

Researcher visibility

Ivana Malovic, PhD

ivana.malovic@ub.uio.no

Library of medicine and science and Digital Scholarship Center
University of Oslo Library



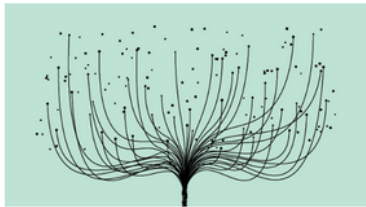
**UNIVERSITY
OF OSLO**

Malovic I. *Researcher visibility* [unpublished lecture presentation]. University of Oslo; 2023 March 3.



Open and reproducible research

More and more researchers across disciplines are preregistering their hypotheses, methods, and analysis plans before they collect or analyze the data to increase research transparency and visibility. This course will give an introduction to preregistration and a step-by-step guide on how to do it yourself.



Time and place: Feb. 3, 2023 10:00 AM–11:30 AM, Zoom

Introduction to open and reproducible research

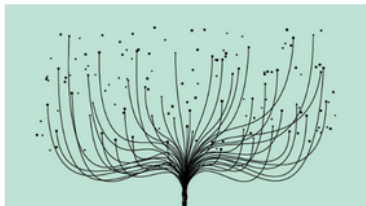
Learn about what open research is and how to make your own research more transparent and reproducible.



Time and place: Feb. 13, 2023 10:00 AM–11:30 AM, Zoom

Reproducible research workflows

Learn about tools and practices for more reproducible and effective research.



Time and place: Feb. 6, 2023 10:00 AM–11:30 AM, Zoom

Preregistration of research studies

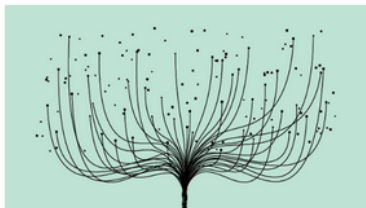
Learn about what preregistration is and how to preregister your own studies.



Time and place: Feb. 27, 2023 1:00 PM–2:30 PM, Zoom

Open Access publishing

Learn about Open Access and how can you choose the best way to publish your results openly.



Time and place: Feb. 8, 2023 10:00 AM–11:30 AM, Zoom

Preregistration on Open Science Framework (OSF)

Learn about how to preregister your study on Open Science Framework (OSF) and how to navigate the platform.



Time and place: Mar. 3, 2023 9:00 AM–10:30 AM, Zoom

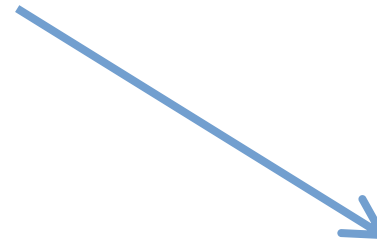
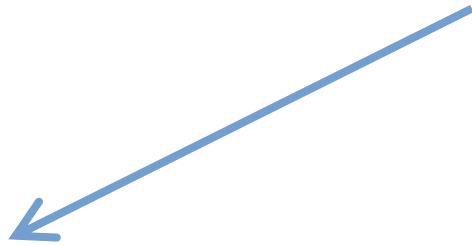
Researcher visibility

Learn about different tools, platforms and services to share your research and other contributions, and how you utilise them to make yourself and your work more visible to the academic community and the society at large.

Roadmap

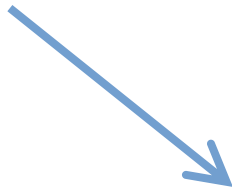
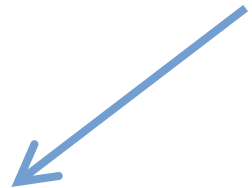
- Bibliometric indicators
- Altmetrics
- Future of bibliometric indicators and researcher evaluation
- Unique identifiers for researchers: ORCID
- Visibility services and SoMe platforms
- Q&A time!

Researcher visibility



Research(er) impact

Researcher profiling



Bibliometrics

Altmetrics



Bibliometrics

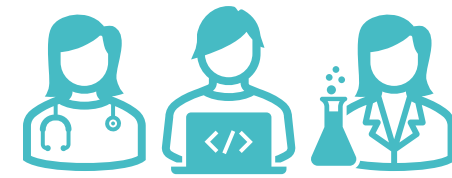
Bibliometric indicators: What are they?

- They are statistics
- Examples: citations, number of publication, *h*-index, Journal Impact Factor
- Only as precise as data they are based on
- Take time to accure
- They have limitations we should be aware

Bibliometric indicators: Why do we have them?

- They can be used for:
 - Exploration – “to gain insight about a field”
 - Evaluation – “on researcher CVs, in project reports, or in strategic decisions or evaluations”

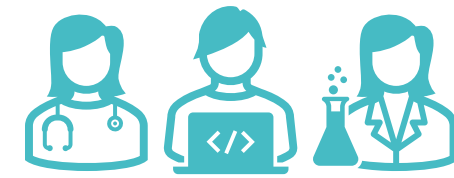
Bibliometric indicators: Author-level metrics



h-index, *h*₁

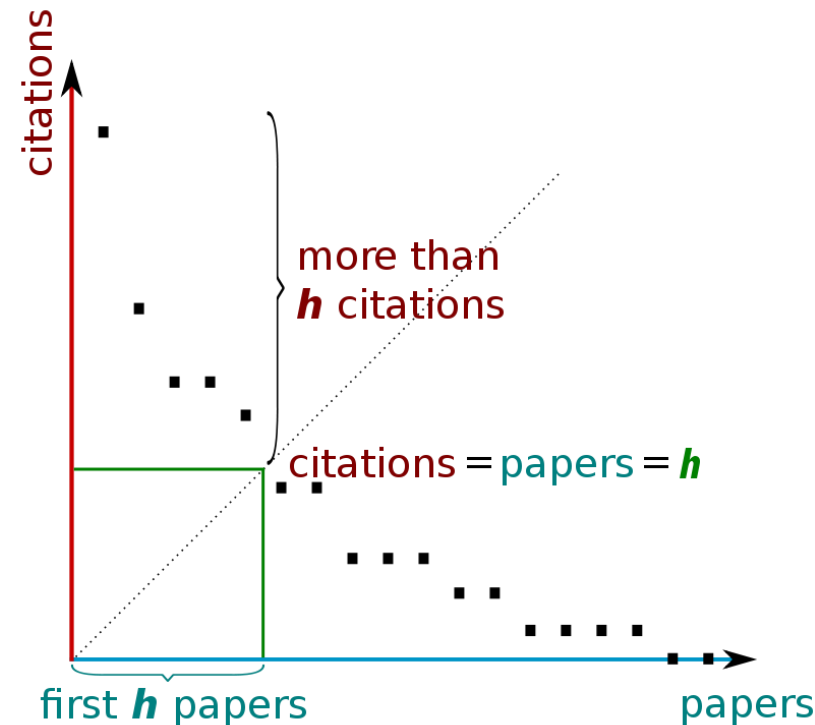
- Developed by Jorge E. Hirsch in 2005 as an indicator at the author's level
- Can be also used at the journal or institutional level

