Australian National University

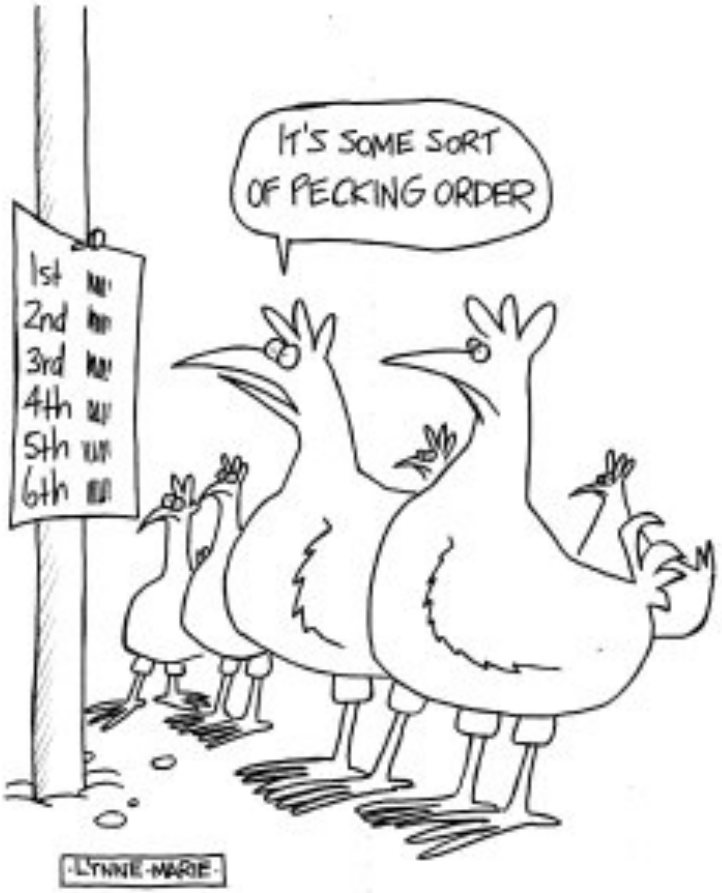
Making an impact

ANU Library

Topics

- Research data management
- Open access
- Bibliometrics
- Researcher profiles
- Where to publish

Bibliometrics



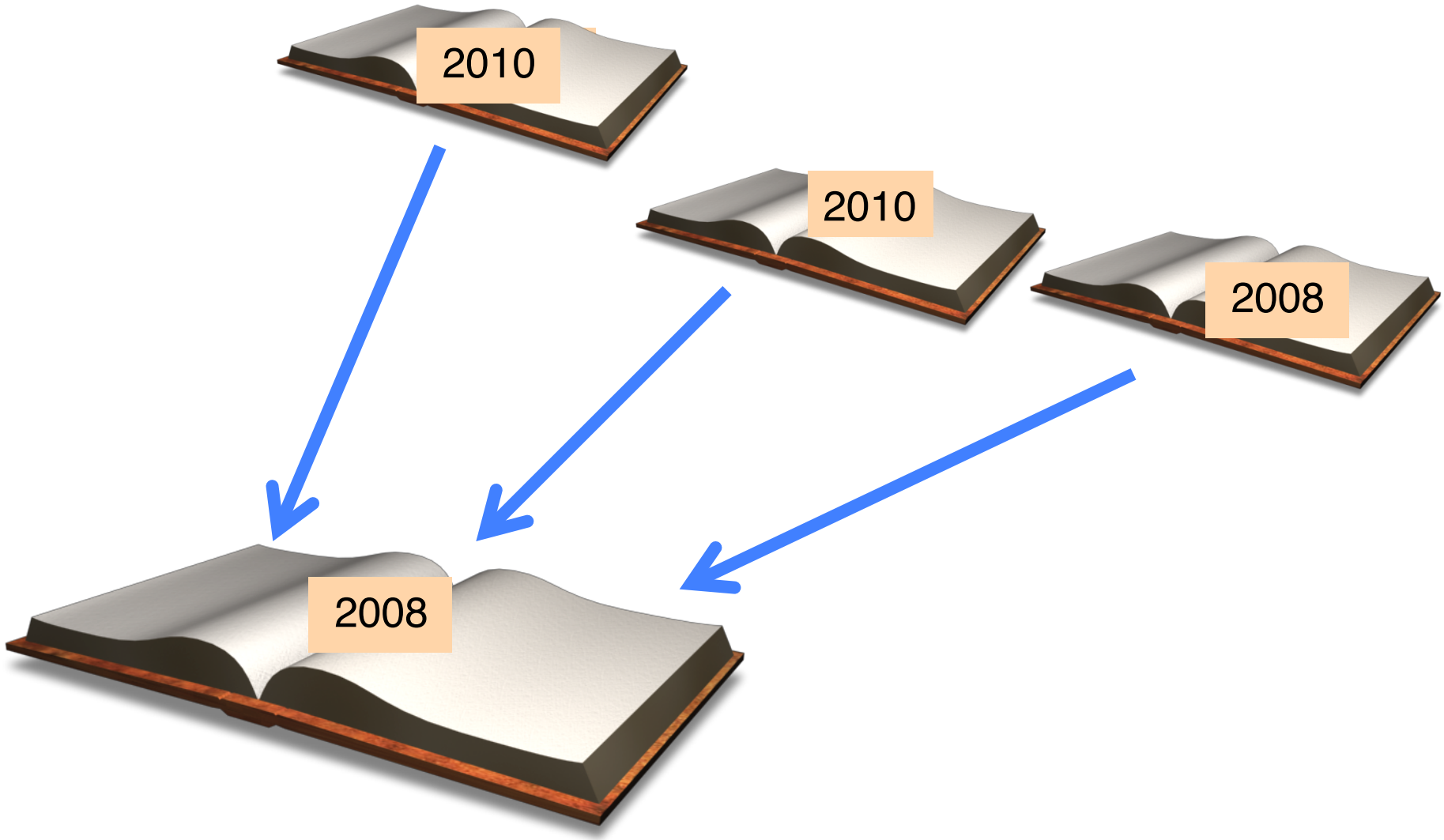
- https://coreybradshaw.files.wordpress.com/2013/11/pecking-order.jpg

