

# Building a Global Knowledge Commons: The Role of Open Access Repositories

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# **Factsheet**



- COAR was founded in 2009 as an international association
- Office is based in Göttingen, Germany
- Members & Partners: over 120 institutions from 35 countries in Australia, Africa, Asia, Europe, North and South America
- Institutional membership fees: EUR 500





# **Executive Board**



- Eloy Rodrigues, University of Minho, Portugal (Chair)
- Carmen-Gloria Labbé, CLARA, Chilé
- Márta Virágos, University and National Library of Debrecen, Hungary
- Wolfram Horstmann, University of Göttingen, Germany
- Oya Rieger, Cornell University, United States
- Daisy Selematsela, National Research Foundation, South Africa





# Vision



A global knowledge commons based on a network of open access repositories



# **COAR Activities**



Global Voice

Alignment and Interoperability

Capacity
Building
(Local)

Value-added Services







# El sistema de publicación internacional está 'roto'!





# The access problem







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About

Welcome to the Scientific American Blog Network, a forum for a diverse and independent set of voices to share news and opinions and discuss issues related to science. For more information see our About page and Guidelines....more

#### Why are journals so expensive?

By Bonnie Swoger | September 26, 2012 | \$\ 8



This morning, at minute 48 of a 50 minute information literacy session for an introductory biology class, a student asked me one of those seemingly innocuous questions,

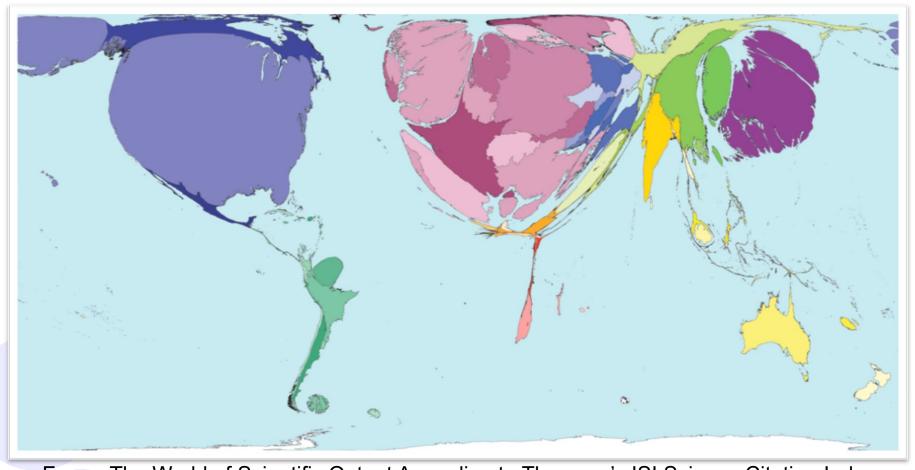
"Why are journals so expensive?"

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# The participation problem





From: The World of Scientific Output According to Thomson's ISI Science Citation Index (2007)





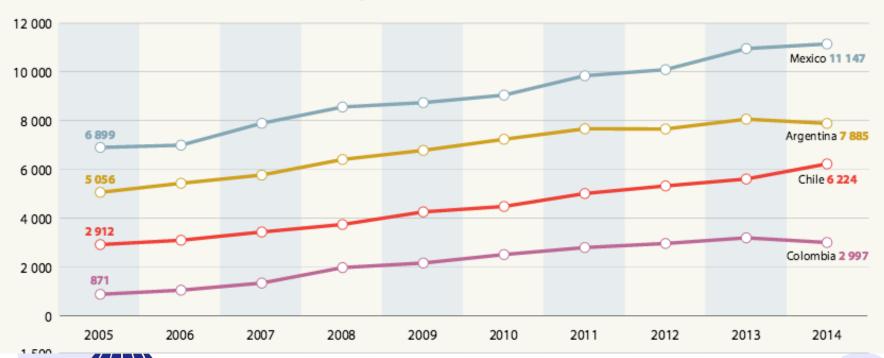
# Figure 7.8: Scientific publication trends in Latin America and the Caribbean, 2005–2014

#### Strong growth in many countries

For the evolution in the volume of publications in Brazil, see Figure 8.9

4.09/o
Latin America and the
Caribbean's world share of
publications in 2005

Latin American and the Caribbean's world share of publications in 2014









# theguardian



Peer review and scientific publishing

home ) science

Nobel winner declares boycott of top science journals

Randy Schekman says his lab will no longer send papers to Nature, Cell and Science as they distort scientific process







"The pressure to publish in "luxury" journals encouraged researchers to cut corners and pursue trendy fields of science instead of doing more important work."









