

Dr. Jan Brocher

Scientific Image Processing and Analysis

21–22 May 2014, 9.00–17.00 h

Auditorium, „Zur Rosen“, Johannisstraße 13

This two-day course on processing and analysis of digital images according to high scientific standards covers:

- Basics in microscopy, good image acquisition, resolution and sampling
- Batch processing, automation (using macros), 3D reconstruction
- Reducing noise, background, and the use of image filters
- Use of different color modes (color spaces)
- Correct resizing, contrast improvement and labeling
- Feature extraction, segmentation and thresholding
- Automatic object counting, tracking and tracing (2D and 3D)
- Measurements and quantifications of fluorescence intensities (and western blots)
- Preparing figures for scientific presentations, posters and publications.

The workshop has a focus on life science applications and microscopic images. We will use the professional software ImageJ / Fiji for processing and analysis.