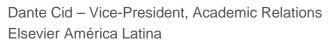


# Open Science desde una perspectiva de la información científica



#### The World of Research is Changing

The use of **new technology and tools** is shaping the world of research, helping researchers being **more efficient**, **collaborative and productive**. Ultimately, this will result in Science having **more impact on society** and better addressing **societal challenges**.

Key drivers for better science:

#### Innovation and technology:

creating the technological infrastructure to solve the pain points in the researcher workflow

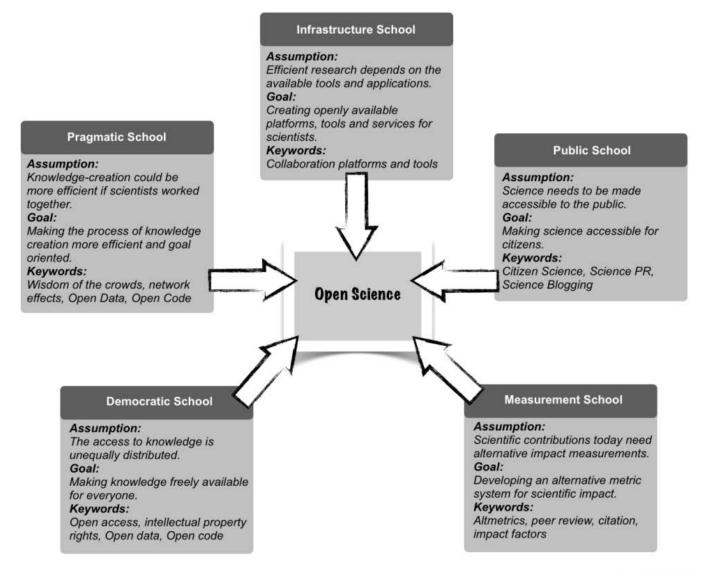
#### **Collaboration:**

researchers connecting across disciplines and regions, embracing increased transparency, reproducibility and sharing of knowledge

#### Increasing and assessing the impact of research:

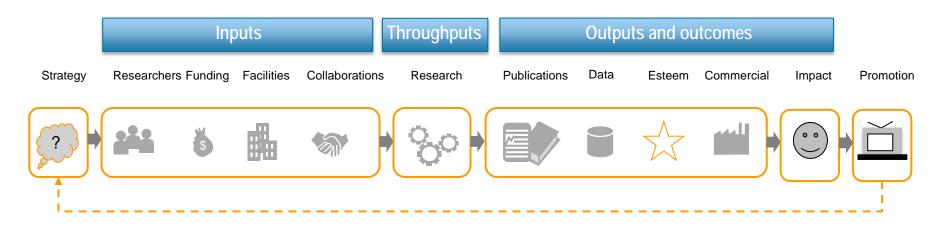
increasing the dissemination of high quality, trusted content whose impact on society is measured beyond traditional methods

#### What is Open Science ...?





# How publishers support the world of research



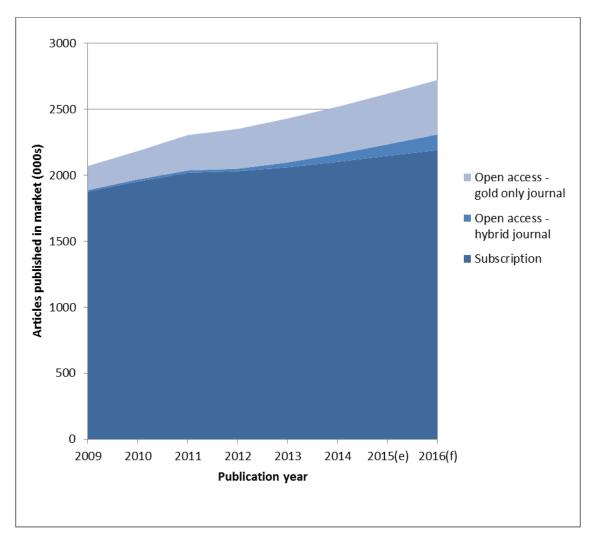
- Benchmark. identify strengths
- Set goals
- Track progress
- Identify, recruit,
- retain, develop Manage internal
- and external assessmen t e.g. REF, **ERA**
- secure funding
- Monitor success rates
  - awarded funds
  - Manage complianc

