THE LANCET Infectious Diseases

Innovation in science publishing And how to improve your chances of getting published

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Outline

- Innovation in science publishing
 - History of academic publication
 - Internet revolution
 - Open access
 - New ways to disseminate knowledge
 - Metrics
- Improve your chances of getting published



Origins of scholarly publishing



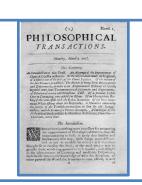




Henry Oldenburg
(1618- 1677)
Founding Editor
and Commercial
Publisher of the
first scientific
journal

Courtesy Elsevier Publishing Connect

http://www.elsevier.com/journal-authors/authors-update/issue-4/publishing-connect



6th March 1665
"Philosophical Transactions of the Royal Society"

First true scholarly journal



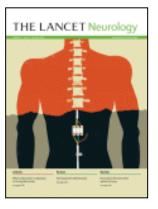
Thomas Wakley 1795 - 1862

- Founded The Lancet in 1823
- Surgeon in London, later also MP and coroner

A suite of print and online journals

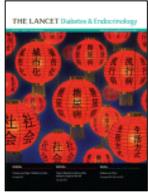




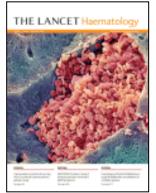
















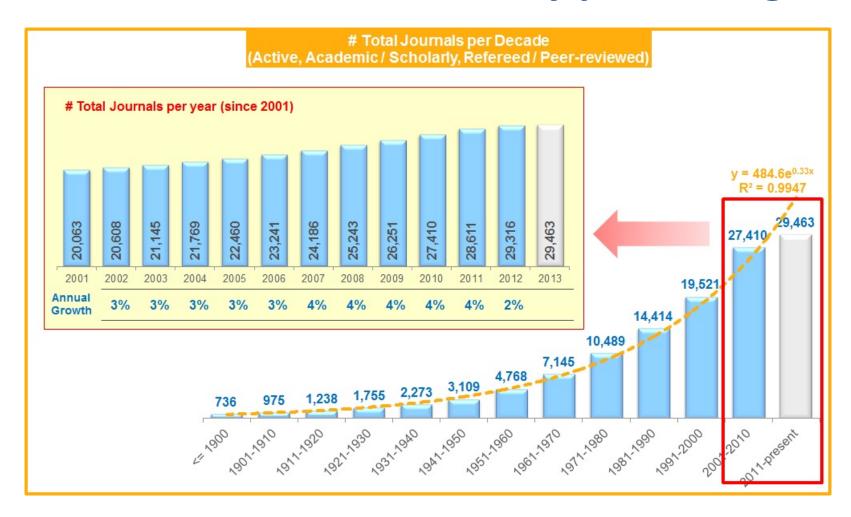






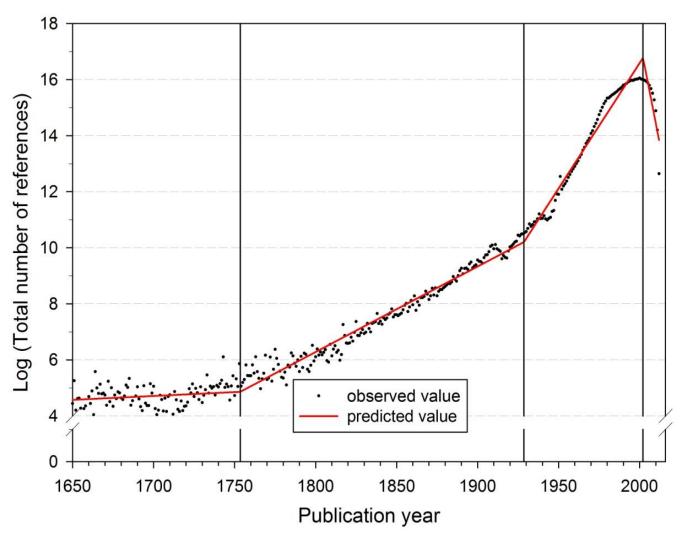


Historical view of scholarly publishing



Courtesy Elsevier Publishing Connect

History



Bornmann & Mutz.

Journal of the
Association for
Information Science
and Technology 2014.

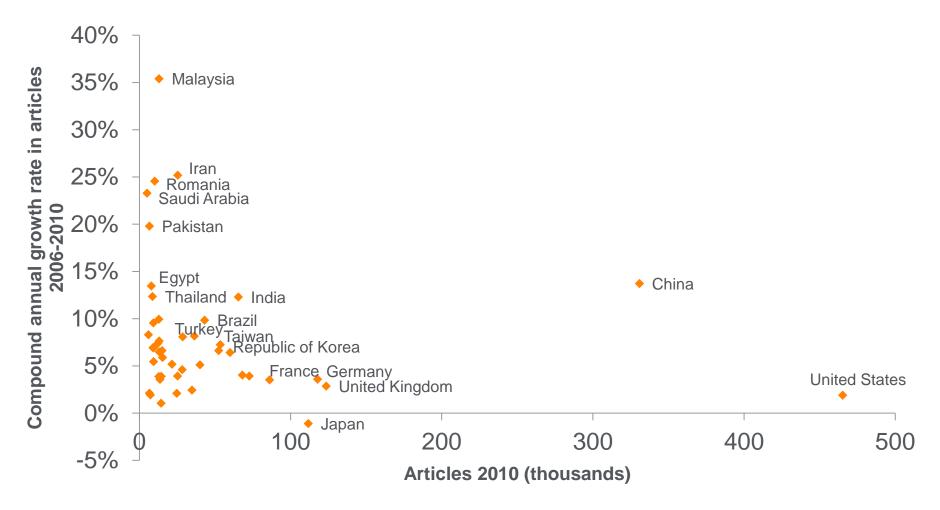
http://arxiv.org/abs/14
02.4578

Doubling of global scientific output about every 9 years

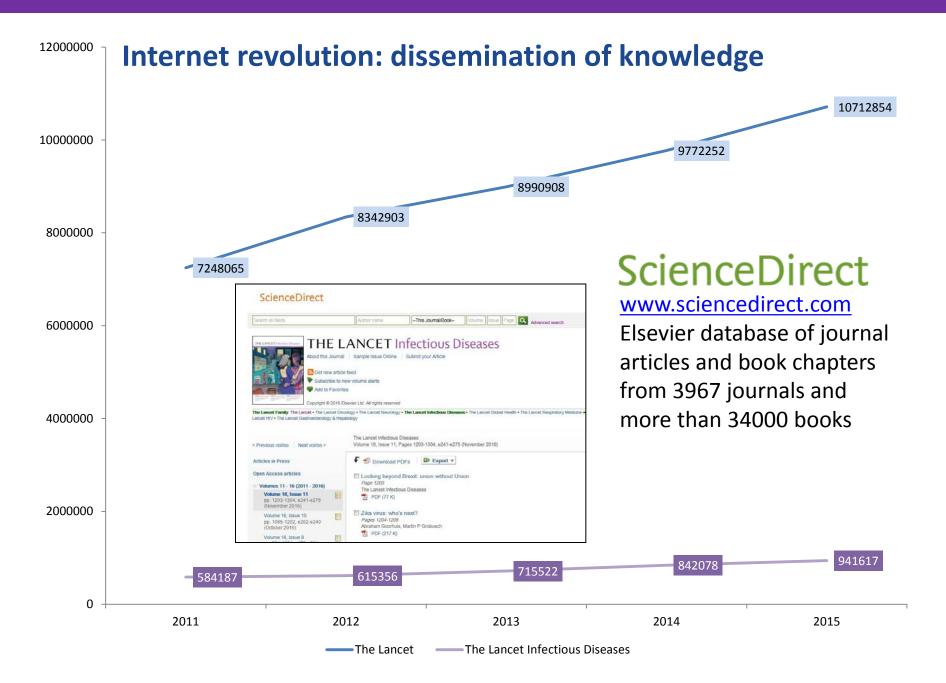
Growth of the annual number of cited references from 1650 to 2012 in the medical and health sciences (citing publications from 1980 to 2012)



Global expansion of scientific research



Elsevier Publishing Campus

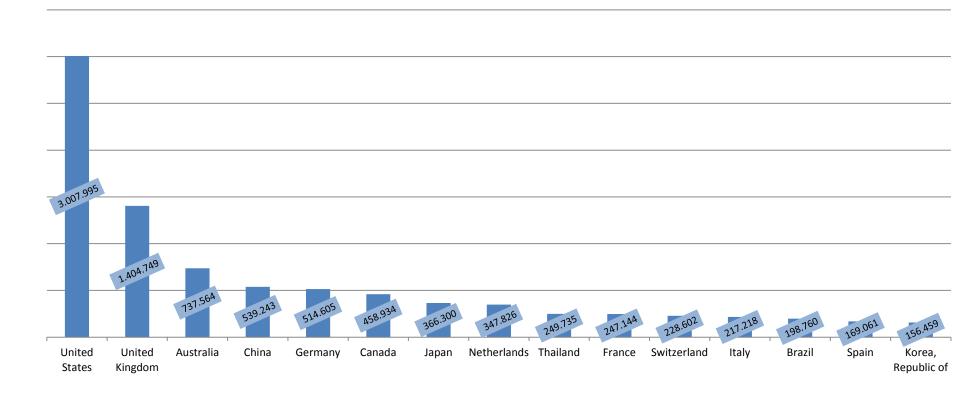


2015 Science Direct Downloads - TL

ScienceDirect

www.sciencedirect.com

Lancet article downloads by country 2015

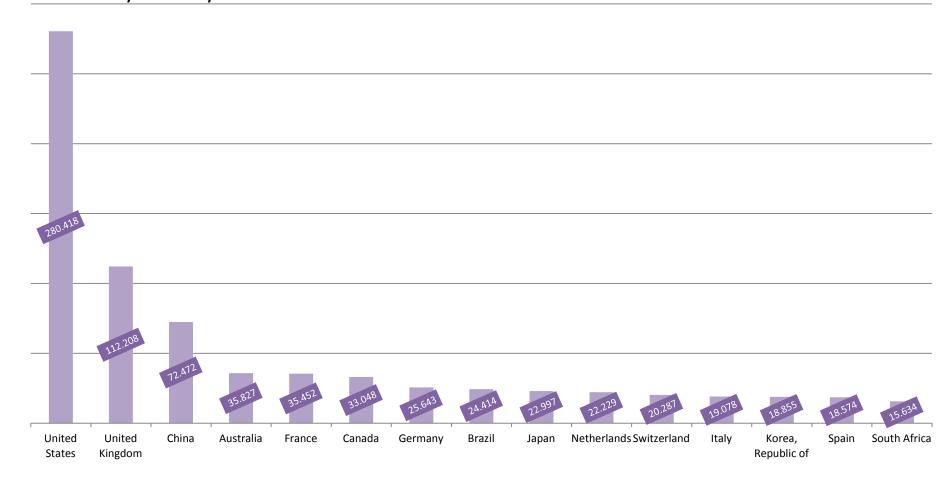


2015 Science Direct Downloads - TLID

ScienceDirect

www.sciencedirect.com

Lancet Infectious Diseases article downloads by country 2015



Open access journals

- Philosophy: research findings should be freely available to people who've paid for it; internet eases access to research
 - arXiv.org is the prototype
- Papers free to read, download, copy, distribute, print, search, or link to full texts
- For Gold OA, authors pays article processing charge: \$100s to \$1000s











