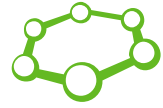


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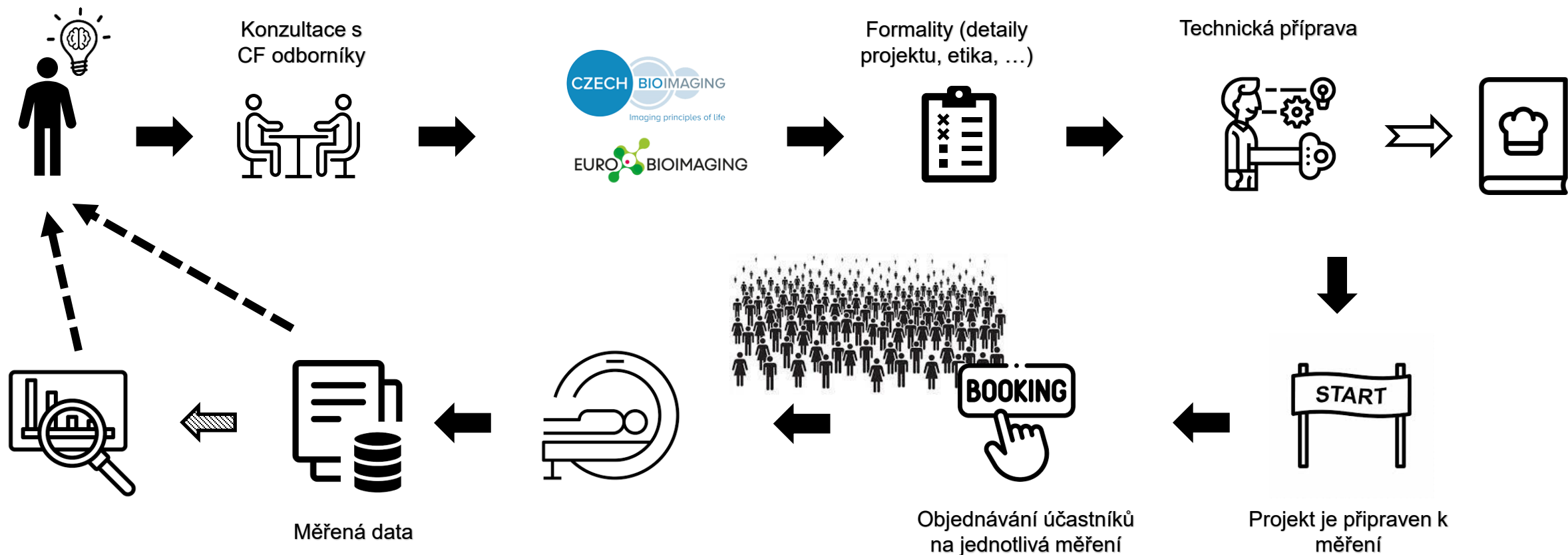


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Data management pro uživatele CF MAFIL

