

Essential Metadata for 3D BRAIN Microscopy

Dataset Category

The Dataset category includes 14 metadata fields that provide a high-level description of the data including title, abstract, methods, imaging modality, and how the data can be reused.

Field Name	Definition	Allowable Values	Occurrence	Required for Brain Image Library Submission	Support Digital Object Identifier (DOI)	DataCite (ID: Property)	Open Microscopy Environment (Element: Attribute)
Short Descriptions							
Title	Short phrase by which the specific dataset is known (e.g., title of a book).	Free text	1	Yes	Yes	3: Title	Dataset: Description (can be mapped)
socialMedia	Suggested short social media text describing the dataset to be posted after the dataset is available (can include tags). May be same as the title.	Free text	0-1	No	No	None	Dataset: Description (can be mapped)
Subject	Description of the dataset using keywords, classification codes, or key phrases.	Free text	0-1	No	Yes	6: Subject	None
subjectScheme	Name of subject scheme or classification (e.g., Allen Mouse Brain Atlas Version2).	Free text	0-1	No	No	None	None
Rights	Any rights information for the dataset. May be the name of the license and can include embargo or other use restrictions on data (see https://spdx.org/licenses).	Free text	1	Yes	Yes	16: Rights	RightsHeld : None (can be mapped)
rightsURI	If using a common license and licensing information is online, provide a link to the license.	Free text	1	Yes	Yes	16.a: rightsURI	RightsHeld : None (can be mapped)

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rightsIdentifier	If using a common license, provide the Software Package Data Exchange (SPDX) code for the license (see https://spdx.org/licenses).	Free text	1	Yes	Yes	16.b: rightsIdentifier	RightsHeld : None (can be mapped)
Image	Suggested static image or animated GIF to associate with the social media and/or web landing page for the dataset.	Free text	0-1	No	No	None	None
generalModality	Description of the general modality of the dataset.	Cell morphology Connectivity Population imaging Spatial transcriptomics Other	0-1	No	No	None	Experiment: Type
generalModalityOther	If generalModality is Other, list the modality used.	Free text	0-1	No	No	None	Experiment: Type
Technique	Description of the technique used.	Anterograde tracing DARTFISH fMOST MERFISH Patch-seq Retrograde Retrograde tracing smFISH Transynaptic tracing TRIO tracing Other	0-1	No	No		Experiment: Type

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techniqueOther	If Technique is Other, list the technique used.	Free text	0-1	No	No	None	Experiment: Type
Detailed Descriptions							
Abstract	Additional descriptive information about the dataset, including a brief description and the context in which it was created (e.g., aim of the experiment, what the dataset is expected to show). This abstract will be used on the Digital Object Identifier (DOI) landing page and will be the primary description of the dataset; ideally 100+ words.	Free text	1	Yes	Yes	17: Description 17.a: descriptionType (can be mapped)	Dataset: Description (can be mapped)
Methods	Additional descriptive information about how the biological materials were processed by the laboratories involved. May be used to describe the methodology (or protocols) used.	Free text	0-1	No	Yes	17: Description 17.a: descriptionType (can be mapped)	Dataset: Description (can be mapped)
technicalInfo	Additional descriptive information about how the data was processed computationally by the laboratories involved. May be used to describe the computational processing	Free text	0-1	No	Yes	17: Description 17.a: descriptionType (can be mapped)	Dataset: Description (can be mapped)

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	done with software versions and parameters.						

Occurrence
0-n = optional and repeatable
0-1 = optional, but not repeatable
1-n = required and repeatable
1 = required, but not repeatable