

Čo sú FAIR dáta a prečo sú tak dôležité?

Silvia Sofianos



EURÓPSKA ÚNIA
Európske štrukturálne a investičné fondy
OP Integrovaná infraštruktúra 2014 – 2020



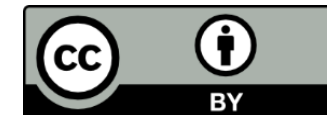
MINISTERSTVO
DOPRAVY A VÝSTAVBY
SLOVENSKEJ REPUBLIKY



MINISTERSTVO
ŠKOLSTVA, VEDY,
VÝSKUMU A ŠPORTU
SLOVENSKEJ REPUBLIKY



NISP **E**Z^{IV}



OBSAH

- Čo sú FAIR dáta?
 - Findable (vyhľadateľné)
 - Accessible (prístupné)
 - Interoperable (interoperabilné)
 - Reusable (opätovne použiteľné)
- Sú FAIR dáta rovnaké ako otvorené dáta?
- Nástroje
 - FAIR Aware
 - Argos
 - Amnesia



Findable

Accessible


Interoperable

Reusable



- Vyhľadateľné dáta

F1. (Meta)dáta majú perzistentný identifikátor



[ADVANCED SEARCH](#) 


Showing **20** of **20** results.

Items per page: 50  1 – 20 of 20  

ORCID ID	First Name	Last Name	Other Names	Affiliations
0000-0001-6195-7920	CONSTANTINOS	SOFIANOS		Colleges of Medicine of South Africa, LIFE BEDFORD GARDENS HOSPITAL, University of the Witwatersrand, Univerzita Komenského v Bratislave
0000-0002-9915-9665	Dimitrios	Sofianos		AHEPA University General Hospital, Faculty of Medicine, School of Health Sciences, University of Thessaly, Interbalkan Medical Center, Universitair Ziekenhuis Brussel, Vrije Universiteit Brussel, Ziekenhuis Netwerk Antwerpen (ZNA Middelheim)
0000-0002-3438-508X	Chrysis	Sofianos		Colleges of Medicine of South Africa, Royal College of Surgeons of England, University of Edinburgh, University of the Witwatersrand
0000-0002-0651-1034	Aristotelis	Sofianos		University of Patras
0000-0002-7375-970X	Zelia	Sofianos		University of the Witwatersrand Faculty of Health Sciences
0000-0001-6325-513X	Sarantis	Sofianos		National and Kapodistrian University of Athens
0000-0002-5476-5223	Silvia	Sofianos		Slovak Centre of Scientific and Technical Information



[https://orcid.org/
0000-0002-5476-5223](https://orcid.org/0000-0002-5476-5223)

 Printable version

Name

Silvia Sofianos

Activities

[Collapse all](#)

▼ Employment (1)

 Sort

Slovak Centre of Scientific and Technical Information: Bratislava, SK

2016 to present (Open Science Support Department)
Employment

[Show more detail](#)

Source: Silvia Sofianos

Record last modified Feb 18, 2022, 4:25:53 PM UTC

Resolve a DOI Name

Type or paste a DOI name, e.g., 10.1000/xyz123, into the text box below. (Be sure to enter all of the characters before and after the slash. Do not include extra characters, or sentence punctuation marks.)

Clicking on a DOI link (try this one: <https://doi.org/10.1109/5.771073>) takes you to one or more current URLs or other services related to a single resource. If the URLs or services change over time, e.g., the resource moves, this same DOI will continue to resolve to the correct resources or services at their new locations.

Check the current status of the DOI system at doi.statuspage.io.



Enhance the value of your content.

Join the DOI Community.

[Watch a video, get the facts, and find out how.](#)

January 24, 2020




Dataset

Open Access

Namelists required to run sea ice and physics configuration of MITgcm for the West Antarctic Peninsula

 Schultz,Cristina

This dataset contains the namelists that describe the initial conditions, forcing files and specific package configurations used to run a sea ice and ocean physics configuration of the MITgcm (general circulation model) for the West Antarctic Peninsula (WAP).