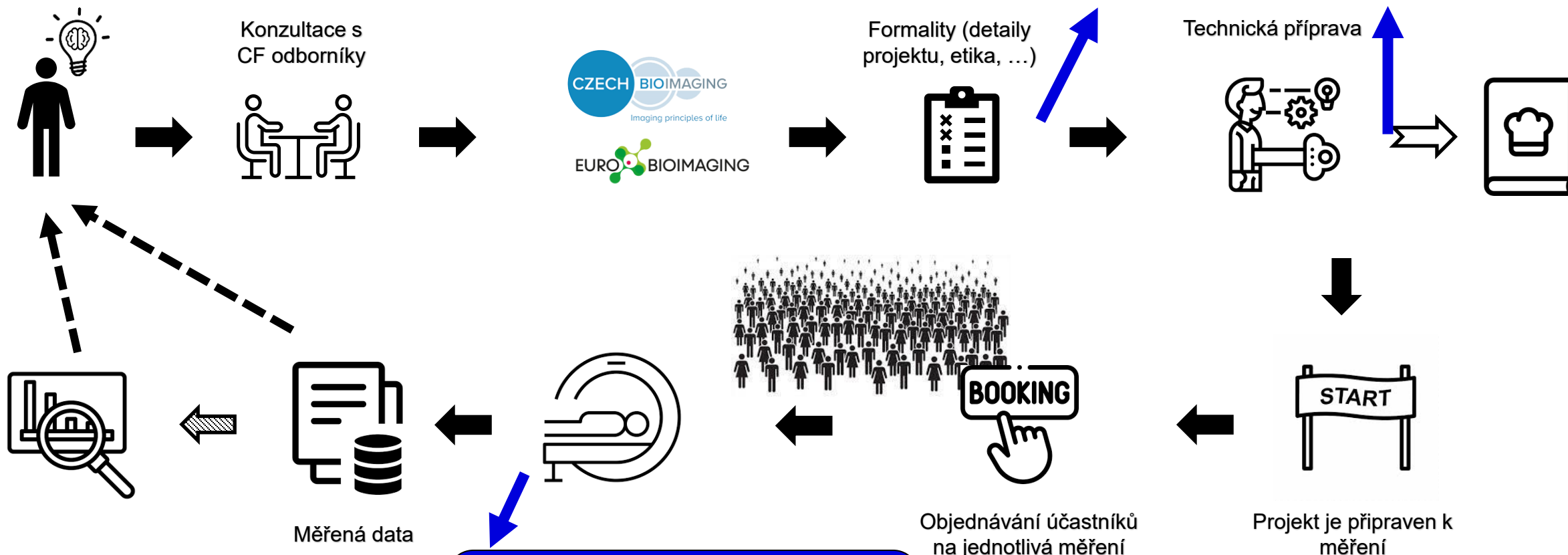
Michal Mikl

Data v MAFIL – životní cyklus projektu



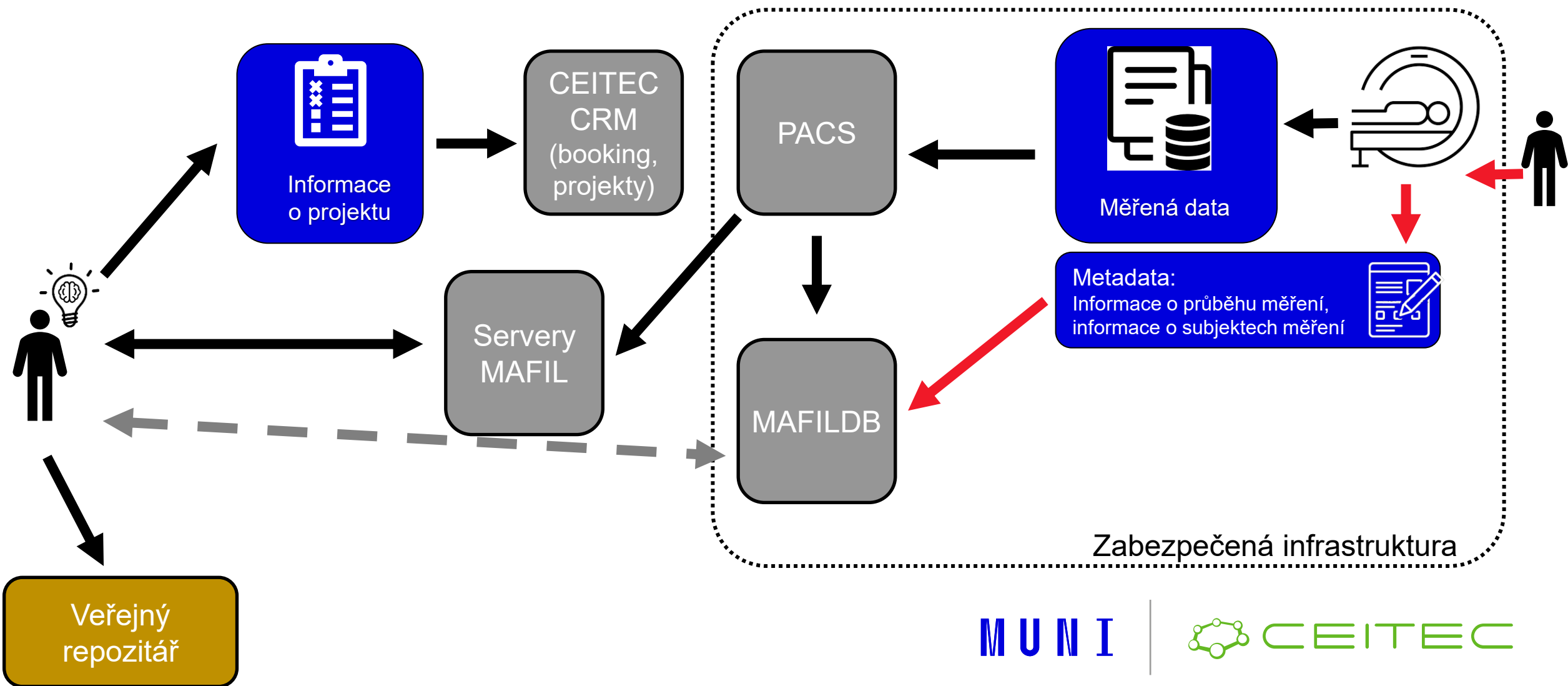
Data v MAFIL

Metadata:
Řešitel, financování,
Poděkování, přístup k datům
Měřící postup, použité přístroje



Metadata:
Průběh měření
(logy, poznámy, provázanost)

Data v MAFIL – zdroje a toky dat / metadat



Novinky v MAFIL

- Do konce roku 2026 se plánuje nový booking systém
 - Otazník nad podobou systému evidence projektů
- Zapojení do vývoje repozitáře pro medicínská obrazová a fyziologická data (MINDR-CZ)
- Na CEITEC MU se řeší příprava DMP (data management plan) šablon v nástroji DSW
 - Michaela Vaňharová (+ Michal Mikl, Tomáš Slavíček, Jan Fousek, ...)

DSW MUNI

Dashboard

Knowledge Models

Document Templates

List

Editors

Projects

Document Templates

Search... Name ▾ ↓

- A** **AZV ČR DMP** 1.0.6
muni:azv-cr-dmp:1.0.6 · Masaryk University · AZV ČR Data Management Plan template (derived from Horizon Europe DMP template)
- G** **GAČR DMP** 1.1.15
muni:gacr-dmp:1.1.15 · Masaryk University · GAČR Data Management Plan template (derived from Horizon Europe DMP template)
- H** **Horizon 2020 DMP** 1.26.0
dsw:h2020-dmp:1.26.0 · Data Stewardship Wizard · Data Management Plan according to the H2020 template
- H** **Horizon Europe DMP** 1.20.0
dsw:horizon-europe-dmp:1.20.0 · Data Stewardship Wizard · Data Management Plan according to the Horizon Europe template
