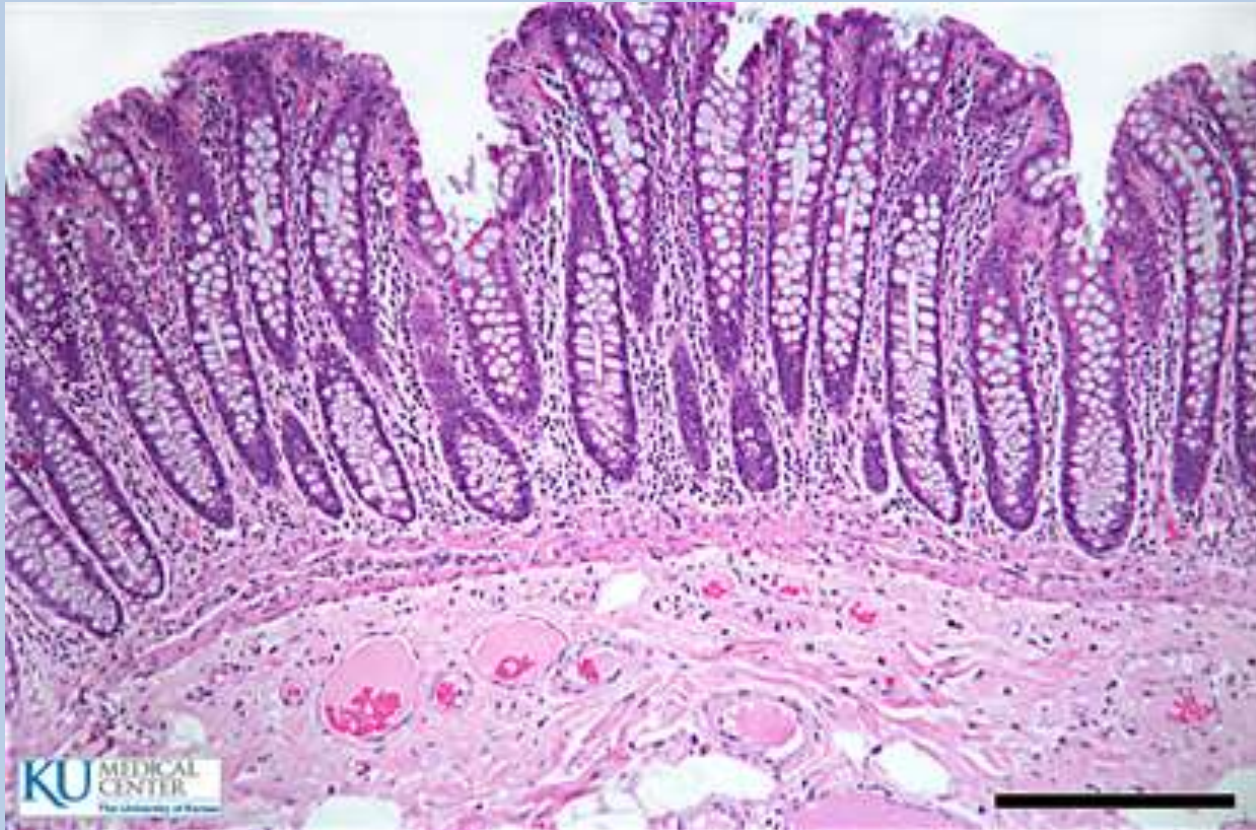
Human Blood



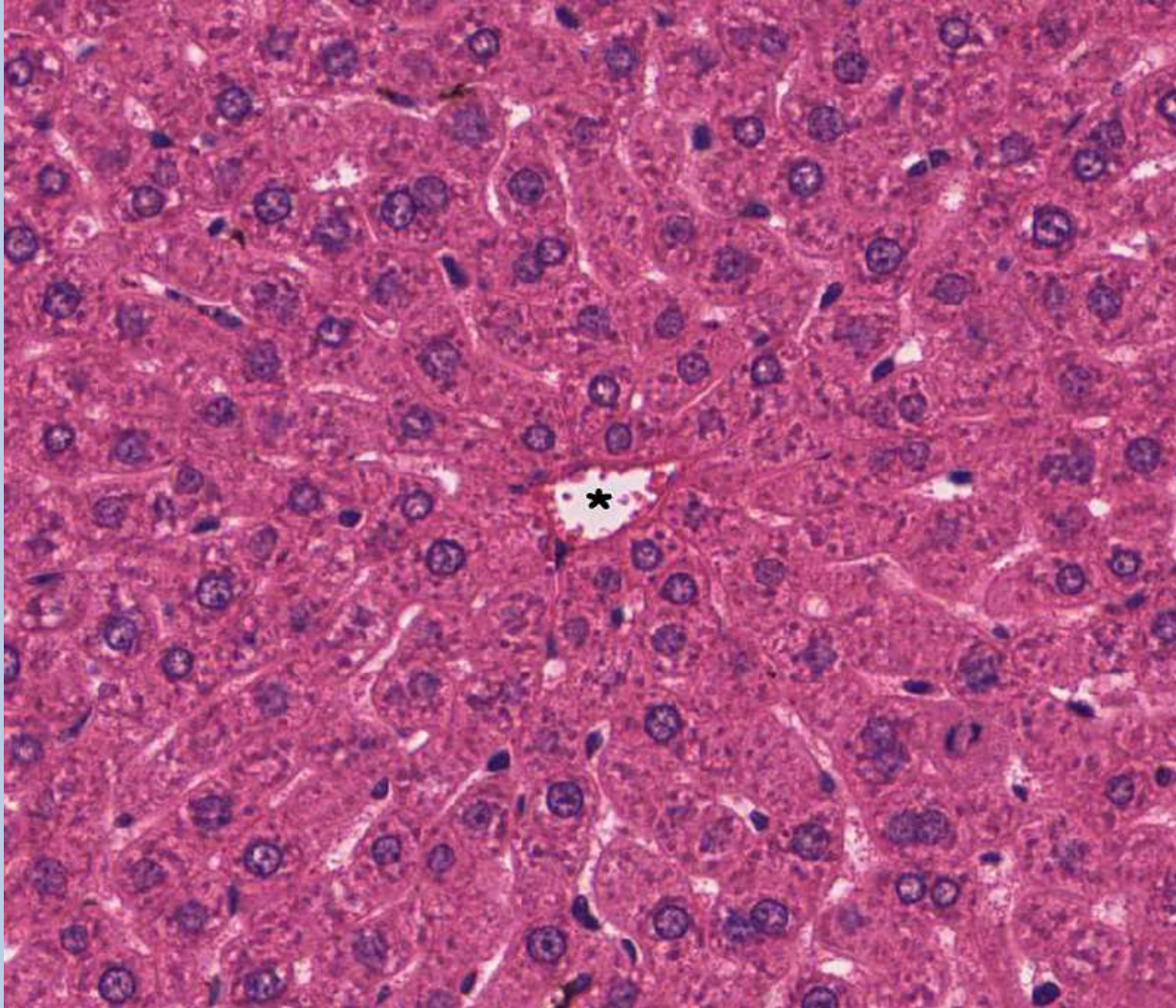
Human Stomach



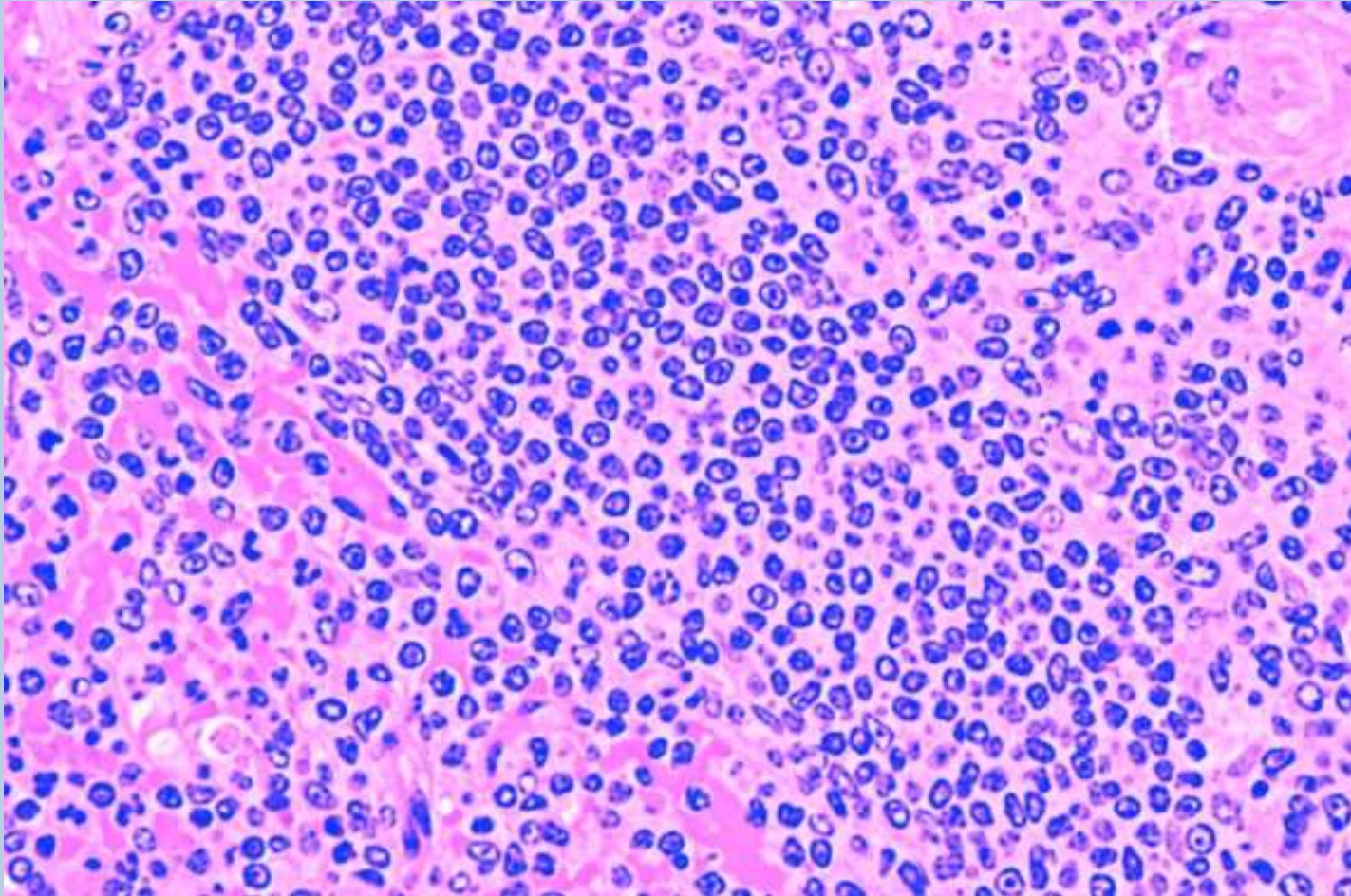
Human Intestines



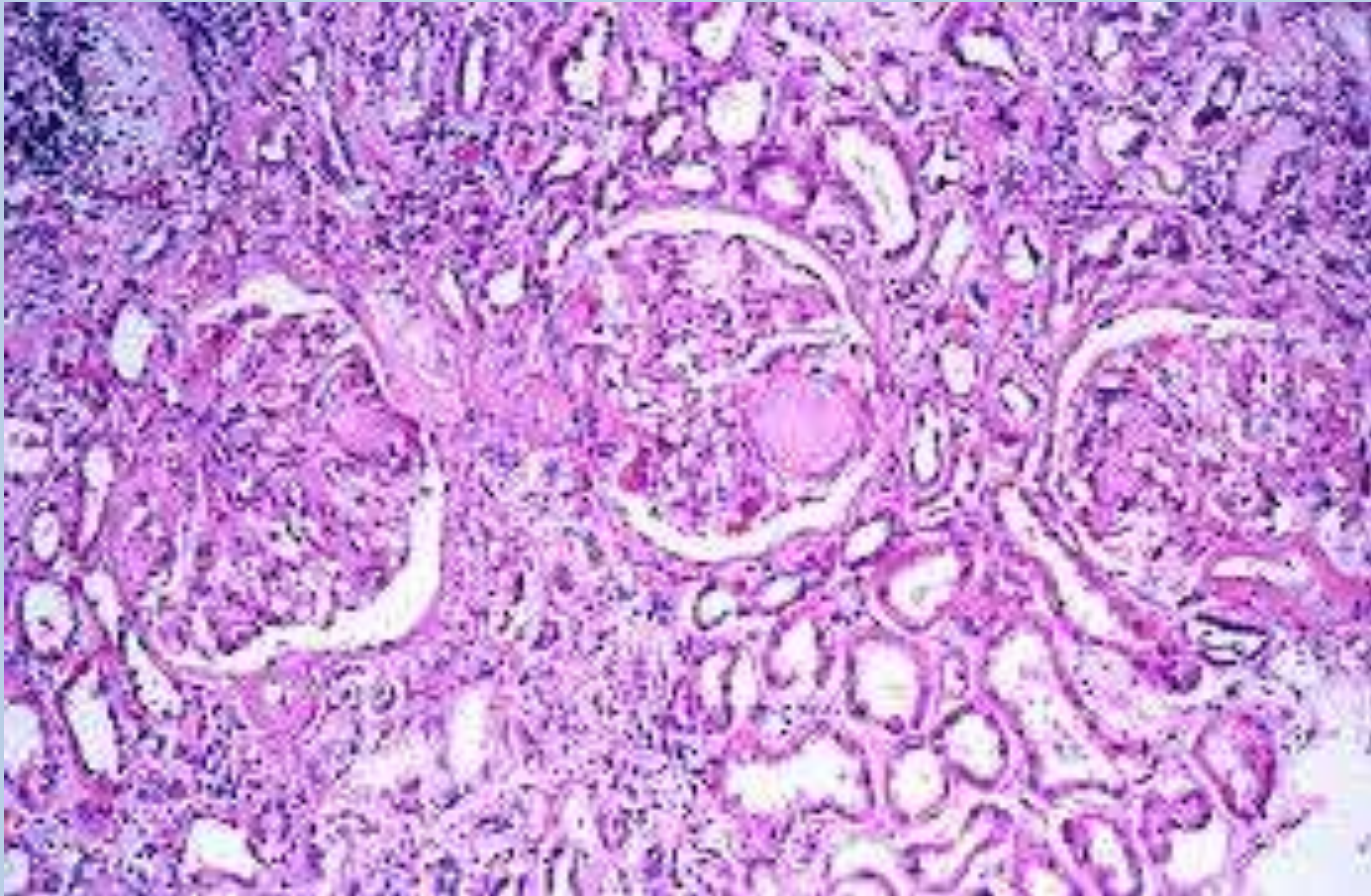
Human Liver



