EUTOPIA TRAIN: A deeper look into RDM practices: the FAIR principles and the role of metadata

10 November 2022

# FAIRsharing.org

an ecosystem of research standards and databases for enabling FAIR data

Allyson Lister, PhD

FAIRsharing Content and Community Lead; Senior Knowledge Engineer;

ORCiD: 0000-0002-7702-4495



RDA Europe / EOSC Future Domain

Ambassador for standards, repositories

and policies



datareadiness.eng.ox.ac.uk



contact@fairsharing.org





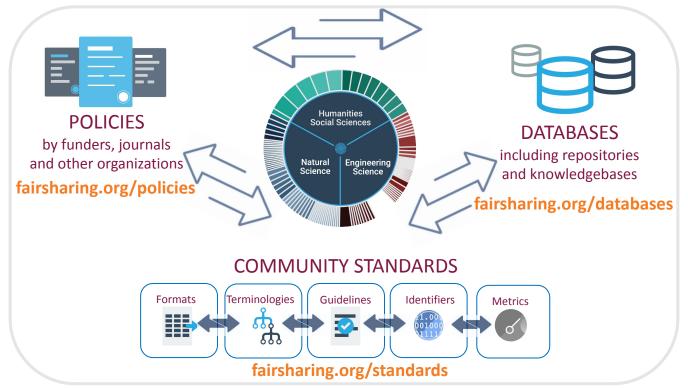
10.25504/FAIRsharing.2abjs5







### An informative and educational resource, and a service

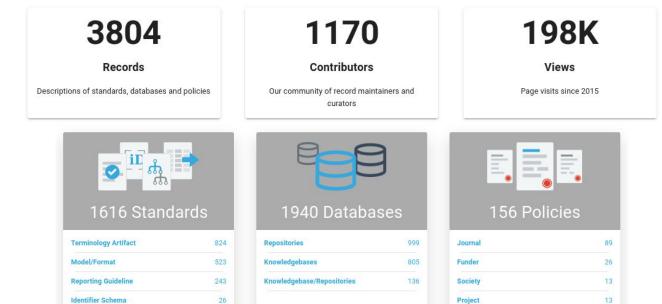


FAIRsharing provides curated descriptions and relationship graphs of

standards, databases and policies in all disciplines FAIRsharing.org 🔝 Educational



## Promoting use and value of databases, standards, policies



Guides *consumers* to *discover*, *select* and *use* these resources with confidence

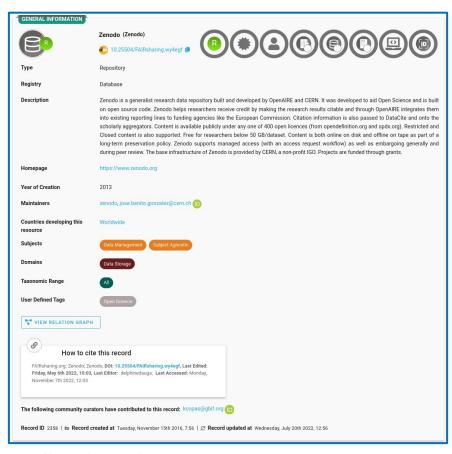
VIEW ALL

VIEW ALL

VIEW ALL

Helps *producers* to make their resources more *visible*, more widely *adopted* and *cited* 

## FAIRsharing at a glance



# Users, adopters, communities and working groups

An endorsed output of the **FAIRsharing WG** (since 2015):

RESEARCH DATA ALLIANCE



A WG (since 2015) in:





A recommended resource in EOSC reports



Used by all stakeholder groups

Researchers in academia. industry and government

Research data facilitators. Society, unions

librarians, trainers

Journal publishers and organisations with data policies Developers & curators of resources and tools

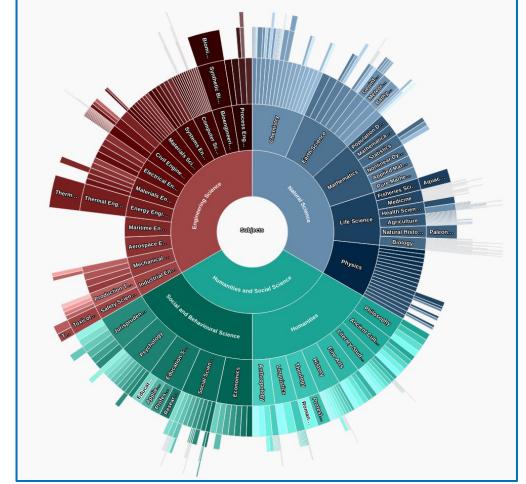
and community alliances

Funders and data policy makers



Providing relevant information across the entire research community is a complex challenge requiring a strong user community