- M** **Machine-Actionable SMP** 1.0.0 unsupported metamodel
dsw:smp-masmp:1.0.0 · Data Stewardship Wizard · Machine-Actionable SMP (maSMP) file in RDF from SMP
- m** **maDMP (RDA DMP Common Standard)** 1.27.0
dsw:rda-madmp:1.27.0 · Data Stewardship Wizard · Machine-actionable DMP according to RDA Common Standard
- M** **MŠMT DMP** 1.1.5
muni:msmt-dmp:1.1.5 · Masaryk University · MŠMT Data Management Plan template (derived from Horizon Europe DMP template)

Current phase

Before Submitting the Proposal

Chapters

I. Administrative information 1

II. Re-using data 1

III. Creating and collecting data 7

- Are you running the project in a colla...
- Will you be collecting physical sampl...
- How will you do file naming and file ...
- What existing data formats/types will ...
 - NIFTI-1 Data Format
 - Data format/type
 - Is this a standard data format ...
 - Does this data format enable s...
 - What volume of data of this ty...
 - Is this data format completely ...
 - What existing encodings/terminologi...
 - Will you be using new types of data?
 - How will you be collecting and keepi...
 - Will you be acquiring data using mea...
 - Do you have any non-equipment dat...
 - Is there a data integration tool that c...
 - Will you collect any data connected t...
 - How is the ownership of the collected...
 - Did you consider how to monitor dat...