- Identify.
- Manage
- Optimize Identify and provision & use of
- form research facilities & collaboration equipment s
- Manage and track research process es
- Publish research output
  - · Read and cite published research
  - Manage open access policy complianc
- Ensure accessibilit y and
- data
- policy
- Win
- utility of Monitor
- open data complianc
- esteem
- Identify and commercialis opportunities on (patents, licenses.

spin-offs)

- Maximise impact of research society
- Showcase researchers , facilities and outcomes to create a virtuous circle

# Open access publishing is growing



#### In 2016:

- 4 out of 5 articles were published subscription
- Elsevier published almost 420,000 articles
- Elsevier published over 20,000 of these as gold open access

ELSEVIER Open Science

# Elsevier and open access

#### Gold open access

- 2nd Largest gold open access publisher
- Publish over 200 fully open access journals
- 1700+ hybrid journals
- Publish over 20,000 open access articles each year
- Choice of either a commercial (CC BY) or non-commercial (CC-BY-NC-ND) user license.
- Article publishing charges (APCs) range from \$500-\$5000 (US Dollars)

#### **Green open access**

- Largest publisher enable of green open access
- All 2500+ journals provide a green open access option
- Participate in CHORUS and support pilots with institutions and international funders
- Free API program to fuel repositories
- Share link service provides 50 days free access to recently published research
- Open archives in 108 journals, including all Cell Press titles after 12 months.

**ELSEVIER Open Science** 

#### Fueling Institutional repositories: Free API program

#### Get metadata & abstracts

Search API can extract the metadata and abstracts of your affiliated authors to help populate your repository, enhance disoverability and create links or embed final version

#### **Show the final** version

**Entitlements API\*\*** can ensure subscribed users see the final version and visitors can see the accepted manuscript hosted on your repository

#### Keep users on your IR

Article Retrieval API embeds the final article in your repository so subscribers don't leave your site to access the article

#### **Make manuscripts** public

Hosting permissions API can retrieve embargo end dates so you can make manuscripts automatically available to the public after embargo



Scopus customers can also integrate Scopus APIs to retrieve metadata and abstracts across all publishers

Please Note: \*\*Minimum part of the program.

//dev.elsevier.com/tecdoc sd ir integration.html

ELSEVIER

# Latin America was pioneer in Open Access to journal articles











DATOS ABIERTOS

#### Latin America was pioneer in Open Access to journal articles

#### Repositorio Institucional EdocUR

06/03/2015 12:00:00 a.m.

En la edición más reciente del ranking Webometrics publicado el pasado 30 de enero, el repositorio institucional EdocUR se ha posicionado en el puesto No. 1 en Colombia, No.19 en Latinoamérica y No. 344 en el mundo.





El repositorio Institucional EdocUR, ha
estado presente en el ranking
webometrics, desde el primer semestre
del 2010, año en el cual ocupó el puesto No. 1.123 a nivel muno
se han desarrollado estrategias, que permitieron mejorar su ca
posicionamiento.

Es por esta razón que se destaca la labor de la biblioteca de la Universidad del Rosario y su rol en la promoción y divulgación de la producción científica,

académica e institucional de nuestra Universidad

Repositorio Institucional EdocUR → Acervo Institucional → Políticas y Normatividad → Ver documento

Decreto rectoral No. 1444: Por el cual se establece la política institucional de Acceso Abierto a la producción científica, académica e institucional de la Universidad del Rosario