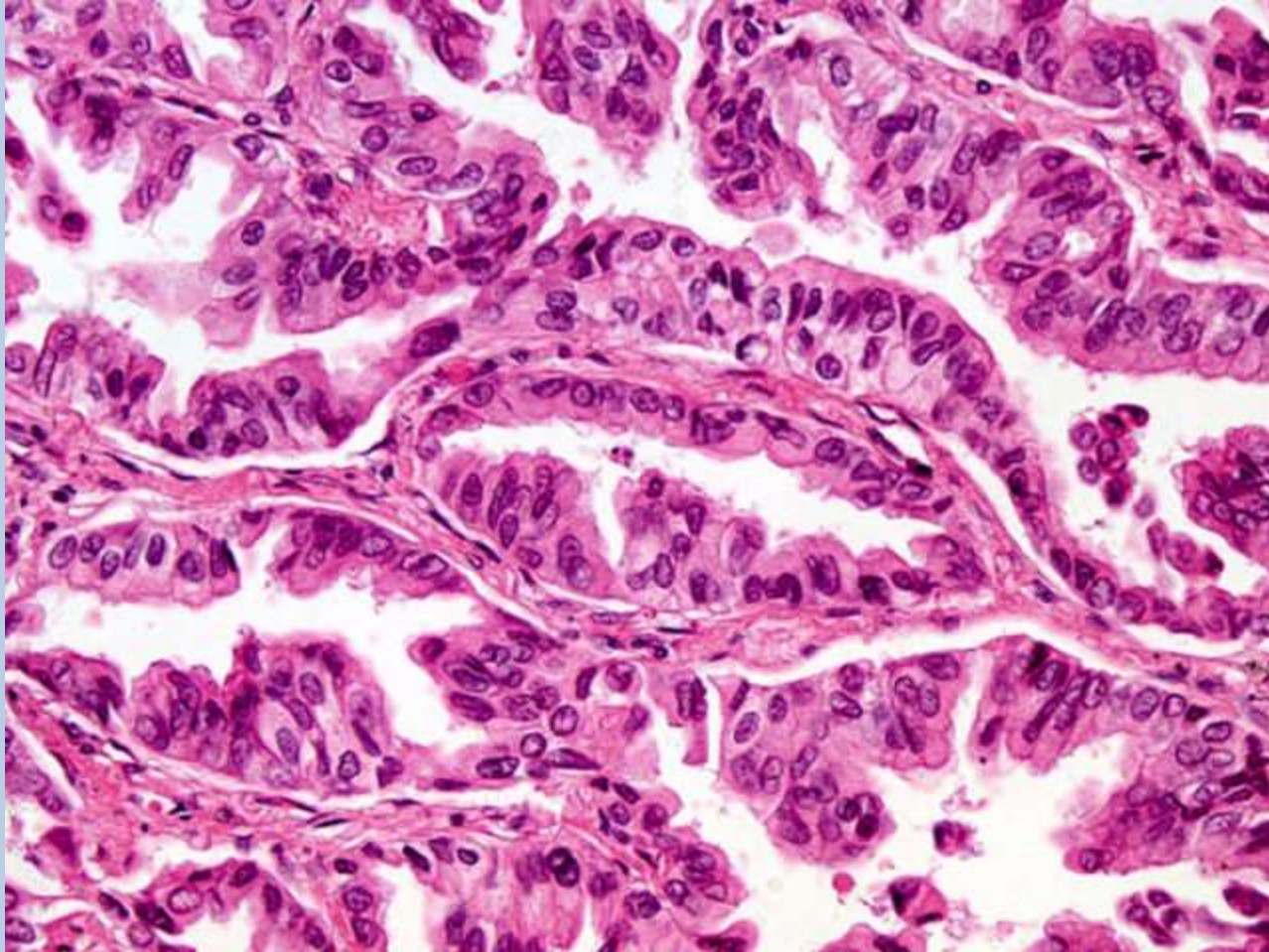
Human Spleen



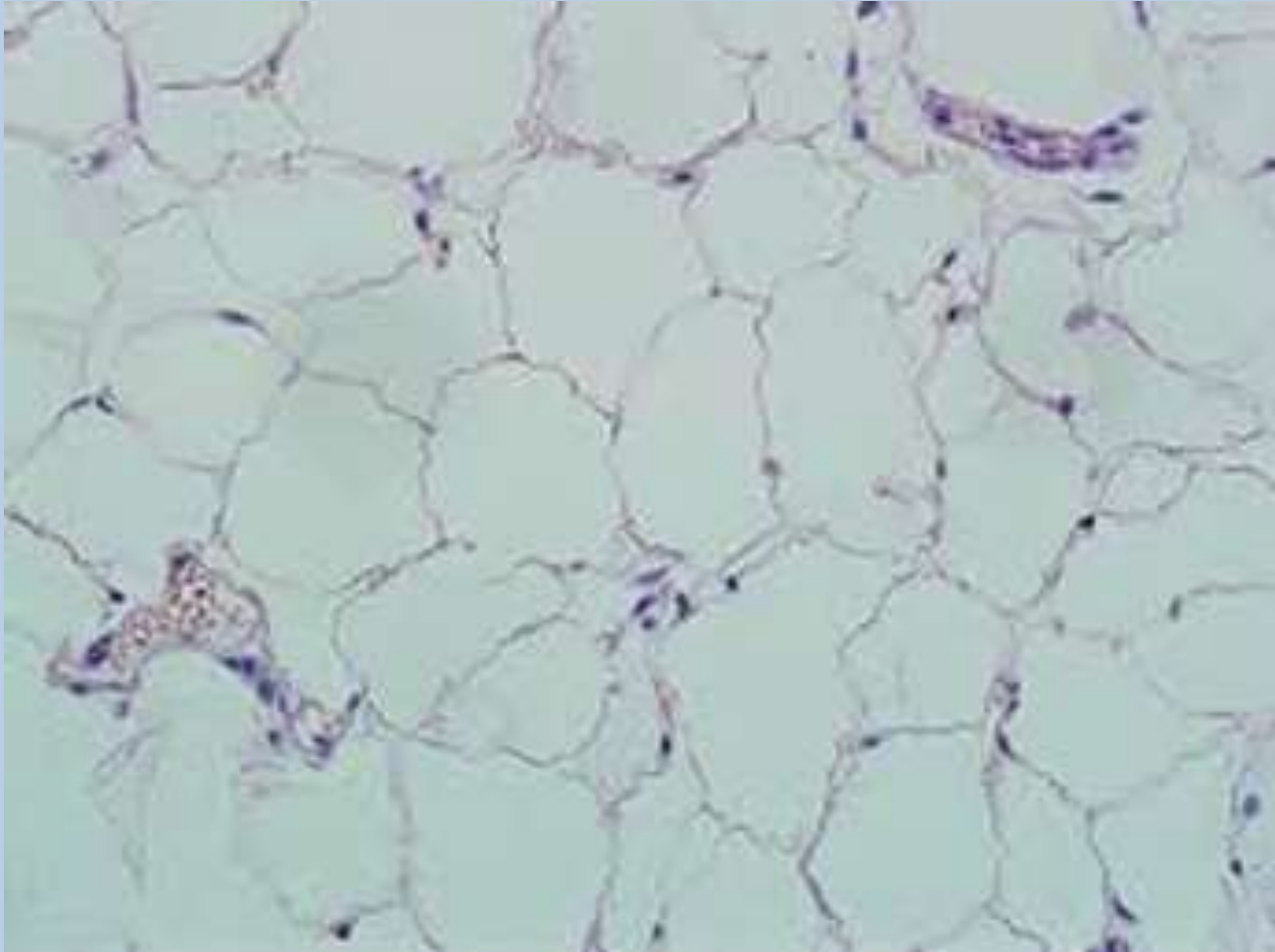
Human Kidney



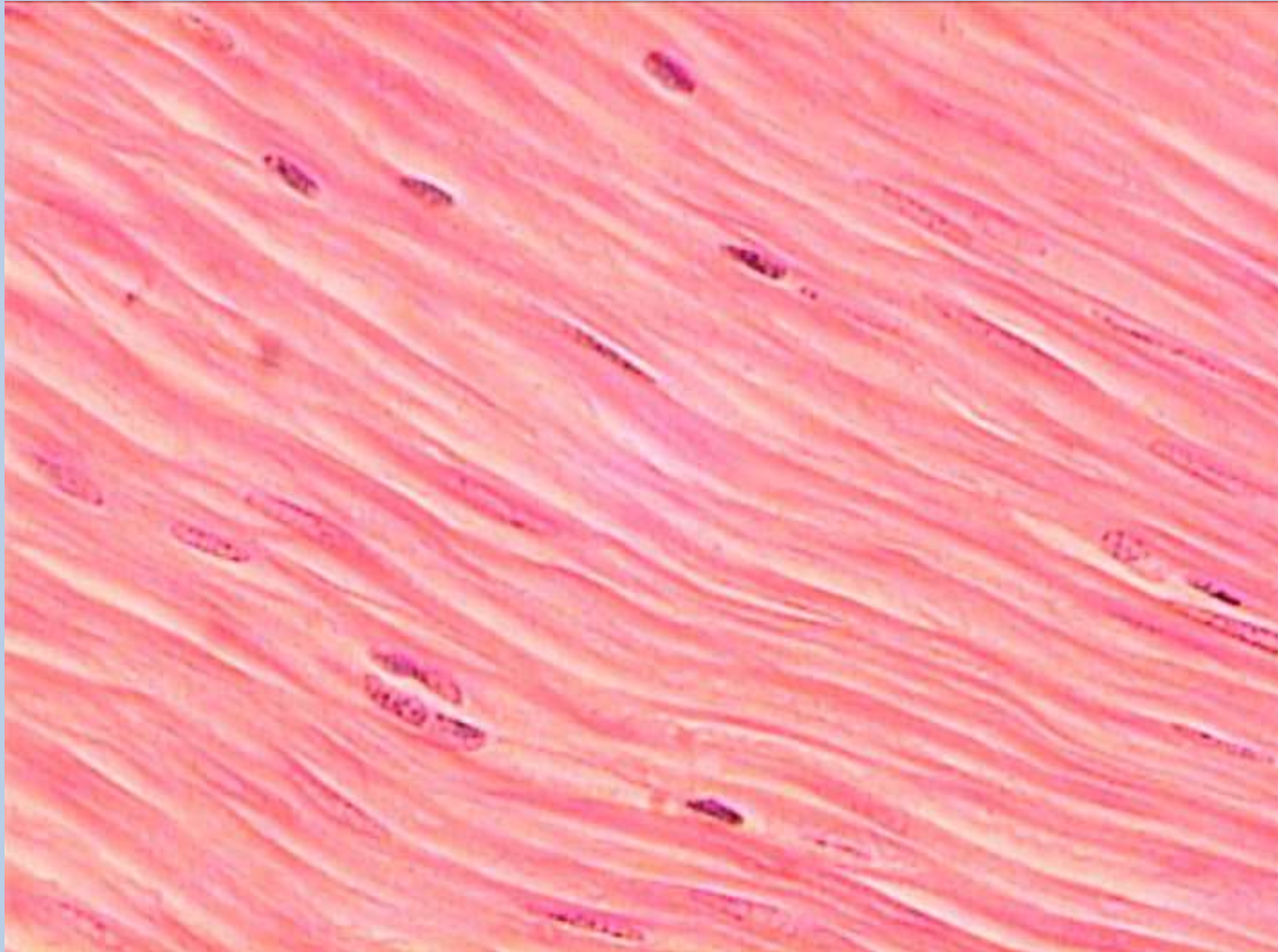
Human Bladder



Human Fat



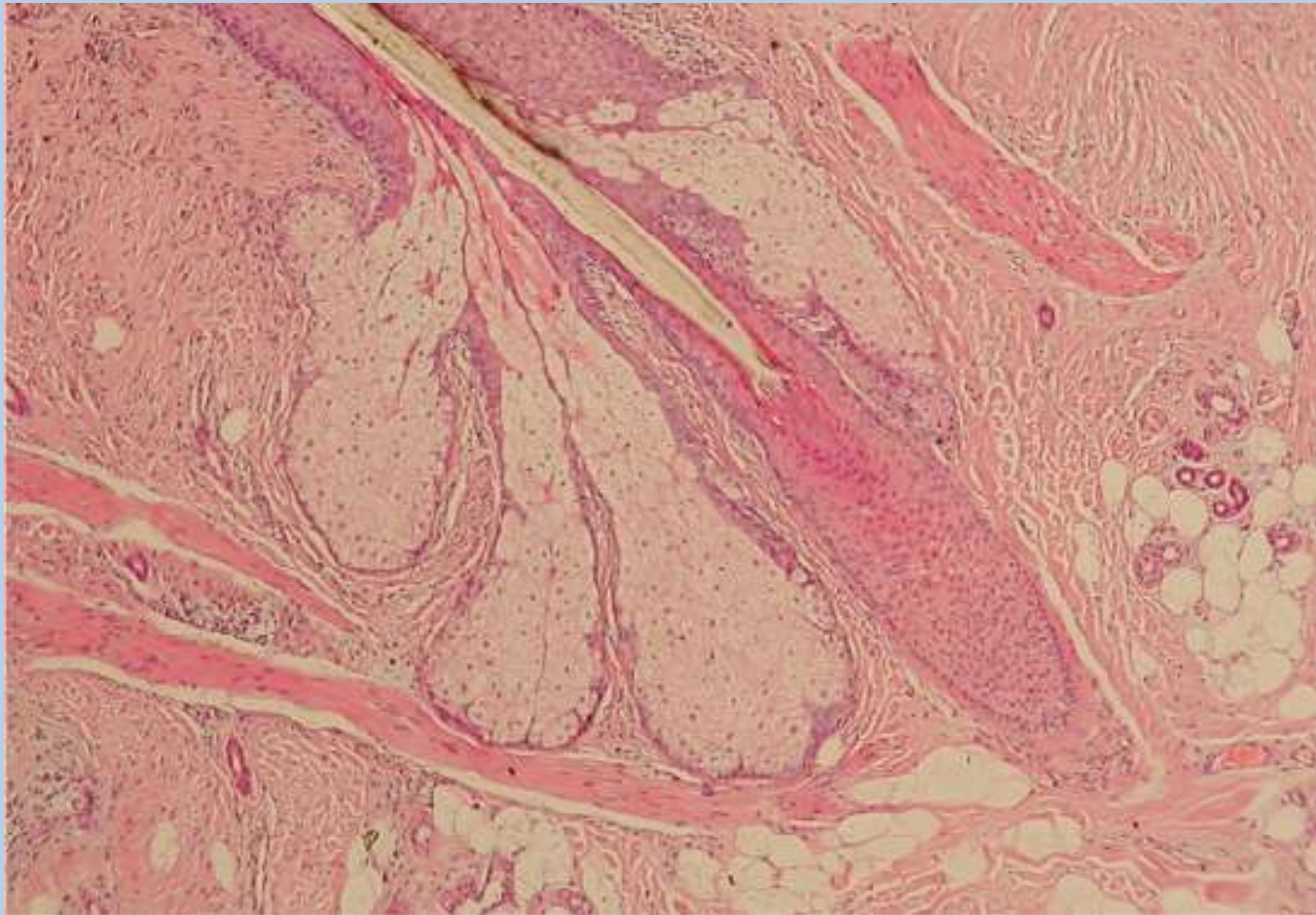
Human Muscle