Open access journals

- Authors retains copyright
- Authors give licence to distribute, reproduce, commercially exploit
- Mandated by some funders
- Beware "predatory" OA publishers











Characteristics of "predatory" journals







- Notifying academics of article fee
- Aggressively campaigning for aca boards
- Listing academics as members of
- Appointing fake academics to edi
- Misleading claims about the pub
- Improper use of ISSNs
- Fake or non-existent impact factor

Per Journal of Infectious Diseases Editor-in-Chief Marty Hirsch, a short list of copycat predatory journals over the years -- with my personal, all-inclusive favorite highlighted! #academicspam

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JID and Immunologic Techniques (JIDIT)
JID and Pathogenesis (JIDP)
JID and Vaccines (JIDV)
JID and Epidemiology (JIDE)
JID and Preventive Medicine (JIDPM)
JID and Therapy (JIDT)
JID and Immune Therapies (JIDIT)
Journal of Infectious and Non-infectious Diseases (JINID)
JID and Diagnosis (JIDD)
JID and Treatment (second JIDT)
JID and Medical Microbiology (JIDMM)
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6:08 PM - 31 Dec 2017

10 Retweets 47 Likes







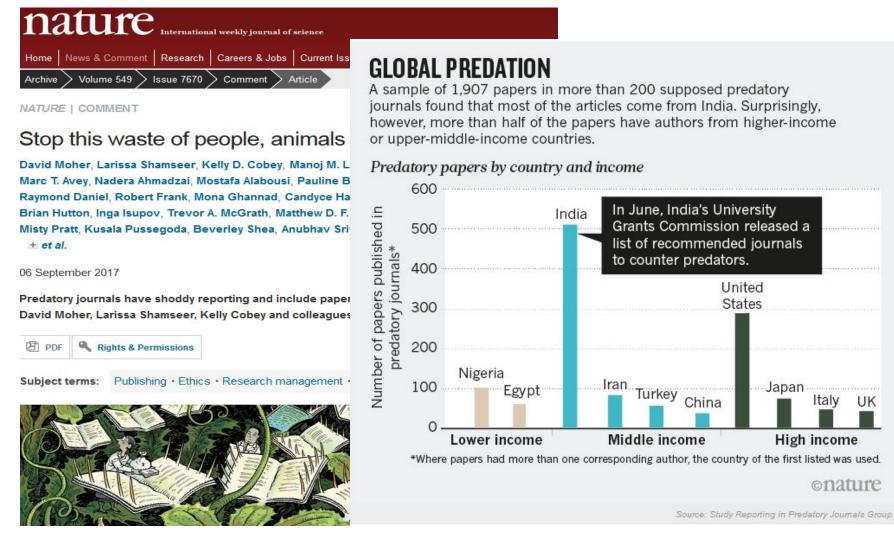




Mimicking the name or web site style of more established journals

Source: https://en.wikipedia.org/wiki/Predatory open access publishing#Characteristics

Characteristics of "predatory" journals



Source: https://www.nature.com/news/stop-this-waste-of-people-animals-and-money-1.22554

Open Access journals



11,098 Journals 8,035 searchable at Article level 124 Countries 2,977,904 Articles

http://doaj.org/oainfo

Open Access and free

Table 3: Percent of the literature that is OA, by type, in three samples of 100,000 journal articles, with 95% confidence intervals.

Access Type	Crossref-DOI All journal articles with Crossref DOIs, all years. ("Articles with DOIs" in Fig.1)		WoSe All citable articles with 2009-2015	th DOIs,	Unpaywall-DOIs All articles accessed by Unpaywall users over a 1-week period in 2017		
	estimate	95% CI	estimate	95% CI	estimate	95% CI	
OA (all types)	27.9%	27.6-28.2	36.1%	36.0-36.2	47.0%	46.7-47.3	
Bronze OA	16.2%	16.0-16.5	12.9%	12.6-13.2	15.3%	15.0-15.6	
Hybrid OA	3.6%	3.3-3.9	4.3%	4.0-4.6	8.3%	8.0-8.6	
Gold OA	3.2%	2.9-3.5	7.4%	7.1-7.7	14.3%	14.0-14.6	
Green OA	4.8%	4.5-5.1	11.5%	11.2-11.8	9.1%	8.8-9.4	
Closed	72.0%	71.8-72.4	63.9%	63.8-64.0	53.0%	52.7-53.3	

See: PeerJ Preprints https://doi.org/10.7287/peerj.preprints.3119v1

Open Access and free

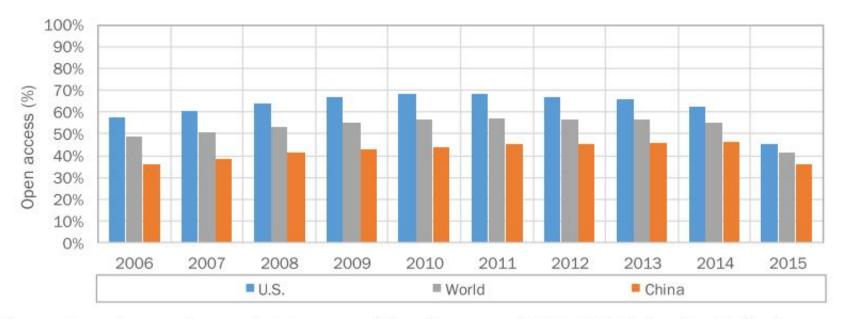


Figure 2 Percentage of OA per publication year (2006–2015), for the United States, China and the world, as measured in Q3 2016

Note: A 120% calibration factor was applied to the raw measures taken from the 1science database. Underlying

data available in Table X.

Source: Prepared by Science-Metrix using the Web of Science (Clarivate Analytics) and the 1science database

See: www.science-metrix.com Open access availability of scientific publications, Jan 2018



Open access is not free. Someone is doing the work. Someone is paying

August 28, 2015 12.07am EDT



Pay wall or no pay wail? Students study at the Humboldt University Library in Berlin, one of the most advanced scientific libraries in Germany. Enumerated

Email

Twitter

▼ Twitter 1

in Linkedin

in Linkedi

Print

There is no such thing as a free lunch – or free open access.

Silicon Valley futurist, <u>Steward Brand</u>, states that all information should be made available for free. But his <u>corollary</u> is that:

... information wants to be expensive because it is so valuable...

There is always a value chain, and costs are incurred, on a continuing basis, whatever the platform that houses it. Someone somewhere is paying for open access publishing.

Open access, which stands for unrestricted access and unrestricted reuse of published

Source:

https://theconversation.com/open-accessis-not-free-someone-is-doing-the-worksomeone-is-paying-46557

Knowledge dissemination

Preprints: publication before peer review

http://biorxiv.org/





Articles

New Results

Fractional Dosing of Yellow Fever Vaccine to Extend

What is an unrefereed preprint?

Before formal publication in a scholarly journal, scientific and medical a are traditionally "peer reviewed." In this process, the journal's editors advice from various experts—called "referees"—who have assessed the and may identify weaknesses in its assumptions, methods, and conclusi Typically a journal will only publish an article once the editors are satist that the authors have addressed referees' concerns.

mass-vaccination, dose sparing by fractional-dose vaccin consideration. Five-fold fractionation is similar to the sta immunogenicity. However, no YF vaccine efficacy trials h humans, so it is possible that fractional-dose vaccines m equally immunogenic. There is an urgent need to study to fractional dosing could provide epidemiologic benefits in Methods We estimated the effective reproductive number disease natural history and case report data. Using these mathematical models of YF transmission, we calculated t

Fractional dosing of yellow fever vaccine to extend supply: a modelling study



Joseph T Wu, Corey M Peak, Gabriel M Leung, Marc Lipsitch

Summary

Background The ongoing yellow fever epidemic in Angola strains the global vaccine supply, prompting WHO to adopt dose sparing for its vaccination campaign in Kinshasa, Democratic Republic of the Congo, in July-August, 2016. Although a 5-fold fractional-dose vaccine is similar to standard-dose vaccine in safety and immunogenicity, efficacy is untested. There is an urgent need to ensure the robustness of fractional-dose vaccination by elucidation of the conditions under which dose fractionation would reduce transmission.

Methods We estimate the effective reproductive number for yellow fever in Angola using disease natural history and case report data. With simple mathematical models of yellow fever transmission, we calculate the infection attack rate (the proportion of population infected over the course of an epidemic) with various levels of transmissibility and 5-fold fractional-dose vaccine efficacy for two vaccination scenarios, ie, random vaccination in a hypothetical population that is completely susceptible, and the Kinshasa vaccination campaign in July–August, 2016, with different age cutoff for fractional-dose vaccines.

Findings We estimate the effective reproductive number early in the Angola outbreak was between 5·2 and 7·1. If vaccine action is all-or-nothing (ie, a proportion of vaccine recipients receive complete protection [VE] and the remainder receive no protection), *n*-fold fractionation can greatly reduce infection attack rate as long as VE exceeds 1/*n*. This benefit threshold becomes more stringent if vaccine action is leaky (ie, the susceptibility of each vaccine recipient is reduced by a factor that is equal to the vaccine efficacy). The age cutoff for fractional-dose vaccines chosen by WHO for the Kinshasa vaccination campaign (2 years) provides the largest reduction in infection attack rate if the efficacy of 5-fold fractional-dose vaccines exceeds 20%.

Interpretation Dose fractionation is an effective strategy for reduction of the infection attack rate that would be robust with a large margin for error in case fractional-dose VE is lower than expected.

Funding NIH-MIDAS, HMRF-Hong Kong.