Universidad del Rosario

URI: http://repository.urosario.edu.co/handle/10336/12300

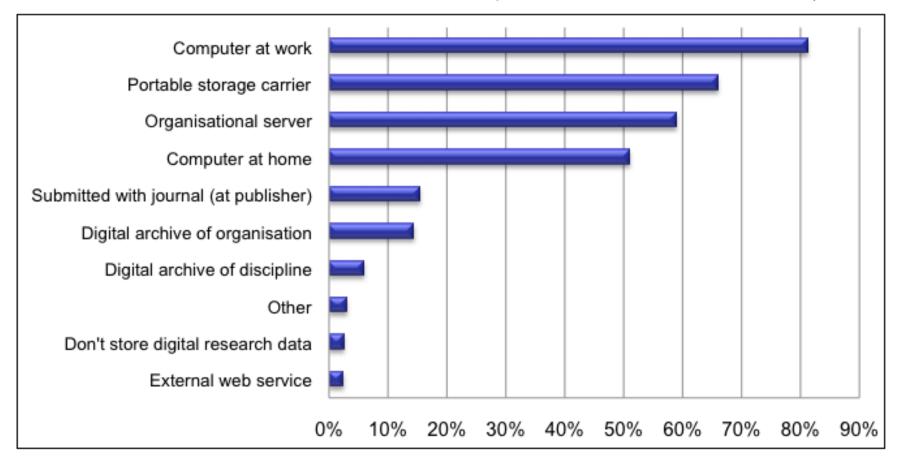
#### ... but when it comes to Research Data ....

# **Open Research Data**



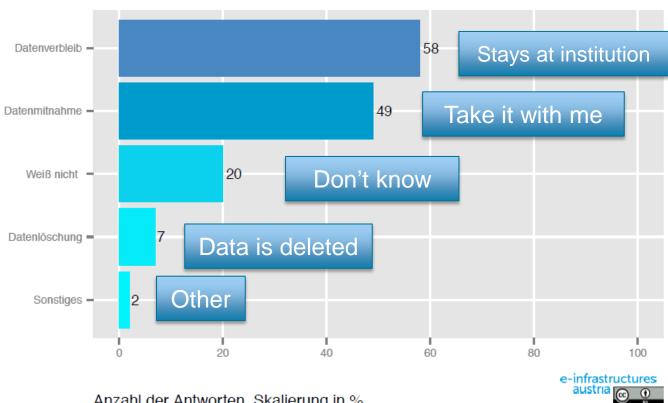
### Common practice: data storage is still very fragmented

Where do you currently store your research data? (researchers/multiple answers, N=1202)



Researcher survey, 1202 respondents (PARSE.insight 2010)

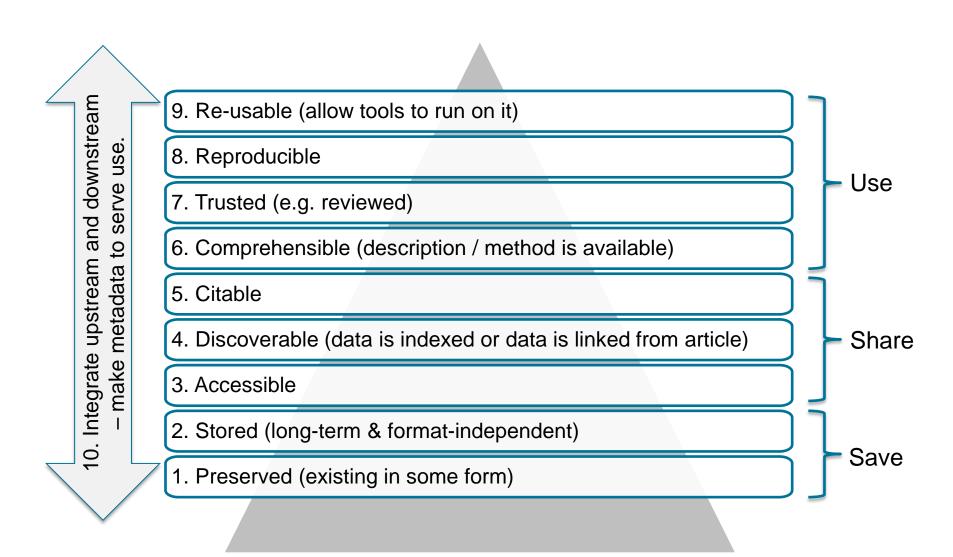
#### When you leave your institution...what happens with your data?



