

3rd Instruct Workshop for Best Practices in CryoEM

19 Nov. 2019 to 20 Nov. 2019

Instruct Centre France 1, Centre for Integrative Biology (CBI) / IGBMC, Strasbourg/Illkirch, France

Day 1: Tuesday, November 19th

13.00 – 13.40 *Registration*

13.45 – 14.05 Welcome & Introduction: Future National Centre for Biomedical CryoEM

Bruno Klaholz
CBI/IGBMC, Strasbourg

Session 1: Sample preparation

14.15 – 14.35 The cryoWriter: Modular microfluidics for protein isolation, EM-grid preparation, and “differential visual proteomics”.

Luca Rima
University of Basel

14.45 – 15.05 Cryo electron tomography workflows at NeCEN

Rebecca Dillard
NeCEN, Leiden

15.15 – 15.45 *Coffee break*

15.50 – 16.45 **Breakout sessions:**

- Sample quality assessment
- Microscope technology development

16.45 – 17.30 Reports from breakout sessions

17.30 – 18.30 Guided tour to the CryoEM facilities at the CBI

Day 2: Wednesday, November 20th

Session 2: On the fly processing / data collection strategies

- 09.00 - 09.20 Some aspects of running a large CryoEM Facility: user access and data collection strategies **Shaoxia Chen**
MRC-LMB, Cambridge
- 09.30 - 09.50 Scipion 2.0 for facilities **Pablo Conesa**,
CNB-CSIC, Madrid
- 10.00 - 10.20 On-the-fly tilt series processing in Warp **Dmitry Tegunov**
MPI, Gottingen
- 10.30- 10.55 Coffee break*
- 11.00 - 11.45 **Breakout sessions:**
- software workflows
 - data management/storage
- 11.45 - 12.30 Reports from breakout sessions
- 12.30- 13.30 Lunch buffet*

Session 3: Cryo electron tomography / FIB

- 13.30 - 13.50 In Situ Structural Biology - You bring the samples, we the tools! **Philipp Erdmann**
MPI, Munich
- 14.00 - 14.20 In situ structure determination using Cryo-FIB-SEM, CryoET and subtomogram averaging **James Gilchrist**
eBIC, Oxford
- 14.30 - 14.50 Data acquisition for high-resolution subtomogram averaging: the details **Wim Hagen**
EMBL, Heidelberg
- 15.00- 15.20 Cryo-FIB-SEM volume imaging and on-grid thinning for CET **Andreas Schertel**
Zeiss/IGBMC
- 15.30 End of the sessions & Farewell*