

Vancouver Community College
Biology 1120
Instructor Maria Morlin

September 2020 – hybrid course

Lab: Histology

Outline

- Student stations
- Objectives
- VCC histology images submitted by students
- Notes on tissues and observations

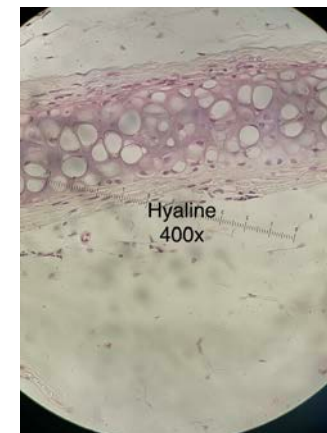
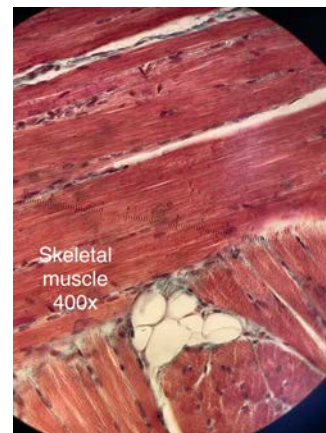
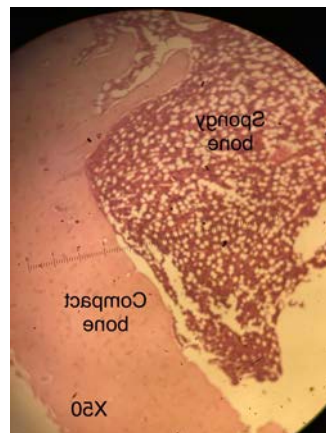
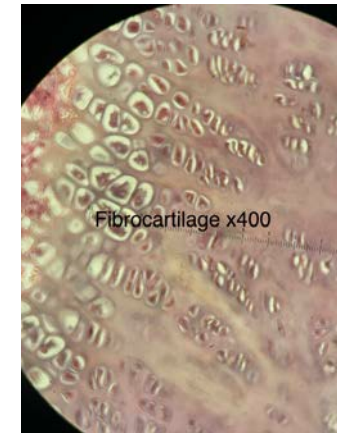
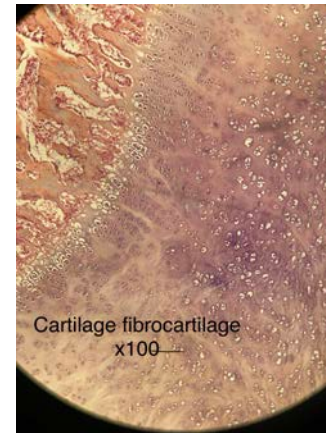
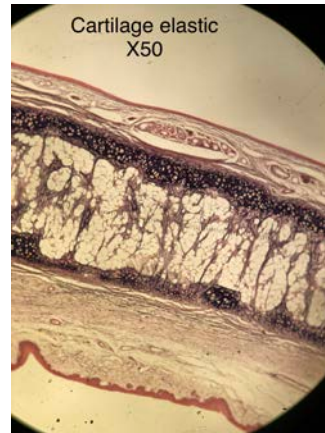
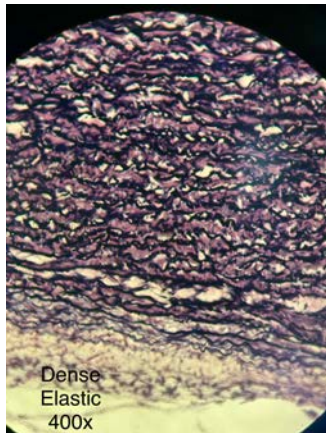
Student stations

- Each student station had:
 - Compound microscope
 - Tray containing tissue slides indicated in lab manual

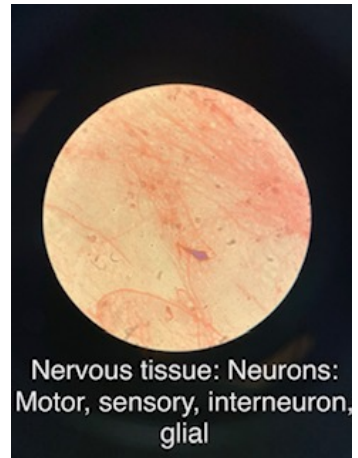
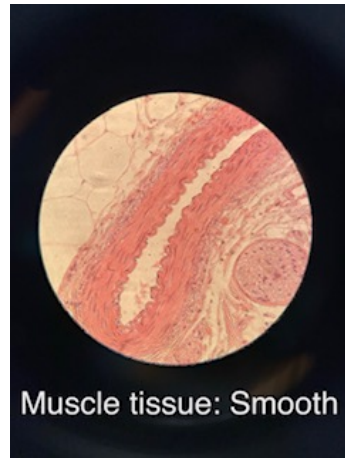
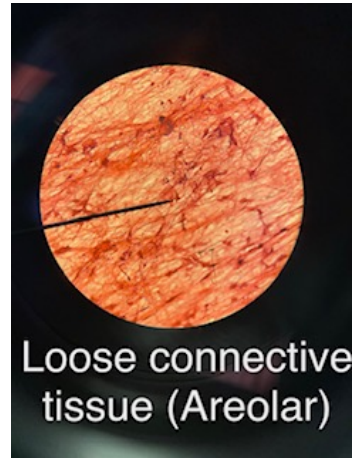
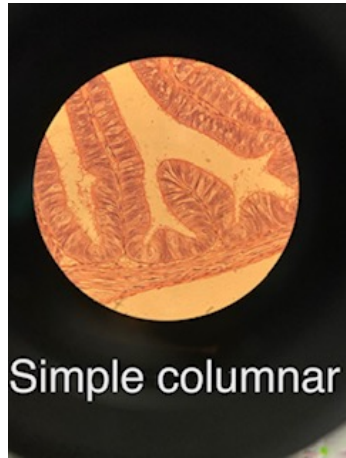
Objectives

1. Observe and draw various tissue types, indicating the structures seen described in the manual description of each slide.
2. Note adjacent kinds of tissue
3. Note the types of cells associated with the tissue.
4. Note how the structure of the tissue fits its function

Slides submitted by Tania – thanks Tania!



Slides submitted by Kayla – thanks Kayla!



Practice

- Study the histology slides on the sciencerocks.ca website.
- Compare those with the images and diagrams in the textbook, chapter 5.
- Identify the tissue types generally (columnar epithelial, blood – connective).
- Relate the form of tissue to its function (for example, long multinucleate skeletal muscle cells fit the function of moving long bones by being long with many individual contractile segments, and nuclei to service the entire cell length).

Notes on tissue observations

- While you are making observations, ask these questions:
 - Are the cells small and tightly packed (epithelial tissue mostly), or sparse in a matrix (areolar, bone, cartilage for example)? Are the fibres parallel and wavy (ligaments and tendons)?
 - Are the cells long and tubular (skeletal and cardiac muscle), with striations?
 - Are there other tissues present? (epithelial, connective and smooth muscle), what looks different about them?