Research ID and Impact: An Introduction

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Today's session

1. Overview of scholarly identity platforms - ORCID, Google Scholar, Scopus, Web of Science, ResearchGate etc.

2. Introduction to impact metrics - focus on JIF and h-index

Digital scholarly identity

What's the point of having an online identity?

- Demonstrating the importance of your work to the wider community

- May help meet academic/career goals
  - Potential employer or supervisor
  - Future collaborator
  - Finding research participants
  - End user of your research
  - Help spread evidence-based information to citizens/popular media

The perspective of an evaluator...

Penny Pexman
@PennyPexman

Following

Early career researcher? Make sure you have a Google Scholar profile. Those are frequently referenced in the Early Career Award nominations I'm reading this morning.

7:53 AM - 8 Apr 2018

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💬 10   🔁 87   ♡ 225

Establishing yourself online

- There are many platforms to choose from

  - ORCID

  - ResearchGate

  - Academia.edu

  - Scopus author profile

  - Web of Science researcher profile

  - Google Scholar profile

  - LinkedIn (sections for scholarship, research, awards, etc.)

- Considerations for choosing

  - what do you have time/energy for?

  - what platforms are used in your discipline/on your campus?

  - what aligns with your goals and values?

Pros/cons of academic social media sites

- They are well-used
- They can be used to host full text content

But…

- They don't do copyright checking for authors
- They exist to make a profit
- They don't fulfill OA mandates
- They aren't community-controlled

ACADEMIA

R^G ResearchGate

Where to start for an academic path? ORCiD

- It's like a social insurance number for your research profile

- Distinguishes you from other authors with a similar name

- Allows you to gather **all** your academic outputs in one place
  - Education
  - Work experience
  - Non-traditional outputs like datasets, code, posters, etc.

- Totally open URL that you can include on email signatures, posters, cards, and other online profile pages

- Helpful integrations with other databases and services

Takes only a moment to claim, at https://orcid.org/register

What is research impact?

What does impact mean in an academic sense?

- Many definitions of impact – today, we're talking about
  - **Quantifiable** impacts
  - Impacts of **written** scholarly outputs
- Traditionally, research community has focused on counting citations

How do we quantify impact?

- Citations power metrics at a variety of levels
  - Journal level (impact factor)
  - Author level (h-index)
  - Article level
- Now a growing interest in a wider variety of impacts
  - These are quantified in "altmetrics"

Journal impact factor

- You can find them in Journal Citation Reports database
- Not all journals have one (although many more will get one this year!)
- Measures the frequency with which the "average article" in a journal has been cited in the last two years
- May reflect the importance of a journal in its field
  - Can drive publication decisions
- Some disciplines pay more attention to it than others

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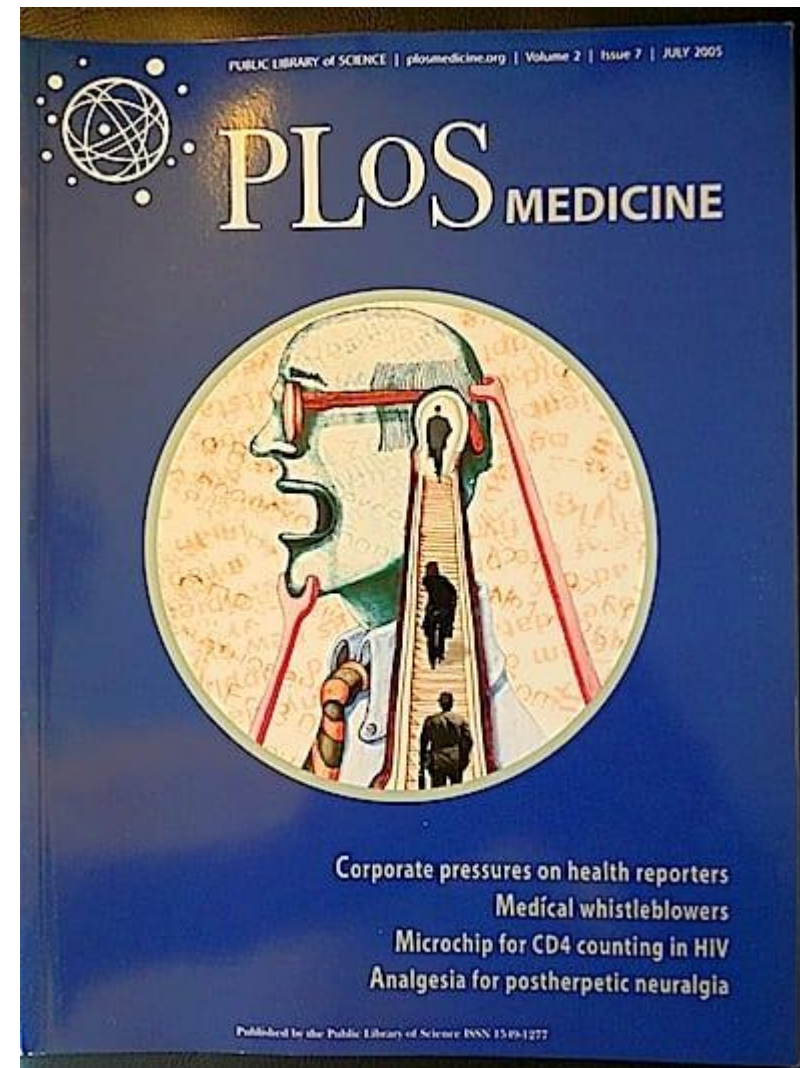
108   THIS WEEK AT NEJM.ORG

