

# LIGHTSHEET MICROSCOPY WORKSHOP

Campus Biotech, Geneva

Day 1: 19 March 2018, 09h00 – 16h45, Auditorium H8-01

09h00	Registration - coffee and croissants	
09h45	Welcome <b>John Donoghue</b> , Wyss Center Director, <b>Stephane Pages</b> , UNIGE/Wyss Center	
	Morning session: New imaging technologies	Chair: Christian Lüscher
10h00	<b>Petr Strnad</b> : Dual illumination inverted lightsheet microscope for long term live imaging	EPFL, Lausanne
10h25	<b>Ludovico Silvestri</b> : Real-time autofocus for high-resolution lightsheet microscopy	LENS, Florence
10h50	<b>Martin Oheim</b> : 2-photon light-sheet imaging with a single objective lens	SPPIN, Paris
11h20	Coffee break and networking	
11h40	<b>Fabian Voigt</b> : The Swiss mesoSPIM - a versatile lightsheet microscope for imaging in cleared tissue	University of Zurich
12h05	<b>Keynote lecture</b> <b>Raju Tomer: Tools for mapping brain structure and function</b>	Columbia University
12h35	Lunch - Poster session	
	Afternoon session: Post-processing and data analysis	Chair: Grégoire Courtine
14h00	<b>Giulio Iannello</b> : TeraTools - experiences in developing software for ultra-terabyte image processing	University Campus Bio-Medico, Rome
14h25	<b>Maged Goubran</b> : An automated pipeline for investigating whole-brain and tract-level alterations across resolution scales	Stanford University
14h55	Coffee break and networking	
	Afternoon session: Sample preparation and applications	Chair: Antony Holtmaat
15h15	<b>Marika Ruiyao Cai</b> : Sub-cellular imaging of intact organs and adult rodent bodies using DISCO tissue clearing	ISD, München
15h40	<b>Nicolas Renier</b> : 3D Histology - combining tissue clearing, immunostaining and automated analysis	ICM – Brain and Spine Institute, Paris
16h10	<b>Paola Perin</b> : A clarified cochlea - auditory brainstem preparation for the visualization of inflammation spread after ototoxic treatment	University of Pavia
16h35	Concluding remarks	Stephane Pages & Laura Batti Wyss Center

16h45 - 18h45 Virtual reality image visualization demo – COLM/SPED lightsheet microscope/ MesoSpim Swiss Initiative microscope (H4 building)

Day 2: 20 March 2018, 09h00 – 16h00, Conference room H8-01-D

09h30	Welcome <b>Stefan Wahl</b> , Zeiss, <b>Corinne Brana</b> , Wyss Center,	
09h45	<b>Jacques Paysan</b> : ZEISS Lightsheet Z1 – Discover the variety of applications!	ZEISS
10h15	<b>Olivier Hagens</b> : Midbrain dopaminergic characterization using lightsheet microscopy: From idea to reality	EPFL, Lausanne
10h45	Coffee break and networking	
11:05	<b>Tamara Manuelian</b> : Arivis imaging science: Discover, quantify and share	Arivis
11h30	<b>Lalit Kumar Dubey</b> : Deep tissue imaging of mesenteric lymph node reveals the interactions between fibroblastic reticular cells and B cells following helminth infection	EPFL, Lausanne
11h50	Lunch (H4 building)	
12h45	Virtual reality image visualization demo – COLM/SPED lightsheet microscope / MesoSpim Swiss Initiative microscope and exhibition (H4 building)	
13:45	<b>Oliver Bauhofer</b> : X-Clarity™: Accelerate your tissue clearing without losing structure or function	Bucher AG
14:05	<b>Wolf Heusermann</b> : On the route to SPIM - an overview of pilot experiments at the IMCF facility	IMCF Basel
14h25	<b>Jacques Paysan, Tamara Manuelian</b> : Live demonstration of a Lightsheet Z1 workflow with data-visualization by Arivis	ZEISS Arivis
15h40	Final remarks	Stefan Wahl, ZEISS Stephane Pages, UNIGE/Wyss Center Laura Batti, Wyss Center
Hands-on sessions for the ZEISS Lightsheet Z1 and Arivis can be booked for the 21 and 22 March		

[www.wysscenter.ch/wyss-lightsheet-workshop/](http://www.wysscenter.ch/wyss-lightsheet-workshop/)

Event partners