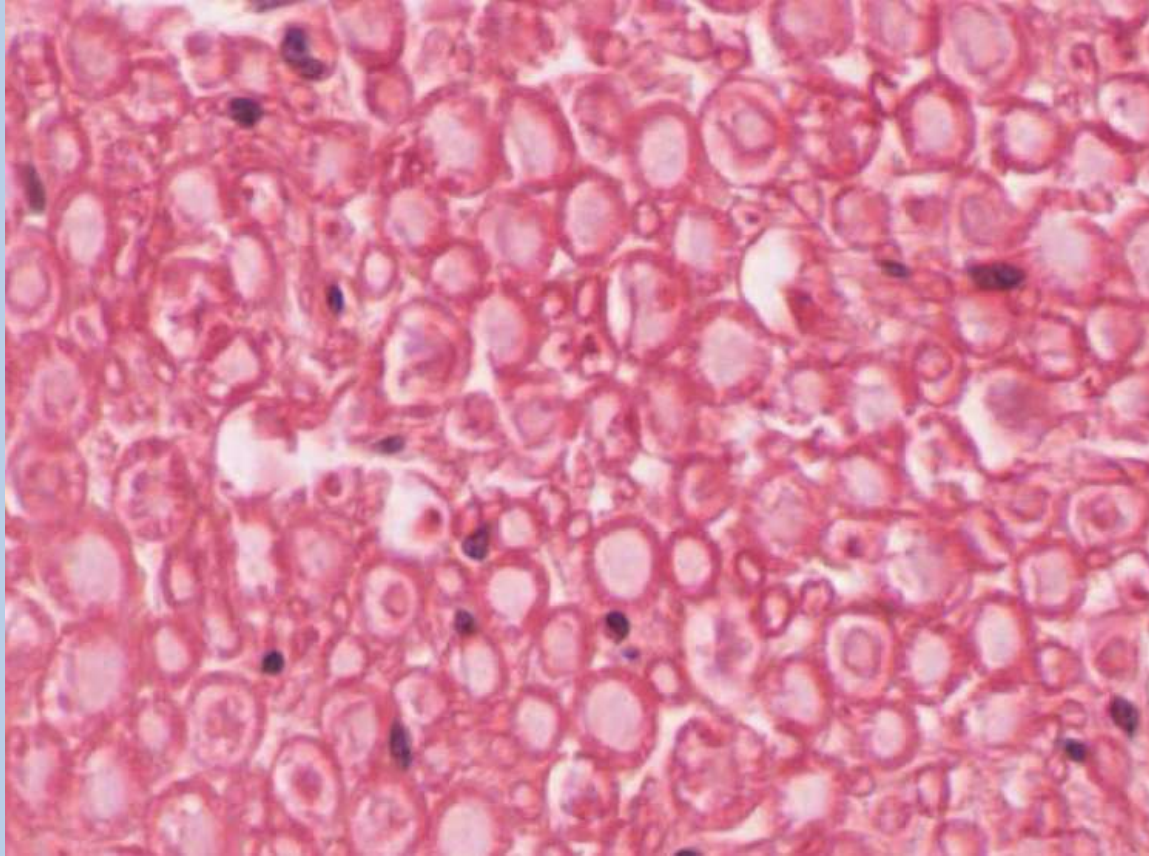
Human Bone



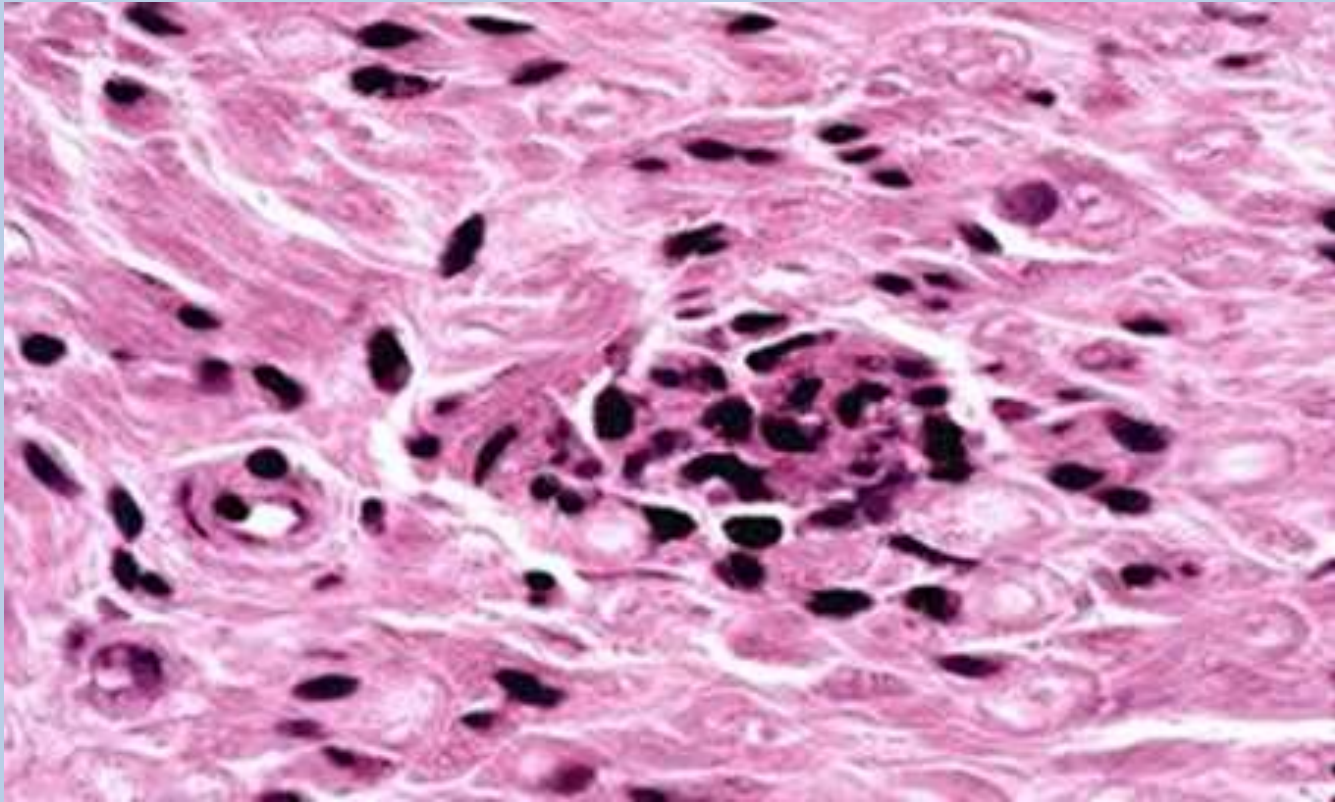
Human Scalp and Hair



Human Spine



Human Brain



Comparing Cell Structures

- Cells that have a *SPECIFIC STRUCTURE* must have a *SPECIFIC FUNCTION*