Files (2.2 MB)	
Name	Size
data	6.6 kB Download
md5:a1c93ee96f3eb18513337ab5d457e47d 	
data.cal	176 Bytes Download
md5:6c3ab678050fceb4d115ef6602adda2 	
data.diagnostics	5.7 kB Download
md5:a7e161607565c6340ef5e767eea1bc17 	

98

 views

24

 downloads[See more details...](#)

Indexed in

**Publication date:**

January 24, 2020

DOI:DOI [10.5281/zenodo.3627365](https://doi.org/10.5281/zenodo.3627365)**License (for files):**[Creative Commons Attribution 4.0 International](#)

Findable

Accessible

Interoperable

Reusable



- Vyhľadateľné dáta

F1. (Meta)dáta majú perzistentný identifikátor

F2. Sú bohato opísané metadátami

Data



Metadata

Filename:
Tadzik.jpg
Author:
Piotr Kononov
Date:
August 15, 2016



A yellow rectangular box containing text and a small map icon. The text lists file details: filename, author, and date. The map icon shows a street view with a red location pin. A yellow arrow points from the map icon to the cat's body.

Findable

Accessible

Interoperable

Reusable



- Vyhľadateľné dáta

F1. (Meta)dáta majú perzistentný identifikátor

F2. Sú bohato opísané metadátami

F3. (Meta)dáta sú registrované alebo indexované vo vyhľadateľnom zdroji

F4. Metadáta zahŕňajú identifikátor dát, ktoré popisujú

Findable

Accessible

Interoperable

Reusable



- Prístupné

A.1.(Meta)dáta sú vyhľadateľné podľa ich identifikátora pomocou štandardizovaného komunikačného protokolu

A1.1. Protokol je otvorený, bezplatný a univerzálne implementovateľný

A1.2. Protokol umožňuje v prípade potreby procedúru autentifikácie a autorizácie

A.2. Metadáta by mali byť dostupné aj vtedy, keď dáta už nie sú k dispozícii



Research. Shared! Sign up today.

Citeable. Discoverable.

Uploads get a Digital Object Identifier (DOI) to make them easily and uniquely citeable.

Communities

Accept or reject uploads to your own community (e.g workshops, EU projects, institutions or entire disciplines).

Trusted Research Data Management

Built on top of CERN's expertise in managing 100s of petabytes of research data from the Large Hadron Collider.

 Sign up with GitHub

 Sign up with ORCID

— OR —

Nie som robot



reCAPTCHA

Ochrana súkromia - Zmluvné podmienky

 Sign Up

Core Certified Repositories

Applications are made public only once certification of a data repository has been approved by the CoreTrustSeal Board. Certification is against the version of the Core Trustworthy Data Repositories Requirements named in the link to the public application (e.g., 2017–2019). The CoreTrustSeal for Data Repositories is valid for three years from the certification date listed within the public application.



Findable

Accessible

Interoperable

Reusable



- Interoperabilné

I1. (Meta)dáta používajú formálny, prístupný, zdieľaný a rozšírený jazyk na prezentáciu znalostí.

I2. Meta(dáta) používajú slovníky, ktoré sa riadia princípmi FAIR

I3. Meta(dáta) zahŕňajú kvalifikované odkazy na iné meta(dáta)

Findable
Accessible
Interoperable
Reusable

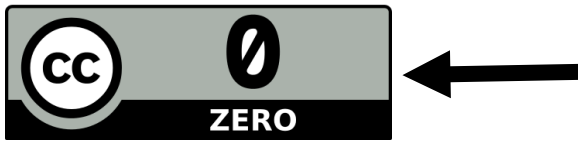


- Opätovne použiteľné

R1. (Meta)dáta sú bohato opísané s množstvom presných a relevantných atribútov

R2. Meta(dáta) majú uvedenú licenciu

R3. (Meta)dáta majú jasnú identifikáciu pôvodu



Choose a license

This chooser helps you determine which Creative Commons License is right for you in a few easy steps. If you are new to Creative Commons, you may also want to read [Licensing Considerations](#) before you [get started](#).



**Choose
Features**



**Optional
Info**



**Get
License**

Get Started

<https://creativecommons.org/>

Findable
Accessible
Interoperable
Reusable



- Opätovne použiteľné

R1. (Meta)dáta sú bohato opísané s množstvom presných a relevantných atribútov

R2. Meta(dáta) majú uvedenú licenciu

R3. (Meta)dáta majú jasnú identifikáciu pôvodu

R4. (Meta)dáta zodpovedajú štandardom danej komunity

MIAME and MINSEQE guidelines

The [MIAME](#) (Minimum Information About a Microarray Experiment) and [MINSEQE](#) (Minimum Information About a Next-generation Sequencing Experiment) guidelines outline the minimum information that should be included when describing a microarray or sequencing study. Many journals and funding agencies require microarray data to comply with MIAME and MINSEQE standards.

