

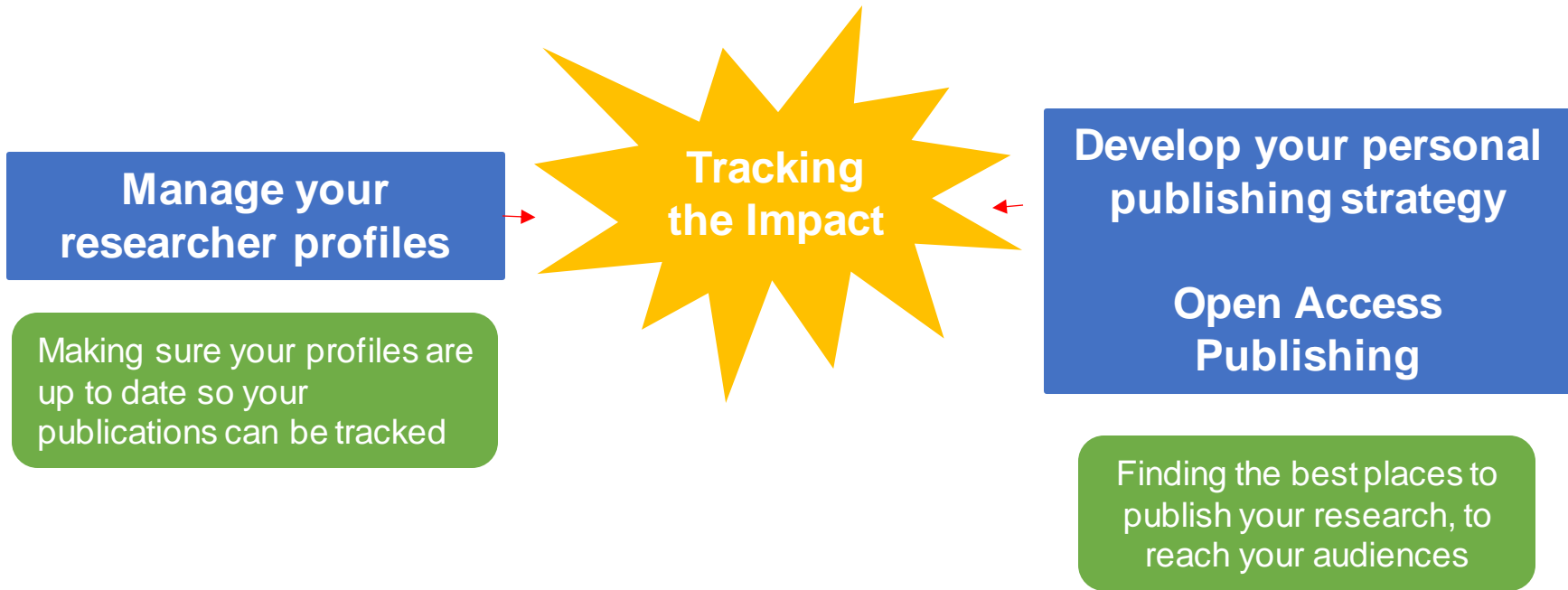
# Tracking the impact of your research publications

13 Oct 2022

Presenters: [jing.li@uts.edu.au](mailto:jing.li@uts.edu.au)

[wei.cai@uts.edu.au](mailto:wei.cai@uts.edu.au)

This session builds on related workshops...



# This workshop will cover

- What is impact and why should we track it?
- Using citation based metrics
- Showcase of 3 tools:

SciVal

Overton

Altmetric for institutions



Asteroid by Freepik via [Flaticon.com](https://www.flaticon.com)

# What is impact?

## Australian Research Council

“Research impact is the contribution that research makes to the **economy, society, environment or culture**, beyond the contribution to **academic** research.”

