



Open Data – How to make the data available with **Mendeley Data**

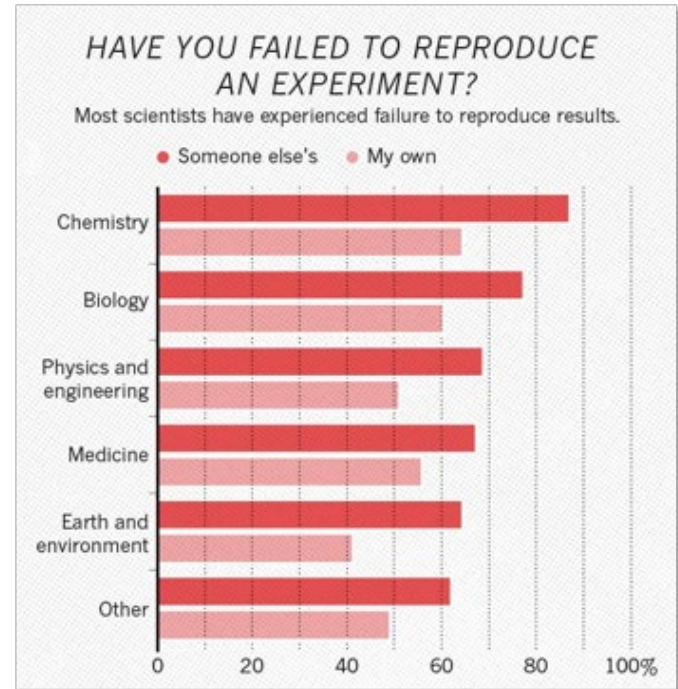
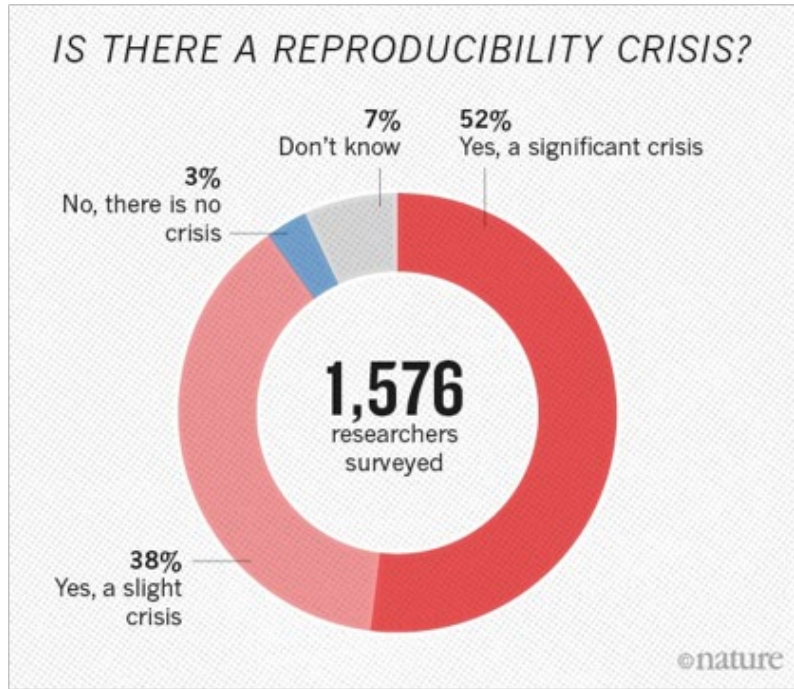
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Solutions Sales Manager



Some figures about WW Research Data Management

- **29%** of datasets are still not even published online and only **7%** are trully open.
- Only **31%** of published dataset have some supporting basic metadata or guidance documentation.
- **26%** of datasets are not up-to-date.
- Only **24%** can be accessed and download in bulk.

Research Reproducibility



Source: <https://www.nature.com/news/1-500-scientists-lift-the-lid-on-reproducibility-1.19970>



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ELSEVIER



An End-to-end Research Data Management

How we deliver

- 1. Open system:** through open APIs, modules can be integrations with other RDM tools
- 2. Data remains private** at or owned by institution
- 3. System is integrated** with the researcher workflows, to ensure simple and clear use
- 4. Researchers continue to work the same way,** avoiding additional bureaucracy and administration



Integrating with global RDM ecosystem

Long-term preservation of published datasets

- Mendeley Data indexed by OpenAIRE index
- OpenAire Zenodo repository indexed by Mendeley Data Search

- Mint DOIs for Mendeley Data Repository
- Data Cite indexed by Mendeley Data Search

Links between articles and datasets:

- Contributed by Mendeley Data to Scholix
- Indexed by Mendeley Data Search and Data Monitor
- Consumed by Scopus and ScienceDirect

