

Hands-on metadata annotation for bioimaging using a REMBI-based annotation template

T. Boissonnet¹, J. Dohle², C. Christian Schmidt³, C. Strambio-De-Castillia⁴, T. Wernet⁵

¹ Center for Advanced Imaging, Heinrich-Heine- University Düsseldorf, DE; ² Integrated Bioimaging facility, Center for Cellular Nanoanalytics, University of Osnabrück, DE; ³ Dep. Enabling Technology, German Cancer Research Center (DKFZ), Heidelberg, DE; ⁴ Program in Molecular Medicine, University of Massachusetts Medical School, MA, US; ⁵ Life Imaging Center, University of Freiburg, DE.

Abstract

Presenters (in alphabetical order): **Tom Boissonnet, Julia Dohle, Christian Schmidt, Caterina Strambio De-Castillia, Tobias Wernet**

Authors: Tom Boissonnet, Julia Dohle, Susanne Kunis, Elisa Ferrando-May, Roland Nitschke, Christian Schmidt, Caterina Strambio-De-Castillia, Stefanie Weidtkamp-Peters, Tobias Wernet

In this workshop, we invite the participants to a guided walk-through of the Recommended Metadata for Biological Images (REMBI)(1) template to annotate metadata on their own image data. Metadata annotation in bioimaging is an often challenging task for researchers (2) who may struggle to choose which information to include and keep annotations consistent. The REMBI checklist has been developed for microscopy experiments to facilitate the choice of entries. Here, we intend to bring a concrete annotation experience to open an exchange about the strengths, challenges, and practical adoption of REMBI in an OMERO database as well as the role of ontologies (3) for metadata annotations to make image data FAIR.

References

1. Sarkans, U., Chiu, W., Collinson, L. et al. REMBI: Recommended Metadata for Biological Images—enabling reuse of microscopy data in biology. *Nature Methods* 18, 1418–1422 (2021), <https://doi.org/10.1038/s41592-021-01166-8>
2. Schmidt, C., Hanne J., et al. Research data management for bioimaging: the 2021 NFDI4BIOIMAGE community survey. *F1000Research* 2022, 11:638, <https://doi.org/10.12688/f1000research.121714.2>
3. Kunis, S., & Dohle, J. (2022). Structuring of Data and Metadata in Bioimaging: Concepts and technical Solutions in the Context of Linked Data. Zenodo, <https://doi.org/10.5281/zenodo.7018750>