



Sample preparation for 3D-SEM techniques

Sample preparation for 3D-SEM techniques in life sciences (30.11-04.12.2020)

Monday:	
9:00-11:00	Welcome & Introduction
11:00-11:45	Talk: Image analysis and visualization
12:00-13:00	Lunch
13:00- 13:45	Students flash talk presentations
14:00-20:00	Image processing/analysis/visualization (IMOD, MIB, Ilastik, Blender)

Tuesday:	
9:00-10:30	Talk: How to get from living samples to image quantification
10:30-12:30	Practicals in groups covering: Group 1: High-pressure freezing, freeze-substitution (agitation module, quick freeze substitution, automatic freeze substitution)
	Group 2: Chemical fixation microwave, Embedding of multiple samples at the same time
	Group 3: Array tomography, ultramicrotomy, Mounting of samples for SEM
12:30-13:30	Lunch
	Coffee break ad libitum
13:30-18:00	Groups are continued from the morning session

Wednesday:	
9:00-10:30	Talk: Chemical fixation and sectioning
10:30-12:30	Practicals in groups
12:30-13:30	Lunch
13:30-18:00	Groups are continued from the morning session
	Coffee break ad libitum

Thursday:	
9:00-10:30	Talk: High-pressure freezing and freeze substitution
10:30-12:30	Practicals in groups
12:30-13:30	Lunch
13:30-18:00	Groups are continued from the morning session
	Coffee break ad libitum
18:30	Dinner at Restaurant

Friday:	
9:00-12:00	Talk: Array Tomography, sample preparation tips and tricks
Ad libitum	Practicals in groups
12:00-13:00	Feedback session and lunch, Departure afterwards