

Photographic Sciences PHBM 312

## Photography and the Microscope

### Assignment Making Photomicrographs using a Research Grade Microscope

**Objective:** Using one of our research grade light microscopes, produce a series of photomicrographs featuring the same subject using all of the objectives on the microscope (except oil). The images must demonstrate optimum management of:

- exposure/brightness constancy /sharpness
- proper use of Kohler illumination
- proper use of aperture diaphragm
- Please insert bar scales on the images

**Purpose:** Research grade photomicroscopes are considerably more complicated to operate than an upright or compound biological photomicroscope. This assignment will give you experience operating a “Rolls Royce”. The Zeiss AxioSkop will provide more imaging capabilities than the Zeiss Axio-Imagers.

### Assignment:

A) Using a one of the Zeiss research photomicroscopes, produce a series of B & W or color images using one sample and a variety of objectives ranging in magnification from the 4x and up through at least a 20x objective. Your images must reflect optimum:

- Exposure/density/color saturation
- Proper use of Kohler illumination
- Proper use of aperture diaphragm
- Please insert bar scales on the images

**Submission:** Multiple color, images that are between at an appropriate resolution pixels using a .TIF file format and identified in the folder with your name, subject and proper magnification. Additionally, the submission should be accompanied by the micrometer views.

Files will need to be submitted to the CIAS server by: Feb 10<sup>th</sup> by midnight

Address: CIAS.RIT.EDU

Username: advancedbiomed

Password:

**Due Date: Thursday February 11 at 8:00am**

Please submit TIF files and name the files with your name and any other image attributes to assist in my evaluation