Bibliometric indicators: Author-level metrics

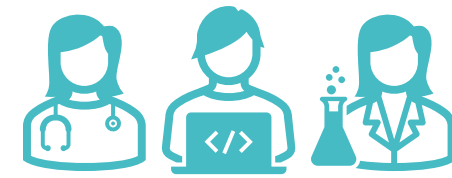


h -index, hI

- Defined as the maximum value of h such that the given author/journal has published at least h papers that have each been cited at least h times



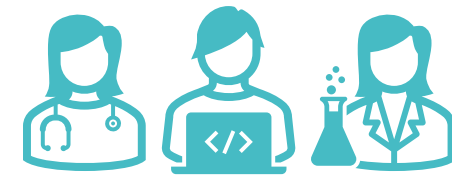
Bibliometric indicators: Author-level metrics



h -index, h_i

- Limitations:
 - Affected by field
 - Varies between different sources
 - Increases with career length → unfair for ECR → Annual h -index
 - Based on citations → can be manipulated → Self-citation index

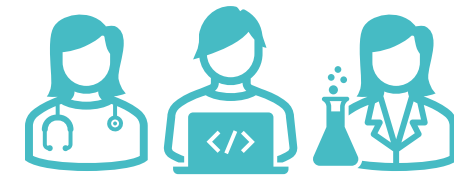
Bibliometric indicators: Author-level metrics



Annual *h*-index, *hla*

- Developed by Harzing et al 2007 (Publish or perish)
- $hla = hl_{norm} / \text{academic age}$
 - hl_{norm} : normalized number of citations for each paper by dividing the number of citations by the number of authors for that paper, and then calculate the *h*-index of the normalized citation counts
 - academic age: number of years elapsed since first publication

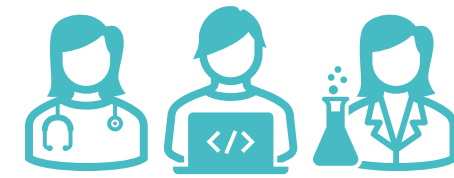
Bibliometric indicators: Author-level metrics



Self-citation index, s-index

- Developed by Flatt et al 2017
 - “...A scientist has a self-citation index s equal to the total number of s papers that he or she has published that have at least the same amount of s self-citations....”

Bibliometric indicators: Author-level metrics



Self-citation index, s-index



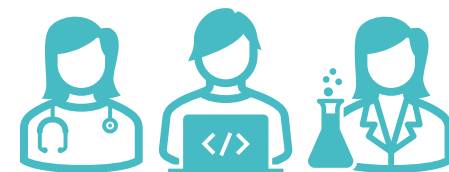
A snapshot of the citation habits of three physicists in the same field reveals the propensity of some scientists to cite themselves. Although the third researcher has the highest *h*-index, he or she also has more self-citations (red) than citations from other groups (gray). Including the *s*-index as an additional metric would provide important context.

- Limitation: Not all self-citation is the same! → Inflated self-citation vs. Necessary self-citation

Bibliometric indicators: Author-level metrics - Example

h-index in **Scopus**, **Web of Science** og **Google Scholar** for Prof. Anne Spurkland:

- [Scopus](#)
- [Web of Science](#)
- [Google Scholar](#)



Bibliometric indicators: Article-level metrics



Citation counts

- They are also an author-level metrics
- They are measure of usage, but are sometimes used as proxies for “impact” or “quality”
- Can be found on databases and services such as Web of Science, Scopus, Google Scholar...

Bibliometric indicators: Article-level metrics



Citation counts

- Limitations:
 - They lack context → “positive” vs. ”negative” citations
 - Self-citations
 - Vary from source to source
 - Citation practices vary between research fields
 - They change with age of the publication
 - They are affected by biases, cultural or social factors
 - They tend to have a self-reinforcing effect

Bibliometric indicators: Journal-level metrics



Journal Impact Factor (JIF)

- Can be found in the Journal Citation Report from Clarivate
- It was designed to help with journal subscription management

Figure 1: Calculation for journal impact factor.

A= total cites in 1992

B= 1992 cites to articles published in 1990-91 (this is a subset of A)

C= number of articles published in 1990-91

D= B/C = 1992 impact factor

Bibliometric indicators: Journal-level metrics



Journal Impact Factor (JIF)

- Limitations:
 - It is susceptible to manipulation via coercive citation practices
 - It is not comparable between fields
 - Wrong use of JIF to assess individual articles is problematic because citation rates vary within a journal

Bibliometric indicators: Journal-level metrics

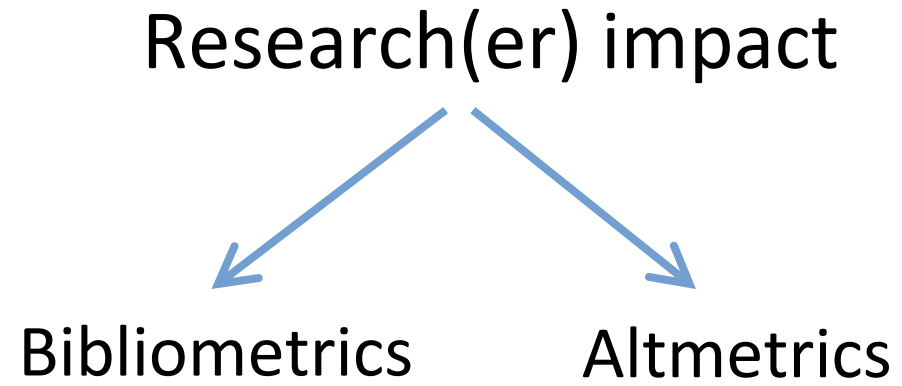


Norwegian national system

- Academic journals and publishers are divided into either Level 1 and Level 2, and these are used in national research funding based on performance
- *The Norwegian Register for Scientific Journals, Series and Publishers* can be found here: https://kanalregister.hkdir.no/publiseringskanaler/Forside.action?request_locale=en