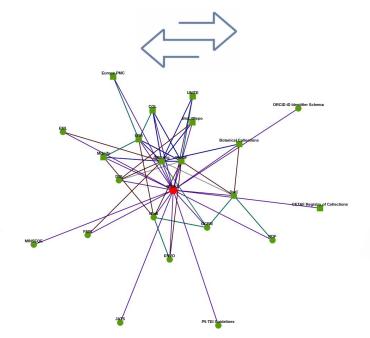
Relationships (among resources and within the user community) are at the core of FAIRsharing's curation approaches



# **Relationships** are key



by funders, journals and other organizations





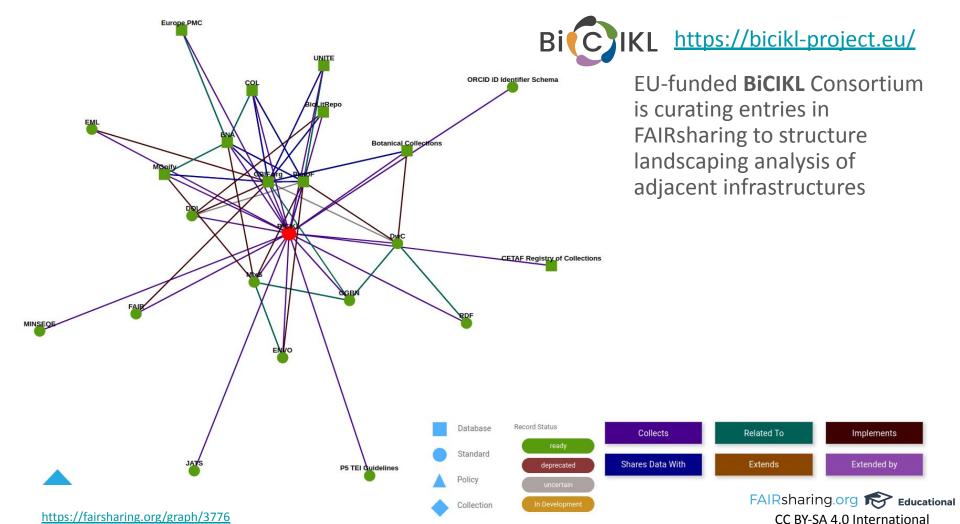


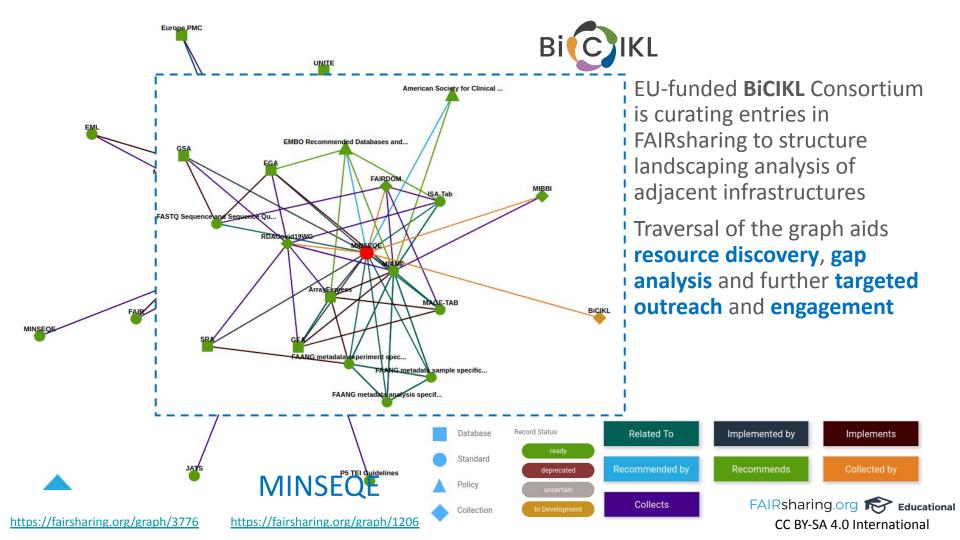


including repositories and knowledgebases









### **Relationships** with tool developers

#### fairassist.org







openaire.eu

# OpenAIRE and FAIRsharing collaboration

The collaboration between OpenAIRE AMKE and FAIRSharing is designed to ensure that our interconnected information will provide greater knowledge to researchers in all disciplines and other stakeholders worldwide. In particular, links to relevant FAIRSharing records from the OpenAIRE Research Graph will help OpenAIRE users who wish to discover relationships to standard of Interest, alongside the repositories that implement that standard of Interest, alongside the repositories that implement that standard of the programment of that endorse that the open and the programment of that endorse that the open and the programment of the programment of the endorse that the open and the programment of the programment o