## NHMRC

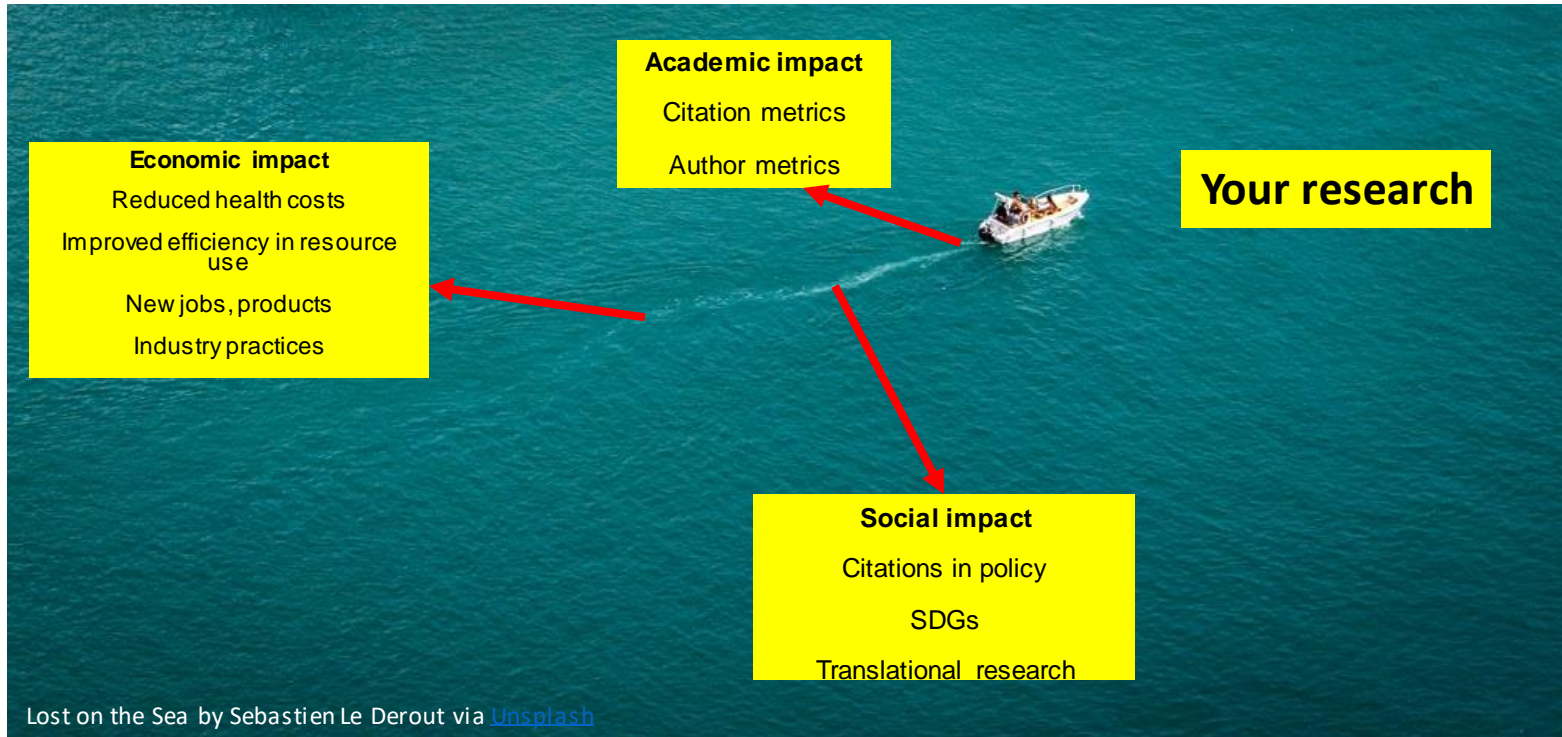
“the verifiable outcomes that research makes to **knowledge, health, the economy and/or society**, and not the prospective or anticipated effects of the research.”

## Research Impact Pathway

Inputs	Activities	Outputs	Outcomes	Benefits
<ul style="list-style-type: none"> <li>• Research income</li> <li>• Staff</li> <li>• Background IP</li> <li>• Infrastructure</li> <li>• Collections</li> </ul>	<ul style="list-style-type: none"> <li>• Research Work and Training</li> <li>• Workshop/Conference Organising</li> <li>• Facility Use</li> <li>• Membership of Learned Societies and Academies</li> <li>• Community and Stakeholder Engagement</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Publications including e-publications</b></li> <li>• Additions to National Collections</li> <li>• New IP: Patents and Inventions</li> <li>• Policy Briefings</li> <li>• Media</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial Products, Licences and Revenue</li> <li>• New Companies – Spin offs, Start Ups or Joint Ventures</li> <li>• Job Creation</li> <li>• Implementation of Programs and Policy</li> <li>• Citations</li> <li>• Integration into Policy</li> </ul>	<ul style="list-style-type: none"> <li>• Economic, Health, Social, Cultural, Environmental, National Security, Quality of Life, Public Policy or Services</li> <li>• Higher Quality Workforce</li> <li>• Job Creation</li> <li>• Risk Reduction in Decision Making</li> </ul>



# Academic, social, economic impact



# Tools



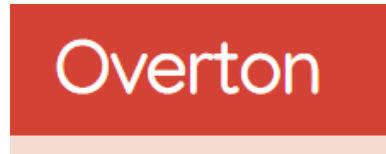
## SciVal

### SciVal

Citation based metrics

Publication reports

SDGs



### Overton

Citing policy  
documents



### Altmetric for Institutions

Alternative metrics (attention  
outside of academia)

Tracks outputs with a DOI or  
unique handle

# Academic impact

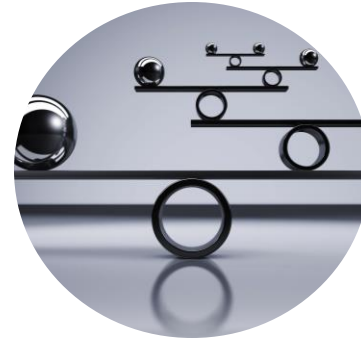
## Citation based metrics- advantages



Citation based metrics are one of many ways to measure how our research output influence other scholars



Citation based metrics are trackable, comparable and documentable



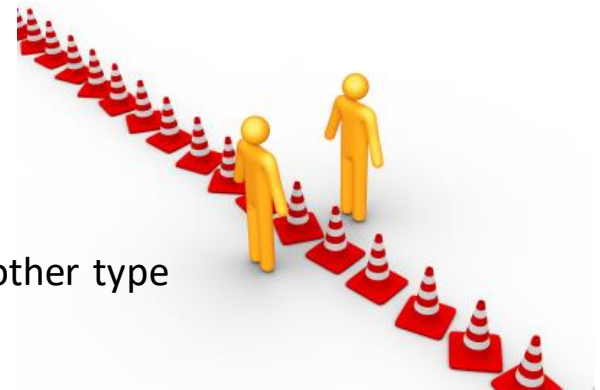
Citation based metrics are heavily considered by evaluators in discipline areas like Health, Life Sciences, etc.



