

Open Access ovvero...

«One of the most exciting and radical events in publishing in recent years»

[Mc Veigh, 2004]

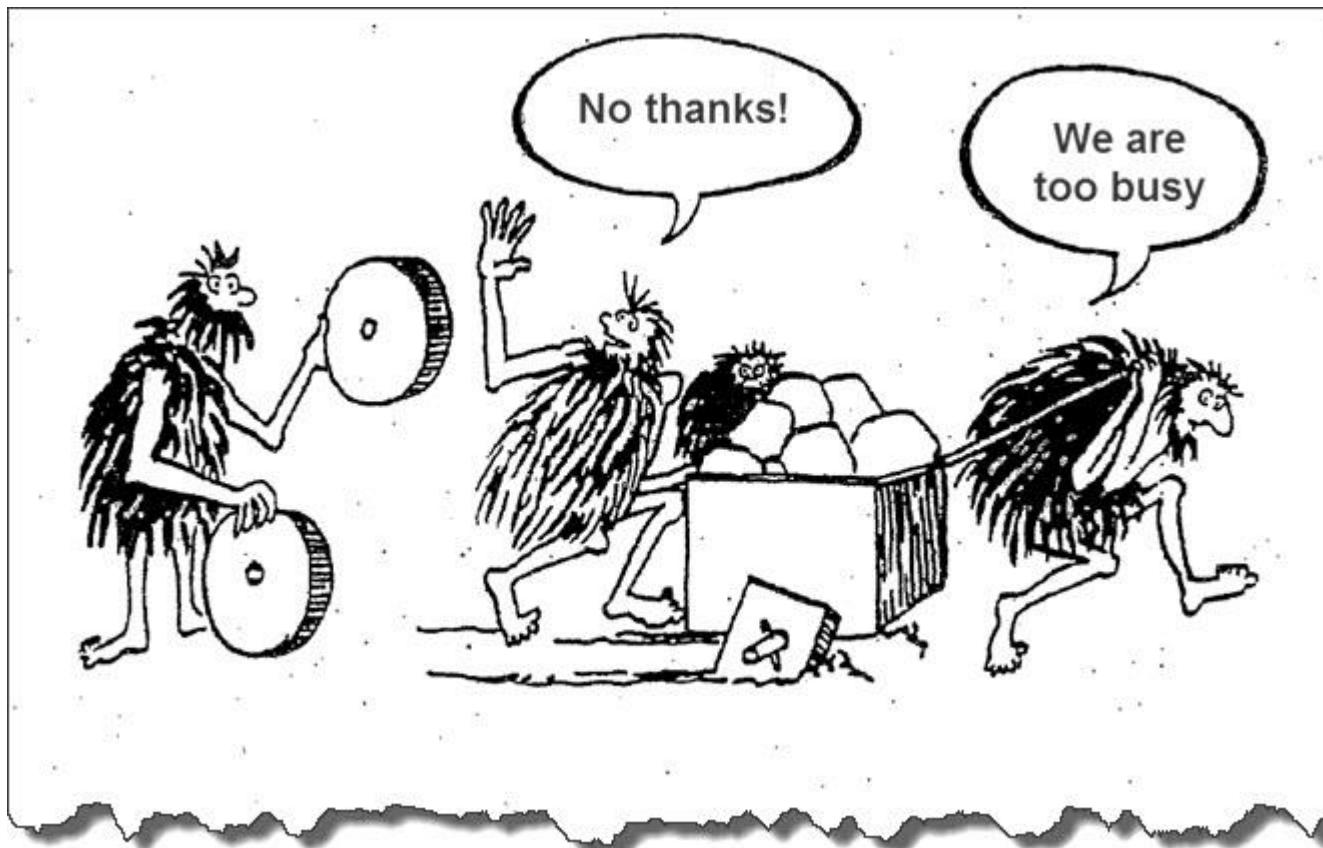
Elena Giglia

Ufficio Accesso aperto ed editoria elettronica
Università di Torino



Quest'opera è distribuita con Licenza Creative Commons Attribuzione - Condividi allo stesso modo - CC Internazionale

Agenda



Comunicazione scientifica?

LA NASCITA DEI DIRITTI DELL'UOMO

33

I diritti inglesi, frutto della contrattazione con la monarchia e risultato evidente della sconfitta dell'assolutismo regio, nel corso dei secoli subiscono un processo di specificazione, di consolidamento e di allargamento⁵⁸, ma si tratta sempre di diritti di libertà «appannaggio del solo cittadino britannico, acquisiti in circostanze concrete e in rapporto a problemi determinati, di natura politica, religiosa, sociale o economica»⁵⁹. Nascono come libertà concesse dal sovrano (o, meglio, frutto di un patto con il sovrano)⁶⁰, vengono ad essere considerati diritti fondamentali e azionabili anche contro i pubblici poteri, ma la loro fondazione è pur sempre particolaristica e consuetudinaria: essi sono validi ed intangibili in quanto goduti «fin da tempi immemorabili» dal popolo inglese⁶¹.

Il riconoscimento di diritti in capo a ciascun uomo, in base alla sola appartenenza al genere umano, si deve al diritto naturale, che universalizza la titolarità dei diritti e conferisce loro un fondamento assoluto, che prescinde da ogni considerazione di tempo e di spazio, per ancorarsi ad una legge naturale assunta come pre-supposto, come data e indiscutibile.

⁵⁸ Il progressivo allungamento della sfera dei titolari, così come la graduale «costituzionalizzazione» dei diritti, sono connessi – come sottolinea L. BACCELLI, *Il particolarismo dei diritti. Poteri degli individui e paradossi dell'universalismo*, Carocci, Roma, 1999, p. 25 – alle vicende storico-politiche (quali la lotta fra i baroni e i tentativi «assolutistici» dei Tudor e degli Stuart), ai progressi economico-sociali e anche al pensiero di giuristi (quali, in particolare, Edward Coke).

⁵⁹ G. OESTREICH, *Storia dei diritti*, cit., p. 47.

⁶⁰ Come ricorda C. H. McILWAIN, *Constitutionalism: Ancient and Modern*, Cornell University Press, New York, 1947, trad. it. a cura di N. Matteucci, *Costituzionalismo antico e moderno*, il Mulino, Bologna, 1990. Coke, al quale soprattutto si deve l'estensione dei principi della *Magna Charta*, pensava alla libertà o, meglio, alle libertà dei sudditi come protezione dal governo e ragionava in termini di diritti concreti, identificando le concrete libertà con le franchigie (p. 36).

⁶¹ La *Petition of Right* del 1628 parla, ad esempio, di libertà ereditate e il

INTERNET BOOKSHELF



EUR 1075 REAHL, MED 2010-06-08

Open access to scientific research: where are we and where are we going?

Facts and figures on the occasion of the 2010 Open Access Week (October 18-24)

E. GIGLIA

This contribution is aimed at presenting a sort of «state of the art» of Open Access on the occasion of the 2010 International Open Access Week, to be held from October 18 to October 24. We shall see facts and figures about open archives and the mandates to deposit; about Open Access journals; about impact and citation advantages for the researchers, and about economic sustainability.

Open Access Week, a global event now entering its fourth year, is an opportunity for the academic and research community to continue to learn about the potential benefits of Open Access, to share what they've learned with colleagues, and to help inspire wider participation in helping to make Open Access a new norm in scholarship and research, as Jennifer McMenamin from SPARC – Scholarly Publishing and Academic Research Council (<http://www.sparc.org/sparc/>) puts it.¹

All over the world libraries, libraries, funding agencies, researchers are going to meet and share their best practices and their creative suggestions in order to reach the «Open Access» to scientific information, i.e., with the words of the Berlin Declaration on Open Access to knowledge in the Sciences and Humanities, «a free, irrevocable, worldwide, right of access to, and a license to copy, use, distribute, transmit and display the work publicly».² Please keep in mind that Open Access (OA) applies only to scientific journal articles – often referred to as «give

away» literature, because authors aren't paid – and that is aimed at maximizing the dissemination of the results of the scientific research, by removing price and permission barriers, leveraging on the means provided by the Internet. The underlying principles are that the results of publicly funded research must be publicly available, knowledge must be free;³ free, on-line availability for peer-reviewed scholarly articles means a wider access to knowledge, which turns into fostering science and accelerating research worldwide: as the motto of the OA Week states, «Learn. Share. Advance.».

In this optic, Open Access has the potential to maximize research investments, increase the exposure and use of published research, facilitate the ability to conduct research across available literature, and enhance the overall advancement of scholarship, according again to McMenamin.⁴ Let's try to confirm this statement in facts and figures, reminding yet that each scientific community has its own way to OA, depending on its communication behavior and specific channels, so we can't reduce this complexity in few numbers.

We have already explored the basic concepts of the OA world some issues ago,⁵ so we won't repeat them. After 5 years, we are now trying to recall the logic, and to stress the main achievements and the ongoing projects. As preliminary reference tools, if you want to learn more on OA, precious starting point collecting principles, instruments, factual lists.

Corresponding author: E. Giglia, University of Turin, Via Vida 8, 10126 Turin, Italy. E-mail: elena.giglia@unito.it

Comunicazione scientifica è ...

Accesso

Produzione

Tecnologia

Canali
(monografie, riviste...)

GESTIONE DEI
DIRITTI
(autori, lettori,
editori)

CONSERVAZIONE

Economia
(e profitti)

Costi
(reali e di mercato – «anelastico»)

Nuovi modelli
(e loro sostenibilità)

VALUTAZIONE
DELLA RICERCA

Open Access nel ciclo della comunicazione scientifica



Il meccanismo nelle riviste

Submission

Peer review

Acceptance/
rejection

Publication

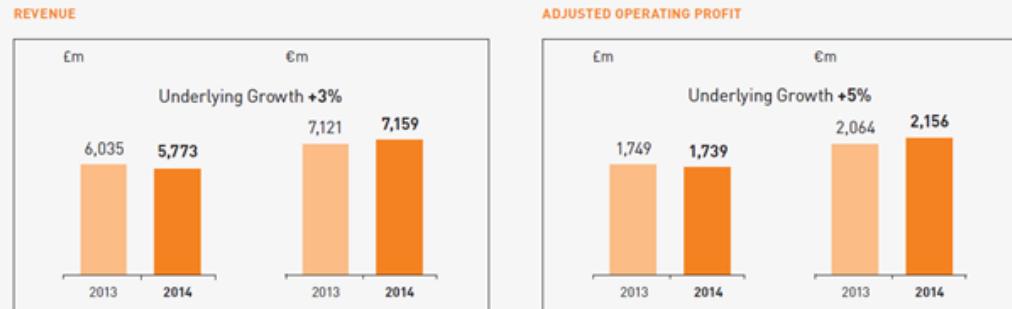
Non c'è compenso
economico

Ritorno
atteso:
reputazione,
citazioni

Parliamo di soldi

Reed Elsevier combined businesses

<https://www.elsevier.com/about/company-information/annual-reports>



WILEY

For the Years Ended April 30,

Dollars in millions (except per share data)	2015	2014	2013	2012	2011
Revenue	\$1,822.4	\$1,775.2	\$1,760.8	\$1,782.7	\$1,742.6
Operating Income (a-c)	237.7	206.7	199.4	280.4	248.1
Net Income (a-d)	176.9	160.5	144.2	212.7	171.9
Working Capital (e)	(62.8)	60.1	(32.2)	(66.3)	(228.9)
Deferred Revenue in Working Capital (e)	(372.1)	(385.7)	(363.0)	(342.0)	(321.4)
Total Assets	3,004.2	3,077.4	2,806.4	2,532.9	2,430.1

<http://eu.Wiley.com/WileyCDA/Section/id-3702377.html>

Financial performance

<http://www.springer.com/gp/about-springer/company-information>

Springer Science+Business Media S.A. achieved sales of €981.1 m in FY 2012 which is growth of approximately 2.9% from FY 2011 (adjusted for acquisitions/divestments and for the changes in the underlying currency exchange rates). FY 2012 adjusted EBITDA is € 342.8 m which is growth of approximately 5% from FY 2011 (also adjusted for acquisitions/divestments and for the changes in the underlying currency exchange rates).

The Economist

Log in | Register | Subscribe

Digital & mobile

World politics | Business & finance | Economics | Science & technology | Culture | The World

Academic publishing

Of goats and headaches

One of the best media businesses is also one of the most resented

May 26th 2011 | from the print edition

HOW much would you pay for an annual subscription to *Small Ruminant Research*, *Queueing Systems* or *Headache*? University librarians pay rather a lot. In Britain, 65% of the money spent on content in academic libraries goes on journals, up from a little more than half ten years ago. With budgets tight, librarians are trying to resist price increases. But Derk Haank, the chief executive of Springer, a big publisher, is firm: "We have to make a living as well."

And what a living it is. Academic journals generally get their articles for nothing and may pay little to editors and peer reviewers. They sell to the very universities that provide that cheap labour. As other media falter, academic publishers have soared. Elsevier, the biggest publisher of journals with almost 2,000 titles, cruised through the recession. Last year it made £724m (\$1.1 billion) on revenues of £2 billion—an operating-profit margin of 36%.



Something to chew on

Academic publishers have jumped deftly from paper to the internet. For more than a decade the dominant model has been the "big deal". Publishers sell access to large bundles of electronic journals for a price based on what colleges used to pay for paper

Il contesto

Knowledge economy

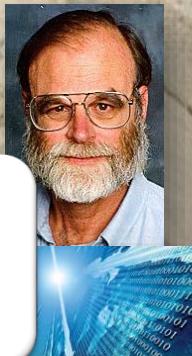
...l'informazione
è strategica

ISI (Impact Factor)=
Thomson Reuters

...to Google
or not to Google
= to be or not to be

Data-
intensive
science

Academic social
networks



The
FOURTH
PARADIGM
DATA-INTENSIVE SCIENTIFIC DISCOVERY

The screenshot shows a news article from Thomson Reuters. The headline reads: "Thomson Reuters Announces Definitive Agreement to Sell its Intellectual Property & Science Business to Onex and Baring Asia for \$3.55 billion". The text below the headline discusses the transaction and regulatory approval. The Thomson Reuters logo is visible at the top.

NEW YORK - Thomson Reuters (TSX/NYSE: TRI) today announced that it has entered into a definitive agreement to sell its Intellectual Property & Science business to private equity funds affiliated with Onex Corporation ("Onex") and Baring Private Equity Asia ("Baring Asia") for \$3.55 billion in cash.

The sale is subject to regulatory approval and customary closing conditions, including the expiration or termination of applicable waiting periods under the Hart-Scott-Rodino Antitrust Improvements Act, and is expected to close in the next few months. The sale is not subject to



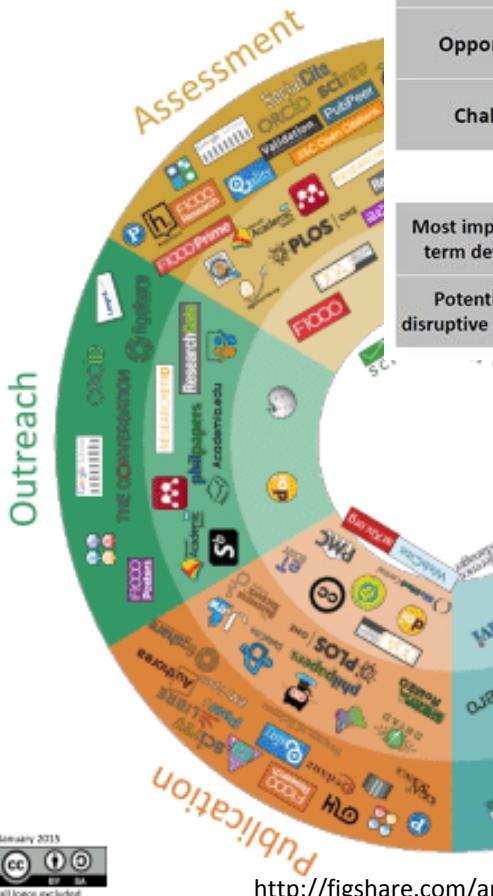
101 INNOVATIONS IN SCHOLARLY COMMUNICATION

Jeroen Bosman [@jero](https://twitter.com/jero)
Utrecht University Library

Most important developments in 6 research workflow phases

Science is in transition. This post phase of a project aiming to chart communication flows from evolution

600 innovative tools and services (< 2 years)



January 2013
all logos excluded

http://figshare.com/articles/101_Innovations_in_Scholarly_Communication_the_Changing_Research_Workflow/1286826

<https://101innovations.wordpress.com/>

Survey of scholarly communication tool usage

Experimental

Google

NPG/Macmillan

Google

?

?

?

?

?

?

?

Publication → Outreach → Assessment

Experimental → Google → NPG/Macmillan

Publication → Outreach → Assessment

Comunicazione scientifica oggi, ovvero...



Scholarly Infrastructure an obscenely expensive anachronism



THE HUFFINGTON POST
INFORM • INSPIRE • ENTERTAIN • EMPOWER

ENTERTAINMENT WELLNESS WHAT'S WORKING VOICES VIDEO ALL SECT

AdChoices ▾

THE BLOG

Academic Journals: The Most Profitable Obsolete Technology in History

12/23/2014 10:00 am ET | Updated Feb 21, 2015

980 f t p

Jason Schmitt  Writer / Associate Professor of Communication and Media

http://www.huffingtonpost.com/jason-schmitt/academic-journals-the-mos_1_b_6368204.html



... i servizi a valore aggiunto?

ScienceDirect

Article outline

Highlights

Abstract

Keywords

1. Introduction

2. Method

3. Results

4. Discussion

5. Conclusions

Acknowledgements

Appendix A. Supplementary data

References

Figures and tables

Table 1

Table 2

Table 3

Table 4

up0006

up0010

up0015

Download PDF

Export

Search ScienceDirect

Advanced search

Journal of Informetrics

Volume 7, Issue 4, October 2013, Pages 914-923

The publishing delay in scholarly peer-reviewed journals

Bo-Christer Björk*, David Solomon*,

Show more

doi:10.1016/j.joi.2013.09.001

Get rights or

Highlights

- Review and publication times vary significantly by discipline.
- Most of the variation in review time is among articles within a journal.
- Most of the variation in publication time is among journals.
- Review and publication times tend to be shorter for open access journals.

Abstract

Publishing in scholarly peer reviewed journals usually entails long delays from submission to publication. In part this is due to the length of the peer review process in part because of the dominating tradition of publication in issues, earlier a necessity of paper-based publishing, which creates backlogs of manuscripts waiting in line. These delays slow the dissemination of scholarship and can provide a significant burden on academic careers of authors.

17.000 volumi, 900 novità, oltre 80 periodici, più di 30.000 autori...

dal 1955

il più grande catalogo specializzato in Italia

Recommended articles

Non sei ancora registrato?

Registrati qui per usufruire di tutti i servizi, ricevere le nostre promozioni, le anticipazioni...

Rivista

Rivista e sommari delle riviste

RIVISTA DI STORIA DELLA FILOSOFIA

Fondata da Mario Dal Pra

4 fascicoli all'anno, ISSN 0393-2516, ISSN-e 1972-5558

Prezzo fascicolo (inclusi arretrati): € 22,50

Prezzo fascicolo e-book (inclusi arretrati): € 19,00

Canoni 2016

Biblioteche, Enti, Società:

cartaceo (IVA inclusa): Italia € 88,50; Estero € 142,50

solo online (IVA esclusa): € 98,00

Info abbonamenti cartaceo Info licenze online

Ateneo:

online (con arretrati), accesso perpetuo, formula plus

Info licenze online

Privati:

cartaceo Italia € 79,00; cartaceo Estero € 124,50; solo online (privati) € 67,50

Info abbonamenti

Abbonati qui

cartaceo Italia (privati) € 79,00

Progetto e fini Direzione editoriale Contatti Referee Ranking Indicizzazione

FrancoAngeli

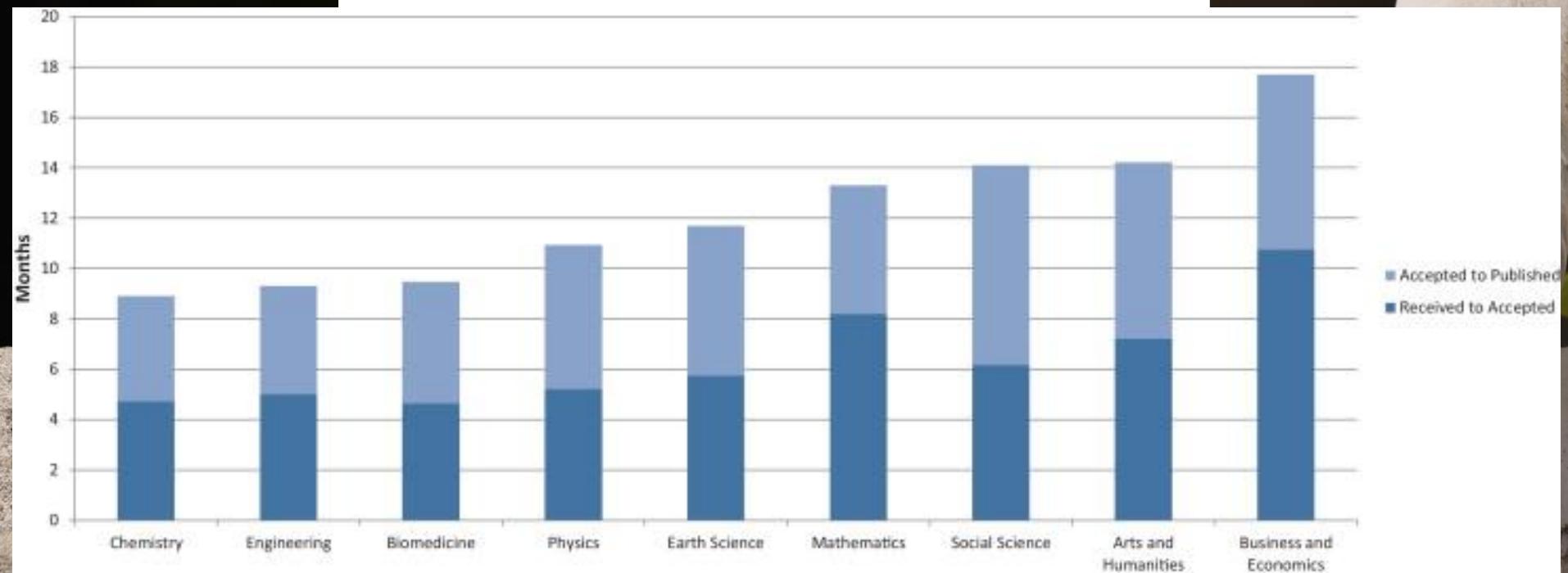
Edizioni La passione per le conoscenze

Ricerca autore, titolo, testo... Ricerca argomento

... spesso,
servizi preistorici

... la rapidità di pubblicazione?

