How to improve our research impact?

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Tehran University of Medical Sciences

چگونه یک پژوهش اثربخش داشته باشیم؟

چگونه اثربخشی پژوهش خود را افزایش دهیم؟

The Story of Impact

Todays Outline

- In this session, we will talk about:

1. What is Research Impact?
2. How is Research Impact measured?
3. What are the resources for assessing impact?
4. How to improve our research impact?
5. How can I demonstrate my research Impact?

پژوهش پاسخگو، نافع، کاربردی، هدفمند، مساله، محصول محور

Publish or Perish!

Substitute of old “**Publish** or **Perish**”!

Getting Found, Staying Found & Increasing Impact

Science Circle

- The circle of science from origination to usage consist of many steps as follows:

1- Doing Research

2- Research Publication (Paper)

3- Knowledge Dissemination

4- Knowledge Utilization & Application

Is my research making an impact?

What is Impact?

- The Oxford dictionary defines impact as “A Marked Effect or Influence.”
- So, Research Impact means that our research has affected or influenced something or someone.
- This arouse the following questions:
  - Whom has it impacted, who is the target audience?
  - How has it made an impact, what was its ultimate goal?
  - Through what means has this impact occurred, i.e., what are the primary outlets?
  - How do we know this impact has occurred, i.e., how can we measure it?

How Research Impact Differs By Academic Role?

Academic Role	*Whom?* Target Audience	*How?* Ultimate Goal	Through Which *Means?* Primary Outlets	How Do We *Know?* Measures
Research	Other academics	Progress scientific knowledge	Academic journals, Research Monographs, Conferences	Citations in academic journals / books / conference papers
Teaching	Students	Develop critical thinking skills	Textbooks, Practitioner journals	Citations in textbooks / syllabi
External Engagement	Industry, Government, Public and society	Address societal problems	Practitioner journals / magazines, Policy reports, (Social) Media, Collaborative	Citations in policy documents, policy / legal changes, improved HDI/SDG*

*HDI = United Nations Human Development Index ; SDG = United Nations Sustainable Development

What is Research Impact?

- It is all the diverse ways that research benefits individuals, organizations and nations through increasing effectiveness of public services and policy, improving quality of life and health, or economic benefits.
- It may translate as benefit, payback, translation, transfer, uptake and utilization.
- The “Academic Impact”, considered to be the research knowledge contribution to a field of study within academia, should be distinguished from “Non-academic Impact”, which goes beyond academia.

What is Research Impact?

- **Research impact** is defined as how broadly scholarly research is being read, discussed, and used both inside and outside of the academy.

What is Research Impact?

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

(Australian Research Council)

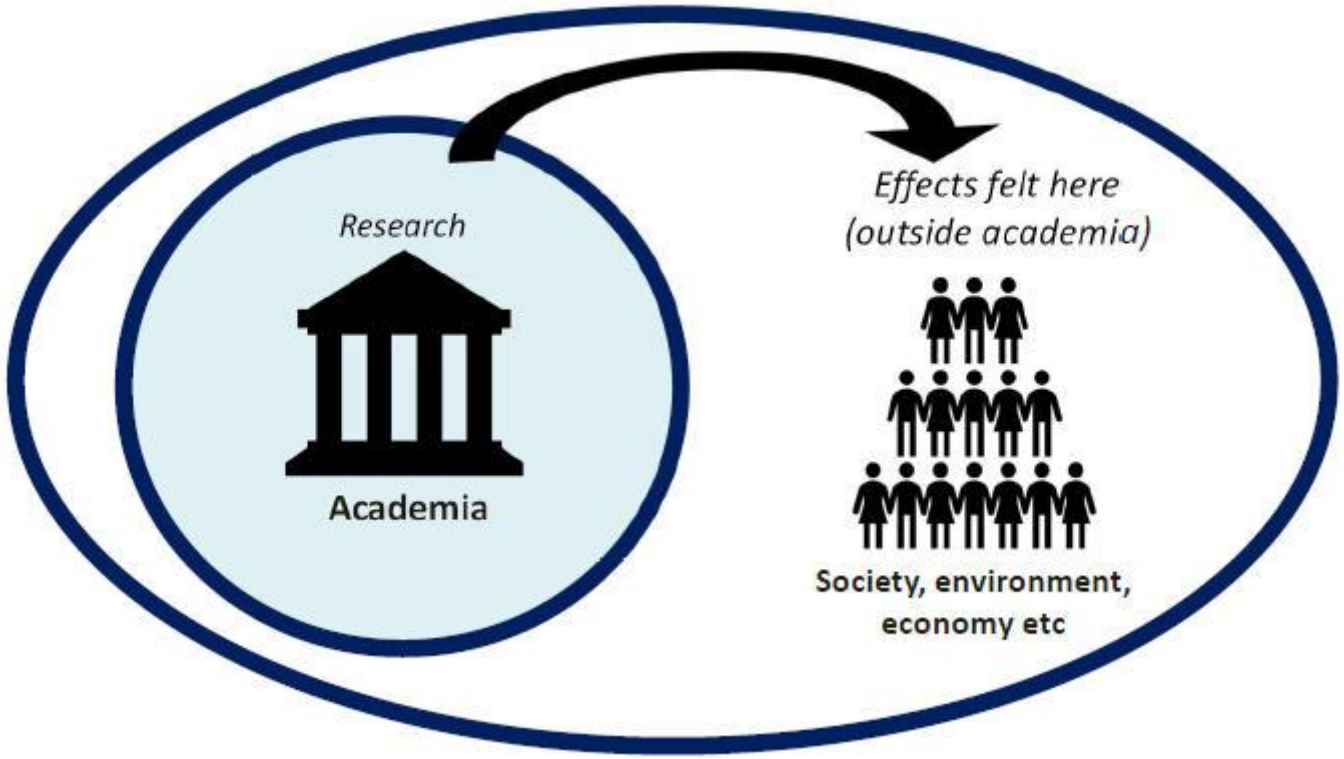
What is Research Impact?

- An effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, **beyond academia.**

https://www.ukri.org/about-us/research-england/research-excellence/ref-impact/

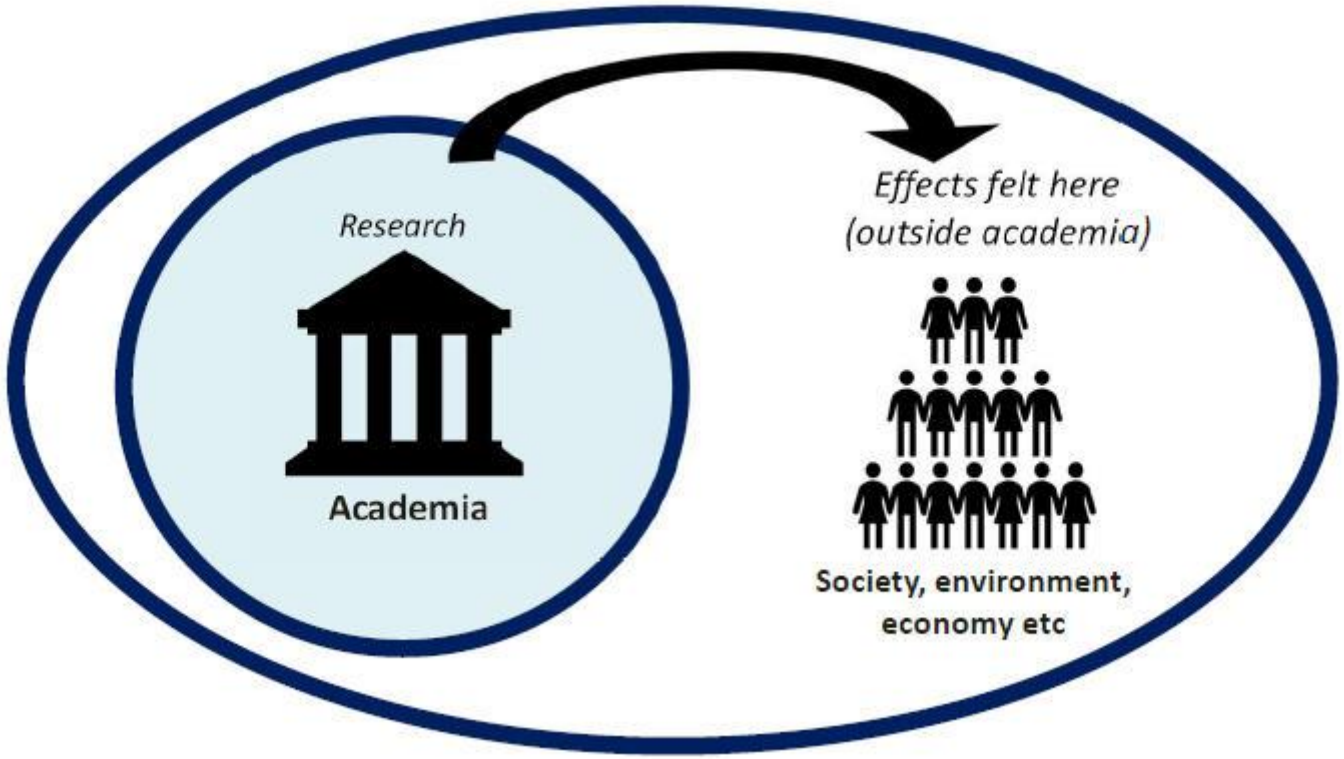
What is Research Impact?

- Any Real Effect of Research in Real World is called impact.



What is Research Impact?

- Any provable Effect (Benefits) of Research in Real World is called impact.

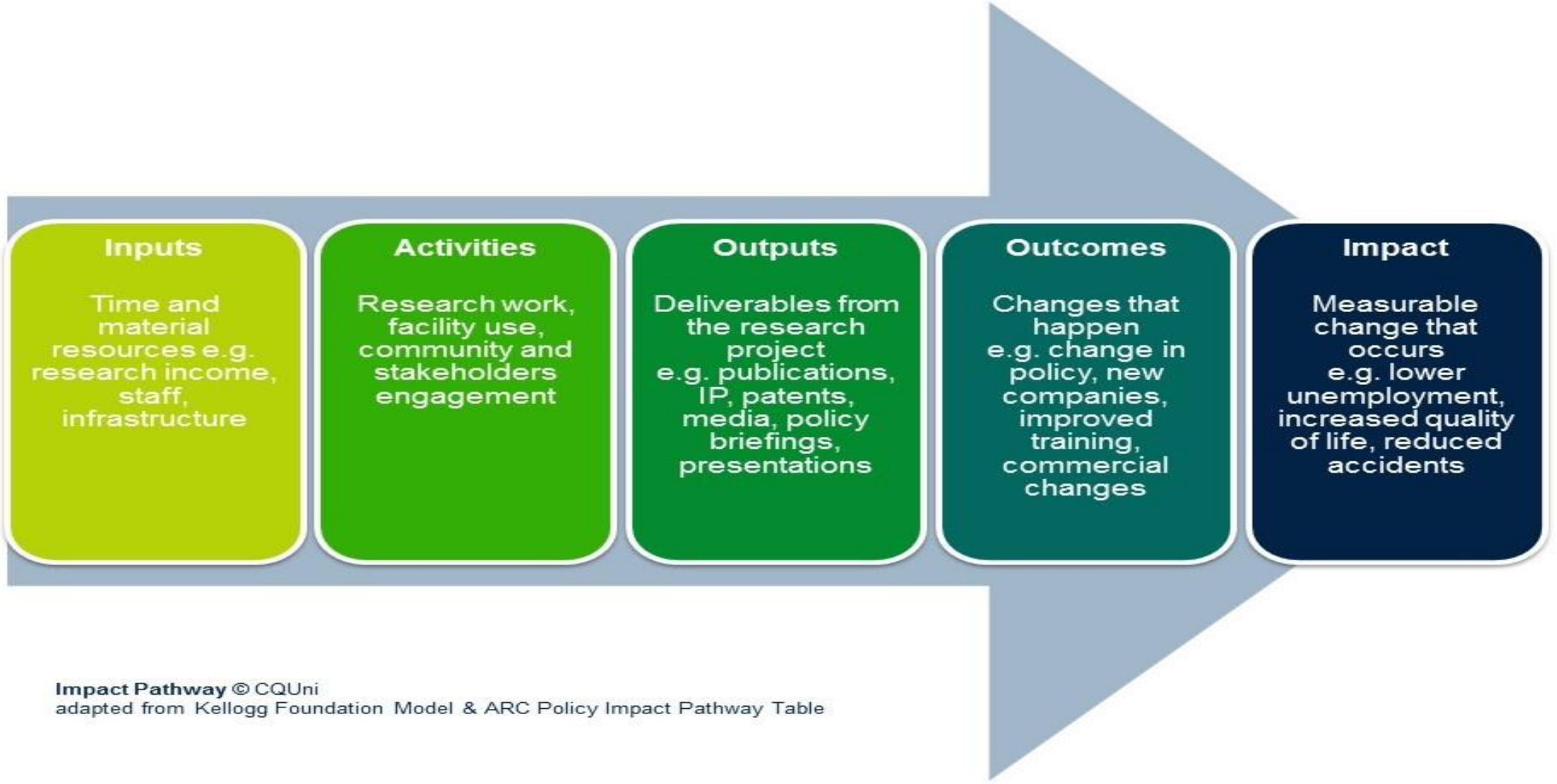


Research Impact Application

- Research impact is taken into account when research groups are being evaluated formally, but also when your own your academic work or career is being evaluated for funding, promotion or appointments.

