

Vancouver Community College
Biology 1120
Instructor Maria Morlin

January 2021 – hybrid course

Lab: Cells

Outline

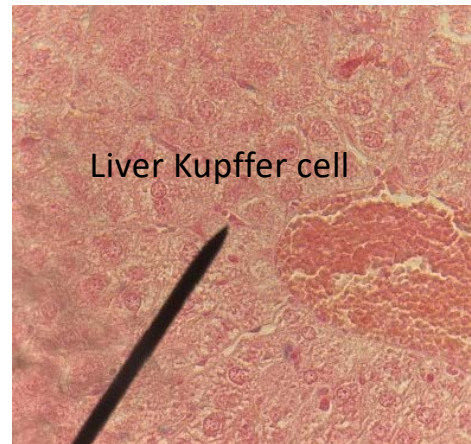
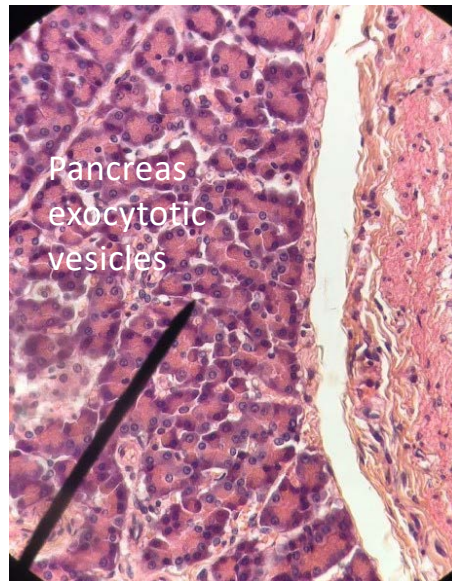
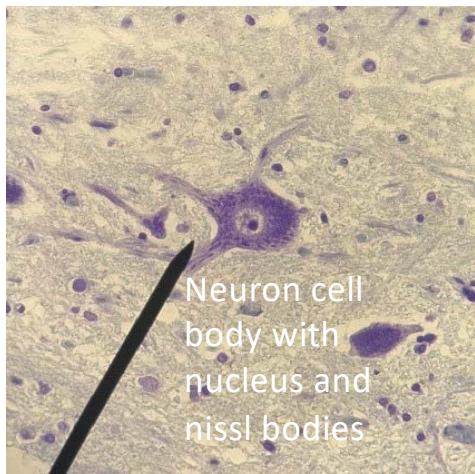
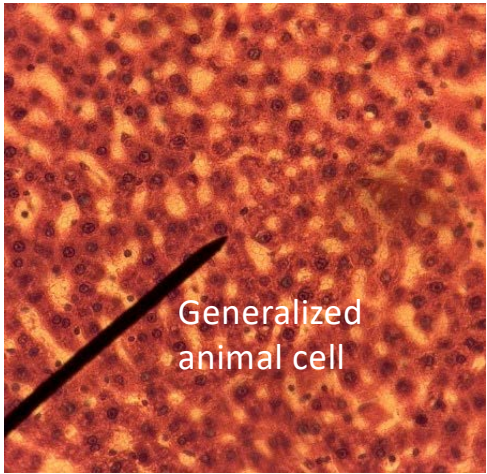
- Objectives
- VCC cell images for practice
- Notes on cells and observations