Integrate with machine readable data management plans

- For more than 35 repositories the metadata as well as the underlying datasets are indexed by Mendeley Data Search
- First repositories are actively integrating with the free and open 'push API' of Mendeley Data Search

DANS



SCHOLIX



+ 35 repositories (BePress planned)



Scopus

- Mendeley Data Search results are visible on Scopus
- Notify new articles to Monitor for data sharing compliance
- Datasets appear as records on Scopus (planned)

Pure

- Mendeley Data Repository datasets are automatically synced with the Pure curation workflow
- Projects, grants, equipment, showcase on portal (planned)

SciVal

Researcher and Institutional Dataset metrics

Plum Analytics

- Mendeley Data usage is accessible through Plum API and widget
- Plumx metrics (citations, usage, social mentions) are captured and shown on Mendeley Data Repository

SSRN

Publish datasets alongside an article on Mendeley Data within the SSRN publication flow

ScienceDirect

Publish or link datasets alongside an article on Mendeley Data within the ScienceDirect publication flow

Mendeley

- User identity & login
- Library (planned)
- Notes (planned)
- Projects (planned)

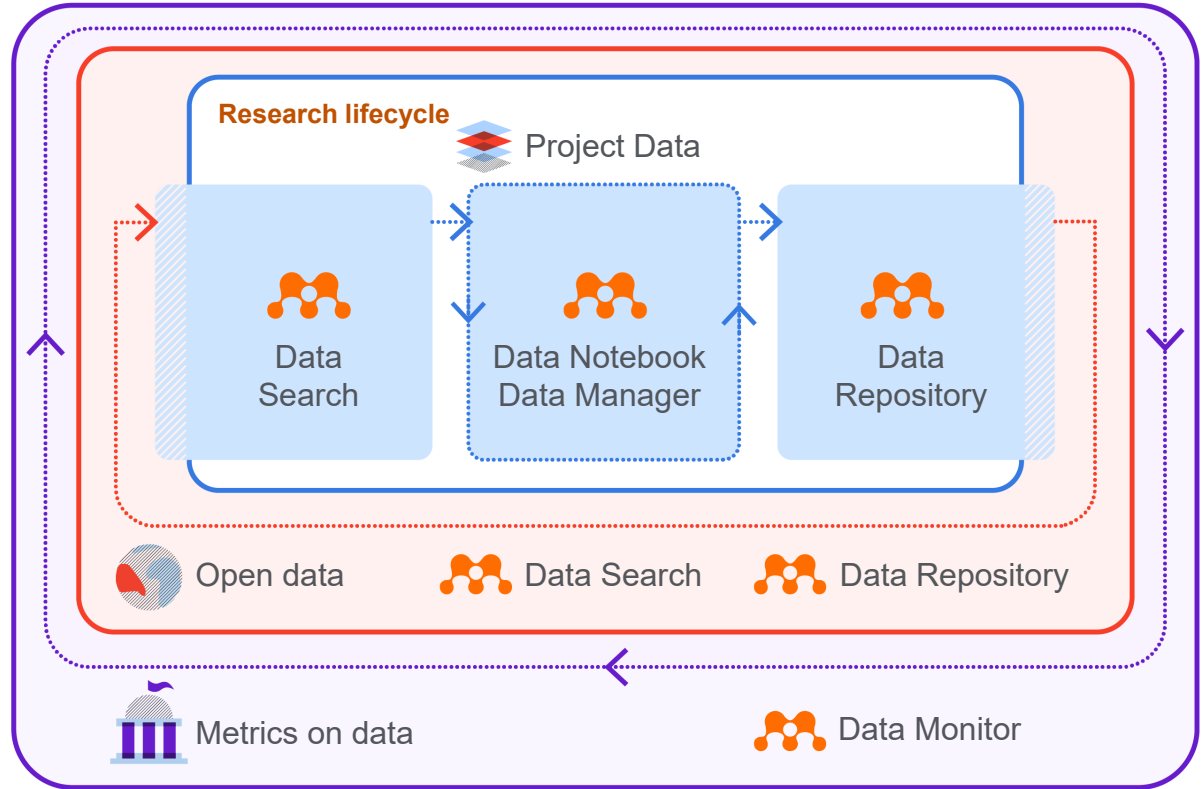


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- Existing integration
- Planned integration

Mendeley Data

A modular, cloud-based platform designed for institutions, to manage the entire lifecycle of research data



Data Repository

Keep datasets in a trusted repository

Researchers can:

- Store up to 100 GB of data per dataset in many formats
- Describe how experiments can be reproduced
- Keep track of versions of dataset
- Create DOI for Citation (or university prefix)

Want to know more?
data.Mendeley.com

Store up to 100 GB of data per dataset in many formats

On your (local) S3 or on Elsevier cloud

Open licenses & indexed in OpenAire

data.mendeley.com

Describe how experiments can be reproduced

Long-term storage: never lose data

On your S3 Or on DUNS

Link back to protocols

Create DOI for Citation (or university prefix)

Keep track of versions of dataset

Metadata:
Dublin Core and Google Science Datasets markup



Data Manager

Go from raw files to active datasets

Researchers can:

- Share data privately within a research project
- Invite external collaborators to join a project
- Gather research data from data sources as it's generated (including Electronic Lab Notebooks, ELNs)
- Annotate research data with detailed, subject-specific metadata
- Curate data according to project or institutional workflows
- Prepare to publish data on repository of your choice
- Open APIs allow tailored upload forms, automated workflows, analyze and re-upload data files

Want to know more?