How is impact measured – the art of bibliometrics

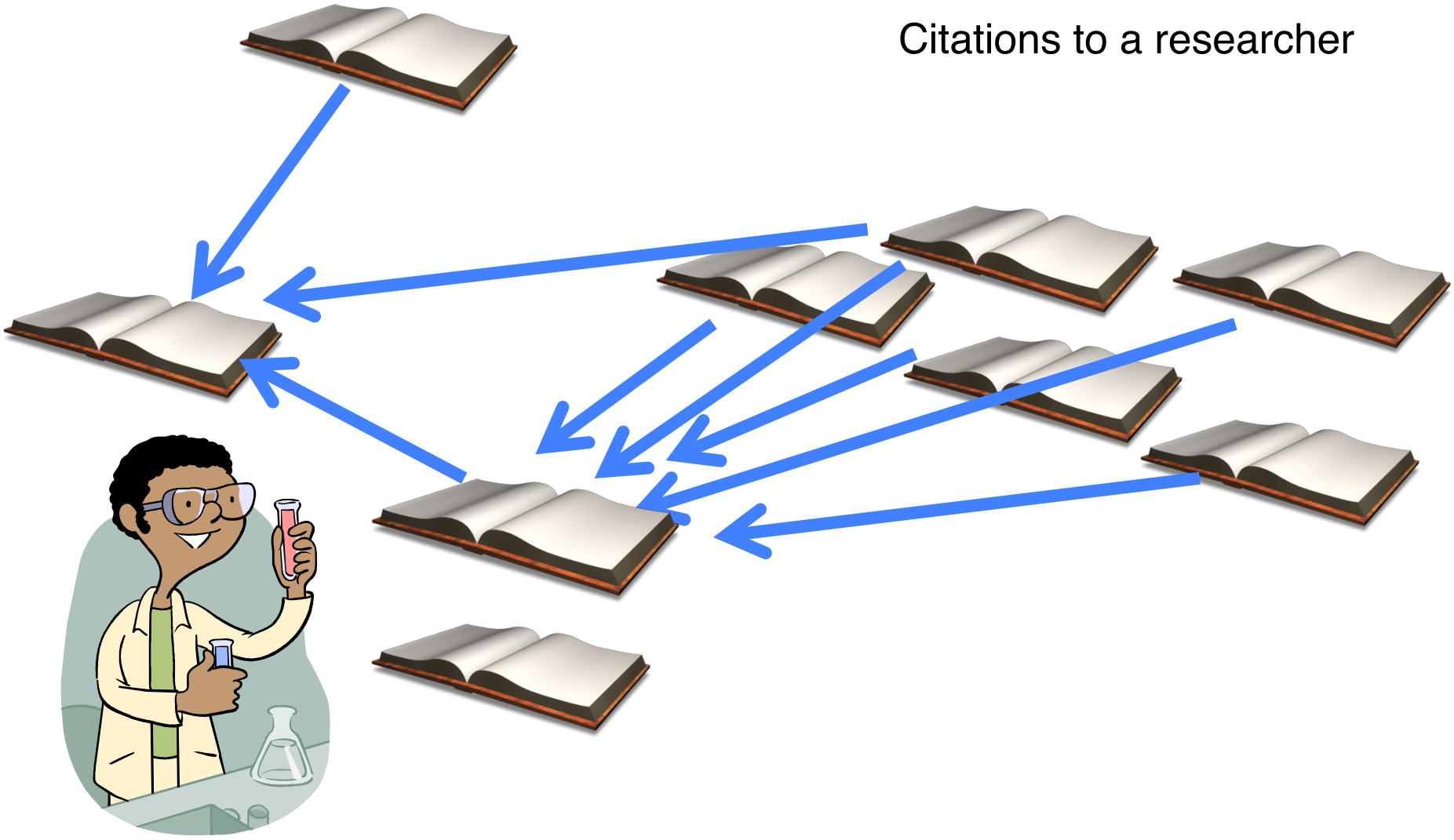
Bibliometrics is a statistical analysis of books, articles, or other publications.

