Maximising Research Impact Workshop

CORE Leaders

Dr. Fintan Bracken
Maximising Research Impact

1. Publish in high impact journals
2. Collaborate with other researchers
3. Ensure research is easily identifiable
4. Increase the visibility of research outputs
5. Communicate & promote research outputs
1. Publish in High Impact Journals

- Impact factor metrics such as the Journal Impact Factor and CiteScore should be used as a guide to selecting high impact journals.
- You should consult with peers & check that the scope of the journal matches your article topic before submitting to a journal.
- Publishing in high impact journals does not guarantee that an article will receive high citations.
CiteScore

https://journalmetrics.scopus.com/

- Freely available on the web & via Scopus
- **Calculation:** CiteScore 2016 counts the citations received in 2016 to documents published in 2013, 2014 or 2015, and divides this by the number of documents published in 2013, 2014 and 2015.
Discipline Specific Rankings

• Washington and Lee Law Journal Ranking  
  [https://managementtools4.wlu.edu/LawJournals/](https://managementtools4.wlu.edu/LawJournals/)

• Harzing’s Journal Quality List  
  [http://www.harzing.com/jql.htm](http://www.harzing.com/jql.htm)

• Chartered Association of Business Schools (formerly ABS)  

• European Reference Index for the Humanities & the Social Sciences (ERIH PLUS)  
  [https://dbh.nsd.uib.no/publiseringskanaler/erihplus/](https://dbh.nsd.uib.no/publiseringskanaler/erihplus/)
Tools to Help You Select an Appropriate Journal

• In EndNote Online (https://www.myendnoteweb.com/) there is a tool called “Match” which will suggest suitable Web of Science journals for an article title & abstract. It will also give you the Journal Impact Factor and quartile(s) of each journal it suggests with links to similar articles from that journal (see http://endnote.com/product-details/manuscript-matcher).

• Similar tools include https://www.edanzediting.com/journal-selector & http://jane.biosemantics.org/

• The analyse results tools in Web of Science can be used to find appropriate journals for your article (see this Video tutorial)
2. Collaborate with Other Researchers

• Collaborate with researchers in other institutions
• Co-authored papers, especially with international authors, are cited more frequently
• Collaboration can lead to better quality research due to the complementary skills of the team
3. Ensure Research is Easily Identifiable

• You should always use the same name version consistently throughout your career
• Create online researcher profile(s):
  - ORCID
  - Google Scholar Profile
ORCID = Open Researcher and Contributor ID

http://orcid.org/0000-0002-1228-5109

4,653,038 ORCID IDs and counting. See more...

Fintan Bracken

Biography
My current role is Deputy Librarian in IT Carlow where I assist in providing a pro-active, cost effective and efficient library and information service in support of the teaching and research requirements of the Institute. Previously, I worked as Research Services & Bibliometrics Librarian in University of Limerick. I have also worked in the Marine Institute’s research library and with IRIS Electronic Information Services Ltd. / IREL. I have conducted research on bird biodiversity in various farmland, woodland and peatland habitats during my PhD and post-doctoral studies in University College Dublin.

Keywords
Library and information science, Bibliometrics, Usage statistics, Virtual Research Environments, Usability studies, Ornithology, Peatlands

Websites
Google Scholar
ResearcherID
Mendeley profile

Other IDs
Scopus Author ID: 24467173000

Breeding bird species diversity across gradients of land use from forest to agriculture in Europe

Ecography
2017 | journal-article
DOI: 10.1111/ecz.03295
HANDLE: http://ulir.ul.ie/handle/10344/6288

Source: Fintan Bracken

Getting the measure of analytics: using bibliometrics and usage statistics to evaluate e-journals

LAI Academic & Special Libraries Annual Conference
2015 | conference-paper

Source: Fintan Bracken
ORCID Helps You to:

• Ensure your work is **discoverable** & connected to you throughout your career

• Eliminate name ambiguity, distinguishing you from other researchers & ensuring your work is **easily identifiable** as your own (i.e. proper attribution)

• Save time by **associating your existing IDs** (e.g. ResearcherID, Scopus Author Profile) with ORCID & exchanging profile and/or publication data between them
Fintan Bracken
Deputy Librarian, Institute of Technology Carlow
Verified email at itc.carlow.ie

Library and information science, Bibliometrics, Virtual Research Environments, Usability studies, Ornithology

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<td>1</td>
<td>2004</td>
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<td>Breeding bird species diversity across gradients of land use from forest to agriculture in Europe</td>
<td>2017</td>
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4. Increase the Visibility of Research Outputs

- Search Engine Optimisation (SEO)
  - The process of identifying factors which impact search engine accessibility
- Make your work available on Open Access (OA)
  - The practice of granting free Web access to research articles and other products of research
1. Ensure the title is clear & descriptive & incorporates a key phrase related to your topic. Avoid humorous titles.

