



CCP-EM presentation to Working Group 1

Tuesday 2nd May 2023
10:00 - 12:00



Science and
Technology
Facilities Council



Medical
Research
Council



Biotechnology and
Biological Sciences
Research Council



Agenda

1. Welcome
+ EBI-MCS SAB - Corinne
2. Plan for Pipeliner / Doppio
3. Tomography in CCP-EM
4. Industrial feedback
5. Finances
6. Training
7. Spring Symposium 2023 and 2024

1. Welcome

Remit of Working Group 1

Membership of Working Group 1

Getting involved in CCP-EM

- we can provide funds, dissemination, admin

3. Tomography in CCP-EM

- Sub-tomogram averaging one of three highlighted themes of the current grant (alongside validation and machine learning).
- Initial developers workshop in March 2022.
- Follow-up hackathon in March 2023 focussed on data model for Pipeliner.
- Rangana Warshamanage joined core team in March 2023 to work on cryoET / STA.
- Starting point is extending support for Relion, but many workflows out there

4. Industrial feedback

ca. 30 commercial licences for CCP-EM

Industrial representative - Pamela Williams



Remit: Communicate industry priorities to CCP-EM management, and help disseminate CCP-EM activities to industrial community.

Feedback sought from commercial licencees and via email to CCP-EM list on 23rd March.

5. Finances

MRC grant 2021-2026

Funds Tom, Colin, Agnel + collaboration activities

Commercial licensing

Annual licence to for-profit organisations (ca. 30 licences)

Fees increased from April 2023. First ever increase!

- Standard licence: £7,800pa
- Subsite licence: £5,200pa
- Micro-entity: £3,900pa

Revenue 2022/2023 = £147k

Spent on:

- Developer time for Pipeliner/Doppio (STFC staff and CapGemini contractors)
- 50% contribution to Liverpool PhD
- Sponsorship of Birkbeck EMBO course
- Workshop costs and TnS for staff and collaborators

6. Training (April 2022 - April 2023)

Principal events

- CCP4/CCP-EM workshop at the European Crystallographic Meeting in Versailles, 21st-22nd Aug 2022 (Tom, Martyn)
- Icknield workshop on model building and validation, 6-9th Sept 2022 @ RAL
- CCP-EM Model Building hackathon, January 2023
- Tomography hackathon, March 2023

Slightly taken a back seat to development of Pipeliner/Doppio.

Plan to increase next year, including site visits.

Need a new website!

Have also participated in other events (PTO)

6. Training (April 2022 - April 2023)

Other contributions:

- Biosim-EM workshop, Leeds, 20-21 April (Tom)
- GRC, 19-24th June. Matt talk "CCP-EM Pipeliner/Doppio: Software Tools for Efficient, Accurate, and Reproducible Management and Automation of CryoEM Processing Workflows"
- Dutch cryoEM school, 27th June - 2nd July, Leiden/Delft (Tom)
- Faraday Discussion: Challenges in biological cryo electron microscopy, 13 - 15 July 2022, Sheffield (Agnel)
- Cryo Electron Microscopy in Structural Biology DTP Course, eBIC, 16-19 Aug 2022 (Colin, Agnel).
- Workshop on Machine Learning for cryoEM, 19 –23 Sep, Singapore (Jola)
- CryoEM course in Regensburg, w/c 26th Sept (Tom)
- EMBO Practical integrative structural biology, 6–13 Nov 2022 Hamburg (Agnel, Tom, Arjen, Maya)
- WT-MRC training, tomography, w/c 28/11/22. Remote, 3 sites.
- Jan 2023 CCP4 Study Weekend lunchtime byte (Tom)

7. Spring Symposium

2023

In-person attendees: **256** (student/PDRA 108, other 148)

cf 2018 = **190**, 2019 = **280**, 2020 virtual, 2021 virtual, 2022 = **150**

Virtual (registered): ca 500

Scientific organisers: Stephen Muench and Vicki Gold

2024

10th edition.

TBD: scientific organisers, balance of talks/posters/free time, sponsorship, social events, etc