Introduction

Yellow fever has resurged in Angola and threatens to spread to other countries with lower yellow fever vaccine coverage. As of July 8, 2016, yellow fever has spread from infection. In response to such a shortage, dose fractionation has been proposed to maximise the public health benefit of the available yellow fever vaccines.⁴ Under dose fractionation, a smaller amount of antigen

Published Online November9, 2016 http://dx.doi.org/10.1016/ S0140-6736(16)31838-4 See Online/Comment http://dx.doi.org/10.1016/

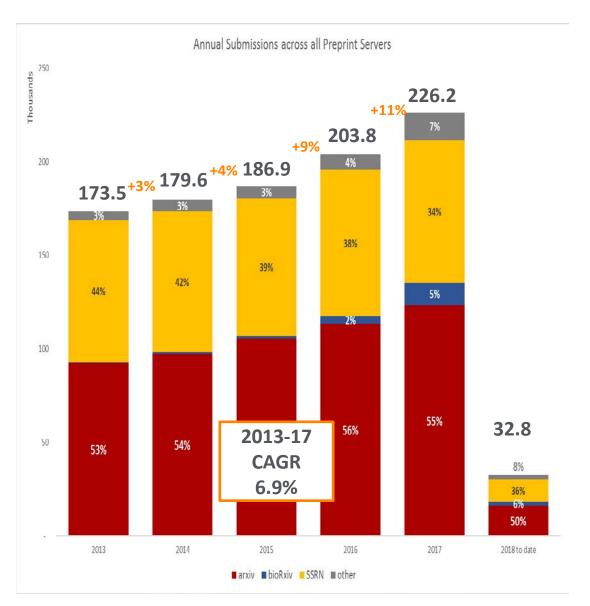
S0140-6736(16)31330-7
WHO Collaborating Centre for Infectious Disease
Epidemiology and Control,
School of Public Health,
Li Ka Shing Faculty of Medicine
He University of Hong Kong,
Hong Kong Special
Administrative Region,
China (1T WU PhD,
Prof G M Leung MD); Center
for Communicable Disease
Dynamics, Department of

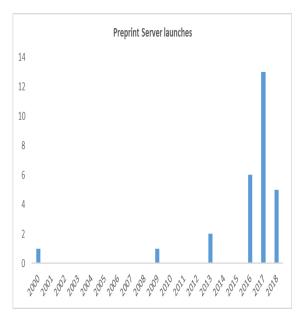
Epidemiology, (C M Peak MS, Prof M Lipsitch DPhil), and Department of Immunology and Infectious Diseases, (Prof M Lipsitch), Harvard T H Chan School of Public Health, Boston, MA, USA

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The preprint market is big and growing

UPDATED FEB 2018





Count of preprint servers launched per year.

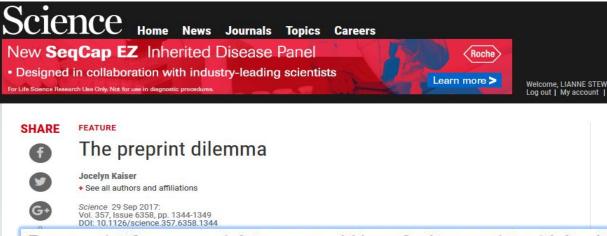
While several preprint servers have been in existence for several decade, a real burst in activity in terms of launches has occurred in the past couple of years, and is continuing. Many of these launches are driven by the Centre for Open Science – and it should be noted that this view hides the expansion in scope in several of the long-standing servers, e.g arXiv and SSRN.



Preprint Server Growth History

Name	Organization	Platform	Start Date	Total Preprint	Main Field
arXiv	Cornell University Library	Custom	Aug-91	1,356,224	Physics, Maths and Comp Sci
SSRN	Elsevier	Custom	1994	777,588	Social Science and Economics/Multidisciplinary
Cryptology ePrint Archive	Theory of Crypography Library	IACR	1996	10,192	Cryptology
Cogprints	University of Southampton	EPrints 3	1997	4,230	Cognitive Science
RePEc - EconPapers	Örebro University School of Business	Distributed - FT hosted elsewhere	May-97	804471	Economics
Philsi-Archive	University of Pittsburgh		2000	3,204	Philosophy of Science
viXra	Independent	Custom	2009	22,108	Science and Mathematics (alternative to arXiv)
PeerJ PrePrints	PeerJ, Inc	Custom	13-Apr	3,556	Life Science, Medicine and Comp Sci
bioRXiv	Cold Spring Harbor Lab Press	HighWire (BenchPress and JCore)	13-Nov	20,373	Life Science
Preprints.org	MDPI	Custom	16-Jun	3,000	Multidisciplinary
ChemRxiv	American Chemical Society	Unknown	16-Aug	199	Chemistry
engrXiv	Center for Open Science (COS)	Open Science Framework (OSF) Preprints	16-Dec	157	Engineering
PsyArXiv	Center for Open Science (COS)	Open Science Framework (OSF) Preprints	16-Dec	1,405	Psychology
SocArXiv	Center for Open Science (COS)	Open Science Framework (OSF) Preprints	16-Dec	1,909	Social Science
AgriXiv	Center for Open Science (COS)	Open Science Framework (OSF) Preprints	17-Feb	24	Agricultural Science
BITSS	Center for Open Science (COS)	Open Science Framework (OSF) Preprints	17-Mar	21	Research transparency and reproducibility
PaleoRxiv	Center for Open Science (COS)	Open Science Framework (OSF) Preprints	17-May	66	Paleontology
LawArXiv	Center for Open Science (COS)	Open Science Framework (OSF) Preprints	17-May	533	Law
INA-Rxiv	Center for Open Science (COS)	Open Science Framework (OSF) Preprints	17-Aug	1,839	PP server for Indonesia
LISSA	Center for Open Science (COS)	Open Science Framework (OSF) Preprints	17-Aug	57	Library and Information Science
MindArkīv	Center for Open Science (COS)	Open Science Framework (OSF) Preprints	17-Aug	63	Mind and Contemplative Practices
NutriXiv	Center for Open Science (COS)	Open Science Framework (OSF) Preprints	17-Aug	12	Nutritional Sciences
SportRxiv	Center for Open Science (COS)	Open Science Framework (OSF) Preprints	17-Aug	20	Sport and Exercise
MedArXiv	Yales University & Yale School of Medicine	Yale Open Data Access (YODA) project	17-Sep	-	Medicine
EarthArXiv	Center for Open Science (COS)	Open Science Framework (OSF) Preprints	17-Oct	247	Earth Sciences
MarXiv	Center for Open Science (COS)	Open Science Framework (OSF) Preprints	17-Nov	30	Ocean Conservation and Marine Climate Sciences
FocUS Archive	Center for Open Science (COS)	Open Science Framework (OSF) Preprints	2017	2	Focus Ultrasound Foundation
Arabixiv	Center for Open Science (COS)	Open Science Framework (OSF) Preprints	18-Jan	19	PP server for Arab countries
Frenxiv	Center for Open Science (COS)	Open Science Framework (OSF) Preprints	18-Jan	-	PP server for French research
ESSOAr	American Geophysical Union	Atypon	2018	-	Earth and Space Science
SciELO Preprints	FAPESP - BIREME	Open Science Framework (OSF) Preprints	mid 2018	-	Multidisciplinary
				3,011,549	

Knowledge dissemination: preprints



For preprint fans, one nightmare would be a faulty preprint with health implications. To guard against the possibility, bioRxiv does not currently accept any clinical research except epidemiology and certain trial results. Yale University researchers this month announced plans for a new server, MedArXiv, for clinical research preprints; it might be built with bioRxiv's infrastructure but would have separate, tighter standards for screening papers, Inglis says. Yale cardiologist Harlan



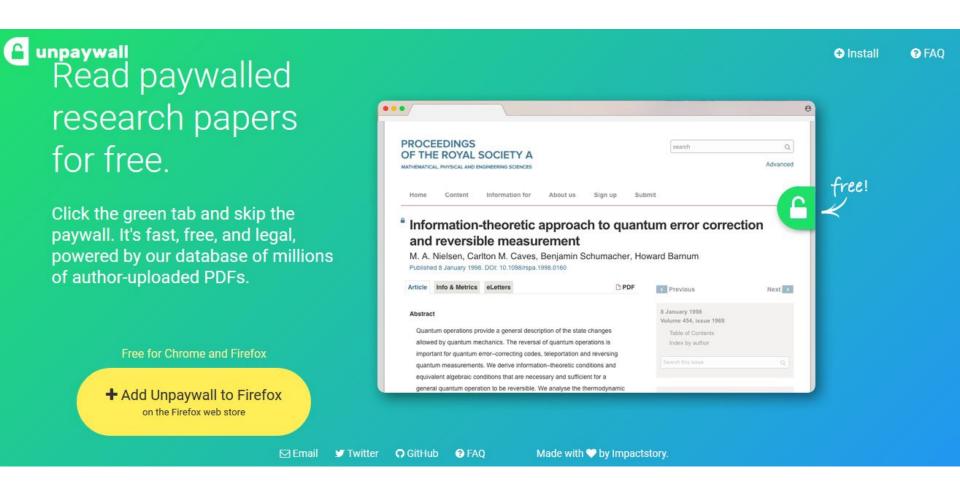
See: http://science.sciencemag.org/content/357/6358/1344

Sharing research: via copyright piracy



At this time the widest possible distribution of research papers, as well as of other scientific or educational sources, is artificially restricted by copyright laws. Such laws effectively slow down the development of science in human society. The Sci-Hub project, running from 5th September 2011, is challenging the status quo. At the moment, Sci-Hub provides access to *hundreds of thousands research papers every day*, effectively bypassing any paywalls and restrictions.