Tempi medi di pubblicazione su rivista per disciplina



... da 9 a 18 mesi...

... e l'efficacia?

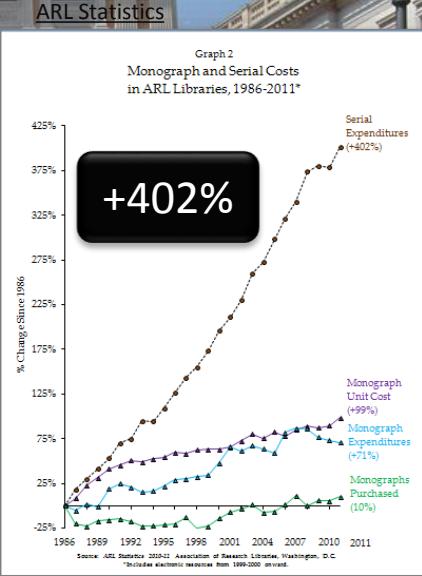
Il paradosso

1. stipendio

tagli ai budget=
minore possibilità
di leggere
di essere letti

... nell'era del web in cui
tutto è disponibile...

Elsevier: +38%



Reed Elsevier chief Erik Engstrom took home £4.5m last year

Reed Elsevier, group behind Lancet, LexisNexis and Comic-Con expo, enjoyed best year since Anglo-Dutch merger in 1993



Fans dress as Wonder Woman at Comic-Con in San Diego. The world's largest comic festival is just one of Reed Elsevier's brands. Photograph: Sandy Huffaker/Corbis

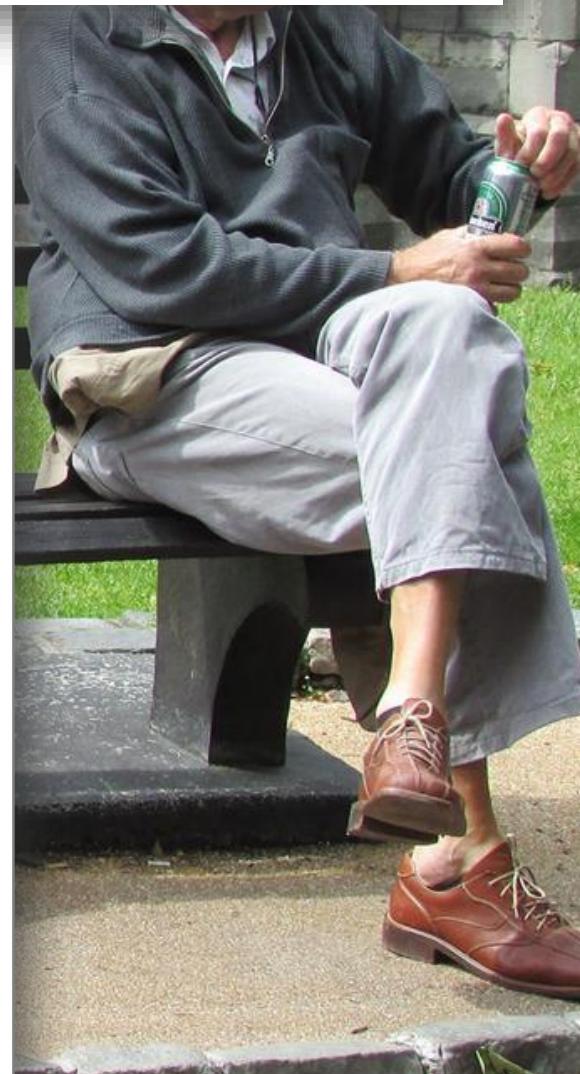
Erik Engstrom, chief executive of Reed Elsevier, received almost £4.5m in remuneration and share awards last year. **Elsevier CEO**

The company - owner of a diverse range of assets including the Lancet, the

The
Economist

ood bash. The
other people's work,
ithing by third parties
in a process called peer review, has been immensely
profitable. Elsevier, a Dutch firm that is the world's biggest
journal publisher, had a margin last year of 38% on revenues
of \$3.2 billion. Springer, a German firm that is the
biggest journal publisher, made 36% on sales of
\$1.1 billion in 2011 (the most recent year for which
data are available). Such firms are **Free for all, 4 may 2013**

publications. **Universities, libraries, and researchers** are increasingly questioning whether this model makes sense. After all, universities usually pay the salaries of both the researchers that write the papers and of the referees who conduct peer review. Elsevier's business model **has been compared** to a restaurant where the customers bring the ingredients, do all the cooking, and then get hit with a \$10,000 bill.





Efficacia ovvero...

Scott Robison
@OtterScotter

Follow

Real consequences of paywalled journals.
#openaccess #USNHshare

"Some foods come cheap but cause health or environmental problems that are not included in the price we pay. In the same way, some pay-walled purchases may seem to offer value in the moment, but may cost us dearly in lost opportunity through artificially limited access, less efficient science and scholarship, and the resulting slower progress working on the greatest problems facing humanity."

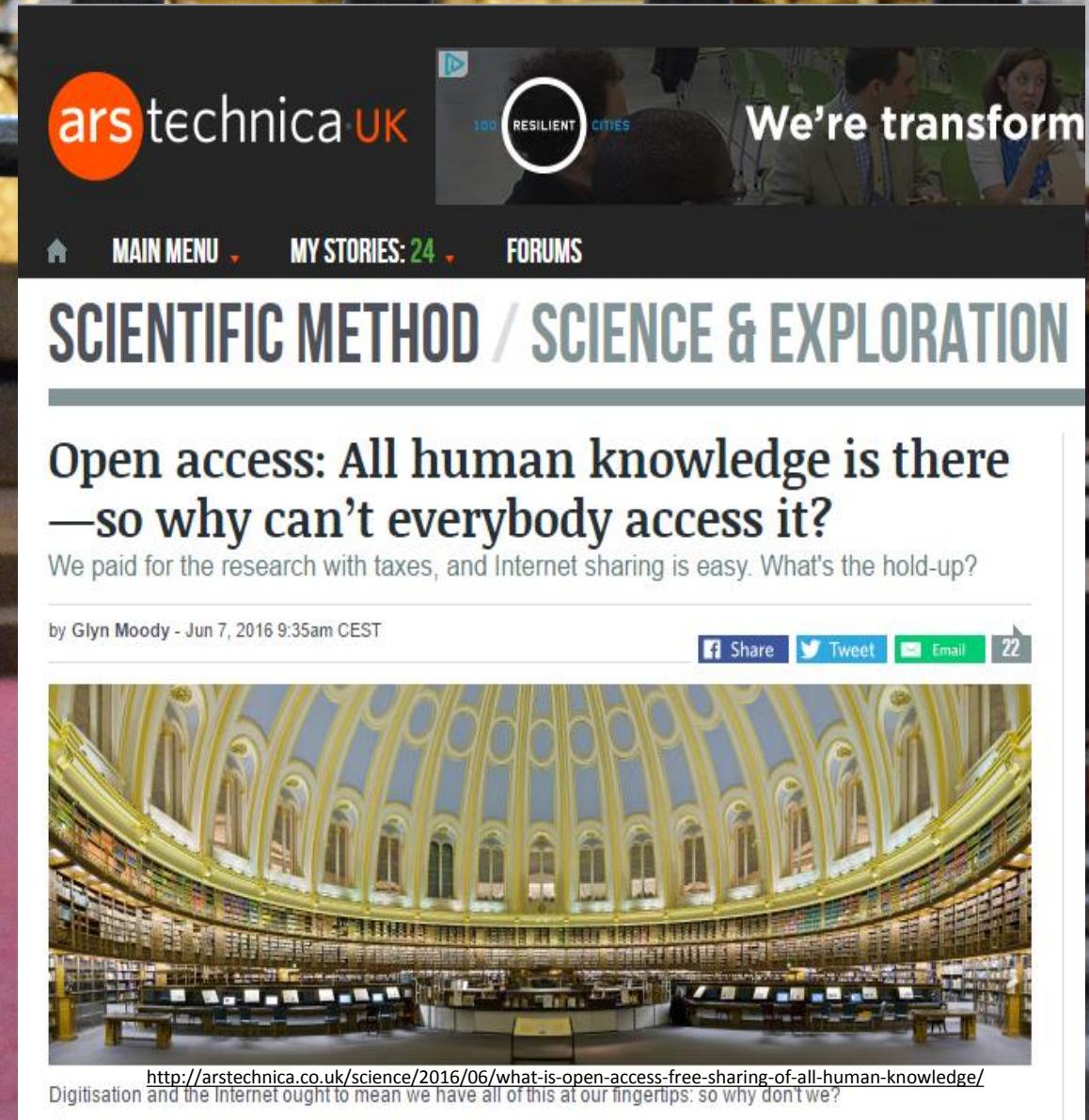
Ellen Finnie
Head, Scholarly Communications & Collections Strategy
MIT Libraries

<http://champagne.technion.ac.il/technion-annual-report-2013.html#p14>

21 RETWEETS 14 LIKES

... pagare gli editori commerciali perché mettano sotto chiave il nostro contenuto...

Efficacia ...



ars technica UK

MAIN MENU MY STORIES: 24 FORUMS

100 RESILIENT CITIES

We're transform

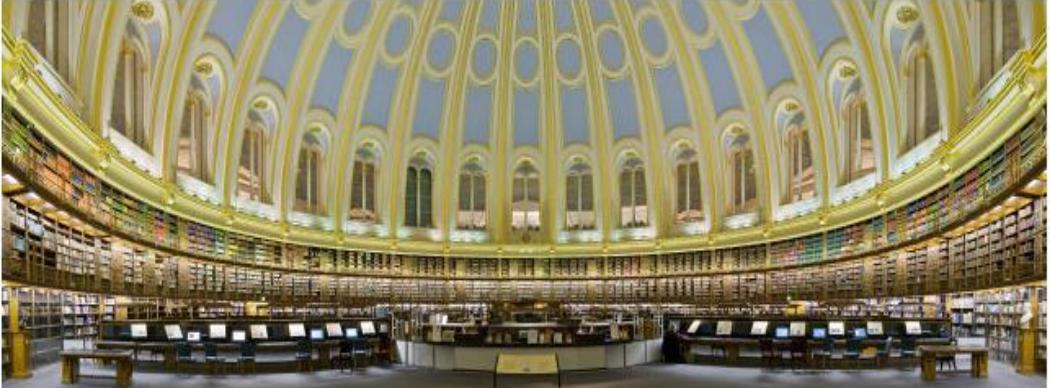
SCIENTIFIC METHOD / SCIENCE & EXPLORATION

Open access: All human knowledge is there — so why can't everybody access it?

We paid for the research with taxes, and Internet sharing is easy. What's the hold-up?

by Glyn Moody - Jun 7, 2016 9:35am CEST

Share Tweet Email 22



<http://arstechnica.co.uk/science/2016/06/what-is-open-access-free-sharing-of-all-human-knowledge/>

Digitisation and the Internet ought to mean we have all of this at our fingertips: so why don't we?

Trasparenza sui costi



<https://olh.openlibhums.org/articles/10.16995/olh.72/>

Reading: Opening the Black Box of Scholarly Communication
Funding: A Public Data Infrastructure for Financial Flows in Academic Publishing

Share: [f](#) [t](#) [g](#) [in](#)

Article

Opening the Black Box of Scholarly Communication Funding: A Public Data Infrastructure for Financial Flows in Academic Publishing

Authors: Stuart Lawson , Jonathan Gray, Michele Mauri

4784

343

267

Views

Downloads

Twitter

Published on 11 Apr 2016 Peer Reviewed

Big deals devastanti perché

- negoziano pacchetti non più singoli titoli
- hanno non-disclosure clauses

Per avere i dati hanno dovuto ricorrere al Freedom of Information Act...
vi sembra normale???????

	2010	2011	2012	2013	2014
Elsevier	£34,177,020	£36,781,827	£39,079,332	£39,476,813	£39,812,145
Wiley	£13,460,226	£14,662,250	£15,616,311	£16,369,917	£16,875,190
Springer	£7,311,046	£7,309,094	£7,906,177	£7,940,116	£8,542,997
Taylor & Francis	£8,319,095	£9,140,572	£9,710,528	£10,084,350	£10,828,334
Sage	£4,495,313	£5,085,196	£5,608,296	£5,869,791	£5,990,818
Oxford University Press	£1,996,163	£2,163,242	£2,395,136	£2,669,757	£2,925,607
Cambridge University Press	£1,447,978	£1,462,214	£1,690,078	£1,832,177	£1,885,485
Nature Publishing Group	£2,998,040	£3,593,308	£4,066,962	£4,273,822	£4,430,900
Royal Society of Chemistry	£806,129	£867,752	£1,062,237	£1,062,948	£1,101,860
Institute of Physics Publishing	£1,091,517	£1,119,070	£1,197,958	£1,279,691	£1,373,533
Total for these 10 publishers	£76,102,528	£82,184,527	£88,333,015	£90,859,384	£93,766,870

... e i diritti?

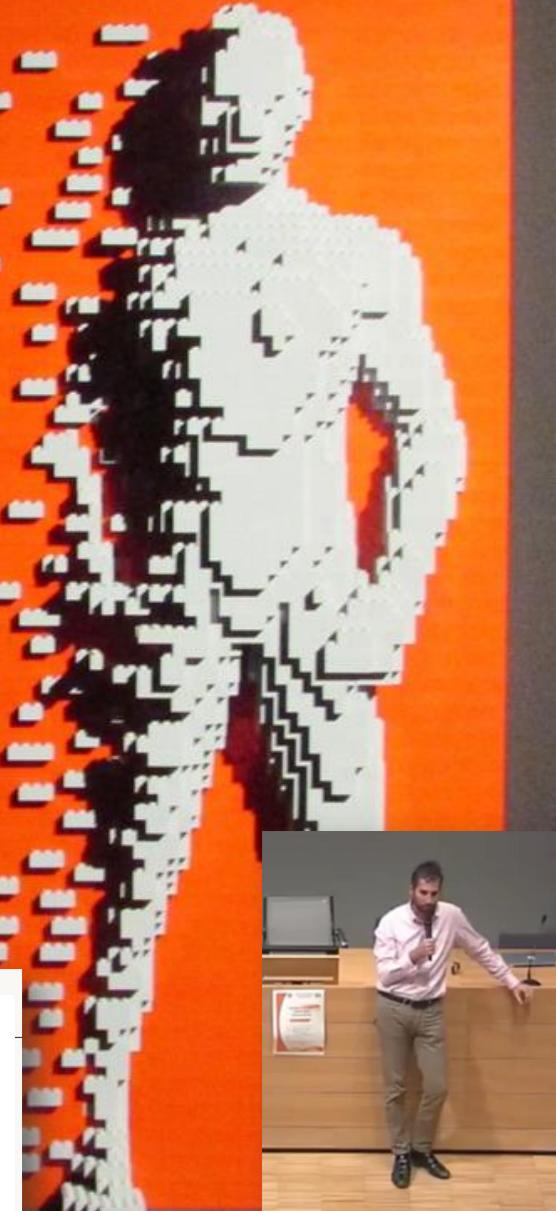
GLI EDITORI
PRETENDONO LA
CESSIONE,
SPOGLIANDOVI
DI TUTTI I DIRITTI

LEGGE 22 aprile 1941, n. 633
Protezione del diritto d'autore e

vigente al 24-11-2015

Articoli	TITOLO I DISPOSIZIONI SUL DIRITTO DI AUTORE
CAPO I Opere protette	
1	
2	
3	
4	
5	

Art. 19 I diritti di sfruttamento
economico sono fra di loro
INDIPENDENTI



[Immagini e testi online: il diritto d'autore alla prova del web](#)

[Video](#)

[Slides](#)

... e i diritti? / 2

The Licenses



Attribution
CC BY

This license lets others distribute, remix, tweak, and build upon your work, even commercially, as long as they credit you for the original creation. This is the most accommodating of licenses offered. Recommended for maximum dissemination and use of licensed materials.

[View License Deed](#) | [View Legal Code](#)



Attribution-ShareAlike
CC BY-SA

This license lets others remix, tweak, and build upon your work even for commercial purposes, as long as they credit you and license their new creation under the identical terms. This license is often "copyleft" free and open source software: new works based on yours will carry the same license, which allows others to further share those works. So any derivatives will also allow commercial use. This is the license used by Wikipedia, and is for materials that would benefit from incorporation into Wikipedia and similarly licensed projects.

[View License Deed](#) | [View Legal Code](#)



Attribution-NoDerivs
CC BY-ND

This license allows for redistribution, commercial and non-commercial, as long as it is passed along unchanged and in whole, with credit to you.

[View License Deed](#) | [View Legal Code](#)



Attribution-NonCommercial
CC BY-NC

This license lets others remix, tweak, and build upon your work non-commercially, and although other works must also acknowledge you and be non-commercial, they don't have to license derivative works on the same terms.

[View License Deed](#) | [View Legal Code](#)



Attribution-NonCommercial-ShareAlike
CC BY-NC-SA

This license lets others remix, tweak, and build upon your work non-commercially, as long as they credit you and license their new creations under the identical terms.

[View License Deed](#) | [View Legal Code](#)

creative commons About • Licenses • Public Domain • Support CC • Projects • Blog • News •

Keep the internet creative, free and open. [Donate to Creative Commons](#)

New to Creative Commons? [Considerations before licensing] [How the licenses work]
Explore the Creative Commons licenses. [Want public domain instead?]
[Looking for earlier license versions, including ports?]

License Features
Your choices on this panel will update the other panels on this page.

Allow adaptations of your work to be shared?

Yes No
 Yes, as long as others share alike

Allow commercial uses of your work?

Yes No

Selected License
Attribution-ShareAlike 4.0 International

This is a Free Culture License!

Help others attribute you!
This part is optional, but filling it out will add machine-readable metadata to the suggested HTML!

Title of work

Have a web page?
 This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Un concetto chiave:

- Diritti in entrata (ho i diritti per utilizzare materiale altrui?)
- Diritti in uscita (quali diritti associo alla mia opera? Cosa concedo di fare della mia opera?)

[Uno scontro in atto]



<http://www.oa.unito.it/new/open-research-data-and-open-science/>

Why academics need to lobby for copyright reform – now

<https://juliareda.eu/2015/09/academics-for-copyright-reform/>

This speech was given at EPIP 2015 in Glasgow, UK on September 2nd, 2015



If we consider evidence-based policy making a desirable goal, then we need to take a stand for research and education.

"CURRENTLY, COPYRIGHT IS UNDERMINING OUR ABILITY TO CONDUCT RESEARCH"

[TWEET THIS!](#)

The current copyright regime is undermining our ability to produce evidence and not just for research. Decreasing for research. Commissioner Oettinger, Parliament



JULIA REDA

Despite denials, copyright reform plans by European Commission are an attack on the freedom to link

The retrograde **copyright reform plans** Commissioner Oettinger presented today spell disaster for the internet. Oettinger has let copyright reform be hijacked by corporate interests

- ▶ and turned a blind eye to the needs of artists and users. This attempt to remake the web to accommodate analogue business models is doomed to fail at great cost.
- ▶ <https://juliareda.eu/2016/09/attack-on-link/>
- ▶ new exceptions for libraries and archives
- ▶ legal protection of the public domain
- ▶ protection of exceptions and limitations from contractual override
- ▶ fully harmonising copyright terms at the lowest levels that currently exist in the EU
- ▶ a comprehensive set of users' rights

These reforms are within reach. But the proposals are heavily attacked by scientific publishers. In a situation where scientific publishers are among the most profitable businesses in the world, and universities are not just spending significant proportions of their budgets on licences, but also on navigating and negotiating terms of an overly complex copyright system, resources are unnecessarily diverted from creating sound evidence.

... e la garanzia della peer review?