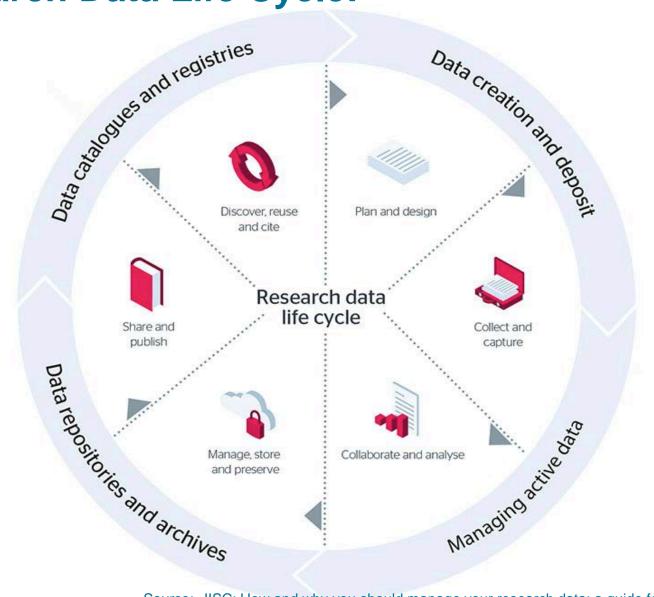
Anzahl der Antworten, Skalierung in %

Forschende und ihre Daten. Ergebnisse einer österreichweiten Befragung (eBook)" E-infrastructures Austria Bauer, B. (Bruno) et all Oct 2015