Comparing Cell Structures

- Cells that have a ***SPECIFIC STRUCTURE*** must have a ***SPECIFIC FUNCTION***
- These cells are said to be ***specialized***

Comparing Cell Structures

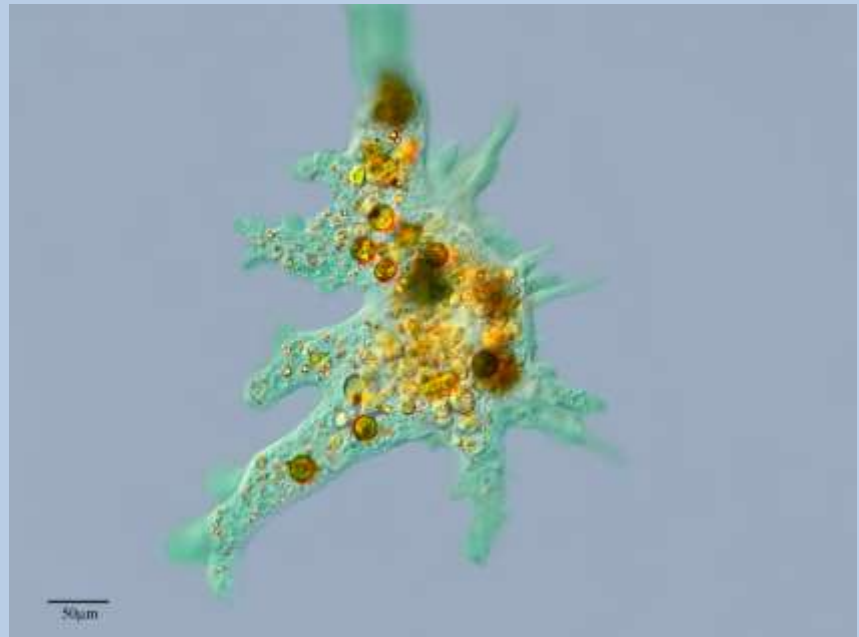