Bibliometric analysis use data on numbers and authors of scientific publications and on articles and the citations therein (and in patents) to measure the “output” of individuals/research teams, institutions, and countries …

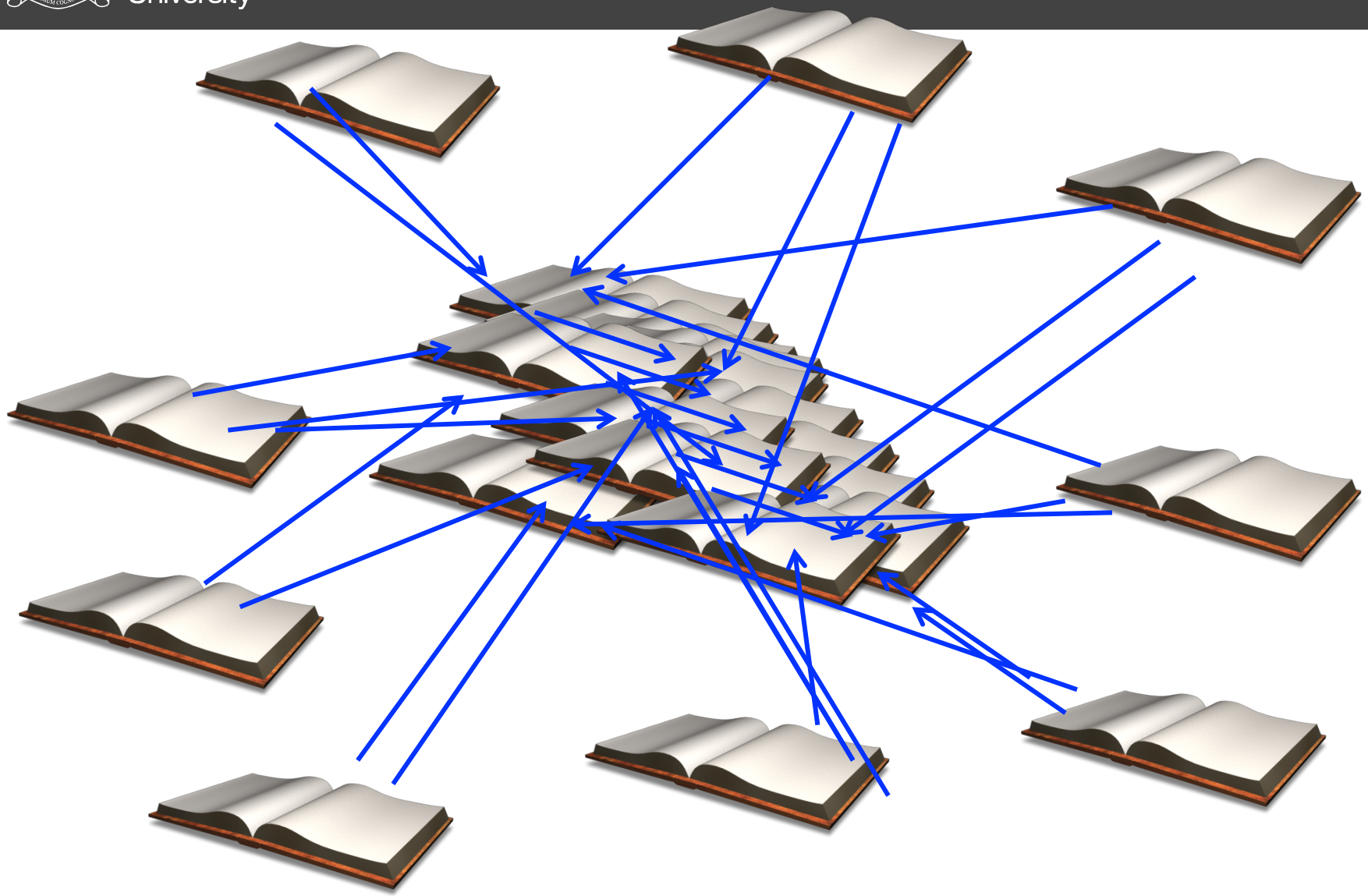
Citations to an individual paper



Citations to a researcher



Citations to a research group/department



Citations to a journal

Many ways to measure

- ISI
- JCR
- Eigenfactor
- H-index
- Journal analyser
- Altmetrics
- Google Scholar

ISI – Web of Science

InCites™ Journal Citation Reports®

Indicates impact of individual article – how many times has my article been cited?

Links to Journal Citation Reports for information on impact of the journal

H-index

- Attempts to quantify an individual's research output
- Can be calculated manually or automatically in Scopus or Web of Science

http://www.harzing.com/pop_hindex.htm

Google Scholar

- Designed to “help authors consider where to publish”
- Based on h-index
- Can browse publications in broad areas such as engineering and computer science, development economics

https://scholar.google.com.au/citations?view_op=top_venues&hl=en

Journal citation reports (JCR)

- Thomson Reuters – data from WoS
- 5000 journals in science & technology
- 1500 journals in social sciences

Indicates -

- Highest impact journals
- Most frequently used journals
- Largest journals

Journal analyser

- Scopus (Elsevier)

http://www.scopus.com/source/eval.url

- SJR – weighted by prestige of journal
- SNIP - measures conceptual impact by weighting citations based on total # of citations in a subject field
- Freely available http://www.journalmetrics.com/