# The components for effective research data



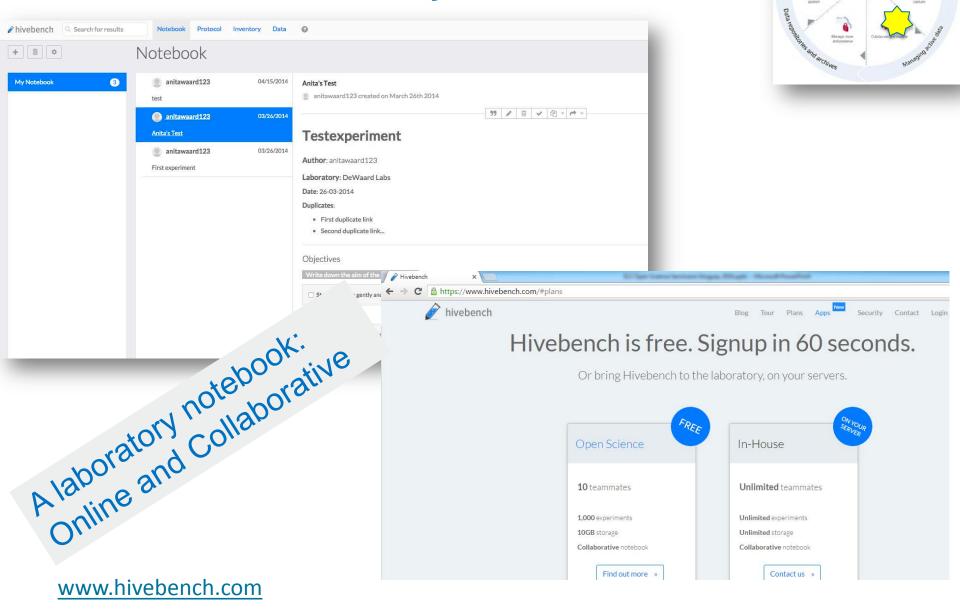
# **Research Data Life Cycle:**



# Initiatives to support Research Data life cycle

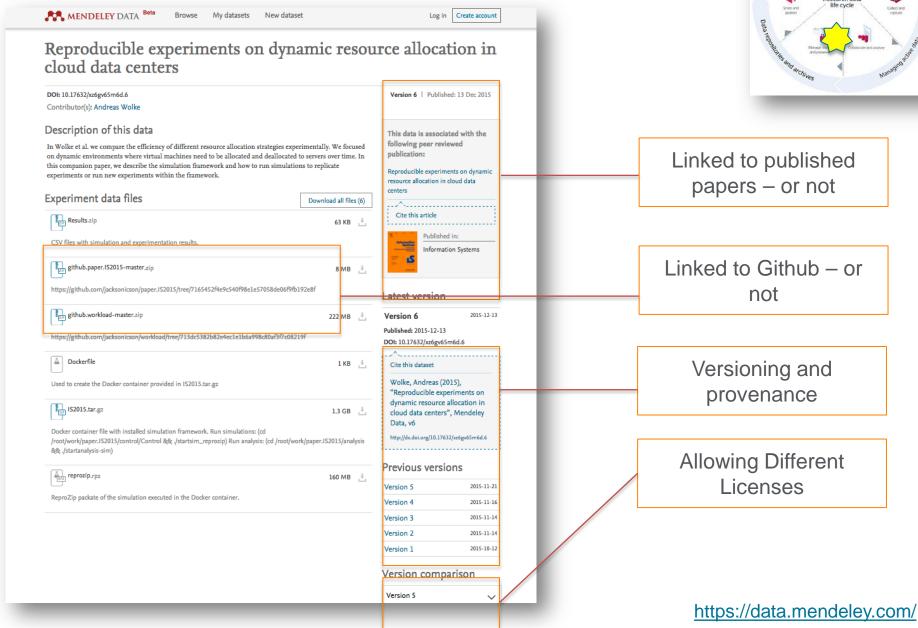


# **Collaborate and Analyze: Hivebench**



Research data

# Manage, Store, Preserve: Mendeley Data

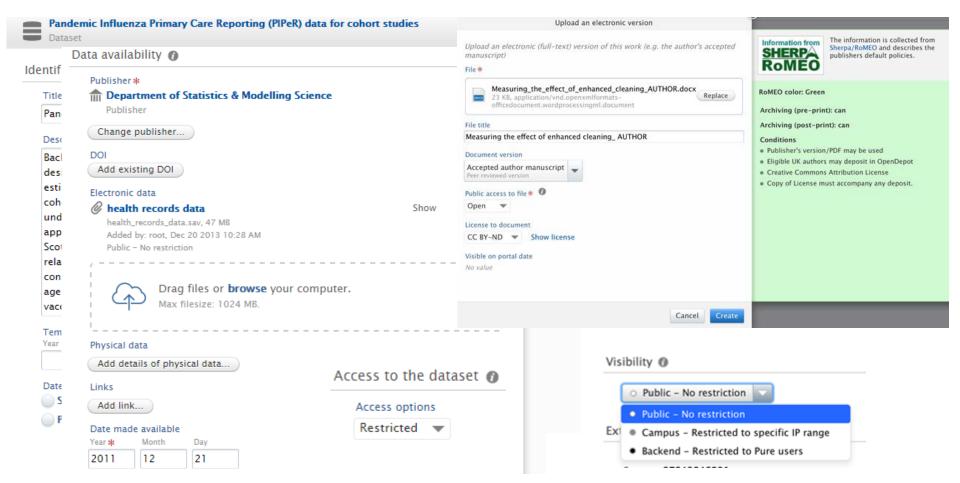


# The state of the s

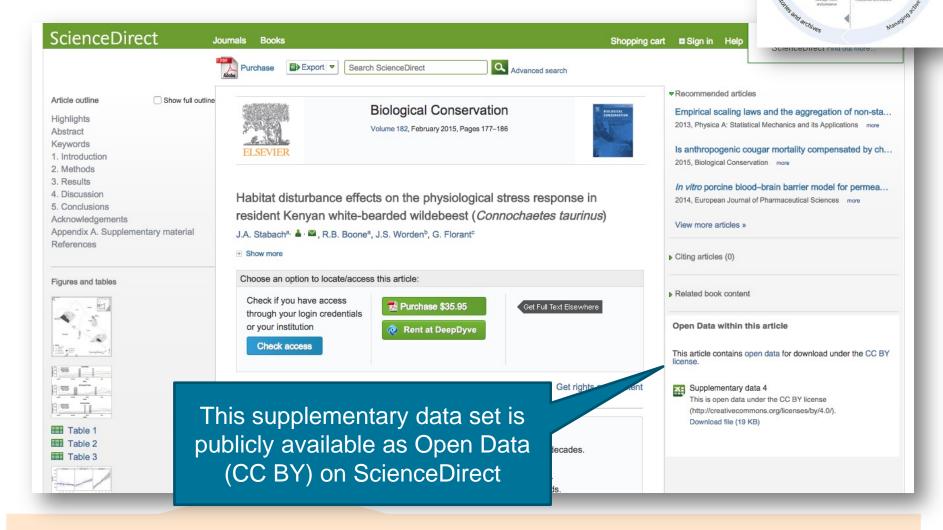
# Manage, Store, Preserve: Pure

#### **Data Management and Open Access**

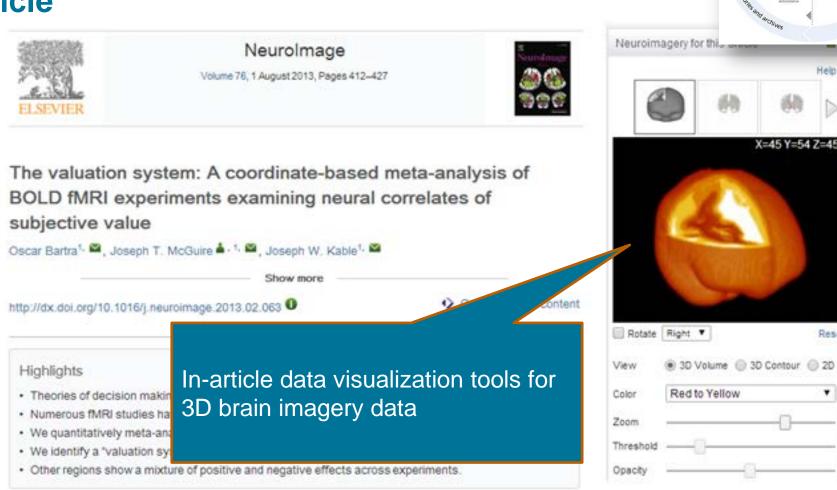