# Academic impact

## Citation based metrics- limitations

- Each citation platform has coverage limits (journal titles and years)
- Citation numbers do not consider authorship
- Citations and mentions: positive + negative
- Self-citations
- Difference between disciplines
- Journal articles are easily tracked by metrics rather than other type of publications like books, arts, etc.
- Your career can't be boiled down to a score!

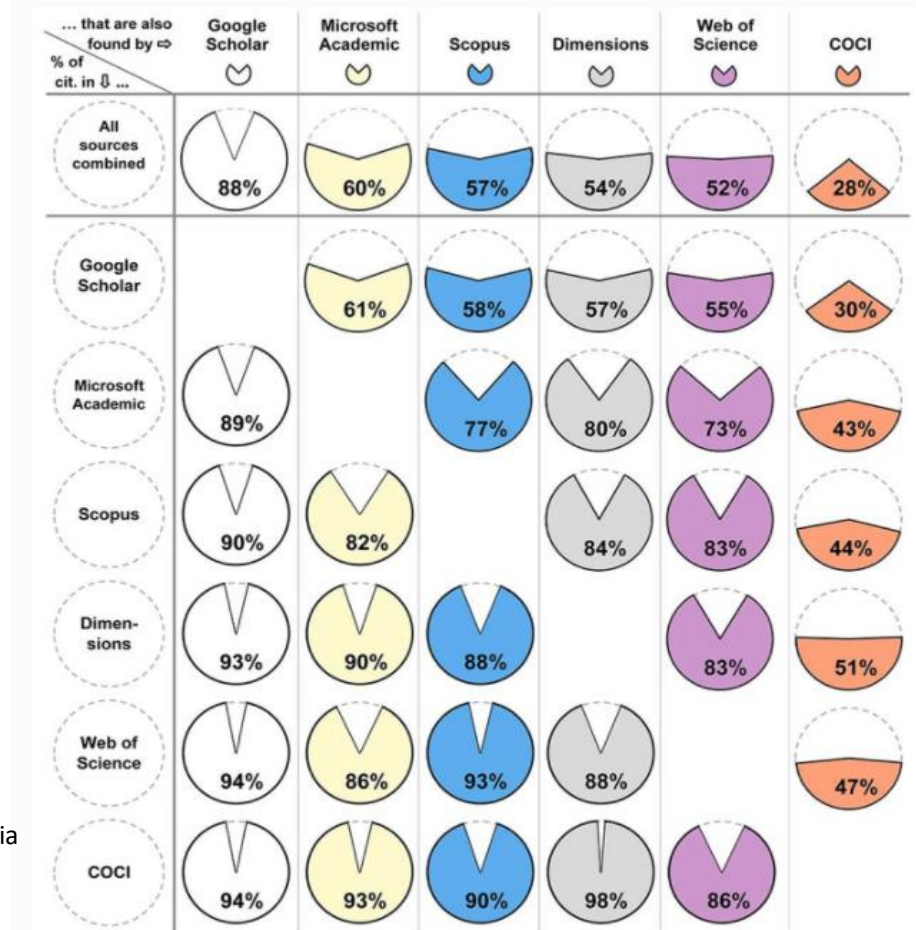


# Citation tracking platforms

- Scopus and SciVal
- Web of Science and InCites
- Google Scholar
- Dimensions

[Access via library subscriptions](#)

Martín-Martín, A., Thelwall, M., Orduna-Malea, E., & Delgado López-Cózar, E. (2021). Google Scholar, Microsoft Academic, Scopus, Dimensions, Web of Science, and OpenCitations' COCI: a multidisciplinary comparison of coverage via citations. *Scientometrics*, 126(1), 871-906. [10.1007/s11192-020-03690-4](https://doi.org/10.1007/s11192-020-03690-4)