[data.Mendeley.com](https://data.mendeley.com)

The screenshot shows the Mendeley Data interface for a project titled "Alzheimer project 2". The interface is divided into three main sections: "Data sources", "Shared datasets", and "Published data".

- Data sources:** This section contains a list of data sources connected to the project. It includes an "Add project data source" button, "Spencer's Dropbox" (with a sub-item "Prototype clips"), "Wouter's Dropbox" (with a sub-item "Alzheimer2"), and "Wouter's Google Drive" (with a sub-item "Alzheimer research Supplementary m...").
- Shared datasets:** This section shows datasets shared within the project. It includes "My dataset", "Alzheimer's research: data analysis", and "Alzheimer Research project 2 - shared data". There is also a "Shared by others" section with "funding data".
- Published data:** This section is currently empty, displaying a globe icon and the text: "Nothing published. Publish here from a Dataset. Publishing Datasets makes them available to the world."



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Mendeley Data



Data Search

Retrieve active data, discover public data

Discover data

- 10 million+ datasets indexed from more than 35 repositories
- Deep indexing of data significantly enhances the relevancy of results
- Keyword search within data files
- In line file preview
- Filter search results by specific author, institution, journal, subject category

Retrieve active data*

- Navigate to locally held institutional data
- Powerful keyword search and filtering

Want to know more?
data.Mendeley.com

The screenshot shows the Mendeley Data search interface. At the top, there are navigation links: "Find Research Data", "My Datasets", "My Projects", "New Dataset", and "FAQ". A search bar contains the text "prostate cancer" and a magnifying glass icon. Below the search bar, it says "Filter Results" and "8667 results for prostate cancer". A "Reset" button is visible. On the left, there is a "FILES" section with a list of file types and their counts: Text (6291), File Set (4190), Tabular Data (4013), Software/Code (1867), Document (1570), Unknown File Type (182), Image (137), Geospatial Data (89), Sequencing Data (11), Slides (9), and Video (2). On the right, there are two search results. The first result is titled "Transcription profiling of human hormone resistant prostate cancer" and includes contributors (Werther Stoss, Middel Zielinski, Rüschoff Jost, Albers Henkel) and a date (2008-06-13). The second result is titled "Genome wide analysis of androgen-receptor binding sites and epigenetic condition in prostate cancer" and includes contributors (unknown) and a date (2015-09-01). Both results have a "Files" section with buttons for "Text (4)", "Tabular Data", and "File Set".



* To be released

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Mendeley Data

Data Notebook (ELN)

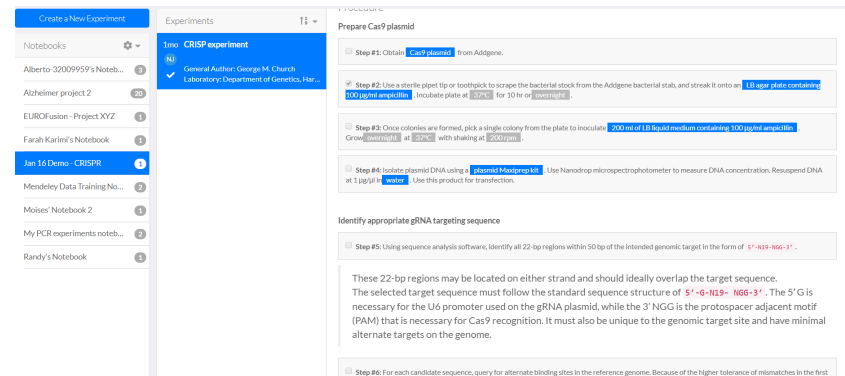
Capture data and results

Researchers can

- Keep track of experiments, results and data in the lab
- Use your own structured protocols or import and adapt from a protocols library
- Easily prepare data and results to share with collaborators and other globally
- Setup and maintain groups

Institutions can

- Have access to data after project end
- Our S3, your S3 or private cloud



The screenshot displays the Hivebench Data Notebook interface. On the left, a sidebar lists various notebooks, including 'Alberto-30009959's Noteb...', 'Alzheimer project 2', 'EUROfusion - Project XYZ', 'Farah Karim's Notebook', 'Jan 16 Demo - CRISPR', 'Mendelley Data Training No...', 'Moises' Notebook 2', 'My PCR experiments noteb...', and 'Randy's Notebook'. The main area shows an experiment titled '1mo CRISPR experiment' by 'General Author: George M. Church, Laboratory: Department of Genetics, Har...'. The protocol details the preparation of a Cas9 plasmid, including steps for obtaining the plasmid, streaking the bacterial stock, growing colonies, and isolating the plasmid DNA. It also includes instructions for identifying appropriate gRNA targeting sequences and using sequence analysis software to identify 22-bp regions within a 50-bp target.