 One of the content types that Pure can manage is a dataset. It represents a research data used during the project that is necessary to support the reproducibility of the process. Besides, electronic data can interoperate with SHERPA/RoMEo and Institutional Repositories



# Share, Publish: Open Data Pilot

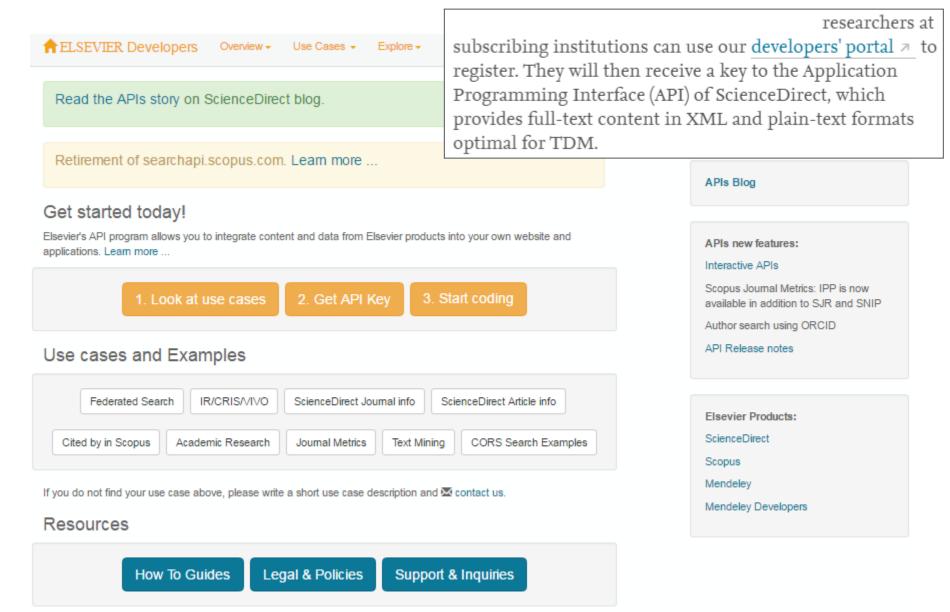


Share, Publish: Data visualization - in-article data viewers to allow data exploration with the article