Eigenfactor

Takes into account the “prestige” of a journal

Attempts to analyse the influence of a journal

Journals with ^ impact factor in a field have higher Eigenfactor

Data from Thomson Reuters JCR

http://www.eigenfactor.org/

Impact factor

JIF – average # times article from journal has been cited in last two years

Uses ISI Web of Knowledge data

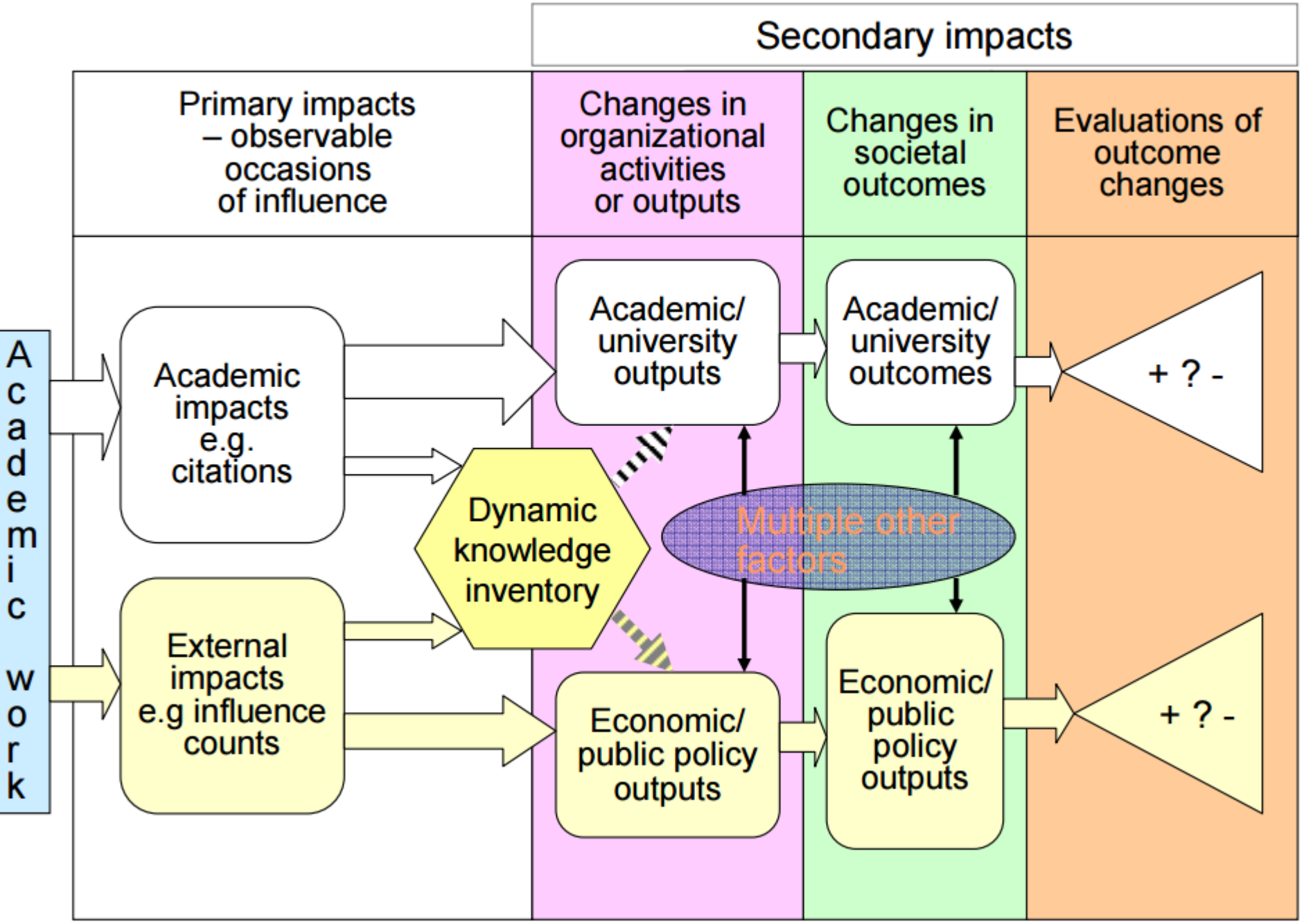
Problems

That sounds great BUT…

Remember results are influenced by –

* Size
* Time/frequency of publication
* Non-English language journals
* Journals not indexed by Scopus/WoS

