



Datenmanagement und Archivierung in der medizinischen Forschung am Beispiel des MIRACUM-Projekts

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Münchner Archivtage 2022



hochschule mannheim



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Inhalt



- Status Quo Standort Mannheim
- Vorstellung der Werkzeuge FAIRDOM, Heicloud, LTRDA Server und deren Einbindung in die Architektur
- Skizzierung der SOP und Metadaten
- Ausblick auf geplante weitere Aktivitäten

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Status Quo Standort Mannheim



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Dokumentation in confluence



Header Information

Request Title	Title of the Data Request / Project
Request-ID	Unique Request-ID (Based on Jira Epic ID)
Data Requester	Name of the Requester contact data of the requester (E-mail, Phone)
Affiliation	Affiliation of the Data Requester (Clinic/Department)
Request Date	Date of the request entry
Status	one of the status icons above
Completion Date	Date of the request completion

Administrative Information

Data Request Admin	Name of the data request admin
JIRA Link	Link to the corresponding JIRA Epic (and stories, if applicable)
Former Feasibility Request	yes/no
Other POI	Other people of interest & contact information
Description	Description of the data request (project form-format)
Approvals	Ethics Commission Approval Data Protection Officer Approval UAC Approval
Data release by data owners (to be expanded as applicable to the request)	Data Release IIC Data Release Microbiology Data Release ...
Signed Data Use Agreement	in place / not in place
Formal Requirement Check by the Front Office	fulfilled / not fulfilled
Reporting Obligation by the Requester	fulfilled / not fulfilled
Reporting Date	Date of the report

Request Logbook

Date	Name	Issue

Data Specifications

This needs to be fulfilled before the request is handled by the Data Science Team

Inclusion Criteria

(change status)

Are the inclusion criteria listed by the data requester in the table below. Edited & marked the table accordingly.

Demographics	Headline of the request	How long was it in the system?
Age		from the project start
Gender		not fulfilled yet
Others		
Clinical	Type of patient	right from the start of
	Diagnosis	starting (before, at and after)
	Procedures	starting (before, at and after)
	Others	
Hospital Management	Departments	not fulfilled yet
	Units	not fulfilled yet
	Others	
Others		

Outcome Data Elements

(change status)

Are the outcome data elements listed by the data requester in the table below. Edited & marked the table accordingly.

Patient Information	PatientID	Comments
	CaseID	
	Height	
	Weight	
	Age	
	Diagnosis	
Laboratory results		
	Lab results	
Others		

Data Format for Delivery

in which format would the requester like the data to be delivered? (csv / pdf / xls / etc.)

Specifications for Biobank Requests

If applicable, please fill in the requirements & specifications here.

Specifications for Data Analysis Requests

If applicable, please fill in the requirements & specifications here.

Data Request Processing


Step	Name
Data Request Received (Data Science Team)	Name of the data requester
Data Request Processed	Name of the data requester
Including Data Delivery	Name of the data requester
Including Data Request Admin	Name of the data requester admin
Data delivered to Requester	Name of the data requester admin
Data received and accepted by the Requester	yes / no

Back to Me in FAIRDOM

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FAIRDOM Konsortium




Open Source Software Platforms


*Supports Standards
Integrate with other platforms*



Project Support

*Stewardship Services
Customised Installations
Consultancy
Training*







FAIRDOM Consortium
Coordination of partners

Community Activities

*Community Development
Outreach, Data
Management Planning*



Free Public Resources




• <https://fair-dom.org>

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FAIRDOM SEEK



FAIRDOM HUB Q Browse Search Help Register Log in


FAIRDOMHub: The better way to manage your data
Free and open platform for easier research data management



Organise & Structure


Organise documents and data to easily manage your research project

[Learn more](#)




Manage access

There is a lot of flexibility and control over who can see, download or edit your items



Standardise research data

Use available standards to describe your dataset and make it ready for publication



Publish & Share data

Publish your data and link them to your scientific article

[Register](#)