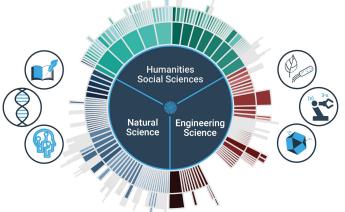
# As a look-up service for standards

 For data stewards, FAIR evaluation, DMP and other tools/services it provides a <u>look-up</u> service for standards: name, types and other metadata

#### To help with questions like:

- what are the types of PID schemas?
- Is SpectralDM the right community standard data model to describe the structure of spectrophotometric datasets?





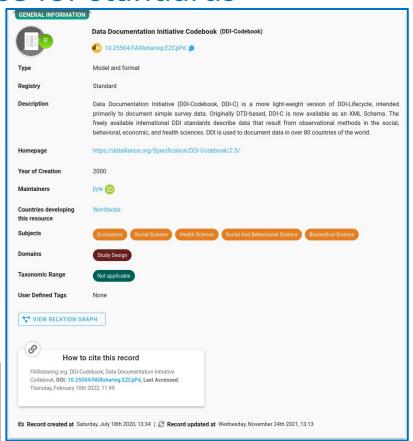


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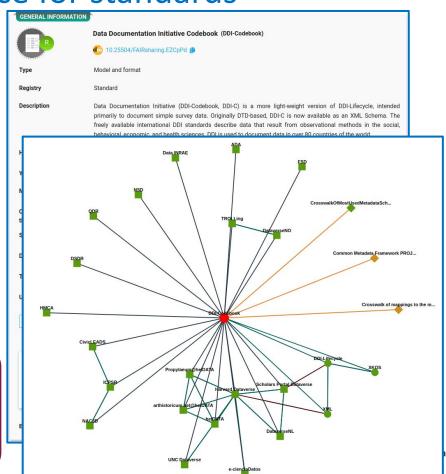


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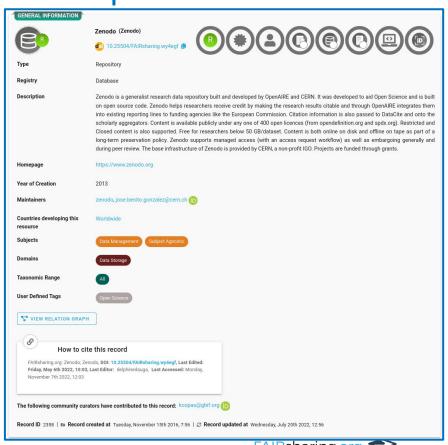
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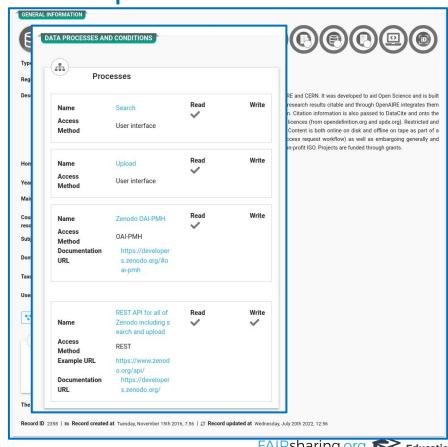
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- licence or terms of use
- datasets accessibility/openness
- accessibility mechanism
- policies (e.g. curation, preservation)
- PIDs schema
- data and metadata standards
- and many others...