MIAME compliance is not related to the submission format or route, but rather to the content provided

GEO deposit procedures enable and encourage submitters to supply MIAME and MINSEQE compliant data. All GEO submission procedures are designed to closely follow the MIAME and MINSEQE checklists; if you provide all requested information, your submission will be compliant.

The six most critical elements contributing towards MIAME are:

- Raw data for each assay (e.g., CEL or FASTQ files)
- Final processed (normalized) data for the set of assays in the study (e.g., the gene expression data count matrix used to draw the conclusions in the study)
- Essential sample annotation (e.g., tissue, sex and age) and the experimental factors and their values (e.g., compound and dose in a dose response study)
- Experimental design including sample data relationships (e.g., which raw data file relates to which sample, which assays are technical, which are biological replicates)
- Sufficient annotation of the array or sequence features examined (e.g., gene identifiers, genomic coordinates)
- Essential laboratory and data processing protocols (e.g., what normalization method has been used to obtain the final processed data)

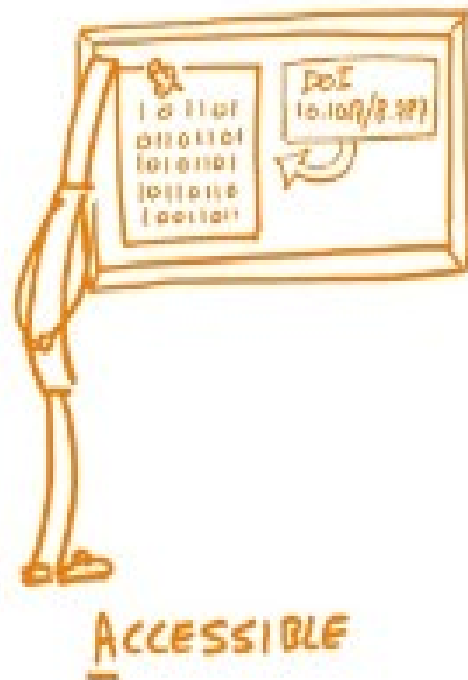
More information and background regarding GEO and data standards are discussed in this [Nature Biotechnology correspondence](#).



