



b UNIVERSITÄT BERN

MIC training: Bioimage analysis with QuPath

Date: December 14, 2023.

**Time:** 9 am - 5 pm.

**Location:** Hauptgebäude, Hochschulstrasse 4, room 331, 3012 Bern.

**Trainers:** Olivier Burri, EPFL, Lausanne (CH)

Dr. Ewelina Bartoszek-Kandler, University of Basel (CH)

**Organizers:** MIC of the University of Bern (<u>www.mic.unibe.ch</u>).

Dr. Guillaume Witz, DSL and MIC, University of Bern (CH)

Dr. Yury Belyaev, MIC, University of Bern (CH)

Supported by the PhD specialization Cutting Edge Microscopy.

**Number of participants:** minimum 15, maximum 30.

**Registration:** until December 7, 2023, <u>here</u>.

**Target audience:** PhD students, postdocs, and everyone who needs image visualisation

and measurement in their research. Participants of Cutting Edge

Microscopy specialization program are particularly invited.

**Credits:** Certificate of attendance.

On request, PhD students of the Cutting Edge Microscopy program can obtain 0.5 ECTS for this course with presenting the learning outcome in the context of his/her project at a separate meeting.

**Background:** QuPath (https://qupath.github.io/) is an open-source software for

bioimage analysis. It offers a powerful set of tools for working with whole slide images and very large images in general but can be used

as an image processing tool in general.

Content: Basic and advanced methods of visualization and analysis using

QuPath. Participants are invited to bring their own data sets for testing

the presented methods during the training.

**Learning outcome:** Participants will learn how to visualize images, annotate objects,

create pixel classifiers, segment, and classify objects in order to

extract quantitative data and present the results.

Course fee: Free or charge. Cancelation after December 07, 2023 or no show –

administrative fee of 100 CHF.

**Schedule:** See next page.

## MIC training: Bioimage analysis with QuPath

## **December 14, 2023**

Time	Day 1 Thursday, 14.12.23
9:00-12:00	Basic functionalities of QuPath. Introduction to batch processing O.Burri, EPFL E. Bartoszek-Kandler, Uni BL
12:00-13:30	Lunch
13:30-17:00	Advanced functionalities of QuPath: Scripting, deep learning tools Work with participants data sets O.Burri, EPFL E. Bartoszek-Kandler, Uni BL