Igualdad de género y ciencia abierta en el escenario de investigación mundial
Igualdad de género y ciencia abierta en el escenario de investigación mundial
Enabling open science

Una perspectiva desde la empresa de información científica

Agosto, 2018
Dante Cid – Vice-Presidente, de Relaciones Académicas
Open Science
Empowering Knowledge™

Elsevier partners with the research community to empower open science. Working together, we can achieve a more inclusive, collaborative and transparent world of research. We believe open science can benefit research and society and drive research performance. Here are some of the ways in which we are supporting open science.

More Collaborative

- Emergency Resource Centres: Providing information during disasters and emergencies.
- Mendeley: Facilitating collaboration.
- SSRN: Exchanging ideas, feedback and early research.

More Inclusive

- Pure: Aggregating and curating network information for deeper insights.
- Accessibility Partnerships: Partnering to further accessibility.
- Digital Commons: Showcasing institutional output.

More Transparent

- PlumX: Research metrics for all types of scholarly output.
- STAR Methods: Structured, Transparent, Accessible Reporting.
- TOP Guidelines: Supporting data sharing.

Open Access

- Open Access: Ensuring access to research outputs.

We provide platforms and partner in programs that facilitate collaboration. We help bring other stakeholders, including the public, into the world of research.

There are more options for researchers to share more kinds of research outputs than ever before. We support a more open and inclusive research experience through our journals, tools and platforms.

We are helping raise the bar on reproducibility, enabling researchers to share their methods and data and to gain more complete insights into research performance.
What is open science?

- Open Science describes a way of working which makes research more inclusive, more collaborative and more transparent.

- We believe open science can benefit research and society and drive research performance.
More inclusive
Making the world of research more inclusive

There are more options for researchers to share more kinds of research outputs than ever before. We support a more open and inclusive research experience through our journals, tools and platforms.
Open access (OA)

- Free and permanent access to scholarly research for everyone
- Referred to as Public Access in the US

Gold open access
- Final version of an article is immediately accessible to everyone
- Cost of publishing is recovered upfront
  - Typically as an Article Publishing Charge (APC)

Green open access
- A version of a subscription article is made freely available
- Relies on the subscription model to continue to operate
  - Usually after an embargo period
  - Normally a draft copy of the article but can also be the final version
Total article growth by journal business model

In 2017 there were an estimated 2.2 million subscription and 0.5 million open access articles published worldwide.

**Subscription content**
- 83% share of total articles in 2017

**Open access content**
- APC-based fully gold and hybrid open access articles is 15% share of total content in 2017
- All gold open access, including subsidized articles, is 17% share of total content.

**Elsevier perspective**
- In 2017, Elsevier published more than 430,000 articles
- Includes over 27,000 open access articles
Latin America was pioneer in Open Access to journal articles
Switzerland takes top spot for OA publishing with 39 percent open access publications


www.elsevier.com/about/open-science
Switzerland takes top spot for OA publishing with 39 percent open access publications

<table>
<thead>
<tr>
<th>Country</th>
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*Scopus database: https://www.elsevier.com/solutions/scopus

Source: [European Commission](https://www.elsevier.com/solutions/scopus) • [Get the data](https://www.swissinfo.ch/eng/sci-tech/science-for-all_switzerland-takes-top-spot-in-global-open-access-ranking/44305468)
Switzerland – Share of Publications and Citations per Publisher

Select metric: Scholarly Output

Source: SciVal

www.elsevier.com/about/open-science
Estonia has the largest share of Gold OA

### Switzerland leads the road to open access

This data, gathered through the analysis of the Scopus database* by the European Commission, shows the top 10-ranked countries based on the percentage of publications with open data policies as of April 2018.

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* Scopus database: [https://www.elsevier.com/solutions/scopus](https://www.elsevier.com/solutions/scopus)

Source: [European Commission • Get the data](https://www.elsevier.com/solutions/scopus)

Source: [https://www.swissinfo.ch/eng/sci-tech/science-for-all_switzerland-takes-top-spot-in-global-open-access-ranking/44305468](https://www.swissinfo.ch/eng/sci-tech/science-for-all_switzerland-takes-top-spot-in-global-open-access-ranking/44305468)
Estonia – Share of Publications and Citations per Publisher

Select metric: Scholarly Output

Select metric: Citation Count

Source: SciVal

www.elsevier.com/about/open-science
Chile - Share of Articles per Access Type

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<tr>
<td>Open Access</td>
<td>4,539</td>
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<tr>
<td>Other</td>
<td>41,443</td>
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</table>

Source: Scopus

11% OA
Open access is enabled by...