Table 3. Most cited retracted articles

First author	Journal	Year published	Year retracted	Times cited*	Reason for retraction
Wakefield	<i>Lancet</i>	1998	2004; 2010	758	Fraud
Reyes	<i>Blood</i>	2001	2009	740	Error
Fukuhara	<i>Science</i>	2005	2007	686	Error
Nakao	<i>Lancet</i>	2003	2009	626	Fraud
Chang	<i>Science</i>	2001	2006	512	Error
Kugler	<i>Nature Medicine</i>	2000	2003	494	Fraud
Rubio	<i>Cancer Research</i>	2005	2010	457	Error
Gowen	<i>Science</i>	1998	2003	395	Fraud
Makarova	<i>Nature</i>	2001	2006	375	Error
Hwang	<i>Science</i>	2004	2006	368	Fraud
Potti	<i>The New England Journal of Medicine</i>	2006	2011	361	Fraud
Brugger	<i>The New England Journal of Medicine</i>	1995	2001	336	Fraud
Van Parijs	<i>Immunity</i>	1999	2009	330	Fraud
Potti	<i>Nature Medicine</i>	2006	2011	328	Fraud
Schön	<i>Science</i>	2000	2002	297	Fraud
Chiu	<i>Nature</i>	2005	2010	281	Error
Cooper	<i>Science</i>	1997	2005	264	Fraud
Le Page	<i>Cell</i>	2000	2005	262	Error
Kawasaki	<i>Nature</i>	2004	2006	243	Fraud
Hwang	<i>Science</i>	2005	2006	234	Error

*As of June 22, 2012.

www.pnas.org/cgi/doi/10.1073/pnas.1212247109

Retraction Watch

Weekend reads: Improper influence by NFL; dissertations for sale; how common is failure to reproduce?

with 7 comments

The week at Retraction Watch featured [controversy over an economics paper](#), and a report of a researcher who [faked more than 70 experiments](#). Here's what was happening elsewhere: [Read the rest of this entry »](#)

Written by Ivan Oransky
May 28th, 2016 at 9:30 am

<http://retractionwatch.com/>



Retraction Watch

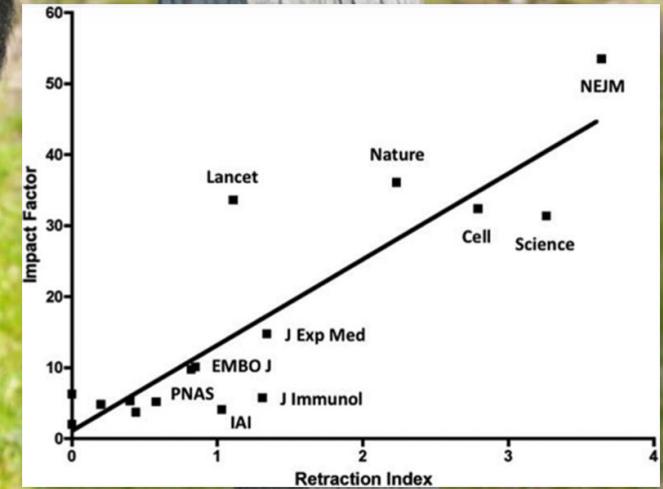
The Retraction Watch Leaderboard

with 18 comments

Who has the most retractions? Here's our unofficial list (see notes on methodology), which we'll update as more information comes to light:

1. [Yoshitaka Fujii](#) (total retractions: 183) Sources: [Final report of investigating committee](#), [our reporting](#)
2. [Joachim Boldt](#) (94) Sources: [Editors in chief statement](#), [additional coverage](#)
3. [Diederik Stapel](#) (58) Source: [Our cataloging](#)
4. [Adrian Maxim](#) (48) Source: [IEEE database](#)
5. [Peter Chen](#) (Chen-Yuan Chen) (43) Source: [SAGE](#), [our cataloging](#)
6. [Hua Zhong](#) (41) Source: [Journal](#)
7. [Shigeaki Kato](#) (39) Source: [Our cataloguing](#)
8. [James Hunton](#) (37) Source: [Our cataloguing](#)
9. [Hendrik Schon](#) (36) Sources: PubMed and Thomson Scientific
10. [Hyung-In Moon](#) (35) Source: [Our cataloguing](#)
11. [Naoki Mori](#) (32) Source: PubMed, [our cataloguing](#)

Fang et al.



... e la riproducibilità



The Atlantic

SUBSCRIBE SEARCH MENU

Rival Scientists Cast Doubt Upon Recent Discovery About Invincible Animals

A recent claim that tardigrades got a sixth of their DNA from microbes is starting to unravel.



ED YONG

SCIENCE The Atlantic blog, Dec 4 2015

nature

Home | News & Comment | Research | Careers & Jobs | Current Issue | Archive | Audio & Video | For Authors

News & Comment > News > 2016 > June > Article

NATURE | NEWS

Sluggish data sharing hampers reproducibility effort

Initiative trying to validate 50 cancer papers finds difficulty in accessing original study data.

Richard Van Noorden

03 June 2015

doi:10.1038/nature.2015.17694

THE LANCET

Volume 383, Issue 9912, 11–17 January 2014, Pages 166–175



Series

doi:10.1016/S0140-6736(13)62227-8

Increasing value and reducing waste in research design, conduct, and analysis

Prof John P A Ioannidis, MD^{a, c, f, g}, Prof Sander Greenland, DrPH^b, Prof Mark A Hlatky, MD^{b, d}, Muin J Khoury, MD^{b, i}, Prof Malcolm R Macleod, PhD^e, Prof David Moher, PhD^{b, m}, Prof Kenneth F Schulz, PhD^{b, o}, Prof Robert Tibshirani, PhD^{e, f}

These issues are often related to misuse of statistical methods, which is accentuated by inadequate training in methods. For example, a study² of reports published in 2001 showed that p values did not correspond to the given test statistics in 38% of articles published in *Nature* and 25% in the *British Medical Journal*. Prevalent conflicts of interest can also affect the design, analysis, and interpretation of results. Problems in study design go beyond statistical analysis, and are shown by the poor reproducibility of research. Researchers at Bayer³ could not replicate 43 of 67 oncological and cardiovascular findings reported in academic publications. Researchers at Amgen could not reproduce 47 of 53 landmark oncological findings for potential drug targets.⁴ The reward system places insufficient emphasis on investigators doing rigorous obtaining reproducible results.

thebmj

Research

Education

News & Views

Campaigns

Archive

<http://www.bmjjournals.org/content/351/bmjh4320>

Research

Restoring Study 329: efficacy and harms of paroxetine and imipramine in treatment of major depression in adolescence

BMJ 2015; 351: doi: <http://dx.doi.org/10.1136/bmjh4320> (Published 16 September 2015)

Cite this as: BMJ 2015;351:h4320

Conclusions Neither paroxetine nor high dose imipramine showed efficacy for major depression in adolescents, and there was an increase in harms with both drugs. Access to primary data from trials has important implications for both clinical practice and research, including that published conclusions about efficacy and safety should not be read as authoritative. The reanalysis of Study 329 illustrates the necessity of making primary trial data and protocols available to increase the rigour of the evidence base.

... e il prestigio dell'Impact Factor? / 2

Archivum Immunologiae et Therapiae Experimentalis
August 2008, Volume 56, Issue 4, pp 223-226

The top-ten in journal impact factor manipulation

Matthew E. Falagas MD, MSc, DSc., Vangelis G. Alexiou

1. Requiring revision of the manuscript references section and inclusion of articles published in the editor's journal or affiliate journals
2. Publishing summaries of articles with relevant citations to them (usually in the form of "what was published in the journal last year")
3. Inflating self-citation through editorials and readers' comments on published articles
4. Publishing articles that add citations to the nominator but which are not counted as "citable"
5. Publishing a larger percentage of review articles over less-cited articles, including original research and, especially, case reports
6. Rejecting negative studies, regardless of their quality
7. Rejecting confirmatory studies
8. Favoring the acceptance of articles originating from large and scientifically active research groups as well as articles with a large number of authors
9. Attracting the work of renowned scientists and leaders of research regardless of the real quality
10. Publishing mainly popular science articles that deal with "hot" topics



OPEN ACCESS

EDITORIAL

The Impact Factor Game

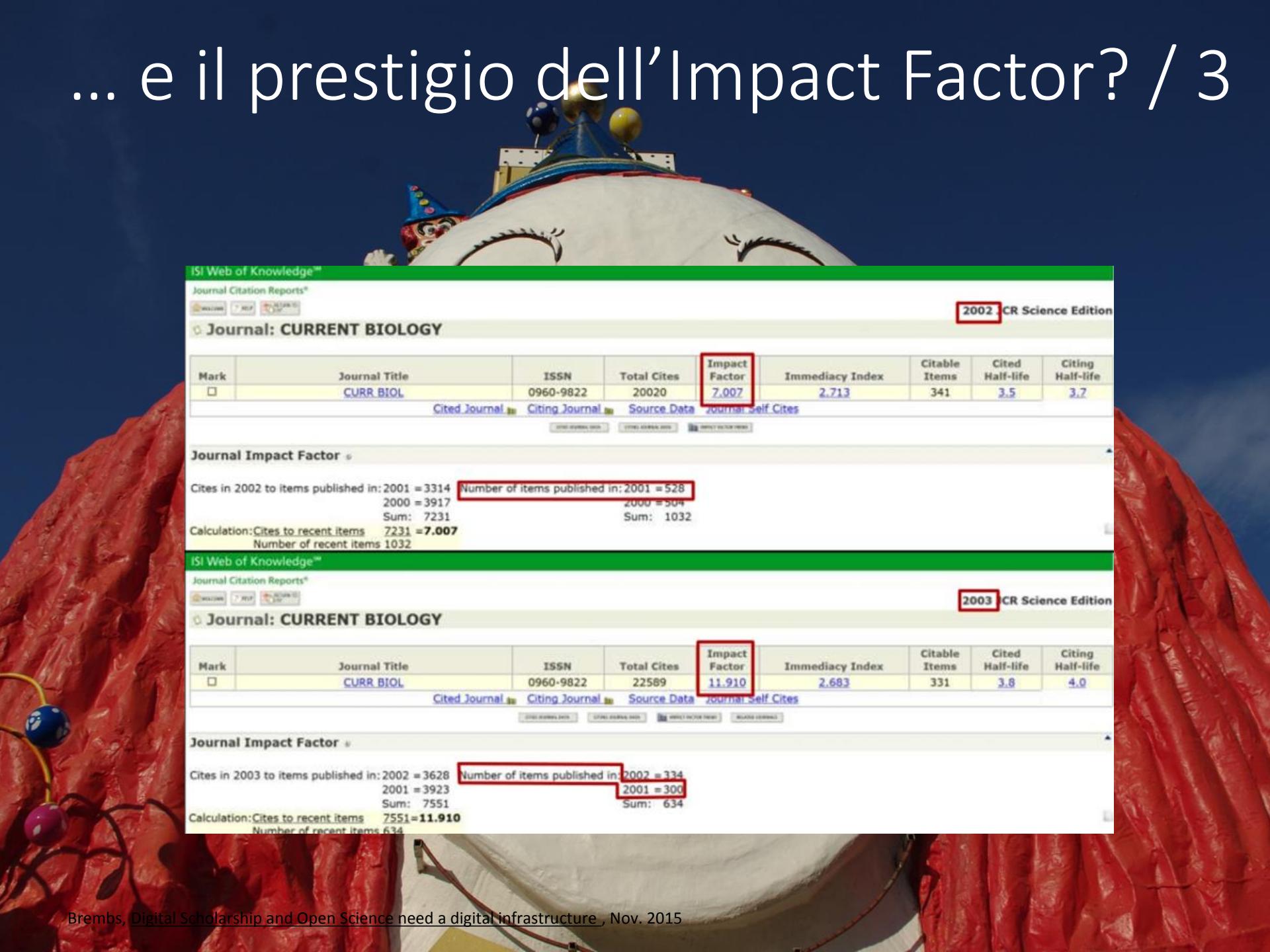
The PLoS Medicine Editors

The PLoS Medicine Editors
(2006) The Impact Factor
Game. PLoS Med 3(6): e291



IF anno X = $\frac{\text{citations nell'anno X}}{\text{totale articoli «cittabili» pubblicati negli anni X-1 e X-2}}$

... e il prestigio dell'Impact Factor? / 3



ISI Web of Knowledge™
Journal Citation Reports®

2002 CR Science Edition

Journal: CURRENT BIOLOGY

Mark	Journal Title	ISSN	Total Cites	Impact Factor	Immediacy Index	Citable Items	Cited Half-life	Citing Half-life
<input type="checkbox"/>	CURR BIOL	0960-9822	20020	7.007	2.713	341	3.5	3.7

Cited Journal Citing Journal Source Data Journal Self Cites

Journal Impact Factor

Cites in 2002 to items published in: 2001 = 3314 Number of items published in: 2001 = 528
2000 = 3917 2000 = 504
Sum: 7231 Sum: 1032

Calculation: Cites to recent items 7231 = 7.007
Number of recent items 1032

ISI Web of Knowledge™
Journal Citation Reports®

2003 CR Science Edition

Journal: CURRENT BIOLOGY

Mark	Journal Title	ISSN	Total Cites	Impact Factor	Immediacy Index	Citable Items	Cited Half-life	Citing Half-life
<input type="checkbox"/>	CURR BIOL	0960-9822	22589	11.910	2.683	331	3.8	4.0

Cited Journal Citing Journal Source Data Journal Self Cites

Journal Impact Factor

Cites in 2003 to items published in: 2002 = 3628 Number of items published in: 2002 = 334
2001 = 3923 2001 = 300
Sum: 7551 Sum: 634

Calculation: Cites to recent items 7551 = 11.910
Number of recent items 634

... e il prestigio dell'Impact Factor? / 4



Times Higher Education, 5 Nov 2015

PROFESSIONAL JOBS RANKINGS STUDENT

Journal impact factors 'no longer credible'

The measure of scholarly impact is now being manipulated so much that it has ceased to be meaningful, editorial claims

November 5, 2015



By David Matthews Twitter: @DavidMatthews



Catriona MacCallum and 1 other Retweeted

Max Planck Society @maxplanckpress · Nov 15

"How much has your research changed the world -- that's **impact**! And **Impact** Factors have nothing to do with that." @DavidSweeneyNPR #OpenCon

81 48 ...

OA19 and 22 others follow

J@n Velterop @Villavelius · Nov 14

@barendmons: "The usefulness of an article at the bench, in the field, is inversely related to the **impact** factor of the journal." #opencon

13 12 ...

hjoseph Retweeted

Erin McKiernan @emckiernan13 · Nov 14

#opencon @brembs: Higher **impact** factor --> higher retraction rate. "We're selecting for people who publish unreliable research."

7 10 ...

...scienza o competizione?

“People game the system at every level and this risks the loss of valuable research in favour of fashionable research.”

<https://royalsociety.org/events/2015/04/future-of-scholarly-scientific-communication-part-1/>

Photo: Royal Society

Scientific Utopia: II. Restructuring Incentives and Practices to Promote Truth Over Publishability

Brian A. Nosek, Jeffrey R. Spies, and Matt M. Motyl
University of Virginia

Abstract

An academic scientist's professional success depends on such, disciplinary incentives encourage design, analysis, and results. Prior reports demonstrate how these incentives favor novelty over replication. False results persist in the literature, and the scientific enterprise is less effective and efficient than it could be.

Photo: AP

Jon Tenn@nt ha ritwittato

Katie Mack @AstroKatie · 13 h
"a world that rewards scientists for publications above all else [...] naturally selects for weak science" theatlantic.com/science/archiv... #academia

<https://goo.gl/IUb5WZ>

The Inevitable Evolution of Bad Science

A simulation shows how the incentives of modern academia naturally select for weaker and less reliable results.

theatlantic.com <https://goo.gl/VKgNxD>

Cut-throat academia leads to 'natural selection of bad science', claims study

Scientists incentivised to publish surprising results frequently in major journals, despite risk that such findings are likely to be wrong, suggests research



publishing novel work often and in high-profile journals like *Nature* and *Science* can lead to a 'natural selection of bad science', according to a new study. The research, published in the journal *Perspectives on Psychological Science*, suggests that scientists are more likely to publish surprising results in major journals, even if they are likely to be wrong. The study, led by researchers from the University of Virginia, found that scientists are more likely to publish surprising results in major journals, even if they are likely to be wrong. The study, led by researchers from the University of Virginia, found that scientists are more likely to publish surprising results in major journals, even if they are likely to be wrong.

<https://goo.gl/IUb5WZ>

Photo: AP

...quantità o qualità?



The Economist <https://goo.gl/jQrUiG>
World politics Business & finance Economics Science & technology Culture

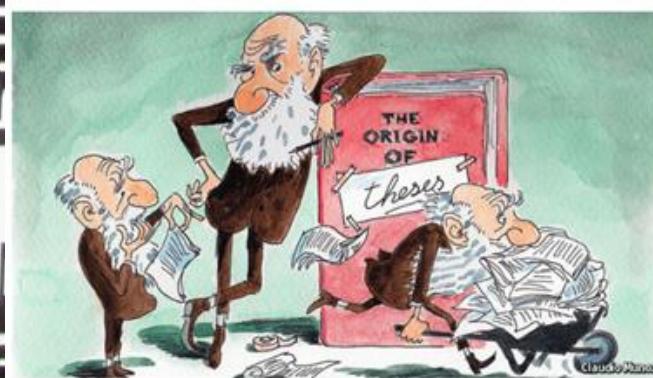
Why bad science persists

Incentive malus

Poor scientific methods may be hereditary

Sep 24th 2016 | From the print edition

Timekeeper [Like](#) 3.1K [Tweet](#)



Ultimately, therefore, the way to end the proliferation of bad science is not to nag people to behave better, or even to encourage replication, but for universities and funding agencies to stop rewarding researchers who publish copiously over those who publish fewer, but perhaps higher-quality papers. This, Dr Smaldino concedes, is easier said than done. Yet his model amply demonstrates the consequences for science of not doing so.

... valutazione o ossessione? / 1



Causes for the Persistence of Impact Factor Mania

Arturo Casadevall^a, Ferric C. Fang^b

Author Affiliations

Address correspondence to Arturo Casadevall, arturo.casadevall@einstein.yu.edu.

ABSTRACT

Numerous essays have addressed the misuse of the journal impact factor for judging the value of science, but the practice continues, primarily as a result of the actions of scientists themselves. This seemingly irrational behavior is referred to as "impact factor mania." Although the literature on the impact factor is extensive, little has been written on the underlying causes of impact factor mania. In this perspective, we consider the reasons for the persistence of impact factor mania and its pernicious effects on science. We conclude that impact factor mania persists because it confers significant benefits to individual scientists and journals. Impact factor mania is a variation of the economic theory known as the "tragedy of the commons," in which scientists act rationally in their own self-interests despite the detrimental consequences of their actions on the overall scientific enterprise. Various measures to reduce the influence of the impact factor are considered.

<http://mbio.asm.org/content/5/2/e00064-14.full>

Impact Factor ▶

How can academia kick its addiction to the impact factor?

April 27, 2016 Author: Jon Tennant 37 comments

The impact factor is academia's worst nightmare. So much has been written about its flaws, both in calculation and application, that there is little point in reiterating the same tired points here (see [here](#) by Stephen Curry for a good starting point).

The problem is cyclical if you think about it: publishers use the impact factor to appeal to researchers, researchers use the impact factor to justify their publishing decisions, and funders sit at the top of the triangle facilitating the whole thing. One 'chef' of the Kitchen piped in by [saying that publishers recognise the problems, but still have to](http://blog.scienceopen.com/2016/04/how-can-academia-kick-its-addiction-to-the-impact-factor/)

<http://blog.scienceopen.com/2016/04/how-can-academia-kick-its-addiction-to-the-impact-factor/>

Excellence R Us: University Research and the Fetishisation of Excellence

Samuel Moore, Cameron Neylon, Martin Paul Eve, Daniel Paul O'Donnell, Damian Pattinson¹

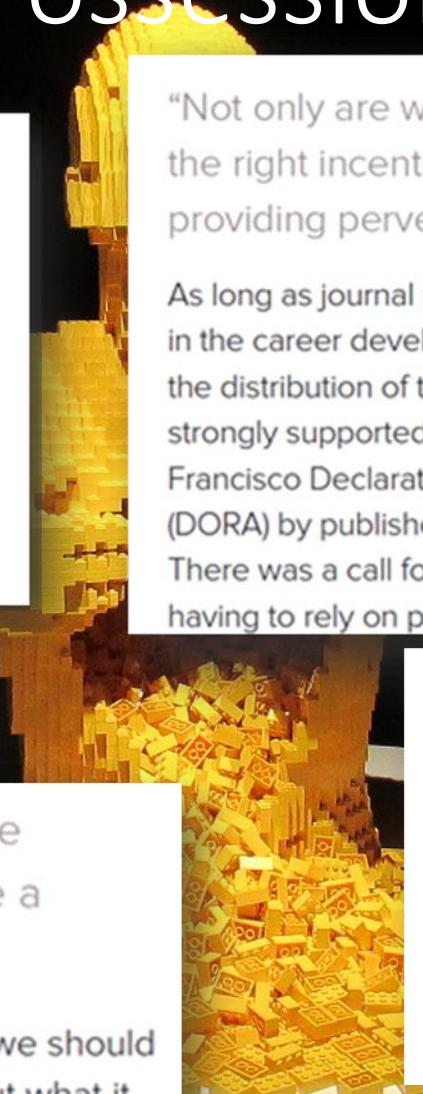
Abstract

The rhetoric of "excellence" is pervasive across the academy. It is used to refer to research outputs as well as researchers, theory and education, individuals and organisations, from art history to zoology. But what does "excellence" mean? Does it in fact mean anything at all? And is the pervasive narrative of excellence and competition a good thing? Drawing on a range of sources we interrogate "excellence" as a concept and find that it has no intrinsic meaning as used in the academy. Rather it functions as a linguistic interchange mechanism or boundary object. To investigate whether linguistic function is useful we examine how excellence rhetoric combines with narratives of scarcity and competition and show that hypercompetition that arises leads to a performance of "excellence" that is completely at odds with the qualities of good research. We trace the roots of issues in reproducibility, fraud, as well as diversity to the stories we tell ourselves as researchers and offer an alternative rhetoric based on soundness. "Excellence" is not excellent, it is a pernicious and dangerous rhetoric that undermines the very foundations of good research and scholarship.

https://figshare.com/articles/Excellence_R_Us:_University_Research_and_the_Fetishisation_of_Excellence/3413821/1

...valutazione o ossessione? / 2

"Why do we do science? It's not to create careers for scientists. It's to increase knowledge for the benefit of mankind. If the need to sustain the careers of young scientists is getting in the way of the primary objective of science there is something wrong in the way in which we organise and motivate those careers."



"Not only are we failing to provide the right incentives, we are actually providing perverse ones."

As long as journal impact factors retain some role in the career development, journals should publish the distribution of their citations. The participants strongly supported the adoption of the San Francisco Declaration on Research Assessment (DORA) by publishers, funders and universities. There was a call for open citation data (rather than having to rely on proprietary sources).

