

Whole Tissue 3D Imaging Using Light sheet fluorescence microscope UltraMicroscope Blaze and Clearing Technique



< Seminar >

Date : Tuesday, August 29, 2023 12:30-13:30

Venue : [Hybrid] Conference Room (B1F, Faculty of Medicine Bldg. B),
Kyoto University / Zoom Online Meeting*

Speaker : Sohei Nakayama Ph.D. (Miltenyi Biotec K.K.)

The UltraMicroscope Blaze is a light sheet fluorescence microscope dedicating imaging of cleared tissue. It enables users to set up light sheet conditions easily using any clearing solutions and acquire samples in 3D with larger sizes than mouse organs. Miltenyi's light-sheet microscopes were used in 143 papers worldwide in 2022. In this seminar, we will introduce the features of UltraMicroscope Blaze, clearing methods/ 3D immunofluorescence that users often choose, and new downstream analysis software.

Main features of UltraMicroscope Blaze

- Easy mounting from agarose embedded organoids to a whole adult mouse.
- The various acquisition mode according to the Rayleigh length that you set.
- Homogenous light sheet illumination for large samples and high-quality images utilized by a large pixel camera.
- Seamless observation at low and high magnification From a whole animal to subcellular structures.

