



PROGRAM

April 15-19 2024

Monday April, 15

- 09.00 - 09.15 Welcome **Bruno Klaholz** CBI/IGBMC, Illkirch, France
- 09.15 - 09.45 Overview of cellular cryo-tomography workflows **Simone Mattei**, EMBL Heidelberg, Germany
- 09.45 - 10.00 Q&A
- 10.00 - 10.30 Sample vitrification **Mikhail Eltsov**, CBI/IGBMC, Illkirch, France
- 10.30 - 10.45 Q&A
- 10.45 - 11.00 Coffee break
- 11.00 - 11.30 Cellular sample preparation **Jenia Zagoriy**, EMBL Heidelberg, Germany
- 11.30 - 11.45 Q&A
- 12.00 - 13.30 LUNCH**

- 13.30 - 18.00 **Practical session 1** Sample preparation
Instructors: **Victor Hanss, Corinne Crucifix & Rafael Schoch**, CBI/IGBMC; **Jana Moravcova & Pavel Krepelka**, CEITEC; **Anna Steyer & Zhengyi Yang**, EMBL; **Parijat Majumder**, eBIC

Tuesday April, 16

- 09.00 - 09.15 Feedback discussion and exchanges on practicals
- 09.15 - 09.45 Practical aspects of reproducible lamella preparation **Jirka Novacek**, CEITEC, Brno, Czech Republic
- 09.45 - 10.00 Q&A
- 10.00 - 10.30 Cryo-FIB milling **James Gilchrist**, eBIC, Oxford, UK
- 10.30 - 10.45 Q&A
- 10.45 - 11.00 Coffee break
- 11.00 - 11.30 Tailoring FIB-milling workflows for demanding specimen Speaker **Florian Fäßler**, CBI/IGBMC, Illkirch, France
- 11.30 - 11.45 Q&A
- 12.00 - 13.30 LUNCH**

- 13.30 - 18.00 **Practical session 2** General aspects of handling a cryo-FIB instrument
Instructors: **Victor Hanss & Corinne Crucifix**, CBI/IGBMC, Illkirch, France; **Jana Moravcova & Pavel Krepelka**, CEITEC; **Jenia Zagoriy & Anna Steyer**, EMBL; **James Gilchrist**, eBIC

Wednesday April, 17

- 09.00 - 12.00 **Practical session 3** Lamella preparation with the FIB
- 12.00 - 13.30 LUNCH**

- 13.30 - 18.00 **Practical session 3 (cont.)** Lamella preparation with the FIB
Instructors: **Victor Hanss & Corinne Crucifix**, CBI/IGBMC, Illkirch, France; **Jana Moravcova & Pavel Krepelka**, CEITEC; **Jenia Zagoriy & Zhengyi Yang**, EMBL; **James Gilchrist**, eBIC

Thursday April, 18

- 09.00 - 09.15 Feedback discussion and exchanges on practicals
- 09.15 - 09.45 Tools and concepts in cryo electron tomography **Bruno Klaholz**, CBI/IGBMC, Illkirch, France
- 09.45 - 10.00 Q&A



iNEXT-Discovery hands-on workshop: cryo-FIB lamella preparation & cryo electron tomography

10.00 - 10.30 Best practices in cryo-ET data collection and processing **Zhengyi Yang**, EMBL-Heidelberg, Germany

10.30 - 10.45 Q&A

10.45 - 11.00 Coffee break

11.00 - 11.30 STA on viruses **Tibor Fuzik**, CEITEC, Brno, Czech Republic

11.30 - 11.45 Q&A

12.00 - 13.30 LUNCH

13.30 - 18.00 **Practical session 4** Setting up a cryo tomography session on the electron microscope
Instructors: **Alexandre Durand, Nils Maréchal & Victor Hanss**, CBI/IGBMC, Illkirch, France; **Jana Moravcova & Pavel Krepelka**, CEITEC; **Zhengyi Yang & Anna Steyer**, EMBL; **Dan Clare**, eBIC

Friday April, 19

09.00 - 12.00 **Practical session 5** Cryo electron tomography data collection, fine-tuning of parameters, initial tilt series and tilt reconstructions; data quality check; on-the-fly image processing & tomogram reconstruction

Instructors: **Alexandre Durand, Nils Maréchal & Victor Hanss**, CBI/IGBMC; **Jana Moravcova & Pavel Krepelka**, CEITEC; **Zhengyi Yang & Anna Steyer**, EMBL; **Dan Clare**, eBIC

12.00 - 13.30 LUNCH

13.30 END of the workshop