Want to know more?
Hivebench.com



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Mendelley Data

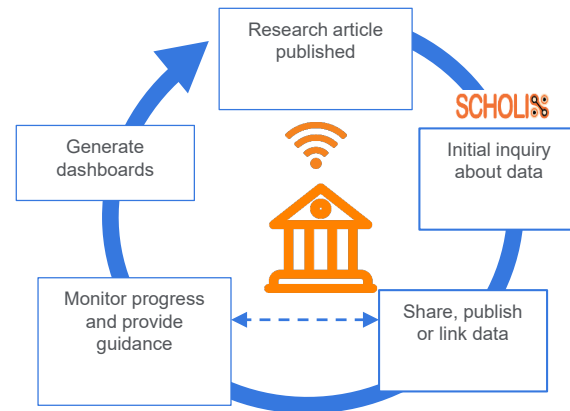


Data Monitor

Encourage and monitor compliance

Institutions can

- Achieve credibility, visibility and integrity of key research outputs
- Keep track of your data inside and outside your institution
- Maintain visibility of events in the research data management space
- Improve adoption of data sharing tools by researchers
- Communicate the value of data sharing to researchers during the research process



Dashboard > Filter campaigns > List campaigns > Campaign dashboard

Management

Researchers

Campaigns

Data Article Repository I...

Repository Info

Vouchers

Properties Campaign dashboard

Datasets & links

First name	Last name	Email	Article DOI	Dataset title	Repository name	Dataset URL	Other contributors	Linked (Yes/No)	Scholix (Yes/No)	Original Data	Linking Status
K. V.	Lakshmi	laksh@rpi.edu	10.1021/jacs.6b13261	CCDC 1524418: Experimental Crystal Structure Determination	Cambridge Crystallographic Data Centre		Ziegler, Micah S., Lakshmi, K. V., Tilley, T. Don	Yes	Yes	Yes	Linked
K. V.	Lakshmi	laksh@rpi.edu	10.1021/jacs.6b13261	CCDC 1524417: Experimental Crystal Structure Determination	Cambridge Crystallographic Data Centre		Ziegler, Micah S., Lakshmi, K. V., Tilley, T. Don	Yes	Yes	Yes	Linked
K. V.	Lakshmi	laksh@rpi.edu	10.1021/jacs.6b13261	CCDC 1524418: Experimental Crystal Structure Determination	Cambridge Crystallographic Data Centre		Ziegler, Micah S., Lakshmi, K. V., Tilley, T. Don	Yes	Yes	Yes	Linked

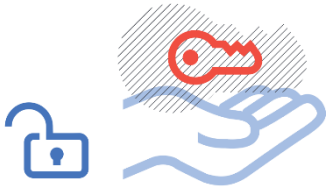


Why Mendeley Data is the best solution for RDM



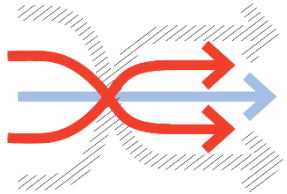
Elsevier's Mendeley Data platform supports the entire lifecycle of research data

The **5 modules** that make up Mendeley Data are specifically designed to utilize data its fullest potential, simplifying and enhancing current way of working.



Researchers own and control data, Elsevier does not

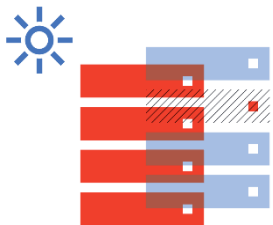
Mendeley Data allows researchers to keep data private, or publish it under one of **16 open data licenses**



Mendeley Data is an open system

It is a **flexible platform** — modules are designed to be used together, as standalones, or combined with other RDM solutions.

Why Mendeley Data is the best solution for RDM



Mendeley Data can increase the exposure and impact of research

Mendeley Data Search indexes over **10 million datasets** from more than **35 repositories**



Elsevier is an active participant in the open data community

Elsevier partners with the open data community, and is currently working on more than **20 projects globally**

Want to know more?

[Elsevier.com/solutions/mendeley-data-platform/five-facts](https://elsevier.com/solutions/mendeley-data-platform/five-facts)



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Mendeley Data



Mendeley Data

Gracias

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