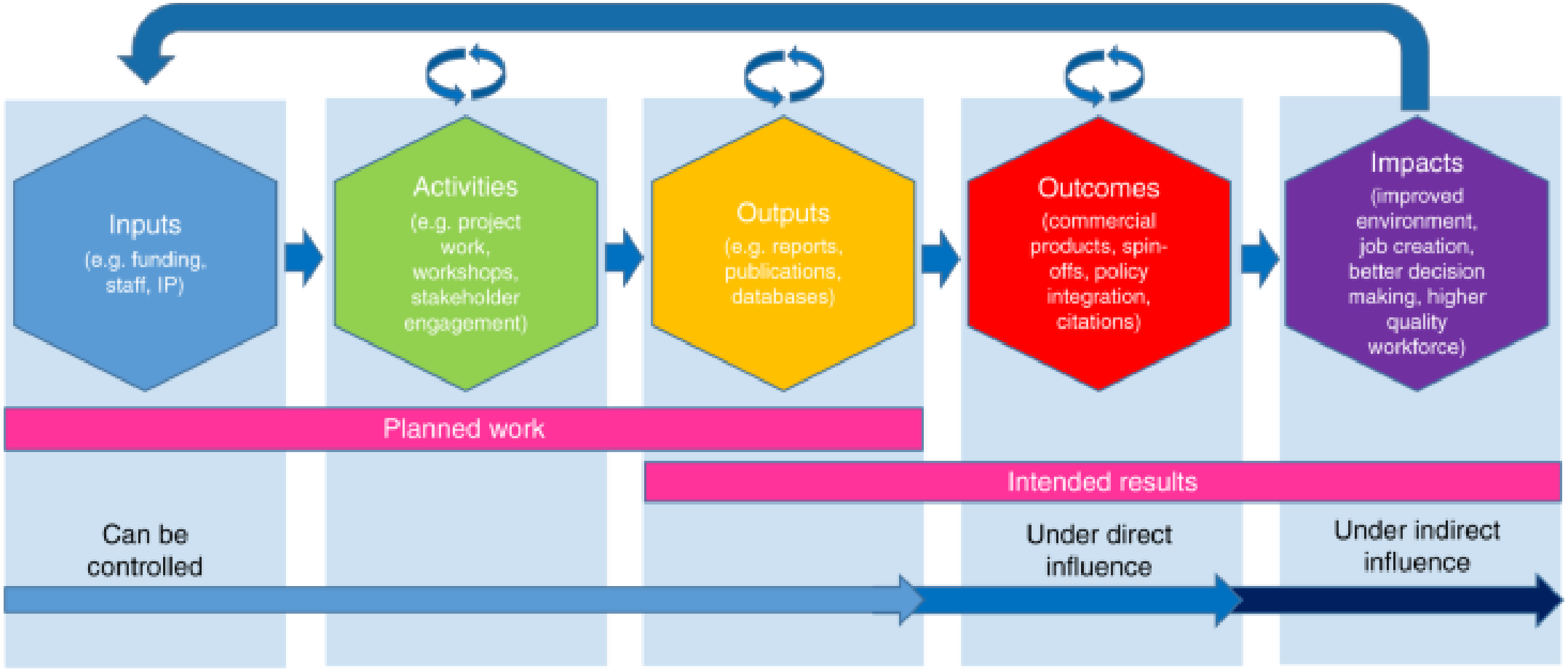
- Researchers use different strategies to improve their potential research impact in all phases of the publishing process.

Pathways to Research Impact and Engagement



Impact Pathway © CQUni
adapted from Kellogg Foundation Model & ARC Policy Impact Pathway Table

Research Impact Assessment



Fryirs, K.A., Brierley, G.J. & Dixon, T. Engaging with research impact assessment for an environmental science case study. *Nat Commun* 10, 4542 (2019). https://doi.org/10.1038/s41467-019-12020-z

A Real Case of Research Impact!

HORMONE RESEARCH

Original Paper

Horm Res 2004;62:79–83
DOI: 10.1159/000079392

Received: September 27, 2003
Accepted: April 20, 2004
Published online: June 24, 2004

Prevalence of Congenital Hypothyroidism in Isfahan, Iran: Results of a Survey on 20,000 Neonates

Mahin Hashemipour[a,b] Massoud Amini[a,b] Ramin Iranpour[b]
Gholam Hossein Sadri[c] Narges Javaheri[a] Sassan Haghighi[a]
Silva Hovsepian[a] Abbas Ali Javadi[d] Mahdi Nematbakhsh[e]
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A Real Case of Research Impact!

Horm Res. 2004;62(2):79-83. doi: 10.1159/000079392. Epub 2004 Jun 24.

Prevalence of congenital hypothyroidism in Isfahan, Iran: results of a survey on 20,000 neonates

Mahin Hashemipour [1], Massoud Amini, Ramin Iranpour, Gholam Hossein Sadri, Narges Javaheri, Sassan Haghighi, Silva Hovsepian, Abbas Ali Javadi, Mahdi Nematbakhsh, Goshtasb Sattari

Affiliations + expand

MID: 15237248 DOI: 10.1159/000079392

tract

Aims: To evaluate the prevalence of congenital hypothyroidism (CH) in a screening program performed for the first time in Isfahan, Iran.

Methods: From May 2002 to December 2002, T4 and TSH serum concentrations of 20,000 3- to 7-day-old newborns, born in all 17 hospitals of the city, were measured by radioimmunoassay and immunoradiometric assay, respectively. The newborns with abnormal screening results (TSH >20 mIU/l, T4 <6.5 microg/dl and based on the weight) were re-examined.

Results: Of 531 recalled subjects (recall rate 2.6%), 54 were confirmed to be hypothyroid, showing a prevalence of 1:370 for CH.

Conclusion: Considering the high frequency of CH, the necessity of implementing a routine screening program in the healthcare system of Isfahan Province is emphasized.

به نام خالق هستی

برنامه کشوری غربالگری بیماری کم‌کاری تیروییدنوزادان

دستورالعمل ویژه کارشناس

نویسندگان:
دکتر شهین یاراحمدی
دکتر نسرین آژنگ

زیر نظر:
دکتر علیرضا مصداقی‌نیا
دکتر کورش اعتماد
دکتر سید محمد علوی‌نیا

تاریخچه و طراحی برنامه کشوری غربالگری بیماری کم کاری تیروییدنوزادان در ایران

با توجه به گذار اپیدمیولوژیک از شیوع و بروز بالای بیماری‌های واگیر به غیرواگیر در سال‌های اخیر، مداخله در هر سه سطح پیشگیری (اولیه، ثانویه و ثالثیه) در مدیریت بیماری‌های غیرواگیر جزو اولویت‌های بهداشتی کشور قرار گرفته است.

در دهه ۶۰ و قبل از اجرای برنامه غنی سازی نمک با ید، دکتر عزیزی و همکاران‌شان اقدام به غربالگری نوزادان برای بیماری کم‌کاری تیروییدکردند. اما به علت کمبود ید میزان فراخوان بسیار بالا بود، لذا این اقدام پس از مدتی متوقف گردید.

مطالعاتی در ارتباط با میزان بروز بیماری کم‌کاری تیروییددر دانشگاه‌های علوم پزشکی مختلف (دکتر عزیزی و همکاران- دانشگاه شهید بهشتی، دکترکرمی‌زاده و همکاران- دانشگاه فارس و دکتر هاشمی‌پور و همکاران – دانشگاه اصفهان) انجام شد.

نتایج حاصل ازکلیه این مطالعات نشان داد که بروز بیماری کم‌کاری تیروییددر نوزادان کشور بسیار بالاست. با توجه به پژوهش‌های انجام شده در اصفهان، تهران و شیراز، بروز کم‌کاری تیروییددر کشور ۱ بیمار در هر ۱۰۰۰ نوزاد زنده متولد شده تخمین زده شد.

به نام پروردگار هستی

غربالگری کشوری نوزادان

وزارت بهداشت، درمان و آموزش پزشکی

برنامه کشوری
غربالگری بیماری کم‌کاری تیرویید نوزادان

دستورالعمل ویژه بهورز و مراقب سلامت

نویسندگان

دکتر شهین یاراحمدی

دکتر نسرین آژنگ

بیماری کم‌کاری تیرویید نوزادان، وضعیتی از کمبود هورمون تیرویید قابل درمان است که در صورت عدم تشخیص به هنگام و یا درمان نامناسب، می‌تواند موجب بروز عقب‌ماندگی شدید و اختلال در رشد کودک شود. عدم تشخیص و درمان مناسب و به‌هنگام بیماری در مبتلایان، بار بیماری سنگینی را بر خانواده و جامعه وارد می‌کند. در حالی که در صورت تشخیص به هنگام، درمان ساده، آسان، ارزان و موثر است. با غربالگری نوزادان و شناسایی بیماران و درمان مناسب آنان، عوارض جدی بیماری اتفاق نیفتاده و با حفظ ضریب هوشی طبیعی در بیمار، فردی مولد و سالم به جامعه تحویل داده می‌شود.

ادغام برنامه کشوری غربالگری نوزادان برای بیماری کم‌کاری تیرویید، در مهر ماه سال ۱۳۸۴، اجرای هم زمان آن در روستاها و شهرها، دستیابی به پوشش بیش از ۹۷٪ در کمترین زمان ممکن، شروع درمان در کلیه بیماران شناسایی شده، حفظ ضریب هوشی طبیعی در همه بیماران تحت درمان، دارا بودن هزینه به سود مناسب برای غربالگری دیگر بیماری‌های مهم و قابل ... همی است که این برنامه را در دنیا بی‌نظیر کرده است.

تاکنون بیش از ۱۲ میلیون نوزاد غربالگری شده ... شناسایی و درمان شده‌اند. بدون اجرای این برنامه عقب ماندگی ... درجات مختلف در این بیماران غیر قابل اجتناب بود.

One from each 370 in 12,000,000 makes more than 32,000 Recognized Case

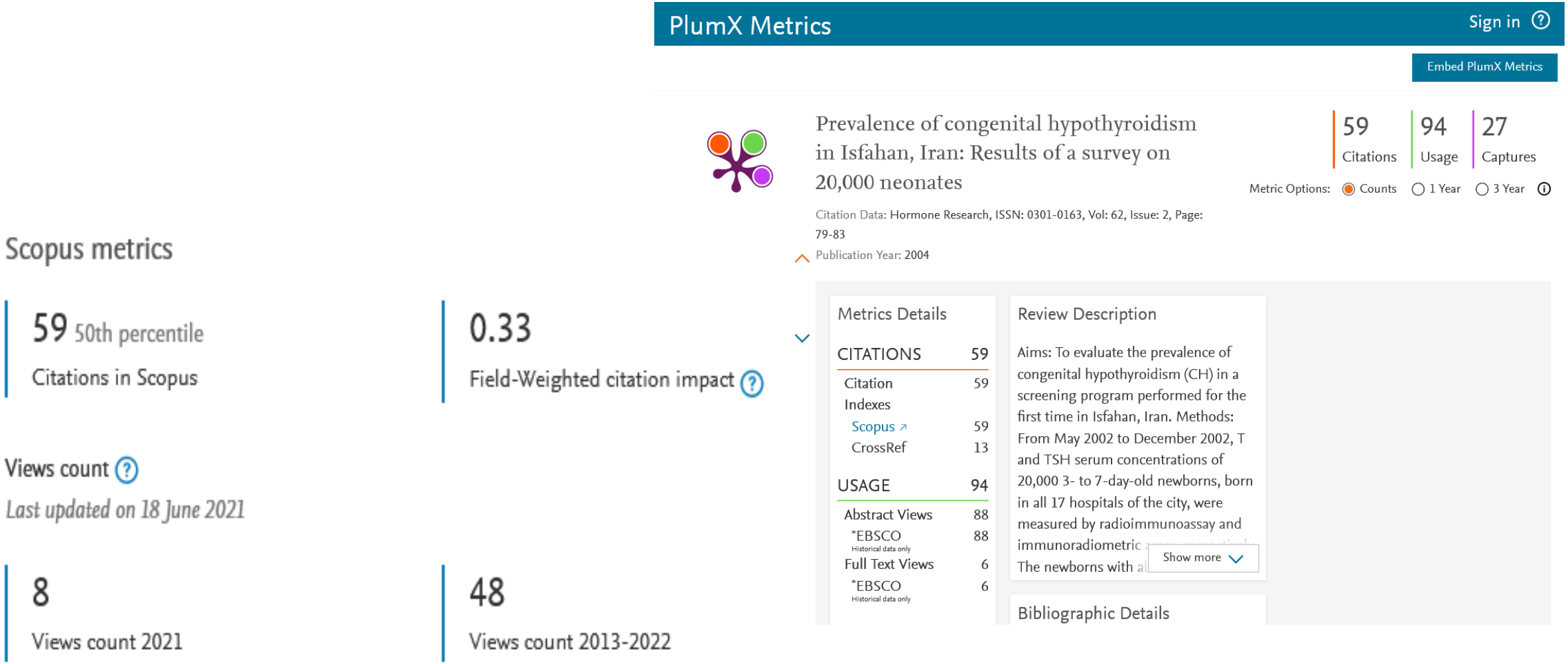
IMPACT

A Real Case of Research Impact!

شیوع بالای بیماری، عوارض جبران‌ناپذیر مغزی بیماری در صورت عدم‌تشخیص و درمان به‌موقع که تنها با غربالگری دوران نوزادی قابل‌پیشگیری است و از طرف دیگر مقرون‌به‌صرفه بودن اجرای برنامه در کشور مسئولین وزارت بهداشت درمان و آموزش پزشکی را بر آن داشت تا برنامه غربالگری را در سطح ملی به اجرا درآورند. لذا با استفاده از نتایج و تجارب به‌دست‌آمده طرح غربال‌گری کم‌کاری مادر زادی تیروئید در سطح کشور به‌عنوان یک برنامه ملی طراحی گردید و در سال 1382 در اولین برنامه کشوری به‌طور آزمایشی در استان‌های اصفهان، بوشهر و شهر شیراز اجرا شد و نهایتاً از سال 1384 این برنامه در سیستم سلامت کشور ادغام‌شده است. از زمان اجرای برنامه در سطح ملی تا آبان ماه سال جاری مجموعاً شش میلیون و هفت‌صد هزار نوزاد (49 درصد نوزاد دختر و 51 درصد نوزاد پسر) تحت غربالگری قرارگرفته که پانزده هزار نفر آزمودن غربالگری مثبت داشته و اقدامات تشخیصی و درمانی بر طبق دستورالعمل کمیته علمی کشوری برای آنان انجام‌شده است. این برنامه درمجموع حدود 95 درصد زایمان‌های شهری و روستایی را تحت پوشش قرار داده و میزان فراخوان برنامه 9/2 در صد است.

https://endocrine.ac.ir/article

A Real Case of Research Impact!



What is Research Impact?

- Research funders and research organizations globally are looking to measure impact .
- The impacts are not easily recognized & quantified.
- There can be considerable time lags between research and impact.
- Impact is often made from accumulated knowledge and not a specific research finding.