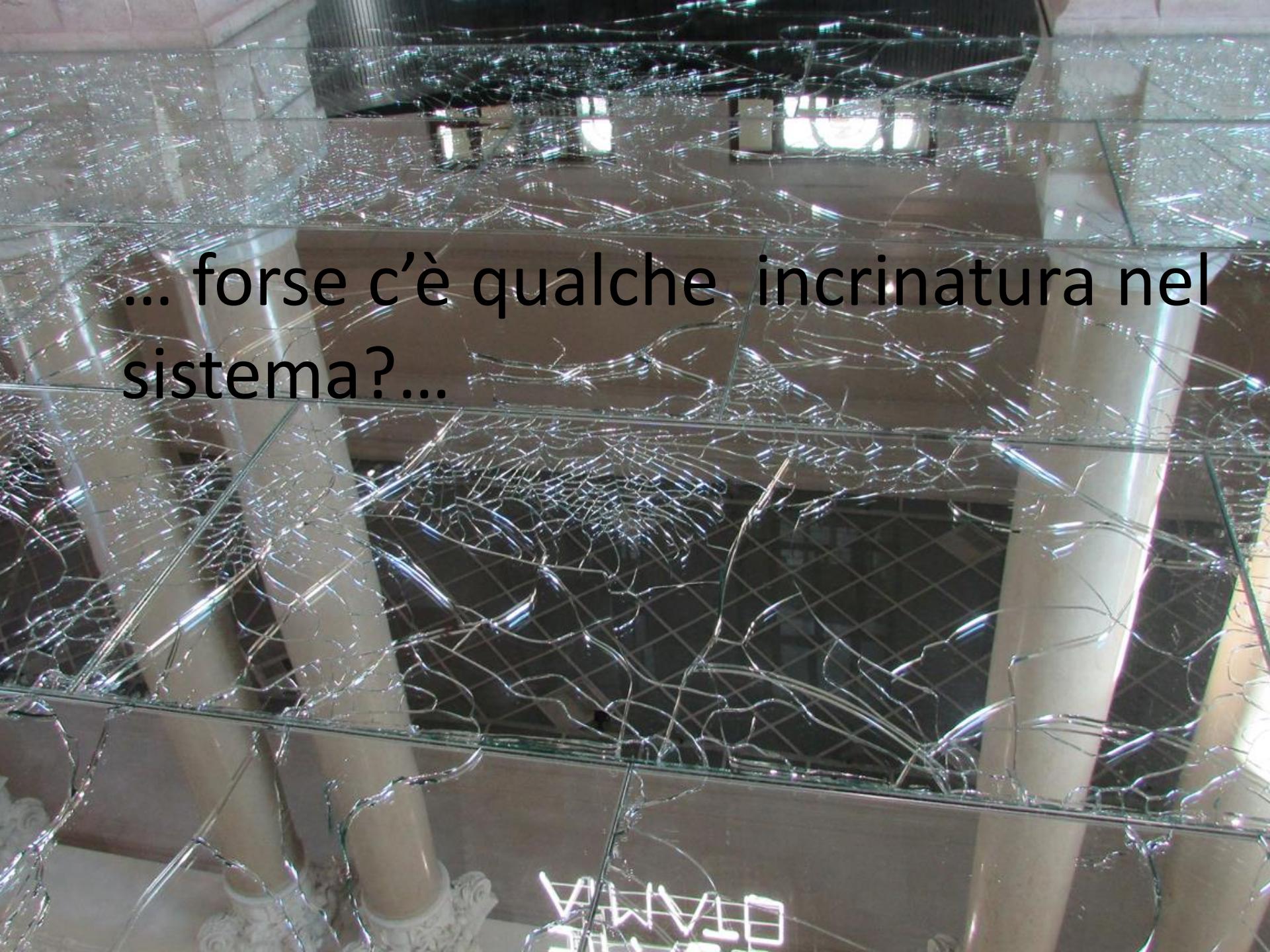
Goodhart's Law: "when a measure becomes a target, it ceases to be a good measure."

Metrics are subject to manipulation, so we should look carefully not only at the number, but what it is that number purports to measure.

We need to build a set of metrics that are not citation based (such as data deposit, mentoring students, writing code etc). This will also help to move the focus away from exclusively considering journal articles.

We should forget about ranking journals in any case and focus on ranking articles and individuals. There is no substitute for actually reading articles, rather than relying on metrics.

"Getting away from this obsession with measurement and going back to judgement might be a way forward."



... forse c'è qualche incrinatura nel
sistema?...

...una soluzione pirata?



Sci-Hub Has Changed How We Access Knowledge

by NATALIE SHOEMAKER · May 3, 2016

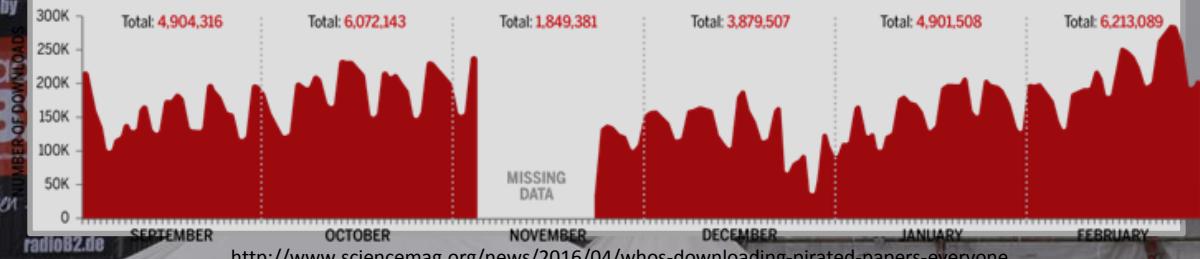


<http://bigthink.com/natalie-shoemaker/sci-hub-has-changed-how-we-access-knowledge>



Sci-Hub activity over 6 months

Sci-Hub's domain switch in November 2015, forced by a lawsuit against it, led to some missing data during the 6-month period, but usage hit record levels in February.



<http://www.sciencemag.org/news/2016/04/whos-downloading-pirated-papers-everyone>



... meglio un cambio di prospettiva?

Openness



The best thing about **Internet** is that it's **open**. In every field **it let us share and innovate**.

In science, **OPENNESS IS ESSENTIAL**.

Open science doesn't mean ignoring economic reality.

Of course **we need business models to be sustainable**. But that **doesn't mean we have to carry on doing things the way they have always been done**.

So, wherever you sit in the value chain, whether you're a researcher or an investor or a policy maker,
my message is clear:

let's invest in collaborative tools that let us progress...

Let's tear down the walls that keep learning sealed off.

And let's make science open.



I am convinced **that excellent science is the foundation of future prosperity,** and that **openness is the key to excellence.** [...] We need more open access to research results and the underlying data.

Let's dare to make Europe open to innovation, open to science and open to the world.



Vague but exciting ...

CERN DD/OC

Information Management: A Proposal

Tim Berners-Lee, CERN/DD

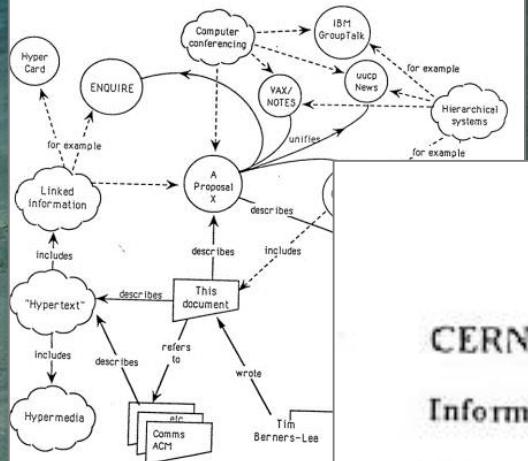
March 1989

Information Management: A Proposal

Abstract

This proposal concerns the management of general information about accelerators and experiments at CERN. It discusses the problems of loss of information about complex evolving systems and derives a solution based on a distributed hypertext system.

Keywords: Hypertext, Computer conferencing, Document retrieval, Information management, Project control



Open?

Vague but exciting ...

CERN DD/OC

Information Management: A Proposal

Tim Berners-Lee, CERN/DD

March 1989

Information Management: A Proposal

Abstract

This proposal concerns the management of general information about accelerators and experiments at CERN. It discusses the problems of loss of information about complex evolving systems and derives a solution based on a distributed hypertext system.

Keywords: Hypertext, Computer conferencing, Document retrieval, Project control

Riuscite a immaginare
il protocollo http chiuso?





Open?

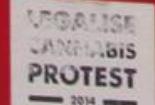
ORIGIN
1 atggagagaaa taaaggaaatt aagagatc
61 acaaagacca ctgtggacca tatggccs
121 aagaaccctg ctctcagaat gaaatggs
181 aagagaataa tagagatgt tcctgaa
241 acaaattatgat ctggatccgga cagggtgaa
301 aggaatgggc cgacgacaaag tacagttcat
361 aagggttggaa ggttaagacca tggaaacctc
421 atacgcggcc gagttgtatc aaatccgtc
481 gatgtcatca tggagggtcg tttcccaataa
541 tcacaattda caataacaaas agggaaagaaa
601 ttaatgggtt catacatgtt ggaaaggaa
661 gcaggcgaaa caagcagtgt gtacatttag
721 gaacagatgt acactccagg cggagaagta
781 attgctgcga gaaacattgt taggagacca
841 ctggagatgt gttacggac acaaattgtt
901 aatccaactt aggaacaacg tggatgtatc
961 tcatctttaa tggggatcc tttttttttt
1021 gaagaggaaag tgcttacagg caacccca
1081 gaggaaatca caatgggtgg gcagaggca
1141 ctgattcaatg tgatgttagt tggaaagaaac
1201 gcaatgggtt tctcacacgg ggattgcatt
1261 gtaaacagag caaacaaag attaaaccc
1321 gacgcaaaag tgcttattca gaattgggg
1381 atcggaaatat tacctgcacat gactcc
1441 agtaaaaatgg gtagatgtatc
1501 ttcttaaagggtt
1561 acccaggaa
1621 ggtcctgt
1681 aaaattcaat
1741 atggatgtgt
1801 gaaaactgg
1861 ggagaccgtg
1921 tggatgtt
1981 tqaaccgttc
2041 atggatgtgt
2101 gggaaatcaac
2161 gggagaccgt
2221 tggatgtt
2280 bp cRNA linear VRL 01-DEC-2006
DEFINITION Influenza A virus (A/Cygnus olor/Italy/742/2006(H5N1)) polymerase
basic protein 2 (PB2) gene, complete cds.
ACCESSION DQ533586
VERSION DQ533586.1 GI:95020630

... nel 2006 Ilaria Capua depositò la sequenza del virus H5N1 (influenza aviaria) in GenBank , sfidando l'OMS. ...l'OMS adottò poi il suo approccio trans-disciplinare per le strategie pre-epidemiche, che riguarda la salute di tutti

Access?

Thomson Reuters, Elsevier, Nature mettono a disposizione gratuitamente i dati e le pubblicazioni su contaminazione nucleare

www.veoverde.com



...che fino al 10 marzo erano chiuse dietro abbonamenti a riviste che nemmeno Harvard può più permettersi...



HARVARD UNIVERSITY

THE HARVARD LIBRARY

News

News Archive

- » Draft Harvard Library Mission Statement
- » Happy Holidays from the Harvard Library
- » Photos: Pop-In Innovative Spaces Showcases Project Exploring and Celebrating Library Spaces
- » Photo: Micro Surface Tables Tested in Three Libraries
- » Photo: Study Guide Design Envisioning the of the Future

Faculty Advisory Council Memorandum on Journal Pricing

Major Periodical Subscriptions Cannot Be Sustained

To: Faculty Members in all Schools, Faculties, and Units

ars technica

MAIN MENU · MY STORIES: 25 · FORUMS · SUBSCRIBE · JOBS

SCIENTIFIC METHOD / SCIENCE & EXPLORATION

Harvard Library: subscriptions too costly, faculty should go open access

The faculty members that advise Harvard's library have told their peers that...

by John Timmer · Apr 23 2012, 9:52pm ET

The problems with state funding may be hitting public schools hard, but even some parts of elite private institutions are feeling the sting of rising prices. That was the message sent by the Harvard Library's Faculty Advisory Council, which says the costs of subscriptions to major research journals "cannot be sustained." It says that the cost of these journals has gone up by 145 percent over the last six years and, if things continue at that pace, it'll be forced to cut back.

Harvard Memorandum, April 2012

Open Access

Open Access significa
accesso **aperto, immediato**
e libero da ogni restrizione

ai risultati e ai dati della ricerca scientifica

Open Access:
canale alternativo e complementare

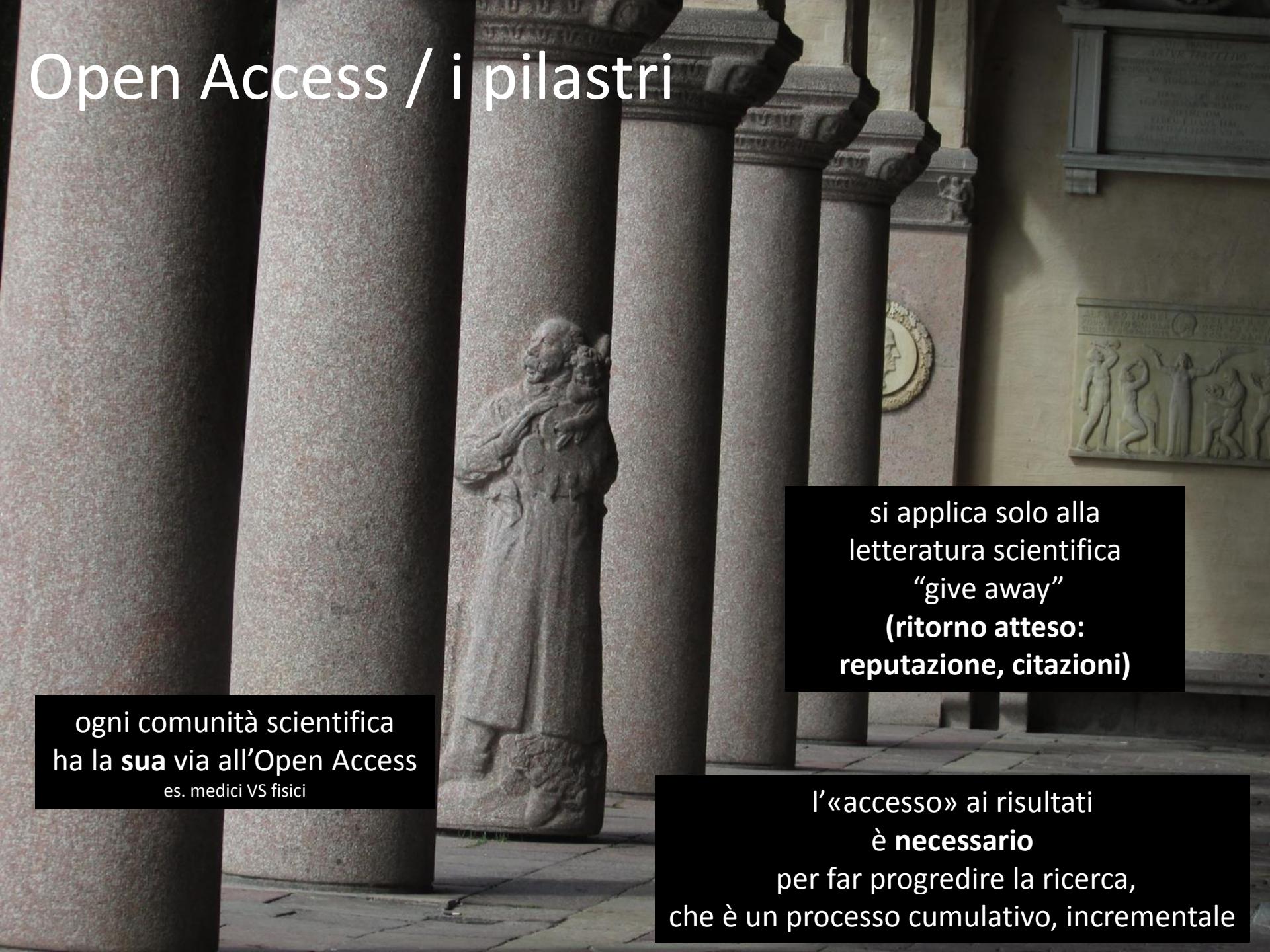


Open Access

Berlin Declaration

1. The author(s) and right holder(s) of such contributions grant(s) to all users a free, irrevocable, worldwide, right of access to, and a license to copy, use, distribute, transmit and display the work publicly and to make and distribute derivative works, in any digital medium for any responsible purpose, subject to proper attribution of authorship (community standards, will continue to provide the mechanism for enforcement of proper attribution and responsible use of the published work, as they do now), as well as the right to make small numbers of printed copies for their personal use.

Open Access / i pilastri



ogni comunità scientifica
ha la **sua** via all'Open Access
es. medici VS fisici

si applica solo alla
letteratura scientifica
“give away”
(ritorno atteso:
reputazione, citazioni)

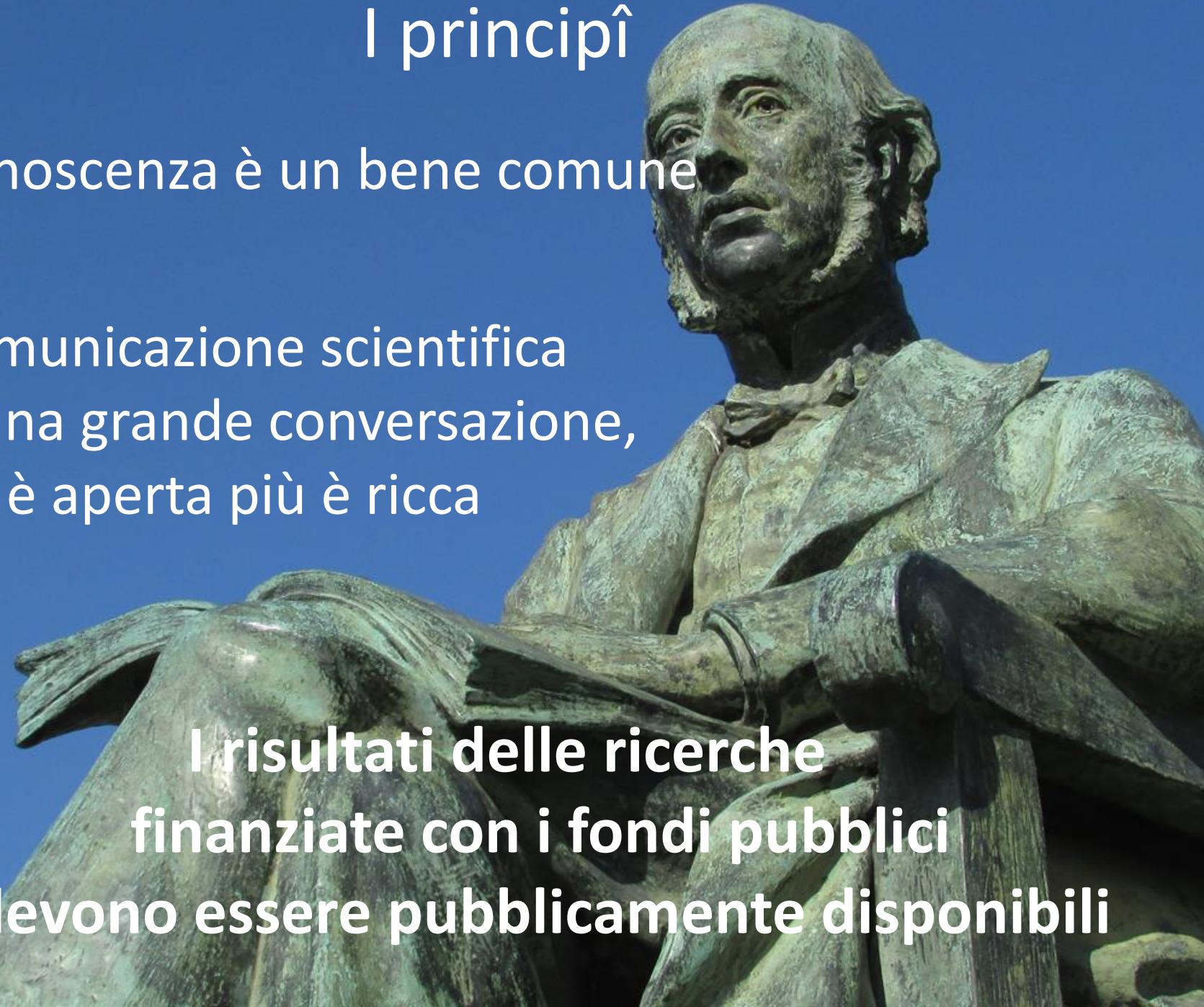
l'«accesso» ai risultati
è **necessario**
per far progredire la ricerca,
che è un processo cumulativo, incrementale

I principî

La conoscenza è un bene comune

La comunicazione scientifica
è una grande conversazione,
più è aperta più è ricca

I risultati delle ricerche
finanziate con i fondi pubblici
devono essere pubblicamente disponibili



Chi ha paura dell'Open Access?

Qui a peur de l'open access ?

Le Monde.fr | 15.03.2013 à 12h39 • Mis à jour le 15.03.2013 à 15h28



Un **savoir enfermé derrière des barrières** et accessible aux seuls happy few des universités les plus riches est un **savoir stérile**, et pour tout dire **confisqué** alors qu'il est produit grâce à des financements publics

Open Access: le politiche

U.S. Department of Health & Human Services

National Institutes of Health
NIH...Turning Discovery Into Health



Massachusetts Institute of Technology



European Organization for Nuclear Research



HARVARD
UNIVERSITY



European Research Council
Supporting top researchers
from anywhere in the world



Telethon.it il portale della Ricerca.



THE WORLD BANK
Working for a World Free of Poverty

The optimal circulation, access to
and transfer of scientific
knowledge
is one of the objectives for the
establishment of a genuine
European Research Area (ERA)

<http://www.pasteur4oa.eu/>



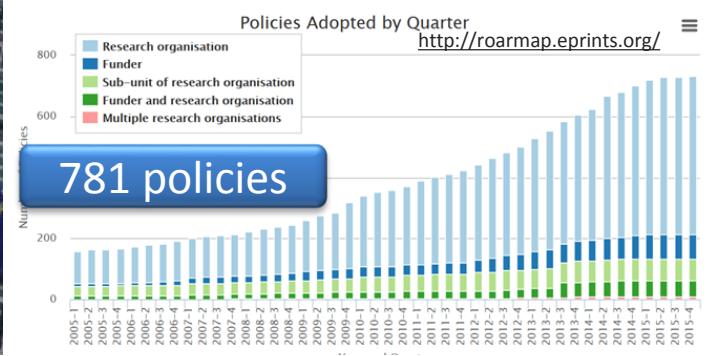
Home | The Project | News | Events | Key Nodes | Advocacy Resources | Final Conference

PASTEUR4OA/Welcome

Welcome to the PASTEUR4OA website!