Findable Accessible Interoperable Reusable

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FAIRDOM SEEK



Yellow pages

Projects

Institutions

People

Experiments

Investigations

Studies

Assays

Assets

Data files

Models

SOPs

Publications

Documents

Activities

Presentations

Events

Samples

Sample types

Organisms

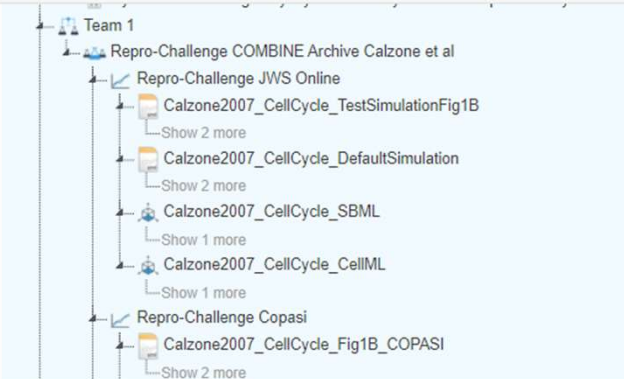
FAIRDOM SEEK




[Home](#) / [Projects Index](#) / [Repro-Challenge](#) / [Overview](#)

Selected: [Repro-Challenge](#) (Project)

Description: This project is part of the BIDS Masters course on biomedical data science.
SEEK ID: <http://localhost:3000/projects/7>



FAIRDOM SEEK



Home / Assays Index / **Repro-Challenge JWS Online**

Repro-Challenge JWS Online Unsubscribe New Modelling analysis based on this one Add new Actions

Simulation des Modells von Calzone et al. mit JWS Online

SEEK ID: <http://localhost:3000/assays/23>
 Class: Modelling analysis
 Submitter: Jessica Vasseur
 Projects: [Repro-Challenge](#)
 Investigation: [Team 1](#)
 Study: [Repro-Challenge COMBINE Archive Calzone et al](#)
 Biological problem addressed: [Cell Cycle](#)
 Organisms: [No organisms](#)

Models:
[Calzone2007_CellCycle_SBML](#)
[Calzone2007_CellCycle_CellML](#)

Data:
[Calzone2007_CellCycle_TestSimulationFig1B](#)
[Calzone2007_CellCycle_DefaultSimulation](#)

Selected: [Repro-Challenge JWS Online \(Modelling analysis\)](#)
 Description: Simulation des Modells von Calzone et al. mit JWS Online
 SEEK ID: <http://localhost:3000/assays/23>

Creators and Submitter
 Creators: [Jessica Vasseur](#), [Felix Schönecker](#), [Andreas Bucher](#)
 Submitter: [Jessica Vasseur](#)


Activity
 Views: 24
 Created: 8th Jun 2021 at 19:33
 Last updated: 13th Jun 2021 at 20:34

Tags
 This item has not yet been tagged.
 Add your tags

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FAIRDOM SEEK



Home / Data files Index / **Calzone2007_CellCycle_TestSimulationFig1B**

Calzone2007_CellCycle_TestSimulationFig1B Unsubscribe Download View content Add new Actions

Version 1

SED-ML file for simulation of the SBML model to reproduce Fig 1B of the original publication

SEEK ID: http://localhost:3000/data_files/78?version=1
 Filename: [Calzone2007-simulation-figure-1B.xml](#)
 Format: XML document
 Size: 4.48 KB

Selected: [Calzone2007_CellCycle_TestSimulationFig1B \(Data file\)](#)
 Description: SED-ML file for simulation of the SBML model to reproduce Fig 1B of the original publication
 SEEK ID: http://localhost:3000/data_files/78

Creators and Submitter
 Creator: [Jessica Vasseur](#)
 Submitter: [Jessica Vasseur](#)


License
 No license - no permission to use unless the owner grants a licence
 Click here to choose a license

Team 1
[Repro-Challenge COMBINE Archive Calzone et al](#)
[Repro-Challenge JWS Online](#)
[Calzone2007_CellCycle_TestSimulationFig1B](#)
[Dynamical modeling of syncytial mitotic cycles in Drosophila embryos](#)

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FAIRDOM SEEK



Home / Models Index / Calzone2007_CellCycle_SBML

Simulate Model on JWS
Unsubscribe
Download
View content

Calzone2007_CellCycle_SBML Version 1

"Dynamical model of nuclear division cycles during early embryogenesis of Drosophila" in SBML format described by Calzone et al. (<https://doi.org/10.1038/nbt4100171>)
downloaded from <https://github.com/SemaProject/CombineArchiveShowCase/blob/master/model/BICMD0000000144.xml>
original source <https://www.ebi.ac.uk/biomodels-main/BICMD0000000144>

SEEK ID: <http://localhost:3000/models/10?version=1>

1 item (and an image) are associated with this Model:

- BICMD0000000144.xml (note, document - 114 KB)

