14 & 15 OCTOBER 2024

Workshop CryoCLEM

BORDEAUX

An event organized by the FBI CLEM working group and sponsored by France Biolmaging.







14th october 9h-12h

THEORETICAL PRESENTATION

Introduction to cryoCLEM workflow and applications

- 9h 9h30 : Robin Anger (IECB) & Noémie Pied (BIC) Introduction to the workshop
 - 9h30 10h00 : Anna Sartori, Institut Pasteur

"Correlative microscopy pipelines in cryogenic conditions: from cells to tissues"

- 10h00 10h20 : Paul Lapios, IINS
- "Cryo-correlative light and electron microscopy of specific synapses
 - 10h20 11h00 : Coffee breack and discussion
 - 11h00 11h20 : Asunción Carmona, LP2I

"Native cryo-correlative light and synchrotron X-ray fluorescence imaging of proteins and essential metals in subcellular neuronal compartments"

• 11h20 - 12h20 : Andreia Pinto, LEICA

"Colorful correlative cryo-imaging"

14h-18h

CRYO-FLUORESCENCE WORKSHOP

Held at BIC photonic

The aim of this workshop is to familiarize participants with sample vitrification and observation by light microscopy in cryogenic conditions.

14h00 - 15h30

- Sample preparation on EM grids
- Vitrification by plunge freezing

15h30 - 18h00

- Cryo-fluorescence observation
- Clipping (in the remaining time)

15th october 9h-12h

CRYO-TOMOGRAPHY WORKSHOP

Held at the IECB

The aim of this workshop is to transfer vitrified samples to a cryo-EM system and to insert the registered coordinates for cryo-tomography.

- Localisation of registered regions of interest
- Selection of optimal regions for cryo-tomography
- Cryo-tomograms acquisition

14h-16h

CORRELATIVE WORKSHOP

Held at the IECB

The aim of this workshop is to provide solutions for tomogram reconstruction and image correlation.

- Softwares for tomogram alignement and reconstruction
- Tomograms reconstruction

Pre-registration until 31st August 2024: <u>CryoCLEM Workshop</u> google forms

This training is limited to 4 - 6 participants.

Selection of the participants will be based on the capacity of immediate application of the methodology in their projet.

Registration covers two meals (Monday and Tuesday lunch) and accommodation (Sunday and Monday evening).

Informations: monica.fernandez-monreal@u-bordeaux.fr; noemie.pied@u-bordeaux.fr