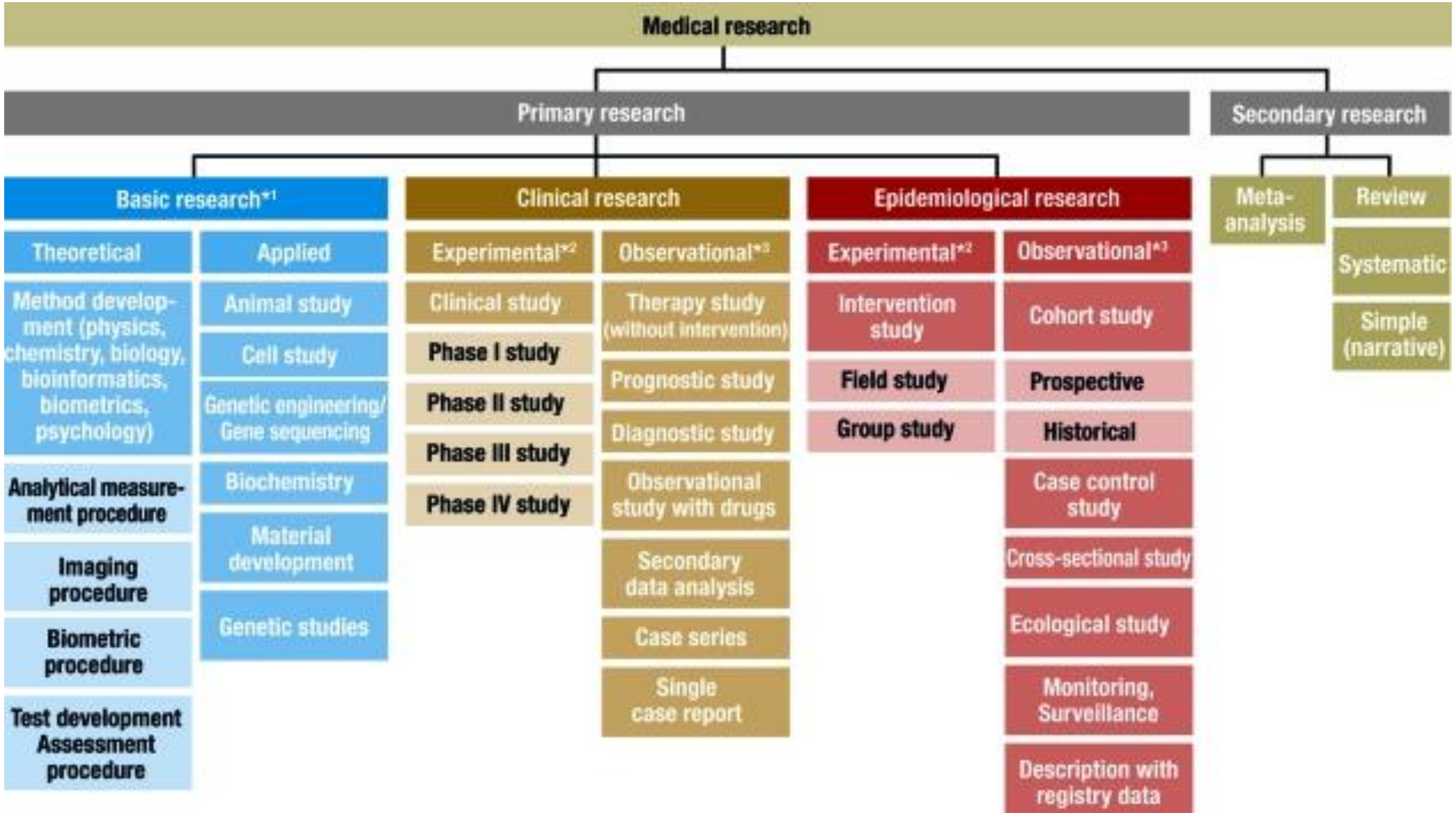
Research Impact Goals & Application

- What type of impact you are trying to achieve?
- Who will benefit from your research?
- How will they benefit?
- How can you measure this impact?
- How can you capture & provide evidence of this?

A Quick Look at: Steps in Scientific Writing

- Design well
- Decide politics
- Choose journal
- Read instructions to authors/papers
- Set framework
- Prepare drafts
- Distribute
- Polish
- Submit

Which Type of Study Makes the Research Impact?



Röhrig B, du Prel JB, Wachtlin D, Blettner M. Types of study in medical research: part 3 of a series on evaluation of scientific publications. Dtsch Arztebl Int. 2009 Apr;106(15):262-8. doi: 10.3238/arztebl.2009.0262. Epub 2009 Apr 10. PMID: 19547627; PMCID: PMC2689572.

Different Types of Impacts

- Research impact
- Social impact
- Clinical impact
- Economic impact
- Environmental impact
- Impact on health and wellbeing
- Policy influence and change
- Technological developments

Altmetrics (Alternative Metrics)
Article Level Metrics

- Scores article social impact & Monitors "mentions" in society
  - Conventional Media
  - Social Media
  - Reference Managers
  - Post-pub & Peer-review Sites

Score in context

Is one of the highest ever scores in this journal (ranked #1 of 3,692)

show more...

Mentioned by

- 32 news outlets
- 17 blogs
- 209 tweeters
- 4 Facebook users
- 21 Google+ users

Readers on

- 8 Mendeley
- 7 CiteULike

Track this article

- Get email updates when this article is shared

Altmetrics (Alternative Metrics)
Article Level Metrics

Article metrics | Last updated: Mon, 27 Jun 2022 3:05:26 Z

The toxic truth about sugar

Access & Citations

165k	467	475
Article Accesses	Web of Science	CrossRef

Citation counts are provided from Web of Science and CrossRef. The counts may vary by service, and are reliant on the availability of their data. Counts will update daily once available.

Online attention

- 1625 tweeters
- 22 Google+ users
- 4 Redditors
- 660 Mendeley
- 33 blogs
- 49 news outlets
- 7 Video uploaders
- 6 Citeulike
- 53 Facebook pages
- 1 LinkedIn users
- 7 Wikipedia page

This article is in the 99th percentile (ranked 9th) of the 248,715 tracked articles of a similar age in all journals and the 99th percentile (ranked 2nd) of the 1,093 tracked articles of a similar age in *Nature*

Altmetric calculates a score based on the online attention an article receives. Each coloured thread in the circle represents a different type of online attention. The number in the centre is the Altmetric score. Social media and mainstream news media are the main sources that calculate the score. Reference managers such as Mendeley are also tracked but do not contribute to the score. Older articles often score higher because they have had more time to get noticed. To account for this, Altmetric has included the context data for other articles of a similar age.

Altmetrics (Alternative Metrics)
Article Level Metrics

Article metrics | Last updated: Mon, 27 Jun 2022 8:20:19 Z

Effect of a vitamin/mineral supplement on children and adults with autism

Access & Citations

51k
Article Accesses

114
Web of Science

140
CrossRef

Citation counts are provided from Web of Science and CrossRef. The counts may vary by service, and are reliant on the availability of their data. Counts will update daily once available.

Online attention

- 75 tweeters
- 35 Google+ users
- 1 Wikipedia page
- 343 Mendeley
- 3 blogs
- 1 news outlets
- 55 Facebook pages
- 1 Pinterest

This article is in the 99th percentile (ranked 1,544th) of the 247,988 tracked articles of a similar age in all journals and the 98th percentile (ranked 1st) of the 86 tracked articles of a similar age in *BMC Pediatrics*

Altmetric calculates a score based on the online attention an article receives. Each coloured thread in the circle represents a different type of online attention. The number in the centre is the Altmetric score. Social media and mainstream news media are the main sources that calculate the score. Reference managers such as Mendeley are also tracked but do not contribute to the score. Older articles often score higher because they have had more time to get noticed. To account for this, Altmetric has included the context data for other articles of a similar age.

Tattoo-Based Noninvasive Glucose Monitoring: A Proof-of-Concept Study

Amay J. Bandodkar, Wenzhao Jia, Ceren Yardımcı, Xuan Wang, Julian Ramirez, and Joseph Wang*

View Author Information

Cite this: *Anal. Chem.* 2015, 87, 1, 394–398
Publication Date: December 12, 2014
https://doi.org/10.1021/ac504300n
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399
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Blogs (10)
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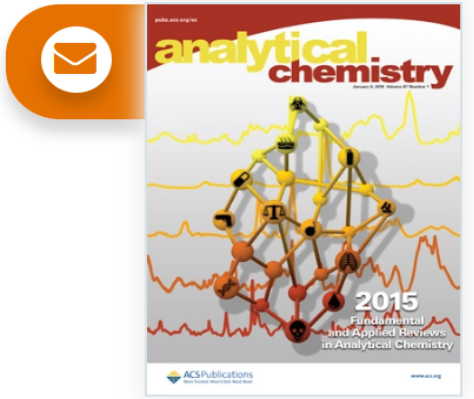
PDF (1 MB)

SI Supporti

y, Carbohydrates,
nd proteins, Sensors



Analytical Chemistry

Abstract

We present a proof-of-concept demonstration of an all-printed temporary tattoo-based glucose sensor for noninvasive glycemic monitoring. The sensor represents the first example of an easy-to-wear flexible tattoo-based

Long-term neurologic outcomes of COVID-19

Citation Data: Nature Medicine, ISSN: 1546-170X, Vol: 28, Issue: 11, Page: 2406-2415

Publication Year: 2022

45	16	189	50	3,928
Citations	Usage	Captures	Mentions	Social Media

Metric Options: Counts 1 Year 3 Year

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This article has 1,846 Twitter interactions across 1 URL. It has received 462 tweets and 1,384 retweets.

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@kopfwehstiftung · Follow

Replying to @AnnEliA91

#Migräne nach #Corona wird uns noch länger begleiten. Erste Studien zeigen, dass Migräne zunimmt.
Gute Besserung wünscht @kopfwehstiftung

> **Stiftung Kopfschmer...** @kopfweh...
>
> #FactFriday: Eine neue Studie zu #LongCovid zeigt, das #Corona-Virus erhöht das Risiko für neurologische Erkrankungen.
> 👉Um 35% steigt die Wahrscheinlichkeit für leichte bis starke #Kopfschmerzen
> 👉Um 21% steigt sie für #Migräne.
> Quelle: nature.com/articles/s4159...
> @kopfwehstiftung

Robert De Roos
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@NOS

> **WesElyMD** @WesElyMD
>
> 1/🧵 Catastrophic Data on Long-Term Neuro Deficits in #LongCOVID ‼️
>
> from >150k pts & 11M patient VA study
>
> Science shows a 42%⬆️ risk of any neuro dz 1 year later in LC pts even from mild never hospitalized COVID.
>
> See recent 🧵👇 w other studies
>
> go.nature.com/3LB8D0u
>
>
>

Chris Knecht 💙🧡 | Joggel...
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⚠️🫁😷 Langfristige neurologische Störungen bei Personen, die an COVID-19 erkrankt waren. 22.09.2022

nature.com/articles/s4159...

#CovidIsntOver #COVID19 #LongCovid #DieMaskeBleibtAuf #LongCovidKids #SARSCoV2 #MassDisablingEvent #ProtectTheKids #VorbilderTragenMaske #aerosole

.

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Metrics Details

CITATIONS 45

Citation Indexes	44
Scopus	44
PubMed Central	38
CrossRef	10
Policy Citations	1
Policy Citation	1

USAGE 16

Abstract Views	10
Digital Commons	10
Downloads	6
Digital Commons	6

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Replying to @AnnEliA91

#Migräne nach #Corona wird uns noch länger begleiten. Erste Studien zeigen, dass Migräne zunimmt.
Gute Besserung wünscht @kopfwehstiftung

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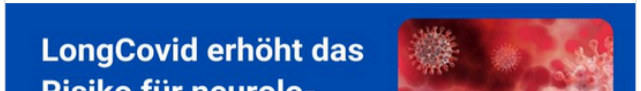
> Quelle: nature.com/articles/s4159...
> @kopfwehstiftung



Article Description

The neurologic manifestations of acute COVID-19 are well characterized, but a comprehensive evaluation of postacute neurologic sequelae at 1 year has not been undertaken. Here we use the national healthcare databases of the US Department of Veterans Affairs to build a cohort of 154,068 individuals with COVID-19, 5,638,795 contemporary controls and 5,859,621 historical controls; we use inverse probability weighting to balance the cohorts, and estimate risks and

Show more

Bibliographic Details

DOI: 10.1038/s41591-022-02001-z
PMID: 36138154
REPOSITORY URL:
https://digitalcommons.wustl.edu/oa_4/732

Altmetric (Alternative Metrics)
Article Level Metrics

- Evaluate your publication Social Impact
- Benchmark your article effect against others
- Connect to discussion on your article
- Shows decisions made based on your papers
- Communicate impact to people, colleagues etc.
- Increasingly....demonstrate societal impact to funders

Five Categories to Learn:
Citations

- **Citations**: Traditional index which also citations that help indicate societal impact such as Clinical or Policy Citations.
- Examples: citation indexes, patent citations, clinical citations, policy citations.
- **Sources:** Web of Science, Scopus, Google Scholar, …

Five Categories to Learn:
Usage

- **Usage:** A way to signal if anyone is reading the articles or otherwise using the research. Usage is the number one statistic researchers want to know after citations.

- **Sources:** Clicks, Downloads, Views, Library Holdings, Video Plays.

Five Categories to Learn:
Captures

- **Captures:** Indicates that someone wants to come back to the work. Captures can be an leading indicator of future citations.

- **Sources:** Bookmarks, Code Forks, Favorites, Readers, Watchers.

Five Categories to Learn:
Mentions

- **Mentions:** Measurement of activities such as news articles or blog posts about research. Mentions is a way to tell that people are truly engaging with the research.

- **Sources:** Blog Posts, Comments, Reviews, Wikipedia References, News Media.

Five Categories to Learn:
Social Media

- **Social Media**: This category includes the tweets, Facebook likes, etc. that reference the research. Social Media can attract attention. Social media can also be a good measure of how well a particular piece of research has been promoted.
- **Examples:** Facebook, Twitter, ...
- **Sources:** Shares, Likes, Comments, Tweets

Papers Different Impact Measures

	Index	Measuring Systems
1	View	Academia, ResearchGate, PloS, Different Publishers
2	Downloaded/Saved	Mendeley, Different Publishers, PloS
3	Discussed	Wikipedia, Facebook, Blogs, ScienceSeeker
4	Recommended	F1000 Prime
5	Citations	Web of Science, Scopus, Google Scholar, CorssRef, Patent Citation,
6	Mentions	Blogs, News, Reddit, Wikipedia
7	Shares, Likes & Comments	Facebook, Twitter

Altmetric (Alternative Metrics)
Article Level Metrics Benefits

- Wide Used Resourced, NOT limited to indexed Journals
- Goof for Young Researchers
- Shows immediate impact, No more time needed
- Free, No Subscription required
- Article Level Metrics instead of Journal Level Metrics

Impactstory

PLUM ANALYTICS

Altmetric

Article Usage (Downloads)

Academic Citation

Blog Coverage

News Coverage

Non-Scholarly Citation

Community Input

Dissemination, Altmetrics, Citations & Impact

- Dissemination is not impact, even if you have the impressive number of reads, downloads, views or use.
- How did you know if anyone really used it or learned from it, benefitted or did anything different as results.
- Keep asking, what happened next?!