Figure I.1: The primary and secondary impacts of academic research



Altmetrics

Reflect impact of article, not container

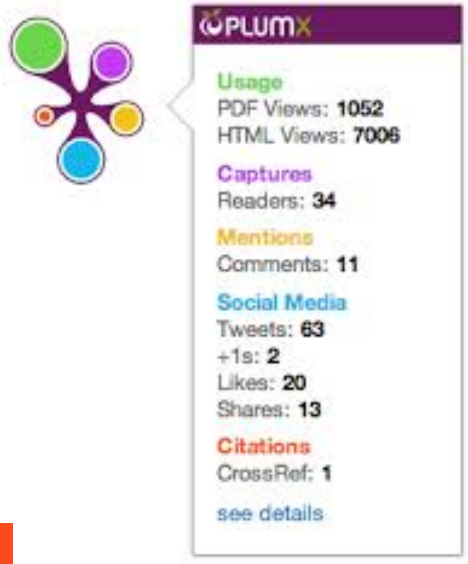
*Altmetric www.altmetric.com

*Impact Story https://impactstory.org/

*PlumX www.plumanalytics.com

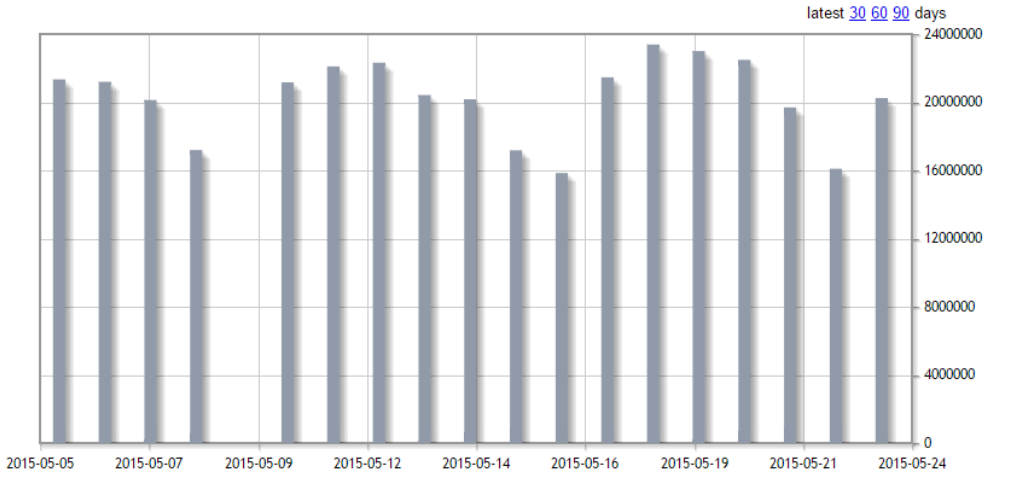
*Google + https://plus.google.com

*Wikipedia https://en.wikipedia.org/w/index.php?title=Main_Page&action=history

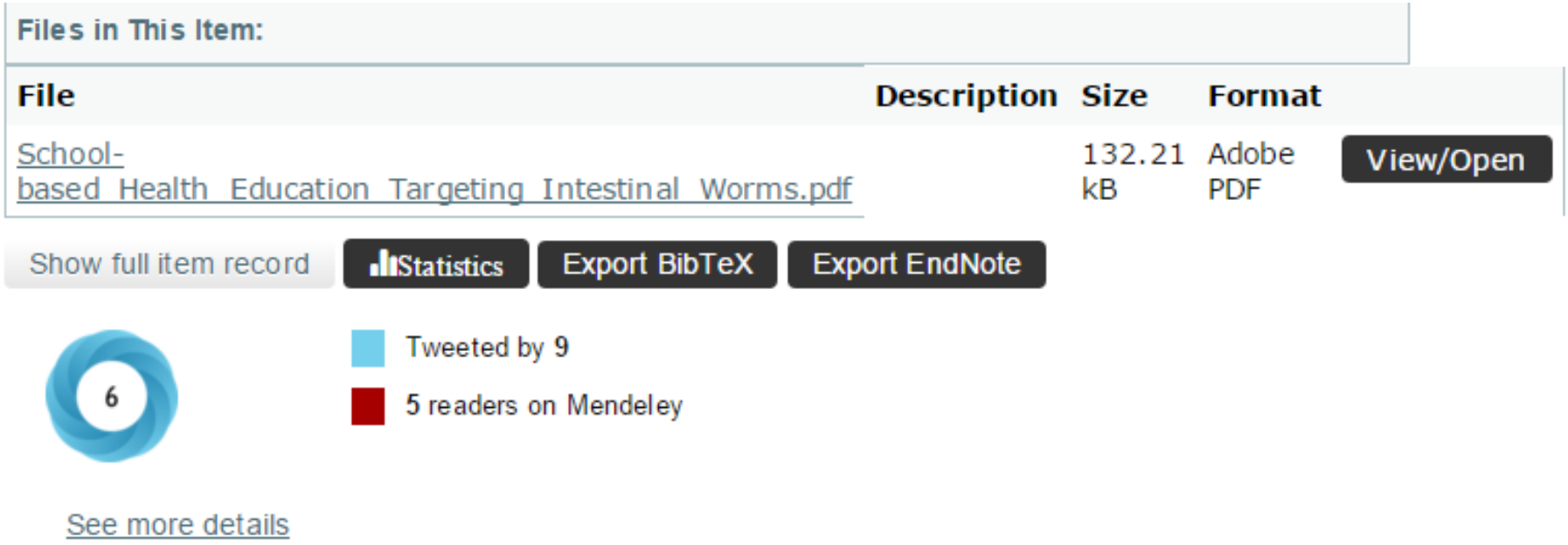


Wikipedia article traffic statistics

Main_Page has been viewed 365432380 times in the last 30 days. This article ranked 2 in traffic on en.wikipedia.org.



Record in ANU repository showing Altmetric score



In your spare time…

Increasing your research impact

Last Updated: Sep 14, 2014 | URL: http://libguides.anu.edu.au/bibliometricsandcitationtracking | Print Guide | RSS Updates | Email Alerts

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Introduction

What is bibliometrics?

The branch of library science concerned with the application of mathematical and statistical analysis to bibliography; the statistical analysis of books, articles, or other publications. (Oxford English Dictionary Online)

In other words… data about publications, or citation frequency.

Scientometrics is the branch of information science concerned with the application of bibliometrics to the study of the spread of scientific ideas; the bibliometric analysis of science. (Oxford English Dictionary Online)

Why is bibliometrics important?

A student asks you "What are the best journals in my field?"

A professor asks you "How do I check who is citing my articles? How many times have I been cited?"

A student asks you "How do I know this article is important?"

A professor asks you "How can I compare the research impact between journals so I know which journal should I publish in?"