- **Funders**
  - Open access policies and mandates

- **Institutions**
  - Open access policies and repositories

- **Researchers**
  - Being encouraged to publish research output open access

- **Publishers**
  - Implementing open access options for researchers

- **Readers**
  - Looking for additional ways to read research content

- **Governments**
  - Open access policies and mandates
Elsevier and open access

Gold open access

- Leading gold open access publisher
- Published over 170 fully open access journals and over 1,850 hybrid journals
- Published over 27,000 open access articles in 2017
- Choice of either a commercial (CC BY) or non-commercial (CC-BY-NC-ND) user license.
- Article publishing charges (APCs) range from ~$150 to ~$5000 (US Dollars)

Green open access

- Largest publisher enabler 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 over 110 journals, including Cell Press titles after 12 months

www.elsevier.com/about/open-science
A low cost solution that widens access, compliance, discovery, and preservation of peer reviewed articles

- Addresses critical pain points of cost and efficiency by:
  - Avoiding duplication of effort
  - Increasing compliance
  - Maximizing the benefit from existing, proven infrastructure
  - Transparent reporting and tracking for funders and institutions

- Currently operational for US federal agencies and piloting services in Japan and Australia
- Piloting services for Institutional Repositories

www.elsevier.com/about/open-science
Share Links

• The majority of our journals offer Share Links – a customized link which authors receive for their newly-published article on ScienceDirect.

• Anyone clicking on the Share Link within a 50-day period will be taken directly to the article with no sign up or registration required.

• Enables authors to promote their article and make an impact with their research.
Share Links

- By March 2018, Share Links had generated over 10 million article views
- Over 1.3 million articles were shared via Share Links
- 68.7% of links come from social media in 2018
- Since Share Links became available to both corresponding and co-authors in August 2017, the number of authors receiving Share Links has increased by over 300%
## Open peer review reports

Pilot in 5 journals to experiment with publishing peer review reports as publicly available research outputs with their own DOI.

<table>
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<th>Editors</th>
<th>Reviewers</th>
<th>Authors</th>
</tr>
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</table>
| • 70% of those surveyed believe that reports are more in depth and constructive i.e. improved and more useful to authors, as a result of being made open | • Like the ability to get recognition  
• Over 95% said publishing review reports didn't influence their recommendation nor would it influence them accepting further review invites for the journal. | • Generally positive about having open peer review reports next to their article  
• Little impact on their journal choice, indeed slightly more likely to choose a journal offering this. |

### Forward look

Extend to other interested journals and provide more data about the peer review process on ScienceDirect.

www.elsevier.com/about/open-science
Fueling IRs: free API program

**Get metadata & abstracts**
Search API can extract the metadata and abstracts of your affiliated authors to help populate your repository, enhance discoverability 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.

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**Did you know?**
Scopus customers can also integrate Scopus APIs to retrieve metadata and abstracts across all publishers.

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

//dev.elsevier.com/tecdoc_sd_ir_integration.html

www.elsevier.com/about/open-science
Publishing data articles

- Offer researchers an easy channel to publish their research output, receive credit, and make research objects discoverable
- Dedicated sections in regular journals
- Specialized, fast and transparent peer-review process
- Co-submission service via regular journals for data articles
- Primarily Open Access, APCs of ~500 USD

Because no matter what field of research you are in, data, methods and software always matter
Storing research data

Submitting authors can store research data in Mendeley Data repository and link this to their article on ScienceDirect.

✓ Open access, free-to-use repository
✓ Hosts all formats (raw, processed data, tables, code and software)
✓ 10GB free storage and CC0 license option
✓ Assigns data DOI to make it independently citable
✓ Partnership with DANS for long term storage and preservation
Linking to external data repositories

- Free Data-linking tool provides one click access to relevant stored data sets
- 50+ leading domain specific data repositories
- Linking enabled by in-article accession numbers, data DOI’s, or data banners

See [http://www.elsevier.com/databaselinking](http://www.elsevier.com/databaselinking)
Access initiatives by Elsevier

We provide a range of alternative access options to ensure everyone can access the information they need.

Some of our key programs include:

• Research4Life: free or low cost access to books and journals
• Free media access through our newsroom
• InterLibrary loan
• Access to Research
• DeepDyve
• Emergency Access Initiative
• Postdoc access program
• Elsevier Resource Centres…and more!
Research4Life

Fostering a strong and independent research culture in the developing world

• Research4Life is a public-private partnership between UN agencies, universities, and publishers

• The programs provide research for free or at low cost to institutions in the developing world

• Elsevier is a founding partner and contributes over a quarter of the nearly 68,000 peer reviewed resources

www.Research4life.org

www.elsevier.com/about/open-science
Elsevier’s Newsroom

Through the newsroom we inform news media about the latest research papers published in Elsevier journals and bring them in contact with industry and publishing experts.