The Impact Story

Citation ≠ Impact

Altmetrics ≠ Impact

Research Visibility Importance

Best Research X Visibility = Impact

100 X 0 = 0

Research Visibility & Impact

- You may consider your research papers visibility in 2 stage:

1. Pre-publication Phase Visibility
2. Post-publication Phase Visibility

Research Impact Story

- Pre-Research Execution
- Post-Research Execution

- Pre-Publication
- Post-Publication

Publication Process

Business Plan for Your Article

1. Preparing your article
2. Publishing your article
3. Promoting your published article
4. Monitoring your article

Business Plan for Your Article

- Pre-Publication
  - Preparing your article
  - Publishing your article
- Post-Publication
  - Promoting your published article
  - Monitoring your article

Research Impact Story

- Pre-Research Execution
- Post-Research Execution

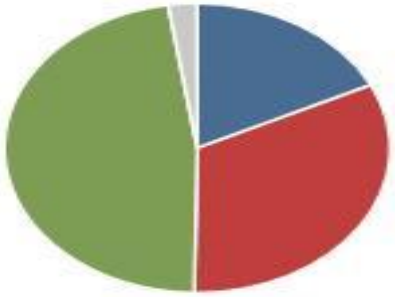
- Pre-Publication
- Post-Publication

Pre-Publication (Pre-Research Execution)

- Select Research topics with a high potential academic and/or societal relevance.
- Consider the related Hot Topics.
- Consider the study types & designs like reviews.
- Don’t forget that a good topic will result in a good impact.

How Collaborations Increase Research Impact?

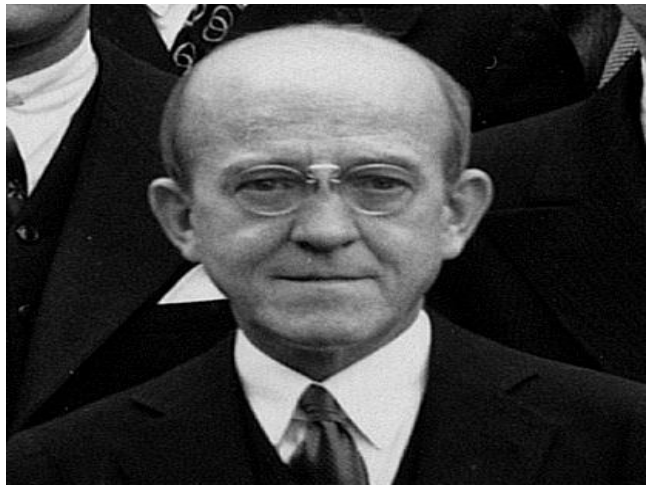
Institutional, National & International Collaboration & Its Effect on Citation



Metric		Publications	Citations per Publication
International collaboration	17.8%	641	5.3
Only national collaboration	32.4%	1,168	3.5
Only institutional collaboration	47.3%	1,704	2.7
Single authorship (no collaboration)	2.4%	87	2.8

Preparing Your Article

- Spend time on abstract and introduction & conclusion
- Use easy to understand charts and professional illustrations
- Use clear and correct manuscript language
- Consider Brevity in paper, Conciseness & Precision in title
- Sharing research data



Oswald Avery (1877-1955)

James Watson (1928-Current)
Francis Crick (1916-2004)

1944: DNA is genes
= function

(nearly) Forgotten

1953: DNA two intertwined spirals
= structure

Immortal

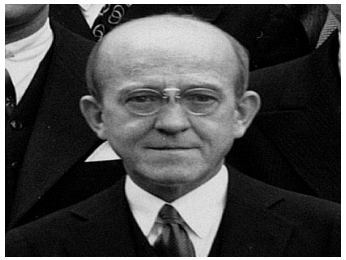
Writing Does Matter!

A structure for Desoxyribose Nucleic Acid
Nature 1953, 737-738

~900 words, 1 sketch
1st mention of DNA: 2nd line

"It has not escaped our notice that the specific pairing we have postulated immediately suggests a possible copying mechanism for the genetic material."

Studies on the Chemical Nature of the Substance Inducing Transformation of Pneumococcal Types
J. Exp. Med. 1944, 137-158



~7'500 words, 4 tables
1st mention of DNA: p9/23

"The evidence presented supports the belief that a nucleic acid of the desoxyribose type is the fundamental unit of the transforming principle of Pneumococcus Type III."

Pre-Publication (Pre-Research Execution)

- Ensure your research output has a clear title that is direct and concise. This will promote readership and attract citations from beyond your own discipline.

- Think about writing a plain language summary of your research that is understandable to a non-specialist audience including public or researchers from other disciplines

Enrich Your Article

Enrich Your Article to present your research in the best possible way

- Search Engine Optimization (keywords, Captions, Highlights)
- Using Multimedia (Editorial Podcasts, AudioSlides)
- Graphical Abstract

Highlights Gynecologic Oncology Journal Example

Cervical Cancer

The efficacy and safety of neoadjuvant chemotherapy in the treatment of locally advanced cervical cancer: A randomized multicenter study Original Research Article

Pages 231-239

Zhijun Yang, Dandan Chen, Jieqing Zhang, Desheng Yao, Kun Gao, He Wang, Cui Liu, Jiang Yu, Li Li

Abstract | Close research highlights | PDF (909 K)

Highlights

- NACT reduces rate of patients requiring postoperative radiation by eliminating pathological risk factors, including LVSI and deep stromal invasion.
- IP as neoadjuvant chemotherapy has similar efficacy comparing to TP, but higher rates of neutropenia and diarrhea.
- LVSI was the only factor that indicates prognosis.

Graphical Abstract

Gynecologic Oncology Journal Example

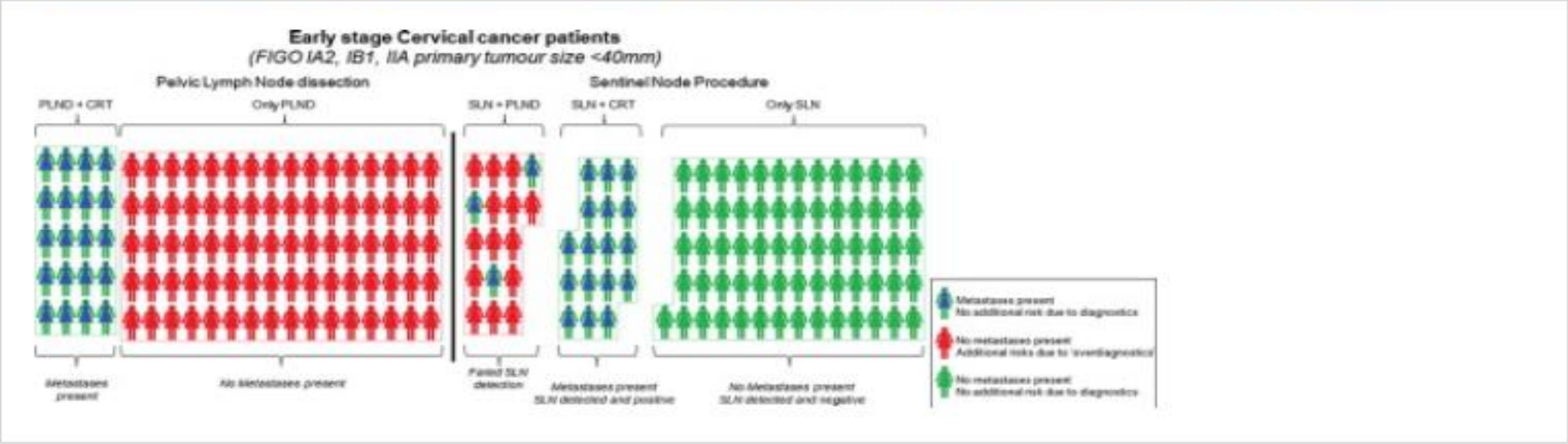
Reviews

The sentinel node procedure in early stage cervical cancer, taking the next step; a diagnostic review Review Article

Pages 559-567

Casper Tax, Maroeska M. Rovers, Corine de Graaf, Petra L.M. Zusterzeel, Ruud L.M. Bekkers

Abstract | Close graphical abstract | Research highlights | PDF (883 K) | Supplementary content



Graphical Abstract

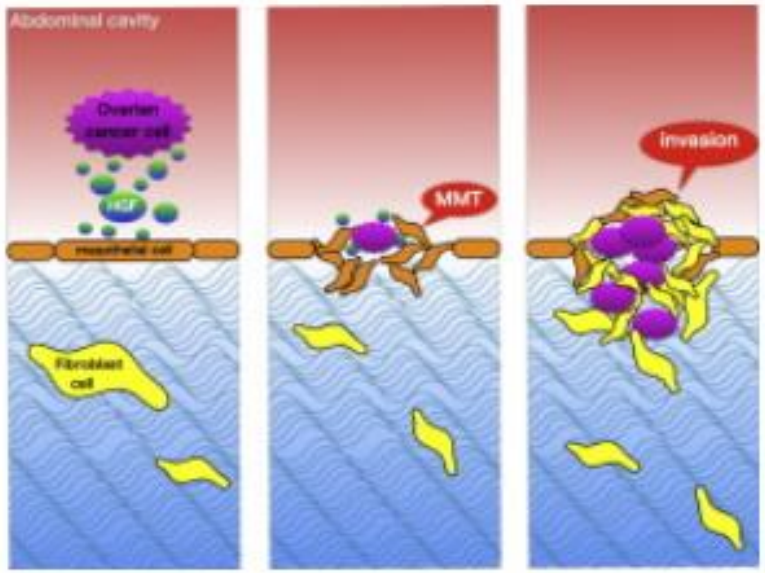
Gynecologic Oncology Journal Example

Hepatocyte growth factor secreted by ovarian cancer cells stimulates peritoneal implantation via the mesothelial–mesenchymal transition of the peritoneum Original Research Article

Pages 345-354

Michihiko Nakamura, Yoshihiro J. Ono, Masanori Kanemura, Tomohito Tanaka, Masami Hayashi, Yoshito Terai, Masahide Ohmichi

Abstract | Close graphical abstract | Research highlights | PDF (1873 K) | Supplementary content



Business Plan for Your Article

1. Preparing your article
2. **Publishing your article**
3. Promoting your published article
4. Monitoring your article

Pre-Publication (Pre-Research Execution)

- Choose the Right Journal to publish your manuscript
- Consider Open Access Journals
- Consider the indexing Database of target Journal

Considerations in Selecting a Journal

1. National or international audience?
2. Language?
3. Databases indexes Journal?
4. Multidisciplinary or specialty journals?
5. The journal’s content area/scope?
6. Chances of acceptance?
7. What about the impact factor?
8. Practical matters (time to publication, etc.)