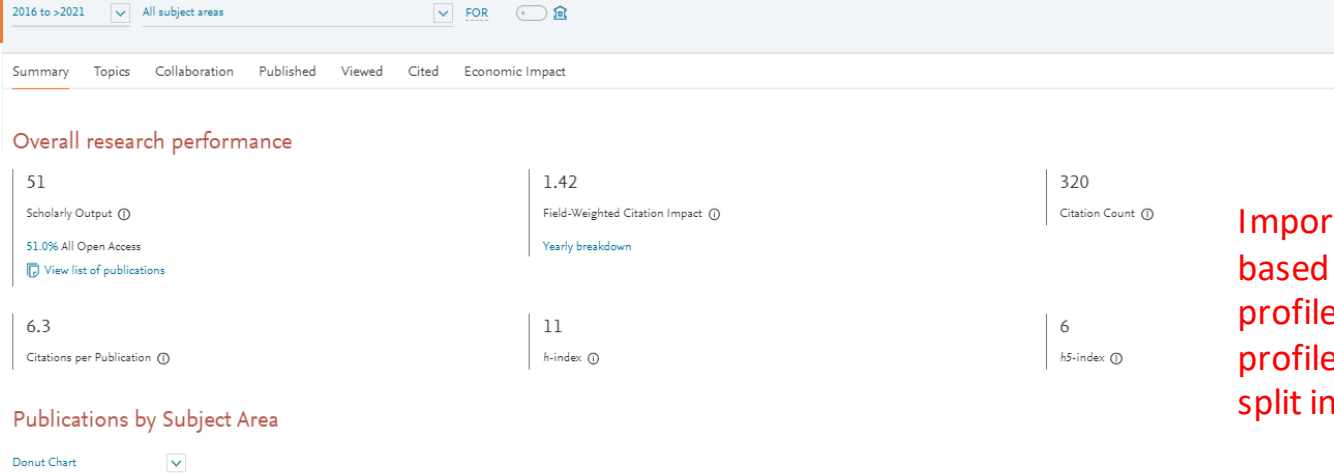


Percentage of citations found by each database, relative to all citations (first row), and relative to citations found by the other databases (subsequent rows)

# Using citation based metrics

## Demo- SciVal

1). Find author metrics in SciVal Overview module



**Important! Accurate data are based on well-maintained profiles, combine multiple profiles if your publications are split into multiple profiles.**

## Demo: SciVal – Generating reports

1. Log into [SciVal](#) and navigate to the “Overview” module
2. Click on “Define a new researcher” and search by author name  
**Important! combine multiple profiles if your publications are split into multiple profiles**
3. To generate a report, add sections of interest by clicking “Add to Reporting”
4. Print/edit/export your report by navigating to “Reporting”

The overview shows:

- Author FWCI
- h5-index
- Publications in top journal percentiles
- FWCI in SciVal topic areas
- Collaboration analysis
- Authorship analysis

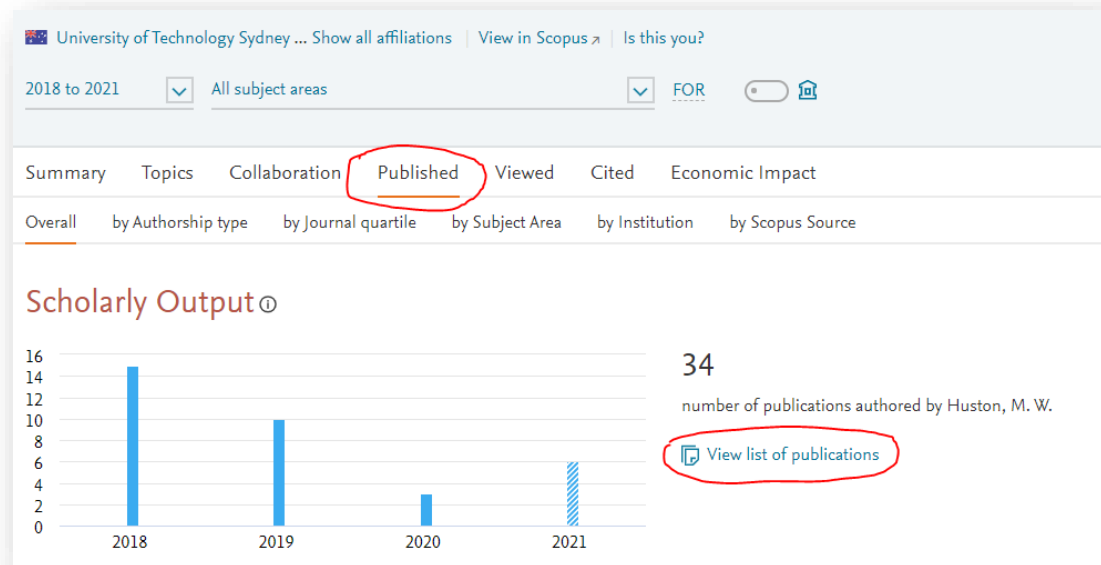
The screenshot shows the SciVal 'Overview' page for a researcher named 'Huston, Wilhelmina'. The left-hand navigation menu is visible, with the 'Define a new Researcher' option circled in red. The main content area shows the researcher's profile, including their affiliation (University of Technology Sydney) and a search bar. A yellow callout box at the bottom right of the screenshot contains the text 'Take note of the year range'.