FAIR DATA PRINCIPLES



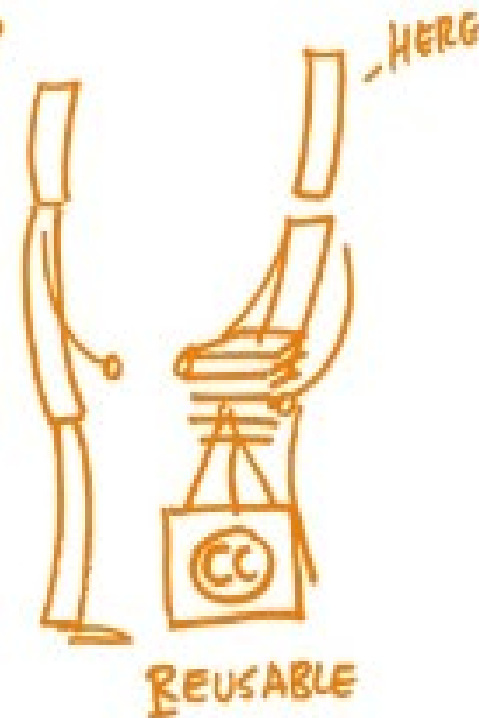
VYHĹADATEĹNÉ



PRÍSTUPNÉ

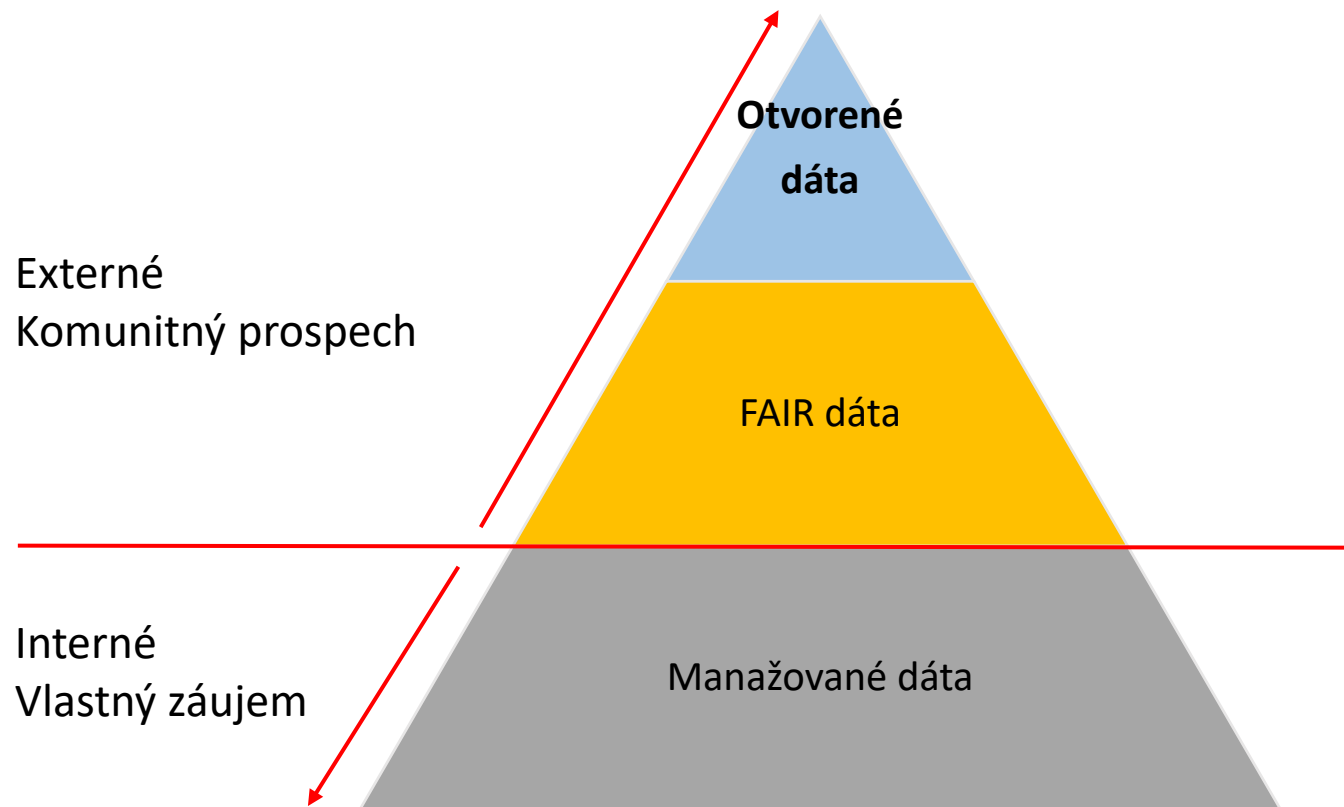


INTEROPERABILNÉ



OPĀTOVNE
POUŹITEĹNÉ

Sú FAIR dáta rovnaké ako otvorené dáta?



NÁSTROJE



Your first step towards your FAIR data(set)

Do you work with data? Are you looking to make it future-proof? The **FAIR Principles** can help you.

These principles stand for the Findability, Accessibility, Interoperability and Reusability of data(sets). Applying these principles to your data(set) will help others to find, cite and reuse your data more easily.

FAIR-Aware helps you assess your knowledge of the FAIR Principles, and better understand how making your data(set) FAIR can increase the potential value and impact of your data.

The tool is discipline-agnostic, making it relevant to any scientific field. You can use this tool at any point during your research before depositing your **data(set)** in a data repository. It is also good to keep in mind that many FAIR-related decisions can already be made in the research planning phase, so you may want to use FAIR-Aware early on to help you make those decisions. Also, if you are a trainer, you can use FAIR-Aware to assess the knowledge of FAIR of your course participants.

The self-assessment consists of 10 questions with additional guidance texts to help you become more aware of what you can do to make your data(set) as FAIR as possible. The assessment will take between 10-30 minutes, after which you will receive an overview of your awareness level and additional tips on how you can further improve your FAIR skills.

