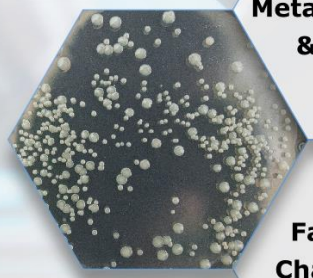
Editing,

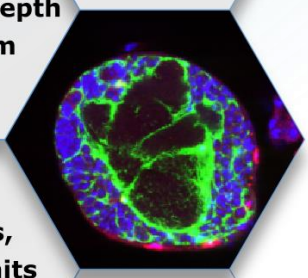
Processing & Analysis of Scientific Images

Scientific Integrity

Scientifically Correct Image Editing

Understanding Metadata, Bitdepth & Histogram



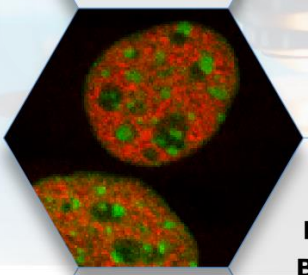


False Colors, Channels, Units & Scale Bars

Do's & Don'ts in Publication Figures

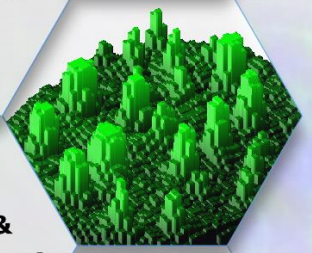
In-depth Image Analysis

3-day Virtual & Live Hands-on Workinars



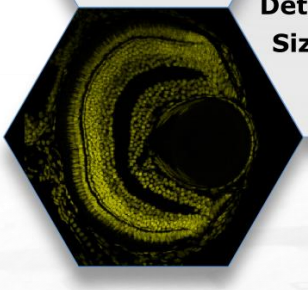
Lighting & Background Corrections

Stepwise Data & Object Extraction



Automatic Selections & Quantification of Intensity

Counting & Determination of Size and Shape



Introducing ImageJ Macros for Analysis Automation

About BioVoxxel

Fiji & ImageJ

Over ...
10 Years
50 Institutions
280 Workshops
3600 Scientists

Workshop recommended by ~95% of all Participants

Bookable Add-On:
0.5 / 1 - day Call4Help Session for individual Analysis Solutions

Contact/Pricing:
Dr. Jan Brocher
www.biovoxxel.de
jan.brocher@biovoxxel.de
phone: +49 (0)176-705 746 81

BioVoxxel

Editing, Processing and Analysis of Scientific Images

Workinar content overview:

- Proper editing of scientific images for publications
- Good scientific practice with Do's and Dont's regarding analysis and publication
- Understanding all aspects of digital images (e.g. metadata, bit depth, histogram,…)
- Scaling, scale bars, false colors, calibration bars, …
- Uneven lighting correction methods for visualization and processing
- Diverse background correction algorithms and their proper application
- Image pre-processing: understanding image filters, their properties and usage
- In-depth object extraction and optimizing image segmentation
- Image post-processing: morphological operations for increased reliability during analyses
- Analysis: object counting, size and shape determination, ROI-based intensity quantification
- Assembly of process automation: A brief introduction to ImageJ macros

All methods are kept as general as possible to achieve a broad applicability. Very specific image analysis techniques (such as co-localization etc.) are part of an advanced course

Venue:

The workshop will be held as a virtual live event via Zoom

Duration:

3 days, each day 9:00 ~ 15:30(max, mostly 15:00 but plan some buffer time)

Main Target Group:

Life or Natural Scientists (optimally around PhD student level and above, imaging experience is helpful but not necessary). Independent of the scientific background, everybody is invited to join if interested in the topic. It has a strong focus on fluorescent micrographs as example images but the methods taught are not limited to those.

The course is designed application-based to learn and apply basic image processing and analysis in daily research. It is not an algorithm-based teaching for computer scientists. The difficulty level is medium but easy to follow in step by step procedures and in-depth explanation of the necessary background to the individual methods.

Software:

During the course we will use exclusively Fiji (ImageJ bundle) in a customized setup. Prior software knowledge is not required but might be of advantage.

Registered participants will receive all information regarding software preparation on time before the workshop via email.