

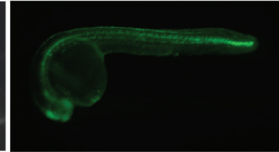
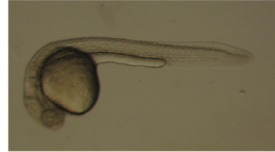
Guide to Microscopy

Bright field

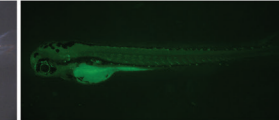
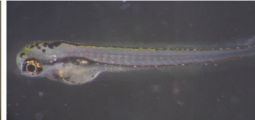
Dark field

Fluorescence

1 dpf



5 dpf



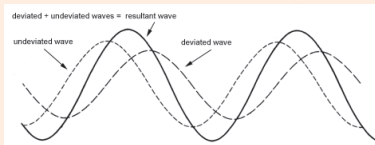
White light comes from below the sample



Bright field

Resultant wave= light that comes to your eye through sample: sometimes lighter and sometimes darker than background

Deviated wave=light that is altered by passing through sample

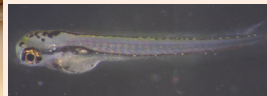


Undeviated wave=not affected by sample

Dark field



White light comes from above the sample
Typically background is opaque black

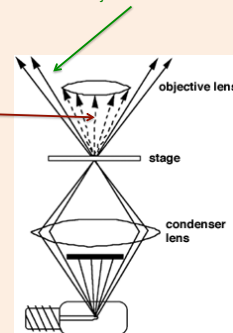


Sample is lighter than background

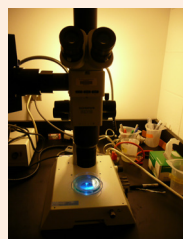
Only the light that has its path changed by the sample reaches the objective lens and your eye

Light ray whose path has NOT been changed by the sample Misses the objective

Light rays whose path has been changed by the sample

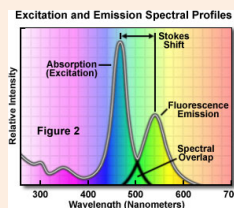


<http://www.ruf.rice.edu/~bioslabs/methods/microscopy/dfield.html>

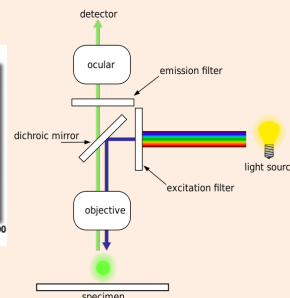


Light of a lower wavelength comes from above, and the fluorescent molecule absorbs this wavelength (ex. blue) and emits light at a higher wavelength (ex. green)

Fluorescence



<http://www.olympusmicro.com/primer/lightandcolor/fluoroexcitation.html>



http://en.wikipedia.org/wiki/Fluorescence_microscope