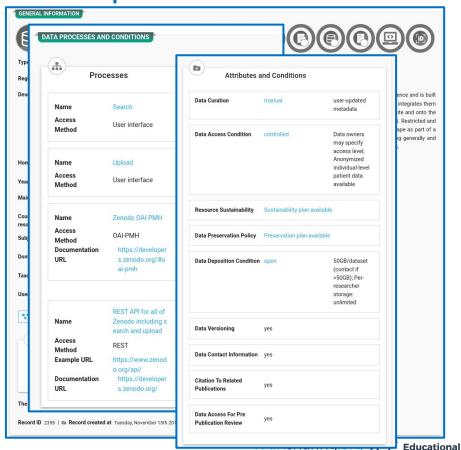
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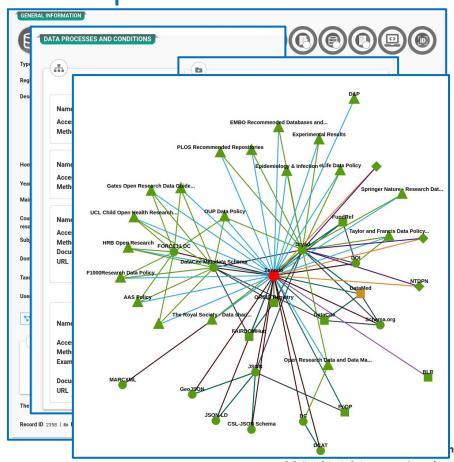
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# Relationships with guidance and standards developers

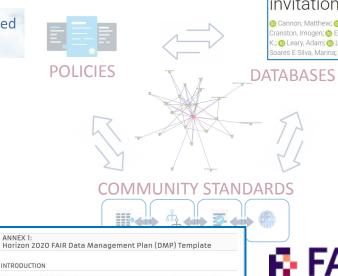




FAIR Data Policy Checklist and Structured
Policy Descriptions

doi.org/10.5281/zenodo.6281105





collects or processes research data. You should develop a single DMP for your project to cover its overall approach

In general terms, your research data should be "FAR", that is findable, accessible, interoperable and re-usable. These principles precede implementation choices and do not necessarily suggest any specific technology, standard, or implementation-solution.

This termidate is not intended as a strict technical implementation of the FAII principles. It is rather inscript the FAIII ac-

FAIR principles (article in Nature

Structure of the template

Repository Features to Help Researchers: An invitation to a dialogue

© Cannon, Matthew; © Graf, Chris; © McNeice, Kiera; © Chan, Wei Mun; © Callaghan, Sarah; © Carnevale, Ilaria; © Cranston, Imogen; © Edmunds, Scott C.; © Everitt, Nicholas; © Ganley, Emma; © Hrynaszkiewicz, Iain; © Khodiyar, Varsha K.; © Leary, Adam; © Lemberger, Thomas; © MacCallum, Catriona J.; © Murray, Hollydawn; © Sharples, Kathryn; © Soares E Silva, Marina; © Wright, Guillaume; © (Moderator) McQuilton, Peter; © (Moderator) Sansone, Susanna-Assunta

doi.org/10.5281/zenodo.4683794

Home » Working and Interest Groups » Working Group » Data Repository Attributes WG

Data Repository Attributes WG

Taxonomy:

Developing a Research Data Policy Framework for All Journals and Publishers

Authors: Iain Hrynaszkiewicz ≤, Natasha Simons, Azhar Hussain, Rebecca Grant, Simon Goudie

