ALTMETRICS: NEW WAYS OF MEASURING RESEARCH IMPACT

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And
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UNT Libraries
Collection Development Department

Willis Library
21 April 2014
DISCLAIMER

We are not experts
We are still learning
OVERVIEW

• Some definitions
• Some social media
  – Who are you?
  – What to do with social media
• Impact
• Altmetric vendors
BIBLIOMETRICS

Study of publication patterns of individual articles, journals, and books to analyze and compare trends within a body of literature.

• Traditional citation analysis
• Journal impact
• Measurements -- Immediacy impact
ALTMETRICS

• **Article Level Metrics (ALM)** - comprehensive and multidimensional suite of established metrics at the article level. [http://article-level-metrics.plos.org/alm-info/](http://article-level-metrics.plos.org/alm-info/)

• **Altmetrics** – creation and study of new metrics based on the social web for analyzing, and informing scholarship. Altmetrics Manifesto, [http://altmetric.org/about](http://altmetric.org/about)
ALTMETRICS

Measurements for the impact of scholarly content, based mentions in the social web, social bookmarking, and collaboration tools

• Viewed (Publisher websites, aggregator websites)
• Downloaded (Slideshare, publisher websites, aggregator websites)
• Reused/Adapted (Github)
• Shared (Facebook, Twitter)
• Bookmarked (Mendeley, CiteULike,Zotero Delicious)
• Commented upon (Twitter, blogs, publisher websites, Wikipedia, Faculty of 1000)
Article metrics for:

Biological, clinical and population relevance of 95 loci for blood lipids


Nature 466, 707–713 (05 August 2010) | doi:10.1038/nature09270

Total citations

Web of Science: 699
CrossRef: 502
Scopus: 789

Online attention

Altmetric score (what's this?)

Tweeted by 1
Blogged by 5
2 F1000

This Altmetric score means that the article is:
- in the 97 percentile (ranked 283rd) of the 13,442 tracked articles of a similar age in all journals
- in the 89 percentile (ranked 45th) of the 412 tracked articles of a similar age in Nature
Mentions in news, blogs & Google+

Scientific blogs (5)

- Missing heritability found?
  News on Genetics
- Mice, rats, and the secrets of the genome.
  Speaking of Research
- Does population matter?
  Science Surf
- Digging into altmetrics
  Suortin II
- Genomic analysis can be powerful – in the right hands
  Berkeley Science Review Blog

View all scientific blogs

Twitter demographics

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<td>100%</td>
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Explanation of terms and methodology

Sources: Web of Science, CrossRef, Scopus, WebTrends, and Altmetric

Frequency of updates: In most cases, our metrics data is updated hourly. In some cases, such as page views, the data is not available the first 48 hours after an article is published.
Some Parts of the Social Media Network

http://www.slideshare.net/rcave/overview-of-the-altmetrics-landscape
DISTINGUISH YOURSELF IN THREE EASY STEPS

ORCID provides a persistent digital identifier that distinguishes you from every other researcher and, through integration in key research workflows such as manuscript and grant submission, supports automated linkages between you and your professional activities ensuring that your work is recognized. Find out more.

1. REGISTER  Get your unique ORCID identifier [Register now!]
   Registration takes 30 seconds.

2. ADD YOUR INFO  Enhance your ORCID record with your professional information and link to your other identifiers (such as Scopus or ResearcherID or LinkedIn).

3. USE YOUR ORCID ID  Include your ORCID identifier on your Webpage, when you submit publications, apply for grants, and in any research workflow to ensure you get credit for your work.
The best free way to manage your research
Organize, share, discover

1. Download Mendeley for free
2. Add all your PDFs
3. Organize, cite and collaborate...

SIGN UP AND DOWNLOAD
Available for Mac, Windows and Linux

Reference Manager
Generate citations and bibliographies in Microsoft Word, LibreOffice, and LaTeX.
citeulike is a free service for managing and discovering scholarly references

7,574,565 articles - 556 added today.

- Easily store references you find online
- Discover new articles and resources
- Automated article recommendations
- Share references with your peers
- Find out who's reading what you're reading
- Store and search your PDFs

Join now  Join now with facebook

If you are using the "HTTPS Everywhere" browser extension, please disable it for citeulike.org.
CrossRef is an association of scholarly publishers that develops shared infrastructure to support more effective scholarly communications. Our citation-linking network today covers over 65 million journal articles and other content items (books chapters, data, theses, technical reports) from thousands of scholarly and professional publishers around the globe.
SHARING DATA

• Why
  – Researchers are active on social media. Some sites are research oriented.
  – Researchers are working in new ways and sharing data earlier
  – Federal mandates

• What
  – Raw data
  – Research/Lab notebooks
Build software better, together.