# Demo: SciVal – Finding publication metrics

1. From the Overview module, click on “Published” → “View list of publications”
2. Click on “Export” → “Export spreadsheet”
3. Choose metrics of interest and then “Export XLSX”

Useful metrics available include:

- Sustainable development goals
- Citations
- Field weighted Citation Impact



# Using citation based metrics Demo- SciVal

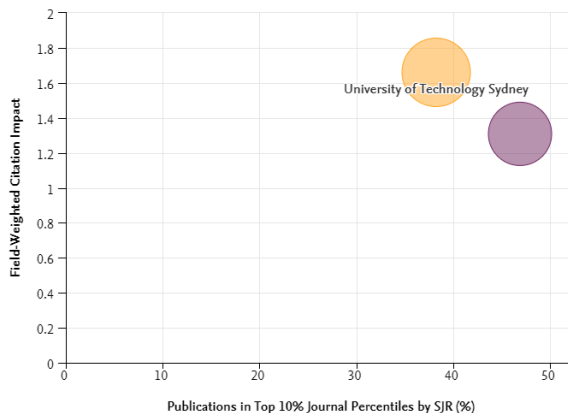
2). Use Benchmarking module to compare your metrics with others (individual researchers or groups)

Field-Weighted Citation Impact

Publications in Top 10% Journal Percentiles by SJR (%)

Output in Top 10% Citation Percentiles (%)

View timeline motion chart



University of Technology Sydney

Individual researcher

Hide all chart labels

View list of Scopus Sources for the selected Researchers and Gro



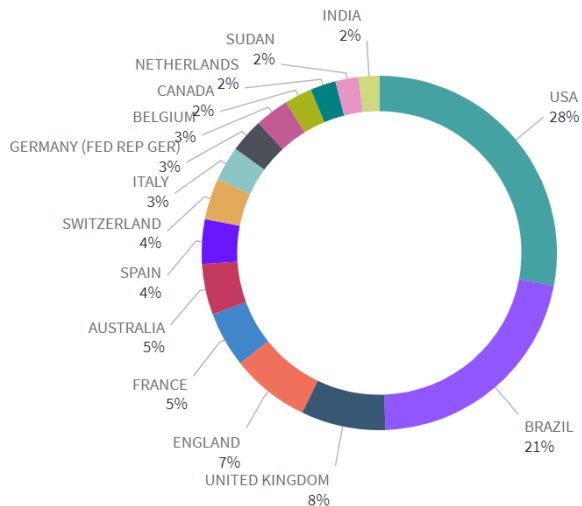
Output in Top 10% Citation Percentiles (%)

# Using citation based metrics

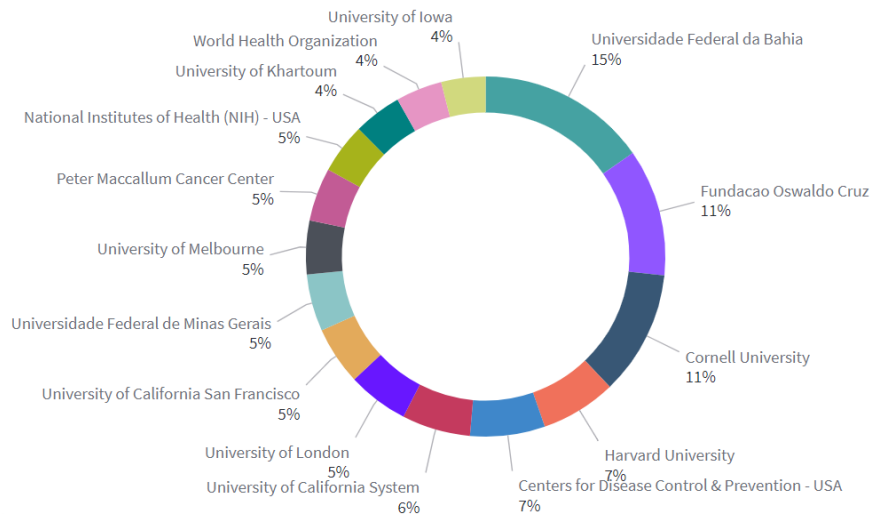
## Finding who are citing you

1). Exporting publications cited your work to InCites

2). Choose filters of researchers, organisations, locations, etc.



Times Cited



# Useful metrics may include...

## Author metrics

- H-index
- H5-index
- FWCI
- Collaboration analysis
- Contribution to topics
- Total number of publications or citations

## Article metrics

- FWCI
- Citation percentiles
- Views

## Journal metrics

- Journal quartiles and ranking e.g. SNIP, SJR, JIF
- Proportion of articles published in top journal percentiles

More information of the metrics can be found from

[lib.uts.edu.au/services/services-for-researchers/demonstrate-your-impact](http://lib.uts.edu.au/services/services-for-researchers/demonstrate-your-impact)



## An sample metrics statement for an early career researcher

*Sarah's career h-index is 3 with 6 publications which have received a total of 25 citations (Scopus). Her field-weighted citation impact (FWCI) is 1.2, and 3 of her articles have been published in the top 25% (Q1) journals in Health Informatics as ranked by SJR, one article with Sarah as the first author has ranked in top 6% in the field of neuroscience globally.*