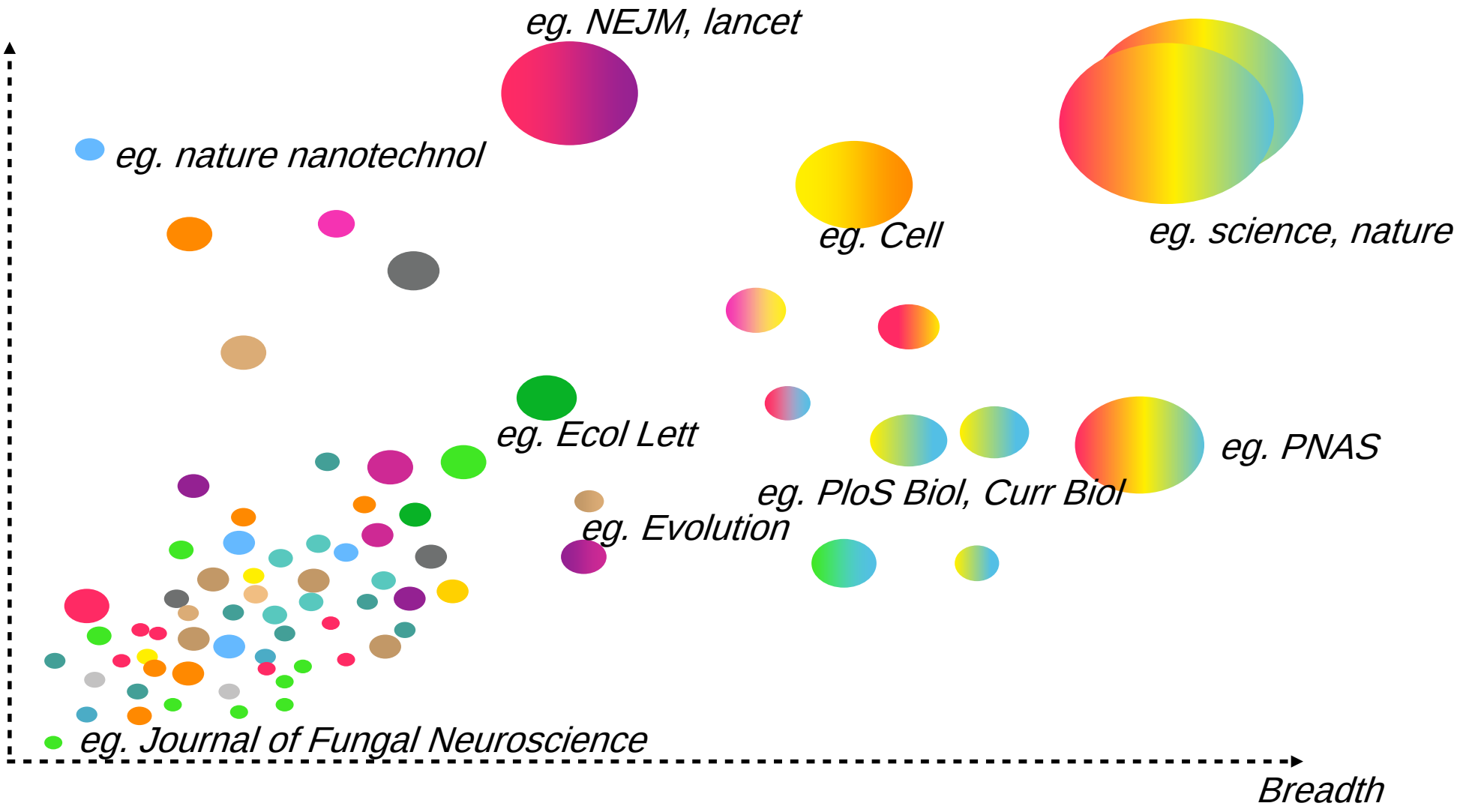
The Journal Spectrum

Different Journals

Different Audiences

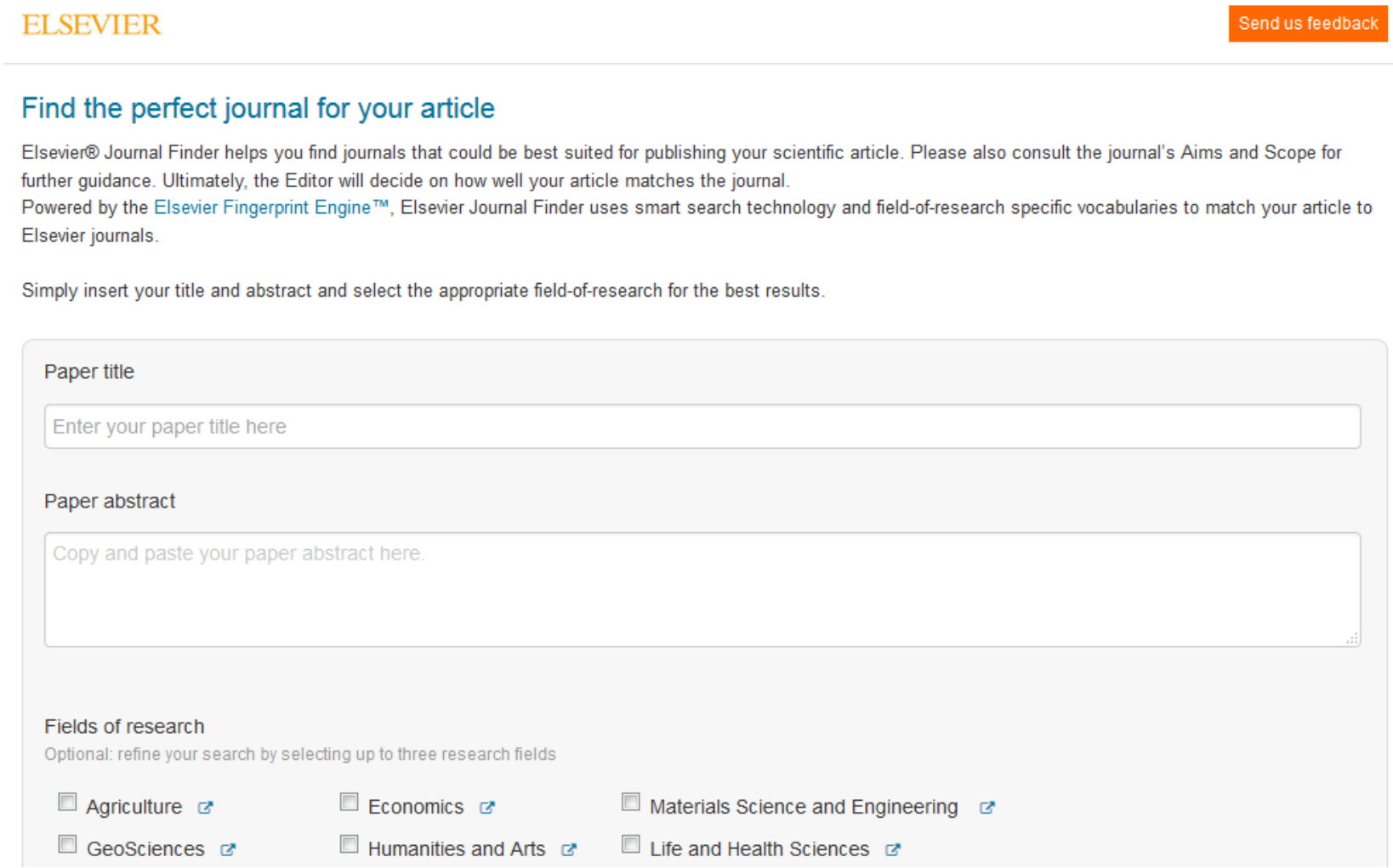
Different Papers

Different Functions



Elsevier Journal Finder

http://journalfinder.elsevier.com



Springer Journal Selector

http://www.springer.com/gp/authors-editors/journal-author/journal-author-helpdesk/preparation/1276

Springer journal selector

Top

How It Works

Select the journal that suits your research best from over 2,600 Springer publications.

The Springer Journal Selector uses semantic technology to help you quickly choose the Springer journal that is right for your paper.

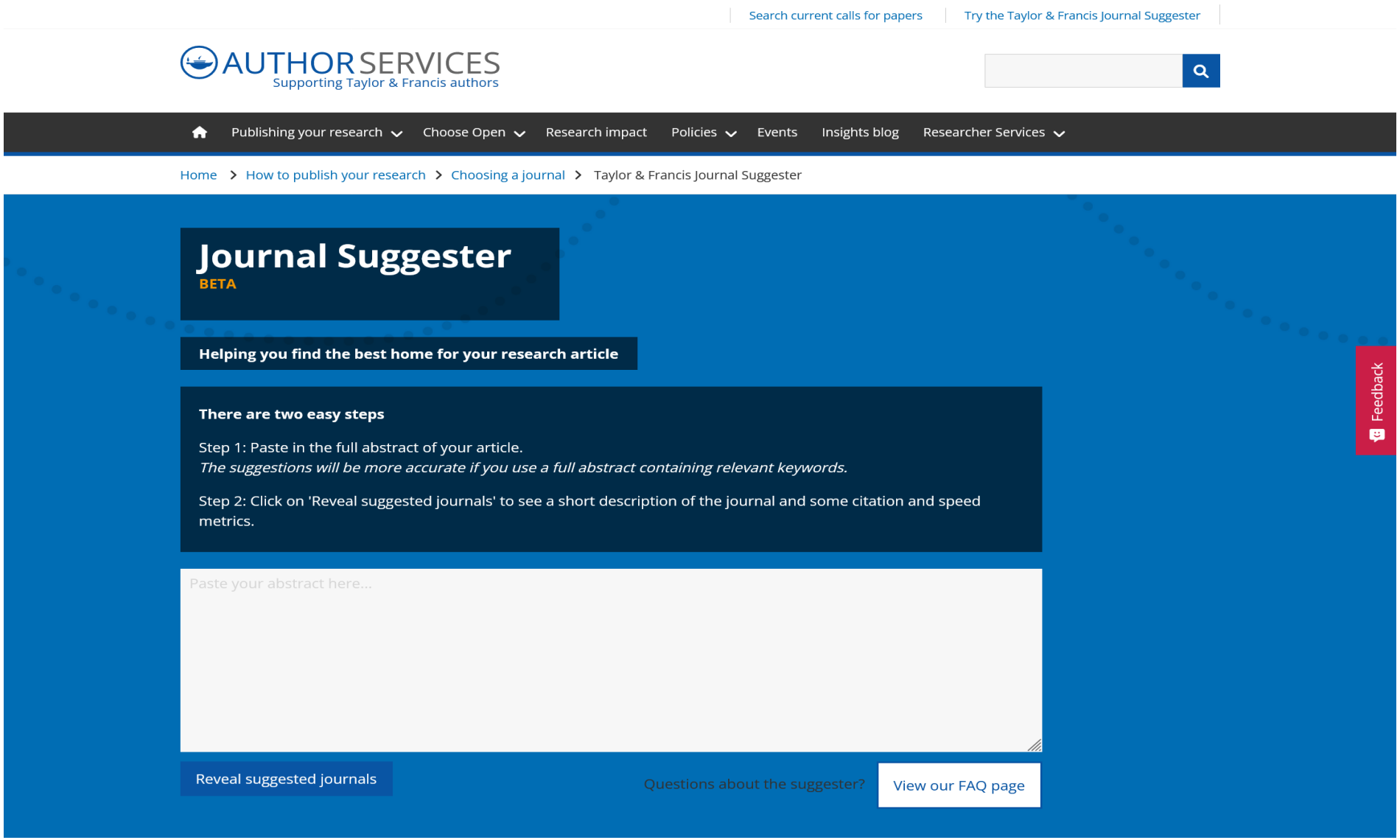
Enter your abstract, description of your research, or a sample text and the Springer Journal Selector provides a list of relevant journals. You can refine the results based on requirements for Impact Factor or publishing model, including an option to match to journals that are fully open access or have open access options.

Enter your abstract or article description

the period of investigation, it is found that the troposphere temperature has increased by about 0.033 °C/year at Helwan, Egypt, 0.03 °C/year at Coimbra, Portugal, and 0.028 °C/year in Hurbanovo/Stará Lesná, Slovakia. The Sq geomagnetic variations depend on the intensity of the electric currents generated by the effect of solar radiation in the ionosphere.

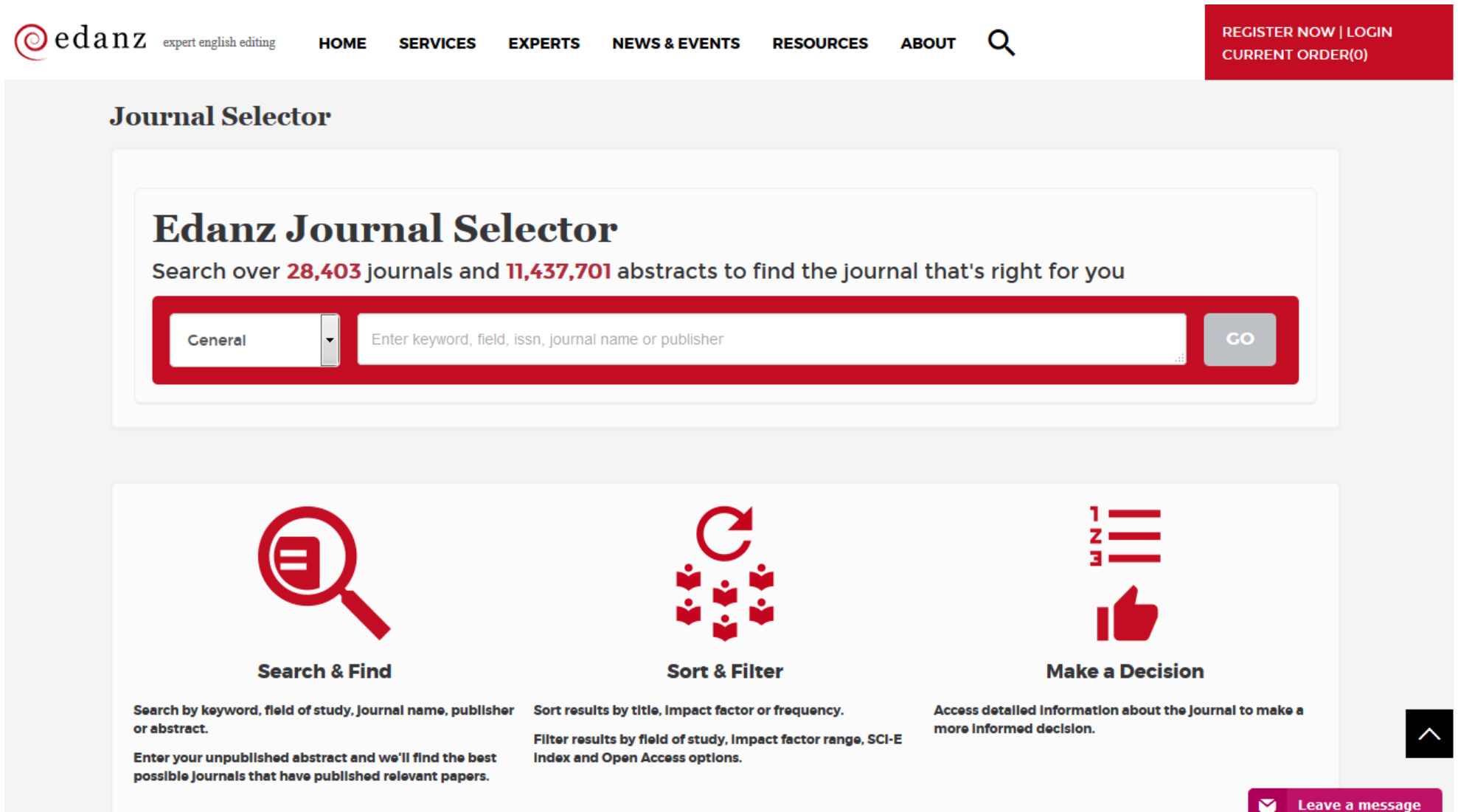
Taylor & Francis Journal Selector

https://authorservices.taylorandfrancis.com/publishing-your-research/choosing-a-journal/journal-suggester/