- Cells that have a ***SPECIFIC STRUCTURE*** must have a ***SPECIFIC FUNCTION***
- These cells are said to be ***specialized***
 - **WHY MIGHT THAT BE?**

Comparing Cell Structures

- Which kind of organism would be more likely to need specialized cells; unicellular or multicellular?
- WHY?

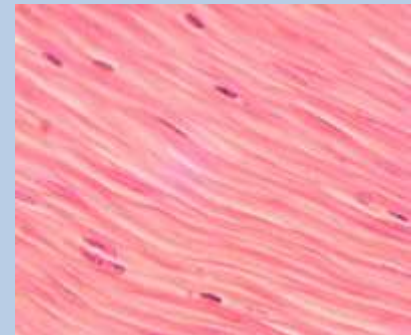
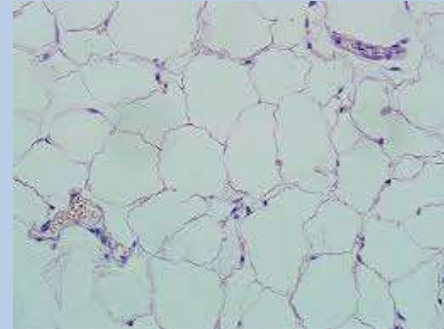
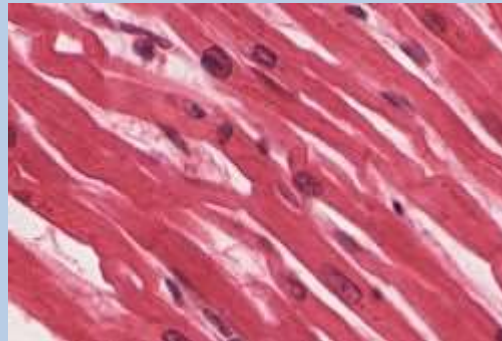
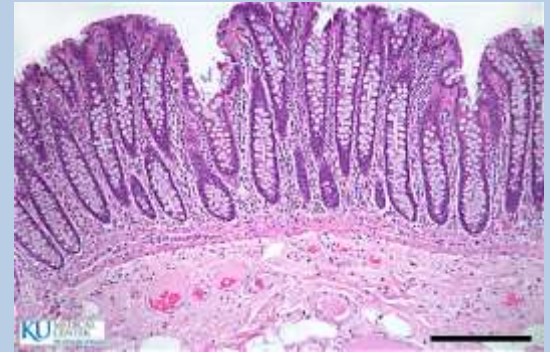
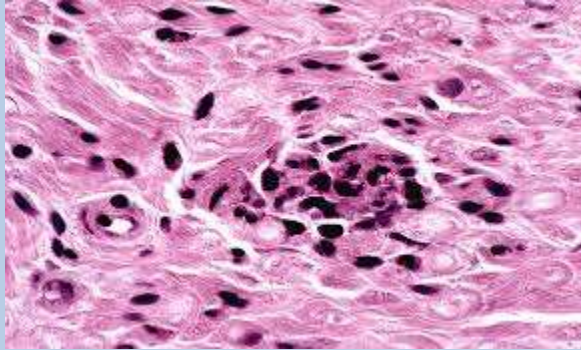
Comparing Cell Structures