PASTEUR4OA (Open Access Policy Alignment Strategies for European Union Research) aims to support the European Commission's Recommendation to Member States of July 2012 that they develop and implement policies to ensure Open Access to all outputs from publicly-funded research.

PASTEUR4OA will help develop and/or reinforce open access strategies and policies at the national level and facilitate their coordination among all Member States. It will build a network of centres of expertise in Member States that will develop a coordinated and collaborative programme of activities in support of policymaking at the national level under the direction of project partners.



«L'informazione scientifica ha il potere di migliorare la nostra esistenza ed è troppo importante per essere tenuta sotto chiave. Inoltre, ogni cittadino dell'UE ha diritto di accedere e trarre vantaggio dalla conoscenza prodotta utilizzando fondi pubblici»

Neelie Kroes
Vicepresidente (2010-2014) della Commissione Europea
e Commissaria responsabile per l'Agenda digitale

Horizon 2020: open by default



[Login](#) | [Create An ECAS Account](#) | [About](#) | [Contact](#) | [Legal notice](#)

 European Commission

HORIZON 2020

The EU Framework Programme for Research and Innovation

European Commission > Horizon 2020

Article 43

Exploitation and dissemination of results

With regard to the dissemination of results through scientific publications, **open access shall apply** under the terms and conditions laid down in the grant agreement. Costs relating to open access to scientific publications that result from research funded under Horizon 2020, incurred within the duration of an action, shall be eligible for reimbursement under the conditions of the grant agreement. With due regard to Article 18 of Regulation (EU) No 1291/2013, the grant agreement shall not stipulate conditions regarding which would result in addition to completion of an action.

Guidelines on FAIR Data Management in Horizon 2020

This document helps Horizon 2020 beneficiaries make their research data **findable, accessible, interoperable and reusable (FAIR)**, to ensure it is soundly managed. Good research data management is not a goal in itself, but rather the key conduit leading to knowledge discovery and innovation, and to subsequent data and knowledge integration and reuse.

ESTESO A TUTTI I PROGETTI
DAL 1 GENNAIO 2017
<http://goo.gl/0mv1hg>

With regard to the dissemination of research data, the grant agreement **may**, in the context of the open access to and the preservation of research data, lay down terms and conditions under which open access to such results shall be provided, in particular in ERC frontier research and FET (Future and Emerging Technologies) research or in other appropriate areas, **considering** the legitimate interests of the **any constraints** pertaining to data protection **files or intellectual property or work processes, through** **DATI SU CUI SI BASA** **L'ARTICOLO, NON inediti**

Version 3.0
26 July 2016

http://ec.europa.eu/research/participants/data/ref/h2020/legal_basis/rules_participation/h2020-rules-participation_en.pdf

... il rischio dei dati fragili

Scientists losing data at a rapid rate

Decline can mean 80% of data are unavailable after 20 years.

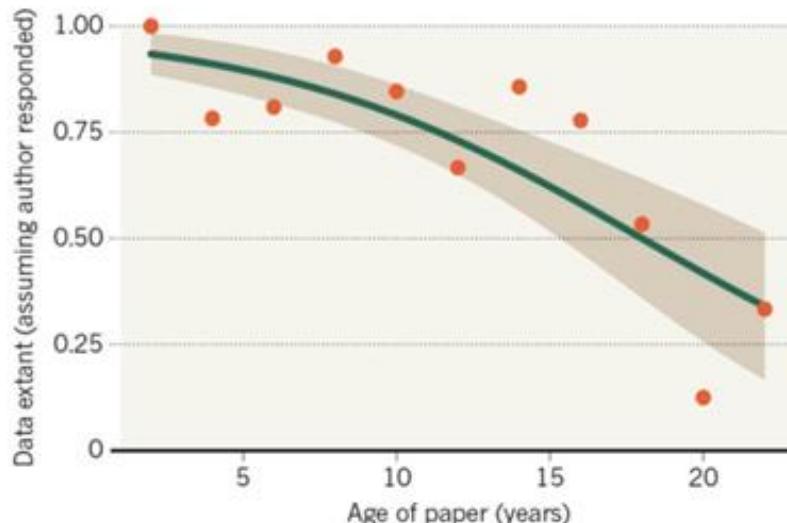
Elizabeth Gibney & Richard Van Noorden

19 December 2013

 Rights & Permissions

MISSING DATA

As research articles age, the odds of their raw data being extant drop dramatically.



<http://www.nature.com/news/scientists-losing-data-at-a-rapid-rate-1.14416>

CASH REWARD

for returning my lost backpack



- Black [AK] Burton Rucksack
- Lost on Friday 15. July at 8 pm in the Panton Arms pub 43, Panton St. Cambridge
- Containing a laptop (white MacBook), a black external hard drive and scientific research documents

The external hard drive is **VERY** important to me as it contains 5 years of research data which are crucial for my PhD thesis!!!
If you found it, I would be extremely grateful.

WHY YOU NEED A DATA MANAGEMENT PLAN
PMRblog, 2011

Open science: il futuro dell'Europa

Today's conference "Opening up to an ERA of Innovation" features a session devoted to open science.

What is open science about?

Open Science describes the on-going transitions in the way research is performed, researchers collaborate, knowledge is shared, and science is organised. It represents a systemic change in the modus operandi of science and research. It affects the whole research cycle and its stakeholders, enhances science by facilitating more transparency, openness, networking, collaboration, and refocusses science from a 'publish or perish' perspective to a knowledge-sharing perspective.

Open science is also about making sure that science serves innovation and growth. It guarantees open access to publicly-funded research results and the possibility of knowledge sharing by providing infrastructures. Facilitating access to those data will encourage re-use of research output. For example, companies, and particularly SMEs, can access and re-use data, infrastructures and tools easily and at a reasonable cost and can accelerate the implementation of ideas for innovative products and services.

Moedas – Oettinger, Opening up to an ERA of innovation, 22 giugno 2015



Uno sguardo all'Europa / 3

12. - AGREES to further promote the mainstreaming of open access to scientific publications by continuing to support a transition to immediate open access as the default by 2020, using the various models possible and in a cost-effective way, without embargoes or with as short as possible embargoes, and without financial and legal barriers, taking into account the diversity



Council of the European Union

In research systems and disciplines, and that open access to scientific publications should be a principle that no researcher should be prevented from

mission, Member States and relevant stakeholders, including to catalyse this transition; and STRESSES the importance of agreements.¶

Brussels, 27 May 2016 (OR. en)

9526/16

RECH 208
TELECOM 100

OUTCOME OF PROCEEDINGS

From: General Secretariat of the Council
To: Delegations
No. prev. doc.: 8791/16 RECH 133 TELECOM 74
Subject: The transition towards an Open Science system
- Council conclusions (adopted on 27/05/2016)



 European Council
Council of the European Union

The European Council The Council of the EU Topics Policies Meetings Documents & Publications

Home > Meetings > Competitiveness Council, 26-27/05/2016

Competitiveness Council, 26-27/05/2016

Indicative programme - Competitiveness Council of 26-27/05/2016
Background brief

Research and Innovation

Following a debate on **open science**, the Council adopted conclusions on the transition towards an open science system.

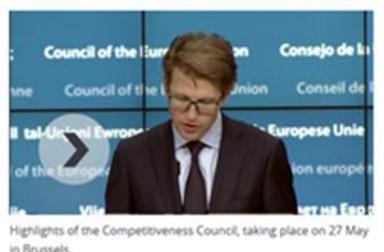
It also adopted conclusions on the lessons learnt from the 7th research framework programme and the future outlook and on the creation of a friendly regulatory environment for research and innovation.

“Open Science is a topic which is very dear to our hearts. During the Netherlands presidency, we have aimed at bringing Europe to the forefront of global change and at leading the transition to a new way of doing research and science based on openness, big data and cloud computing.”

Sander Dekker, State Secretary of Education, Culture and Science of the Netherlands

Chairing the Council, Sander Dekker, State Secretary of Education, Culture and Science of the Netherlands, made the following statement: “Open Science is a topic which is very dear to our hearts. During the Netherlands presidency, we have aimed at bringing Europe to the forefront of global change and at leading the transition to a new way of doing research and science based on openness, big data and cloud computing. Open Science breaks down the barriers around universities and ensures that society benefits as much as possible from all scientific insights. In that way we maximize the input of researchers, universities and knowledge institutions”.

Today, building on work done during recent months, particularly at the April conference when we approved the “Amsterdam Call for Action on Open Science”, I can say that we have made a major step forward”.



Highlights of the Competitiveness Council, taking place on 27 May in Brussels.

Open science: il futuro dell' Europa



http://ec.europa.eu/research/openscience/index.cfm?pg=open-science-policy-platform

RESEARCH & INNOVATION
Open Science

European Commission > Research & Innovation > Open Science > Open Science Policy Platform

Home Open Access European Open Science Cloud Open Science Policy Platform

European Open Science Policy Platform

Members of the OSPP

The Members of the Open Science Policy Platform (OSPP) have been nominated. Commissioner Moedas, during the 27 May Competitiveness Council, will announce the Members of the Platform and he will inform the Member States on the role of the Policy Platform in further developing a European Open Science Policy Agenda.

 [List of Nominated Members of the Open Science Policy Platform](#)  210 KB

A Vision for Europe

- Open Innovation
- Open Science

The mandate of the Open Science Policy Platform is to:

1. advise the Commission on how to further develop and practically implement open science policy, in line with the priority of Commissioner Moedas to radically improve the quality and impact of European science
2. function as a dynamic, stakeholder-driven mechanism for bringing up and addressing issues of concern for the European science and research community and its representative organisations, following five broad lines for actions which are presented in the [draft European Open Science Agenda](#)  124 KB
3. support policy formulation by helping to identify the issues to be addressed and providing recommendations on the policy actions required
4. support policy implementation, contributing to reviewing best practices, drawing policy guidelines and encouraging their active uptake by stakeholders
5. provide advice and recommendations on any cross-cutting issue affecting Open Science



European Open Science Cloud



The screenshot shows the European Open Science Cloud homepage. At the top, there is a navigation bar with links for 'A-Z index', 'Site map', 'About this site', and 'What's New'. Below this is the European Commission logo and the text 'RESEARCH & INNOVATION' and 'Open Science'. The main content area has a blue header with 'European Commission > Research & Innovation > Open Science > European Open Science Cloud'. Below this are three buttons: 'Home', 'Open Access', and 'European Open Science Cloud' (which is highlighted). The main title 'European Open Science Cloud' is in bold. Below it is a section for 'Latest news 19 April 2016 – European Open Science Cloud' with a link to the news article: <http://ec.europa.eu/research/openscience/index.cfm?pg=open-science-cloud>. The text of the news article is partially visible: 'Giving a major boost to Open Science in Europe, the Commission today presented its'.

European Open Science Cloud

A trusted, open environment for storing, sharing and re-using scientific data and results and supporting Open Science practices.

- **A virtual environment** for all European researchers to store, manage, analysis and re-use data.
- **Strongly stated needs:** cost-effective, user-driven, privacy and IPR-conscious.
- **Bringing together** existing and emerging data infrastructures.
- **Added value:** scale, data-driven science, inter-disciplinarity, data to knowledge to innovation.



I vantaggi / 1



...le idee circolano prima, circolano di più...

ACCELERAZIONE

NEL PROCESSO DI CREAZIONE DELLA CONOSCENZA

I vantaggi / 2



è tutto SUBITO VISIBILE
(ed è visibile su Google, ovvero dove tutti
vanno a cercare)

I vantaggi / 3

...maggiore visibilità: incremento di citazioni



Size of OA citation advantage when found (and where explicitly stated by discipline)	% increase in citations with Open Access
Physics/astronomy	170 to 580
Mathematics	35 to 91
Biology	-5 to 36
Electrical engineering	51
Computer science	157
Political science	86
Philosophy	45
Medicine	300 to 450
Communications studies [IT]	200
Agricultural sciences	200 to 600

<http://eprints.soton.ac.uk/id/eprint/268516>



Benefits : readership

Impact of open or restricted access on downloading on average per article



X 18,1

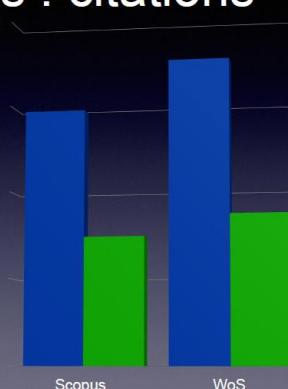
Benefits : citations

Impact of the presence or not in ORBi on citations (average per article)

in Scopus (n=351)

or in WoS (n=7673)

in 2011-2012



http://decennale.unime.it/wp-content/uploads/2014/11/Rentier_Messina_04112014.pdf

I vantaggi / 4



Disrupting the subscription journals' business model for the necessary large-scale transformation to open access

A Max Planck Digital Library Open Access Policy White Paper

Scenario of transformation based on current operating numbers per year

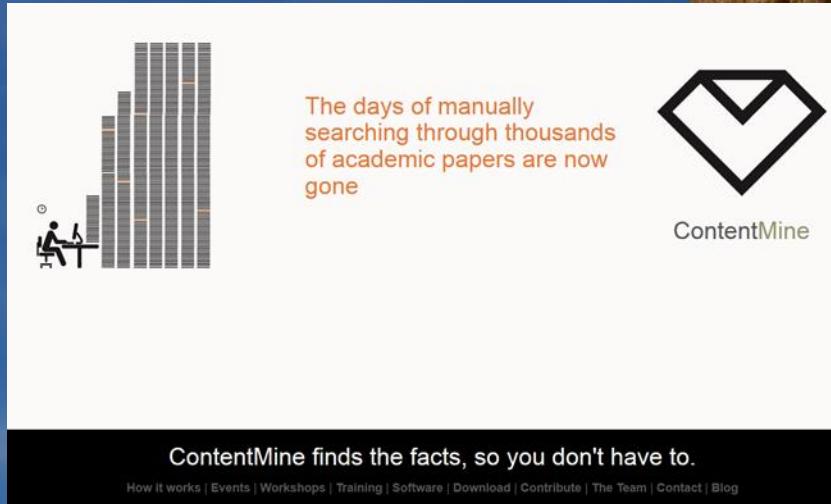
Global view



Schimmeier, R et al. (2015). [Disrupting the subscription journals' business model for the necessary large-scale transformation to open access](#).



I vantaggi / 5



The days of manually searching through thousands of academic papers are now gone

ContentMine

ContentMine finds the facts, so you don't have to.

How It works | Events | Workshops | Training | Software | Download | Contribute | The Team | Contact | Blog



Dibattito in corso a livello EU su diritti per text and data mining (LIBER)

McKinsey&Company

Client Services

Insights & Perspectives

About Us

Alumni

Careers

Global Locations

McKinsey Global Institute

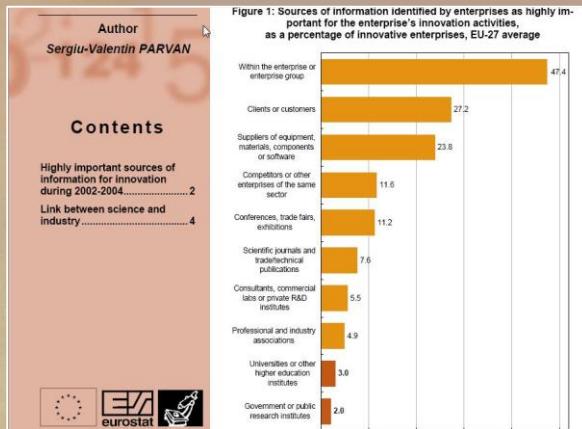
possibile utilizzo di text mining e data mining

Big data: The next frontier for innovation, competition, and productivity

percent. Harnessing big data in the public sector has enormous potential, too. If US healthcare were to use big data creatively and effectively to drive efficiency and quality, the sector could create more than \$300 billion in value every year. Two-thirds of that would be in the form of reducing US healthcare expenditure by about 8 percent. In the developed economies of



I vantaggi / 6



I vantaggi / 7

Open Access è
veicolo per la scienza
aperta



OKF Open Science Working Group

Home About Us Blog Community Projects Tools

Open science means many things, but primarily scientific knowledge that people are free to use, re-use and distribute without legal, technological or social restrictions.

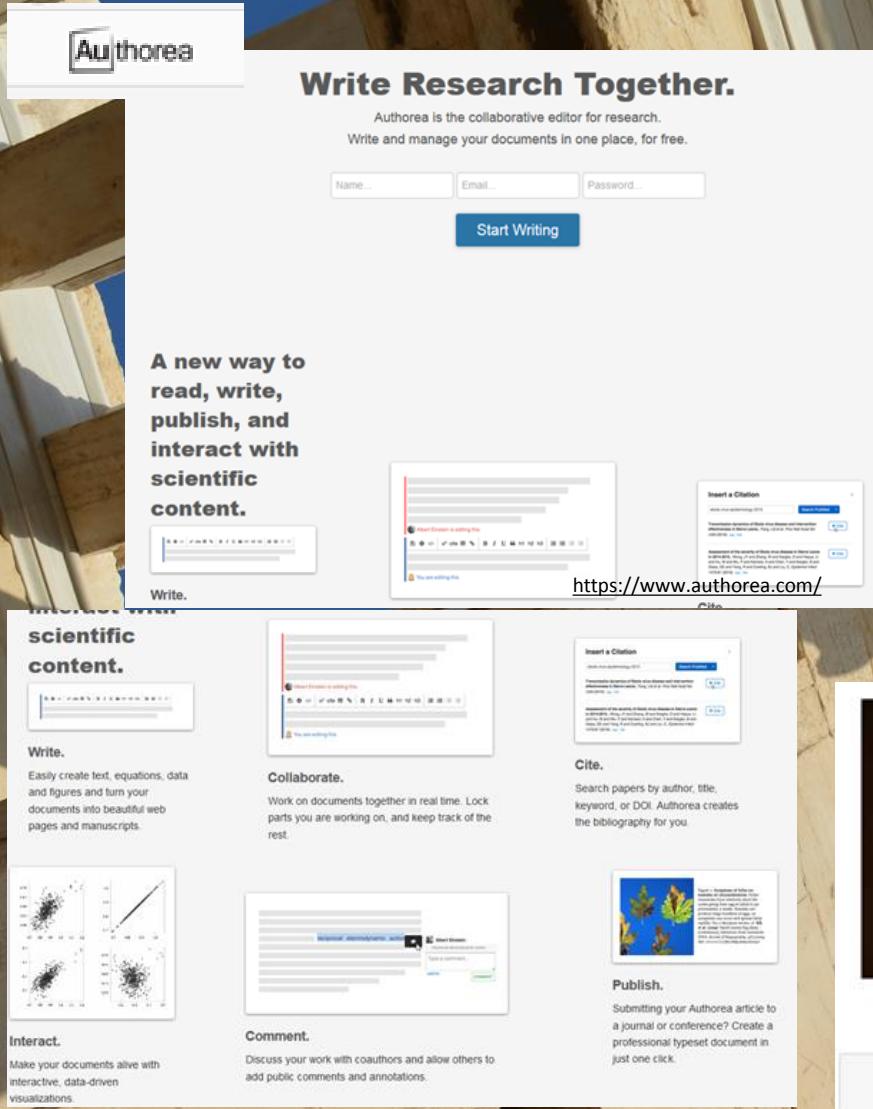
D@niel Mietchen @EvoMRI · 30 nov
Brief [#openscience](#) definition: Sharing research with the world as soon as you record it for yourself
youtube.com/watch?v=LwW1-X...
[#KEevent15](#)

[Video](#), 30 nov 2015

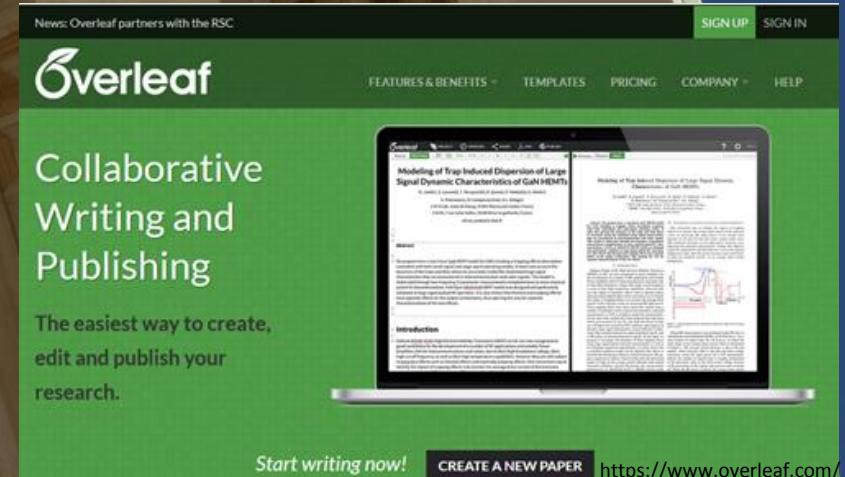
YouTube

Open Research

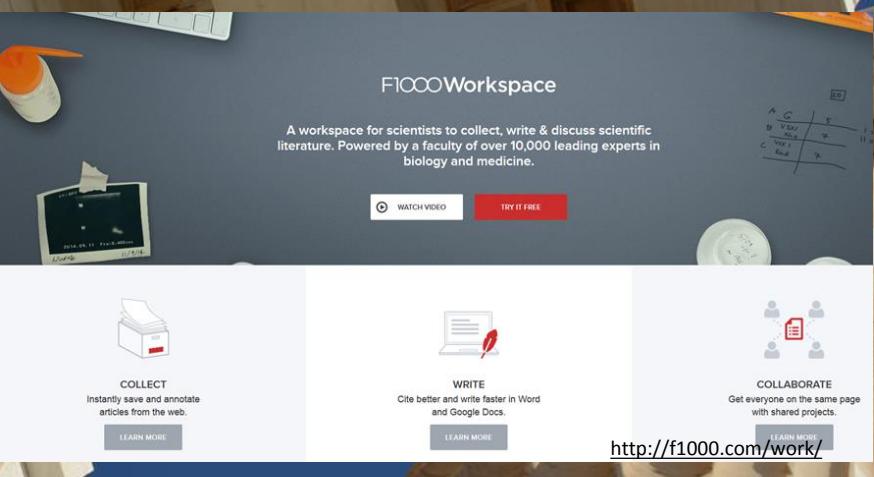
I vantaggi / 8



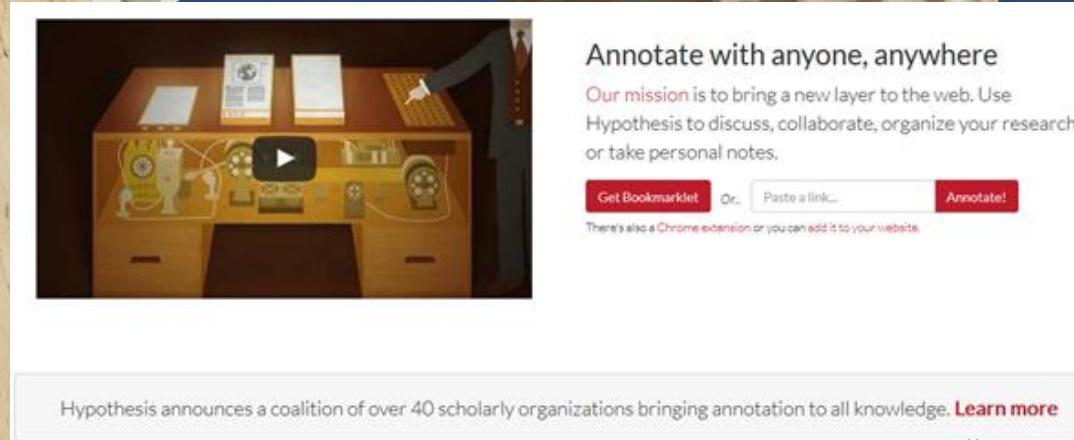
The image shows the homepage of Authorea, a collaborative editor for research. The header features the Authorea logo and a large call-to-action button: "Write Research Together." Below this, a sub-headline reads: "Authorea is the collaborative editor for research. Write and manage your documents in one place, for free." There are input fields for "Name...", "Email...", and "Password...", and a "Start Writing" button. The main content area is titled "A new way to read, write, publish, and interact with scientific content." It includes several screenshots of the platform's interface, such as "Write" (text editor), "Collaborate" (document lock interface), "Cite" (citation manager), "Publish" (document submission interface), "Comment" (comment section), and "Interact" (data visualization). A URL "https://www.authorea.com/" is visible at the bottom of the page.