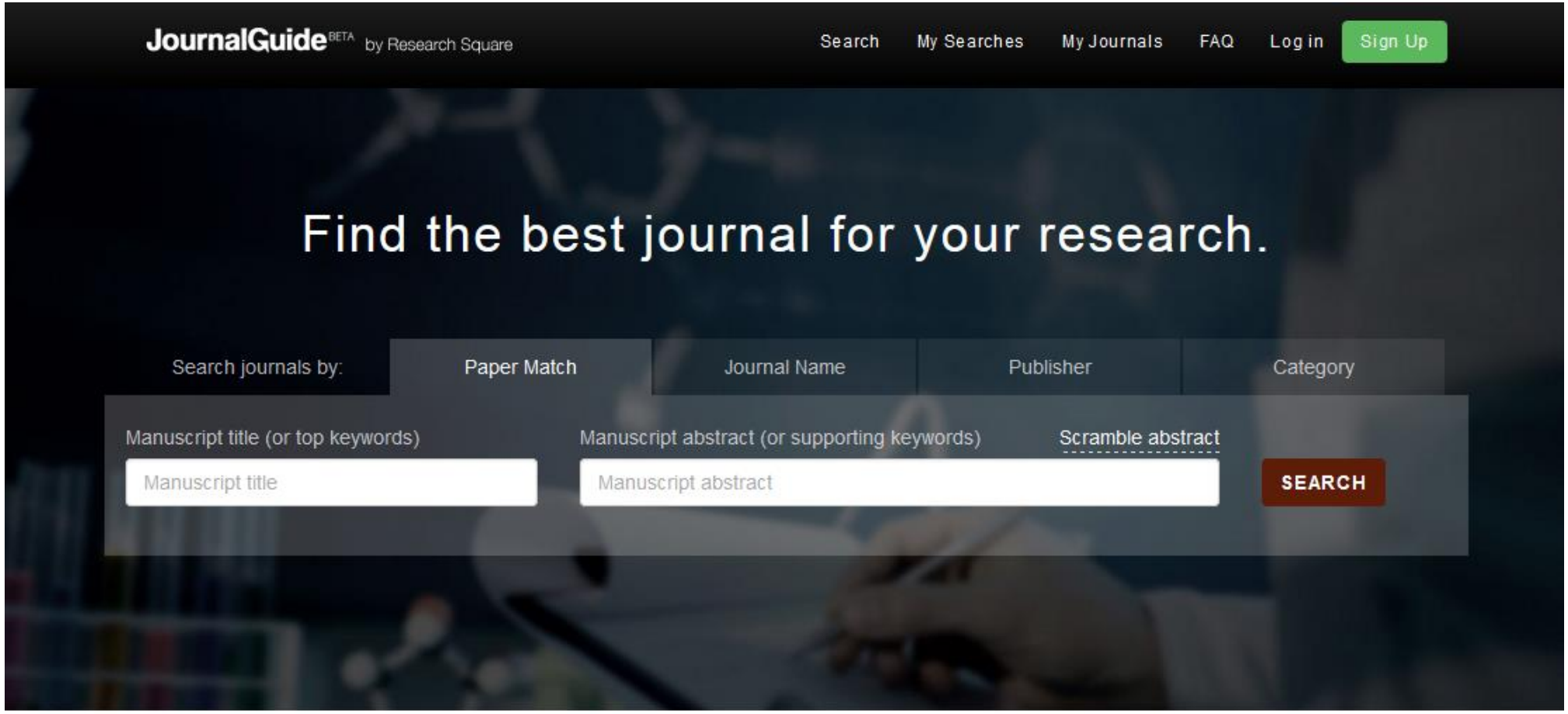
Edanz Journal Selector

https://www.edanzediting.com/journal-selector



Journal Guide

https://www.journalguide.com/

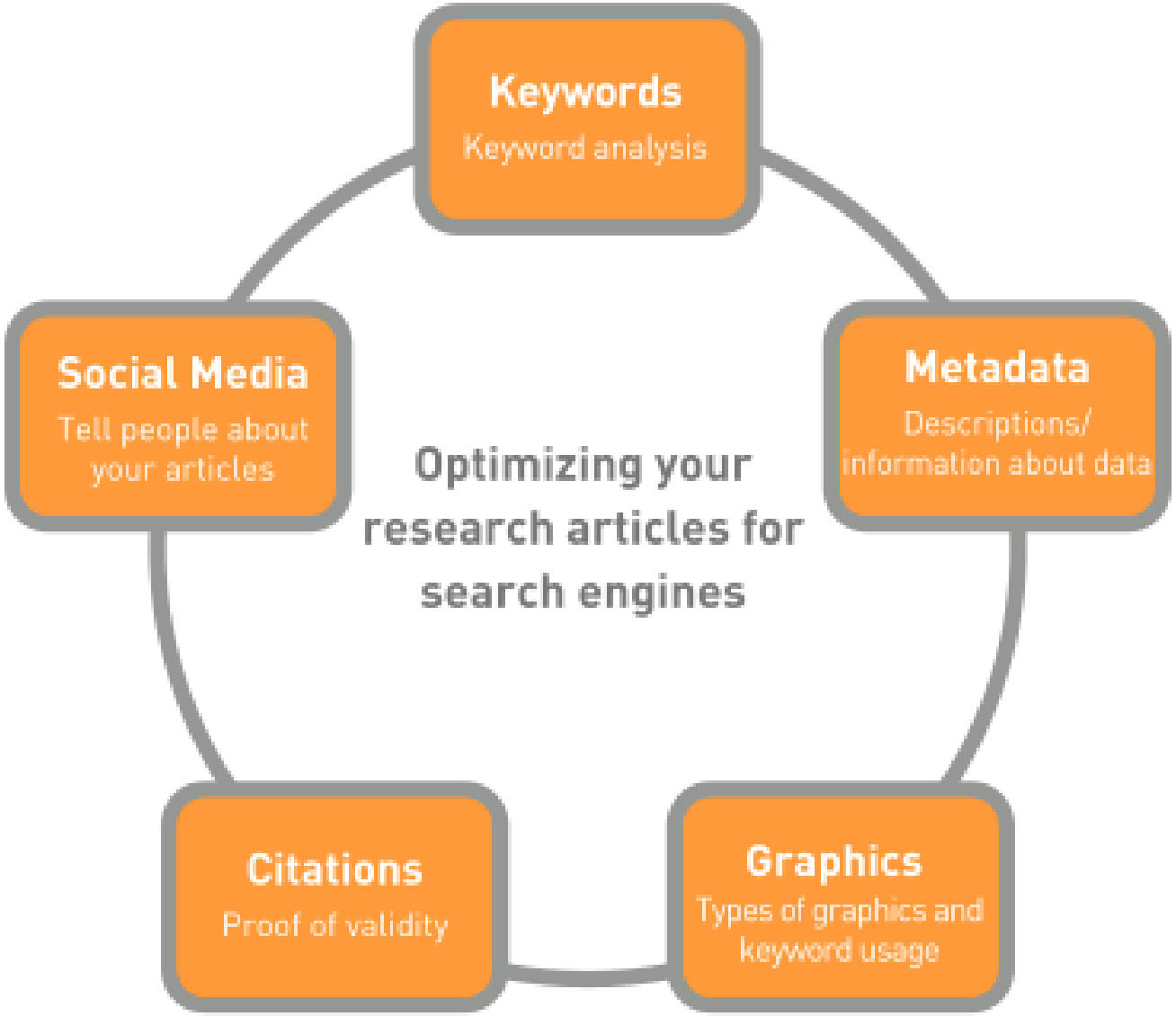


Data update: Journal Impact Factor is not currently displayed on JournalGuide. Read more here.

Optimizing articles for search-engines (SEO)

- Although search engine optimization (SEO) is usually associated with websites and webpages, it can be used for scientific articles as well.
- Not only to ensure that articles are found (crawled) and indexed, but also to influence the position where the articles are displayed in the results list.
- Just like any other type of ranked search results, articles displayed in top positions are more likely to be read and cited.

How to SEO your articles



Pre-Publication (Pre-Research Execution)

- Use Alternative and/or parallel publishing channels, such as Pre-print Services and Pre-print Servers to generate feedback and interest in your publication (e.g. arXiv.org e-print service and others)

Research Impact Story

- Pre-Research Execution
- Post-Research Execution

- Pre-Publication
- Post-Publication

Business Plan for Your Article

- Pre-Publication
  - Preparing your article
  - Publishing your article
- Post-Publication
  - Promoting your published article
  - Monitoring your article

Promoting your published article

Post-Publication (Post-Research Execution)

- Writing and publishing your scholarly article is not the final step. You must Market your research.
- To maximize your research impact, you must inform everyone in your academic and social networks about it.
- Use social media to discuss your article or study, focusing on special interest groups.

Impact & So Correlated With Visibility

- To make an impact, first you have to make yourself & your work visible.
- The more visible you are, the more probable you make an impact.
- The ways for researchers to increase their visibility and impact are different across different.

Make & Mind Your Academic Profiles

- **Use & Update Author Identifiers and Profiles:**

- ORCiD
- Google Scholar
- ResearcherID (Publons)
- Scopus Author ID
- Loop

Post-Publication (Post-Research Execution)

- Share links to your abstract or publication on Academia, LinkedIn, on your website, your academic institution's profile page, Facebook, Twitter, etc.

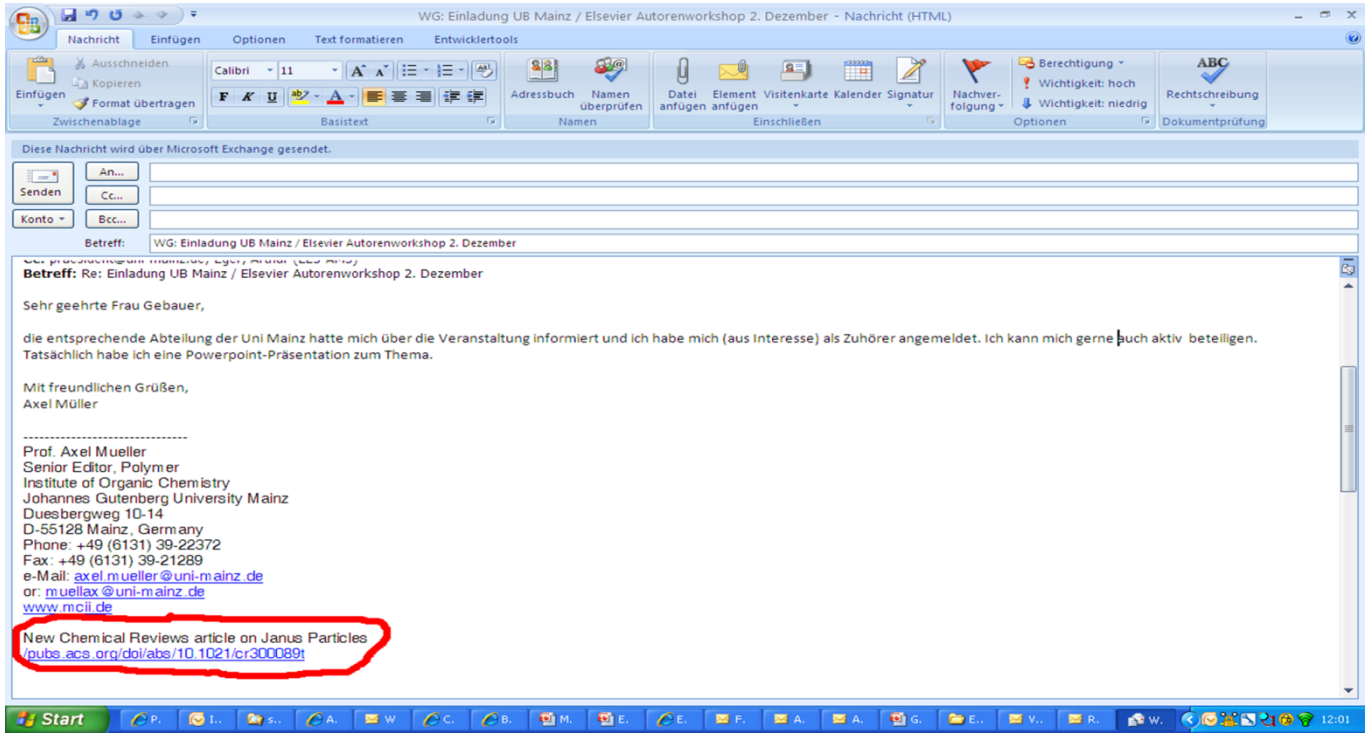
- When publisher policy permits, post your article/study (or author version) to:
  - Subject repositories, (e.g. SSRN, DOAJ, PubMed Central)
  - Mendeley, ResearchGate, Academia and elsewhere

Promoting your article

1. Press Release
2. Conferences
3. Media relations
4. Shared links to your article
5. Online CV
6. Social Networks

Share links to your article

- Customized short link with free access
- Link from university website & Emails to boost SEO



Social Networks

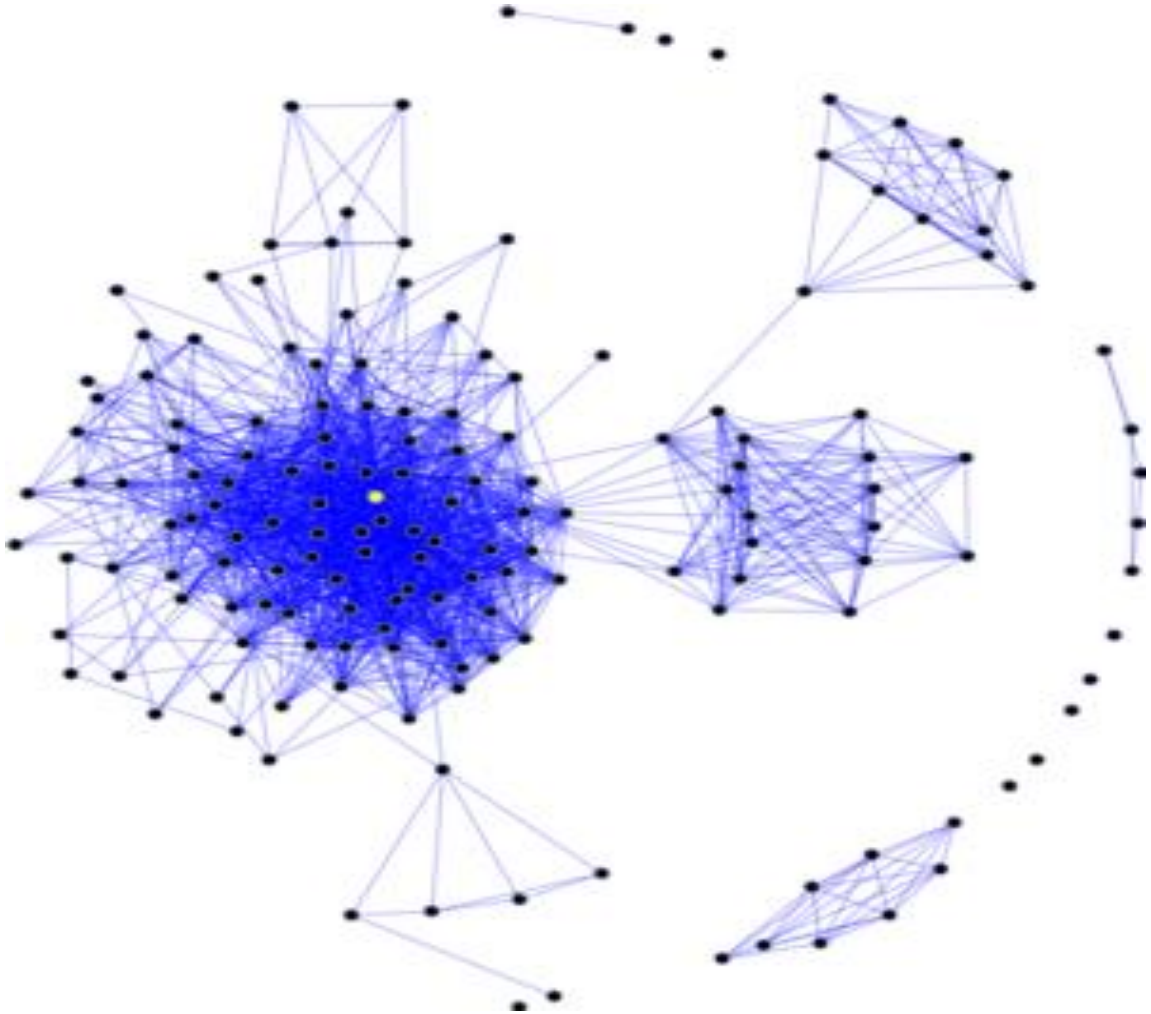
Maximize your research impact of your published papers through Social Networks

Academic Social Networks

What is a Social Network?

- A social network is a social structure made up of individuals which are connected by one or more specific types of interdependency, such as friendship, common interest, relationships of beliefs, knowledge or prestige.