Altmetrics

Altmetrics

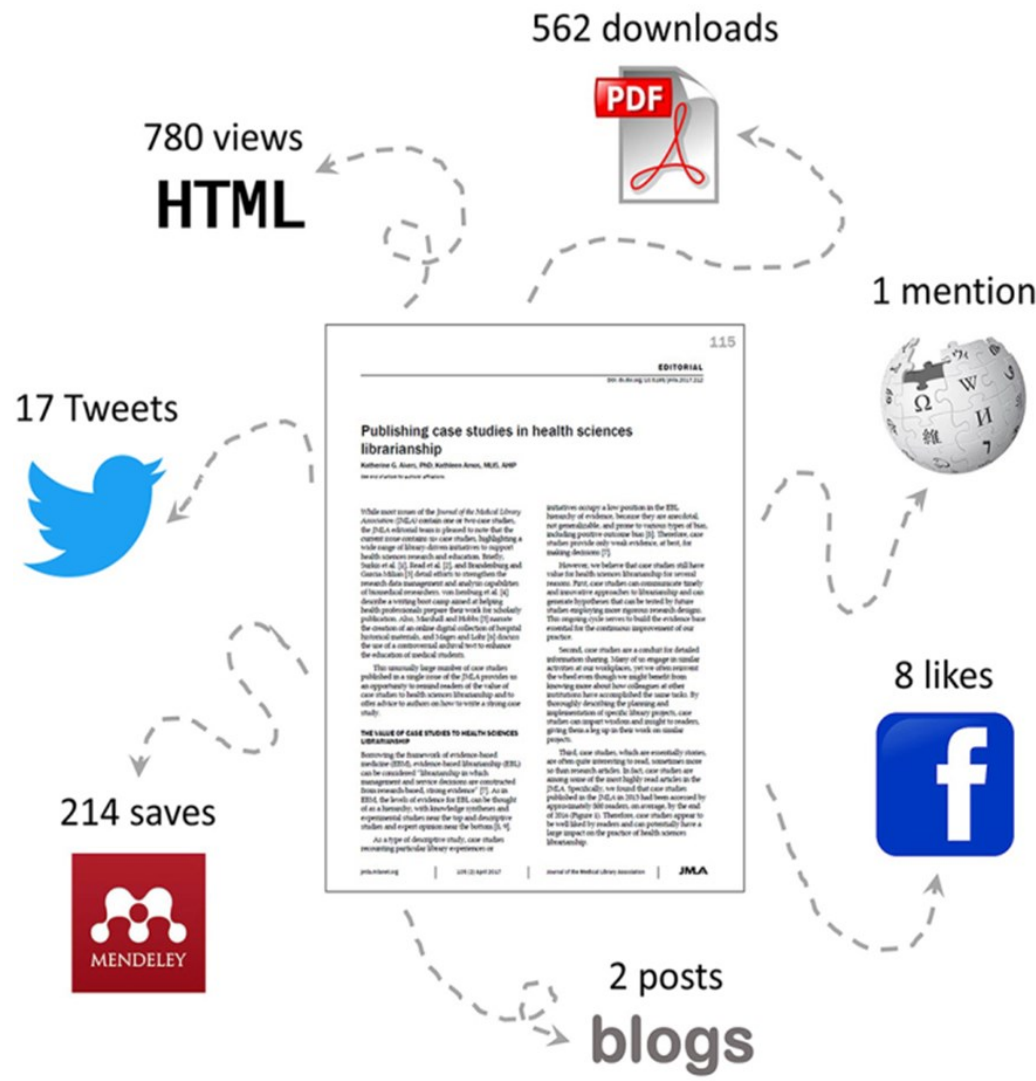


© University College Dublin Research and Innovation



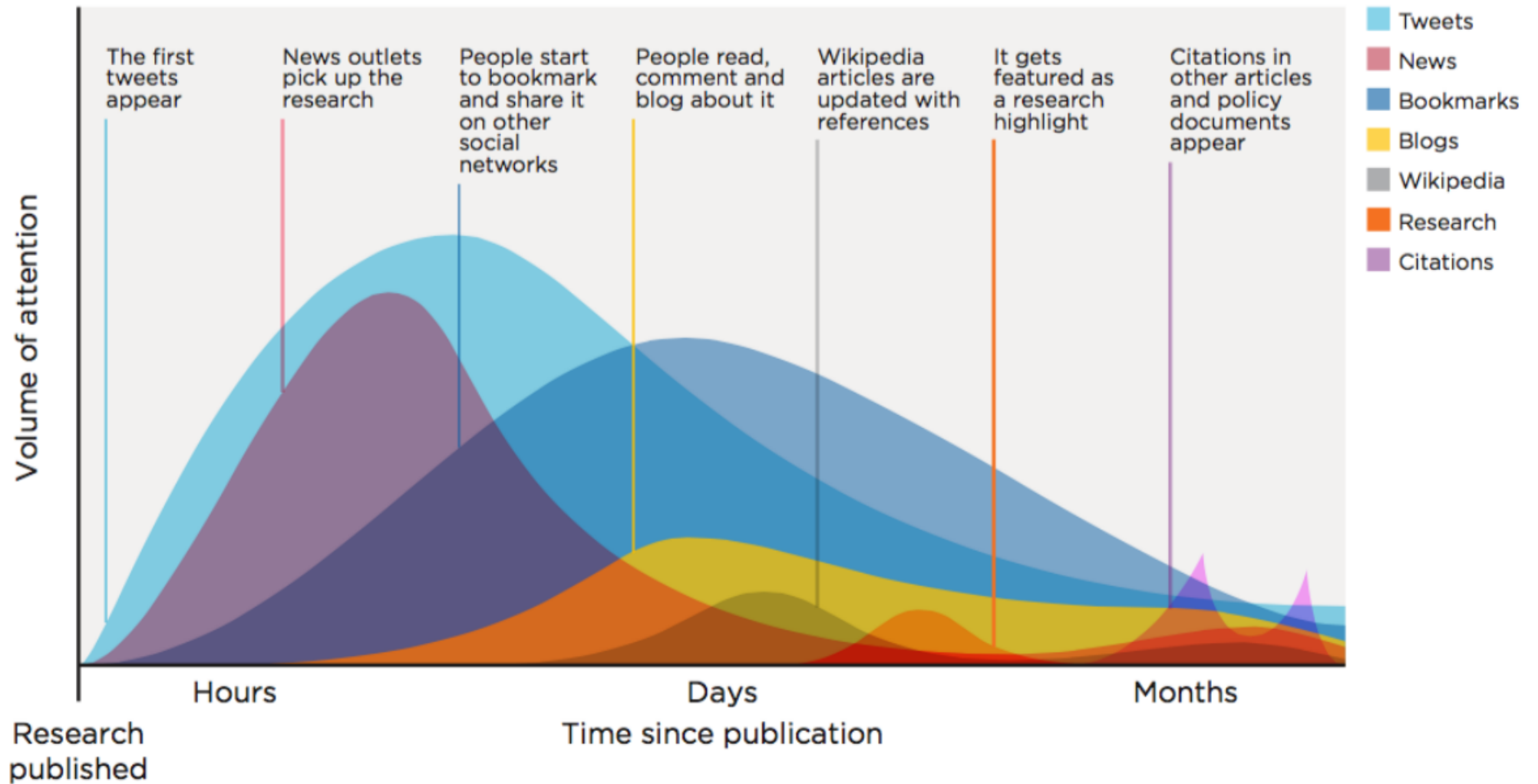
- ***Alternative metrics***
- Proposed by Priem et al. 2010
- They track online interaction with a digital object produced by the research cycle
- Complimentary to the article-level bibliometrics → but not exclusive to it
- Measure attention and indicate potential social, economic and cultural impact