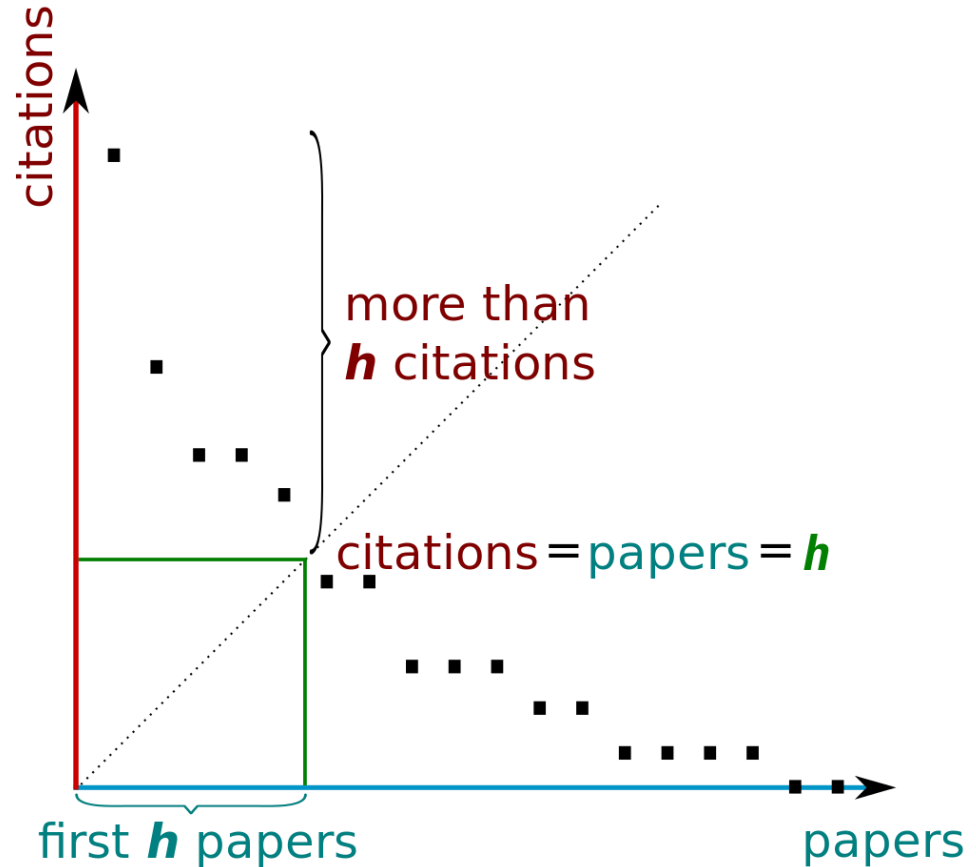
# H-index

## Author metric

"The  $h$ -index is the largest number  $h$  such that  $h$  articles have at least  $h$  citations each.

For example, if an author has five publications, with 9, 7, 6, 2, and 1 citations (ordered from greatest to least), then the author's  $h$ -index is 3, because the author has three publications with 3 or more citations. However, the author does *not* have four publications with 4 or more citations."

(Wikipedia)



# Field weighted citation impact (FWCI)

## Article or author metric

Indicates how the number of citations received by an article compares to the average or expected number of citations received by other similar publications.

- An FWCI of 1 means that the output performs just as expected against the global average.
- More than 1 means that the output is more cited than expected according to the global average; for example, 1.48 means 48% more cited than average.

# Journal quartiles and ranking

## Journal metrics

Metrics which use different formulas to calculate a journal's impact. These scores represent how many citations each journal attracts and are used to rank journals. Used to describe the impact of the journal you have published in.

### Field-Normalised

SNIP  
SJR

### Not Field-Normalised

JIF (Journal Impact Factor)  
CiteScore



# How can we get cited more?



[Read highly cited articles](#)



[Publish in higher ranked journals](#)



[Manage profiles and promote research](#)

# Social impact

The “real world” benefit your research has had.

Some things that are useful to look for include:

- Citations in policy papers, reports or guidelines
- Media mentions
- Wikipedia citations

= people are using your research to inform approaches, further understanding, build capacity, in everyday practice, etc.

[Overton and Altmetric for institutions](#) can be used to locate leads



## Metrics Details

### CITATIONS 47

Citation Indexes	44
<a href="#">Scopus ↗</a>	44
CrossRef	37
<a href="#">PubMed Central ↗</a>	7
Clinical Citations	1
<a href="#">PubMed Guidelines</a>	1
Patent Family Citations	1
<a href="#">Patent Families</a>	1
Policy Citations	1
<a href="#">Policy Citation</a>	1

### USAGE 254

Abstract Views	243
*EBSCO	243
<small>Historical data only</small>	
Link-outs	11
*EBSCO	11
<small>Historical data only</small>	

### CAPTURES 49

Readers	43
<a href="#">Mendeley ↗</a>	43
Exports-Saves	6
*EBSCO	6



## Mentioned by

- 37** news outlets
- 3** blogs
- 2** policy sources
- 157** tweeters
- 4** Facebook pages
- 2** Wikipedia pages
- 1** Google+ user
- 1** Redditor
- 1** video uploader

## Citations


- 257** Dimensions

## Readers on

- 592** Mendeley

# Demo: Altmetric for Institutions





Exploring data for **all research outputs** from the **full Altmetric database** by author **Philip HANSBRO** [EDIT SEARCH](#)