Sharing research



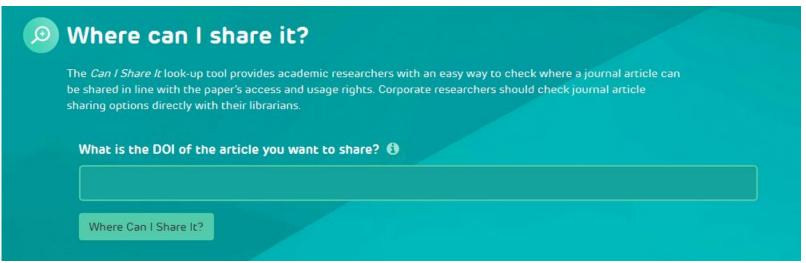
See: http://unpaywall.org/



Sharing research

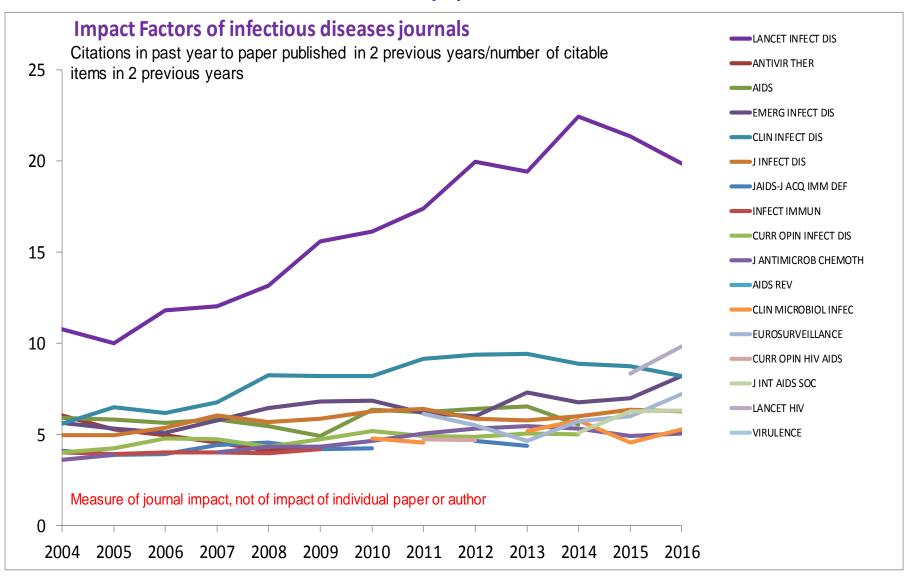
See:

http://www.howcanishareit.com/

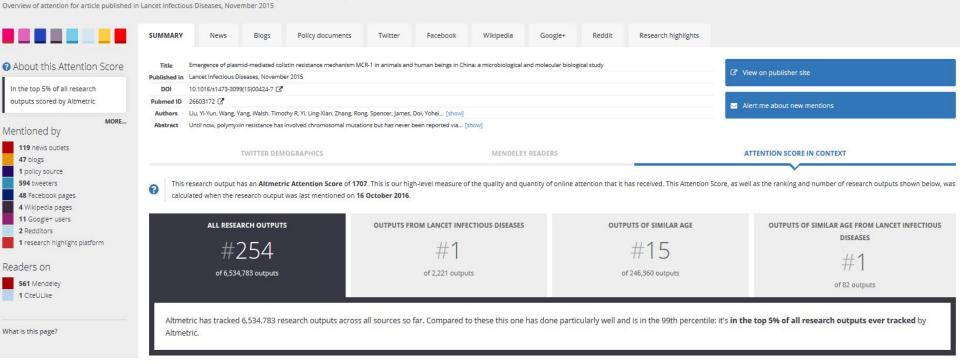


Journal level metric Impact Factor: ratio of citations to citable items

"Citable items" = research & review papers



Emergence of plasmid-mediated colistin resistance mechanism MCR-1 in animals and human beings in China: a microbiological and molecular biological study





Source: http://elsevier.altmetric.com/details/4781198#score

Emergence of plasmid-mediated co...





Emergence of plasmid-mediated colistin resistance mechanism MCR-1 in animals and human beings in China: a microbiological and molecular biological study.

Citation data: The Lancet. Infectious diseases, ISSN: 1474-4457, Vol.: 16, Issue: 2, Page: 161-8 Publication Year: 2016

Explore	PlumX Metrics
What are	PlumX Metrics? How can they help tell
the story	about this research? How can I use
them?	

CAPTURES ^	963	MENTIONS ^	200	SOCIAL MEDIA ^	3644	CITATIONS ^	517	RATINGS ^	
Readers o	918	Comments a	91	Shares, Likes &	2555	Citation Indexes o	516	Reddit o	621
Mendeley	918	Reddit	83	Comments	9	Scopus	516	Score	609
Exports-Saves • EBSCO	45 45	Reddit	4	Facebook	2555	CrossRef	473	Score	8
		Reddit Reddit	2	Tweets ○ Twitter	1072 1072	PubMed Central Clinical Citations DynaMed Plus Topics	278 1 1	Score Score Score	1
		News Mentions ◎ News	64 64	+1s a Google+	17 17				1
		Blog Mentions ◎ Blogs	32 32	T :					
		Links	13						

See: https://plumanalytics.com/learn/about-metrics/

Wikipedia

Waste or inefficiency in biomedical research



The Lancet REWARD (REduce research Waste And Reward Diligence) Campaign invites everyone involved in biomedical research to critically examine the way they work to reduce waste and maximise efficiency.

Read the REWARD statement and join the campaign

http://www.thelancet.com/campaigns/efficiency

Are research decisions based on questions relevant to users of research?

• Low priority questions

Important outcomes

More than 50% studies

reference to systematic

designed without

reviews of existing

addressed

evidence

not assessed



- Appropriate research design, methods, and analysis?
 - Adequate steps to reduce bias not taken in more than 50% of studies
 - Inadequate statistical power
 - Inadequate replication of initial findings

Efficient research regulation and management?

- Complicit with other sources of waste and inefficiency
- Disproportionate to the risks of research
- Regulatory and management processes are burdensome and inconsistent

Fully accessible research information?

- More than 50% of studies never fully reported
- Biased under-reporting of studies with disappointing results
- Biased reporting of data within studies

Unbiased and usable research reports?

- More than 30% of trial interventions not sufficiently described
- More than 50% of planned study outcomes not reported
- Most new research not interpreted in the context of systematic assessment of other relevant evidence

 \bigcirc

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Research waste

Lancet 2014; 383: 101-104

Lancet journals: our editorial commitment

- High impact content that changes medical and public health practice and thinking
- Editors who will strengthen the quality of your work
- Speed to publication
- Global reach and visibility
- Thought-provoking news and comments
- Initiatives well beyond publication
- Independence from any society or political body
- Built on 194 years' tradition of excellence

What do editors look for?

- Research that is going to change practice or thinking, at least within specialty of the journal
- Interest to journal audience
- First, last, or necessary replication
- Ethically sound
- Robust methods, suitable for research question
- Reported fully, without bias

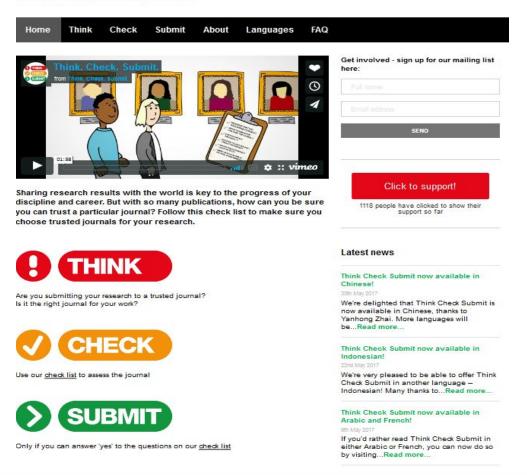
- Who is your audience?
- International vs regional
- General vs specialist
- Calls for papers
- Upcoming events
- If in doubt, check your references

- Be familiar with your chosen journal
- Philosophy
- Interests
- Landmark papers
- Include publication strategy in your protocol

Thinkchecksubmit.com



Choose the right journal for your research



- Reporting requirements
 - Abstract structure
 - Word count
 - Number of references and reference style
 - Number of tables and figures (and submission format)
 - Reporting guidelines (see http://www.equator-network.org/reporting-guidelines)

EQUATOR Network reporting guidelines

http://www.equator-network.org/reporting-guidelines/

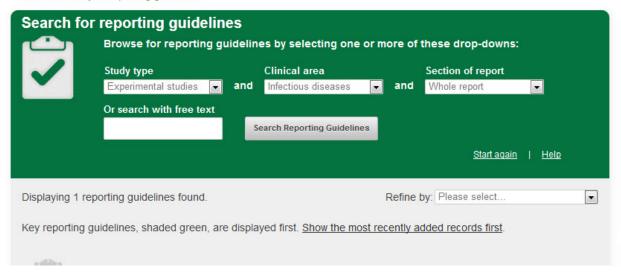


Enhancing the QUAlity and Transparency Of health Research



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Home > Library > Reporting guideline





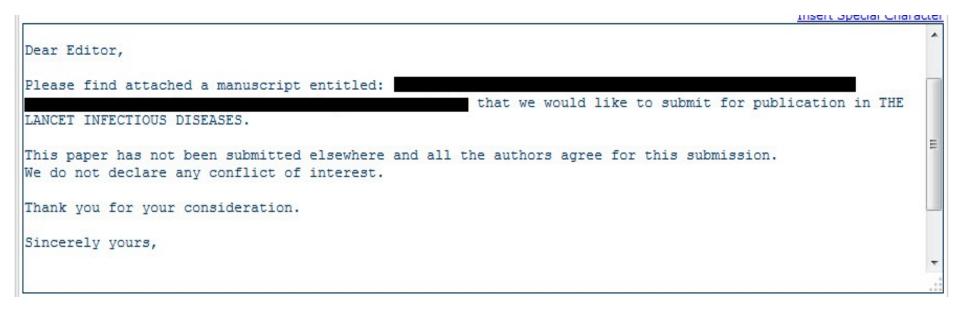
Submission—where?

- Supporting documents
 - Protocol
 - Trial registration
 - Signatures
 - Conflicts of interest statements
 - Patient consent
 - References in press
 - Permission to reproduce

Submission—how?

Many journals will make an initial decision based on reading your <u>cover letter</u> and <u>abstract</u>; sometimes just the abstract

Submission—Cover letter



Submission—Cover letter

- Short and snappy—elevator pitch
 - Give context and background to study
 - What question does your study address?
 - What method did you use to answer study question?
 - Mention you've followed reporting guidelines appropriate to study design
 - What did you find?
 - How do your findings affect totality of knowledge on subject; how might they influence practice or thinking?
 - Why is your paper relevant to journal's readership?

Unhelpful submitted abstract

Background: The presence of extended spectrum beta-lactamases (ESBL)-producing antimicrobial resistance organisms has been increasingly reported worldwide. Probiotics are often used to support the treatment of infections in clinical practice. These in vitro studies investigated the **effect of a probiotics, on ESBL-producing Escherichia coli**, the most widely distributed ESBL producer.

Methods: The probiotic strain C. butyricum MIYAIRI588 and bla-CTX-M-15-positive, **ESBL-producing E. coli clinical isolates** were used in this study. **The inhibitory effect** of C. butyricum MIYAIRI588 strain on the growth of ESBL-producing E. coli was examined by both co-culture and in C. butyricum MIYAIRI588 supernatant. **Beta-lactamase activity** produced by E. coli was analysed with or without C. butyricum MIYAIRI588 supernatant. A conjugation assay was performed by the broth mating method to determine **the frequency of transfer of antibiotic resistance** property between E. coli donor strains to recipient strain.