IV. Processing data 3

V. Interpreting data 2

VI. Preserving data 4

VII. Giving access to data 3

III. Creating and collecting data

In this chapter we describe all the sources of data: they can e.g. come from instruments or from questionnaires; data can be newly collected as part of the current project, but it can also be pre-existing data that may need proper contracts with the maintainer, some pre-processing, and quality checks. It can also be reference data that is part of curated resources and (public) databases.

For more information see [Collecting in RDMKit](#)

III.1 Are you running the project in a collaboration between different groups or institutes?

 a. No

 b. Yes

III.2 Will you be collecting physical samples?

Will you be collecting artefacts like specimens, minerals, biological samples?

 Desirable: *Before Submitting the Proposal*
 External links: [RDMkit on Plant biological materials](#)
 a. No

 b. Yes

III.3 How will you do file naming and file organization?

 Horizon 2020 DMP

 Horizon Europe DMP

Putting some thoughts into file naming can save a lot of trouble later.

 Desirable: *Before Submitting the DMP*
 External links: [RDMkit on data organisation](#)
 a. Explore

III.4 What existing data formats/types will you be using?

 Horizon 2020 DMP

 Horizon Europe DMP

 Science Europe DMP

Have you identified types of data that you will use that are used by others too? Some types of data (for example "images" or "tables") are used by many different projects. For such data, often common standards exist (in our example "JPG" and "CSV" [comma separated values]) that help to make these data reusable. Are you using such common data formats?

Podpora FAIR / open data na MAFIL

- Michaela Vaňharová – data steward pro primární kontakt s uživateli v obecnější rovině
- Tomáš Slavíček – data curator pro řešení specifických situací v datasetech, techničtější rovina
- Martin Kojan, Kateřina Ingrová – specifická podpora práce s daty

Anonymizace dat v MAFIL

- Na přelomu 2025/2026 hotová první technická implementace anonymizace v MAFILDB a PACS a začátkem 2026 otestování na vybraných projektech z roku 2015
- Provedena kontrola MR projektů z let 2015 a 2016 za MAFIL, nyní budeme oslovovat jednotlivé řešitele/kontaktní osoby s možností jejich kontroly / doplnění informací před propvedením anonymizace

Další zkušenosti s publikací dat

– Dataset z projektu ELICIT + článek v časopise Scientific Data

The screenshot shows the OpenNeuro interface for a dataset. At the top, there's a navigation bar with 'SEARCH', 'SUPPORT', 'DOCUMENTATION', 'UPLOAD', and 'My Account'. The dataset title is 'Complex multi-echo fMRI dataset: New strategies in processing of multi-echo data'. Below the title, there are buttons for 'Files', 'Share', 'Versioning', 'Download', 'Metadata', and 'Delete'. A yellow banner states: 'This dataset has been published! There are currently unsaved changes to this draft. Changes made here become public when you create a new version.' The main content area is divided into sections: 'BIDS Validation' (50000 WARNINGS, Valid), 'OpenNeuro Accession Number' (ds006926), 'Authors' (Miki Michal, Kovarova Anezka, Gajdos Martin, Marecek Radek, Schejbalova Marie, Slavicek Tomas, Ingrova Katerina), 'Available Modalities' (MRI), 'Versions' (Draft, Updated: 2025-11-12), 'Tasks' (VOB, rest, VisMot), and 'Uploaded by' (Tomáš Slaviček on 2025-11-11 - 6 months ago). The 'Overview' section contains the following text: 'The dataset was created to develop new algorithms and define workflows for processing complex multi-echo functional magnetic resonance imaging data. Each subject's dataset (83 subjects) includes structural scans, field maps, physiological signals, and six fMRI runs consisting of three tasks (a visual-motor task, an oddball task, and a resting-state task). Each of these three tasks was performed twice, using two different repetition times: one with TR = 1800 ms and another one with TR = 800 ms. The dataset contains four protocol variants, which differ only in the randomized order of fMRI task presentation to counterbalance potential order effects across participants (see participants.json for details). Details about the tasks and measurement'.

