

## Light-Sheet Image Analysis Workshop program

### Public Lectures

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#### **Monday 5 – Light-Sheet Principles and Digital Images**

**Location:** Corporative Auditorium

**09:00 – 09:15** Welcome session and course overview

**09:15 – 10:00** Principles of Light-Sheet Microscopy

**10:00 – 11:00** Experimental Design & Sample Mounting

**11:00 – 11:45** *Coffee break & Poster Session (given by full attendees only)*

**11:45 – 12:30** Visualization and processing of digital images

**12:30 – 13:00** Best practices in microscopy data management

**13:00 – 14:00** *Lunch Break*

#### **Practical Afternoon Session**

**14:00 – 14:30** Sponsor Talk: Microx

**14:30 – 15:30** Visualisation of 2D images

**15:30 – 17:30** Visualisation of 3D images

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#### **Tuesday 6 – Image Processing and Multiview Reconstruction**

**Location:** Science Auditorium

**09:00 – 10:00** Image processing and analysis

**10:00 – 11:00** Multiview reconstruction and tissue cartography

**11:00 – 11:45** *Coffee break & Poster Session (given by full attendees only)*

**11:45 – 13:00** Multiview reconstruction

13:00 – 14:00 *Lunch Break*

### **Practical Afternoon Session**

14:00 – 14:30 Sponsor Talk: Galenica

14:30 – 16:00 Pre-processing, denoising, segmentation

16:00 – 17:30 ImageJ macro programming

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## **Wednesday 7 – Machine Learning and Advanced Workflows**

***Location:*** Science Auditorium

09:00 – 10:30 Deep Learning

10:30 – 11:00 *Coffee Break*

### **PRACTICAL: MORNING SESSION**

11:00 – 12:30 3D Segmentation using machine/deep learning

12:30 – 13:00 Sponsor talk: Bruker

13:00 – 14:00 *Lunch Break*

### **PRACTICAL: AFTERNOON SESSION**

14:00 – 16:00 Tissue Cartography

16:00 – 17:30 Cell Tracking

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## **Thursday 8 – Scientific Applications**

***Location:*** Science Auditorium

09:00 – 09:30 Dr Bruno Vellutini

09:30 – 10:00 Dr Marina Cuenca

10:00 – 10:30 Dr Charlotte Buckley

**10:30 – 11:00** Dr Leonardo Valdivia

11:00 – 11:30 *Coffee Break*

**PRACTICAL: MORNING SESSION**

**11:30 – 13:00** Project work (groups)

13:00 – 14:00 *Lunch Break*

**PRACTICAL: AFTERNOON SESSION**

**14:00 – 17:30** Project work (groups)

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**Friday 9 – Project work & Presentations**

***Location:*** Computer Lab

**PRACTICAL: MORNING SESSION**

**09:00 – 11:00** Project work (groups)

11:00 – 11:30 *Coffee Break*

**PRACTICAL: MORNING SESSION**

**11:30 – 13:00** Project work (groups)

13:00 – 14:00 *Lunch Break*

**PRACTICAL: AFTERNOON SESSION**

**14:00 – 16:30** Group Presentations

**16:30 – 17:00** Closing Remarks

**17:00 – Onwards** Group Dinner