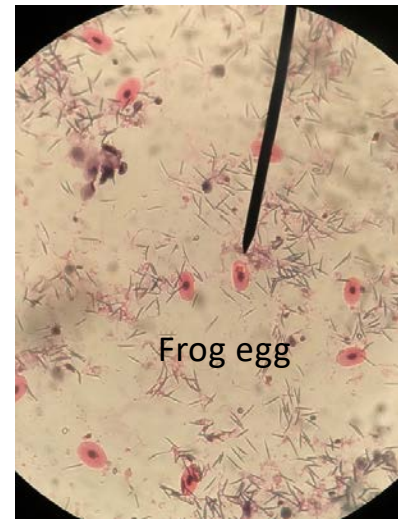
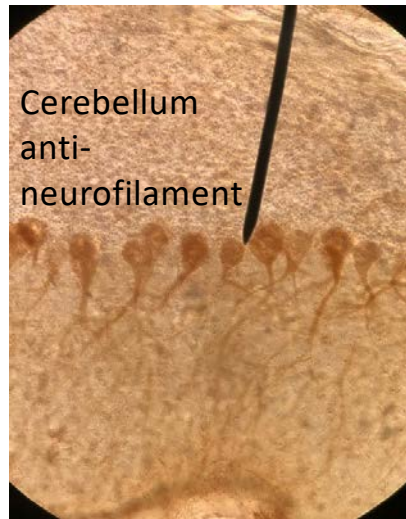
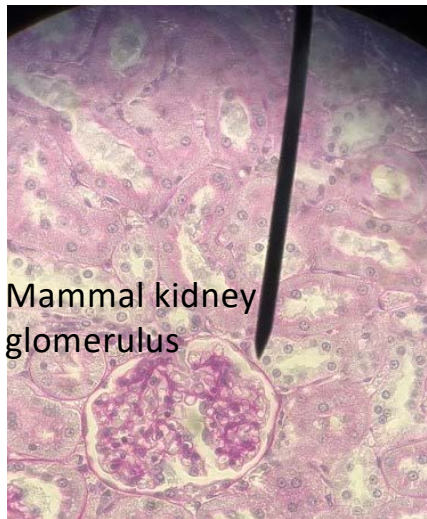
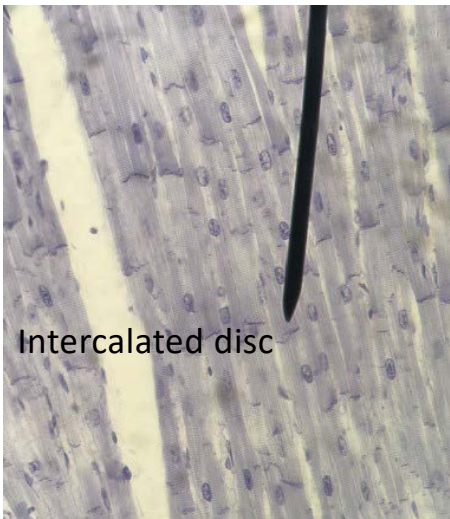
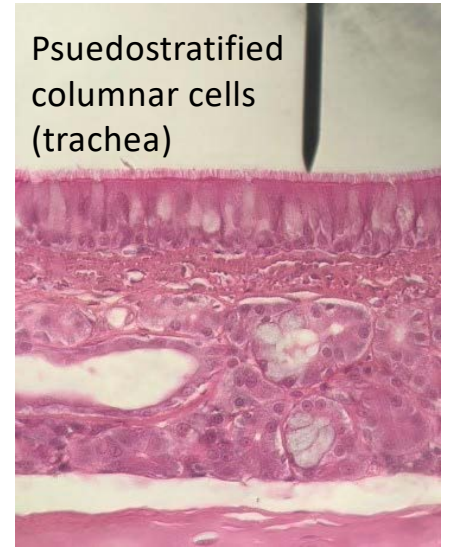
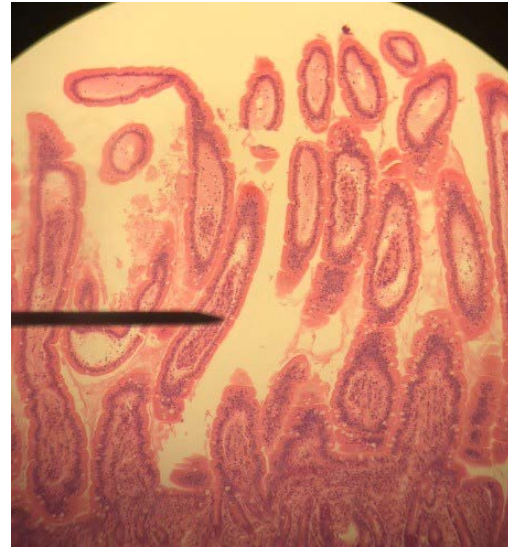
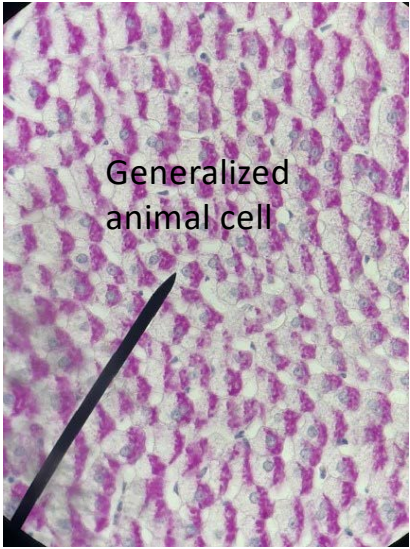
Objectives

