

Light Sheet Fluorescence Microscopy: Principles and Systems Overview



REGISTRATION DEADLINE: March 4, 2022

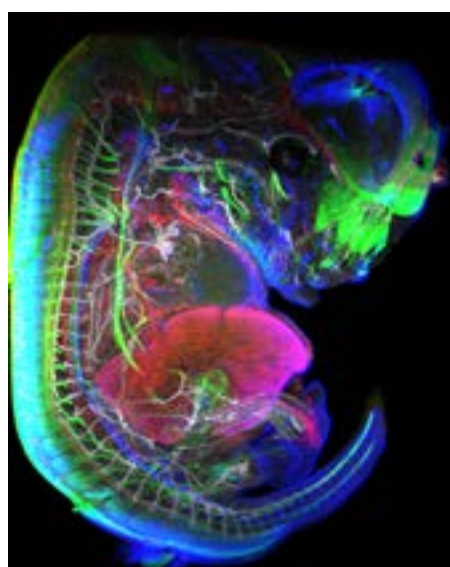
ORGANIZERS: Mathieu DUCROS (Bordeaux Imaging Center, Bordeaux), Rémi GALLAND (Institut Interdisciplinaire des NeuroSciences, Bordeaux)

AIMS: This workshop will present the principle of light-sheet fluorescence microscopy (LSFM). Seminars will cover basic principles, applications, and challenges of LSFM, while practical sessions will allow to test different LSFM implementations and to learn sample preparation and data processing methods.



PHASE I – CRITICAL ASSESSMENT

May 16-18, 2022 in Bordeaux



LSFM MAIN PRINCIPLES

Philippe GIRARD (Institut J. Monod, FRA), Mathieu DUCROS (BIC, FRA), Carole SIRET (CIML, FRA), Cesar Augusto VALADES CRUZ (Institut Curie, FRA)

SAMPLE PREPARATION & CLEARING

Gopi SHAH (EMBL, ESP), Nicolas RENIER (ICM, FRA), Jenny SCHAFER (Vanderbilt, USA)

VARIOUS LSFM IMPLEMENTATION

Reto FIOKA (UT Southwestern Medical Center, USA), Willy SUPATTO (LOB, FRA), Wesley LEGANT (Univ. North Carolina, USA), Alexandra FRAGOLA (Univ. Paris IV, FRA), Rémi GALLAND (IINS, FRA)

DATA VISUALIZATION, ANALYSIS AND MANAGEMENT

Jean-Yves TINEVEZ (Institut Pasteur, FRA), Emmanuel FAURE (LIRMM, FRA), Loic ROYER (Chan Zuckerberg Biohub, San Francisco, USA), Perrine PAUL-GILLOTEAUX (Structure Fédérative de Recherche F. Bonamy, FRA)



PHASE II – TECHNICAL WORKSHOP

June 2022 in:

Bordeaux	- Microscopes: Ultramicroscope; LLSM; soSPIM - Topics: Neurosciences
Montpellier	- Microscopes: Z7; MuviSPIM - Topics: Developmental biology, Neurosciences
Marseille	- Microscopes: Ultramicroscope; Z1 - Topics: Developmental biology, Immunology
Paris	- Microscopes: 2Ph-SPIM; AO-SPIM; DiSPIM; LLSM - Topics: Cellular & developmental biology

The practical phase will provide hands-on trainings on various light-sheet microscopes, each with specific application domains and performances. Attendees will choose the microscope on which they want to be trained and image their own sample according to their targeted biological question.

SELECTION: Up to 4 attendees will be selected per set-up (with a minimum of 2 attendees per set-up) among Phase I participants.

Information and registration
ateliers@inserm.fr
<https://tinyurl.com/k7pwr6e>