

Cryo Electron Tomography in Structural Biology

22nd – 25th Nov 2021

Hosted virtually at eBIC - (GMT time zone) - Registration required



Organiser: Kyle Morris (eBIC)

Day 1: Monday – 22nd November

09:45–10:00	Virtual arrival: Introductions and welcome
10:00–11:00	Lecture 1: Cryo-ET - preparation, collection, reconstruction (Karen Davies, eBIC)
11:00–12:00	Lecture 2: Subtomogram averaging and reconstruction (Ben Himes, HHMI/UMassMed)
12:00–12:30	<i>Lunch break</i>
12:30–15:00	Practical 1: Molecular and cellular cryo-ET (eBIC)
15:00–15:15	<i>Coffee break</i>
15:15–17:00	Practical 1: Molecular and cellular cryo-ET (eBIC)

Day 2: Tuesday – 23rd November

10:00–11:00	Lecture 3: In-situ cryo-ET, cryo-FIB and cryo-CLEM (Michael Grange, RFI)
11:00–12:00	Lecture 4: Segmentation and interpretation of cellular tomography (Steve Ludtke, Baylor)
12:00–12:30	<i>Lunch break</i>
12:30–15:00	Practical 2: Molecular and lamella cryo-ET (eBIC)
15:00–15:15	<i>Coffee break</i>
15:15–17:00	Practical 2: Molecular and lamella cryo-ET (eBIC)

Day 3: Wednesday – 24th November

10:00–12:00	Practical 3: Processing & sub-tomogram averaging in IMOD/emClarity (eBIC/STRUBI)
12:00–13:00	<i>Lunch break</i>
13:00–15:00	Practical 3: Processing & sub-tomogram averaging in IMOD/emClarity (eBIC/STRUBI)
15:00–15:15	<i>Coffee break</i>
15:15–16:30	Practical 3: Processing & sub-tomogram averaging in IMOD/emClarity (eBIC/STRUBI)

Day 4: Thursday – 25th November

10:00–10.45	Practical 4-1: Cryo-CLEM demo (eBIC)
10.45–11.00	Short presentation: samples, correlative work, autorings
11:00–12:00	Practical 4-2: Cryo-FIB-SEM demo (eBIC)
12:00–13:00	<i>Lunch break</i>
13:00–16:30	Practical 4-2: Cryo-FIB-SEM demo (eBIC)
15:00–15:15	<i>Coffee break</i>
15:15–16:30	Practical 4-2: Cryo-FIB-SEM demo (eBIC)
16:30	Farewell and photo

End of Workshop

For the most up to date information please go to:

<https://www.diamond.ac.uk/Instruments/Biological-Cryo-Imaging/eBIC/Training/Courses-title-pg/Cryo-ET-course.html>