Altmetrics



Altmetrics

A typical timeline of attention





- **Alternative *metrics***
- Proposed by Priem et al. 2010
- They track online interaction with a digital object produced by the research cycle
- Complimentary to the article-level bibliometrics → but not exclusive to it
- Measure attention and indicate potential social, economic and cultural impact
- **Pro:** Have an immediate impact
- **Con:** Potential for manipulation is high



- Criticised:

Real world impact cannot be effectively reduced to a numerical ranking for a number of reasons:

- It's often subtle and non-obvious, requiring an explanation, rather than a yes/no tick box.
- It's slow, in many fields better measured in decades rather than months.
- It's widely variable, and there's no one standard measure that makes sense for a particle physicist and an economist.
- Trying to metric-ize real world impact leads to short term thinking rather than doing what's best for research and for society over the long term.

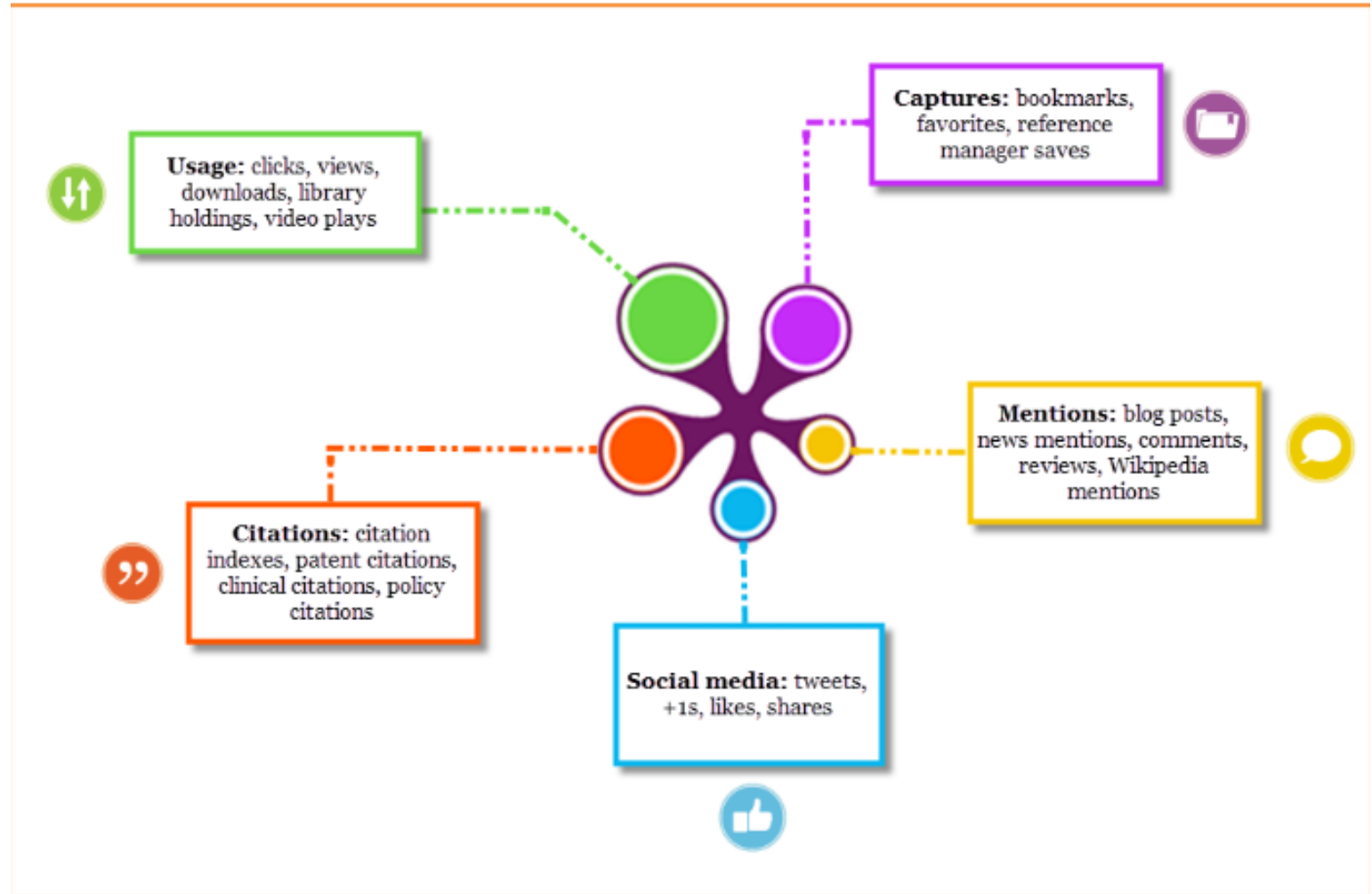
Altmetrics are often mentioned as a way to measure real world impact. The first thing we must absolutely be clear on though, is that attention is not the same thing as impact. Just because something is popular or eye-catching, doesn't mean it's important or of value.

[David Crotty, The Scholarly Kitchen, Aug 2, 2018](#)

Altmetrics

- Tools (examples):
 - PlumX metrics (2011-)

Scopus
Mendeley



Altmetrics

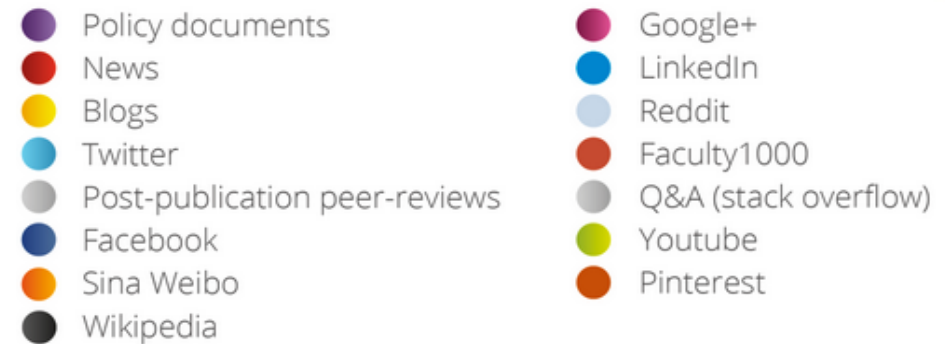
- Tools (examples):
 - Altmetric (2011-)