2. Choose appropriate keywords & phrases for your abstract and repeat them 3-4 times throughout the abstract.

3. Provide at least five keywords or phrases in the keywords field including those you repeated in your abstract. Provide additional relevant keywords & synonyms for those keywords as they relate to your article.

4. Use headings for the various sections of your article to tip off search engines to the structure and content of your article.

Ocean Acidification and Its Potential Effects on Marine Ecosystems

Keywords
ocean acidification, climate change; carbonate saturation state; seawater chemistry; marine ecosystems; anthropogenic CO₂

Abstract
Ocean acidification is rapidly changing the carbonate system of the world oceans. Past mass extinction events have been linked to ocean acidification, and the current rate of change in seawater chemistry is unprecedented. Evidence suggests that these changes will have significant consequences for marine taxa, particularly those that build skeletons, shells, and tests of biogenic calcium carbonate. Potential changes in species distributions and abundances could propagate through multiple trophic levels of marine food webs, though research into the long-term ecosystem impacts of ocean acidification is in its infancy. This review attempts to provide a general synthesis of known and/or hypothesized biological and ecosystem responses to increasing ocean acidification. Marine taxa covered in this review include tropical reef-building corals, cold-water corals, crustose coralline algae, Halimeda, benthic mollusks, echinoderms, coccolithophores, foraminifera, pteropods, seagrasses, jellyfishes, and fishes. The risk of irreversible ecosystem changes due to ocean acidification should enlighten the ongoing CO₂ emissions debate and make it clear that the human dependence on fossil fuels must end quickly. Political will and significant large-scale investment in clean-energy technologies are essential if we are to avoid the most damaging effects of human-induced climate change, including ocean acidification.

Types of Open Access

- **Green open access** → immediate or delayed open access that is provided through self-archiving
  - Free
  - E.g. Institutional Repositories
- **Gold open access** → immediate open access that is provided by a publisher either in a fully OA journal or a hybrid journal
  - Usually author pays fee (approx. US$500-US$5,000)
  - E.g. PLoS One, Blood Cancer Journal
Benefits of Open Access

- No subscriptions necessary
- Greater visibility of your research – indexed by Google Scholar, Google, etc.
- Dissemination of knowledge – a public good
- Satisfy funding agency requirements (e.g. SFI, IRC)
  - Peer-reviewed publications from projects funded by Horizon 2020 must be made OA within 6 months (social sciences & humanities 12 months)
- Increases research exposure and citation rate (Open Access citation advantage)
## The Open Access Citation Advantage

<table>
<thead>
<tr>
<th>Description</th>
<th>Count</th>
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<tr>
<td>Total number of studies up to 2015</td>
<td>70</td>
</tr>
<tr>
<td>Studies that found a citation advantage</td>
<td>46</td>
</tr>
<tr>
<td>Studies that found no citation advantage</td>
<td>17</td>
</tr>
<tr>
<td>Studies that were inconclusive, found non-significant data or measured other things than citation advantage for articles</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: [https://sparceurope.org/what-we-do/open-access/sparc-europe-open-access-resources/open-access-citation-advantage-service-oaca/](https://sparceurope.org/what-we-do/open-access/sparc-europe-open-access-resources/open-access-citation-advantage-service-oaca/)
Green OA & Copyright

• Many publishers allow authors to deposit some form of their work in an open access repository – e.g. post-print
• Use SHERPA RoMEO to check journals’ policies (http://www.sherpa.ac.uk/romeo/)
• Engage with publishers – negotiate contracts & copyright transfer agreement
Post-print of an Article

• The post-print is the author’s final peer reviewed draft
• All corrections & suggestions from peer-reviewers have been incorporated into the draft
• The post-print hasn’t been formatted by the publisher & doesn’t include the publisher’s logo
• The post-print is normally still a Word document
The potential use of online tools for scientific collaboration by biology researchers

Fintan Bracken, Daniel Earls, Catherine Madders, Faye O'Leary, Stephanie Ronan, Paul Tolan, Ciara Ward and Judith Wusteman

School of Information and Library Studies, University College Dublin

Abstract:

Purpose – This study aims to discover the research practices of biology researchers and to assess the suitability of the OJAX++ Virtual Research Environment (VRE) for these researchers.

Design/methodology/approach – Usability testing was used to evaluate the usability of OJAX++ in relation to biology researchers. Interviews with biology researchers in a large Irish university were conducted to investigate their research information behaviour, to establish user requirements in their discipline and to evaluate the feasibility of using OJAX++ in their research.