scientific data

OPEN
DATA DESCRIPTOR

Complex multi-echo fMRI dataset: New strategies in processing of multi-echo data

Michal Miki¹, Kateřina Ingrová¹, Martin Gajdoš¹, Marie Schejbalová¹, Anežka Kovářová^{1,2}, Radek Mareček¹ & Tomáš Slaviček¹

This publication introduces a novel, publicly available dataset designed to support the development and evaluation of advanced algorithms and processing workflows for complex multi-echo functional magnetic resonance imaging (fMRI) data. The dataset comprises multi-echo fMRI and electrophysiological recordings collected from 83 healthy, right-handed adult participants. Data was acquired with two 3T MR scanners and is available on OpenNeuro under the title "Complex multi-echo fMRI dataset: New strategies in processing of multi-echo data".

Background & Summary

This dataset¹ was created to facilitate research into the processing and analysis of multi-echo fMRI data. It was acquired with several specific features, making it a unique resource for methodological comparison and testing. Despite the fact that multi-echo fMRI acquisition was introduced many years ago² (see³ for a review of the history of multi-echo fMRI acquisition), and many methodological improvements and examples of application have been published since then, it is still not a widely used technique in routine neuroscience research. The main benefit of acquiring multiple images (echoes) at different echo times is the possibility to optimize sensitivity to

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Zkušenosti z recenzního řízení

- Postřehy k úpravě datasetu (pojmenování v BIDS)
- Doplnění informací o datech z jednotlivých ech
- Zveřejnění kódu (dkriptů) pro kontrolu kvality
a preprocessing

1. When complex-valued data are present, the magnitude images should have 'part-mag' in the filenames. The omission of 'part-mag' from filenames is only valid if magnitude data are the only data available for that acquisition.

Thank you for this suggestion. You are right, that 'part-mag' in the filenames is correct and more intuitive. We changed the filenames accordingly.

2. I believe the T2starw suffix is not the correct choice for your anatomical images. I think the MEGRE suffix is what is recommended for this kind of acquisition.

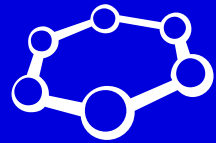
Thank you for the comment. We changed the suffix to MEGRE.

4. It would make it easier to work with the data if the acquisition entity was used. For example, the following labels could be useful:

- task-rest_acq-tr800 and task-rest_acq-tr1800 instead of task-rest1 and task-rest2.
- task-rest1_acq-scanner1 and task-rest1_acq-scanner2 instead of placing the information about the scanner in the participants.tsv file. I think the differences in parameters between scanners merits a distinct acq entity.
- task-rest_acq-tr800+scanner1, task-rest_acq-tr1800+scanner1, task-rest_acq-tr800+scanner2, and task-rest_acq-tr1800+scanner2.

Thank you for the suggestion of use of the acquisition entity. This can help to distinguish between the tasks and repetition times. Therefore, we implemented it to the filenames structure. Regarding the scanner version, we checked the BIDS specification (<https://bids-specification.readthedocs.io/en/stable/longitudinal-and-multi-site-studies.html#option-2a-collate-sites-at-subject-level>) and selected different approach (option 2a at this webpage) which we consider clearer. We incorporated scanner type (A/B) into the subject names. And the scanner type is in the participants.tsv table too.

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