EMF week-course program

We are happy to announce the first edition of the EMF week-long course. The course is aimed to give an introduction to and the perspective of different EM techniques, stressing the methods available in house.

Goals:

- To see the various methods of biological samples preparation for EM together with the advantages and disadvantages related to each presented method
- To understand the basic TEM and SEM operation
- To learn which EMF-available techniques can be applied to your research question.
- To discover the basic of EM image formation and analysis and reconstruction
- How molecules can be localized in cells or tissues.

Instructors:

Theoretical part:
Jacques Dubochet
Stanislav Fakan
Marco Cantoni / EPFL
Helmut Gnaegi / Diatome
Partick Schwarb / IMAGIC
Bruno Humbel
Irina Kolotueva
Caroline Kizilyaprak
Jean Daraspe

Practical part:
Bruno Humbel
Irina Kolotueva
Caroline Kizilyaprak
Jean Daraspe
Antonio Mucciolo
Topics covered:

- Sample preparation: fixation, dehydration, resin embedding
- Sample preparation for scanning electron microscopy
- High-pressure freezing, freeze-substitution, resin embedding
- TEM, transmission electron microscopy
- SEM, scanning electron microscopy
- Ultramicrotomy, resin sections
- Cryo-ultramicrotomy, Tokuyasu technique
- Electron tomography: TEM, Focused ion beam-SEM, array tomography
- Image processing, tomogramme reconstruction and modelling

Who can participate:

Anyone who is willing to discover or to deepen the knowledge in the field of electron microscopy. Whoever who wishes to create professional links with the Electron Microscopy Facility of UNIL.

The theoretical morning sessions can be accessed by everybody. For the afternoon hands-on demonstrations, only registered participants can be admitted. The maximum number of participants is 16.

When:

24th - 28th April 2017

Where:

Theoretical part: Amphipole, auditorium No 340.1

Practical part: Biophore, EMF, Room 1110

How much:

For the registered participants of the afternoon sessions: 550 CHF, including basic formula lunch (Banana).

Language:

English

To register, please send the following subscription form until 30th March 2017 to: irina.kolotueva@unil.ch