Springer Nature
Taylor and Francis
JAMA Network

[Free Badges for Individual Researcher \(for websites\)](#)

Colors of the donut

The colors of the Altmetric donut each represent a different source of attention:



Altmetrics

- Tools (examples):
 - Altmetric (2011-)

Springer Nature
Taylor and Francis
JAMA Network

[Free Badges for Individual Researcher \(for websites\)](#)

Colors of the donut

The colors of the Altmetric donut each represent a different source of attention:

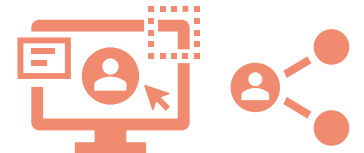


Blogs	Q&A Forums (Stack Exchange)
Dimensions Citation Data	Reddit
Facebook	Twitter
Faculty Opinions (formerly F1000)	Web of Science Citation Data
News and Mainstream Media	Wikipedia
Mendeley	YouTube
Patents	Syllabi (Open Syllabus)
Policy Documents	



Altmetrics: Examples for different articles

- a. <https://doi.org/10.1371/journal.pmed.0020124>
- b. <http://dx.doi.org/10.1038/ngeo2670>
- c. [An article in Scopus](#)



Future of bibliometric indicators and researcher evaluation

Future of bibliometric indicators

- Indicators are not everlasting! → Example: Oncotarget
 - [loss of JIF 2017](#) – What does it mean for the authors?
 - Not indexed in MEDLINE since 2017

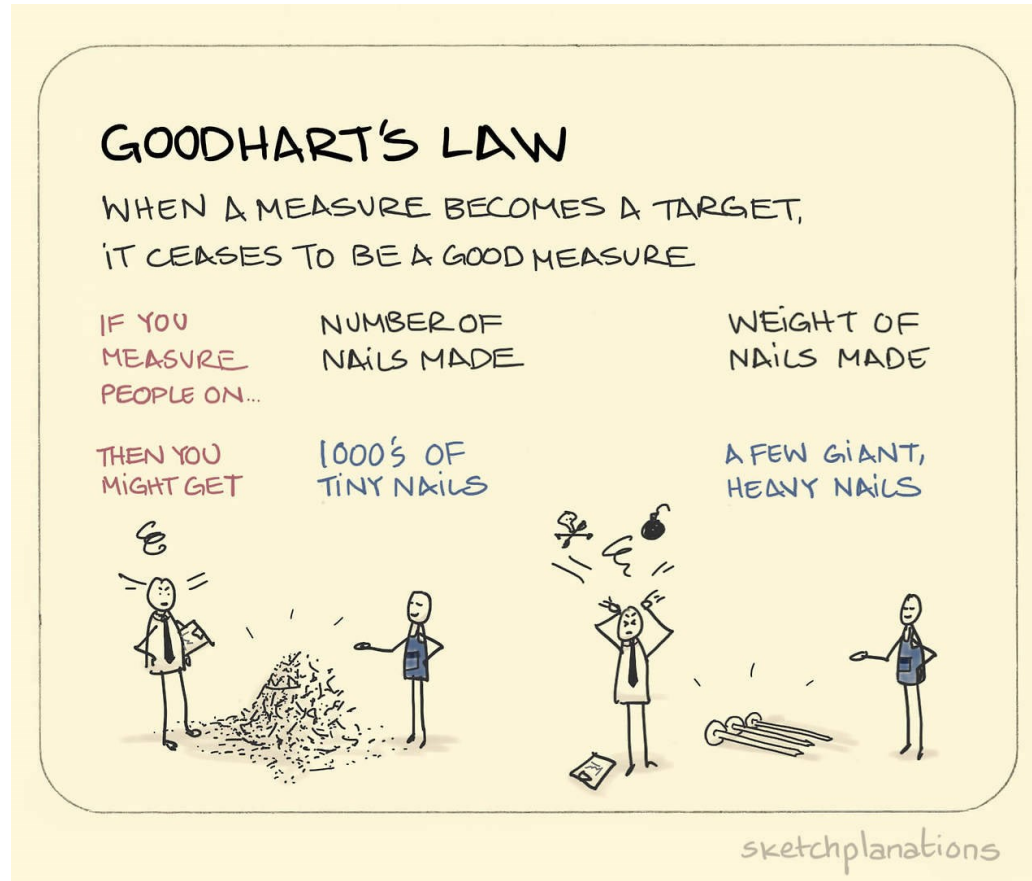
When a journal is delisted, authors pay a price

Shocked, confused, disappointed — these are the reactions of authors who recently published in a cancer journal that was delisted by a company that indexes journals.



Future of bibliometric indicators

- They are imperfect as a tool for researcher evaluation



Goodhart's Law:

In other words, if you pick a measure to assess people's performance, then they find a way to game it.

Future of researcher evaluation



- New recommendations and tools are developed internationally:



- [SF DORA](#) = San Francisco Declaration on Research Assessment (2013): recommendations for research assessment at different levels



- [TOP Factor](#) = Transparency and Openness Promotion Factor (COS, 2015): an alternative way to assess journal qualities based on open science practices



- [The Hong Kong Principles](#) for assessing researchers (2019)



Nationally: **NOR-CAM**: Norwegian Career Assessing Matrix

- The framework is aimed at academic institutions, funders, and national authorities
- It consist of six principles and four recommendations
- Based on DORA, the Hong Kong Principles, the [Leiden Manifesto for Research Metrics](#), and inspired by the Dutch initiative '[Room for everyone's talent](#)', and the European Commission's [Open Science Career Assessing Matrix](#) (OS-CAM)



