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# **DLA/CDSIG-Schema-Draft-v0.0.1**

**DLA/CDSIG**

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## PROJECT-LEVEL METADATA

Project-level metadata is metadata that describes the project. A project could be a wider organisational unit of studies. For example, there may be different substudies within a project.

<a href="https://github.com/cdsig/CDSIG-Schema/blob/main/project.json">https://github.com/cdsig/CDSIG-Schema/blob/main/project.json</a>			
type		<i>object</i>	
properties			
• <b>name</b>	Informative or internal name of the project		
	type	<i>string</i>	
• <b>uuid</b>	This is a unique MD5 hash generated from the <i>name</i> field		
	type	<i>string</i>	
• <b>funding_sources</b>	Any funding sources supporting the project. If the funding number is available, it should be given		
	type	<i>array</i>	
	items	type	<i>string</i>
	minItems	1	
• <b>description</b>	Short narrative description of the project. This could include any further information on the project and the context in which it was completed		
	type	<i>string</i>	
• <b>keywords</b>	Key words describing the projects.		
	type	<i>array</i>	
	items	type	<i>string</i>
	minItems	3	
• <b>contributors</b>	type	<i>array</i>	
	items	#/definitions/person	
• <b>project_status</b>	Status of the project (i.e. if it is still running)		
	type	<i>object</i>	

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Table 1 – continued from previous page

	properties				
	• <b>period</b>	Time period during which the project took place			
		type	object		
		properties			
		• start_date_time	Start date-time for the project		
			type	string	
			format	date-time	
		• ongoing	Indicate if the project is still ongoing (true) or completed (false)		
			type	boolean	
		if	properties		
			• ongoing	const	True
		then	properties		
			• stop_date_time	Stop date-time for the project	
				type	string
format	date-time				
definitions					
• person	type	object			
	properties				
	• name	type	string		
	• role	Role ID according to the Contributor Role Ontology ( <a href="https://www.ebi.ac.uk/ols/ontologies/cro">https://www.ebi.ac.uk/ols/ontologies/cro</a> )			
		type	string		
		pattern	^((CRO_[0-9]{7}) (CREDIT_[0-9]{8}))\$		
	• email	type	string		
		format	idn-email		
	• orcid	ORCID identifier			
		type	string		
		pattern	^[0-9]{4}-[0-9]{4}-[0-9]{4}-[0-9]{4}\$		
	• institution	type	object		
		properties			
		• name	type	string	

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Table 1 – continued from previous page

		• street_address	type	<i>string</i>
		• city	type	<i>string</i>
		• <b>country</b>	type	<i>string</i>





## STUDY-LEVEL METADATA

Study-level metadata describes any information on a specific study, e.g. a specific data collection effort with multiple participants

<a href="https://github.com/cdsig/CDSIG-Schema/blob/main/study.json">https://github.com/cdsig/CDSIG-Schema/blob/main/study.json</a>		
type	<i>object</i>	
properties		
• <b>name</b>	Informative or internal study name	
	type	<i>string</i>
• <b>uuid</b>	Unique MD5 hash generated from the <i>name</i> field	
	type	<i>string</i>
• <b>prereg_doi</b>	DOI (Digital Object Identifier) of pre-registration document describing data collection	
	type	<i>string</i>
• <b>ethics_information</b>	Name of ethics committee and approval number	
	type	<i>string</i>
• <b>clinical_trial</b>	Is this a registered clinical trial?	
	type	<i>boolean</i>
• <b>description</b>	Short narrative description of the study	
	type	<i>string</i>
• <b>sample</b>	Short description of the study sample.	
	type	<i>string</i>
• <b>sample_groups</b>	Description of the sample group(s) enrolled or examined in the study	
	type	<i>object</i>
	properties	
	• <b>name</b>	Name of group.
		type <i>string</i>
	• <b>description</b>	Description of sample group