Social Network Analysis



Examples of Social Networks

Scientific Social Networks

- http://www.researchgate.net/
- http://www.academia.edu/
- http://www.mendeley.com/

General Social Networks

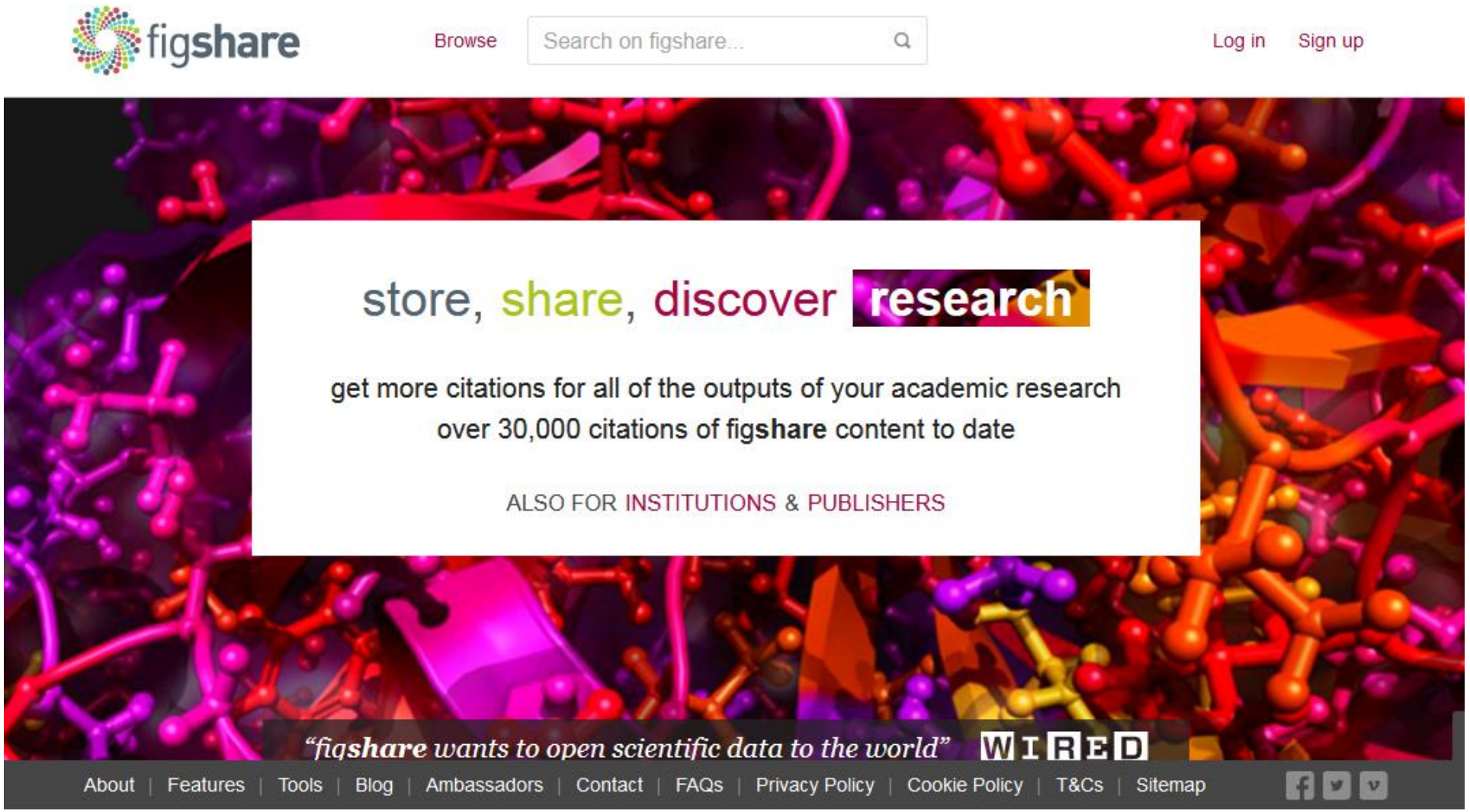
- http://www.facebook.com
- http://www.twitter.com
- http://www.linkedin.com

Share Your Profiles & Research

- **Use & Update Author Identifiers and Profiles:**

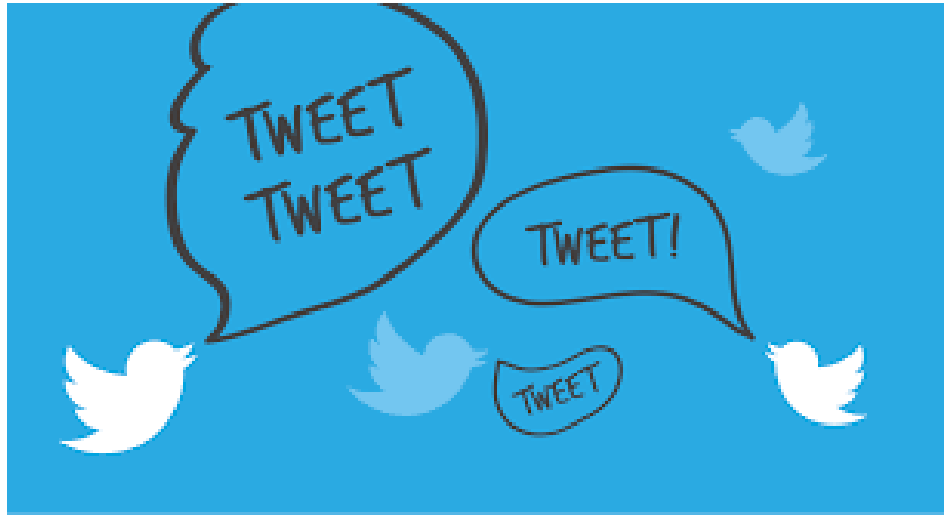
- Figshare (https://figshare.com)
- Twitter (http://twitter.com)
- Facebook (https://facebook.com)
- GitHub (https://github.com)
- Universities Repositories

Figshare (https://figshare.com/)



Social Media: Twitter

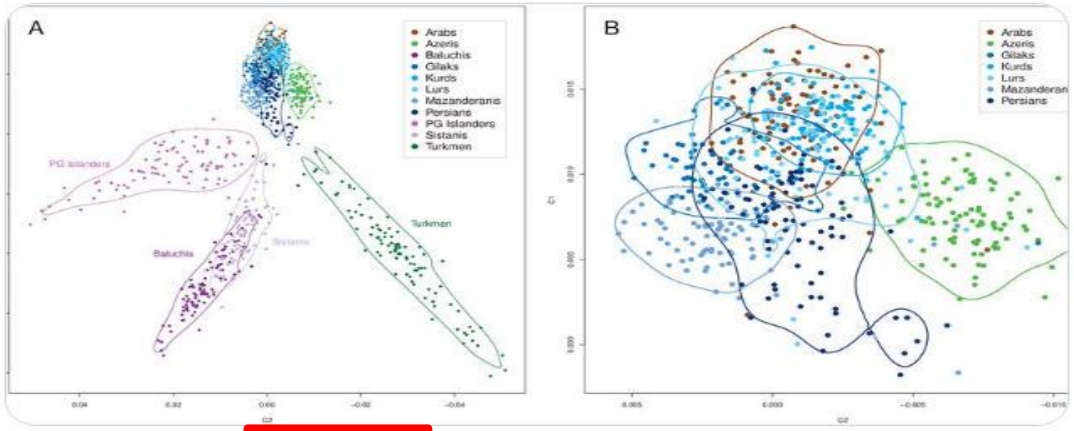
- Tweet of 280 Character
- Audio and video tweets limited to 140 seconds
- Follow other researchers
- Post regularly and respond promptly
- Retweet
- Use images, movies & audios



Twitter Visibility

Neo @legendoffall_ · Aug 5

رشتو:
۱/ آزمایش ژنتیکی ۱۰۰۰ ایرانی از اقوام مختلف:
پژوهشگران تعداد مشخصی از گروه های ترک، لر، عرب، فارس، بلوچ، ترکمن، کرد، زرتشتی، گیلک، جزایر خلیج فارس و سیستانی را انتخاب میکنن و آزمایس میگیرن.
نتایج نشون می ده که همه از یک ریشه هستیم؛ فقط بلوچ و جزایر خلیج فارس و اعراب کمی



268 1,183 7,796

Neo @legendoffall_ · Aug 5

۲:التقاط با همسایه ها داشتن.
زرتشتی ها وسط کلاستر همه اقوام هستن.
اختلاف بین دوتا فارس ممکنه از یک فارس و یک ترک بیشتر باشه.
نتایج نشون میده که ماها با مردم Tuscany ایتالیا ژن مشترک زیادی داریم.
همچنین اگه ما را با اعراب و جنوب آسیا و شرق آسیا و ... مقایسه کنن، ما با اروپایی ها

10 39 2,549

Twitter Visibility

https://journals.plos.org/plosgenetics/article/metrics?id=10.1371/journal.pgen.1008385

PLOS GENETICS

BROWSE PUBLISH ABOUT SEARCH advanced search

OPEN ACCESS PEER-REVIEWED

RESEARCH ARTICLE

Distinct genetic variation and heterogeneity of the Iranian population

Zohreh Mehrjoo, Zohreh Fattahi, Maryam Beheshtian, Marzieh Mohseni, Hossein Poustchi, Fariba Ardalani, Khadijeh Jalalvand, Sanaz Arzhangi, Zahra Mohammadi, Shahrouz Khoshbakht, Farid Najafi, Pooneh Nikuei, Mohammad Haddadi, [...], Michael Nothnagel [view all]

Published: September 24, 2019 • https://doi.org/10.1371/journal.pgen.1008385

61 Save	19 Citation
109,521 View	465 Share

Article | Authors | Metrics | Comments | Media Coverage

Download PDF | Print | Share

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Total Article Views
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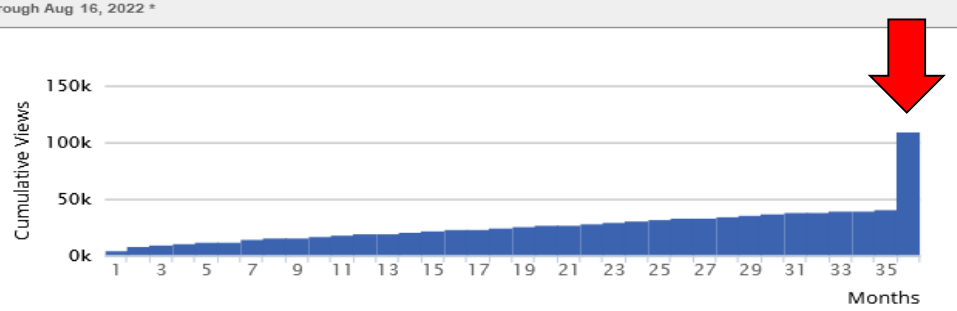
Sep 24, 2019 (publication date) through Aug 16, 2022 *

HTML Page Views	PDF Downloads	XML Downloads	Total
99,403	6,234	3,883	109,520

6.271 % of article views led to PDF downloads



*Although we update our data on a daily basis, there may be a 48-hour delay before the most recent numbers are available.

Social media: Facebook

- Create a ‘fan’ page
- Invite fellow researchers
- Share images, videos, AudioSlides
- Link to your articles
- Discuss and ask for feedback

Find & Connect with Your Peers

- Academia (https://www.academia.edu)
- ResearchGate (https://www.researchgate.net)
- Linkedin (https://www.linkedin.com)
- Universities Repositories

Academia (www.academia.edu)

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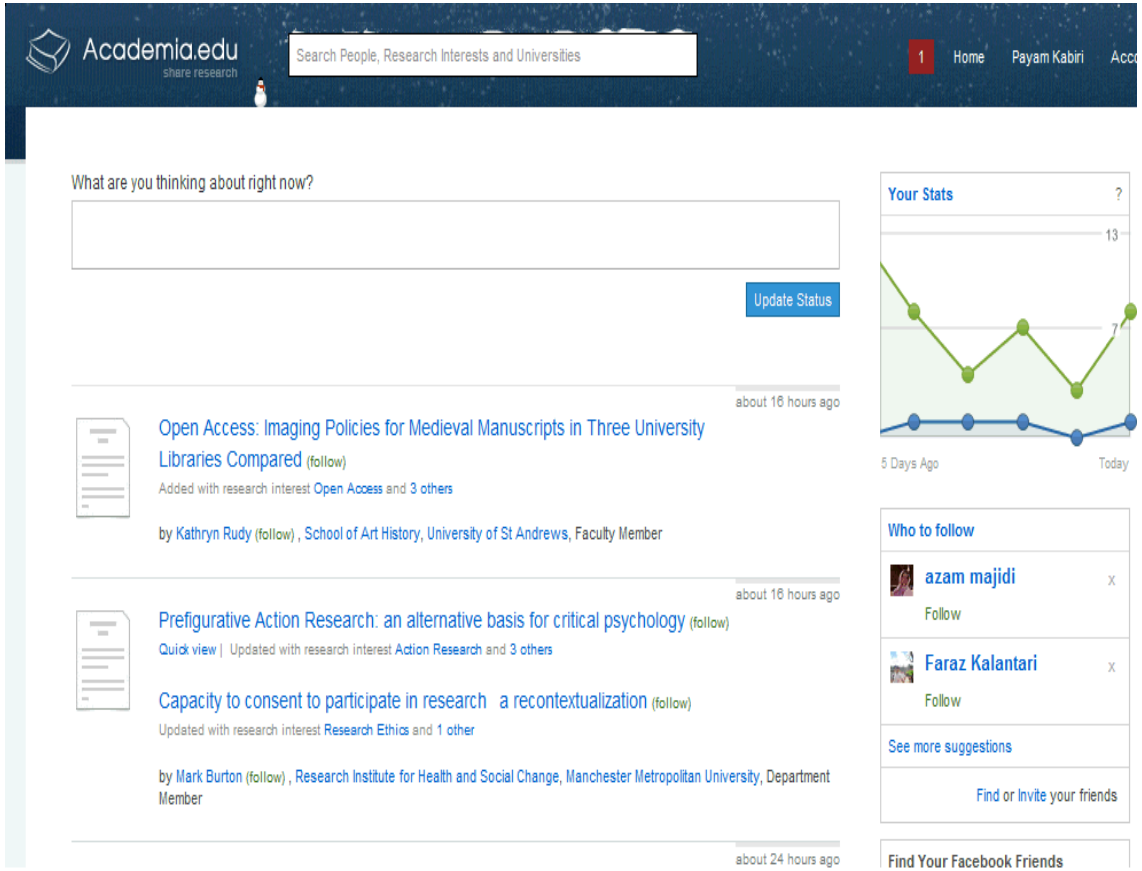
Academia