**HIGHLIGHTS** RESEARCH OUTPUTS TIMELINE DEMOGRAPHICS MENTIONS MENTION SOURCES JOURNALS

**Total mentions** 6,589

**Outputs with attention** 333



**Total outputs tracked** 490

### Attention breakdown




Source	Mentions
Social media	5,923
News and blogs	521
Policy and patents	100
Other sources	33
Academic sources	12

### Top outputs

	871	Pathophysiological regulation of lung function by the free fatty acid... Article in <b>Science Translational Medicine</b> , August 2020
	659	Of bats and men: Immunomodulatory treatment options for COVID-19 guided by... Article in <b>Science Immunology</b> , September 2021

### Most mentioned by

 **Kam\_Dua**  
76 total mentions from this **Tweeter**



# Demo: Overton



SEARCH POLICY DOCUMENTS **SEARCH PEOPLE** SEARCH SCHOLARLY ARTICLES

or  or

☰ Click to hide people filters

People whose names contain 'p hansbro' x in all documents x sorted by Documents ▾

- TYPE**
- Only people cited
  - Only people mentioned

- FROM COUNTRY**
- Australia 5
  - United Kingdom 1

- WITH AFFILIATION**
- University of Technology Sydney

- IN DOCUMENTS PUBLISHED**
- In past 5 years
  - In past 2 years
  - In past 6 months

☆ Save search 📄 Export 🔗 Explore Showing 6 results

<input type="checkbox"/>	PERSON	DOCUMENTS	ARTICLES	TOP SUBJECT	TOPICS & HIGHLIGHTS	BY YEAR	SOURCES
<input type="checkbox"/>	UNIVERSITY OF NEWCASTLE AUSTRALIA Philip M Hansbro	14 <small>2 IN KEY SOURCES</small>	8	health	<ul style="list-style-type: none"> <li>Matrix-assisted laser desorption/ionization</li> <li>Bronchiectasis</li> <li>Appears in The UK Government</li> <li>Seen in government policy from 6 countries</li> </ul>		67% Gov 0% IGO 11% Think
<input type="checkbox"/>	UNIVERSITY OF TECHNOLOGY SYDNEY Philip M Hansbro	4	4	health			100% Gov 0% IGO 0% Think
<input type="checkbox"/>	UNIVERSITY OF NEWCASTLE AUSTRALIA Phillip M Hansbro	3	2	virus disease	<ul style="list-style-type: none"> <li>Influenza A virus subtype H5N1</li> <li>Avian influenza</li> </ul>		33% Gov 67% IGO 0% Think
<input type="checkbox"/>	CENTENARY INSTITUTE OF CANCER MEDICINE AND CELL BIOLOGY						100% Gov

# How are these publications tracked?

## How to ensure online attention is tracked by Altmetric: A donut's journey



How do I make sure Altmetric tracks mentions of my work online?



Altmetric relies on identifiers, like DOIs, to match up mentions with publications. Identifiers are usually located on journal websites or repositories.



When sharing research online, e.g. Twitter, always include a link to the journal or other page where the publication was originally posted so Altmetric can track the identifier.



Encourage journalists, bloggers, and other science communicators to do the same and watch attention to your research grow!



Learn more by watching this short [video](#) or view this [blog post](#).

<https://www.altmetric.com/about-altmetrics/tips-tricks/>

# Economic impact

The monetary impact your research has had – e.g. cost savings, improved efficiency or productivity


Useful leads include:

- Citations and mentions in patents
- Government and industry funding




[Dimensions](#) and [Lens.org](#) can be used to locate leads

# Dimensions for grants, patents (and SDGs)

 Dimensions
Save / Export

**FILTERS** FAVORITES

- › PUBLICATION YEAR
- ▼ RESEARCHER
  - Wilhelmina May Huston 20
  - Judith Wilson 6
  - Cameron Buckley 6
  - David Mark Whiley 6
  - Patiyen Andersson 6
  - Deborah C Holt 6
  - Rachael A Lilliebridge 6
  - Philip Morrison Giffard 6
  - Kerry-Ann F O'Grady 6
  - Stephen Bernard Lambert 6
  - Teagan Maree Harris 6
  - [More](#)
- › FUNDER
- › RESEARCH ORGANIZATION
- › COUNTRY/TERRITORY
- › RESEARCH CATEGORIES
- › SOURCE TITLE
- › REPOSITORY



**Wilhelmina May Huston**  
 University of Technology Sydney · Sydney, Australia  
[View Profile](#)

---

**Overview**
Experience & Education

Publications	Datasets	Grants	Patents	Clinical Trials
<b>98</b>	<b>20</b>	<b>6</b>	<b>3</b>	<b>0</b>

Citations  
1,543

The information on this profile has been aggregated algorithmically from several different sources (including publication and public ORCID data).


PUBLICATIONS	DATASETS	GRANTS	PATENTS	CLINICAL TRIALS	POLICY DOCUMENTS
98	<b>20</b>	6	3	0	selected filter not applicable

Show abstract    Sort by: Relevance ▼

Title, Author(s), Year, Repository

[Additional file 1 of Chromatin accessibility dynamics of Chlamydia-infected epithelial cells](#)  
 Regan J. Hayward, James W. Marsh, Michael S. Humphrys, Wilhelmina M. Huston, Garry S. A. Myers  
 2020 - Springer Nature  
 Additional file 1. Summary of mapped reads by time and condition. Table summarising the number of mapped reads for each time and infection condition.