Findings: The growth of ESBL-producing E. coli was suppressed by both co-culture and in C. butyricum MIYAIRI588 supernatant. In addition, the activity of beta-lactamase was also significantly reduced by C. butyricum MIYAIRI588 culture supernatant. Moreover, transmissibility of antibiotic resistant properties from ESBL-producing E. coli to E. coli 5980 was inhibited by the C. butyricum MIYAIRI588 supernatant.

Interpretation: These findings are promising and support the use of probiotics as adjuncts to antibiotic treatment of clinical infections. We plan further studies on the effect of probiotics on ESBL-producing bacteria.

- Context and background; study objectives and/or hypothesis
- Methods: population; design (eg, prospective/retrospective, RCT, case/control, cohort, case series, diagnostic, surveillance, in vitro, animal model); endpoints; trial registration
- Results: absolute number; primary endpoints; effect size (eg, relative risk, hazard ratio, sensitivity/specificity); confidence intervals; p-values; avoid stats with small numbers
- Conclusions: implications for practice/research; don't spin secondary endpoints

- How: follow reporting guidelines
- How many: absolute numbers
- How much: effect size, confidence intervals, p-values
- How useful: implications for practice / research
- How funded

Jargon—Avoid!

Interpretation: The efficacy and safety of ART has substantially improved with the introduction of newer drug classes of ARVs that are now available to patients and HIV care providers. Our SLR found that among ART-naïve patients, the use of INSTI + 2 NRTI, particularly DTG, have superior efficacy to EFV + 2 NRTI regimens and that low-dose EFV is non-inferior to standard dose EFV.

Submission—Research in context

Research in context/key messages: adding to existing knowledge and improving research efficiency

Research in context

Systematic review

We searched PubMed on Feb 11, 2015, for articles published between Jan 1, 2000, and Feb 11, 2015, using a combination of the MeSH search terms "HCV treatment", "antiviral agent", and "genotype 4" and consulted the hepatitis C virus (HCV) treatment guidelines for phase 2 or 3 clinical trials of treatments for patients with HCV genotype 4. We also searched the reference lists of articles from our search for additional reports that met our inclusion criteria of phase 2 and phase 3 clinical trials of interferon-free regimens for treatment of HCV genotype 4.

Four clinical trials have been reported (one journal article and four in abstract form) for interferon-free regimens for patients with HCV genotype 4. The results of these trials have shown promising safety and efficacy (sustained viral response at

12 weeks, 84–100%) with combination direct-acting antiviral drugs, with or without ribavirin for 12–24 weeks. Few patients with cirrhosis or who have previously been treated with interferon-containing regimens have been included.

Added value of this study

Although our study is small, we showed high rates of sustained viral response at 12 weeks with use of sofosbuvir and ledipasvir for 12 weeks, which supports the possibility that this simple regimen might be effective for some patients.

Implications of all the available evidence

Further development of this efficacious, simple, well tolerated regimen is warranted and studies in patients with cirrhosis and previously treated patients should be pursued.

Bias—interpretation of statistical significance

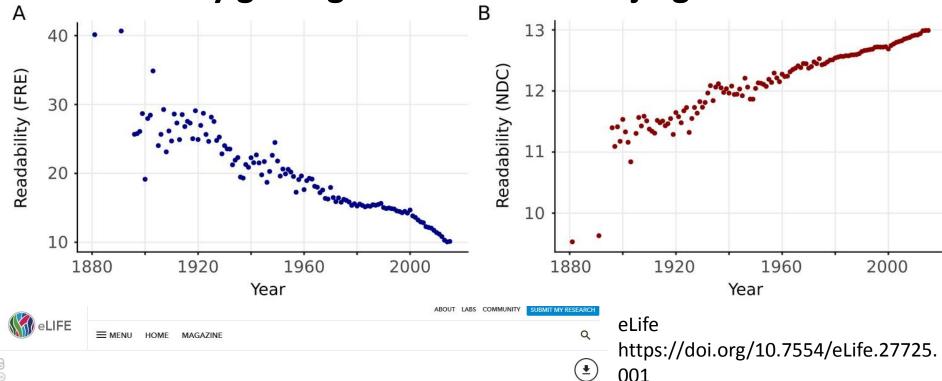
- "You don't need to play the significance testing game – there are better methods, like quoting the effect size with a confidence interval – but if you do, the rules are simple: the result is either significant or it isn't"
- "So if your p-value remains stubbornly higher than 0.05, you should call it 'nonsignificant' and write it up as such"

https://mchankins.wordpress.com/2013/04/21/still-not-significant-2/ Accessed May 2016

```
(barely) not statistically significant (p=0.052)
a barely detectable statistically significant difference (p=0.073)
a borderline significant trend (p=0.09)
a certain trend toward significance (p=0.08)
a clear tendency to significance (p=0.052)
a clear trend (p<0.09)
a clear, strong trend (p=0.09)
a considerable trend toward significance (p=0.069)
a decreasing trend (p=0.09)
a definite trend (p=0.08)
a distinct trend toward significance (p=0.07)
a favorable trend (p=0.09)
a favourable statistical trend (p=0.09)
a little significant (p<0.1)
a margin at the edge of significance (p=0.0608)
a marginal trend (p=0.09)
a marginal trend toward significance (p=0.052)
a marked trend (p=0.07)
a mild trend (p<0.09)
a moderate trend toward significance (p=0.068)
a near-significant trend (p=0.07)
a negative trend (p=0.09)
a nonsignificant trend (p<0.1)
a nonsignificant trend toward significance (p=0.1)
a notable trend (p<0.1)
a numerical increasing trend (p=0.09)
a numerical trend (p=0.09)
a positive trend (p=0.09)
a possible trend (p=0.09)
a possible trend toward significance (p=0.052)
a pronounced trend (p=0.09)
a reliable trend (p=0.058)
a robust trend toward significance (p=0.0503)
a significant trend (p=0.09)
a slight slide towards significance (p<0.20)
a slight tendency toward significance(p<0.08)
```

Submission—Use of language

Readability getting worse because of jargon



CITE AS: eLife 2017;6:e27725 DOI: 10.7554/eLife.27725

Research: The readability of scientific texts is decreasing over time

Pontus Plavén-Sigray, Granville James Matheson, Björn Christian Schiffler, William Hedley Thompson Karolinska Institutet, Sweden

FEATURE ARTICLE Sep 5, 2017

CITED 0 VIEWS 6,000 COMMENTS 1

Data from >700000 abstracts

"impact both the reproducibility and accessibility of research findings"

Submission—Use of language

Keep it simple and brief

Consequently, we shall exclude from our pages the semibarbarous phraseology of the Schools, and adopt as its substitute, plain English diction. In this attempt, we are well aware that we shall be assailed by much interested opposition. But, not-withstanding this, we will fearlessly discharge our duty.

Thomas Wakley (1823) The Lancet, 1: p2



We shall use simple English. We recognise that this will be resisted by medical schools who want to maintain the mystery of medicine by using long words

Language—keep it simple

be under consideration by another journal. Because the readership covers a wide range of specialties, it is vital that articles should be written clearly, and should not assume a level of knowledge above that of, say, a reasonably well-read, recently qualified, doctor in training. The importance of a clear, accessible writing style cannot be stressed too highly. One way to find out if your article is understandable to those reading outside their immediate field of interest is to show the manuscript to colleagues in other specialties. If they find it difficult to follow, so will a good proportion of the readership. Wherever possible,

See: https://eeslive.elsevier.com/thelancetid/default.asp

Language—keep it simple

- Write with the non-expert reader in mind
- Never us a long word where a short one will do
 - majority of = most; utilise = use; in order to = to; perform = do; in the event of = if or when; leverage = ??? (probably "use")
- Use active voice
 - Passive "data were collected"; Active "we collected data"
 Passive "patients were enrolled"; Active "we enrolled patients"
- Short sentences: 20–30 words per sentence
 - Can you read your sentences out loud without running out of breath?

Peer review process



Lancet journals' peer review

- Authors can suggest reviewers
- Anonymous—ie, authors not told names of reviewers
- Specialist opinion (3 clinical + 1 statistics)
 - 1 from the author's country (NOT from the same institution)
 - Familiar with database (if used)
- Reviewers asked to disclose conflicts of interest
- Final decision with in-house editors—reviewers are advisers
 - Accept (never happens); Revise; Reject

Our expectations of peer reviewers

- State any potential conflicts of interest
- Keep comments confidential
- Be objective
- Be constructive
- Be timely

Common issues raised by reviewers (1)

- Research not original, insightful, definitive
- Inappropriate design/methods, including statistical
- Ethical concerns
- Failure to comprehensively review up-to-date literature in Introduction and Discussion
 - Over-reliance on older references or references from one research group

Common issues raised by reviewers (2)

Interpretation issues

- Over-interpretation of subgroup analyses, without acknowledging issues with subgroup analyses in limitations
- Overstating importance of treatment difference, especially if not meeting prespecified criteria for statistical significance—ie, talking-up a "nearly significant" finding
- Emphasising a statistically significant result that is unlikely to be of biological or clinical significance;
- Research out of line with routine clinical practice
- Overstating findings in Summary and Conclusions
- Not discussing limitations of research in Discussion

Peer review—responding to reviewers' comments

- An opportunity, not a criticism
 - Chance to make a better paper—be conscientious and cooperative
- Respond promptly
 - Ask the editor if you need more time
- Provide point-by-point list of:
 - how each comment was addressed; justification for not addressing any comments
- Respond to ALL editorial points—eg, format, style, author statements

Summary

- What do editors look for?
- Choosing a journal
- Importance of cover letter
- Importance of summary and key messages
- Use of language
- Review process





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Appendix

THE LANCET.

Vol. I .- No. 1.] LONDON, SUNDAY, OCTOBER 5, 1823. [Price 6d.

PREFACE.

It has long been a subject of surprise and regret, that in this extensive and intelligent community there has not hitherto existed a work that would convey to the Public, and to distant Practitioners as well as to Students in Medicine and Surgery, reports of the Metropolitan Hospital Lectures.

Having for a considerable time past observed the great and increasing inquiries for such information, in a department of science so pre-eminently useful, we have been induced to offer to public-notice a work calculated, as we conceive, to supply in the most amplemanner, whatever is valuable in these important branches of know-ledge;—and as the Lectures of Sir Astley Cooper, on the theory and practice of Surgery, are probably the best of the kind delivered in Europe, we have commenced our undertaking with the introductory Address of that distinguished professor, given in the theatre of St. Thomas's Hospital on Wednesday evening last. The Course will be rendered complete in subsequent Numbers.