Findings – The results show that biology researchers used online tools extensively in their research but do not use social networking tools. Email and phone conversations are the preferred methods of collaborating with colleagues. The biology researchers found that OJAX++ was easy to use, intuitive and professionally presented but in its present format, OJAX++ does not fit in with current research practices as they do not use Web 2.0 tools that facilitate tagging. A list of requirements of a VRE for biology researchers is presented.
Research@THEA is an open access repository established in 2017 containing research from all the Institutes of Technology. Research@THEA is a free electronic resource where you can search the entire collections of the Institute of Technologies research output in a single search or alternatively you can opt to search the research from a single institute using the institute's individual site details.

Communities in Research@THEA

Select a community to browse its collections.

Athlone Institute of Technology [0]
Dundalk Institute of Technology [320]
Galway-Mayo Institute of Technology [339]
Institute of Technology Carlow [1]
Institute of Technology Sligo [304]
Institute of Technology Tallaght [0]
Letterkenny Institute of Technology [223]
Waterford Institute of Technology [0]

Recently Added

Agile Medical Device Software Development: Introducing Agile Practices into MDevSPICE®
McCaffrey, Fergal; Lepmets, Marion; Trektene, Kitiia; Ozcntop, Ozden; Pikkarainen, Minna (IARIA, 2016)
Additional Benefits of IT Carlow Institutional Repository

- Provides an online searchable database of the Institute’s research outputs
- Provides a permanent web link for each publication
- Increases brand awareness
- Allows theses, grey literature and multimedia formats to be published
- Provides usage metrics
5. **Communicate & Promote Research Outputs**

- Attend & present at conferences & seminars
  - To communicate the results of research & meet potential collaborators
- Profiles on academic social networking sites e.g.:
  - Academia.edu
  - ResearchGate
  - Mendeley
- Tips on managing your digital identity:
You can use Social Media to:

- Publicise your research & engage with your audience:
  - Twitter
  - Blogs
  - Slideshare
  - YouTube
  - Personal Website
Twitter

- Tweet about new publications
- Get feedback on ideas
- Engage industry, funders & the wider public
- Keep up to date with emerging research, researchers & trends
- Get live updates from conferences & seminars
TDD Improves Quality

TDD improves quality! That might sound obvious, but evidently it isn't. Test driven development (TDD) is often cited as a key agile practice (1,2). But, still, the evidence has been equivocal until now.

• http://www.blogger.com/
• http://wordpress.com/
Fintan Bracken

Looking for dealers
The only professional floorwash machine suitable for domestic use.

Cyber Threat Summit 2015
Conference and Exhibition - C-Level Audience - Dublin - Oct 1st - Book Now

Autocad LT 2016 Ireland
Get Up to date. Fast & reliable. New Autocad 2016 rental option from Procad

Getting the Measure of Analytics: Using bibliometrics and usage statistics to evaluate e-journals

Dr. Fintan Bracken
University of Limerick
&
Arlene Healy
Trinity College Dublin

On behalf of the IReL Monitoring Group

Academic & Special Libraries Section Annual Conference 27th February 2015

278 views
Other Methods to Maximise Your Research Impact

- Don’t be too frugal with your references – papers that cite more tend to be more highly cited (Corbyn, 2010)
- Share your articles with authors you’ve cited as this can have a positive impact on you being cited
- Include a link in your paper to your underlying research data – sharing data, especially quantitative data, can increase citations (King, 2006; Piwowar & Vision, 2013)
- Publication throughout a project may generate more citations than just one at the end (Bornmann & Daniel, 2007)
Measuring Your Research Impact

Bibliometrics

Bibliometrics refers to the quantitative measures used to assess research output i.e. publication & citation data analysis

• h-index → Measure of consistency
• Times cited → Amount of times an author/paper has been cited

Altmetrics

• Alternative metrics / Article level metrics
h-index

- The h-index is a simple metric to quantify the scientific output of an individual (Hirsch, 2005)
- A h-index of 10 means that of all of the papers written by this author, 10 papers have been cited at least 10 times each
- Only meaningful when compared to others within the same discipline area & at the same career stage

<table>
<thead>
<tr>
<th>Title</th>
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<th>Google Scholar Citations</th>
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<tr>
<td>Effects of set-aside management on birds breeding in lowland Ireland</td>
<td>Agriculture, ecosystems &amp; environment</td>
<td>2006</td>
<td>27</td>
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<td>Bird Study</td>
<td>2008</td>
<td>5</td>
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<td>Tearmann</td>
<td>2003</td>
<td>5</td>
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<td>The diversity of birds and butterflies in Irish lowland landscapes with special reference to the effects of set-aside management on birds in the breeding season</td>
<td>PhD Thesis</td>
<td>2004</td>
<td>1</td>
</tr>
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<td>Lowland bogs, fens and reedswamps</td>
<td>Bird Habitats in Ireland</td>
<td>2012</td>
<td>0</td>
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<td>The value of the Open Access Repository to the Marine Institute</td>
<td>GLINT</td>
<td>2012</td>
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<td>Aslib Journal of Information Management</td>
<td>2014</td>
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<td>An Leabharlann</td>
<td>2014</td>
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The h-index is 3 as 3 publications have at least 3 citations each. In order to obtain a h-index of 4, the 4th ranked publication (the PhD thesis) would need to receive 3 more citations.
Tools to find citations & calculate the h-index

• Web of Science

• Scopus (SciVal)

• Google Scholar (Publish or Perish)
Web of Science (http://www.webofscience.com)

Citation report for 150 results from Web of Science Core Collection between 1945 and 2018.