Bibliometrics affects:

- People
- Journal collections
- Research Funding
- Tenure
- Expertise status in the field
- Finding others in the field/subject area (using citation searching)

Acknowledgements

This guide includes content adapted with permission from Bodleian Libraries, University of Oxford and Robin Kear, Liaison Librarian, University of Pittsburgh.

Law of Scattering

80% of the citations come from about 20% of the journals cited, identifying a core list for a local journal collection.

-- (Chung, 2007)

Sample bibliometric map

The emergence of neuroeconomics

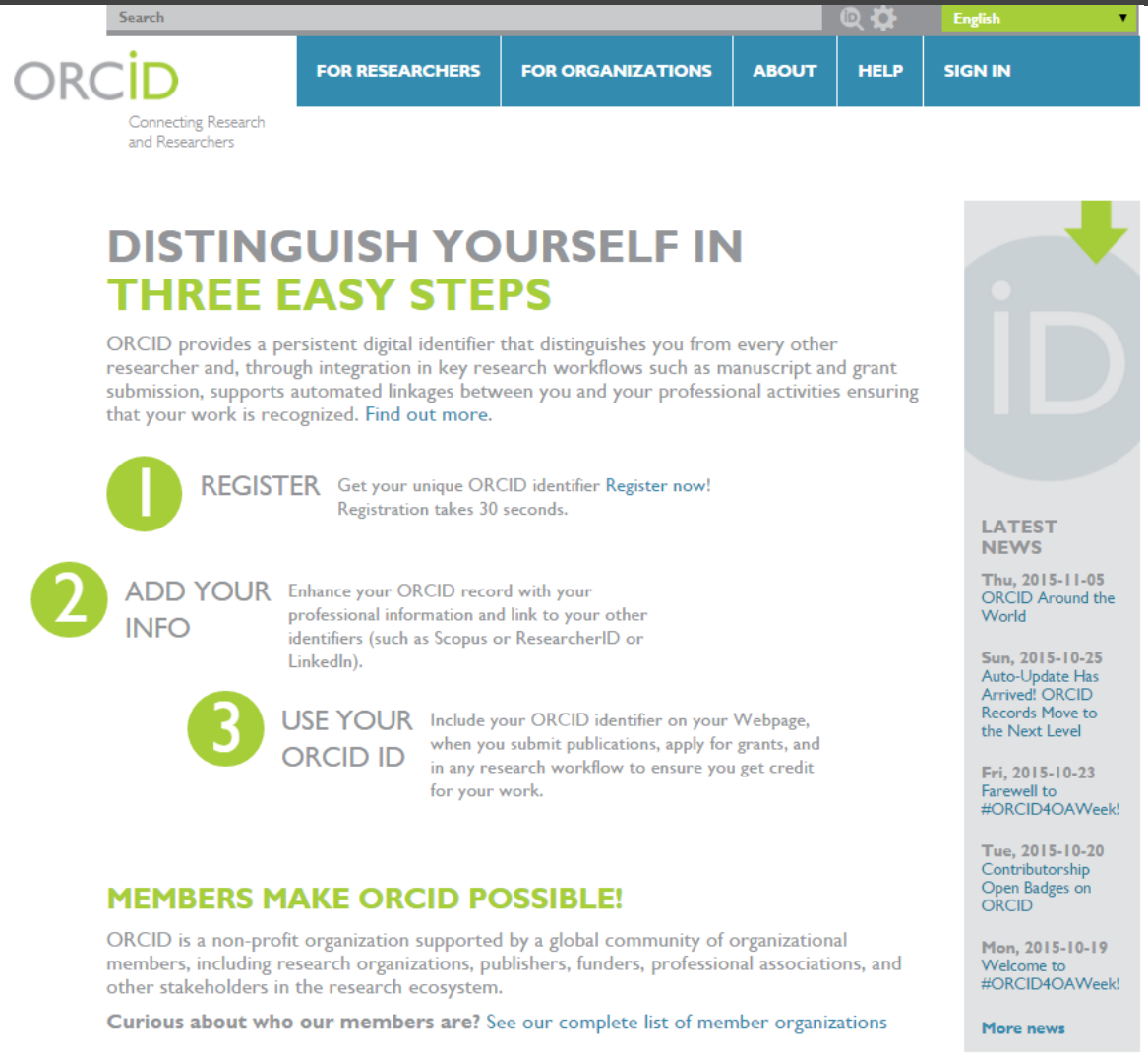
This map, constructed using journal-level citation data from the Journal Citation Reports, highlights the role of neuroeconomics in bringing together research in economics and in neuroscience.

Thomson Reuters (ISI Web of Knowledge)

ORCiD

ORCID
Connecting Research and Researchers

- Persistent digital identifier
- Distinguishes individuals – name disambiguation
- Automated linkages between author and professional activities – manuscript submission; grant applications, etc
- Endorsed by ARC/NHMRC



http://orcid.org/

Google Scholar

https://scholar.google.com.au/citations?user=4kW-r2QAAAAJ&hl=en

Dr Danny Kingsley

Follow

Head of Scholarly Communication at University of Cambridge and Visiting Fellow - Australian National

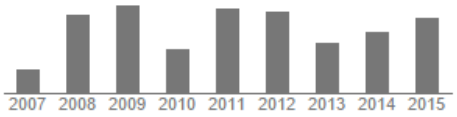
open access, scholarly communication, repositories, publication, authorship

Verified email at cam.ac.uk - Homepage

Title 1–20	Cited by	Year
The publishing imperative: the pervasive influence of publication metrics C Steele, L Butler, D Kingsley Learned Publishing 19 (4), 277-290	75	2006
The state of the nation: A snapshot of Australian institutional repositories MA Kennan, DA Kingsley First Monday 14 (2)	40	2009
The journal is dead, long live the journal D Kingsley On the horizon 15 (4), 211-221	22	2007
e-Publishing's impacts on journals and journal articles R Clarke, D Kingsley Journal of Internet Commerce 7 (1), 120-151	17	2008

Google Scholar

Citation indices	All	Since 2010
Citations	227	142
h-index	7	6
i10-index	7	5



Co-authors View all...