If you would like to use FAIR-Aware in your own training, you can find instructions on the trainer functionality here [↗](#)

You can contact the FAIR-Aware development team for any questions or comments via e-mail. ✉

FINDABLE

1. Are you aware that a data(set) should be assigned a globally unique persistent and resolvable identifier when deposited with a data repository? ⓘ Yes No
2. Are you aware that when you deposit a data(set) in a data repository, you will need to provide discovery metadata in order to make the data(set) findable, understandable and reusable to others? ⓘ Yes No
3. Are you aware that the data repository providing access to your data(set) should make the metadata describing your data(set) available in a format readable by machines as well as humans? ⓘ Yes No

ACCESSIBLE

4. Are you aware that access to your data(set) may need to be controlled and that metadata should include licence information under which the data(set) can be reused? ⓘ Yes No
5. Are you aware that metadata should remain available over time, even if the data(set) is no longer accessible? ⓘ Yes No

INTEROPERABLE

6. Are you aware that the metadata describing your data(set) should use controlled vocabularies? ⓘ Yes No

REUSABLE

7. Are you aware that provenance information about the collection and/or generation of data should be included in the metadata? ⓘ Yes No
8. Are you aware that metadata describing your data(set) should follow the specifications of a community-endorsed standard? ⓘ Yes No
9. Are you aware that your data(set) should be deposited preferably in a file format that is open and supported by the data repository for long-term preservation? ⓘ Yes No
10. Are you aware that keeping your data(set) FAIR over time requires professional data curation and digital preservation? ⓘ Yes No



High accuracy Data Anonymization.

Perform research and share your results that satisfy GDPR guidelines by using data anonymization algorithms.

GET STARTED



Plan and follow your data

Create machine actionable DMPs.

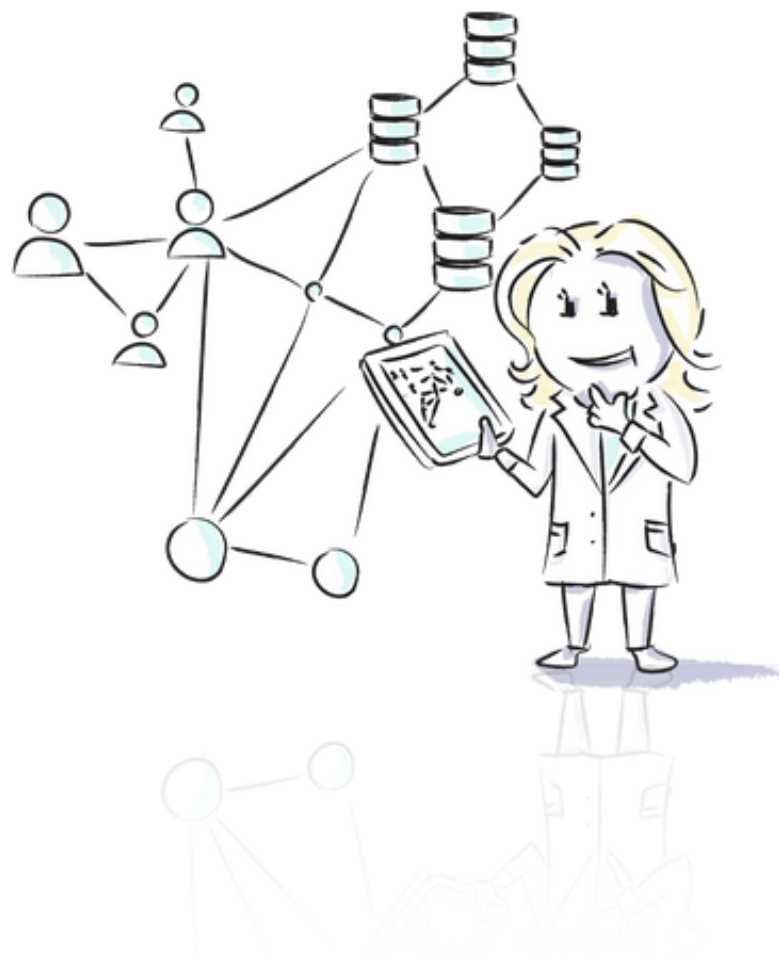
Configure to best fit your discipline.

Link to EOSC components out of the box.

Share easily in your repository.

Bring your Data Management Plans closer to where data are generated, analysed and stored.

Start your DMP



ZDROJE

- ARDC (2020): FAIR data 101 training. <https://ardc.edu.au/resource/fair-data-101-training-findable-1/>
- CESSDA (2019): Data Management Expert Guide. <https://dmeg.cessda.eu/>
- DANS (2022): FAIR Aware. <https://fairaware.dans.knaw.nl/>
- FAIR DATA AUSTRIA (2021): Let's make our data FAIR! <https://forschungsdaten.at/en/fair-data-austria/materials/lets-make-our-data-fair/>
- GO FAIR (2022): FAIR Principles. <https://www.go-fair.org/fair-principles/>



Ďakujem za pozornosť.

silvia.sofianos@cvtisr.sk