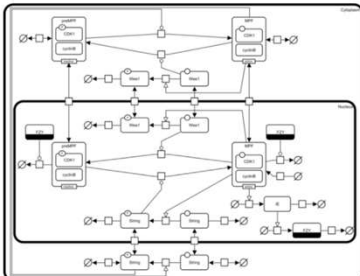
Organism: *Not specified*

Model type: *Not specified*

Model format: SBML

Execution or visualisation environment: *Not specified*

Model image: [\(Click on the image to zoom\)](#) (Original)



Creators and Submitter

Creator
 Jessica Vasseur

Submitter
 Jessica Vasseur

License

Creative Commons Attribution-NonCommercial 4.0

Activity

Views: 29 Downloads: 0
Created: 12th Jun 2021 at 19:35
Last updated: 12th Jun 2021 at 20:33
Last used: 7th Mar 2022 at 10:01

Tags

This item has not yet been tagged.


[Add your tags](#)

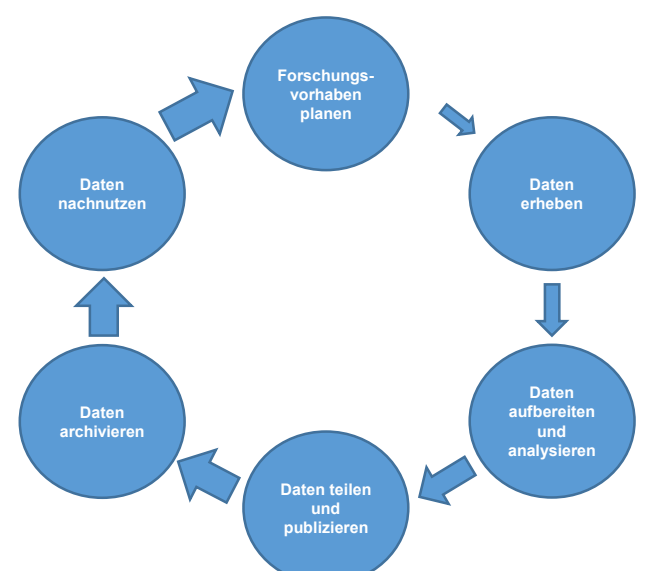
Attributions

None

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<https://www.forschungsdaten.info/themen/informieren-und-planen/datenlebenszyklus/>

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MIRACUM Infrastruktur



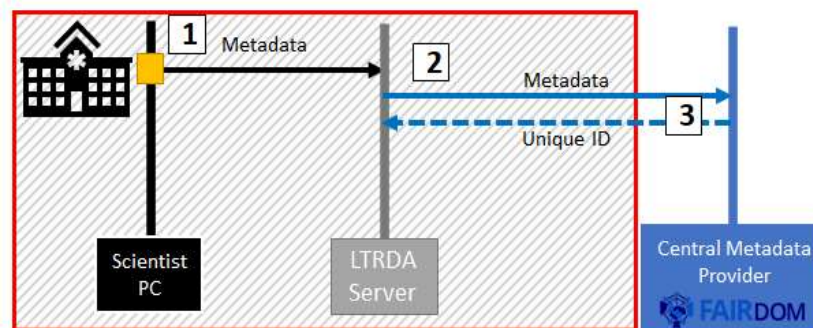
- LTRDA –Server
 - Webanwendung
 - Schnittstelle zu Nutzern
- FAIRDOM SEEK Instanz
 - Am Standort Mannheim
- Heicloud
 - Infrastructure as a Service
 - Rechenzentrum der Universität Heidelberg

