

Time / Day	Mon, 21.2.22	Tue, 22.2.22	Wed, 23.2.22	Thu, 24.2.22	Fri, 25.2.22	Mon, 28.2.22	Tue, 1.3.22	Wed, 2.3.22	Thu, 3.3.22	Fri, 4.3.22							
Module	Microscopy & Image analysis				Microfluidics		scRNA-seq analysis										
9:00	Introduction to light microscopy	Homework Discussion	Homework Discussion	Scrum meeting	Introduction into microfluidics	Student presentations											
		Image processing I: Filters, thresholding, segmentation	Image processing II: Machine learning, tracking	Scientific lecture II			Introduction to scRNA-seq	Homework discussion and exercises in 'R'	Scientific lecture IV (Antonio Scialdone)	Scientific lecture V							
10:00																	
		Confocal acquisition (interactive demo)	Fiji III: Segmentation	Fiji V: ML tools			Coffee break	Coffee break	Coffee break	Coffee break							
							Getting started with scRNA-seq data analysis	Machine learning tools I	Homework discussion and scRNA-seq data from pre-implan- tation mouse embryos I	Homework discussion and scRNA-seq data from gastru- lating mouse embryos I							
11:00	Q'n'A Break	Fiji II: ROI manager, measurements	Fiji IV: Automation	Project work II	How to run microfluidics experiments		Lunch break	Lunch break	Lunch break	Lunch break							
	Epifluorescence acquisition (interactive demo)										Project outline	Quiz II					
12:00		Quiz I															
	Lunch break	Lunch break	Lunch break	Lunch break							Lunch break	Lunch break					
13:00													Some machine learning tools	Machine learning tools II	scRNA-seq data from pre-implan- tation mouse embryos II	scRNA-seq data from gastru- lating mouse embryos II	
	Fiji I: Image I/O, basic manipulations	Fiji and R. Model fitting, plotting, statistics	Project work I	Scrum meeting	Single cell analysis in Matlab	Scientific lecture III	Homework assignment	Homework assignment	Homework assignment	Concluding remarks							
14:00				Project work III													
15:00		Scientific lecture I															

Home-work	Homework I	Homework II	Project work	Project work	Prepare presentations		Homework	Homework	Homework	
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