

Microscope Experiment Prelab  
BI-102, Fall '07, Dr. C. S. Tritt

In this activity you'll use compound light microscopes to investigate the microscopic structure of living things. Please read Chapter 4 in your textbook prior to lab. You will work in teams of two. The general outline of your activities is:

- Identify some prepared slides you'd like to look at.
- Investigate the contents of these slides (on-line and in the MSOE library) and develop hypotheses regarding what you expect see. Record these hypotheses in your laboratory notebook.
- Develop procedures that will allow you to investigate your hypotheses. Record these procedures in your laboratory notebooks. Be sure to include calibration and image process procedures as well as actual microscope procedures.
- Execute your procedures and record your results in your laboratory notebook and save image files on your laptop.
- Based on the information recorded in your laboratory notebooks, prepare a professional looking report summarizing your results.

If you do not already have a favorite image editing program, I suggest you download ImageJ from (<http://rsb.info.nih.gov/ij/>). It is a free, Java based program used by professional researchers. I'll demonstrate its use it lab.