



TRAINING SCHOOL on IMARIS-based 3D IMAGE PROCESSING & ANALYSIS OF THE 3D NUCLEUS

Zürich December 7-11, 2020



Event organised by the INDEPTH COST-Action CA16212
Trainer: Célia Baroux, IPMB, University of Zürich
Partners: Bitplane AG, Oxford Scientific Instruments.
IPMB, University of Zürich, Switzerland.



University of
Zürich^{UZH}



Day 1 - Monday 7.12

- 9:00-9:30 Introduction to the course & round-table presentations
9:30-11:00 Snap-Talks by participants (research question related to this training school)
11:00-12:00 Presentation on 3D image processing for analyzing nuclear organization *Célia Baroux*
12:00-13:00 lunch
13:00-15:00 General introduction to Imaris rendering, *Michael Mahlerl (Bitplane, AG)*
15:00-15:30 Coffee Break
15:30-17:30 Practice rendering and visualization on own images
3D viewer, blend/MIP, slicers, frame etc.

Day 2 - Tuesday 8.12

- 8:30-10:00 Image segmentation using Imaris, *Michael Mahlerl (Bitplane, AG)*
10:00-10:30 Coffee Break
10:30-12:00 Practice: segment and quantify signals in nucleus, chromocenters, FISH signals
12:00-13:00 lunch
13:00-15:00 Presentation of Imaris *advanced* features, *Michael Mahlerl (Bitplane, AG)*
15:00-15:30 Coffee Break
15:30-17:30 Practice 1-2 *advanced* features (to chose on a list depending on own learning need): spot/surface statistics, distance measurements, batch, plot using Vantage

Day 3 - Wednesday 9.12

- 8:30-10:00 Example of a pipeline for immunosignal distribution analysis *Célia Baroux*
10:00-10:30 Coffee Break
10:30-12:00 Practice **no remote Imaris -> shift the Practice to Friday 11.12**
12:00-13:00 lunch
Free afternoon – social programme

Day 4 - Thursday 10.12 - no remote Imaris -> shift to Friday 11.12

- 8:30-17:30 Whole day practice - Project defined by instructor or by applicant
Work in teams of 2 (3)

Day 5 - Friday 11.12 -> shift to Monday 14.12 AFTERNOON 1:30-5:30 pm (Paris time, UTC+001)

- 9:00-12:00 Delivery: presentation of results by teams
12:00-13:00 Lunch
13:00-14:00 Final questions & conclusions
14:00 Departure