doi.org/10.5334/dsj-2020-005

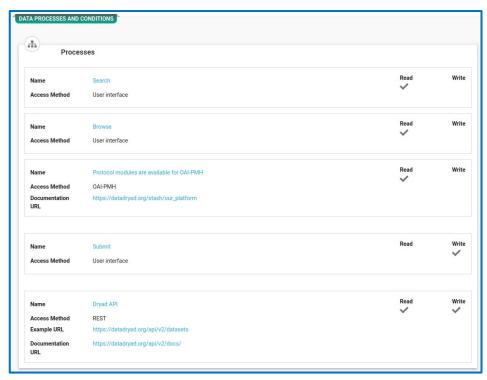
# FAIR cookbook

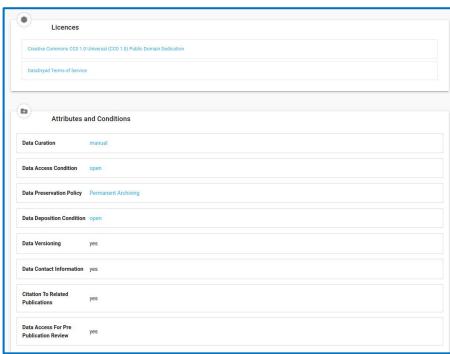
faircookbook.elixir-europe.org





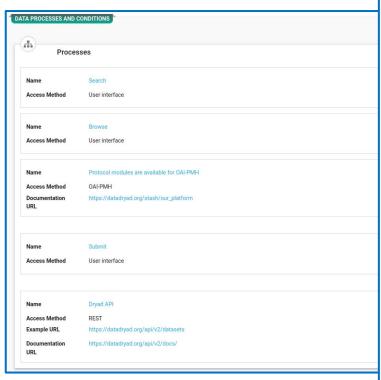
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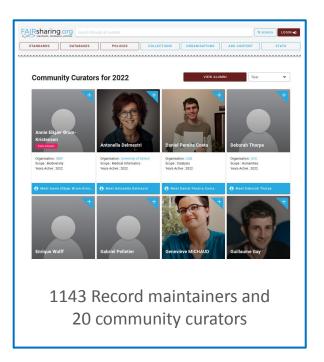
standards developers

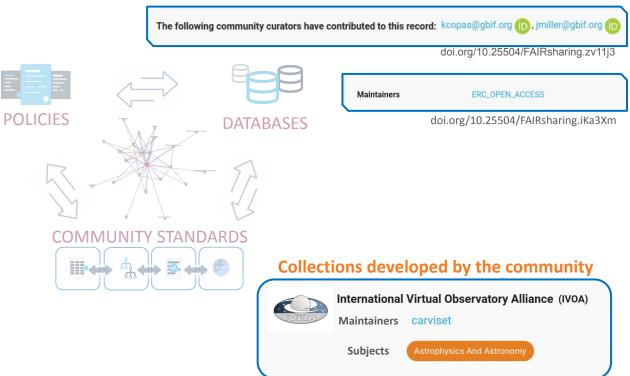


Attributes and Conditions **Data Curation** manual **Data Access Condition** open **Data Preservation Policy** Permanent Archiving Data Deposition Condition open **Data Versioning** ves Data Contact Information yes Citation To Related yes **Publications Data Access For Pre** yes Publication Review

CC BY-SA 4.0 International

Dryad: https://doi.org/10.25504/FAIRsharing.wkggtx





URL: https://fairsharing.org/IVOA

#### **Organisations**

look for ways to promote their work

search for related infrastructures and resources



Researchers / Research Support Roles

look to FAIRsharing for information on relevant resources



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FAIRsharing.org



### Maintainers / Community Curators

showcase projects and reveals

enrich FAIRsharing content to gain expertise and attribution

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Engagement with FAIRsharing aids resource discovery, gap analysis and further targeted outreach and engagement



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### **FAIRsharing for communities**

We help you <u>customise your view</u> of FAIRsharing to declare and visualise the standards and repositories you use

We <u>promote</u> your organisation and your efforts as a maintainer/curator

We help you <u>leverage</u> wider knowledge, <u>share</u> information, <u>support</u> open science and <u>connect</u> infrastructures







#### **GBIF Use Case**

GBIF wants to perform a landscape analysis of infrastructures adjacent to them and to the BiCIKL consortium.

