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 FIOLKA (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), Perrine PAUL-GUILLOTEAUX (Structure Fédérative de Recherche F. Bonamy, FRA)

### PHASE II – TECHNICAL WORKSHOP
June 2022 in:

<table>
<thead>
<tr>
<th>Location</th>
<th>Microscopes</th>
<th>Topics</th>
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<tbody>
<tr>
<td>Bordeaux</td>
<td>Ultramicroscope; LLSM; soSPIM</td>
<td>Neurosciences</td>
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<tr>
<td>Montpellier</td>
<td>Z7; MuviSPIM</td>
<td>Neurosciences</td>
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<tr>
<td>Marseille</td>
<td>Ultramicroscope; Z1</td>
<td>Developmental biology, Immunology</td>
</tr>
<tr>
<td>Paris</td>
<td>2Ph-SPIM; AO-SPIM; DiSPIM; LLSM</td>
<td>Cellular &amp; developmental biology</td>
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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.