Leslie Chan

"Openness is not simply about gaining access to knowledge, but about the right to participate in the knowledge production process, driven by issues that are of local relevance, rather than research agendas set elsewhere or from the top down"





# The gold road









BUSINESS MODELS, COMMERCE, CONTROVERSIAL TOPICS, ECONOMICS, OPEN ACCESS, RESEARCH

# Is it True that Most Open Access Journals Do Not Charge an APC? Sort of. It Depends.

POSTED BY DAVID CROTTY · AUG 26, 2015 · 25 COMMENTS

FILED UNDER APC, BUSINESS MODELS, DOAJ, OPEN ACCESS





# The other problem(s)



#### **5 COMMENTS**

BY CDLUC3 ALTMETRICS, DATA PUBLICATION

#### MAY 22 2013 IMPACT FACTORS: A BROKEN SYSTEM

If you are a researcher, you are very familiar with the concept of a journal's Impact Factor (IF). Basically, it's a way to grade journal quality. From Wikipedia:

> The impact factor (IF) of an academic journal is a measure reflecting the average number of citations to recent articles published in the journal. It is frequently used as a proxy for the relative



1962. From Flickr by The Official CTBTO



Add a comment

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#### Publication and reporting biases and how they impact publication of research

By Velany Rodrigues | October 29, 2013 Under Publication Buzzwords | 21,620 Views ★ ★ ★ ★ ★ Average: 3.4



In a desert prison, an older prisoner befriends a new arrivi prisoner talks constantly about escape, spinning plan af months, he makes a break. He's gone a week; then the guards dra half dead, crazy with hunger and thirs the wails how awful it w oner: endless stretches of sand, no oasis, failure at every turn. Th for a while, then says, "Yep. I know. I tried those escape plans my: The young prisoner says, "You did? Why didn't you tell me?" The shrugs: "So who publishes negative results?"

#### Does peer review do more harm than good? Peer review may be a central tenet of academic life, but Luc Rinaldi explains why it's

being compromised by profit-driven predators

Luc Rinaldi



#### **Retraction Watch**

Tracking retractions as a window into the scientific process

#### Can journals get hijacked? Apparently, yes

without comments

Did you recently log onto your favorite journal's website and see this? (For anyone who doesn't want to bother clicking, it's the video from Rick Astley's "Never Gonna Give You Up.") If so, your favorite journal was hijacked.

In today's issue of Science, John Bohannon (who recently published a bogus study about the benefits of chocolate) explains how easy it is to take over a journal's website - so easy, in fact, that he did it himself. And he's not the only one, he reports: Read the rest of this entry

Share this: f Facebook (1) I Twitter (1)

Written by Alison McCook November 19th, 2015 at 2:00 pm Posted in AAAS,computer science,science (journal)

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How you can support Retraction Watch

Meet the Retraction Watch

About Adam Marcus About Ivan Oransky

The Center For Scientific Integrity

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# These are print "legacy" problems CONTROLLED TO PROBLEMS CONTROLLED







**Publish** 

About

**Browse** 







RESEARCH ARTICLE

#### The Oligopoly of Academic Publishers in the Digital Era

Published: June 10, 2015 • DOI: 10.1371/journal.pone.0127502

Article	Authors	Metrics	Comments	Related Content
*				

#### Abstract

Introduction

Methods

Results

Discussion and Conclusion

Acknowledgments

Author Contributions

References

Reader Comments (3)

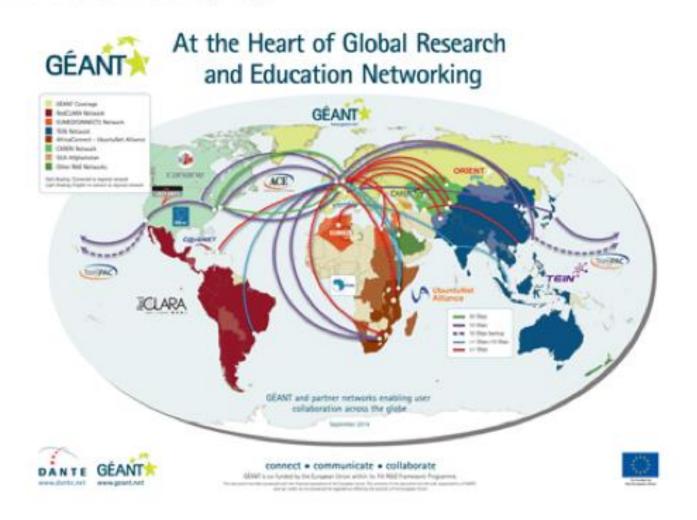
#### Abstract

The consolidation of the scientific publishing industry has been the topic of much debate within and outside the scientific community, especially in relation to major publishers' high profit margins. However, the share of scientific output published in the journals of these major publishers, as well as its evolution over time and across various disciplines, has not yet been analyzed. This paper provides such analysis, based on 45 million documents indexed in the Web of Science over the period 1973-2013. It shows that in both natural and medical sciences (NMS) and social sciences and humanities (SSH), Reed-Elsevier, Wiley-Blackwell, Springer, and Taylor & Francis increased their share of the published output, especially since the advent of the digital era (mid-1990s). Combined, the top five most prolific publishers account for more than 50% of all papers published in 2013. Disciplines of the social sciences have the highest level of concentration (70% of papers from the top five publishers), while the humanities have remained relatively independent (20% from top five publishers). NMS disciplines are in

