

# Light Microscopy Principles

## Köhler illumination

Uniform field illumination technique

## Numerical aperture

Light gathering power of objective

## Abbe diffraction limit

$$d = \lambda / (2 \cdot \text{NA}) \approx 200 \text{ nm}$$

## Point spread function

3D light distribution pattern

## Optical aberrations

Spherical, chromatic distortions