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Table 1 – continued from previous page

		type	<i>string</i>
	• label	Label of sample group	
		type	<i>integer</i>
	• group_size	Group size	
		type	<i>integer</i>
		minimum	1
	• inclusion_criteria	Inclusion criteria for sample group, given as an array of strings	
		type	<i>array</i>
		items	type <i>string</i>
		minItems	0
	• exclusion_criteria	Exclusion criteria for sample group, given as an array of strings	
		type	<i>array</i>
		items	type <i>string</i>
		minItems	0
• intervention	Short description of the study intervention, if any		
	type	<i>string</i>	
• keywords	Key words describing the study.		
	type	<i>array</i>	
	items	type	<i>string</i>
	minItems	3	
• contributors	#/definitions/person		
if	properties		
	• clinical_trial	const	True
then	properties		
	• clinical_trial_id	Clinical trial identifier as well as registry	
		type	<i>string</i>
definitions			
• person	type	<i>object</i>	
	properties		
	• name	type	<i>string</i>
	• role	Role ID according to the Contributor Role Ontology ( <a href="https://www.ebi.ac.uk/ols/ontologies/cro">https://www.ebi.ac.uk/ols/ontologies/cro</a> )	

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Table 1 – continued from previous page

		type	string	
		pattern	^((CRO_[0-9]{7}) (CREDIT_[0-9]{8})))\$	
	• email	type	string	
		format	idn-email	
	• orcid	ORCID identifier		
		type	string	
		pattern	^[0-9]{4}-[0-9]{4}-[0-9]{4}-[0-9]{4}\$	
	• institution	type	object	
		properties		
		• name	type	string
		• street_address	type	string
		• city	type	string
	• country	type	string	



## DATASET-LEVEL METADATA

Dataset-level metadata is metadata concerning one specific, per-participant dataset

<a href="https://github.com/cdsig/CDSIG-Schema/blob/main/dataset.json">https://github.com/cdsig/CDSIG-Schema/blob/main/dataset.json</a>		
type	<i>object</i>	
properties		
• name	Dataset name.	
	type	<i>string</i>
• uuid	MD5 hash generated from the <i>name</i> field	
	type	<i>string</i>
• description	Short description of the dataset.	
	type	<i>string</i>
• instructions	Description of the instructions that were given to the study participants prior to or during collection of this data set	
	type	<i>object</i>
	properties	
	• verbatim_instruction	Verbatim instructions given to participant
		type <i>string</i>
	• wear_time	Number of days the participants were instructed to wear the actigraph. Fractional values are allowed
		type <i>number</i>
		minimum 0
• contributors	#/definitions/person	
• data_set	Information about the data collection effort.	
	type	<i>object</i>
	properties	

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Table 1 – continued from previous page

	• <b>period</b>	Time period during which the data collection was performed				
		type		<i>object</i>		
		properties				
		• start_date_time	Start date-time for the data collection			
			type		<i>string</i>	
			format		date-time	
		• ongoing	Indicate if the data collection is still ongoing			
			type		<i>boolean</i>	
		if	properties			
			• ongoing		const True	
		then	properties			
			• stop_date_time	Stop date-time for the data collection		
				type format		<i>string</i> date-time
definitions						
• <b>person</b>	type		<i>object</i>			
	properties					
	• <b>name</b>	type		<i>string</i>		
	• <b>role</b>	Role ID according to the Contributor Role Ontology ( <a href="https://www.ebi.ac.uk/ols/ontologies/cro">https://www.ebi.ac.uk/ols/ontologies/cro</a> )				
		type		<i>string</i>		
		pattern		^((CRO_[0-9]{7}) (CREDIT_[0-9]{8}))\$		
	• email	type		<i>string</i>		
		format		idn-email		
	• orcid	ORCID identifier				
		type		<i>string</i>		
		pattern		^[0-9]{4}-[0-9]{4}-[0-9]{4}-[0-9]{4}\$		
	• <b>institution</b>	type		<i>object</i>		
		properties				
		• <b>name</b>		type		<i>string</i>