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MIRACUM Infrastruktur

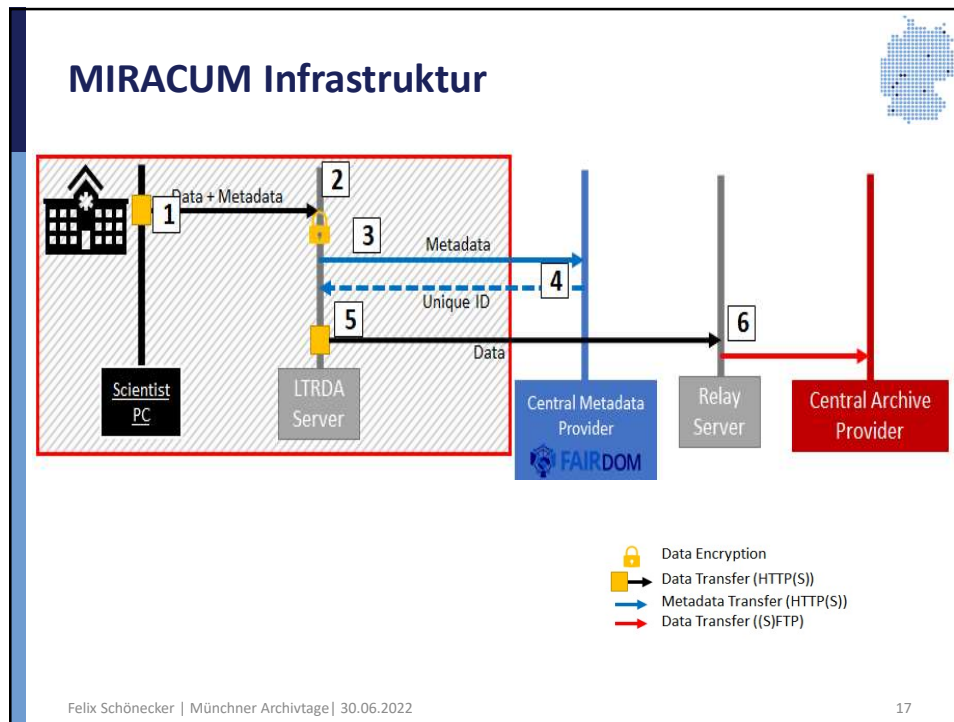


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Definition eines Mindest-Metadatensatzes



Feld	Priorität (obligatorisch, empfohlen, fakultativ)	Phase Anfragephase Forschungsphase Publikation	Details
Titel	obligatorisch	Anfragephase	
Thema	empfohlen	Anfragephase	
Beschreibung	obligatorisch	Anfragephase	
Projektverantwortlicher	obligatorisch	Anfragephase	
Anfragedatum	empfohlen	Anfragephase	
Status	empfohlen	Anfragephase	<div style="display: flex; justify-content: space-between; font-size: 8px;"> IN PLANUNG LÄUFT BEENDET </div> <div style="display: flex; justify-content: space-between; font-size: 8px;"> ARCHIVIERT ABGEBROCHEN </div>
Datum Datenbereitstellung	empfohlen	Anfragephase	
AnfrageTitel	obligatorisch	Anfragephase	Titel der Datenanfrage
Beschreibung der Datenanfrage	empfohlen	Anfragephase	
Anfrage ID	obligatorisch	Anfragephase	ID der Datenanfrage (basierend auf JIRA-Epic)
Kontakt Daten Antragsteller	obligatorisch	Anfragephase	
Ethikantrag	empfohlen	Anfragephase	
Ablageort der Dokumente zum Ethikantrag	empfohlen	Anfragephase	
UAC Votum	empfohlen	Anfragephase	
Ablageort der Dokumente zum UAC Votum	empfohlen	Anfragephase	
Votum Datenschutzbeauftragter	empfohlen	Anfragephase	

Definition eines Mindest-Metadatensatzes



Feld	Priorität (obligatorisch, empfohlen, fakultativ)	Phase Anfragephase Forschungsphase Publikation
Zeitraum der Daten	empfohlen	Forschungsphase
Fachabteilungen	empfohlen	Forschungsphase
Diagnosen	empfohlen	Forschungsphase
Prozeduren	empfohlen	Forschungsphase
Laborparameter	empfohlen	Forschungsphase
Alter	empfohlen	Forschungsphase
Geschlecht	empfohlen	Forschungsphase
DOI	obligatorisch	Publikation
Titel der Publikation	obligatorisch	Publikation
Autor	obligatorisch	Publikation
Nachnutzungsrechte (Lizenzen)	obligatorisch	Publikation
Schlagwörter	empfohlen	Publikation

Definition eines Mindest-Metadatensatzes



- Datenspezifikation bei Erstellung einer Anfrage
 - Einschlusskriterien
 - Datenelemente der Ergebnisse
 - Datenformat
- Bearbeitungsschritte des Antrags
- Links zu Daten und Bearbeitungsvorgängen

Ausblick



- Fertigstellung der Definition eines Mindest-Metadatensatzes
- Überarbeitung der SOP
- Erweiterung der Funktionalitäten des Uploaders des LTRDA-Servers

Vielen Dank für Ihre Aufmerksamkeit



<https://github.com/seek4science>

<https://fair-dom.org>

<https://fairdomhub.org/>

<https://www.forschungsdaten.info/themen/informieren-und-planen/datenlebenszyklus/>

<https://heicloud.uni-heidelberg.de>



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