In addition to Lectures, we purpose giving under the head, Medical and Surgical Intelligence, a correct description of all the important Cases that may occur, whether in England or on any part of the civilized Continent.

Although it is not intended to give graphic representations with each Number, yet, we have made such arrangements with the most experienced surgical draughtsmen, as will enable us occasionally to do so, and in a manner, we trust, calculated to give universal satisfaction.

The great advantages derivable from information of this description,

THE LANCET

Volume 386 · Number 10 000 · Pages 1211-1310 · September 26-October 2, 2015

www.thelancet.com

THE LANCET

Vol. I .- No. 1.] LONDON, SUNDAY, OCTOBER 5, 1823. [Price 6d.

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The great advantages derivable from information of this description, will, we hope, be sufficiently obvious to every one in the least degree conversant with medical knowledge; any arguments, therefore, to prove

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THE LANCET Infectious Diseases

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Feb 2016 Volume 16 Number 2 p131-264 e10-e21

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Correspondence Nowsdock

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131 Guinea worm disease nears eradication The Lancet Infectious Diseases

Summary | Full-Text HTML | PDF

132 Colistin resistance: a major breach in our last line of defence David L Paterson, Patrick N A Harris

Summary | Full-Text HTML | PDF

133 CHAPAS-3 fills the gap

Harry Moultrie, Annelies Van Rie Open Access

Summary | Full-Text HTML | PDF

134 Artemisinin-based combination therapy for knowlesi malaria Michael Ramharter

Summary | Full-Text HTML | PDF

136 Pyronaridine-artesunate retreatment for malaria

Sabine Bélard, Florian Kurth

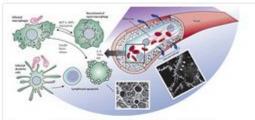
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Ebola Resource Centre

Research | Reviews | Editorials | Correspondence | World Report | Commont | Archive | Elsovier Virology | Multimedia | Related Links

Focus

Ebola-lessons learned: Authors from Harvard's Global Health Institute and the London School of Hygiene and Tropical Medicine outline 10 proposals to help prevent future health catastrophes, based on experiences from the 2014-15 Ebola outbreak in west Africa



Latest Updates: Offline: An irreversible change in global health governance

The current outbreak of Ebola in west Africa is both a public health emergency of international concern and a human tragedy.

The Lancet Ebola Resource Centre contains all related resources from The Lancet family of journals offered with free access to assist health workers and researchers in their important work to bring this outbreak to a close a quickly

Find out more about Fhola in The Lancet's Seminar.

Research

Early clinical sequelae of Ebola virus disease in Sierra Leone; a crosssectional study

John G Mattia, Mathew J Vandy, Joyce C Chang, Devin E Platt, Kerry Blerberg, Daniel G Bausch, Tim Brooks, Sampha Contoh, Ian Crozler, Robert A Fowler, Amadu P Kamara, Cindy Kang, Srividya Mahadevan, Yeallo Mansaray, Lauren Marcell, Gillan McKay, Tim O'Dempsoy, Victoria. Parris, Ruxandra Pinto, Audrey Rangel, Alex P Salam, Jessica Shantha, Vanessa Wolfman, Stoven Yoh, Adrionne K Chan, Sharmistha Mishra.

The Lancet Infectious Diseases Published online: December 22, 2015

Zika virus resource centre

Home | Correspondence | Data sharing statement | Elsevier ID

Latest Updates: Microcephaly in Brazil: how to interpret reported numbers?

Detection and sequencing of Zika virus from amniotic fluid of fetuses with

Gutlherme Calvet, Renato S Agutar, Adriana S O Melo, Simone A Sampaio,

Ivano de Filippis, Allison Fabri, Eliane S M Araujo, Patricia C de Sequeira, Marcos C L de Mendonça, Louisi de Oliveira, Diogo A Tschoeke, Carlos G

Schrago, Fabiano I. Thompson, Patricia Brasil, Flavia B dos Santos, Rita M R



microcephaly in Brazil: a case study

Noguetra, Amilicar Tanuri, Ana M B de Filippis The Lancet Infectious Diseases

WHO reveals its shopping list for weapons against Zika

Published online: February 17, 2016

Summary | Full-Text HTML | PDF

The Lancet, Vol. 387, No. 10020

Summary Full-Text HTML PDF

Published in issue: February 20, 2016

The Lancet Zika virus resource centre brings together the best evidence from across The Lancet family of journals -offered with free access-to assist researchers, policy makers, and health workers, in understanding the effects of the outbreak and how best to respond. Find out more about Zika virus in this Special Report.

Audio

Zika virus in amniotic fluid: The Lancet Infectious Diseases: February 17, 2016

The arguments for sharing data, and the consequences of not

outbreaks. In the context of a public health emergency of

doing so, have been thrown into stark relief by the Ebola and Zika

international concern, there is an imperative on all parties to make

any information available that might have value in combatting the



(mp3, 10:21 mins, 9.47Mb)

COMMENT

Rino K I Menor

The Lancet, Vol. 387, No. 10020

Summary Full-Text HTML PDF

The Lancet, Vol. 387, No. 10019

Summary Full-Text HTML PDF

Published online: February 6, 2016

Published online: February 10, 2016

Read the statement in full

Ana de Filippis discusses research on how Zika virus has been detected in the amniotic fluid of two pregnant women in Brazil.

Categories: Global Health

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Zika virus and microcephaly: why is this situation a PHEIC?

David L Heymann, Abraham Hodgson, Amadou Alpha Sall, David

O Freedman, J Erin Staples, Fernando Althabe, Kalpana Baruah,

Ghazala Mahmud, Nyoman Kandun, Pedro F C Vasconcelos, Silvia

Microcephaly in Brazil: how to interpret reported numbers?

Cesar Gomes Victora, Lavinia Schuler-Faccini, Alicia Matilasevich.

SPECIAL REPORT

WORLD REPORT

John Maurice

Concern over Zika virus grips the world

Udant Samarasekera, Marcta Triunfol. The Lancet, Vol. 387, No. 10018 Published online: February 2, 2016 Summary Full-Text HTML PDF

EDITORIAL

Zika virus: a new global threat for 2016

The Lancet, Vol. 387, No. 10014 Published in issue: January 09, 2016

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Moving towards universal health coverage: lessons from 11 country studies

Michael R Reich, Joseph Harris, Naoki Ikegami, Akiko Maeda, Cheryl Cashin, Edson C Arauto, Ketzo Takemt, Timothy G Evans

The Lancet, Vol. 387, No. 10020 Published online: August 20, 2015

Summary Full-Text HTML PDF

Health security: the defining challenge of 2016

The Lancet, Vol. 386, No. 10012

Published in issue: December 19, 2015 Summary Full-Text HTML PDF

2016 Olympics, Umrah, and Hajj Habida Elachola, Ernesto Gozzer, Jiatong Zhuo, Ziad A Memish The Lancet, Vol. 387, No. 10019

A crucial time for public health preparedness: Zika virus and the

Published online: February 6, 2016 Summary Full-Text HTML PDF

Erlane Ribetro, André Pessoa, Fernando Celso Barros

Identification of Zika virus vectors and implications for control



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Guest Post: Kent Anderson UPDATED — 96 Things Publishers Do (2016 Edition)

POSTED BY SCHOLARLY KITCHEN - FEB 1, 2016 - 18 COMMENTS

FILED UNDER ACADEMIC PUBLISHERS, ACADEMIC PUBLISHING, COWBELL, EDITING, MARKETING, MEDLINE, PEER REVIEW, PRODUCTION, PUBLISHERS, PUBLISHING, PUBMED, SCHOLARLY PUBLISHING

Editor's Note: If you're reading this blog, you likely know who Kent Anderson is. What you might not know is that Kent recently hung out his own shingle as an independent publishing consultant, starting Caldera Publishing Solutions. Kent now also has his own blog at the site, and it's worth checking regularly. I recently realized that one of Kent's most-read and most-cited posts, about the things publishers do, was in dire need of updating. Kent graciously agreed to dig back into this ever-expanding list.

The first version of this list was created back in the summer of 2012, at a time when publishers were being repeatedly challenged to prove they added value beyond managing peer review and some basic copy editing and formatting. The first



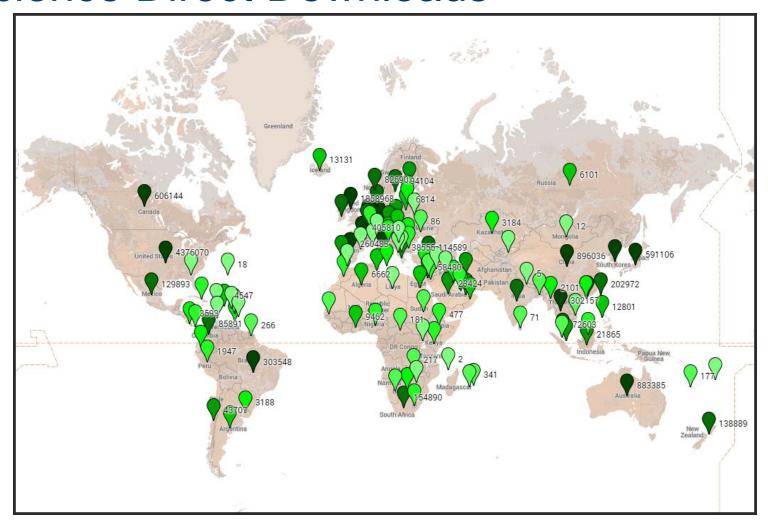
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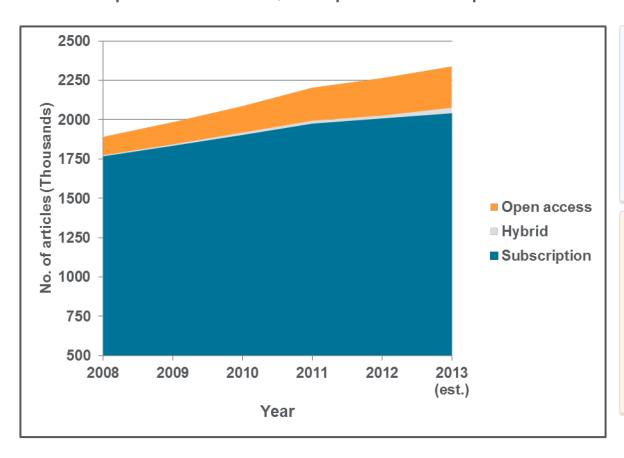
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- Text or data mine the article

What is the uptake of open access?