PERSPECTIVE

101   The Politics of Emergency Contraception
      A.J.J. Wood, J.M. Drazen, and M.F. Greene

103   The Constitutionality of the ACA's Medicaid-
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105   Expanding Eligibility, Cutting Costs — A Medicaid
      Update   J.K. Iglehart

e4   Achieving Accountable Care — "It's Not About
      the Bike"   J. Walker and A. McKethan

CLINICAL PRACTICE

158   Hidradenitis Suppurativa
      G.B.E. Jemec

IMAGES IN CLINICAL MEDICINE

165   Paragonimiasis
      M.A. Barrientos and A.U. Carrasco

e5   Jugular Venous C-V Wave in Severe Tricuspid
      Regurgitation
      N.B. Senguttuvan and G. Karthikeyan

2021 Impact factor 176.082

2021 Impact factor 11.613

Many, many criticisms of the impact factor

- Citation distributions within journals are highly skewed
  - "blockbuster" papers
- Journal impact factor is very field specific
  - Different disciplines have varied publication trends and citation patterns
- Impact factor can be "gamed"
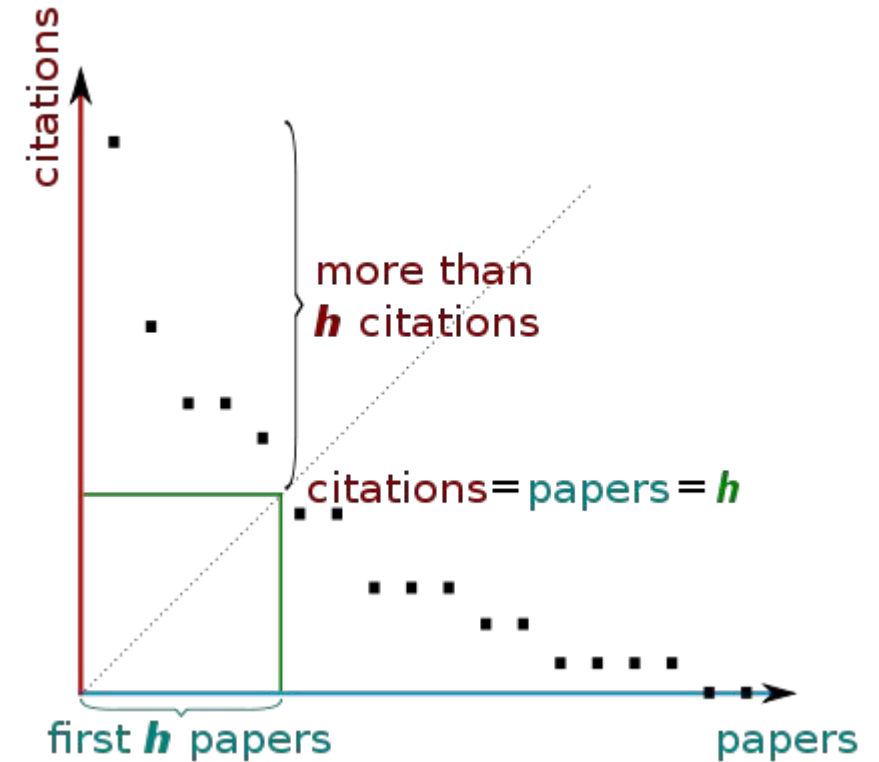 - E.g. editors ask authors to cite recently published works from the same journal

Sample exercise: find the impact factor of a journal in your discipline!

1. Use the library's web site to find the Journal Citation Reports database

2. Search for a particular journal – or browse by category

3. Report back

   ○ Did you find your journal?

Author impact: h-index

- The most widely used research metric

- Measures both productivity (# of papers) and impact (# of citations)

Hirsch, J. E. (2005). An index to quantify an individual's scientific research output. *Proceedings of the National Academy of Sciences of the United States of America*, 102(46), 16569-16572.

Author impact: h-index

- It's based on a list of publications ranked in descending order by number of times cited
  - So the value of "h" (your h-index) is equal to the number of published papers (h) sorted in descending order with at least (h) citations

Example:
- Paper 1 (400 citations)
- Paper 2 (150 citations)
- Paper 3 (6 citations)   = h-index

- Paper 4 (3 citations)

Criticisms of the h-index

- Strongly correlated with an individual's overall number of publications

- Its value never decreases

- Doesn't measure quality

- Open to manipulation
  - self-citation
  - collaboration

Sample exercise: find the h-index of someone in your discipline!