# Research is increasingly global!



#### **GÉANT Global Connectivity Map**







#### The majority of articles have foreign co-authors in all but Argentina, Brazil and Mexico

Share of papers with foreign co-authors, 2008-2014 (%)







# Acceso abierto 'verde' ha llegado



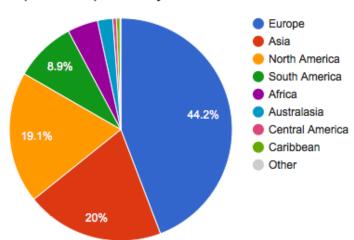
#### OA Policy Requirements - Pasteur4OA

Criterion (Green OA)	Number of policies	Criterion (Gold OA)	Number of policies
Deposit in repository required (Green OA)	381	OA publishing required	2
Deposit in repository requested	140	Recommended alternative to Green OA	97
Deposit in repository not specified	141	Permitted alternative to Green OA	101
		Not specified/other	463
Total	663		663



Table 3: Open Access policies: Green and Gold OA criteria

#### Proportion of Repositories by Continent - Worldwide



#### **OA Publisher Archiving Policies**

RoMEO colour	Archiving policy	Publishers	%
green	Can archive pre-print and post-print	827	38
blue	Can archive post-print (ie final draft post-refereeing)	730	34
<u>yellow</u>	Can archive pre-print (ie pre-refereeing)	137	6
<u>white</u>	Archiving not formally supported	472	22

Total = 2988 repositories

OpenDOAR - 13-Oct-2015





At COAR, we believe that a global network of repositories is a crucial part of the solution to improve both the access and visibility gaps.





#9: Infraestructura local, sostenible y inclusiva

(Los sistemas abiertos y repartidos como el Internet, son más flexibles, sostenibles y menos propensos a fallar)





# La historia 2000-2015: desde los repositorios individuales a las redes de repositorios





#### Pero...

Existing networks are being developed based on different policies, objectives, requirements, metadata standards and vocabularies
...creating SILOS



# Aligning Repository Networks









# Áreas de alineamiento



### 1. Strategic

- coordination in policy and strategy
- 2. Technical and semantic interoperability
  - Metadata schemas
  - Standard vocabularies

#### 3. Services

- Usage statistics
- Routers/brokers, harvesting and curation technologies
- Peer review on top of repository networks





# Actividades Estratégicas





# Promoting Open Knowledge and Open Science Report of the Current State of Repositories

May 21, 2015

Produced by Confederation of Open Access Repositories (COAR) on behalf of the COAR Aligning Repository Networks Committee

# COAR Guidelines for Assessing Publisher Repository Services

- Services should include the transfer of both full text and metadata into the repository
- 2. Services should **not impose embargo times of longer than 12 months** and existing
  publisher embargo periods should not be
  lengthened as a result of the adoption of
  the publishers' repository services

Repositories are also encouraged to seek licenses that enable the re-use and full-text mining of content once embargo periods are over.





# períodos de embargo



<u>COAR Statement on Embargo Periods</u>: "Embargo periods dilute the benefits of open access policies and we believe that, if they are adopted, they should be no more than 6 months for the life and physical sciences, 12 months for social sciences and humanities."

<u>Statement against Elsevier's Sharing Policy</u>: In their new policy, Elsevier has placed greater restrictions on depositing into institutional repositories and imposes embargo periods of to up to 48 months

More than 3000 signatories





# Interoperabilidad entre redes @





## Metadata and vocabularies for OA repositories

Funding agency	Different approaches	
Project/grant number	Different approaches	
Author name	✓	
Output types	Controlled vocabularies being	
	proposed by COAR	
Publication date	✓	
Open access status	Different approaches	
Embargoes		
Licenses		
Unique identifier for publication	<b>√</b>	
Jurisdictional information	Ø	
Institution	Ø	



### **COAR Controlled Vocabularies**



Develop and maintain a set of international controlled vocabularies (into English, Chinese, Dutch, French, Portuguese and Spanish)

- Beginning with "resource type"
- e.g. Journal article, book, theses, etc.