There were in 2013, estimated worldwide 2,041,106 published subscription and 297,596 published open access articles



Subscription content:

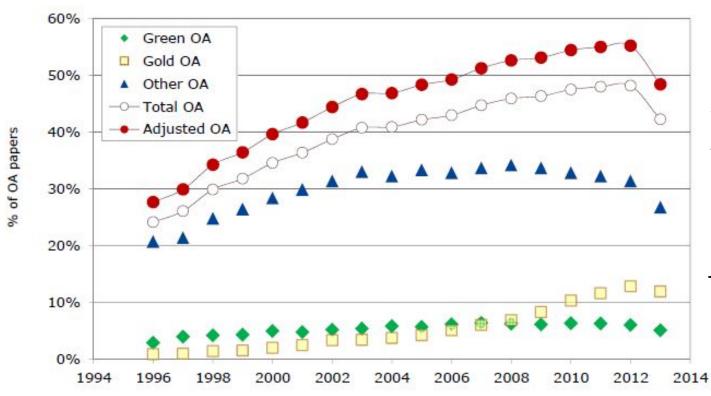
- Continues to grow year on year at approx. 3-4%
- Amounts to a total article share of approx. 87.3% in 2013
- In 2013, Elsevier published over 330,000 articles which included an increase of 20,000 extra subscription articles

Open access content:

- Currently growing at approx. 20% in 2013
- Amounts to a total article share (hybrid + "pure" Gold) of approx.8.2% in 2013
- The total article share of all immediately accessible OA articles is 12.7% including subsidized open access
- In 2013, Elsevier published over 6,000 gold open access articles

Courtesy Elsevier Publishing Connect

Free availability on the internet



"more
than 50% of the
scientific papers
published in 2007,
2008, 2009, 2010,
2011 and 2012 can
be downloaded for
free on the
Internet"

Figure 9 Percentage of freely available peer-reviewed papers as measured in April 2014, 1996-2013

Source:

Computed by Science-Metrix using Scopus as well as DOAJ, ROAR, OpenDOAR, PubMedCentral, and numerous sources of freely downloadable papers.

Source: Archambault, E. et al. (2014). *Proportion of Open Access Papers Published in Peer-Reviewed Journals at the European and World Levels—1996–2013*. Deliverable D.1.8. (2014 Update). Version 11b. For European Commission

Post-publication peer review

https://pubpeer.com/



Subcutaneous injections of aluminum at vaccine adjuvant levels activate innate immune genes in mouse brain that are homologous with biomarkers of autism

Journal of Inorganic Biochemistry (2017) - 34 Comments
pubmed: 28923356 doi: 10.1016/j.jinorgbio.2017.08.035 issn: 1873-3344 issn: 0162-0134

Dan Li, Lucija Tomljenovic, Yongling Li, Christopher A. Shaw

#8 Condylocarpon Amazonicum commented 19 days ago

Are you sure you are looking at this paper in the right way, people? Isn't it much more efficient to find the image duplications in the gels? Outside of the antivaxx world the gene C2, for example, is not the same as SFTPB or STAT4, flipped or not, etc., etc.,

Clearly flipped band duplications in Fig. 2A:

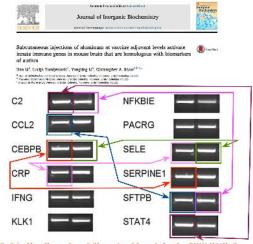
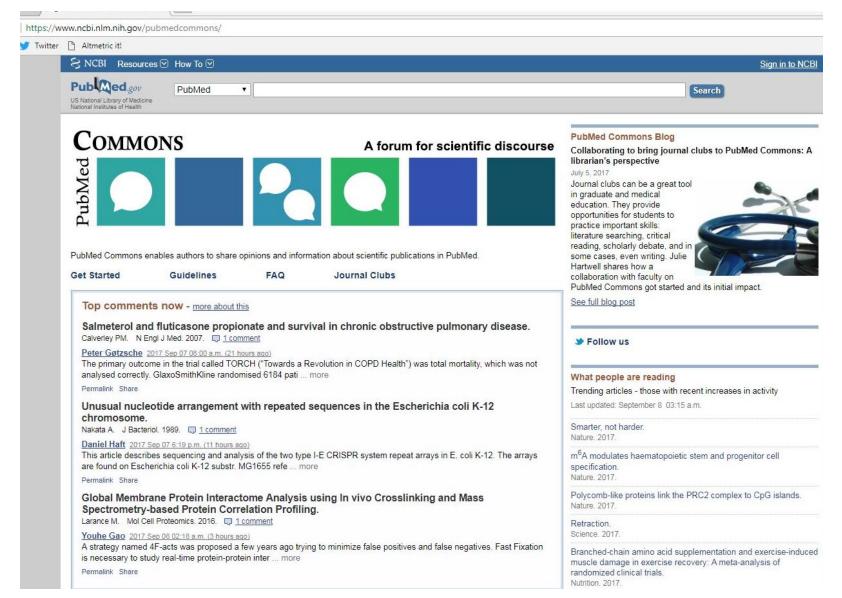


Fig2A: Duplicated and flipped gel bands in the "RT-PCRs"

Post-publication peer review

https://www.ncbi.nlm.nih.gov/pubmedcommons/



ResearchGate: research community & sharing

https://www.researchgate.net/home

Project

Connect and collaborate with

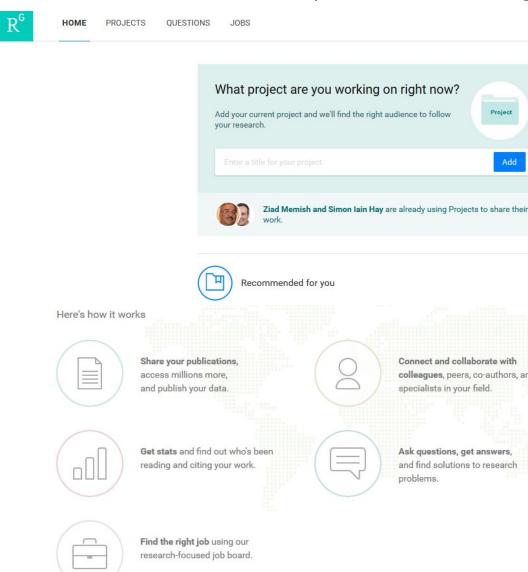
Ask questions, get answers,

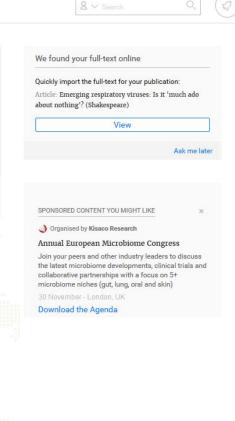
problems.

and find solutions to research

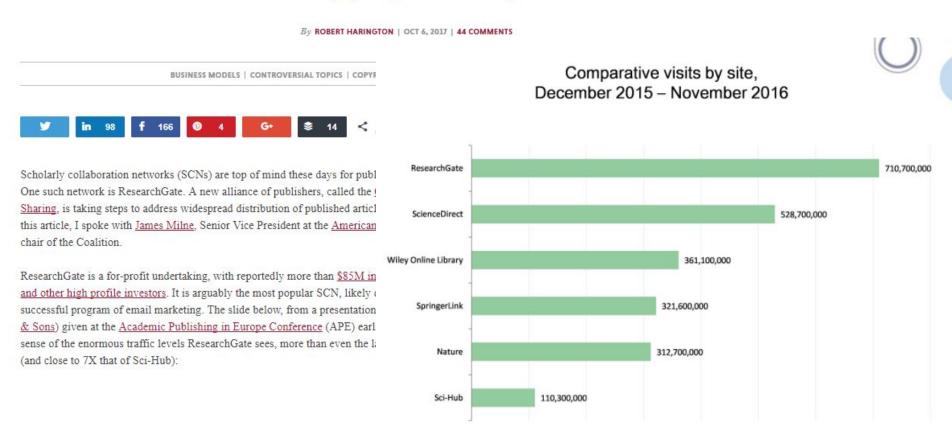
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colleagues, peers, co-authors, and





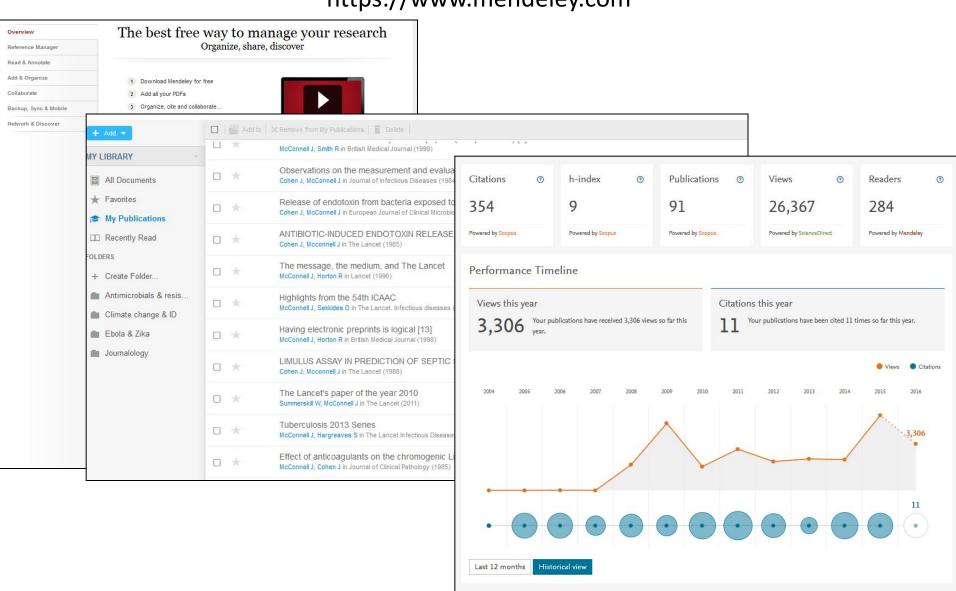
ResearchGate: Publishers Take Formal Steps to Force Copyright Compliance