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Table 1 – continued from previous page

		• street_address	type	<i>string</i>
		• city	type	<i>string</i>
		• <b>country</b>	type	<i>string</i>





## EVENT-LEVEL METADATA (WITHIN DATASET)

Event definition in the context of actigraphy or light data set

<a href="https://github.com/cdsig/CDSIG-Schema/blob/main/event.json">https://github.com/cdsig/CDSIG-Schema/blob/main/event.json</a>		
type	<i>object</i>	
properties		
• <b>event_id</b>	The unique identifier for an event	
	type	<i>number</i>
	multipleOf	1
	minimum	0
• <b>event_name</b>	Name of the event	
	type	<i>string</i>
• <b>start_date_time</b>	Start date-time for an event	
	type	<i>string</i>
	format	date-time
• <b>stop_date_time</b>	Stop date-time for an event	
	type	<i>string</i>
	format	date-time
• <b>comment</b>	Comment about an event	
	type	<i>string</i>



## PARTICIPANT-LEVEL METADATA

Information about the participant

<a href="https://github.com/cdsig/CDSIG-Schema/blob/main/participant.json">https://github.com/cdsig/CDSIG-Schema/blob/main/participant.json</a>		
type	<i>object</i>	
properties		
• <b>age</b>	Age of the participant	
	type	<i>string</i>
• <b>uuid</b>	MD5 hash generated from the <i>name</i> field.	
	type	<i>string</i>
• <b>internalid</b>	Internal ID	
	type	<i>string</i>
• <b>sex</b>	Sex	
	type	<i>string</i>
• <b>phenotypes</b>	type	<i>array</i>
	items	<i>#/definitions/phenotype</i>
definitions		
• <b>phenotype</b>	type	<i>object</i>
	properties	
	• <b>name</b>	Phenotype
		type <i>string</i>
	• <b>value</b>	Value
		type <i>string</i>



## SPECIFICATION OF ACTIGRAPHY DEVICE

Information about the actigraphy device

<a href="https://github.com/cdsig/CDSIG-Schema/blob/main/actigraphydevice.json">https://github.com/cdsig/CDSIG-Schema/blob/main/actigraphydevice.json</a>		
type	<i>object</i>	
properties		
• <b>manufacturer</b>	Manufacturer of the device	
	type	<i>string</i>
• <b>uuid</b>	MD5 hash generated from the <i>name</i> field.	
	type	<i>string</i>
• <b>model</b>	Model of the device	
	type	<i>string</i>
• <b>serial_number</b>	Serial number of the device	
	type	<i>string</i>
• <b>sensor_type</b>	Measurement device type	
	type	<i>string</i>



## SPECIFICATION OF LIGHT-SENSING DEVICE

Information about the light sensor used

<a href="https://github.com/cdsig/CDSIG-Schema/blob/main/lightsensor.json">https://github.com/cdsig/CDSIG-Schema/blob/main/lightsensor.json</a>		
type	<i>object</i>	
properties		
• <b>manufacturer</b>	Manufacturer of the device	
	type	<i>string</i>
• <b>uuid</b>	MD5 hash generated from the <i>name</i> field.	
	type	<i>string</i>
• <b>model</b>	Model of the device	
	type	<i>string</i>
• <b>serial_number</b>	Serial number of the device	
	type	<i>string</i>
• <b>sensor_type</b>	Measurement device type	
	type	<i>string</i>
• <b>channels</b>	type	<i>array</i>
	items	<i>#/definitions/channel</i>
definitions		
• <b>channel</b>	type	<i>object</i>
	properties	
	• <b>name</b>	Name of the channel
		type <i>string</i>
	• <b>description</b>	Description of the channel
		type <i>string</i>
	• <b>spectral_sensitivity</b>	type <i>object</i>

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		properties	
		• <b>spec-tral_sensitivity_calibration_status</b>	type  

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		<ul style="list-style-type: none"><li>directional_response_calibration_details</li></ul>	type	<i>string</i>
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