## PROGRAMME – JANUARY 2015



## **Tuesday 20<sup>th</sup> of January** Light, Resolution and Magnification 09:00 - 09:45 09:45 - 10:45 The Microscope, Conjugate Planes and Contrast techniques Coffee break 11:00 - 11:20 Peter Evennett – Abbe's diffraction experiments (Video)) 11:20 - 12:50 Practical 1 (3 rotations - 30min each) Aperture & Conjugated planes on Optical bench • Resolution Köhler illumination and conjugated planes • Lunch break 13:30 - 14:15 Introduction to fluorescence 14:15 - 15:00 Light sources, detectors and principles of Confocal microscopy 15:00 - 16:00 Practical 2 Intro to ZEN, setting Köhler and DIC on LSM Wednesday 21<sup>st</sup> of January 09:00 - 9:45 Laser scanning confocal microscopy Colocalization analysis – important considerations 9:45 - 11:00 Practical considerations before image acquisition Live Imaging strategies Coffee break 11:15 - 12:45 Practical 3, rotation 1 • Testing resolution and optimizing dynamic range Acquiring confocal data – multi channel design Spinning Disk and TIRF ٠ Lunch break 13:30-16:30 Practical 3, rotations 2 and 3