

KÖHLER ILLUMINATION

To get the most out of a compound microscope, you have to reduce light scatter by having all light hit your sample at 90° , and by illuminating your field of view evenly. This can be achieved through the Köhler illumination procedure. Note that this requires a field iris, which we do not currently have mounted on all student microscopes. However, for taking pictures with the research microscope in the imaging lab, Köhler illumination is absolutely necessary.

- (1.) find and focus on the specimen
- (2.) completely close the **field iris** so that you can see the edges of the diaphragm
- (3.) bring the edges of the field iris into focus by raising/lowering the **condenser**
-- both the specimen and the iris should now be in focus
- (4.) center the image of the field iris using the condenser-centering knobs
- (5.) open the field iris so that the edges touch the field of vision, re-center as necessary
- (6.) open the field iris so the edges lie just beyond the field of view
- (7.) adjust the **condenser iris** to increase/decrease image contrast -- do not use this to control light intensity
- (8.) adjust light intensity with power supply knob