- h-index: 24
- Sum of Times Cited: 1,860
- Citing articles: 896
- Average citations per item: 12.4
- Without self citations:
  - Sum of Times Cited: 1,432
  - Citing articles: 774

Graph showing the sum of times cited per year from 1995 to 2017.
Google Scholar

https://scholar.google.com/

• Google Scholar covers more books, conference papers, technical reports, etc. than Web of Science & Scopus

• Coverage is uncontrolled
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</table>
Free software created by Anne-Wil Harzing
Uses Google Scholar data (or Microsoft Academic Search data)
Hawking, Stephen

University of Cambridge, Cambridge, United Kingdom
Author ID: 6701475619
Other name formats: HAWKING, S. W., Hawking, Stephen W., Hawking, S. W.

Subject area:
- Physics and Astronomy
- Mathematics
- Multidisciplinary
- Arts and Humanities
- Biochemistry, Genetics and Molecular Biology
- Computer Science
- Chemistry
- Medicine
- Materials Science

Document and citation trends:

- 157 Documents
- Cited by 21424 documents
- 72 co-authors
- h-index: 71

Total citations: 36425 by 21424 documents

Get citation alerts + Add to ORCID ⚫ Request author detail corrections

Sort on: Date (newest)
Altmetrics are measures that capture the attention a resource generates on the social web or other sources.

They are measures of scholarly activity & impact which differ from the traditional measures such as citations.

They aim to provide a more comprehensive picture of scholarly activity & of the use & impact of a researcher's work.
Potential of Altmetrics in:

- Providing real-time indicators of impact
- Capturing ‘practitioner’ impact of those who may never publish
- Showing evidence of industry & public engagement
- Being an indicator for future citations?
Impactstory Profiles (https://profiles.impactstory.org/) tracks impact from across the Web. Create a profile with your ORCID credentials in a minute.

Fintan Bracken
Institute of Technology Carlow Deputy Librarian

ACHIEVEMENTS

Open Access Top 10%
80% of your research is free to read online. This level of availability puts you in the top 8% of researchers.

Global Reach
Your research has been saved and shared in 14 countries.

Greatest Hit Top 50%
Your top publication has been saved and shared 12 times. Only 43% of researchers get this much attention on a publication.

TIMELINE

29 Online mentions over 13 years
28
1

PUBLICATIONS

Breeding bird species diversity across gradients of land use from forest to agriculture in Europe
2017 Ecology
12

The potential use of online tools for scientific collaboration by biology researchers
2014 Aslib Journal of Information Management
10

Effects of set-aside management on birds breeding in lowland Ireland
2006 Agriculture, Ecosystems & Environment
4

https://profiles.impactstory.org/u/0000-0002-1228-5109
Altmetric.com tracks the following sources:

**News outlets**
- Over 2,000 sites
- Manually curated list
- Text mining
- Global coverage
  - Irish Daily Star
  - Irish Examiner
  - Irish Independent
  - Irish Times
  - TheJournal.ie

**Social media and blogs**
- Twitter, Facebook, Google+, Sina Weibo
- Public posts only
- Manually curated list

**Post-publication peer review**
- Publons
- PubPeer

**Reference managers**
- Mendeley, CiteULike
- Reader counts
- *Don’t count towards the Altmetric score*

**Other sources**
- Wikipedia
- YouTube
- Reddit
- F1000
- Pinterest
- Q&A

**Policy documents**
- NICE Evidence
- Intergovernmental Panel on Climate Change
- European Food Safety Authority
  - WHO
  - Many more
Altmetric.com bookmarklet
- works for any paper with a DOI http://altmetric.it
Summary

• You should try to:
  ▪ Publish in high impact journals – Journals indexed by Scopus if possible
  ▪ Collaborate more
  ▪ Increase the visibility of your research
  ▪ Create researcher profiles to claim your research
  ▪ Communicate & promote your research to the widest possible audience via various means
Thank you for listening

Questions?

Contact Details:
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Deputy Librarian
Tel.: 059 9175770
Email: fintan.bracken@itcarlow.ie