Schedule of 15th NorMIC Workshop (IBV, NorMIC Platform, UiO) Kristine Bonnevies hus - Oslo, Level 3, Room Sanger 3213

1st Monday **Preparation Day**	2nd June Tuesday **Day1**	3rd June Wednesday **Day2**	4th June Thursday **Day3**	5th June Friday **Day4**
8:30-9:00	Intro_Oddmund	Last Day ReCap(Rainer)	Last Day Recap(Kay)	Last Day Recap(Felix)
9:00-9:30	Lecture: Overview of Modern Image Modalities, Confocal and Spinning Disk (LightSheet) (Kay) (5min Break)	Lecture: "Superresolution" Overview, Resolution, Diffraction, Rainer (5 min Break)	Lecture: TIRF, Single Molecule Localization Microscope (Felix/) (5 min Break)	Aberrations/Imaging Artefacts: Felix
9:30-10:00				
10:00-10:30	Lecture: Microscope Building Ellement, Objectives, filters, and how do they affect the final image. (Felix) (5 min Break)	Lecture: Deep Tissue Imaging/ Index matching/Tissue Clearing (PC) (5 min Break)	Tea Break	Rainer:"Superresolution"II, Structured Illumination Microscopy, Rainer Overview of super resolution
10:30-11:00			Lecture:Calcium Imaging, SMLM for Drug Discovery and (Tim Kaminsk)	
11:00-11:30 **11:30-12:00**	Lecture: Labeling/Dyes/Fluorescence (PC) (5min Break)	Lecture:High-Content Imaging and Multiplex Imaging: Anna Lång	Vendor Talk, Leica (Stellaris, Spectraplex)	Image Scanning Microscopy, Rainer
			Vendor Talk: Jan (Abberior) STED FLIM, Minflux	Talk/Lab :ImageJ Intro (Felix)
12:00-12:30	Vendor Talk, Nikon (NSPARQ,Extended Focus)	Vendor Talk, Evident (Spinning Disk,SORA)	Vendor Talk Zeiss (Lightfield, Airyscan) From Complexity to Clarity: Workflow Automation for Spatial Biology at Scale	Vendor Talk: Juergen Mayer (Light Sheet Microscopy)
12:30-13:30 lunch	**lunch**	**lunch**	**lunch**	**lunch**
13:30-14:00	Parallel Lab 1 Köhler_illumination, Optical Elements, Aberration (Dominik, Edna) 3626	Whole afternoon: Groups rotate amongst different microscope stations **(2pm to 5pm)**	Whole afternoon: Groups rotate amongst different microscope stations **(2pm to 5pm)**	Work on Data with groups(1 hour) 13:30-14:30
14:00-14:30				
14:00-14:30	Parallel Lab 2 : Diffraction Lab 2 , Abbe Diffraction Kit (Rainer Heintzmann))3110			Student Presentation in Group 10 min Each (1 hours) 14:30-15:30 ReCap of the Whole course(Felix)

14:30-15:00 **15:00-15:30** **15:30-16:30**	Parallel Lab 3 Ray optics and Total Internal Reflection (TIRF) (PC, Felix) Room 3604			Rest of Teaching Staff (Evaluation and Closing Remarks) 15:30-16:00
16:00-16:30	(Essential Labs duration : 45mins) (Snacks will be provided from 2:30 to 4:30pm) Students who brought samples can stain their sample for STED microscopy.	(Labs duration : 45min to 1h) 6 groups rotation amongst 6 stations in two days. (Snacks will be provided from 2:30 to 4:30pm)	(Labs duration : 45min to 1h) 5 groups rotate amongst 5 stations in two days. (Snacks will be provided from 2:30 to 4:30pm) (Last Slot, student can choose which station they want to go, need to book engineer/station)	

Lectures are open to the public, free of registration.
Social Dinner: First day of the workshop(2nd June), 6:30pm, ShangHai 2K18

System for Hands on sessions:

1.Zeiss LSM880 Airyscan (In House System) Image Scanning Superresolution (3613)
2.Abberior FLIM-STED Facility Line(In House System)/Stedycon2(Demo) Superresolution, Life Time (FLIM) System (3604)
3.Nikon Ji Spinning Disk System, with Extended Focus(Invention that was developed by NorMIC platform) (3613)
4.Olympus SORA Spinning Disk(In House System) (3604)
5.Bruker MuView SPIM (Julien's) (Level 2)
6.Leica Mica(Demo) (3604)

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