

# LIGHT MICROSCOPY COURSE

PROGRAMME – AUGUST 2015



Tuesday 18 <sup>th</sup> of August		
09:00 - 09:45	Light, Resolution and Magnification	15.2.18
09:45 - 10:45	The Microscope, Conjugate Planes and Contrast techniques	15.2.18
10:45 - 11:00	<b>Coffee break</b>	
11:00 - 11:20	Peter Evennett – Abbe's diffraction experiments (Video)	15.2.18
11:20 - 12:50	<b>Practical 1 (rotations - 30min each)</b> <ul style="list-style-type: none"> <li>▸ Aperture &amp; Conjugated planes on Optical bench (LP)</li> <li>▸ Resolution (THB)</li> <li>▸ Köhler illumination and conjugated planes (CP)</li> </ul>	15.2
12:50 - 13:30	<b>Lunch break</b>	
13:30 - 14:15	Introduction to fluorescence	15.2.18
14:15 - 14:30	<b>Coffee break</b>	
14:30 - 15:00	Light sources, detectors and principles of Confocal microscopy	15.2.18
15:00 - 16:00	<b>Practical 2</b> Intro to ZEN, setting Köhler and DIC on LSM (Practical – CFIM) <ul style="list-style-type: none"> <li>▸ LP LSM700</li> <li>▸ THB LSM780</li> <li>▸ CP LSM710</li> </ul>	CFIM
Wednesday 19 <sup>th</sup> of August		
09:00 - 9:45	Laser scanning confocal microscopy Colocalization analysis – important considerations	15.2.18
9:45 - 11:00	Practical considerations before image acquisition Live Imaging strategies	15.2.18
11:00-11:15	<b>Coffee break</b>	
11:15 - 12:45	<b>Practicals 3, rotation 1 (rotations - 90min each)</b> <ul style="list-style-type: none"> <li>▸ Testing resolution and optimizing dynamic range LP, LSM710</li> <li>▸ Acquiring confocal data – multi channel design CP, LSM780</li> <li>▸ Spinning Disk and TIRF THB, Cell Obs</li> </ul>	CFIM
12 :45-13 :30	<b>Lunch break</b>	
13 :30-15 :00	<b>Practical 3, rotation 2 - CFIM</b>	CFIM
On the run	<b>Coffee break</b>	
15 :00 - 16:30	<b>Practical 3, rotation 3 - CFIM</b>	CFIM