

MLS course on Basics of Light Microscopy at the LMC ETHZ, October 2010

	04.10.10	05.10.10	06.10.10
9-12 theory sessions	Venue: to be announced Microscopy basics: resolution, magnification, structure of microscope, objectives, brightfield contrast methods etc.	Venue: to be announced Fluorescence: widefield and confocal 3D, multichannel, PSF, chromatic and spherical aberrations	Venue: to be announced Image processing, Deconvolution, 3D rendering, ethics in Bioimaging Pitfalls ?
13-17 hands on session	brightfield contrast methods Köhler DIC (Zeiss life, Palm, FCS) Phase contrast (Olympus MM, Leica TIRF)	Fluorescence microscopy @ Widefield and confocal Topics: 3D, Z-sectioning, cross-talk problems, filter choice, Experiments: 3D stacks of beads in 1 color multicolor acquisition of invitrogen samples (3 cell labels, 1 kidney) Mics: PALM, Zeiss life or CellR, SP2 AOBS and FCS	Venue: to be announced Deconvolution of acquired stacks with Huygens or Image J Venue: to be announced Imaris and Image J demo with beamer hands on @ IPC1-3