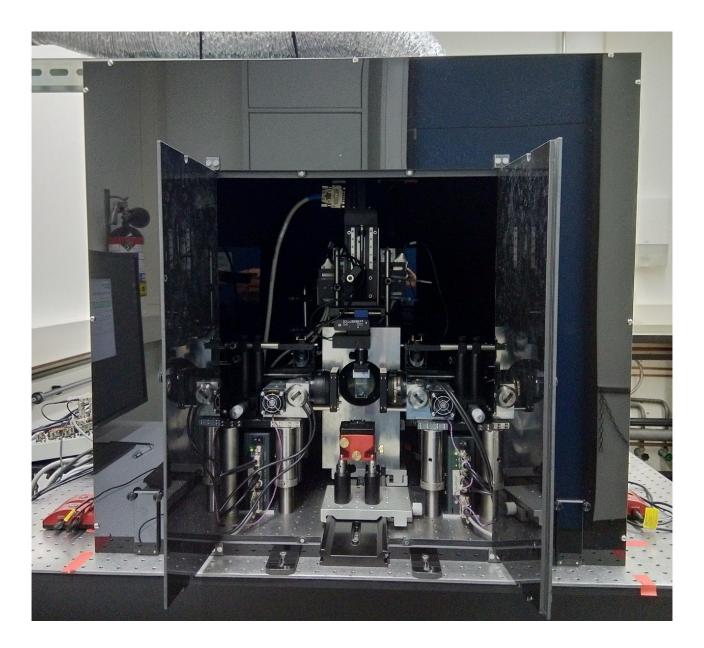


MesoSPIM - Part 1: Start-up

Start-up guide for the ZMB MesoSPIM microscope.

Written By: José Maria Mateos Melero

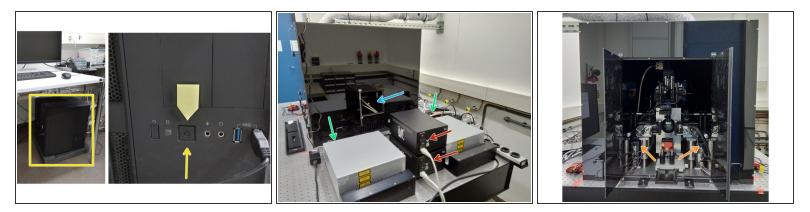


INTRODUCTION

In this guide you will learn how to start-up and mount a sample on the ZMB MesoSPIM lightsheet microscope.

For a full documentation about the microscope please, visit the project webpage: http://MesoSPIM.org

Step 1 — Start-up hardware



- Switch on computer located below the table.
- Log-in to instrument computer with your ZMB credentials.
- At the back of the mesoSPIM. Turn-on the two power supplies for the galvo systems.
- Turn the laser keys to "ON" position.
- Open the light insulation box back door for accessing the camera and turn it on.
- Turn-on the two galvo mirrors.

Step 2 — Start-up software

							Indox, v. 1.8.0				- 0	X RestRet	bel: Camara Window				- 0
				File View Movement ETL Scripting Log Parameters Alignment													
						Sample Translation				Focus							
	Open ETL config file	e, speci	fic for immersion medium and stationary cuvette	size		XY			2								
→	$\rightarrow \sim \uparrow$	« soft	> mesoSPIM-control-Nov2022 > mesoSPIM >	config > etl_parame	eters												
SPIM				ZERO XY		ZERO	ZERO	AUTO Focus									
Or	rganize • New	folder					~1		2		TOLUS						
			Name	Date modified	Туре												
,	Quick access		ETL-parameters - Adrian - Cubic.csv	26.09.2022 12:19 n	e	Increment	1040	UNLOAD		Incremen	t						
	E Desktop	*	ETL-parameters - Alexandra - Clarity.csv	31.05.2022 12:19 h	SpreadSheet	500 µm	LUAD	UNLUAD		500 µm							
	Downloads	*	ETL-parameters - Alexandra - Clarity.csv	23.06.2020 10:41 v		Rotation	ZERO		Increment		STOP						
	📑 j.mateos	*		26.08.2021 6:01 na			ROT				MOVEMENT						
	Pictures	*	ETL-parameters - Anna Maria - ZMBM ETL-parameters - Anna Maria - ZMB - Hu	m Y 2000	Y 2000.0 µm Z 22923.9 µm Angle 0.0" Pocus 50000.0 µm												
				09.06.2022 9:24 vo		Controls											
	S This PC		ETL-parameters - Anna Maria - ZMB - Ki	19.03.2021 11:16 v		405-488-56 488 nm	-640-Quadr	upleblock			Right 10 %						
	Network		ETL-parameters - Anna_Maria_DBE.csv	27.06.2019 6:14 na		488 nm					10 %						
	TICHIOIR		ETL-parameters - Antonis_Clarity.csv	30.05.2022 12:16 n		Uve	Sn	1 P	Run ected Acquisitio	Run	STOP						
			ETL-parameters - Burcu - BABB.csv	10.02.2022 10:57 v		Acquisition		See	ected Acquisitio	0%	luse						
			ETL-parameters - Celina- ZMB - DBE.csv	15.09.2022 2:39 na		Total Progre				0%		Adjust level Status: OK	Overlay: none				
			ETL-parameters - Dalila - BABB.csv	17.02.2022 11:06 v								3				_	
			ETL-parameters - Davide - ZMB.csv	19.03.2021 3:27 na	SpreadSheet	1 mescON Acquire	pos Y	pos Z	and 7 m		Rank	Day E alant	and later	latancity filter	Term butteries	- II X	
			🖷 ETL-parameters - Dayra - Clarity.csv	29.08.2022 5:11 na	SpreadSheet	Stack 0 0	0	0	100	10 2_step	10 0	0 0	488 nm	0 Empty-Al.	. 1x Left	tmp one.tif	
			ETL-parameters - Desiree_Clarity.csv	10.01.2022 5:02 na	SpreadSheet												
			ETL-parameters - DND - ExLSM.csv	28.07.2020 10:17 v	SpreadSheet	0					-						
						Add Ro Preview Selec		Duplicate Ro		lete Row te all Rows	Move Row Up Move Row Dow	Save Table	Tiling Wizard Filename Wiz			Mark Rotation Mark ETL values	
						= Preview: M			Estimate	ed time & size	00:00:00	0 G	Set Folders		Mark State	Mark ALL	

- Double click on the "MesoSPIM Control" icon. A window will appear to select the ETL parameters.
- Select your personal ETL configuration file which has been created during your microscope introduction.
- The microscope control, camera and acquisition manager windows will appear. Select the "Movement" menu and proceed with the sample loading.

Step 3 — Mount a sample



- Take the immersion cuvette according to your sample from the chemical hood.
- Insert the sample holder with the two two balls to the back.
- In the software use the arrow button to bring the sample down into the immersion chamber.
- Close the doors of the light insulation box.