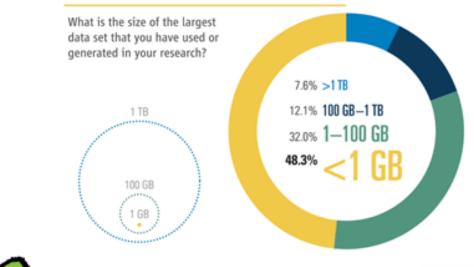
https://www.coar-repositories.org/activities/repositoryinteroperability/ig-controlled-vocabularies-for-repositoryassets/deliverables/



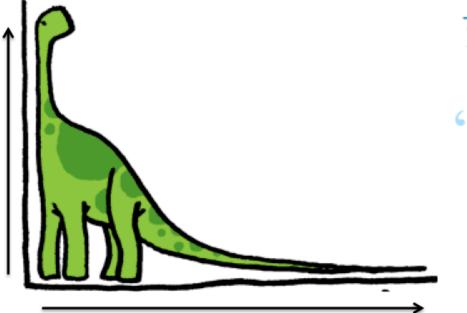


#### Research data: the role of the institution





From: Science 11 February 2011: Vol. 331 no. 6018 pp. 692-693. Available at: DOI: 1126/science.331.601 8.692



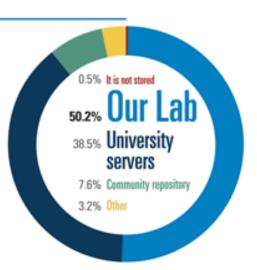
data sets

of o

Size

Where do you archive most of the data generated in your lab or for your research?

Even within a single institution there are no standards for storing data, so each lab, or often each fellow, uses ad hoc approaches.



Number of data sets



# Value-added services



## Usage statistics (impact measures)

Journal Google index Reports academic influence atmetrics scholarship portfolio analytics article factor impact bibliometrics index metrics immediacy article JCR Citation author SCImago Article h-index

Broker/router services







# **BIG DATA!**

90% of world's data has been generated over last two years

http://www.sciencedaily.com/releases/ 2013/05/130522085217.htm

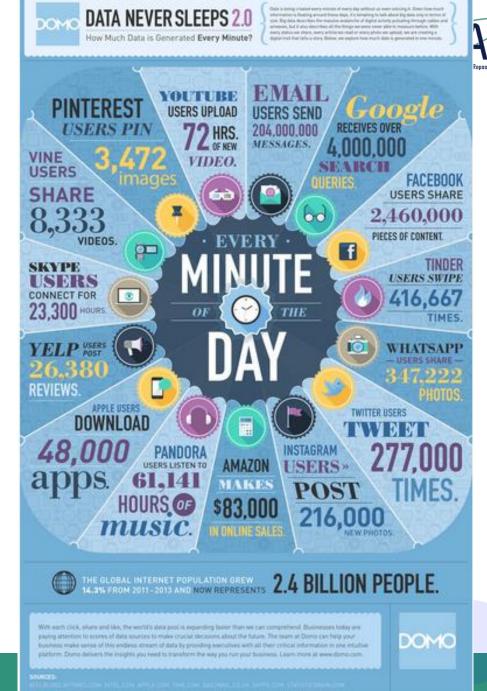


Image: Erik Fitzpatrick licensed CC BY 2.0

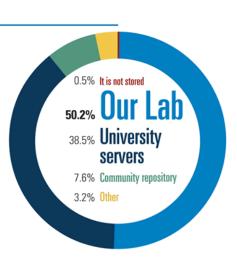
# Value-added services

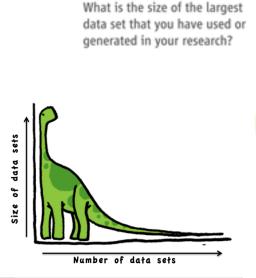


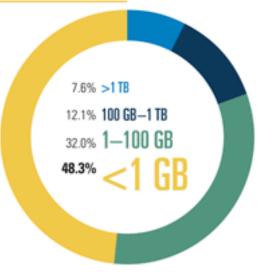
**Research data** A 2011 survey by *Science*, found that 48.3% of respondents were working with datasets that were less than 1GB in size and over half of those polled store their data only in their laboratories. *Science* 11 February 2011: Vol. 331 no. 6018 pp. 692-693 *DOI*: 10.1126/science.331.6018.692

Where do you archive most of the data generated in your lab or for your research?

Even within a single institution there are no standards for storing data, so each lab, or often each fellow, uses ad hoc approaches.











# los desafíos del alineamiento global

Confederation of Open Access Repositories

- Geografía e idioma
- Directivos y misiones
- Prioridades son locales, no globales
- Recursos disponibles
- Estados de implementación









COAR es un mecanismo para facilitar la colaboración, construir la confianza y las relaciones





# Gracias!Obrigada!



COAR Meeting in Portugal 2015

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