NOR-CAM



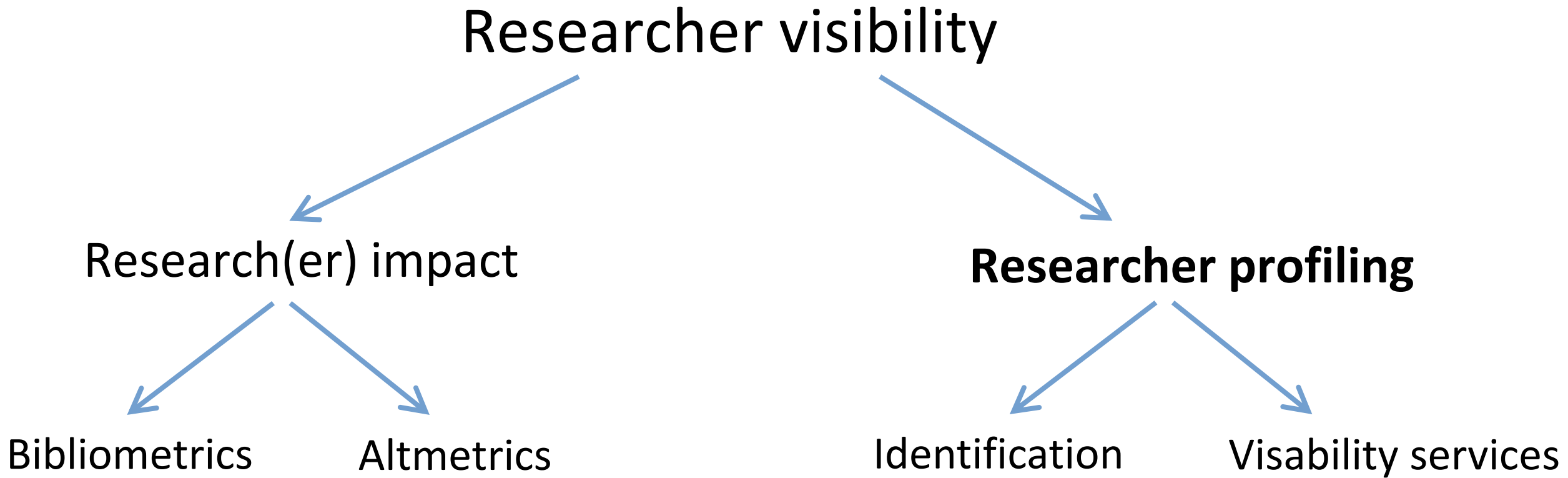
NOR-CAM – Norwegian Career Assessment Matrix
The Norwegian Career Assessment Matrix (NOR-CAM) is a further development of OS-CAM. The intention is for the matrix to serve as a framework for assessing general academic activity (results and competencies). One of the main aims of NOR-CAM is for multiple areas of expertise to be assessed more systematically than is currently the case.

1. Area of competence	2. Results and competencies (examples)	3. Documentation	4. Reflection
A. Research output	-Published works -Datasets -Software -Methodologies -Artistic results -Research reports	CRIS systems (e.g. Cristin) and other databases	Reflection on the relevance and quality of the results. Emphasis is placed on open access to published works and other results, as well as whether the data adhere to the FAIR principles.
B. Research process	- Leadership and participation in research groups -Working across disciplines - Research integrity/RRR - Editorial activity - Peer reviews - Building consortia - External funding - Development of research infrastructure -Leadership and participation in clinical trials	CRIS systems and other databases. Narrative CV system with links to source data.	Reflection on roles and relevance. How and why various actors within and outside academia have been involved in the research process. Emphasis is placed on transparency in the research process.
C. Pedagogical competence	- Planning, execution, evaluation and development of lectures and supervision of students - Participation in the development of educational standards in academic communities - Mentoring - Devising and sharing learning materials	CV system with links to source data. Institutional registration of lecturing activity. Pedagogical portfolio.	Reflection on formal and informal competence and experience. Emphasis is placed on open education and the sharing of educational resources.

³¹ Responsible research and innovation. See for example <https://www.rrr-practice.eu/about-rrr-practice/what-is-rrr/>

1. Area of competence	2. Results and competencies (examples)	3. Documentation	4. Reflection
D. Impact and innovation	-Innovation -Entrepreneurship and commercialisation -Social innovation -Innovation in the public sector -Citizen science -Textbooks -Publishing activity -Research reports and studies -Application of research in public administration and industry	CRIS systems and other databases. Altmetrics. Narratives and impact stories. Patents and licences.	Reflection on the relevance and effects of activities for society, as well as external contributions to research. Sharing of research and educational results with the general public and others.
E. Leadership	-Institutional and departmental leadership -Leadership in academic networks and projects -Leadership outside academia -Leadership in panels and other committee work	CV system with links to source data, CRIS systems and other databases, narratives.	Formal and informal leadership, reflection on roles, processes and effects. Contribution to strategies and policy development in relation to open science.
F. Other experience	-Experience and competence from sectors outside academia. -Courses and discipline-related development work.	CV system with links to source data.	Reflection on how these experiences contribute to the competence in general.





Unique identifiers

Unique researcher identifiers: What are they?



- Unique standardized names for each researcher

Unique researcher identifiers: Why do you need them?

- Distinguishing between similarity of personal names:

- Name equivalence
- Name changes
- Different spelling and transliterations
- Abbreviations
- Multiple surnames
- Switching surname and first name
- ...

An illustrative example: **Jens Åge Smærup Sørensen**

• J. Å. S. Sørensen	• J. Åge S. Sørensen	• J. Åge Smærup Sørensen
• J. Aa. S. Sørensen	• J. Aage S. Sørensen	• J. Aage Smaerup Sørensen
• J. Å. S. Sorensen	• J. Åge S. Sorensen	• J. Åge Smarup Sorensen
• J. Aa. S. Sorensen	• J. Aage S. Sorensen	• J. Aage Smarup Sorensen
• J. Å. S. Soerensen	• J. Åge S. Soerensen	• J. Åge Smaerup Soerensen
• J. Aa. S. Soerensen	• J. Aage S. Soerensen	• J. Aage Smaerup Soerensen
• Jens Å. S. Sørensen	• Jens Åge S. Sørensen	• Jens Åge Smærup Sørensen
• Jens Aa. S. Sørensen	• Jens Aage S. Sørensen	• Jens Aage Smaerup Sørensen
• Jens Å. S. Sorensen	• Jens Åge S. Sorensen	• Jens Åge Smarup Sorensen
• Jens Aa. S. Sorensen	• Jens Aage S. Sorensen	• Jens Aage Smarup Sorensen
• Jens Å. S. Soerensen	• Jens Åge S. Soerensen	• Jens Åge Smærup Soerensen
• Jens Aa. S. Soerensen	• Jens Aage S. Soerensen	• Jens Aage Smaerup Soerensen

And on and on it goes ...

Unique researcher identifiers: Why do you need them?

- Distinguishing between similarity of personal names
- Correct attribution of your research outputs and activities
- Reliable contributions and affiliations
- Improving discoverability and recognition

Unique researcher identifiers: How do you get them?

- Publisher based:
 - [Scopus Author ID](#) (Elsevier) → automatically assigned during indexing of your first paper

This author profile is generated by Scopus. [Learn more](#)

Quintana, Daniel S.

 [Universitetet i Oslo, Oslo, Norway](#)

 36119176600 

 <https://orcid.org/0000-0003-2876-0004>

 Is this you? [Connect to Mendeley account](#)

6,648

Citations by 4,914 documents

516

Co-authors

40

h-index [View h-graph](#)

- [ResearcherID](#) (Clarivate Analytics) → integrated with Publons profile

Unique researcher identifiers: How do you get them?

