INSELSPITAL
UNIVERSITÄTSSPITAL BERN
HÔPITAL UNIVERSITAIRE DE BERNE

Universitätsklinik für Neurologie

Friday, June 5, 2026

12.00 o'clock

Inselspital, Kursraum Neurologie
INO B118, Entrance 34
Rosenbühlgasse 25 3010 Bern

zoom
Link here

Aberration corrected microendoscopes for extended field-of-view deep brain imaging in benchtop and miniaturized two-photon microscopes

Tommaso Fellin, PhD

Technologies for Life Sciences (LifeTech)
Italian Institute of Technology (IT)

Neural population dynamics in deep regions of the brain play fundamental roles in crucial brain functions, from decision making to the processing of sensory information. A fundamental prerequisite to understand how neuronal population dynamics in the deep brain control such important behavioral processes is to sample large neuronal networks with high and homogeneous spatial resolution and minimal invasiveness. Current techniques based on two-photon microendoscopy are limited in achieving this goal. In this talk, I will present the development of aberration corrected microendoscopes to perform two-photon functional imaging over extended field-of-views in the deep brain of both head fixed mice and freely moving animals.

Chair: Asso Prof. Carolina Gutierrez Herrera

Information & contact:
Trân Vu **I** Tel. +41 (0)31 63 295 43 **I** tran.vu@unibe.ch , Department of Neurology, Inselspital University Hospital, Freiburgstrasse 18, 3010 Bern
Organization: Prof. Antoine Adamantidis /Prof. Stéphane Ciocchi /Prof.. Carolina Gutierrez Herrera/ Prof. Baud