Mary Anne Kennan

Roger Clarke

Lisa Kruesi

Open Access

More exposure for your work
Researchers in developing countries can see your work
Practitioners can apply your findings
Taxpayers get value for money
Higher citation rates
Compliant with grant rules
The public can access your findings
Your research can influence policy

Open access citation advantage

Measure	Result
Studies finding a positive Open Access citation advantage	27
Studies finding no Open Access citation advantage (or an OA citation disadvantage)	4

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

Why does all this matter?

- Reputation
- High impact journals = increase in your citation counts
- Making your research visible

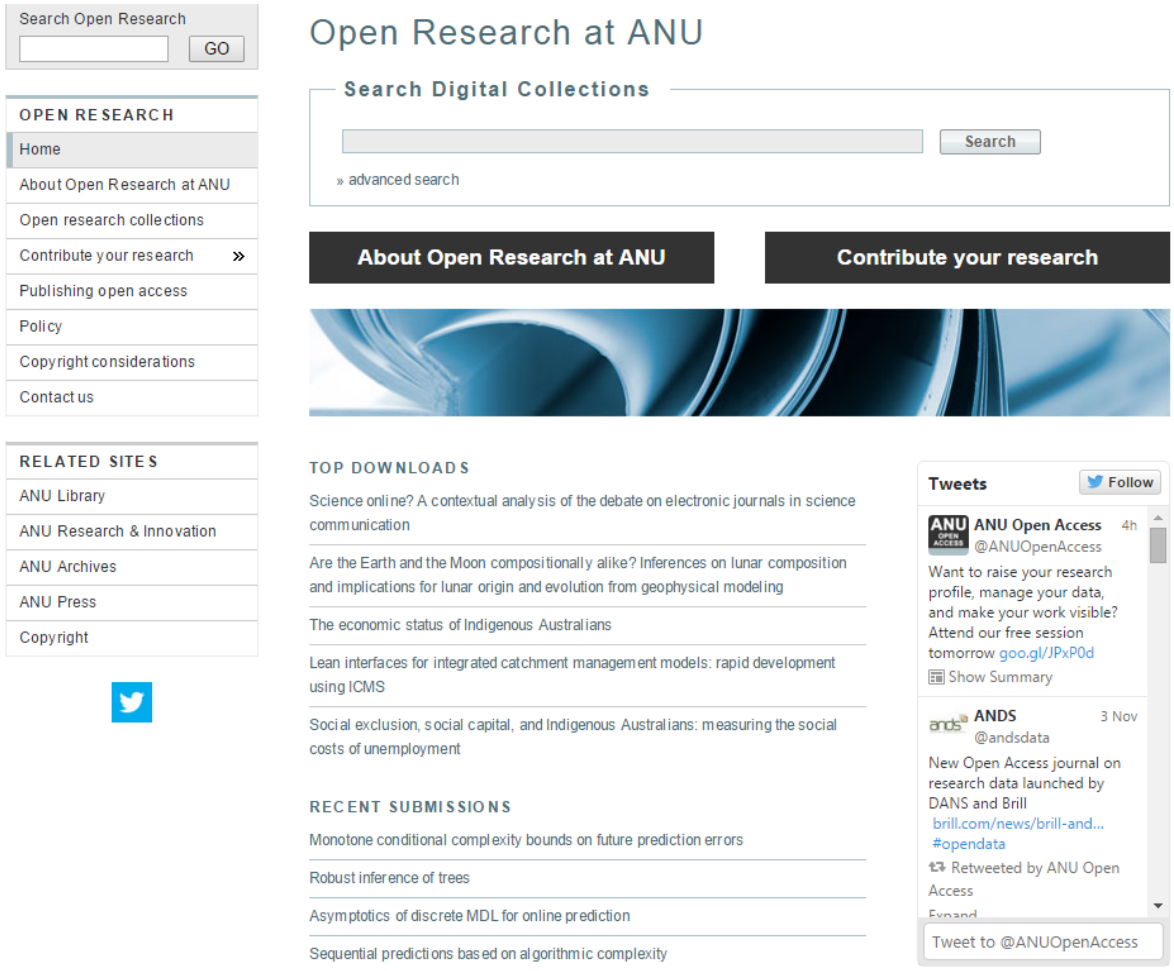
How?

OpenResearch@ANU

- ANU open access publications repository
- Facilitates ANU Open Access Policy
- Disseminate your research more broadly
- Meet funder obligations
- *Increase your impact!*

Australian National University

OpenResearch@ANU



Publish with the best – an overview

- How to get published — SAGE Publishing

Presenter: Rosalia da Garcia, SAGE Publishing

Video presentation (MP4, 88MB)

Slide presentation (PDF 17.4MB)

- How to get published — CSIRO

Presenter: Andrew Stammer, Executive Manager Communications & Publishing and Director of CSIRO PUBLISHING

Audio presentation (MP4, 58.5MB)

Slide presentation (PDF 2.49MB)

Australian National University

Predatory publishing

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- Open research collections
- Contribute your research »
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- ANU Research & Innovation
- ANU Archives
- ANU Press
- Copyright

Publishing open access

By publishing open access or making a version of your published work available open access, you are providing free, unrestricted online access to scholarly materials that a number of people — including professional practitioners, industry workers and people in institutions and countries that are unable to afford subscriptions — would not otherwise have.