The image shows the homepage of Overleaf, a collaborative writing and publishing platform. The header includes the Overleaf logo and links for "SIGN UP" and "SIGN IN". A news banner at the top left states: "News: Overleaf partners with the RSC". The main content area features the heading "Collaborative Writing and Publishing" and the sub-headline: "The easiest way to create, edit and publish your research." It includes a screenshot of a laptop displaying a LaTeX document with mathematical formulas and figures. A "Start writing now!" button and a "CREATE A NEW PAPER" button with the URL "https://www.overleaf.com/" are at the bottom.



The image shows the homepage of F1000Workspace, a workspace for scientists. The header features the F1000 logo and the text "F1000Workspace". Below this, a sub-headline reads: "A workspace for scientists to collect, write & discuss scientific literature. Powered by a faculty of over 10,000 leading experts in biology and medicine." It includes a "WATCH VIDEO" button and a "TRY IT FREE" button. The main content area is divided into three sections: "COLLECT" (instantly save and annotate articles from the web), "WRITE" (cite better and write faster in Word and Google Docs), and "COLLABORATE" (get everyone on the same page with shared projects). A URL "http://f1000.com/work/" is visible at the bottom.



The image shows the homepage of Hypothesis, a platform for annotation and discussion. The header features the Hypothesis logo and links for "SIGN UP" and "SIGN IN". A news banner at the top left states: "News: Hypothesis announces a coalition of over 40 scholarly organizations bringing annotation to all knowledge." The main content area features the heading "Annotate with anyone, anywhere" and the sub-headline: "Our mission is to bring a new layer to the web. Use Hypothesis to discuss, collaborate, organize your research or take personal notes." It includes a "Get Bookmarklet" button, a "Paste a link..." input field, and an "Annotate!" button. A video player in the center shows a person using a stylus to annotate a document on a desk. A URL "https://hypothes.is/" is visible at the bottom.

I vantaggi / 9

Nuove forme di valutazione?



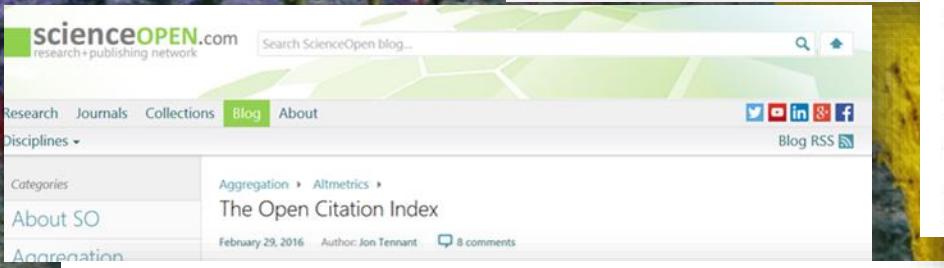
The screenshot shows the homepage of the journal 'nature'. The header includes the title 'nature' and the subtitle 'International weekly Journal of science'. Below the header are navigation links for 'Home', 'News & Comment', 'Research', 'Careers & Jobs', 'Current Issue', 'Archive', 'Volume 520', 'Issue 7548', 'Comment', and 'Article'. A sub-header 'NATURE | COMMENT' is present. A news article titled 'Bibliometrics: The Leiden Manifesto for metrics' by Diana Hicks, Paul Wouters, Ludo Waltman, Sarah de Rijcke & Ismael Peeters is displayed, dated 22 April 2015. The URL is <http://www.nature.com/news/bibliometrics-for-research-metrics-1.17351>.



The screenshot shows the 'San Francisco DORA' website. The header features the 'DORA' logo and the text 'Declaration on Research Assessment'. Below the header are links for 'DORA', 'Sign The Declaration', and 'Inspiration and Good Examples'. The main content area discusses the 'San Francisco Declaration on Research Assessment (DORA)', which aims to improve the way research is evaluated. It includes a call to action for researchers to sign the declaration. Two buttons are visible: 'Download the Declaration (PDF)' and 'Download the DORA Logo (PDF)'. The URL is <http://dora.scholarlypublishing.org/>.



The screenshot shows a briefing paper titled 'Better ways to evaluate research and researchers' by SPARC Europe. The title is in large bold letters, followed by 'A SPARC Europe BRIEFING PAPER'. Below the title is a quote: 'We may say, by the way, that success is a hideous thing. Its counterfeit of merit deceives people [...] Prosperity supposes capacity. Win in the lottery, and you are an able man.' attributed to '— Victor Hugo¹'. The URL is <http://sparceurope.org/wp-content/uploads/2015/12/Evaluate-SE-Briefing-paper-1215.pdf>.



The screenshot shows the homepage of 'scienceOPEN.com'. The header includes the logo 'scienceOPEN.com' and a search bar 'Search ScienceOpen blog...'. Below the header are links for 'Research', 'Journals', 'Collections', 'Blog' (which is highlighted in green), and 'About'. A dropdown menu for 'Disciplines' is shown. The main content area features a section titled 'The Open Citation Index' with a sub-section 'Aggregation > Altmetrics > The Open Citation Index'. It includes a date 'February 29, 2016', an author 'Jon Tennant', and '8 comments'. The URL is <http://blog.scienceopen.com/2016/02/the-open-citation-index/>.

But what is the Open Citation Index, and how is it calculated? The core of ScienceOpen is based on a huge number of open access articles drawn primarily from PubMed Central and arXiv. This forms about 2 million open records, and each one comes with its own reference list. What we've done using a clever metadata extraction engine is to take each of these citations and create an article stub for them. These stubs, or metadata records, are the core of our citation network. The number of citations derived from this network are displayed on each record, and each item that cites another can be openly accessed from within our archive.



So the citation counts are based exclusively on open access publications, and therefore provide a pan-publisher, article-level measure of 'open' your idea is. Based on the way the data are gathered, it also means that every record has had at least one citation, therefore we explicitly provide a level of publisher content filtering. It is pertinent to

Ideally, we would evaluate each work on its own merits, taking into account expert opinions, and ignoring numeric metrics. These after all are only proxies for the things we really care about: rigour, correctness, replicability, honesty.

In practice, this is simply not possible. For logistical reasons, metrics are going to be used whether they are good for the

Then the formula would be:

$$LWM = k_1 \cdot x_1^{e1} + k_2 \cdot x_2^{e2} + \dots + k_n \cdot x_n^{en}$$

Choosing the parameters for the Less Wrong Metric

How should the parameters for this general formula be chosen? One approach would be to start with subjective assessments of the scores of a body of researchers – perhaps derived from the faculty of a university confidentially assessing each other. Given a good-sized set of such assessments, together with the known values of the metrics x_1, x_2, \dots, x_n for each researcher, techniques such as simulated annealing can be used to derive the values of the parameters k_1, k_2, \dots, k_n and e_1, e_2, \dots, e_n that yield an LWM formula best matching the subjective assessments.

Where the results of such an exercise yield a formula whose results seem subjectively wrong, this might flag a need to add new metrics to the LWM formula: for example, a researcher might be more highly regarded than her LWM score indicates because of her fine record of supervising doctoral students who go on to do well, indicating that some measure of his/her quality should be included in the LWM calculation.

Human MicroRNA Targets

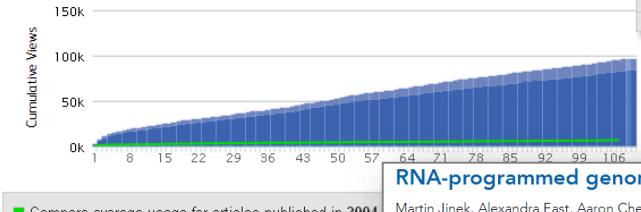
Bino John, Anton J Enright, Alexei Aravin, Thomas Tuschl, Chris Sander, Debora S Marks

Article	About the Authors	Metrics	Comments	Related Content

Viewed ?

Total Article Views	HTML Page Views	PDF Downloads	XML
96,844	PLOS 68,539	15,096	304
Oct 5, 2004 (publication date) through Nov 3, 2013*	PMC 6,776	6,129	n.a.
Totals	75,315	21,225	304

28.18% of article views led to PDF downloads



*Although we update our data on a daily basis, there may be a 48-hour delay before

PLoS Article Level Metrics

Source	Views in Oct 2013		Views through Oct 2013	
	PLOS	PMC	PLOS	PMC
HTML	549	0	68,518	6,776
PDF	80	0	15,095	6,129
XML	2	n.a.	304	n.a.
Total	631	0	83,917	12,901

Subject A

MicroRNA

Gene regulation

Gene targeting

Mammals

Protein translation

Expression

Region

Cell RNA

Score in context

Puts article in the top 5% of all articles ranked by attention

show more...

Mentioned by

- 27 tweeters
- 5 Facebook users
- 1 LinkedIn users
- 2 news outlets
- 11 science blogs
- 6 Google+ users
- 1 Redditors

Readers on

- 56 Mendeley
- 0 CiteULike

e-Life
Metrics +
Impact
Story

RNA-programmed genome editing in human cells

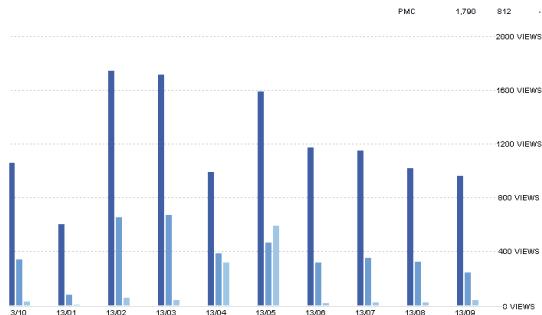
Martin Jinek, Alexandra East, Aaron Cheng, Steven Lin, Enbo Ma, Jennifer Doudna

Howard Hughes Medical Institute, University of California, Berkeley, United States; University of California, Berkeley, United States; Lawrence Berkeley National Laboratory, United States

DOI: <http://dx.doi.org/10.1371/journal.pone.00471>
Published: January 29, 2013
Cite as: eLife 2013;2:e00471

Total views: 19,677

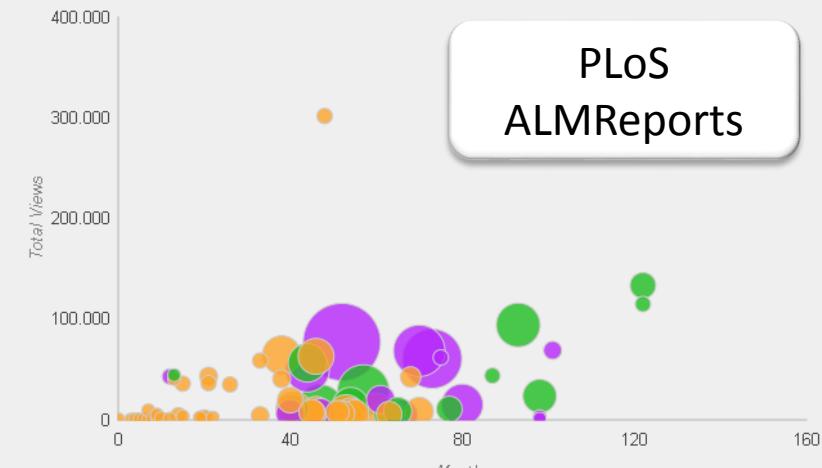
Since publication on 29 January 2013



Scholarly impact
via ImpactStory

<http://elife.elifesciences.org/>

1 Article Usage and Citations as a function of Age



Total usage includes page views and downloads from PLOS and PMC. Bubble size correlates with Scopus citations and bubble color with the PLOS journal.

<http://almreports.plos.org/>

A novel virus genome discovered in an extreme environment suggests recombination between unrelated groups of RNA and DNA viruses

Twitter Facebook LinkedIn News Blogs Google+ Reddit Score Demographics Help

So far Altmetric has seen 30 tweets from 27 accounts with an upper bound of 47,548 combined followers.



Eigen Victor
@selfishneuron
295 followers



Ken Yaw
Agyeman-Budu
@Kenzibit
654 followers

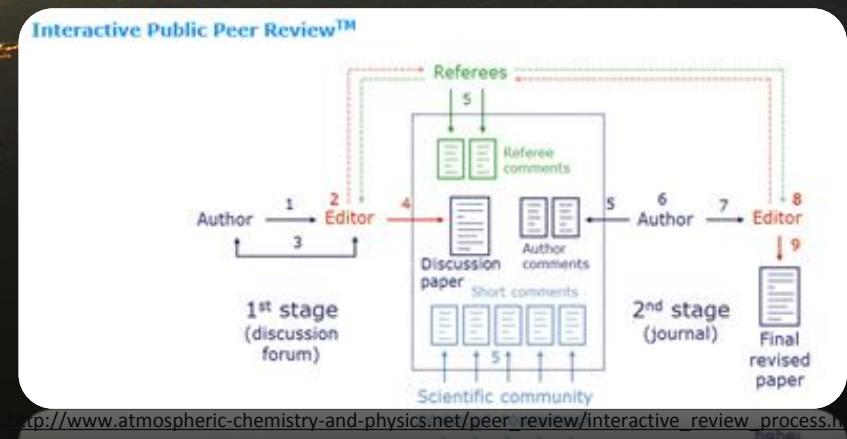
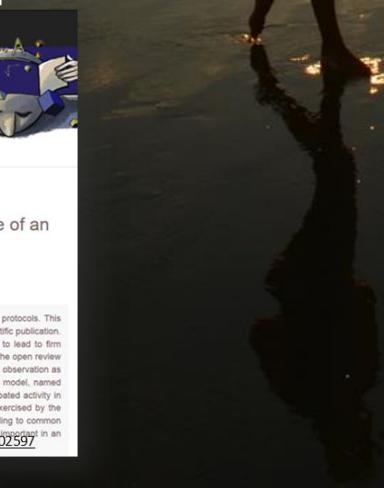
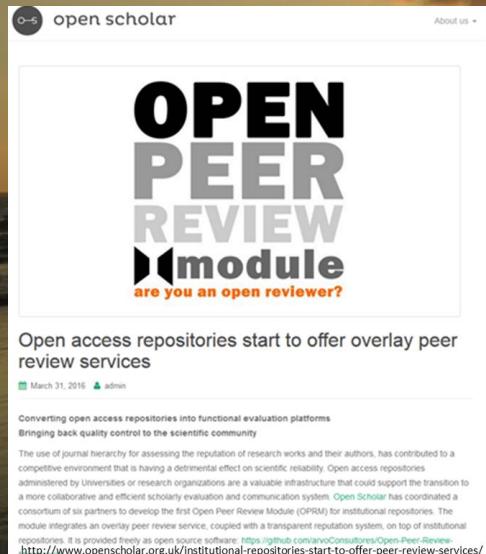


Ken Yaw
Agyeman-Budu
@Kenzibit
654 followers

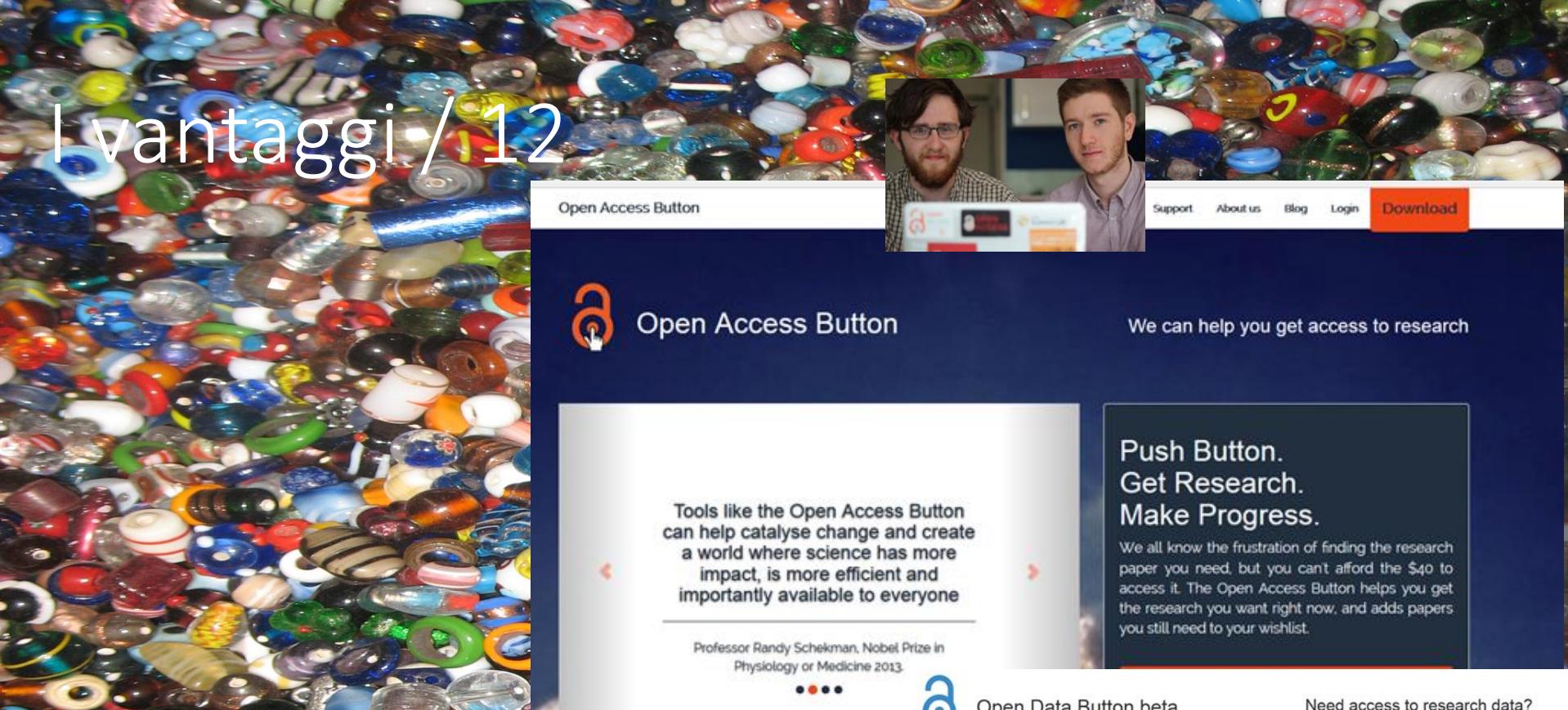
A novel virus genome discovered in an extreme environment suggests recombination between unrelated groups of RNA and DNA viruses

Jun-2012

I vantaggi /11



I vantaggi / 12



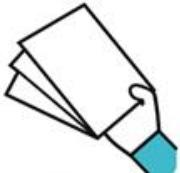
HOW THE BUTTON WORKS

Push Button.



The next time you're asked to pay to access academic research. Push the Open Access Button on your phone or on the web.

Get Research.



The Open Access Button will search the web for a version of the paper that you can access immediately. If that doesn't work, the Button will email the author and look for more information about the paper.

Make Progress.



If you get your research, you can make progress with your work. If you don't get your research, your story will be used to help change the publishing system so it doesn't happen again.

[Get your own button!](#)

[Get involved!](#)

[Check out our API docs.](#)

[Open Access Button](#)



[Support](#) [About us](#) [Blog](#) [Login](#) [Download](#)



Open Access Button

We can help you get access to research

Tools like the Open Access Button can help catalyse change and create a world where science has more impact, is more efficient and importantly available to everyone

Professor Randy Schekman, Nobel Prize in Physiology or Medicine 2013.

**Push Button.
Get Research.
Make Progress.**

We all know the frustration of finding the research paper you need, but you can't afford the \$40 to access it. The Open Access Button helps you get the research you want right now, and adds papers you still need to your wishlist.



Open Data Button beta

Need access to research data?

We can help.