- To maintain homeostasis, unicellular organisms grow, respond to the environment, transform energy, and reproduce by **using organelles**



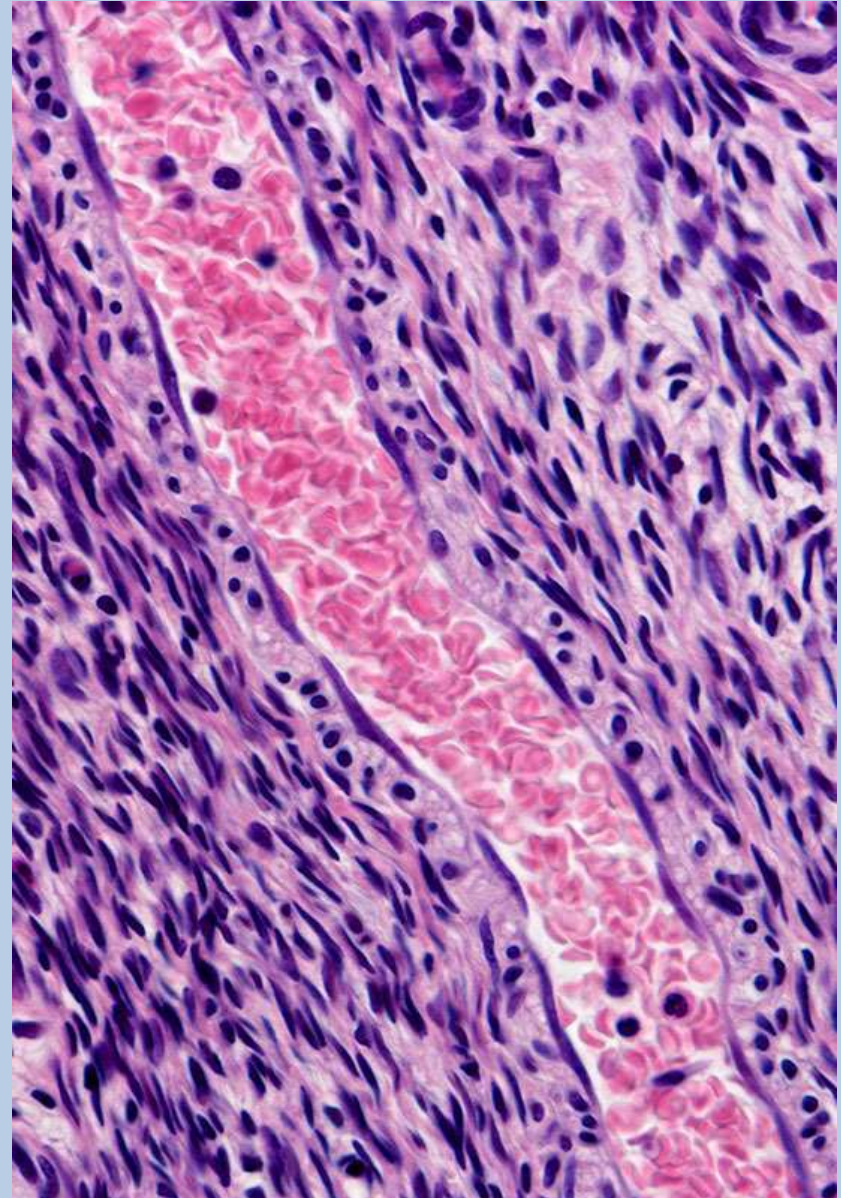
Comparing Cell Structures

- The **cells** of multicellular organisms become specialized for particular tasks and communicate with one another to maintain homeostasis



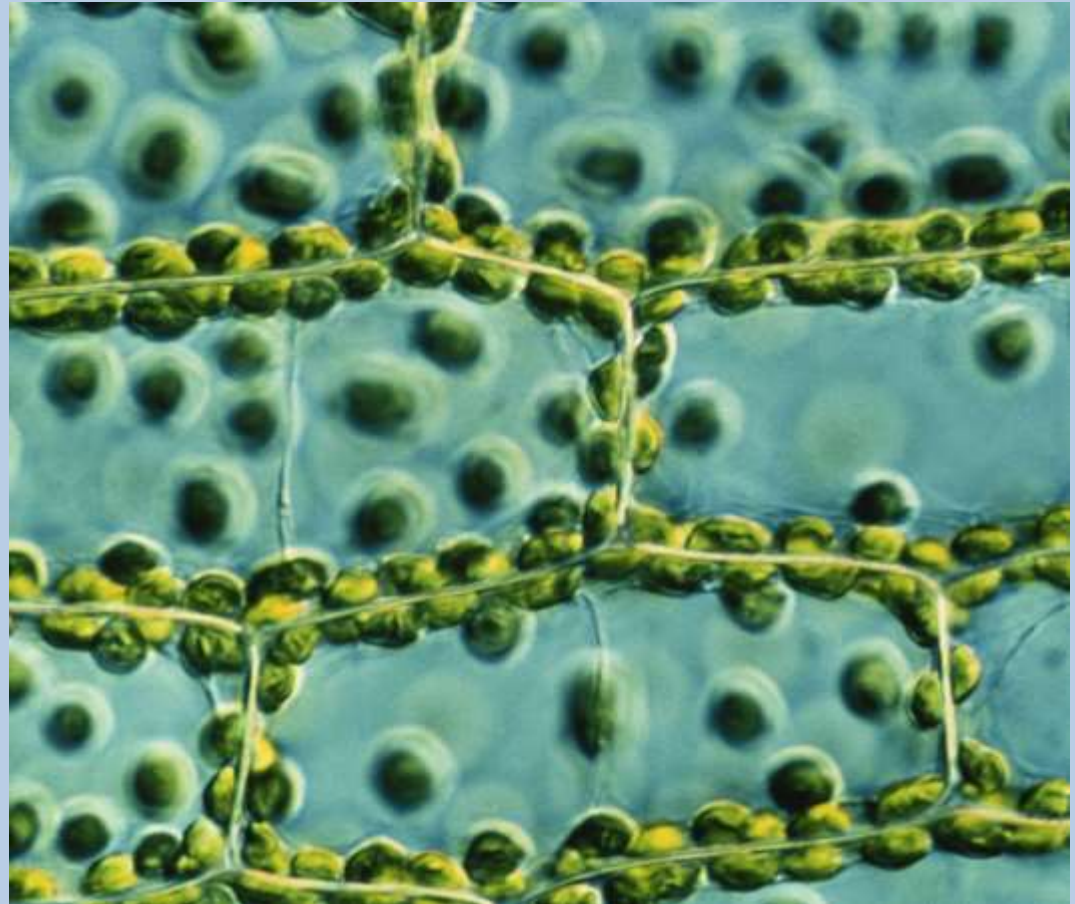
Specialized Animal Cells

- The cells stained pink are red blood cells
 - They carry oxygen to the cells of your body and pick up carbon dioxide as a waste

