Diamond Biological Cryo-imaging User Meeting: eBIC & B24

All times UK (BST)

Tuesday 20th April

*Session 1: Chair: Dan Clare (*eBIC Diamond*)*

14:00	Welcome: **Martin Walsh (Diamond)**
14:10	**Julika Radecke (eBIC Diamond)**
	eBIC user updates
14:40	**Mohamed Koronfel (B24 Diamond)**
	Correlative Light and X-ray Tomography (CLXT): the technique
15:00	**Jim Naismith (Rosalind Franklin Institute & Oxford)**
	eBIC user talk: Blocking SARS-CoV-2: The role of EM in mapping nanobody interactions
15:30	*Break*

Session 2: Chair: Maria Harkiolaki (DLS)

15:45	**Archana Jadhav (B24 Diamond)**
	Correlative Light and X-ray Tomography (CLXT): sample preparation
16:05	**Colin Crump (Cambridge)**
	B24 user talk: Uncovering ultrastructural remodelling of cells during HSV-1 infection
16:35	**Sjors Scheres (MRC-LMB)**
	eBIC user talk: Atomic-resolution cryo-EM and amyloid structures from brain
17:05	**User meeting round-table discussion**
	Chairs: Sean Connell (CICbioGUNE) & Jamie Blaza (York)
	During the user meeting eBIC representatives will discuss topics raised in the eBIC User Survey. Please complete in advance:
	https://www.surveymonkey.co.uk/r/JGBJLMS
17:45	*end*

CCP-EM Spring Symposium Online

All times UK (BST)

Wednesday 21st April

Session 1: Chair: Giulia Zanetti (ISMB Birkbeck College)

14:00	*Opening and welcome*
	What's new in CCP-EM, eBIC & EMDB/EMPIAR
14:00	CCP-EM: **Matthew Iadanza**
14:20	eBIC: **Andrew Howe**
14:40	EMDB/EMPIAR: **Ardan Patwardhan**
15:00	*Break*

Session 2: Chair: Neil Ranson (Leeds)

15:30	**Misha Kudryashev (Max Planck Institute of Biophysics)**
	Structure of ion channels in membranes by cryo-EM
16:00	**Danielle Paul (Bristol)**
	In situ cryo-electron tomography reveals filamentous actin with the microtubule lumen.
16:20	**Alberto Bartesaghi (Duke)**
	High-throughput, high-resolution structure determination using single-particle cryo-ET
16:50	**Francesca Coscia (Human Technopole)**
	The structure of human thyroglobulin
17:20	*End*

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Thursday 22nd April

Session 3: Chair: Alan Cheung (Bristol)

14:00	**Radoslav Enchev (Crick)**
	Visual biochemistry
14:30	**Lori Passmore (MRC-LMB)**
	Molecular insights into gene expression
15:00	**Peijun Zhang (DLS / Oxford)**
	Visualizing SARS-CoV-2 infection and vaccine by multi-scale cryo-imaging
15:30	*Break*

Session 4: Chair Maya Topf (Birkbeck / CSSB Hamburg)

15:50	**James Krieger (CSIC)**
	ProDy 2.0 and CryoDy: Extension of protein dynamics analyses to large scale and cryo-EM maps
16:10	**Takanori Nakane (MRC-LMB)**
	Single-particle cryo-EM at atomic resolution
16:40	**Ellen Zhong (MIT)**
	Advances in heterogeneous reconstruction with cryoDRGN
17:10	*End*

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Friday 23rd April

Session 5: Chair: Xiaodong Zhang (Imperial)

10:30	**Hans Elmlund (Monash)**
	SIMPLE 3.0: SPA in real time and new methods for motion correction of cryogenic and liquid samples
11:00	**Matthias Wolf (OIST)**
	Beyond the potential: Cryo-TEM-EELS for bio samples
11:30	**Mateusz Olek (DLS / York)**
	The IceBreaker software for automated estimation and removal of the ice gradient on cryo-EM micrographs
11:50	*Break*

Session 6: Chair: Christopher Aylett (Imperial)

14:00	**Grzegorz Chojnowski (EMBL)**
	Identification of unknown proteins and sequence assignment validation in cryo-EM
14:20	**Carlos Oscar Sorzano (CSIC)**
	Bias and variance in CryoEM
14:50	**Maya Topf (Birkbeck / CSSB Hamburg)**
	Assessment and refinement of models from CASP14 cryo-EM targets
15:20	*Meeting close*

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