GBIF Community Manager Kyle Copas asks FAIRsharing if we can help, and joins us as a Community Curator for Biodiversity



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His role as a Community Curator promotes the work of GBIF by enriching FAIRsharing content, revealing connections that they weren't aware of going into the collaboration/project

# Tailored views for education and promotion

**Collections** are are branded pages that *group* selected **standards** and/or **repositories** Initiatives and projects have created them for several purposes, e.g. to list resources:



#### **Developed by the community**



URL: https://fairsharing.org/IVOA

#### **Developed by a SDO**



URL: https://fairsharing.org/CDISC

#### Recommended by a community



URL: https://fairsharing.org/RDACovid19WG

#### Mapped to each other

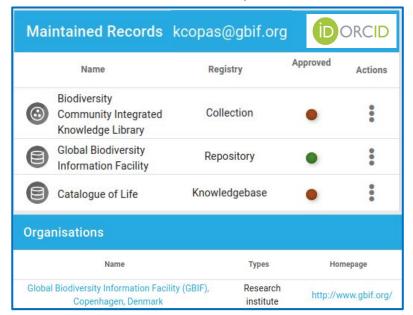


URL: https://fairsharing.org/CrosswalkOfMostUsedMetadataSchemesAndGuidelines

#### Organisation information for: Global Biodiversity Information Facility Records related to this organisation FILTER RECORDS Name Status Relation Actions SiB Colombia IPT - GBIF Colombia Repository Maintains World Register of Marine Species Funds Atlas of Living Australia IPT - GBIF Australia Maintains Repository GBIF Spain IPT - GBIF Spain Repository Maintains Canadensys IPT - GBIF Canadensys Repository Maintains Canadian Biodiversity Information Facility Maintains Minimum Information for Reusable Arthropod Maintains Abundance Data Biological Collections Ontology Maintains GBIF.org Maintains ChecklistBank Funds 1-10 of 17

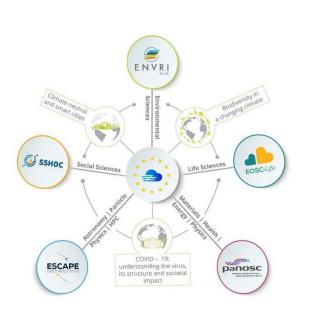
# Organization and user attribution

Linking associated data resources, standards and policies



### FAIRsharing Community Curator Programme

### **Curate – Influence – Gain Attribution – Engage – Learn**





- Gain on-the-job curation expertise
- Engagement and networking with a community of like-minded people
- Become an expert on data and metadata standards, repositories and data policies in their area
- Influence new FAIRsharing functionalities
- Attribution via ORCID, specialist user profiles, and others

fairsharing.org/community\_curation

# FAIRsharing.org

#### **Current Operational Team**

- Allyson Lister, Content and Community Lead
- Milo Thurston, Technical Lead
- Ramon Granell, Data Enrichment & Quality Manager
- Delphine Dauga, Data Curator Manager
- Prakhyat Gailani, Web Developer
- Dominique Batista, Research Software Engineer
- Philippe Rocca-Serra, Co-Founder
- Susanna-Assunta Sansone, Pl and Founder
- and many collaborators and contributors!

#### **Executive Advisors**

- Chris Graf, Springer Nature
- David Carr, Independent expert
- Peter McQuilton, (FAIRsharing Founding Member), GSK
- Robert Hanisch, National Institute of Standards and Technology
- Varsha Khodiyar, Independent Expert

#### **Community Curators**

https://fairsharing.org/community\_curation/our\_curators

#### Stakeholder Advisors

- Amye Kenall, Research Square
- Adam Leary, Oxford University Press
- Catriona MacCallum, Hindawi
- Dagmar Meyer, European Research Council, Executive Agency
- Dominic Fripp, JISC
- Emma Ganley, Protocols.io
- Geraldine Clement-Stoneham, Medical Research Council
- Helena Cousijn, DataCite
- Lauren Cadwallader, PLoS
- Imma Subirats, FAO of the United Nations
- Kiera McNiece, Cambridge University Press
- Luiz Olavo Bonino, GO-FAIR
- Lorenzo Feri and Sarah Callaghan, Elsevier
- Michael Ball, Medical Research Council
- Mike Huerta, NIH National Library of Medicine
- Molly Cranston and Guillaume Wright, F1000Research
- Nick Everitt and Matthew Cannon, Taylor and Francis
- Sarah Stewart, Bodleian Libraries, University of Oxford
- Scott Edmunds, GigaScience, Oxford University Press
- Simon Hodson, CODATA
- Theo Bloom, British Medical Journal
- Thomas Lemberger, EMBO Press
- Wei-Mun Chan, eLife
- Sowmya Swaminathan, Springer Nature
- Marta Teperek, TUDelft