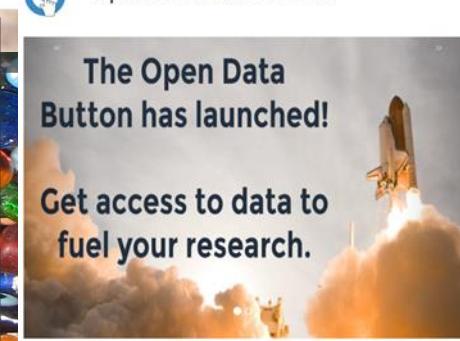
**Push Button.
Request Data.
Make Progress.**

Hidden data is hindering research. The Open Data Button allows you to request research data at the click of a button. When a researcher releases the requested data it can be seen, reused, and built upon for further innovation.

[Learn more about how it works](#)

The Open Data Button has launched!

Get access to data to fuel your research.



<https://opendatabutton.org/>

HOW THE BUTTON WORKS

Push Button.

Request Data.

Make Progress.



I vantaggi / 13

... trasparenza...

Principio generale di trasparenza

1. La trasparenza e' intesa come accessibilita' totale delle informazioni concernenti l'organizzazione e l'attivita' delle pubbliche amministrazioni, allo scopo di favorire forme diffuse di controllo sul perseguitamento delle funzioni istituzionali e sull'utilizzo delle risorse pubbliche.

2. La trasparenza, nel rispetto delle disposizioni in materia di segreto di Stato, di segreto d'ufficio, di segreto statistico e di protezione dei dati personali, concorre ad attuare il principio democratico e i principi costituzionali di egualianza, di imparzialita', buon andamento, responsabilita', efficacia ed efficienza nell'utilizzo di risorse pubbliche, integrita' e lealta' nel servizio alla nazione. Essa e' condizione di garanzia delle liberta' individuali e collettive, nonche' dei diritti civili,

D.Lgs. 14 marzo 2013, n. 33

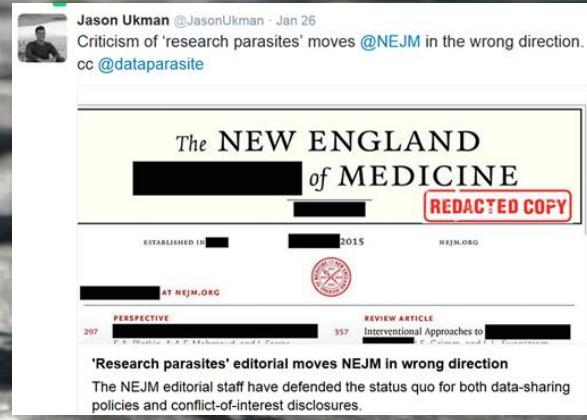
Open research data – I vantaggi / 1

...una scienza più solida...

- meglio basarsi sui **DATI** che sulla loro interpretazione
[data make up per pubblicare...]
- confrontare/dibattere con i propri dati
- creare nuova conoscenza aggiungendo i propri dati

Open research data - I vantaggi / 2

RIPRODUCIBILITÀ



Jason Ukman @JasonUkman · Jan 26
Criticism of 'research parasites' moves @NEJM in the wrong direction.
cc @dataparasite

The NEW ENGLAND of MEDICINE **REDACTED COPY**
ESTABLISHED IN 1812 2015 NEJM.ORG
AT NEJM.ORG

207 PERSPECTIVE 357 REVIEW ARTICLE Interventional Approaches to [REDACTED]
'Research parasites' editorial moves NEJM in wrong direction
The NEJM editorial staff have defended the status quo for both data-sharing policies and conflict-of-interest disclosures.



Science AAAS

Home News Journals Topics C

Science Science Advances Science Immunology Science Robotics

SHARE

EDITORIAL #IAmAResearchParasite

Marcia McNutt + Author Affiliations

Science 04 Mar 2016: Vol. 351, Issue 6277, pp. 1005 DOI: 10.1126/science.aaf4701



TOPICS AUTHORS GRAIN & CHAFF the WINNOWER SUBMIT ABOUT

Replication celebration: rewarding replication to improve reproducibility

Hannah Hobson¹

1. MRC Social, Genetic and Developmental Psychiatry Centre, Institute of Psychiatry, Psychology and Neuroscience, King's College London, 16 De Crespigny Park, London, SE5 8AF

<https://thewinnower.com/papers/4743-replication-celebration-rewarding-replication-to-improve-reproducibility>

Open research data - I vantaggi / 3

il valore del RIUSO...
costruire percorsi inediti
grazie ai dati aperti

«the coolest thing to do with your data will be thought of by someone else»

Open research data - I vantaggi / 4

Data creates a bridge between traditional disciplines, spawning discovery and innovation from the humanities to the hard sciences. Data dissolves barriers, opening up new channels of communication, lines of research, and commercial opportunities. Data will be the engine, the spark to create a better world for all.

World Economic Forum 2012, <http://goo.gl/ExaGW>



Open research data – I vantaggi / 5



...pubblicando anche i dati negativi si evitano duplicazioni inutili...

Le due vie / green e gold



Green road - deposito



L'autore deposita
in un archivio Open Access,
nel rispetto delle norme di copyright,
la sua **versione finale del lavoro**
[quasi mai il pdf con layout editoriale]
uscito su riviste/sedi editoriali tradizionali

Perché in un archivio Open Access (istituzionale o disciplinare)?

- assegna un ID univoco e persistente (handle), VS pagina personale
- è no-profit VS Research Gate e Academia.edu

A social networking site is not an open access repository

	Open access repositories	Academia.edu	ResearchGate
Supports export or harvesting	Yes	No	No
Long-term preservation	Yes	No	No
Business model	Nonprofit (usually)	Commercial. Sells job posting services, hopes to sell data	Commercial. Sells ads, job posting services
Sends you lots of emails (by default)	No	Yes	Yes
Wants your address book	No	Yes	Yes
Fulfills			

Due specie diverse



Rezensionsüberblicke Disziplinen Grundwissenschaften Mittelalterliche Autoren Variablen

CUM IRA ET STUDIO / DIGITAL HUMANITIES / SUMMA SUMMARUM
<http://mittelalter.hypotheses.org/7123>

Upon Leaving Academia.edu

BY G. GELTNER • 07/12/2015

Early last week I uploaded to my Academia.edu homepage a brief note signaling and explaining my decision to close my account on that site. As a medieval historian, I had been an active and enthusiastic member since 2010, with moderately high exposure, and while "On leaving Academia.edu" was meant as a provocative goodbye, I hadn't expected Above all, however, comments exposed the complacency of users regarding the portal's financial horizons, its plans to monetize, and the political implications thereof, be it for professional academics or the freedom of scholarship in general. The latter—more than any specific feature of the site—was the root cause of my decision to close my account. It is a position I have been invited to explain in the current blog post, using the example of Academia.edu and last week's discussions. In many ways, however, it illuminates the challenges academia and the free exchange of ideas is facing, especially if scholars remain uncritical users of new digital technologies.

extension underwrite independent research). It is time to stop being naïve, and do something for the freedom of scholarship. Open access to scholarship should be a human right, not a business model.

Green road - deposito

il 70% degli editori internazionali lo consente
(Elsevier, Wiley, Springer...), elenco:



...ovviamente, con limiti:
- quasi mai pdf editoriale, spesso «**postprint**»
- possibile **embargo**
[=mesi in cui articolo pur depositato non è visibile]

Author's Pre-print:  author **can** archive pre-print (ie pre-refereeing)

Author's Post-print:  **subject to Restrictions below**, author **can** archive post-print (ie final draft post-refereeing)

Restrictions:

- 12 months embargo

Publisher's Version/PDF:  author **cannot** archive publisher's version/PDF

General Conditions:

- Some journals have separate policies, please check with each journal directly
- On author's personal website, institutional repositories, arXiv, AgEcon, PhilPapers, PubMed Central, RePEc or Social
- Author's pre-print may not be updated with Publisher's Version/PDF
- Author's pre-print must acknowledge acceptance for publication
- Non-Commercial
- Publisher's version/PDF cannot be used
- Publisher source must be acknowledged with citation
- Must link to publisher version with set statement (see policy)
- If OnlineOpen is available, BBSRC, EPSRC, MRC, NERC and STFC authors, may self-archive after 12 months
- If OnlineOpen is available, AHRC and ESRC authors, may self-archive after 24 months

Attenzione...

l'editore ha voce in capitolo
SOLO SE avete firmato CONTRATTO
con CESSIONE DI TUTTI I DIRITTI

Arsenate toxicity on the apices of *Pisum sativum* L. seedling roots: Effects on mitotic activity, chromatin integrity and microtubules

Stefania Dho, Wanda Camusso, Marco Mucciarelli, Anna Fusconi



UNIVERSITÀ DEGLI STUDI DI TORINO

Abstract

Arsenic (As) is one of the most toxic elements for plant growth. Despite the growing literature data on As effects on plant development, alterations induced by this element on meristem activity have not been explored to any great extent. In the present study, short-term experiments with *Pisum sativum* L. seedlings were conducted to assess whether plant growth impairment was due to DNA/chromosome or mitotic microtubule damages. Root growth was studied by evaluating apical meristem activity and cell elongation. Mitotic aberrations, DNA fragmentation and microtubule organization of the apical cells were also analyzed. The results have shown that arsenate, at the lowest concentration (0.25 μ M), slightly increases root growth and some related parameters, whilst the other concentrations have a dose-dependent negative effect on root growth, on the mitotic and labelling index (after bromo-deoxyuridine administration), and on the mitotic arrays of microtubule (through immunofluorescence). The main effects on mitosis occurred for 25 μ M As. The percentage of metaphases increased, as did the irregular metaphases and c-mitoses. This was related to alterations in the mitotic spindles, which closely resemble those induced by colchicine. Chromosome breaks and ana/telophase bridges were virtually absent, whilst DNA fragmentation only increased from 25 μ M arsenate onwards. These data point to a poor clastogenic activity of As and implicate that microtubules are one of the main targets of As.

Keywords

Pea; Arsenic; Apical meristems; Aberrations; Immunofluorescence; TUNEL test

1. Introduction

Arsenic (As) is a toxic element, frequently found in soils and water. A main natural source of As is the erosion of mother rock, even though a consistent part of As environmental pollution comes from human activities (Meharg and Hartley-Whitaker, 2002 and Patra et al., 2004). The As in unpolluted fresh water is usually in the range 1–10 μ g/l. According to EPA and WHO, the maximum permissible As concentration in drinking water is 50 μ g/l (Mandal and Suzuki, 2002).

Arsenic is a well-established human carcinogen (Qin et al., 2008a) and has been shown to be genotoxic in a variety of *in vitro* studies (Hughes, 2002). In plants, it severely affects growth and development, and its toxicity is strongly dependent on the concentration, exposure time and physiological state of the plant (Singh et al., 2007). However, plants vary in their sensitivity to As, and a wide range of species have been identified in As-contaminated soils (Meharg and Hartley-Whitaker, 2002). Besides, hyperaccumulators such as *Pteris vittata*, which tolerate high internal As content, may also use this As to defend themselves against herbivore attack (Mathews et al., 2009).

Higher plants take up As mainly as arsenate (V), the dominant form of phytoavailable As in aerobic soils. According to Meharg and Hartley-Whitaker (2002), As competes with phosphate for plant phosphate transporters. Upon absorption, most arsenate is rapidly reduced to arsenite (III), due to an arsenate reductase activity (Xu et al., 2007), hence, the arsenate cytoplasmic concentration is generally not high enough to exert toxicity (Meharg and Hartley-Whitaker, 2002). Both As species interfere with various metabolic pathways: arsenate, as an analogous chemical to phosphate, may replace phosphate in the ATP and in various

Contents lists available at ScienceDirect

Environmental and Experimental Botany

journal homepage: www.elsevier.com/locate/envexpbot



ELSEVIER

Environmental and Experimental Botany

journal homepage: www.elsevier.com/locate/envexpbot

Arsenate toxicity on the apices of *Pisum sativum* L. seedling roots: Effects on mitotic activity, chromatin integrity and microtubules

Stefania Dho^a, Wanda Camusso^a, Marco Mucciarelli^b, Anna Fusconi^{a,*}

^a Dipartimento di Biologia Vegetale, CEBIOVEM, Viale Mattioli 25, I-10125 Torino, Italy

^b Dipartimento di Morfofisiologia Veterinaria, Via Leonardo da Vinci 44, I-10095 Grugliasco (To), Italy

ARTICLE INFO

Article history:

Received 20 July 2009

Received in revised form 9 February 2010

Accepted 14 February 2010

Keywords:

Pea

Arsenic

Apical meristems

Aberrations

Immunofluorescence

TUNEL test

ABSTRACT

Arsenic (As) is one of the most toxic pollutants in the environment, where it severely affects both animal and plant growth. Despite the growing literature data on As effects on plant development, alterations induced by this element on meristem activity of the root have not been explored to any great extent. In the present study, short-term experiments with arsenate have been conducted on *Pisum sativum* L. seedlings to assess whether plant growth impairment is due to DNA/chromosome or mitotic microtubule damages. Root growth was studied by evaluating apical meristem activity and cell elongation. Mitotic aberrations, DNA fragmentation and microtubule organization of the apical cells were also analyzed. The results have shown that arsenate, at the lowest concentration (0.25 μ M), slightly increases root growth and some related parameters, whilst the other concentrations have a dose-dependent negative effect on root growth, on the mitotic and labelling index (after bromo-deoxyuridine administration), and on the mitotic arrays of microtubule (through immunofluorescence). The main effects on mitosis occurred for 25 μ M As. The percentage of metaphases increased, as did the irregular metaphases and c-mitoses. This was related to alterations in the mitotic spindles, which closely resemble those induced by colchicine. Chromosome breaks and ana/telophase bridges were virtually absent, whilst DNA fragmentation only increased from 25 μ M arsenate onwards. These data point to a poor clastogenic activity of As and implicate that microtubules are one of the main targets of As.

© 2010 Elsevier B.V. All rights reserved.

1. Introduction

Arsenic (As) is a toxic element, frequently found in soils and water. A main natural source of As is the erosion of mother rock, even though a consistent part of As environmental pollution comes from human activities (Meharg and Hartley-Whitaker, 2002 and Patra et al., 2004). The As in unpolluted fresh water is usually in the range 1–10 μ g/l. According to EPA and WHO, the maximum permissible As concentration in drinking water is 50 μ g/l (Mandal and Suzuki, 2002).

Arsenic is a well-established human carcinogen (Qin et al., 2008a) and has been shown to be genotoxic in a variety of *in vitro* studies (Hughes, 2002). In plants, it severely affects growth and development, and its toxicity is strongly dependent on the concentration, exposure time and physiological state of the plant (Singh et al., 2007). However, plants vary in their sensitivity to As, and a wide range of species have been identified in As-contaminated soils (Meharg and Hartley-Whitaker, 2002). Besides, hyperaccumulators such as *Pteris vittata*, which tolerate high internal As content, may also use this As to defend themselves against herbivore attack (Mathews et al., 2009).

Higher plants take up As mainly as arsenate (V), the dominant form of phytoavailable As in aerobic soils. According to Meharg and Hartley-Whitaker (2002), As competes with phosphate for plant phosphate transporters. Upon absorption, most arsenate is rapidly reduced to arsenite (III), due to an arsenate reductase activity (Xu et al., 2007), hence, the arsenate cytoplasmic concentration is generally not high enough to exert toxicity (Meharg and Hartley-Whitaker, 2002). Both As species interfere with various metabolic pathways: arsenate, as an analogous chemical to phosphate, may replace phosphate in the ATP and in various

may also use this As to defend themselves against herbivore attack (Mathews et al., 2009).

Higher plants take up As mainly as arsenite (V), the dominant form of phytoavailable As in aerobic soils. According to Meharg and Hartley-Whitaker (2002), As competes with phosphate for plant phosphate transporters. Upon absorption, most arsenate is rapidly reduced to arsenite (III), due to an arsenate reductase activity (Xu et al., 2007), hence, the arsenate cytoplasmic concentration is generally not high enough to exert toxicity (Meharg and Hartley-Whitaker, 2002). Both As species interfere with various metabolic pathways: arsenate, as an analogous chemical to phosphate, may replace phosphate in the ATP and in various phosphorylation reactions, leading to the disruption of the energy flow in cells. The toxicity of arsenite is mainly ascribed to its reaction with sulphhydryl groups of proteins that interfere with their functions (Meharg and Hartley-Whitaker, 2002; Patra et al., 2004).

Exposure to high concentrations of As induces the production of reactive oxygen species (ROS) (Singh et al., 2007; Wang et al., 2007; Lin et al., 2008; Shri et al., 2009) and the conversion of arsenite to arsenite is regarded as one of the causes of ROS generation (Wang et al., 2007). Oxidative stress induced by As can damage cells, mainly through lipid peroxidation of membranes (Singh et al., 2007) and DNA fragmentation, as has been demonstrated in leaves and roots

* Corresponding author. Tel.: +39 011 6705968; fax: +39 011 6705962.
E-mail address: anna.fusconi@unito.it (A. Fusconi).

L'AUTORE NON CAMBIA LE SUE ABITUDINI EDITORIALI

- CONTINUA A PUBBLICARE SULLE MIGLIORI RIVISTE DEL SETTORE
(per motivi di valutazione o di carriera accademica)
- poi rende disponibile nell'archivio
istituzionale il suo lavoro NELLA VERSIONE
CONSENTITA DALL'EDITORE (post-print, raro pdf)



Gold road

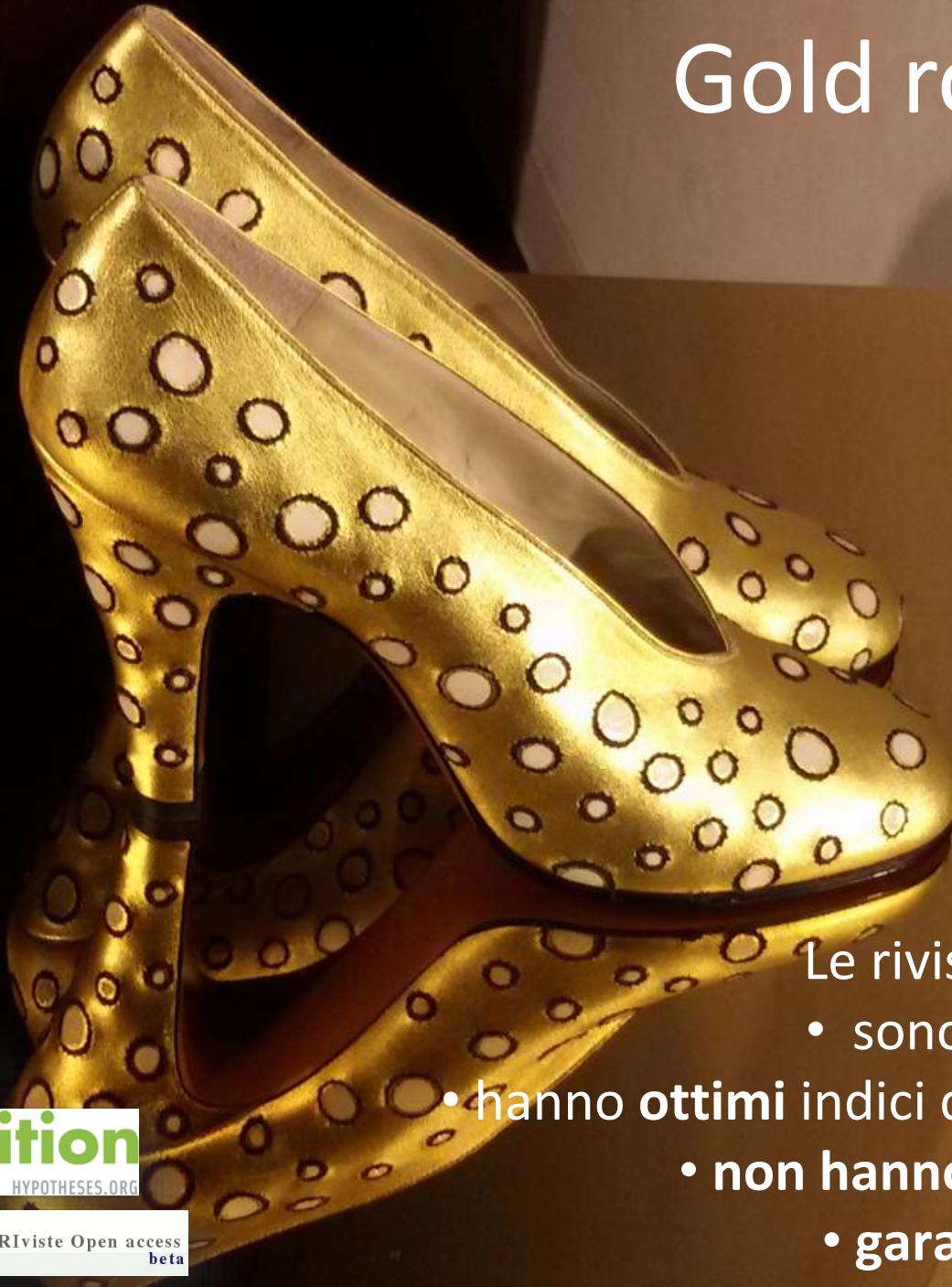
Pubblicazione in Open Access

- si cambia sede editoriale
- si sceglie una delle oltre 9.000 riviste Open Access (elenco in DOAJ, Directory of Open Access Journals)
- nel 23% dei casi si paga una Article Processing Fee, che varia da 500 a 2900 \$ per articolo (è la logica del francobollo...)
- anche gli editori tradizionali fanno pagare figure, pagine...



<https://doaj.org/>

Gold road



SIRIO @unito.it
SIstema RIviste Open access
beta

Le riviste Open Access:

- sono **peer reviewed**,
- hanno **ottimi** indici di **Impact Factor**,
- non hanno abbonamento,
- garantiscono il riuso

Attenzione ai borseggiatori...



