



PhD course Electron Microscopy



Lecturer

Sunday, October 18, 2015

18:00 – 20:30	Introduction and get-together, Panum Faculty Club	
	Evening lecture	PJE

Lecture Theater 21.2.27b

Monday

09:00 – 10:00	Principles of Electron Microscopy	PJE
---------------	-----------------------------------	-----

10:00 – 10:15 **Coffee**

10:15 – 12:00	Biological Electron Microscopy I: Electron – specimen interactions Biological Electron Microscopy II: Sample preparation TEM	PCH
---------------	---	-----

12:00 – 12:45 **Lunch**

12:45 – 14:45	Practical I, Rotation 1		
	1) Embedding	16.1.39	PCH
	2) Ultramicrotomy, knife breaking	CFIM	Leanne
	3) Negative staining, CM100 (a)	CFIM	RF
	4) Imaging Tissue, CM 100 (b)	CFIM	Gema
	5) TEM alignment, Tecnai	CFIM	KA

14:45 – 15:00 **Coffee**

15:00 – 17:00	Practical I, Rotation 2	
---------------	--------------------------------	--

Tuesday

Lecture 21.2.27b

09:00 – 09:45	Biological Electron Microscopy II: Sample preparation SEM	PCH
09:45 – 10:00	Coffee (CFIM)	
10:00 – 12:00	Practical I, Rotation 3	
12:00 – 12:45	Lunch	
12:45 – 14:45	Practical I, Rotation 4	
14:45 – 15:00	Coffee	
15:00 – 17:00	Practical I, Rotation 5	

Wednesday

Lecture Theater 21.2.26

09:00 – 10:00	HPF and Freeze sub	JDW
10:00 – 10:15	Coffee	
10:15 – 11:00	Cryo TEM and SEM	RF
11:00 – 12:00	Immuno labelling	PCH
12:00 – 12:45	Lunch	
12:45 – 14:45	Practical II, Rotation 1 1) HPF 2) Freeze Fracture, Quanta 3) Plunge Freeze, Vitrobot, Tecnai 4) Cryo Ultramicrotomy (16.1.39) 5) Tokuyasu, immunolabelling (16.1.39)	JDW RF/FT KA ZN/Gemma PCH/Leanne
14:45 – 15:00	Coffee	
15:00 – 17:00	Practical II, Rotation 2	

Thursday

Lecture Theater 21.2.27b

09:00 – 09:45 Introduction to SEM, DualBeams, FIB and 3D applications FT

09:45 – 10:00 **Coffee**

10:00 – 12:00 **Practical II, Rotation 3**

12:00 – 12:45 **Lunch**

12:45 – 14:45 **Practical II, Rotation 4**

14:45 – 15:00 **Coffee**

15:00 – 17:00 **Practical II, Rotation 5**

Faculty Club

17:00 Course dinner

Evening Lecture

Friday

09:00 – 10:00	Practical III, Rotation 1 1) Tomography 2) Dual Beam 3) Pippa, Chit-chat	MJ FT PCH
---------------	--	-----------------

10:00 – 10:15 **Coffee**

10:15 – 11:15 **Practical III, Rotation 2**

11:15 – 12:15 **Practical III, Rotation 3**

12:15 – 13:00 **Lunch**

Lecture Theater 21.2.27b

13:00 – 13:45	Imaging in 3D – electron tomography	PCH
---------------	-------------------------------------	-----

13:45 – 14:30	Data handling and image analysis	KA
---------------	----------------------------------	----

14:30 – 14:45 **Coffee**

14:45 – 16:00	Data handling and image analysis continued	KA
---------------	--	----

16:00	Quiz (prizes available!) Questions, evaluation	
-------	---	--