



Link for all Plenary sessions

<https://ukri.zoom.us/j/95963440589>

Diamond BCI (Biological Cryo-imaging) User Meeting: eBIC & B24

Wednesday 22nd April

All times UK (BST)

- Chair: Emma Buzzard (eBIC, DLS)**
- 11:00 David Farmer (eBIC, DLS)**
eBIC user updates
- 11:20 Valentina Loconte (B24, DLS)**
B24 user updates
- 11:40 Alfred Fernandez-Castane (Aston)**
B24 user talk: Correlative microscopy to elucidate the interplay between intracellular iron and magnetosome formation in magnetotactic bacteria
- 12:00 User meeting discussion**
Question hosts: Emma Buzzard (eBIC, DLS) & Éilís Bragginton (eBIC, DLS)
Discussion Chairs: Richard Collins (University of Manchester) and Josie Ferreira (University College London)
Representative(s) from the Diamond User Committee (DUC) will lead a dynamic and interactive discussion on various topics with a panel of representatives from eBIC & B24. This is a unique opportunity for the user community to directly influence the evolution of our facilities, ensuring we provide a service that is both relevant and beneficial to the changing needs of our user community.
- 12:40 Lunch for all BCI user meeting attendees**
- 13:50 Karen M Davies Memorial Symposium**
Full schedule below and for further information:
<https://www.diamond.ac.uk/Home/Events/2026/Karen-M.-Davies-Memorial-Symposium.html>
- 19:00 Drinks and Buffet reception for BCI attendees (sponsored by Thermo Fisher Scientific)**
- 20:30 - Ceilidh with 'Blackbeard's Tea Party'**

CCP-EM Spring Symposium

Thursday 23th April

All times UK (BST)

Session 1: Chair: Jamie Blaza (University of York)

9:00 Opening and welcome
What's new in CCP-EM, eBIC & EMDB/EMPIAR

9:15 CCP-EM

9:45 DLS/eBIC

10:15 EBI

10:45 **Coffee**

Session 2: Chair: Janet Vonck (Max Planck)

11:30 **Davide Tamborrini (Biozentrum)**
Ray-N-Drop: a plug-and-play infrastructure for time-resolved perturbation during plunge vitrification

12:00 **Tanmay Bharat (MRC-LMB)**
Multi-Scale, Correlated Cryogenic Imaging of Bacterial Biofilms

12:30 **Lunch, Poster Session and Workshop**
12:30 - Start of lunch service
13:00 - TFS workshop "Recent Advances in 200kV Cryo Electron Microscopy (in main lecture theatre)
13:30 - Poster session 1 (in banquet hall)

Session 3: Chair: Colin Palmer (STFC-UKRI)

14:30 **Éilís Bragginton & Christian Orr (DLS)**
Accelerating cryo-FIB sample preparation with femtosecond laser for lamella

preparation

14:50 **Thomas Fish (Rosalind Franklin Institute)**
15:10 *Adaptive Milling: imaging feedback-driven automated lamella fabrication*

Mart Last (MRC-LMB)
Large scale in situ studies with general pretrained networks for cellular cryoET

15:30 **Coffee**

Session 4: Chair: Corinne Smith (University of Warwick)

16:30 **Martin Jones (Francis Crick Institute)**
CCP-volumeEM: Connecting People, Tools, and Data Across the Volume EM Community

17:00 **Guillaume Gaullier (Uppsala University)**
Atomic resolution structure of spinach rubisco reveals protons and dynamics

17:20 **Maria Davila (IBS)**
Visualizing the B12-dependent photoreceptor CarH in action with time-resolved electron cryo-microscopy

17:40 **Helen Foster (Leeds)**
The multi-step mechanism of axoneme assembly revealed by in situ structural biology

19:30 **Conference dinner**



CCP-EM Spring Symposium

Friday 24th April

All times UK (BST)

Session 5: Oksana Degtjarik (Leeds)

- 9:00 **Bogdan Toader (MRC-LMB)**
Self-supervised spatial features for protein detection in crowded cryo-ET tomograms
- 9:30 **Beata Turonova (Max Planck Institute of Biophysics)**
Twist and Scout with TANGO: Decoding Spatial Organization in Cryo-ET
- 10:00 **Herman Larsen (STFC)**
CMOS sensors for Electron Microscopy at STFC

10:20 **Coffee**

Session 6: Felix Weis (Ibs)

- 11:00 **Ali Punjani (Structura)**
New Developments for Single Particle Cryo-EM Data Processing in CryoSPARC
- 11:30 **Chiara Rapisarda (Sanofi)**
Small little steps to automate cryo-EM processing
- 12:00 **Emma Hesketh (Leicester)**
Single particle cryoEM at the Midlands Regional CryoEM Facility
- 12:30 **Lunch & Poster Session**
12:30 - lunch service starts
13:00 - Post session 1 (in banquet hall)

Session 7: Natalie Al-Otaibi (Birkbeck, University of London)

- 14:00 **Clemens Plaschka (Institute of Molecular Pathology)**
Mechanisms of mRNA packaging and export
- 14:30 **Wyatt Yue (Newcastle)**
Versatility of S-adenosyl-methionine (SAM) as an enzyme cofactor, activator and inhibitor
- 15:00 **Coffee**

Session 8: Ana Casañal (Human Technopole)

- 15:30 **Ezgi Karaca (Izmir Biomedicine and Genome Center & DEU)**
AI revolution in the structure prediction of biomolecular complexes
- 16:00 **Oli Clarke (Columbia)**
High-resolution ab initio reconstruction enables cryo-EM structure determination of small particles
- 16:30 **Jane Richardson (Duke)**
Validation Oddities: Ramachandran Refinement, AF3 Hallucinations, and Barbed Wire
- 17:00 **Poster awards and meeting close**



Karen M. Davies Memorial Symposium

Celebrating a Legacy in Structural Biology

Wednesday 22nd April 2026

All times UK (BST)

- Session 1:** **Chair: Éilís Bragginton (eBIC, DLS)**
- 13:50 **Peijun Zhang (eBIC, DLS & University of Oxford)**
Welcoming Remarks
- 14:00 **Catherine Venien-Bryan (Sorbonne Université)**
Karen's DPhil years at Oxford
- 14:30 **Martin Walsh & Petra Lukacik (DLS)**
Dr Karen Davies' Structural Biology Legacy: From Micrographs to Molecular Machines
- 15:00 **Alexey Amunts (Stockholm University)**
Structural studies of energy-converting membranes
- 15:20 **Christoph Gerle (RIKEN Spring-8 Center)**
Membrane bending in Japan and Germany - memories of Karen
- 15:40 **Coffee**
- Session 2:** **Chair: Vicki Gold (University of Exeter)**
- 16:30 **Werner Kuehlbrandt (MPI Biophysics)**
Karen Davies - postdoc, inspiration, colleague
- 17:00 **Liam Mead (eBIC, DLS)**
Tailocins: Weapons of Bacterial Warfare
- 17:20 **Helmut Kirchhoff (Washington State University)**
Visualization of the Photosystem II supercomplex in plant photosynthesis membranes
- 17:40 **Bertram Daum (University of Exeter)**
Dimers unleashed: Memories of Karen from Frankfurt and beyond
- 18:00 **All organisers (Peijun Zhang, Éilís Bragginton, Vicki Gold, Bertram Daum)**
Closing Remarks

Sponsors

We would like to thank [Thermo Fisher Scientific](#), [UCB](#), [Biochemical Society](#), [CCPEM](#) and [Diamond Light Source](#) for their support of the Memorial Symposium.

