

Privat Docent course on imaging

Contributed by Yannick KREMPP
Wednesday, 30 August 2017
Last Updated Thursday, 27 September 2018

2019 CIF COURSES

Cours de privat docent & Cellular Imaging Facility (CIF)

Dr Jean-Yves CHATTON

Introduction to fluorescence imaging for the analysis of living cells

Place: Petit Auditoire de l'Ecole de Médecine, rue du Bugnon 9 (1er étage)

Schedule: Winter Semester – Tuesdays (mostly) 12:15 – 14:00

8 January 2019 : Basics of transmitted light and fluorescence microscopy

15 January 2019 : Confocal microscopy

22 January 2019 : Modes of image formation, acquisition, signal sampling

29 January 2019 : Dynamic recording of cellular functions by fluorescence imaging.

Intracellular ion imaging and cellular signaling.

Problems related to imaging of living cells

5 February 2019 : Other optical applications (proposed topics)

Fluorescence recovery after photobleaching (FRAP) , photoactivation-optogenetics, multiphoton microscopy,

fluorescence resonance energy transfer (FRET), optical contrasting methods (DIC, phase, ...), Super-resolution microscopy.

Remarks:

- lectures will be given in English.
- in parallel with theoretical lectures, demonstrations will be proposed on the confocal microscopes of the Cellular Imaging Facility (details and registration on site).
- gives right to ONE credit for students of doctoral schools (FBM and neuroscience)

Admission to the course is free and open to anyone interested

(Please register to jean-yves.chatton@unil.ch -- on site registration possible)