[Additional file 3 of Chromatin accessibility dynamics of Chlamydia-infected epithelial cells](#)  
 Regan J. Hayward, James W. Marsh, Michael S. Humphrys, Wilhelmina M. Huston, Garry S. A. Myers  
 2020 - Springer Nature  
 Additional file 3. Annotation of all significant peaks. Annotation of all the significant peaks, with tabs separating genomic features and fold-change regulation.



Library

## Using Dimensions to find SDGs

1. Log in to [Dimensions](#) using your UTS email
2. Use the 'Researcher' filter to locate your name and click "limit"
3. Click on researcher categories and select 'sustainable development goals'

Tip: Go via Symplectic to locate your Dimensions profile(s)

### ▼ RESEARCH CATEGORIES

› FIELDS OF RESEARCH

› RESEARCH, CONDITION, AND DISEA...

› HEALTH CATEGORY (HRCS)

› RESEARCH ACTIVITY CODES (HRCS)

› ICRP CANCER TYPES

› ICRP COMMON SCIENTIFIC OUTLIN...

› UNITS OF ASSESSMENT

▼ SUSTAINABLE DEVELOPMENT GOA...

3 Good Health and Well Being

14

# Lens.org for patent citations

<https://www.lens.org/>

English ▾ About ▾ Our Apps ▾ Guest Work Area ▾ Register / Sign in Support ▾

5 Scholarly Works

Refine your search ? Search ▾

Hide Query Details Edit Search Search Patents

## Scholar Results

Scholarly Works (5) = All Docs

Filters: Author Display Name = ( *Wilhelmina May Huston* ⊖ , *Wilhelmina M Huston* ⊖ ) Cited By Patents ⊖

Works in Set	Works Cited by Patents	Citing Patents	Patent Citations	Works Cited by Scholarly	Scholarly Citations
5	5	8	8	5	204

Scholarly Works Citing Patents

Table List Analysis

Expand Save as Query Share Export Cited by Patents Hide Analysis Sort by Relevance

The temperature activated HtrA protease from pathogen *Chlamydia trachomatis* acts as both a chaperone and protease at 37 °C

Wilhelmina M Huston , Joaquim E Swedberg , Jonathan M Harris , Terence Patrick Walsh , Sarah A Mathews , Peter Timms  
 FEBS letters, Issue: 18, Volume: 581, Pages: 3382-3386. Jun 26, 2007

# Additional Info: [Open Access](#) [Patents](#) [Substance](#) [Affiliation](#) [Field of Study](#)

3 Citing Patents 41 Citing Scholarly Works Reference Count: 31

Journal Article [Open Access](#) [DOI](#) 053-775-950-282-846 [DOI](#) 10.1016/j.febslet.2007.06.039 [DOI](#) 17604025 [DOI](#) 2035146963 [DOI](#) 10881624 [DOI](#) 95112217

[Find full-text at your institution](#)

The multicopper oxidase of *Pseudomonas aeruginosa* is a ferroxidase with a central role in iron acquisition.

Wilhelmina M Huston , Michael P Jennings , Alastair G McEwan  
 Molecular microbiology, Issue: 6, Volume: 45, Pages: 1741-1750. Sep 27, 2002



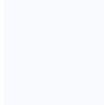
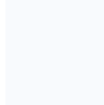

# Additional Info: [Open Access](#) [Patents](#) [Substance](#) [Affiliation](#) [Field of Study](#)

2 Citing Patents 90 Citing Scholarly Works Reference Count: 44

Journal Article [Open Access](#) [DOI](#) 121-722-655-420-076 [DOI](#) 10.1046/j.1365-2958.2002.03132.x [DOI](#) 12354238 [DOI](#) 1571228333 [DOI](#) 14999425 [DOI](#) 10877777

[Find full-text at your institution](#)

### Institution Name

 Queensland Univers... 3	 University of Quee... 3	 Critical Care Depart... 1	 Menzies School of ... 1
 Northwestern Univ... 1			

# Top tips for boosting impact

- Supply ORCID ID and use UTS byline when you publish
- Maintain your author profiles, combine multiple profiles before extracting citation metrics
- Try to publish in Open Access or provide copyright cleared versions of your publications to OA repositories, e.g. [OPUS](#)
- Develop and make available summaries of your research and data including infographics, images, and files for people to share
- Provide author opinion and editorial content for [mainstream press](#)
- Always include DOIs when you discuss your publications in digital platforms

# Support and resources

## Support

- [Research Office](#): UTS research output management systems, funding applications, IP and commercialization
- [Library](#): request workshops and consultations for individual research and group benchmarking metrics

## Resources

- Staff Connect – [UTS Library of Successful Grant Applications](#)
- SharePoint- [Research Outputs Support](#)
- Library Pages – [tips for ARC Discovery schemes](#), [demonstrating impact](#)

