

Data Management for Bioimaging Data and Metadata Annotation Tools

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Abstract

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To enhance the quality, interpretability, reproducibility, and re-use value of bioimaging data, it is crucial to include comprehensive descriptions of the experimental conditions used to produce them. During this workshop, you will learn about the concepts of Data Life Cycle, FAIR Research Data Management (RDM), Data Provenance, Image Metadata, and Community-driven Standards (1-2) and how they can be applied to typical light microscopy experiments. Following an initial basic introduction, the workshop will demonstrate available OMERO-compatible (3-5) image metadata annotation tools that have been developed in the context of bioimaging initiatives associated with QUAREP-LiMi (6-8). The utilization of these tools can streamline the pre-publication management process for the Experimental, Sample Preparation, and Image Acquisition phases of a standard microscopy experiment. Moreover, they can assist research scientists in complying with required research data management plans and share their image data more efficiently.

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