Powerful collaboration, code review, and code management for open source and private projects. Need private repositories? Upgraded plans start at $7/mo.

Why you’ll love GitHub.

Powerful features to make software development more collaborative.
The Directory of Open Access Repositories - OpenDOAR

OpenDOAR is an authoritative directory of academic open access repositories. Each OpenDOAR repository has been visited by project staff to check the information that is recorded here. This in-depth approach does not rely on automated analysis and gives a quality-controlled list of repositories.

As well as providing a simple repository list, OpenDOAR lets you search for repositories or search repository contents. Additionally, we provide tools and support to both repository administrators and service providers in sharing best practice and improving the quality of the repository infrastructure. Further explanation of these features is given in a project document Beyond the list.

The current directory lists repositories and allows breakdown and selection by a variety of criteria - see the Find page - which can also be viewed as statistical charts. The underlying database has been designed from the ground up to include in-depth information on each repository that can be used for search, analysis, or underpinning services like text-mining. The OpenDOAR service is being developed incrementally, developing the current service as new features are introduced. A list of Upgrades and Additions is available.

Developments will be of use both to users wishing to find original research papers and for service providers like search engines or alert services which need easy-to-use tools for developing tailored search services to suit specific user communities.

OpenDOAR is one of the SHERPA Services including ROMEO and JULIET, run by the Centre for Research Communications (CRC). Current development work is currently funded by JISC, with contributions from the CRC host organisation, the University of Nottingham.

OpenDOAR has also been identified as a key resource for the Open Access community (K.B Oliver & R.Swain, 2006 - PDF) and identified as the leader in repository directories in a study by Johns Hopkins University. OpenDOAR was one of the services which contributed to SHERPA being awarded the 2007 SPARC Europe Award for Outstanding Achievements in Scholarly Communications.

More information on the project is available on this site through the About page.

© 2006-2014, University of Nottingham, UK  Last reviewed: 25-Feb-2014
figshare is a repository where users can make all of their research outputs available in a citable, shareable and discoverable manner.

figshare allows users to upload any file format to be made visualisable in the browser so that figures, datasets, media, papers, posters, presentations and files can be disseminated in a way that the current scholarly publishing model does not allow.
The Repository: Key features

- **Flexible** about data format, while encouraging the use and further development of community standards.
- Fits into the manuscript submission workflow of its partner journals, making data submission easy.
- Gives journals the option of making data privately available during **peer review** and of allowing submitters to set **limited-term embargoes** post-publication.
- Data are **linked** both to and from the corresponding publication and, where appropriate, to and from select specialized data repositories (e.g. GenBank).
- Assigns data Digital Object Identifiers (DOIs) to data so that researchers can gain professional credit through **data citation**.
- Promotes data visibility by allowing content to be **indexed, searched** and **retrieved** through interfaces designed for both humans and computers.
- Contents are **free** to download and have no legal barriers to reuse.
- Contents are **curated** to ensure the validity of the files and metadata.
- Submitters may **update** data files when corrections or additions are desired, without overwriting the original version linked from the article.
- **Long-term preservation** ... by migrating common file formats when older versions become
American Association for the Advancement of Science
American Society of Naturalists
The American Genetic Association
Botanical Society of America
British Ecological Society
BMJ Publishing Group, Ltd.
The Biological Journal of the Linnean Society (Linnean Society of London)
BioMed Central
Cambridge University Press
Ecology Letters
Ecological Society of America
Elementa: Science of the Anthropocene
European Society for Evolutionary Biology
Evolutionary Applications
The Genetics Society
German National Library of Medicine
HighWire
Molecular Ecology
Molecular Ecology Resources
Molecular Phylogenetics and Evolution
Oikos
Oxford University Press
The Paleontological Society
Pensoft Publishers
PLOS
The Royal Society
Society for Molecular Biology and Evolution
Society for the Study of Evolution
Society of Systematic Biologists
United States Fish and Wildlife Service
Wiley
AGGREGATORS/REVIEWS

• Why – can’t read everything

• What - Synthesis of what experts think most important.
Leading biomedical experts helping scientists to discover, discuss and publish research.