1. Use your library's discovery tool and choose one more more of the following:

    ○ Scopus

    ○ Web of Science

    ○ Google Scholar (no subscription required)

2. Search for an academic mentor, superstar in your discipline…

3. Report back

    ○ Did you find your person?

    ○ Bonus points – if you searched in more than one tool, is the number different?

Research assessment is changing...

- TriAgencies have signed onto Declaration On Research Assessment (DORA), which recommends:
  - Not using journal-based impact metrics, e.g. JIF, to evaluate individual articles or researchers
  - Being explicit that the *content* of a paper is more important than the *container* it is published in
  - Valuing the impact of all research outputs (datasets, software, influence on policy/practice)
  - https://sfdora.org/read/

- UofC is a signatory to DORA - more info

What are altmetrics?

Complementary to traditional, citation based metrics
- Citations on Wikipedia
- Citations in public policy documents
- Links on blogs
- Mainstream media coverage
- Saves in reference managers (e.g. Mendeley)
- Mentions on social media (e.g. Twitter)
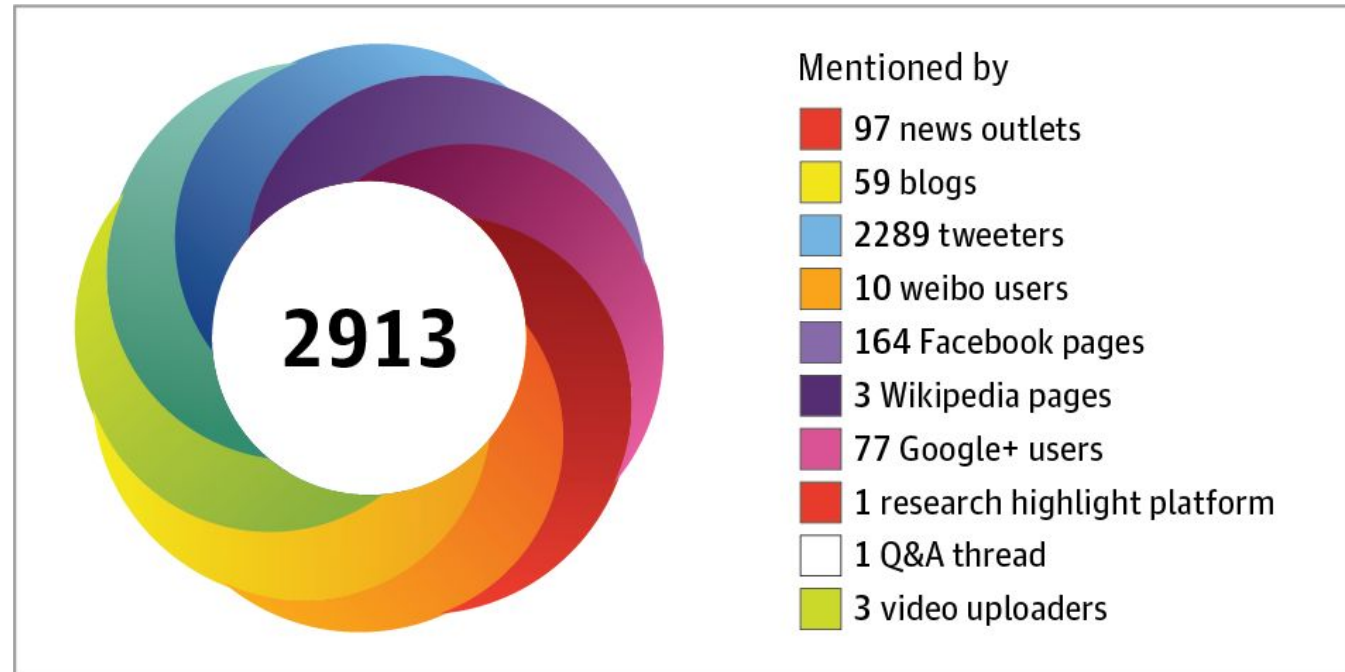
Provided by a number of different services

| Free for individuals, grant funded | Not free, owned by Digital Science – find on various publisher sites (ACS, T&F) | Not free, owned by Elsevier – find in Scopus |

What are the benefits?

- Timely
- Diverse/non-traditional
- Not just metrics
- Not just for journal articles
  - Software
  - Data
  - Posters
  - Books

2913

Mentioned by

- 97 news outlets
- 59 blogs
- 2289 tweeters
- 10 weibo users
- 164 Facebook pages
- 3 Wikipedia pages
- 77 Google+ users
- 1 research highlight platform
- 1 Q&A thread
- 3 video uploaders

Building your profile can start now!

- ORCID
  - Registration is especially important if you have a common surname
  - You can add all kinds of info to it - scholarships, poster presentations, etc.

- If you already have publications
  - Create/fix your author profiles in Scopus/Web of Science/Google Scholar
  - See https://libguides.ucalgary.ca/guides/researchID/author for details
  - Do a yearly checkin/cleanup

- Use Zotero or similar to create a library of your own publications, including posters and presentations (useful to export to a CV).

More information

Guide: https://libguides.ucalgary.ca/guides/researchID

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