- Free:

- [ORCID](#) (Open Researcher and Contributor ID)



- Must be created
 - [Already incorporated in National Research Archive](#)
 - [Overview of publisher that require ORCID](#)
 - [Direct import](#)
 - You own your own record

- [Google Scholar Author Profile](#)

- Must be created



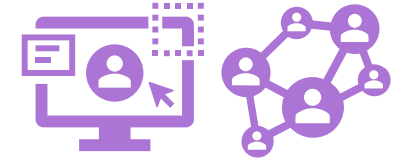
Unique researcher identifiers: Example

ORCID record of Aleksander Refsum Jensenius



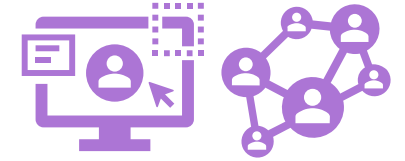
Visibility services

Visibility services: What are they?



- Online services helping you to:
 - Connect to each other easier
 - Promote yourselves and all your scholarly activities to a wider audience

Visibility services: Why do you need them?

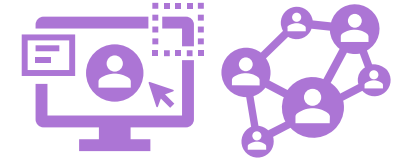


WHY SHOULD I CARE ABOUT MY ONLINE PRESENCE?

- To make your research and teaching activities known
- To increase the chance of publications getting cited
- To correct attribution, names and affiliations
- To make sure that as much as possible is counted in research assessments
- To increase the chance of new contacts for research cooperation
- To increase the chance of funding
- To serve society better

Universiteitsbibliotheek Universiteit Utrecht

Visibility services: How do you get them?



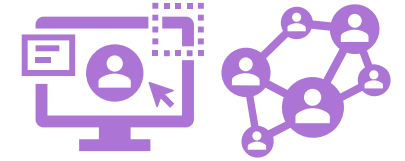
- Majority you have to **create yourself** (often proprietary):
 - Profiles on different professional and scholarly communities and networks
 - ResearchGate, Academia.edu, LinkedIn,...

ResearchGate

LinkedIn

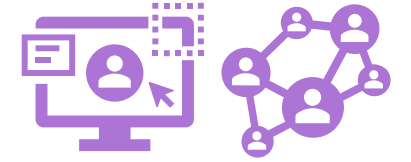
ACADEMIA

Visibility services: How do you get them?



- Majority you have to **create yourself** (often proprietary):
 - Profiles on different professional and scholarly communities and networks
 - ResearchGate, Academia.edu, LinkedIn,...
 - Websites
 - Personal blogs and personal websites
 - Wikis

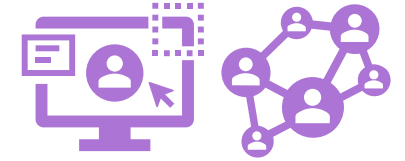
Visibility services: How do you get them?



- Majority you have to **create yourself** (often proprietary):
 - Profiles on different professional and scholarly communities and networks
 - ResearchGate, Academia.edu, LinkedIn,...
 - Websites
 - Personal blogs and personal websites
 - Wikis
 - Social media
 - Twitter, Mastodon, Facebook, Instagram, ...
 - YouTube, TikTok,....



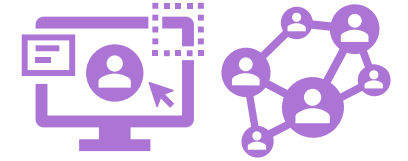
Visibility services: SoMe pros and cons



Benefits:

- Gives **instant up-to-date** with current research
- **Rapid and meaningful communication** with peers
- Creates **platforms for career development** and interdisciplinary **collaboration**
- Provides **new ways of communicating** with your students
- **Easier recruitment** of staff, students, and study participants
- **Increases citation** of work shared
- **Allows** tracking of research impact via **altmetrics**

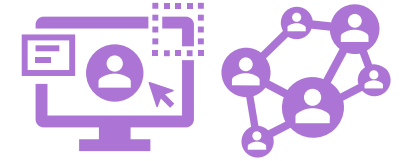
Visibility services: SoMe pros and cons



Challenges:

- Additional **time burden** to keep up-to-date and create content
- **Reputational risks** in case of posting poorly written statements, sharing or commenting certain content or topics
- Raised **privacy concerns** such as account hacking, personal information leakage, deep fakes
- Easy **dissemination of misinformation** and poor quality information
- **Pressure by the research institutions** to be engaged in self-promotion
- **Trolling**

Visibility services: How do you get them?



- It is given to you **automatically**:
 - Personal profile pages at UiO
 - [How to edit your UiO profile page](#)



Visibility services: Examples – personal profiles at UiO

Torbjørn Rognes,

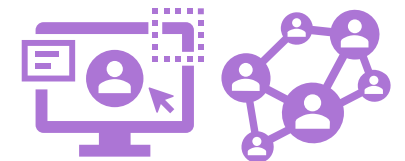
Research Group for Biomedical Informatics

Bruno Laeng,

Research Group Literature, Cognition and Emotions (LCE)