**F1000Prime**
Personalized recommendations of the best biomedical research articles from our faculty. [Find out more](#)

**F1000Research**
An Open Science journal: rapid, open, post-publication peer-reviewed research, with underlying datasets. [Find out more](#)

**F1000Posters**
An open access repository for free deposition of conference posters and slide presentations. [Find out more](#)

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**Press Releases**

**Faculty of 1000 appoints new CEO**
25 Feb 2014
Respected business leader and web entrepreneur Daniel Marovitz has joined F1000 as Chief Executive Officer. [Read more](#)

**Join the F1000Journal Club – new tools for discussing and organizing research articles**
16 Jan 2014
Scientists and clinicians can spend hours each month critically evaluating published research as part of their training and teaching, but valuable discussions about what makes a good or bad paper are often lost forever. F1000Journal Clubs (http://f1000.com/prime/journalclubs), a new feature of F1000Prime that launches today, makes these discussions – journal club meetings – more online, more open and efficient, and helps scientists get recognition for more of their contributions to science. [Read more](#)
Submission of the Week

Biochemistry

Leukocyte CoA level and N-acetyltransferase activity as biomarkers of pantothentic acid allowances

Vitamin B5 is one of the essential vitamins required for physiological biochemistry. The authors of this poster found that chronic alcohol drinkers and those with intestinal ulceration have significantly reduced levels of vitamin B5 active derivatives. Deficiencies of vitamin B5 and its derivative co-enzyme A usually occur as a result of impairments in balanced nutrition. Diseases can also cause vitamin B5 deficiency &dash; for example, genetic disorders such as panthotenate kinase-associated neurodegeneration or the syndrome of CASTOR (co-enzyme A sequestration, toxicity or redistribution. The levels can be normalized through supplementary intake.

E Moiseenok, S Omelyanchik, A Moiseenok Based on: Biochemistry 2014: Coenzyme A and Its Derivatives in Cellular Metabolism and Disease

JUST POSTED

Measles immunization coverage and three-dose series completion among children in Tianjin, China

M Boulton, J Montgomery, B Carlson, X X Wang, S Ewing, Y Zhang
Based on: 16th International Congress on infectious Diseases 2014, Poster ID:1095225

TOTAL

5885 Total Posters/Slides
215 F1000Prime Recommended Posters/Slides
10 New Conferences Added

ABOUT F1000POSTERS

F1000Posters is a unique open access repository for posters and slide presentations across biology and medicine. By keeping the work visible long after a meeting has ended it maximizes the return on the time, effort and money invested in creating each presentation. We also accept depositions from local meetings (e.g. PhD student days).

F1000Posters has received positive responses from presenters and societies alike, and we have support from leading journals and publishers including Nature, Science, PNAS, Elsevier, BioMed Central, PLoS, SAGE etc (see here for a full list of responses). More »
Editors' Picks

**Floating Nuclear Plant Would Ride Out Tsunamis**
Built like oil rigs, offshore reactors would be safe from earthquakes, too. Continue reading →

**When Evidence Backfires**
Don’t read this blog post. Definitely don’t read it to the end. Didn’t I tell you not to read this blog post? You’re still doing it... We can laugh at our inherent ability to be contrary, but unfortunately something similar can happen when we give a human being scientific evidence that debunks... Read More

**Scientists Find A Planet Like Earth**
The planet, about 500 light-years from Earth, orbits in its star’s habitable zone.

**What does the new Tamiflu data really tell us?**
Does Tamiflu have any meaningful effects on the prevention or treatment of influenza? Considering the drug’s been on the market for almost 15 years, and is widely used, you should expect this question has been answered after 15 flu seasons. Answering this question from a science-based perspective requires three steps: Consider prior probability, be systematic...
Altmetrics: an app review.
Http://hdl.handle.net/2022/14714
## TYPES OF IMPACT

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<td>Wikipedia, websites</td>
</tr>
<tr>
<td><strong>Recommended</strong></td>
<td>Faculty of 1000, listservs, ScienceSeeker,</td>
<td>Popular press, new stories, listservs</td>
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<td><strong>Discussed (Social Media)</strong></td>
<td>Scholarly Blogs, SlideShare, Google+</td>
<td>Twitter, popular blogs, Facebook</td>
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<td><strong>Viewed</strong></td>
<td>Downloads, Views Cited reference search Datasets/Repositories/Figshare</td>
<td>Downloads, Views</td>
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Fig. 1 Coverage of English-language journal articles with DOI, 2012. (n = 310)
Fig. 2 Altmetric coverage of English-language books, 2012, (n = 54)

ALTMETRIC VENDORS

• Direct to publisher - Altmetric.com
• Author/Institution generated
  – Repositories
  – Academic.edu
  – Impact Story (Widget)
• Commercial
  – Plum Analytics
1. Add bookmarklet to your bookmarks toolbar
2. Visit any paper
3. Get article level metrics with a single click
The Altmetric score is one measure of the quality and quantity of online attention that this article has received. You can read about how Altmetric scores are calculated here.