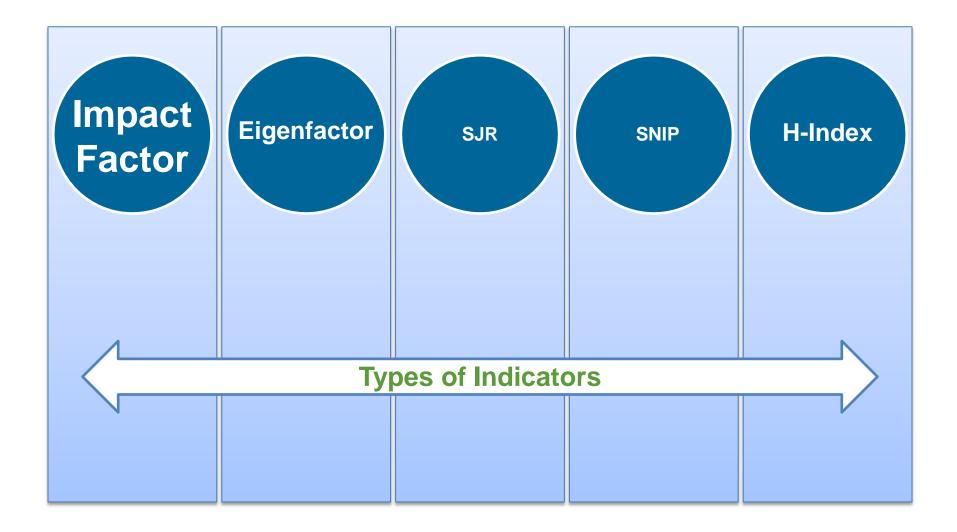
See: https://scholarlykitchen.sspnet.org/2017/10/06/researchgate-publishers-take-formal-steps-force-copyright-compliance/

Mendeley: reference manager, collaboration, sharing (owned by Elsevier)

https://www.mendeley.com

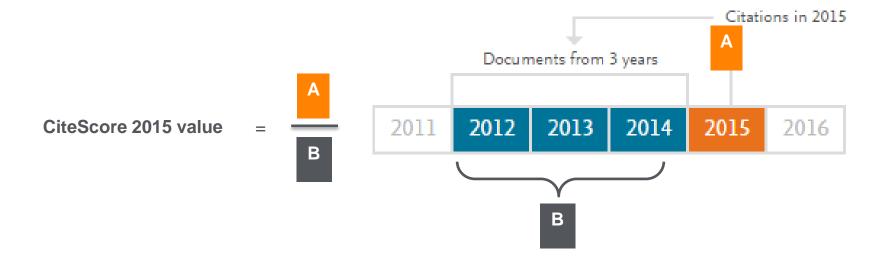


Metrics





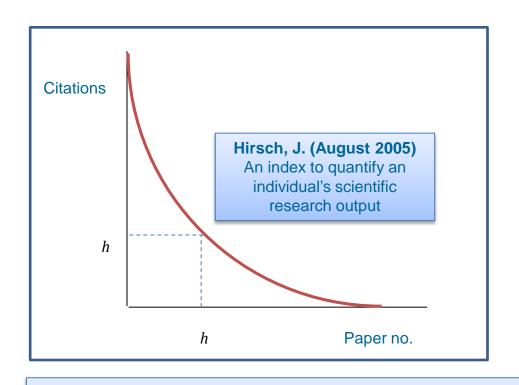
CiteScore is a simple metric for all Scopus journals



CiteScore	Impact Factor
A = citations to 3 years of documents	A = citations to 2 or 5 years of documents
B = all documents indexed in Scopus, same as A	B = only citable items (articles and reviews), different from A



The H-index





Available online via Scopus, Google Scholar

Rates individuals based on career publications

Incorporates both quantity and quality

Productivity and age constraints

Courtesy Elsevier Publishing Connect

Process — trial registration

 WHO International Clinical Trials Registry Platform (ICTRP)

http://www.who.int/ictrp
/network/primary/en/

International Clinical Trials Registry Platform (ICTRP)

About Registries

WHO Registry Criteria | WHO Data Set | Primary Registries | Partner Registries

Primary Registries in the WHO Registry Network

Primary Registries in the WHO Registry Network meet specific criteria for content, quality and validity, accessibility, unique identification, technical capacity and administration. Primary Registries meet the requirements of the ICMJE.

The registries that currently meet these criteria are:

Thai Clinical Trials Registry (TCTR)
The Netherlands National Trial Register (NTR)

Pan African Clinical Trial Registry (PACTR)

Sri Lanka Clinical Trials Registry (SLCTR)

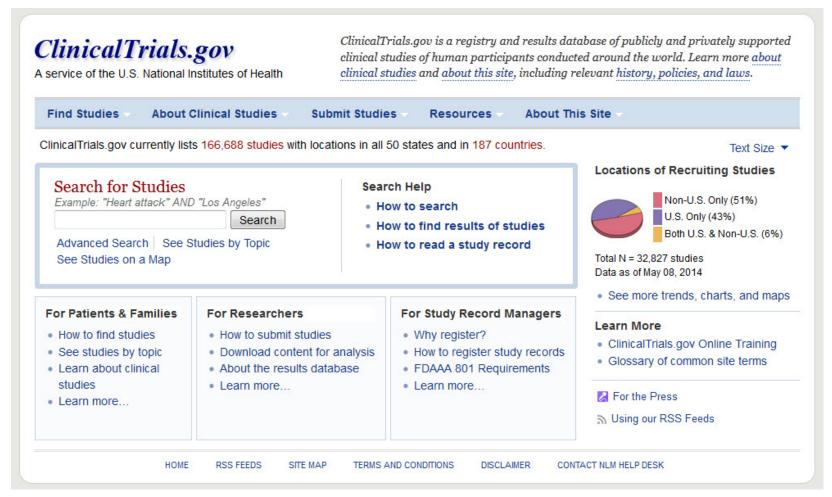
Australian New Zealand Clinical Trials Registry (ANZCTR)	Profile	Go to Website
Brazilian Clinical Trials Registry (ReBec) Chinese Clinical Trial Registry (ChiCTR) Clinical Research Information Service (CRiS),	Profile Profile Profile	Go to Website Go to Website Go to Website
Republic of Korea	Profile	Go to Website
Clinical Trials Registry - India (CTRI) Cuban Public Registry of Clinical Trials(RPCEC) EU Clinical Trials Register (EU-CTR)	Profile Profile	Go to Website Go to Website
German Clinical Trials Register (DRKS) Iranian Registry of Clinical Trials (IRCT)	Profile Profile	Go to Website Go to Website
ISRCTN.org Japan Primary Registries Network (JPRN)	Profile Profile	Go to Website Go to Website (in
Japan Filliary Registries Network (JFRN)	Fiolile	Japanese)

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UMIN CTR Website
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Profile Go to Website
Profile Go to Website
Profile Go to Website

Go to Website

Profile

Process — trial registration



US NIH http://clinicaltrials.gov/

Process — reporting guidelines: CONSORT statement

- Submission requirement for many journals when reporting randomised controlled trials
 - Checklist of information to include in paper
 - 2010 update available at http://www.equator-network.org/reporting-guidelines/consort/

"To assess a trial accurately, readers of a published report need complete, clear and transparent information on its methodology and findings." (CONSORT Statement Authors 2010)

Table. CONSORT 2010 Checklist of Information to Include When Reporting a Randomized Trial*

Section/Topic	Item Number	Checklist Item	Reported on Page Number
Title and abstract	1a 1b	Identification as a randomized trial in the title Structured summary of trial design, methods, results, and condusions (for specific guidance, see CONSORT for abstracts [21, 31])	
Introduction			
Background and objectives	2a	Scientific background and explanation of rationale	
	2b	Specific objectives or hypotheses	
Methods			
Trial design	3a	Description of trial design (such as parallel, factorial), including allocation ratio	
	3p	Important changes to methods after trial commencement (such as eligibility criteria), with reasons	
Partidpants	4a 4b	Eligibility criteria for participants	
Interventions	40 5	Settings and locations where the data were collected The interventions for each group with suffident details to allow replication,	
		including how and when they were actually administered	
Outcomes	6a	Completely defined prespecified primary and secondary outcome measures, including how and when they were assessed	
	6b	Any changes to trial outcomes after the trial commenced, with reasons	
Sample size	7a	How sample size was determined	
Randomization	7b	When applicable, explanation of any interim analyses and stopping guidelines	
Sequence generation	8a	Method used to generate the random allocation sequence	
	8b	Type of randomization; details of any restriction (such as blocking and block size)	
Allocation concealment mechanism	9	Mechanism used to implement the random allocation sequence (such as sequentially numbered containers), describing any steps taken to conceal the sequence until interventions were assigned	
Implementation	10	Who generated the random allocation sequence, who enrolled participants, and who assigned participants to interventions	
Blinding	11a	If done, who was blinded after assignment to interventions (for example,	
	11b	partidipants, care providers, those assessing outcomes) and how If relevant, description of the similarity of interventions	
Statistical methods	12a	Statistical methods used to compare groups for primary and secondary outcomes	
	12b	Methods for additional analyses, such as subgroup analyses and adjusted analyses	
Results			
Partidpant flow (a diagram is strongly recommended)	13a	For each group, the numbers of participants who were randomly assigned, received intended treatment, and were analyzed for the primary outcome	
Recruitment	13b 14a	For each group, losses and exclusions after randomization, together with reasons Dates defining the periods of recruitment and follow-up	
Recidioneric	14a 14b	Why the trial ended or was stopped	
Baseline data	15	A table showing baseline demographic and clinical characteristics for each group	
Numbers analyzed	16	For each group, number of participants (denominator) included in each analysis and whether the analysis was by original assigned groups	
Outcomes and estimation	17a	For each primary and secondary outcome, results for each group, and the	
		estimated effect size and its precision (such as 95% confidence interval)	
	17b	For binary outcomes, presentation of both absolute and relative effect sizes is recommended	
Ancillary analyses	18	Results of any other analyses performed, including subgroup analyses and	
Harms	19	adjusted analyses, distinguishing prespecified from exploratory All important harms or unintended effects in each group (for specific guidance,	
		see CONSORT for harms [28])	
Discussion			
Limitations	20	Trial limitations; addressing sources of potential bias; imprecision; and, if relevant,	
Generalizability	21	multiplicity of analyses Generalizability (external validity, applicability) of the trial findings	
Interpretation	22	Interpretation consistent with results, balancing benefits and harms, and considering other relevant evidence	
Other Information			
Registration	23	Registration number and name of trial registry	
Protocol	24 25	Where the full trial protocol can be accessed, if available	
Funding	20	Sources of funding and other support (such as supply of drugs), role of funders	

CONSORT checklist

Process — ICMJE Recommendations

- "Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals"
 - Provide recommendations relating to ethics and aspects of editing and writing when reporting research results
 - Improves chances of acceptance in a high impact factor journal
 - 2013 version available at <u>www.icmje.org</u>



Process — Author identification orcid.org