Scholarly Open Access
Critical analysis of scholarly open-access publishing

Home About the Author Disclaimer **LIST OF PUBLISHERS** **LIST OF STANDALONE J**
Other pages <http://scholarlyoa.com/publishers/>

LIST OF PUBLISHERS

Beall's List:

Potential, possible open-access publishers

This is a list of questionable journals that recommend that scholars submit article descriptions provided want to submit article criteria for determining

We hope that tenure committees how important journals in the context of the geocultural locus. We change in their business up-to-date to the best unreported, or unknown

Be
Bet
Moni
At
If you come These disse These proce fly-b
o The 5th Publisher
o ABC Journals
o M&P Journals

College & Research Libraries
news
Association of College & Research Libraries
HOME CURRENT ISSUE PAST ISSUES ALERTS SUBSCRIBE HELP

March, 2015

Cites & Insights
Crawford at Large
Libraries • Policy • Technology • Media
Volume 14, Number 4: April 2014 ISSN 1534-0937
Walt Crawford

Intersections
Ethics and Access 1:
The Sad Case of Jeffrey Beall

Open access (OA) is all about ethics, economics and equity, and the three interact in various ways. OA is inherently at the intersection of libraries, media, policy and technology—but that's a different issue.

This is the first of a trio of essays: two related to fairly specific situations, one covering a range of ethical discussions. Depending on how you define either “ethics” or “access,” the situation is either

citesandinsights.info/civ14/4.pdf



! THINK **✓ CHECK** **> SUBMIT**

Choose the right journal for your research

Home Think Check Submit About FAQ

Sharing research results with the world is key to the progress of your discipline and career. But with so many publications, how can you be sure you can trust a particular journal? Follow this check list to make sure you choose trusted journals for your research.

! THINK

Are you submitting your research to a trusted journal?
Is it the right journal for your work?

✓ CHECK

Use our check list to assess the journal

> SUBMIT

Only if you can answer 'yes' to the questions on our check list
<http://thinkchecksubmit.org/>

La «red road»

la Gold road **non è** la «Open Choice»
degli editori tradizionali
(Elsevier, Springer, Wiley...)

pagando 3000 \$,
UN SINGOLO articolo viene reso Open Access,
mentre la rivista resta IN ABBONAMENTO

di fatto, paghiamo due volte...

serve solo se l'ente finanziatore
stabilisce embargo massimo inferiore a
quello stabilito dall'editore
(es. Horizon 2020, che però rimborsa)

[DA EVITARE SE POSSIBILE, perché auto-
archiviando ottengo stesso effetto, gratis!!!]

Cosa non è l'Open Access / 1



NON è in contrasto con il diritto d'autore

- negli archivi, solo materiale che non viola il copyright
- consigliate le Licenze Creative Commons

Cosa non è l'Open Access / 2.1

NON è un canale di serie B - archivi



- negli archivi, lavori già pubblicati altrove (e referati altrove)
- che interesse ho a far vedere al mondo un lavoro mediocre, o copiato, o scientificamente non solido??????

Cosa non è l'Open Access / 2.2

NON è un canale di serie B - riviste

9

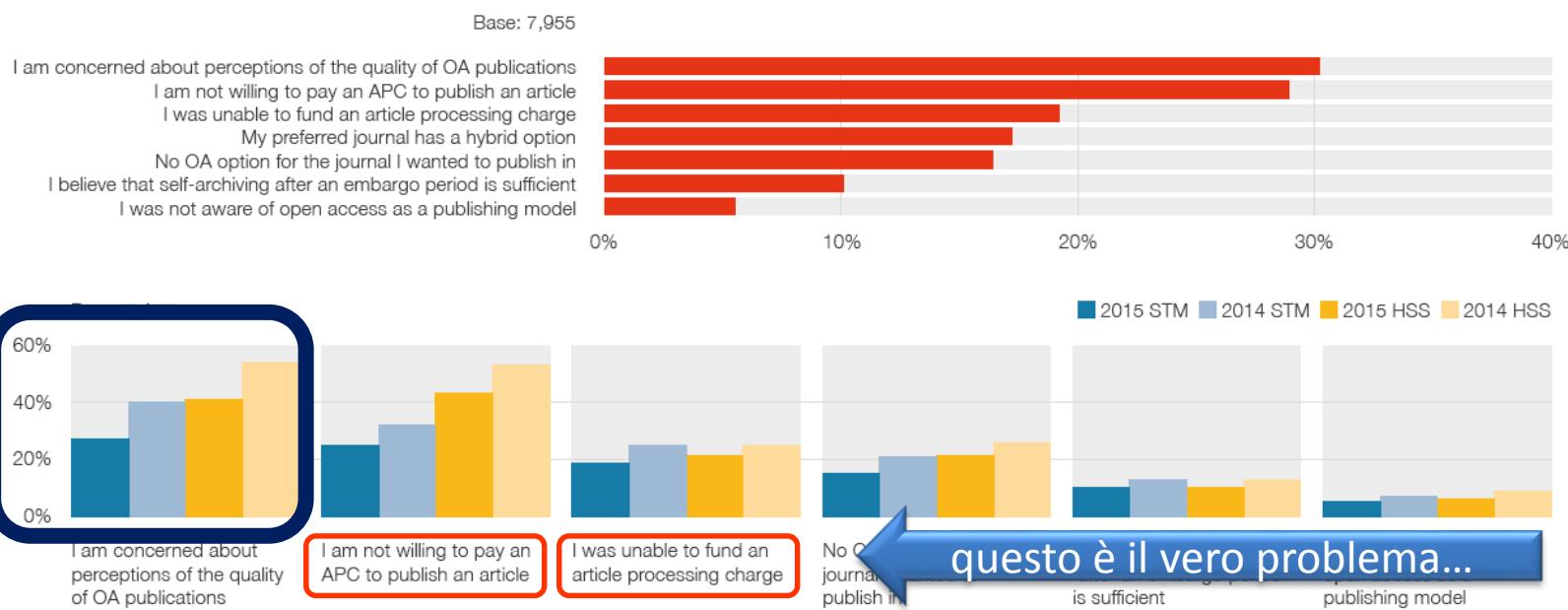
Reasons for not publishing OA?

Nature Pub. Group, 2015 Authors' insights survey

"Which of the following are reasons why you haven't published any of your articles via an immediate open access model in the past three years?" (select all that apply)

Anche per le riviste, la qualità è in crescita

The most common reason given for not publishing Open Access is a concern about perceptions of quality, but the proportion of authors with this opinion seems to be in decline.



Cosa non è l'Open Access / 3

NON è un veicolo di plagio, anzi,
deposito garantisce data certa.
E “attribuzione” è unico requisito

**ON OUR WAY TO
MUNCH'S
SCREAM HILL!**

**GUIDED
WALK FROM
MUNCH TO
RAMOVIC**



Open Access

Berlin Declaration

for any responsible purpose, subject to proper attribution of authorship

Nature Publishing Group, 15 agosto 2015

Cosa non è l'Open Access/ 4

NON è in contrasto con la peer review,
che anzi è spesso condotta in modo
più trasparente



Legge italiana sull'Open Access

Legge
112/2013

«2. I soggetti pubblici preposti all'erogazione o alla gestione dei finanziamenti della ricerca scientifica adottano, nella loro autonomia, le misure necessarie per la promozione dell'accesso aperto ai risultati della ricerca finanziata per una quota pari o superiore al 50 per cento con fondi pubblici, quando documentati in articoli pubblicati su periodici a carattere scientifico che abbiano almeno due uscite annue. I predetti articoli devono includere una scheda di progetto in cui siano menzionati tutti i soggetti che hanno concorso alla realizzazione degli stessi. L'accesso aperto si realizza:

a) tramite la pubblicazione da parte dell'editore, al momento della prima pubblicazione, in modo tale che l'articolo sia accessibile a titolo gratuito dal luogo e nel momento scelti individualmente;

b) tramite la ripubblicazione senza fini di lucro in archivi elettronici istituzionali o disciplinari, secondo le stesse modalita', entro diciotto mesi dalla prima pubblicazione per le pubblicazioni delle aree disciplinari scientifico-tecnico-mediche e ventiquattro mesi per le aree disciplinari umanistiche e delle scienze sociali.



Guidelines on Open Access to Scientific Publications and Research Data in Horizon 2020

<https://www.openaire.eu/>

PARTICIPATE SEARCH MONITOR

OpenAIRE

Get funding for your FP7 Post

OpenAIRE survey on
attitudes to Open Peer
Review



RESEARCHERS

Why Open Access. How to comply. What
services to use.

DATA PROVIDERS

How to make your content more visible. What
to do to increase quality. How to join.

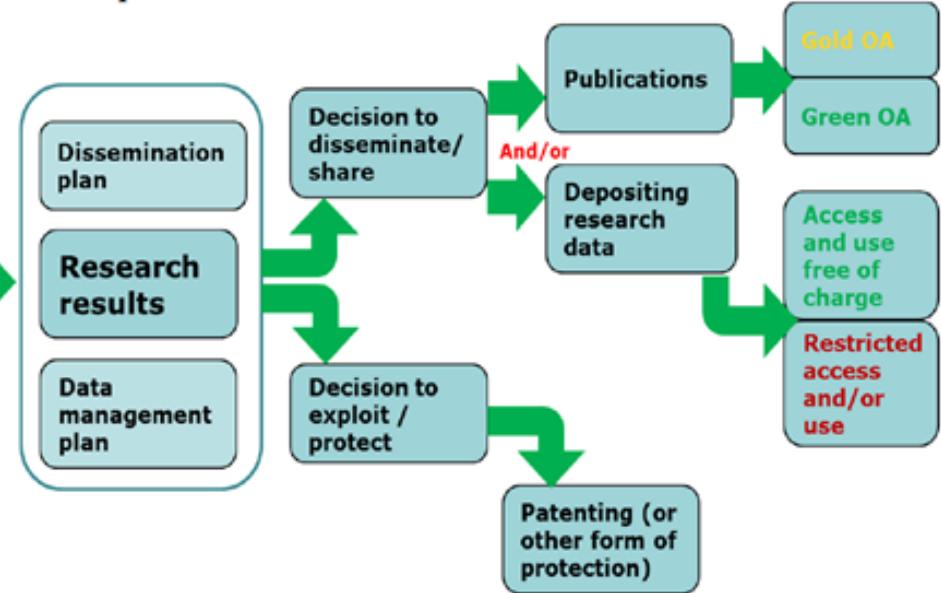
3. Mandate on open access to publications

The detailed legal requirements on open access to publications are contained in article 29.2 of the Model Grant Agreement.

Under Horizon 2020, each beneficiary must ensure open access to all peer-reviewed scientific publications relating to its results.

Graph: Open access to scientific publication and research data in the wider context of dissemination and exploitation

R
e
s
e
a
r
c
h



Horizon 2020



Chi è finanziato con fondi Horizon 2020 ha **l'obbligo** di

- a) depositare** in un archivio
- b) rendere disponibili** in Open Access tutti i risultati della ricerca entro 6/12 mesi dalla pubblicazione

- il deposito **assolve l'obbligo** purché non sia previsto embargo superiore ai 6/12 mesi
- in caso di **embargo** di durata **superiore**, va scelta la **Open Choice** degli editori tradizionali **[unico caso]**.

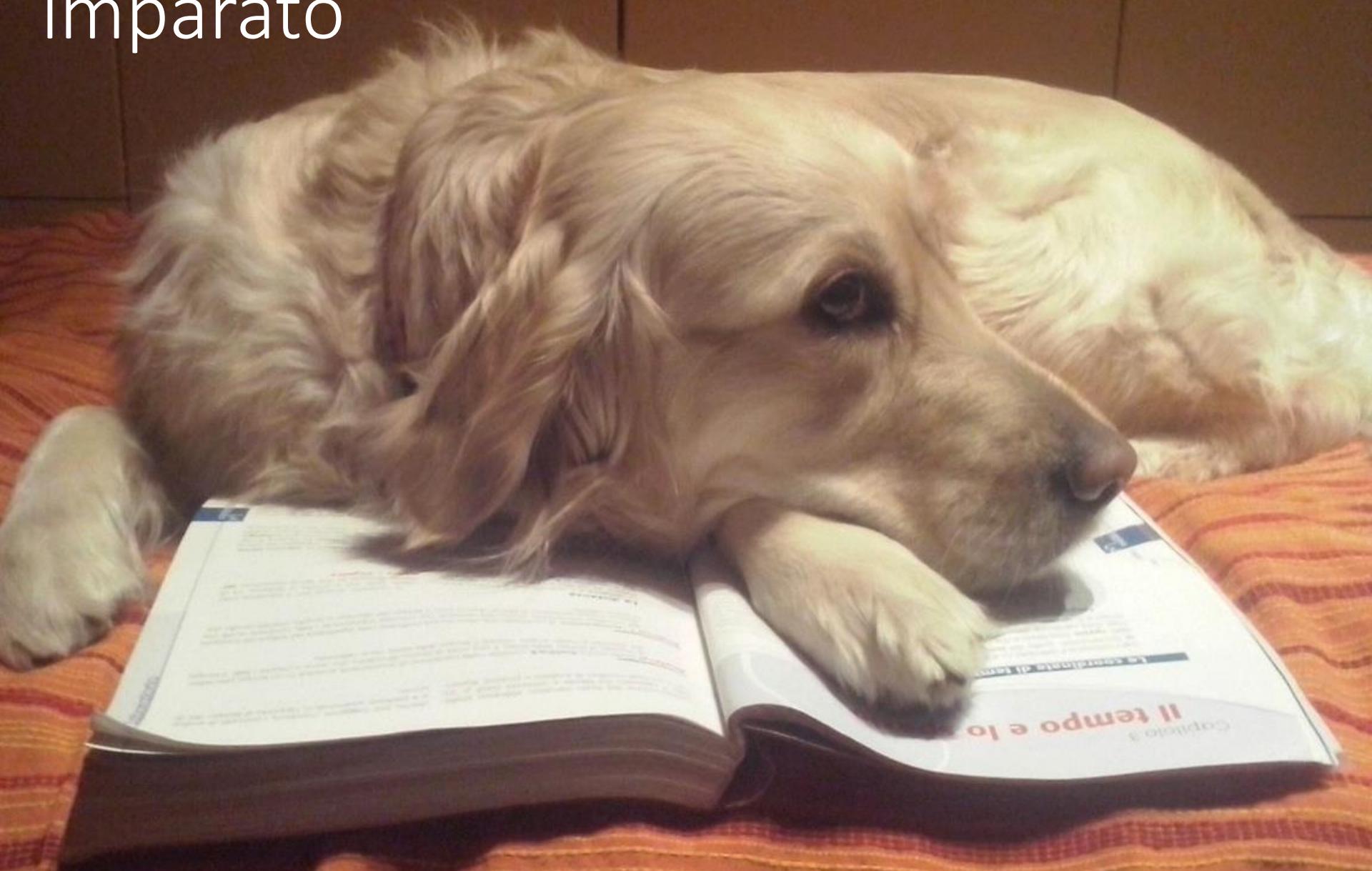
Le **spese** per le Article Processing Charges sono **rimborsabili** purché siano previste nel budget iniziale.

Il Regolamento UniTO

Il Regolamento Open Access (DR 4481 del 20/8/2014) prevede che

- al momento della pubblicazione vengano inseriti per i prodotti pubblicati dal 1 nov. 2013
 - i dati bibliografici
 - il file nella versione consentita per l'Open Access
(se non viene consentita nessuna versione: deroga)
- NON è più richiesto pdf editoriale ad accesso riservato
- per la **VALUTAZIONE INTERNA** verranno presi in **considerazione SOLO** i prodotti che hanno **allegato il file nella versione consentita per l'Open Access** [art. 4.3]
(se non viene consentita nessuna versione: deroga)
NB: si tratta di un pre-requisito non di un criterio

... due o tre cose che abbiamo
imparato





Il legame
con la valutazione della ricerca
è fondamentale

ROMPERE MURO DI INDIFFERENZA E “FALSI MITI”



CREARE CONSAPEVOLEZZA SU
LOGICHE E VANTAGGI

A ciascuno il suo

...a ogni attore coinvolto, il suo linguaggio...

[con gli autori: citazioni, prestigio, riconoscimento delle competenze...
con gli amministratori: trasparenza, ritorno sugli investimenti...
con editori: opportunità ...]



DIALOGO ISTITUZIONALE

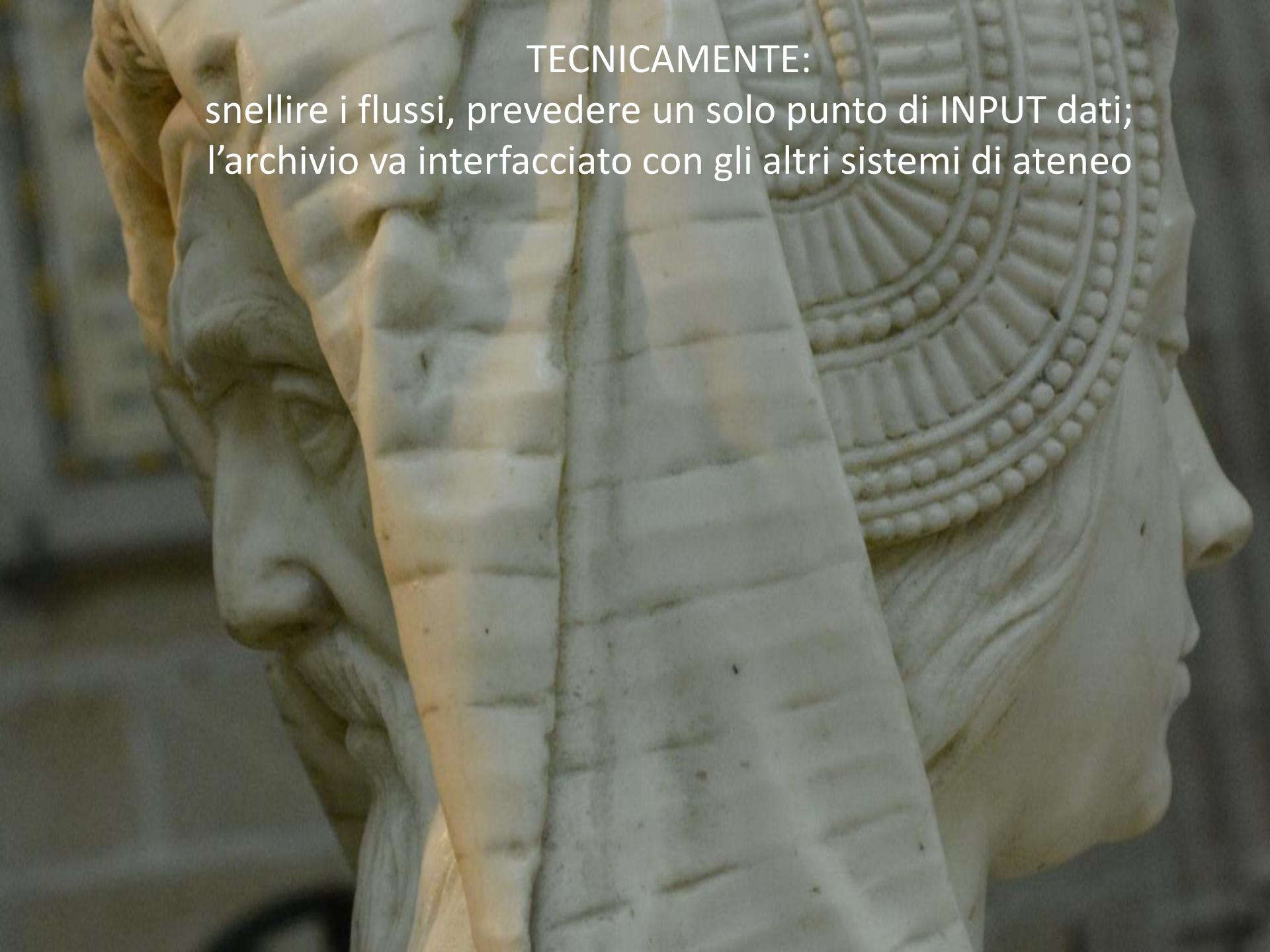


Chi fa cosa



- ufficio dedicato che supporti in tutto le pratiche di deposito
- comitato di ateneo
- referenti nei dipartimenti: supporto operativo





TECNICAMENTE:
snellire i flussi, prevedere un solo punto di INPUT dati;
l'archivio va interfacciato con gli altri sistemi di ateneo



fornire tutto il supporto possibile

CINECA IRIS Institutional Research Information System

IRIS è il sistema di gestione integrata dei dati della ricerca (persone, progetti, pubblicazioni, attività) adottato dall'Università degli Studi di Torino.

AperTO è l'archivio istituzionale Open Access destinato a raccogliere, rendere visibile e conservare la produzione scientifica dell'Università degli Studi di Torino.



UNIVERSITÀ
DEGLI STUDI
DI TORINO



Prodotti recenti



Open Access, ovvero...

- [Open Access in breve](#)
- [Il Regolamento di Ateneo sull'accesso aperto](#)
- [Open Access in UNITO](#)

Disclaimer

- [Form e contatti](#)
- [Le politiche di AperTO](#)

Help-desk

- [Aprire un ticket](#)

Open Access: istruzioni

Come depositare

- [Come allegare il file Open Access](#)
- [Tutorial](#)
- [Domande frequenti](#)

Politiche di copyright

- [Editori italiani](#)
- [Editori stranieri \(banca dati SHERPA RoMEO\)](#)
- [Riviste Elsevier \(embargo specifico\)](#)
- [Dubbi sul copyright](#)
- [Versioni ed embargo già calcolato](#)

Strumenti

- [Richiesta di deroga](#)
- [Copertine](#)
- [Moduli editori e Addenda ai contratti](#)
- [Glossario](#)

...urge la promozione...



...un enorme sforzo di promozione:
seminari in ognuno dei 27 dipartimenti

Le reazioni...



Funziona?



Allegati Open Access		+ %
Nov 8, 2008 - Nov. 1, 2013 (senza Regolamento)	3.430	
Nov. 2013 – Ago. 2016 (dopo entrata in vigore)	12.142	354%

The background of the image is a clear, blue underwater scene. Sunlight filters down from the surface in bright rays, creating a dappled light effect on the sandy ocean floor. The water is slightly rippled, with some larger, more pronounced waves in the upper portion of the frame.

...buon lavoro!

elena.giglia@unito.it