Eirinn Larsen,

Research Group for Democracy, Freedom and Boundaries



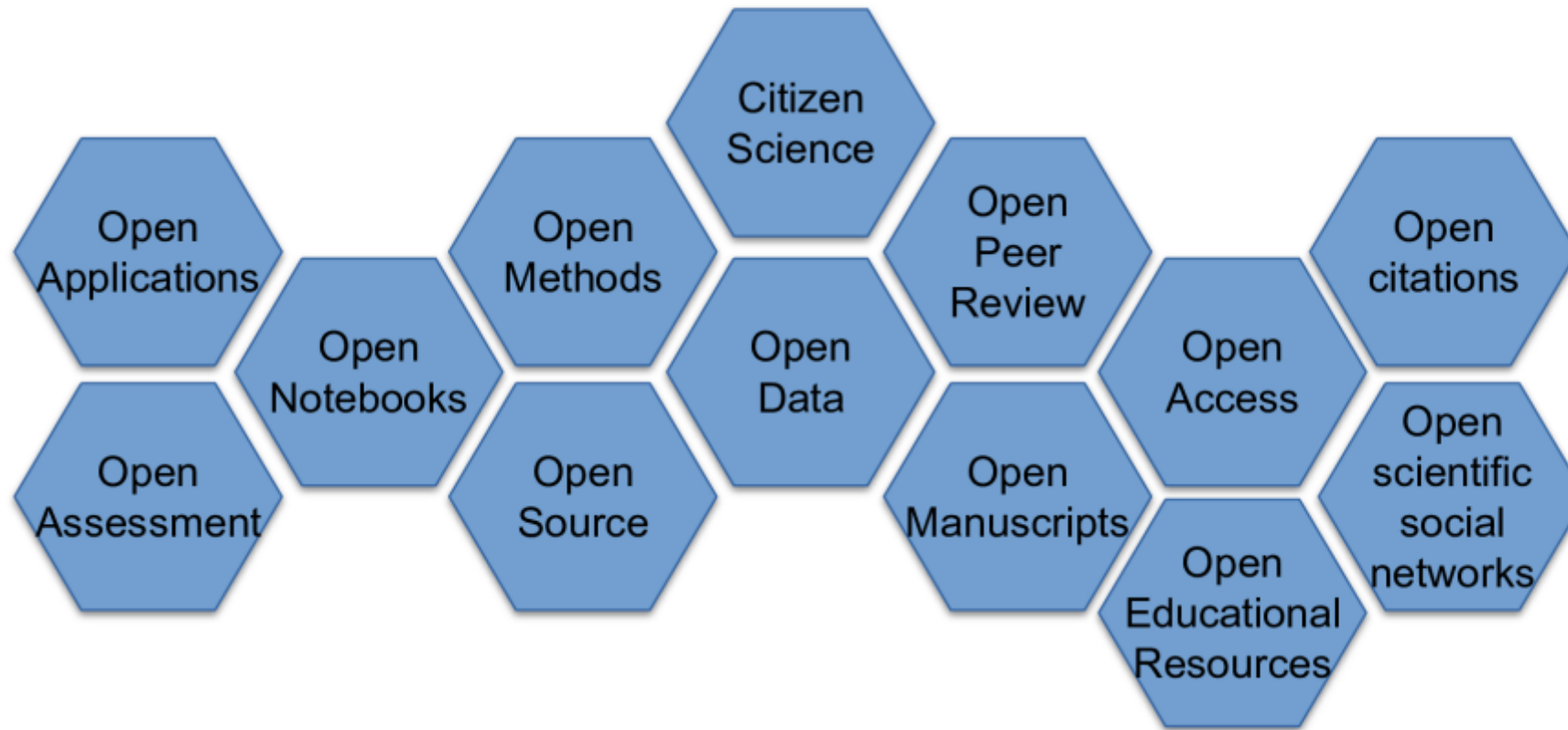
How to improve your visibility?

(adapted from Tampere University Library, University Library of South Australia and book by Allen et al 2023)

- Create an **ORCID** iD.
- Use a **consistent spelling of your author-name** in all publications.
- Use the **standardized institutional affiliation** in your publications.
- Choose your publication channels carefully; use **Open Access** channels (including self-archiving), as well as **preprint publishing** (when possible).
- Add a **persistant identifier to your research output** (DOI: article, preprint or dataset; ISBN: book).
- Add a **CreativeCommons lisences** to all your research output: preprints, datasets, OER,...
- Choose **title of your paper** carefully ([tips by Anna Clemens](#), a Scientific Editor)
- Check **your own publication information** at international databases and contact the service provider if you notice errors in your name or contact information.
- Join **professional and scholarly communities and networks** for researchers to follow news in your field, and to discuss and share your research.
- Consider communicating information about your research through **social media**.

How to improve your visibility?

Open Research = **Share!**



You need help?

- Talk to your research administration
- Get inspired by others
- Read!
 - Allen K-A, Jimerson SR, Quintana DS & McKinley L (2023) An academic's guide to social media: learn, engage, and belong. Routledge; Abington, Oxon, UK; New York, NY.

Research data

Good research data management plays an essential role in Open Science, which is increasingly important for scholars around the globe. The University Library provides courses on key concepts as a part of the Skills Development for Research Data project.

Time and place

Introduction to research data management

Apr. 12, 9:00 AM, Zoom

Data management planning

Apr. 14, 9:00 AM, Zoom

Data organization, metadata, and documentation

Apr. 19, 9:00 AM, Zoom

Data classification and storage selection

Apr. 21, 9:00 AM, Zoom

Copyright and licensing

Apr. 21, 1:00 PM, Zoom

Sharing and archiving research data

Apr. 26, 9:00 AM, Zoom

Finding and reusing research data

Apr. 27, 9:00 AM, Zoom

Open Science Lunch

Each last Thursday of the month at 12:00 we invite you to join us for a lunch seminar to hear about how to make your research more open. We will discuss research transparency and visibility, open publishing, data sharing, and more!

Upcoming



Time and place: Feb. 23, 2023 12:00 PM–1:00 PM, Hybrid: Georg Sverdrups hus and Zoom

Open your data with DataverseNO

Learn about DataverseNO - a new institutional data archive for open data at UiO.



Time and place: Apr. 27, 2023 12:00 PM–1:00 PM, Hybrid: Georg Sverdrups hus and Zoom

Open knowledge resources: Store norske leksikon and Wikipedia

Join us for a discussion on using, maintaining and contributing to freely available open knowledge resources.



Time and place: Mar. 30, 2023 12:00 PM–1:00 PM, Hybrid: Georg Sverdrups hus and Zoom

Public health reporting: an open source approach

Join us for a discussion on how open source tools can enable automated, reproducible and scalable public health reporting.



Time and place: May 25, 2023 12:00 PM–1:00 PM, Hybrid: Georg Sverdrups hus and Zoom

Keep the rights to your work: UiO's Rights Retention Policy

Learn about how you can retain the rights to your published work with the new Rights Retention Policy at UiO.



Journal Clubs

Our mailing list:

<https://sympa.uio.no/uio.no/subscribe/open-science-oslo>

University of Oslo

Welcome

Our journal club is open to both staff and students at UiO across all departments. Everyone is welcome to join us - whether you are an enthusiast, a skeptic, or a cautious explorer. Feel free to get in touch if you are interested to participate or contribute!

Our mission

- provide an informal and friendly platform for discussions about meta scientific topics
- help each other get familiarized with open science practices (e.g., pre-registrations, sharing data, sharing preprints, etc.)
- connect students and researchers from various disciplines who are interested in meta science.

Format

Before each meeting, we read an article on meta scientific topics, which we then discuss during the meeting. At each meeting, a different discussion leader will begin by providing a short overview of the paper and facilitate discussion throughout the meeting. Anyone can propose a possible paper or topic to present if we have not covered it already. Grab a cup of tea (coffee?) and join us! Due to the current pandemic, all sessions will be held online (Zoom) for the time being.

🌐 Universitetet i Oslo

🔧 osf.io/mvx54

Z [collection](#)

? timo.b.roettger@gmail.com

👤 Timo B. Roettger

👤 Agata Bochynska



Thank you!