There are many avenues for publishing open access, and a good resource is the Directory of Open Access Journals (DOAJ), which lists the journals and publishers that facilitate open access publishing.

The *Guide to OA monograph publishing* is a useful resource for those looking for information about open access monograph publishing.

To gain a broader understanding of open access publishing watch this short video produced by PHD Comics.

Open access journals—gold open access

Publishing in an open access journal often means an article is assigned a creative commons licence permitting it to be distributed openly across a number of networks. You may be required to pay the publisher an upfront fee, or author processing charge (APC), to make the work openly available on the web. Publishing in this way is typically referred to as Gold Open Access.

Gold open access

Subscription-based journals—green open access

Publishing in a traditional subscription-based journal means your published work is immediately available to journal subscribers.

Articles published in these journals can still be made open access by making a pre or post print version of your article available in an open access repository such as the University's Digital Collections. This form of publishing is known as Green Open Access, or self-archiving.

Alternatively, an author payment charge (APC) can be paid for an article in a subscription journal to be made open access in that journal — this is known as hybrid publishing, and is not supported at ANU.

Green open access

Paying for publication

At this time, ANU does not have a centrally administered fund for paying for publication. Check with your College research staff for available funds, and make sure you know your funder's policy in regard to using grant money for paying for publication.

Predatory publishing

While the benefits of open access publishing are undeniable, its evolution has seen the emergence of enterprises that run conferences and journals with low or no peer review or other quality mechanisms. These predatory publishers solicit contributions to reputable sounding journals and conferences promising publication, however they do not provide a quality contribution to careers.

The ANU University Librarian recently provided some practical advice to researchers (PDF, 1.6MB) on how to prevent exploitation by predatory or vanity publishers, reiterating three major tips:

- If you haven't heard of the journal or conference check Beall's list or ask your local librarian
- Don't believe the website – ask your colleagues and look at indicators of journal impact. A library's guide to Increasing your research impact with information on journal measures and tools can help you
- Don't respond to unsolicited emails – choose the journals you wish to submit to.

How innovative are you in publishing?

https://101innovations.wordpress.com/

Research Data Management

Search Library website

GO

ANU LIBRARY

- Home
- My library record
- Using the library »
- Search the Library collection »
- Subject & 'how to' guides »
- Training & resources »
  - IT Skills development
  - Referencing
  - Research data management
  - Research skills
  - Subject contacts
  - Tailored programs
  - Training calendar
  - Library tours & information sessions
- Help »
- News »
- Events & exhibitions »
- About us »

Library home » Training & resources » Research data management

Research data management

Planning your research

Finding and analysing data, training and support

Managing your data

Collecting, organising and storing data

Research publication

Sharing your research

Policies and procedures

Responsible conduct, intellectual property

Australian National University

Data Management

Last Updated: Nov 9, 2015 | URL: http://libguides.anu.edu.au/datamanagement | Print Guide | RSS Updates | Email Alerts

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ANU Data Services

Further Reading

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Why Do You Need to Manage Your Data?

The carrot:

- improvements to efficiency - managing data at the last minute and using the first method that comes to mind is usually time-consuming and error-prone
- protection - loss of data can be a disaster
- quality - data that is carefully managed has a much greater likelihood of being quality data
- exposure - data is now recognised as a scholarly output and good data management maximizes the impact of your work, increasing the visibility of your research and extending its relevance; data citation standards are at a critical stage with general acceptance of the use of DOIs (Digital Object Identifiers) and a major database specific to data citation is soon to be released

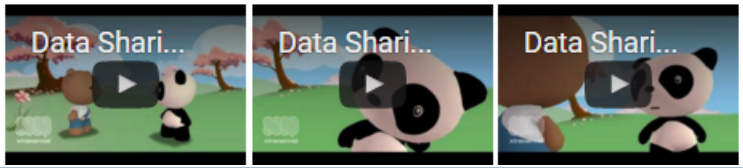
The stick:

- basic data management is required by the *Australian Code for the Responsible Conduct of Research*, and compliance with the *Code* is already a requirement for ARC and NHMRC funding and is likely to be mandated by other funding bodies, government and institutions in the near future
- inadequate data management can also lead to catastrophes like the loss of data or the violation of people's privacy

Comments (0)

A Data Management Horror Story

This is a mini series of Youtubes by NYU Health Sciences Libraries showing what shouldn't happen when a researcher makes a data sharing request.



ANU in RDA

The Australian National University (ANU) is a place of intensive research, and this is reflected in the variety and quality of ANU dataset descriptions in the Research Data Australia (RDA) database.

View ANU Records in RDA

Comments (0)

ANU Data Management Manual

Much of the content for the Managing Data section of this Guide is from the ANU Data Management Manual: Managing Digital Research Data at the Australian National University 2015.

Comments (0)

What else?

What do you want to hear more about?

Anne.Lahey@anu.edu.au

Thanks to Bodleian Libraries