Science journalists are granted free media access to a range of tools and databases to help them get the information they need to inform and educate the public. Including: ScienceDirect, Scopus, SciVal, Mendeley and ClinicalKey
Access to Research

Free walk-in access to journal articles in public libraries.

- Members of the public in the UK can access more than 15 million digital journal articles for free at participating libraries
- Elsevier is one of 21 publishers participating in the service
- Subjects include:
  - Art
  - Architecture
  - Biological Sciences
  - Business
  - Engineering
  - Environmental Science
  - Film
  - Health
  - History
  - Journalism
  - Languages
  - Politics
  - Philosophy
  - Physics
  - Religion
  - Social Sciences
  - Mathematics
More collaborative

More Collaborative

- Emergency Resource Centres: Providing information during disasters and emergencies
- SSRN: Exchanging ideas, feedback and early research
- Mendeley: Facilitating collaboration
- Atlas: Promoting lay summaries
- Audioslides: Research explained by authors in their own words

www.elsevier.com/about/open-science
Making the world of research more collaborative

We provide platforms and partner in programs that facilitate collaboration. We help bring other stakeholders, including the public, into the world of research.
SSRN is devoted to the rapid worldwide dissemination of research and is composed of a number of specialized research networks.

SSRN’s eLibrary provides 761,906 research papers from 354,694 researchers across 30 disciplines.
Mendeley

A Unique Scholarly Collaboration Network

- 70M collaboration groups on Mendeley
- Signatory of STM principles on article sharing on SCNs
- Public metadata, links, lists
- Group sharing functionality
- Mendeley Stats
Atlas – research for a better world

- Winning articles showcased in a lay summary by a scientific journalist and hosted on Atlas website
- Articles chosen by external advisory board
- Shortlist from Elsevier’s 1800+ journals
- Board members from NGOs across the world
- Author receives the Atlas award and have their article free to access on ScienceDirect
AudioSlides

Bringing research to a wide audience in an easily accessible, personal format.

✓ Brief, 5-minute presentations using slides & voice-over

✓ Overview in easily accessible format for researchers and the public at large

✓ AudioSlides are openly available

✓ Can be embedded on websites or posted to YouTube etc. - a great way to promote the article and increase usage!

More info: https://www.elsevier.com/audioslides
More transparent

- CiteScore: Providing comprehensive, transparent, current insights into journal impact
- PlumX: Research metrics for all types of scholarly output
- STAR Methods: Structured, Transparent, Accessible Reporting
- TOP Guidelines: Supporting data sharing
- Scholix: Linking articles and data
Making the world of research more transparent

We are helping raise the bar on reproducibility, enabling researchers to share their methods and data and to gain more complete insights into research performance.
Comprehensive Journal Data Guidelines

https://www.elsevier.com/authors/author-services/research-data/data-guidelines

TOP GUIDELINES
TRANSPARENCY AND OPENNESS PROMOTION

https://cos.io/our-services/top-guidelines/

www.elsevier.com/about/open-science
Research data enhance the value of an article and aid reproducibility. Scopus is recognizing the importance of research data as both output and sourcing for articles.

- Last March 2017, Scopus started a collaboration with DLI Service to find data related to any specific document.
- With this new release, Scopus is enhancing its involvement in research data by starting a new collaboration with DataSearch.
Implemented data citations

- Authors are encouraged to cite datasets
- Used to access a direct link to stored datasets and encourage data sharing
- Implemented the FORCE 11 data citation principles for all journals
- Data references contain different elements than article references
- Tags to distinguish between data and article references
Enhanced Reporting

- WHO calling for main findings submitted for publication - including negative findings
  - ✓ Launch of journal New Negatives in Plant Sciences
- Scientists need a clear framework to submit data for review and publication.
  - ✓ Launch journals Data in Brief and Genomics Data
- AllTrials calls for all clinical trials to be registered with full methods and summary results reported
  - ✓ Launch of journal Contemporary Clinical Trials Communications
- Participation in new Crossref pilot to link published reports of clinical trials to the registered study
Decisions should be based on both **quantitative** and **qualitative** input

- Should always use several metrics (more than one way to ‘excellence’)
  - The methodologies should be **open, transparent, valid and replicable**
- Definitions should be **owned** by the community
- Need **trust** between the parties using metrics to evaluate
Want to know more?

Check out the latest news from Elsevier Connect or connect with us directly!

@ElsevierNews

www.elsevier.com/connect
Gracias!