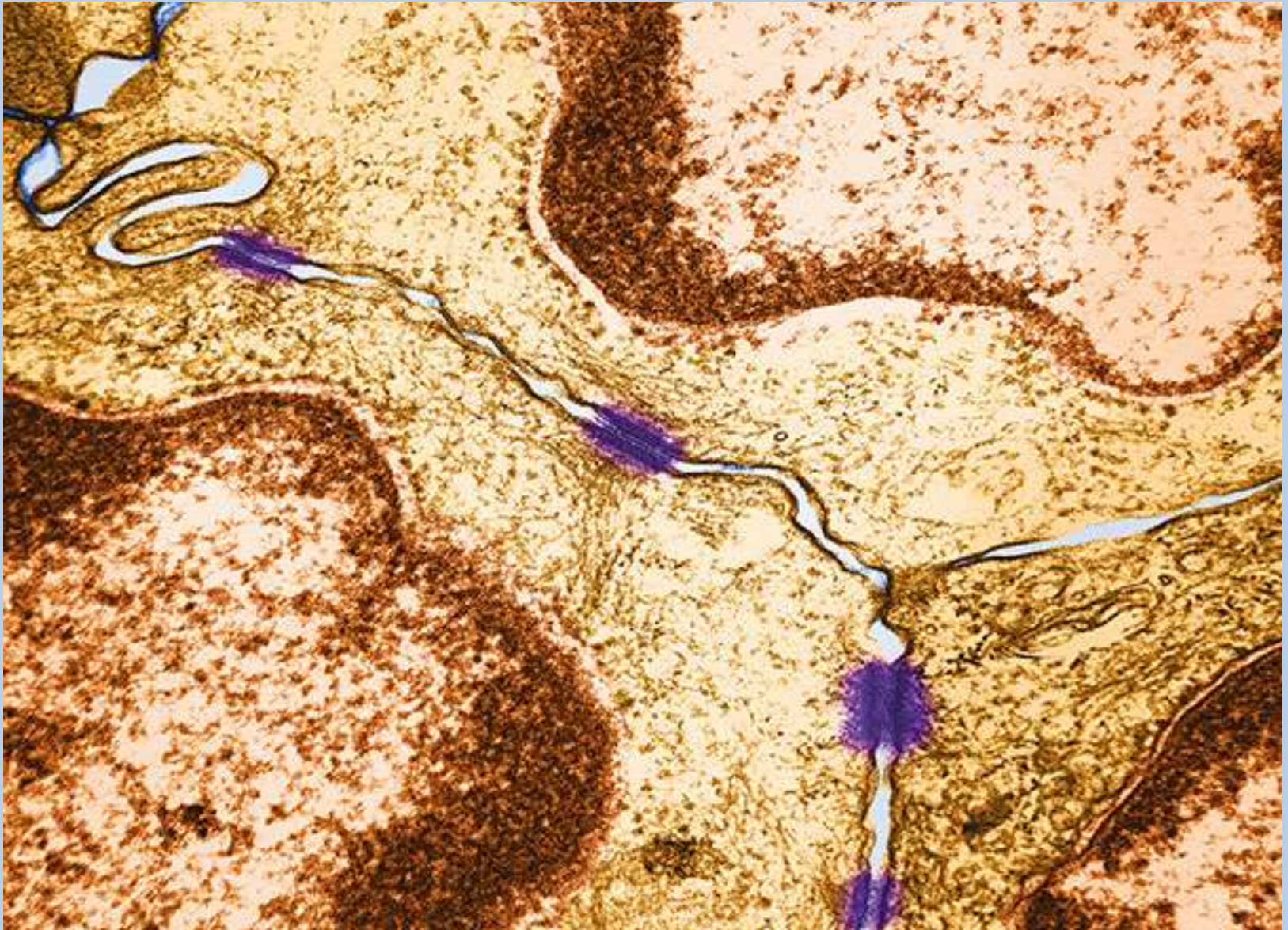


Specialized Plant Cells

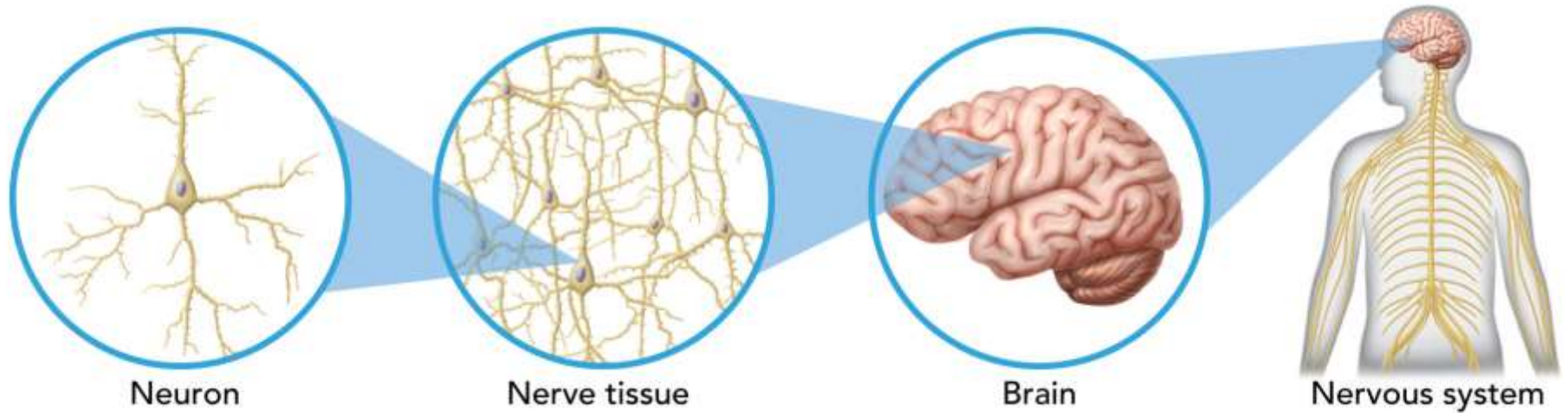
- What kind of specialized cells might plants need?



Cellular Communication



Levels of Organization



Cell → Tissue → Organ → Organ system

Levels of Organization

- To better understand the levels of organization you will complete the interactivity “Multicellular Life”

Interactivity: Multicellular Life

- **MAKE SURE YOU CLICK ON THE ORANGE HEADING ON REALIZE**



Comparing Cell Structures

- **WHEN YOU ARE DONE MAKE SURE YOUR NOTEBOOK IS CAUGHT UP:**

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Build a Factory

- **AND THE WINNER IS...**