Reset

# Share, Publish: Text and Data Mining Portal



# **Share, Publish: Research Elements**

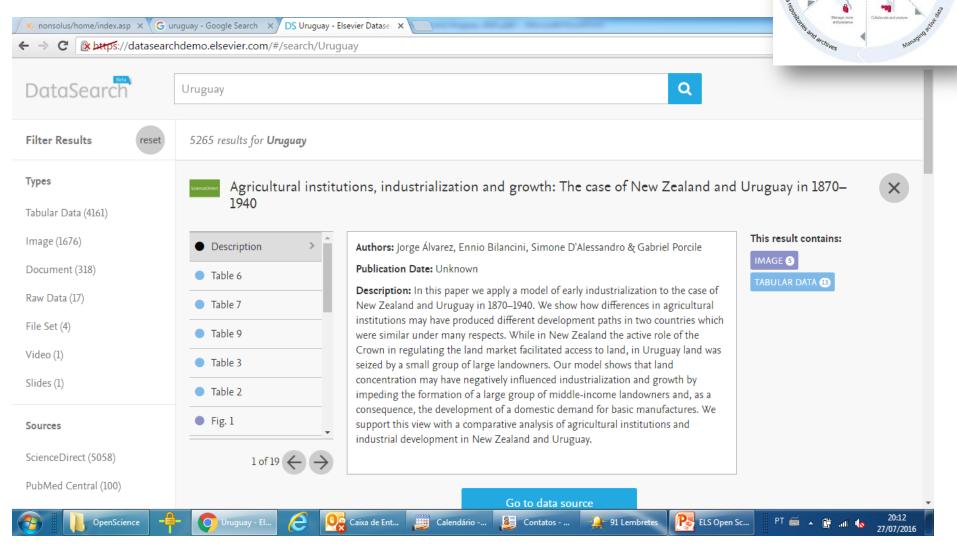
 Brief article types designed to communicate a specific element of the research cycle

Complementary to full research papers

- Peer-reviewed and indexed
- Receive a DOI and fully citable
- Allow citable post-publication updates
- Primarily Open Access (CC-BY)



#### **Discover: Datasearch**



# Publishing The Full Research Cycle Requires Networks of Collaboration:

#### Force11:

- Multi-stakeholder, member-driven organization



- E.g. Software citation group, akin to Data Citation Group

#### National Data Service:

- Multi-stakeholder group, based around supercomputing centers
- Aims to be a 'connective tissue' between data creation, curation, storage, etc, projects.
- E.g. Datasearch, Data Linking systems

#### RDA:

- Co-leading Data publishing, linking group
- Co-lead Cost Recovery group, part of RDA US Sustainability effort
- Active in Chemistry, Earth Science groups, starting IG on Data Search







ELSEVIER

#### References

- https://www.hivebench.com
- https://dev.elsevier.com/tecdoc\_sd\_ir\_integration.html
- <a href="https://www.elsevier.com/physical-sciences/earth-and-planetary-sciences/the-2015-international-data-rescue-award-in-the-geosciences">https://www.elsevier.com/physical-sciences/earth-and-planetary-sciences/the-2015-international-data-rescue-award-in-the-geosciences</a>
- <a href="http://www.journals.elsevier.com/softwarex/">http://www.journals.elsevier.com/softwarex/</a>
- https://www.elsevier.com/books-and-journals/content-innovation/data-base-linking
- <a href="https://rd-alliance.org/groups/rdawds-publishing-data-services-wg.html">https://rd-alliance.org/groups/rdawds-publishing-data-services-wg.html</a>
- https://rd-alliance.org/bof-data-search.html
- https://data.mendeley.com/
- https://www.elsevier.com/connect/10-aspects-of-highly-effective-research-data
- https://www.force11.org/
- http://www.nationaldataservice.org/
- https://rd-alliance.org/
- https://www.elsevier.com/about/open-science/research-data

ELSEVIER 1 2

# **Gracias!**