This article scored 707.22

The context below was calculated when this article was last mentioned on 3rd January 2014

Compared to all articles in Nature

So far Altmetric has tracked 22,562 articles from this journal. They typically receive a lot more attention than average, with a mean score of 35.3 vs the global average of 4.5. This article has done particularly well, scoring higher than 99% of its peers.

All articles of a similar age

Older articles will score higher simply because they've had more time to accumulate mentions. To account for age we can compare this score to the 48,625 tracked articles that were published within six weeks on either side of this one in any journal. This article has done particularly well, scoring higher than 99% of its contemporaries.

Other articles of a similar age in Nature

We're also able to compare this article to 621 articles from the same journal and published within six weeks on either side of this one. This article has done very well, scoring higher than 97% of its contemporaries.

All articles

More generally, Altmetric has tracked 1,766,495 articles across all journals so far. Compared to these this article has done particularly well and is in the 99th percentile: it's in the top 5% of all articles ever tracked by Altmetric.
Setting S.M.A.R.T. Goals For Smart Staff Development

Description:
This presentation discusses setting goals for staff. Goals can set a course of action for staff and give rationale for decision making on how staff development is presented, funded, and assessed. Organizational goals serve four basic functions: providing guidance and direction, facilitating, planning, motivating and inspiring employees, and helping organizations assess performance for continuous improvement. If goals are not well defined they are meaningless. With the fast pace of change in libraries, while goals are the ends toward which your efforts will be directed, they may need to be changed from year to year or more frequently. This presentation will talk about writing SMART goals that are clear and achievable and that meet the needs of the organization and its individuals for training.

Creator(s): Avery, Elizabeth Fuselier
Creation Date: July 9, 2012
Partner(s): UNT Libraries
Collection(s): UNT Scholarly Works
Usage: TotalUses: 299
Past 30 days: 21
Yesterday: 0
Setting S.M.A.R.T. Goals For Smart Staff Development

Included in:
Partner(s): UNT Libraries
Collection(s): UNT Scholarly Works

299 Total Uses / 21 in the last 34 days.

Item Usage by Month/Year

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## Setting S.M.A.R.T. Goals For Smart Staff Development

**Included in:**
- Partner(s): UNT Libraries
- Collection(s): UNT Scholarly Works

### Recent Referral Breakdown for the last 34 days (03/17/2014 to 04/20/2014)

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### Referral Breakdown

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Legal and Literary Fictions
New Directions in Law and Literature, ed. Elizabeth Anker and Bernadette Meyler, Forthcoming
Simone Stern
University of Toronto - Faculty of Law
Date Posted: April 26, 2014
Accepted Paper Series
4 downloads

Remarks on Alan Liu and the Digital Humanities, a Working Paper
William L. Benzon
Independent
Date Posted: April 19, 2014
Working Paper Series
12 downloads

Notes on Motifiction
Jose Angel Garcia Lanca
Universidad de Zaragoza
Date Posted: April 16, 2014
Working Paper Series
3 downloads

John Updike: Dynamics of Cultural Universals
GRK Murty
IUP Publications
Date Posted: April 15, 2014
Accepted Paper Series
1 downloads

Conceptos básicos de narratología (Ground Notions of Narratology)
José Angel García Lanca, "Samuel Beckett y la narración reflexiva" (Zaragoza: Prensas Universitarias de Zaragoza, 1992).
José Angel García Lanca
Universidad de Zaragoza
Date Posted: April 15, 2014
Accepted Paper Series
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Commercial Moment

Workshop on PLUM Analytics

Wednesday, April 30
2:00 p.m
Willis Library 136
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<td>Scholarly Citations – PubMed, Scopus</td>
<td>N</td>
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HOW ALTMETRICS SHOULD BE USED?

• Indication of impact made on the community
• Explore to see who is using your work
• Include in your CV
• One part of a comprehensive picture of your work.
HOW ALTMETRICS SHOULDN’T BE USED?

• An indication of comprehensive impact
• As a substitute for personal judgment of quality
• As if we knew exactly what it means
OTHER USES

• Identify similar research projects
• Identify collaborators
• Determine if research findings are duplicated, confirmed, corrected, improved, repudiated.
REMEMBER

METRICS ARE ONLY ONE PART OF THE STORY!
CAUTIONS

• Care should be taken in comparisons.
  – What is being compared
  – Make sure you are comparing likes
  – Check what the vendor is comparing

• Numbers should be considered minimums.
Altmetrics is a new field that helps provide a more robust picture of scholarly influence.

Awareness of these new social tools can aid you in your research and provide you a better view of the influence of your work.
THANK YOU

QUESTIONS??