1. Observe various human cell types, locating the structures described in the manual description of each slide, using the cell images:
<https://sciencerocks.ca/cell-lab-slides/>
2. Note stained organelles, and their function in the cell
3. Note features of cells such as the intercalated disk between heart cells, desmosomes that hold cells together, basement membrane, flagellae (of sperm cells), cilia and microvilli.
4. Note stages of mitosis in the fish blastula.

Practice

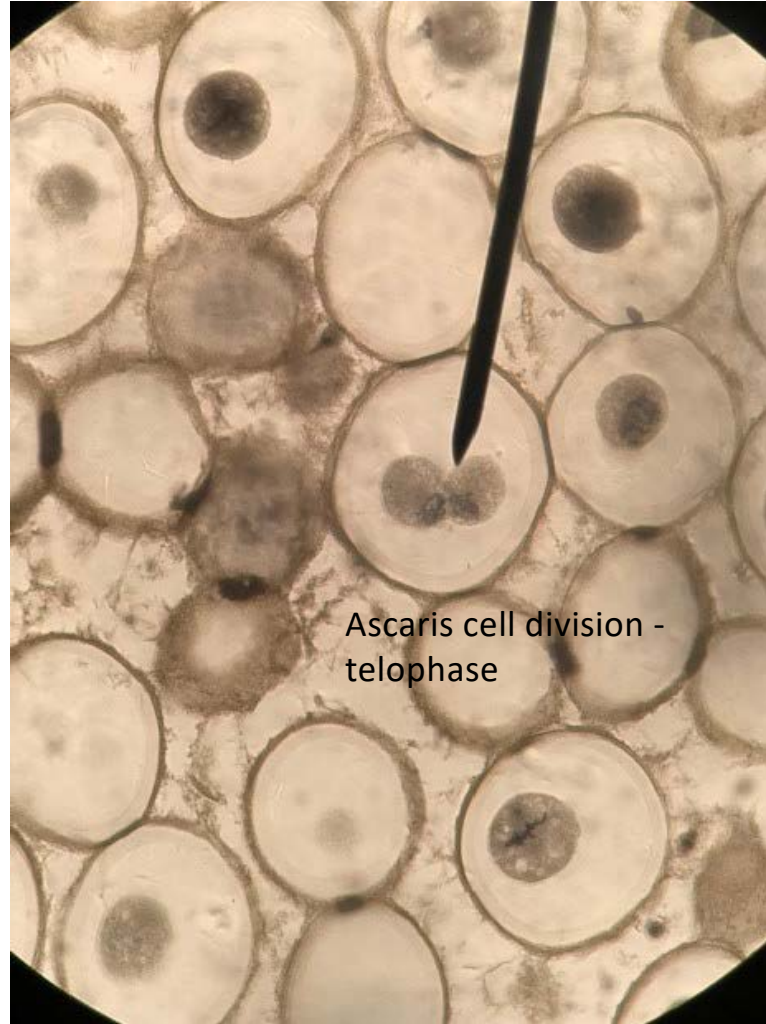
- For practice, examine the following images from the cell lab. They are unlabeled.
- Identify the cell types generally (columnar, cuboidal, liver...)
- Identify the structure at or close to the tip of the pointer.
- This is a good site for cells and histology
 - <http://histologyatlas.wisc.edu/>







Ascaris – cell in anaphase



Ascaris cell division -
telophase

Notes on cell observations

- Make sure to read the lab handout, in particular the description of each slide.
- Review cell slides from the lab on the sciencerocks.ca website. These slides are mostly labelled.
- Identifying cells is no easy task. You may have noticed at first they all look the same! However, after a while you start to notice subtle differences: the shape of the cell, the location relative to other structures. Identifying organelles can also be challenging. Generally, they need to be stained for identification, unless you are looking under an electron microscope.