www.academia.edu

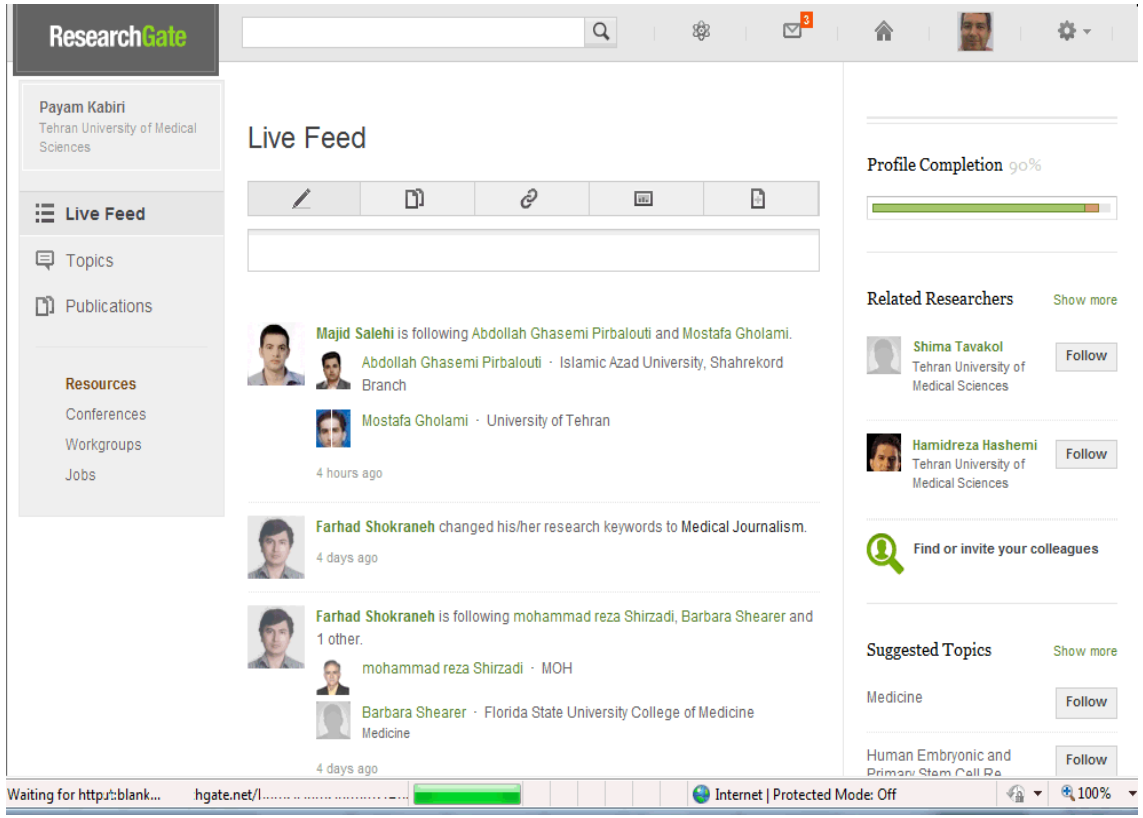
- Create a profile in Academia.edu
- 7.9m papers uploaded)
- Provides analytics on visitors to your papers, country they came from, keywords used



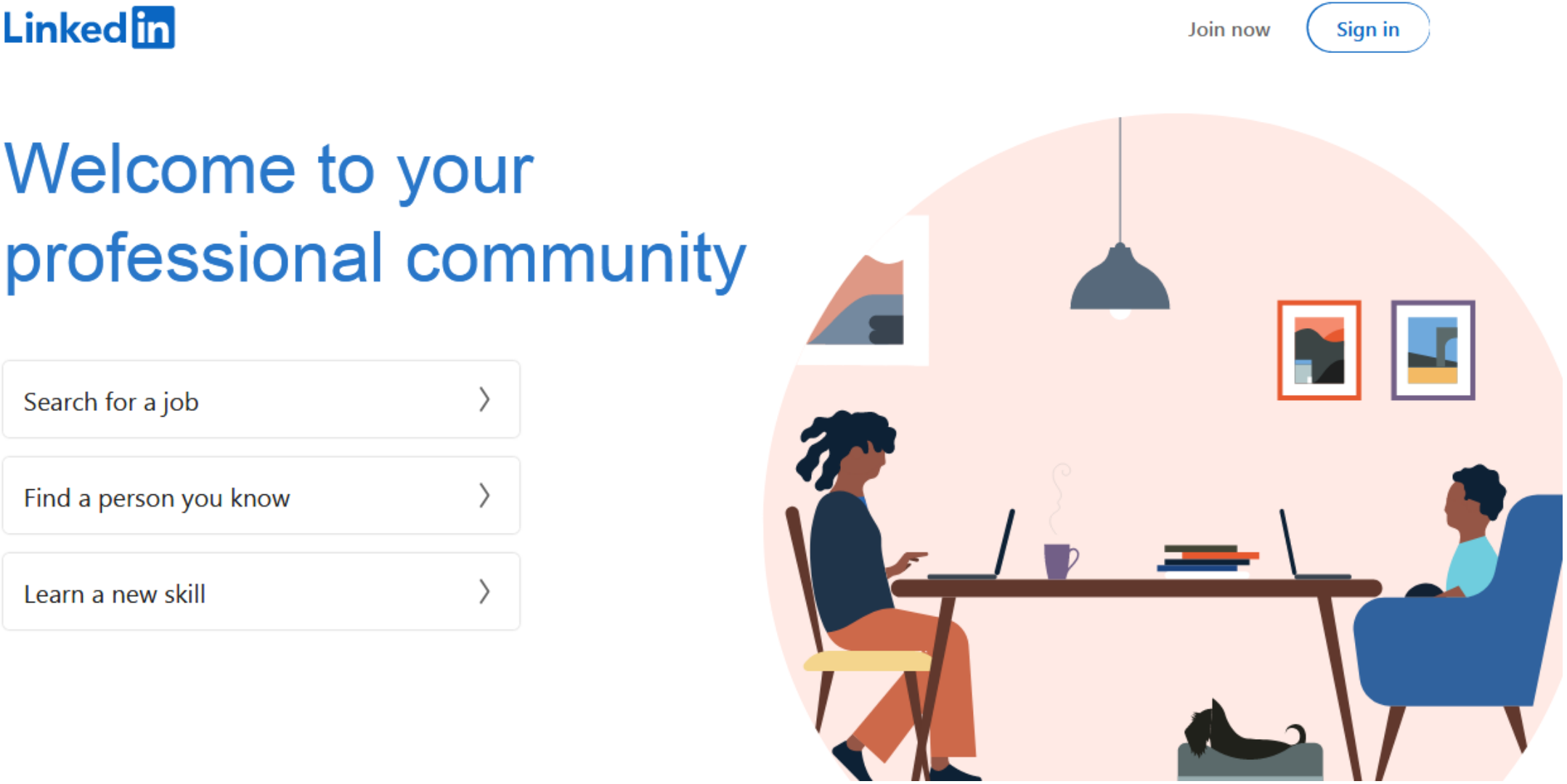
Researchgate

www.researchgate.net

- Create a profile in ResearchGATE.net
- Social network for scientists (esp. biological and health) with over 8m members
- Emphasis on sharing papers, asking and answering questions, finding collaborators



Linkedin (www.linkedin.com)



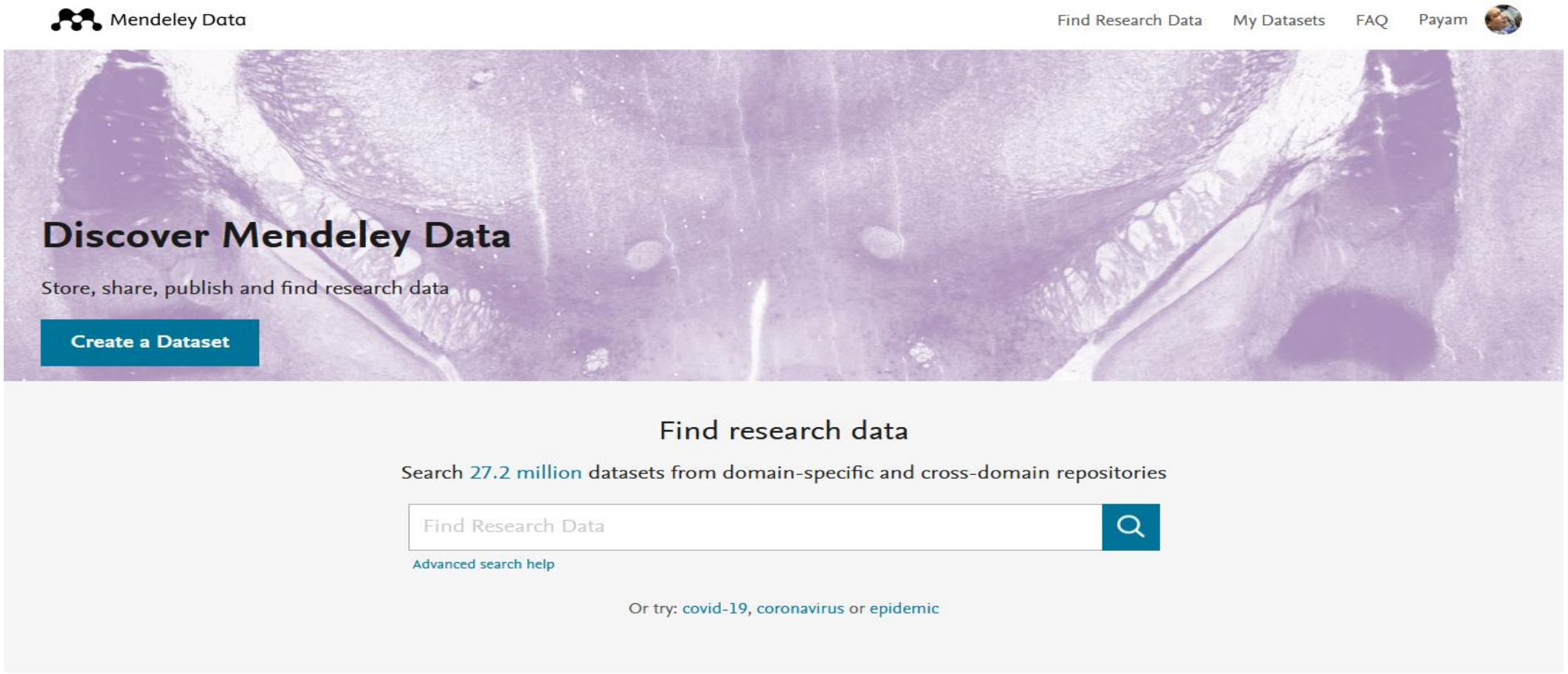
Linkedin
www.linkedin.com

- Used professionally by 65 percent of the researchers, now it has 300m members
- Your Profile is the key to promote your research
- First, expand your connections with a complete, concise and compelling profile
- Add papers, videos, images, presentations that showcase your achievements

Datasets Registrations in Repositories

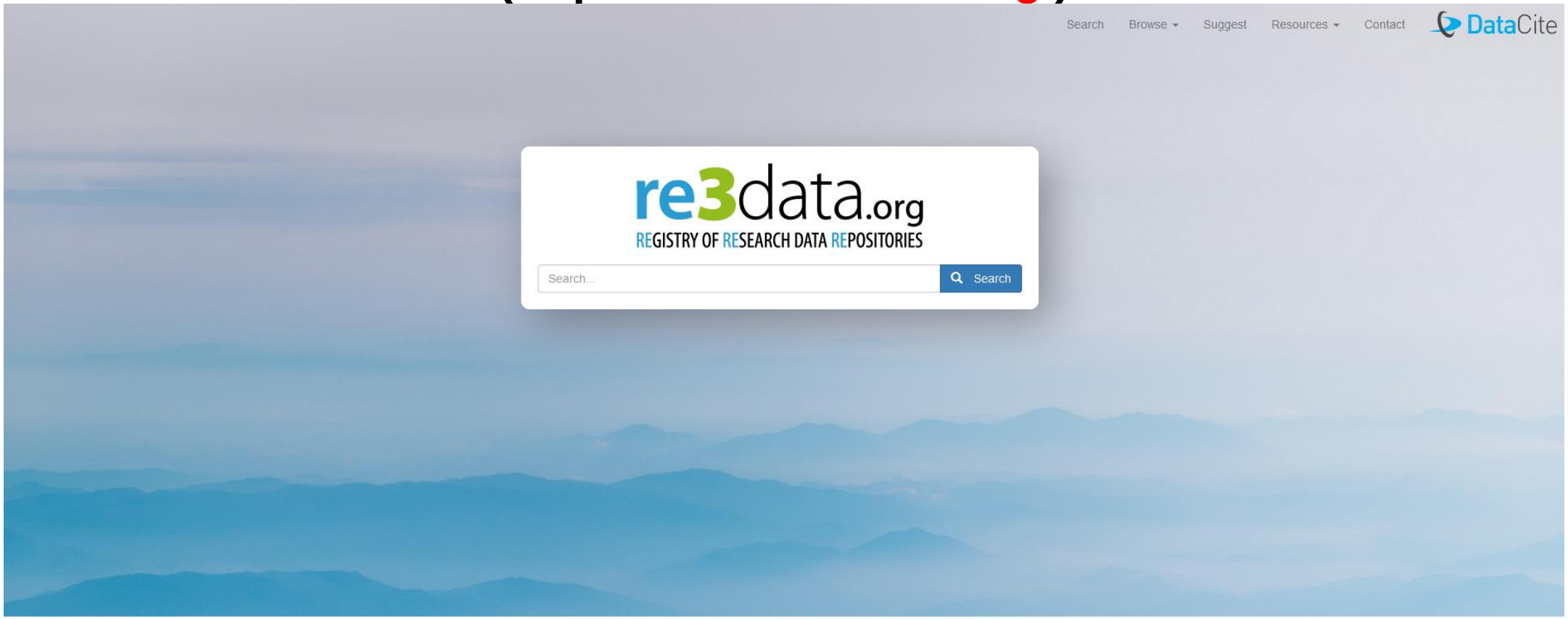
- Post your datasets to Data Registration Platforms for and storage of datasets.
- Make your data findable and citable from a repository. This can lead back to your original research or to your other work.
- Use data.mendeley.com & Re3data.org & to identify a suitable service for your discipline.

Datasets Repositories (https://data.mendeley.com)



Registry of Data Repositories

(https://www.re3data.org/)



Datasets Registrations in Repositories

- Data journals offer another route to making data more discoverable and citable. They are often based on data deposited in a data repository and involve some level of peer review.
  - Data in Brief
  - Journal of Open Humanities Data
  - Open Health Data
  - Journal of Open Psychology Data
  - Scientific Data

Business Plan for Your Article

1. Preparing your article
2. Publishing your article
3. Promoting your published article
4. Monitoring your article

Monitoring Your Article

Monitoring your article

1. Publishers Research Dashboard
2. Altmetrics Indices
3. Social Networks Tools
4. Scientometric Tools

Research Dashboard

- Early feedback on downloads, shares and citations
- Data about the geographic locations and research disciplines of your readers
- Search terms used in ScienceDirect to find your publications
- A comparison of the performance of your article with other people’s articles

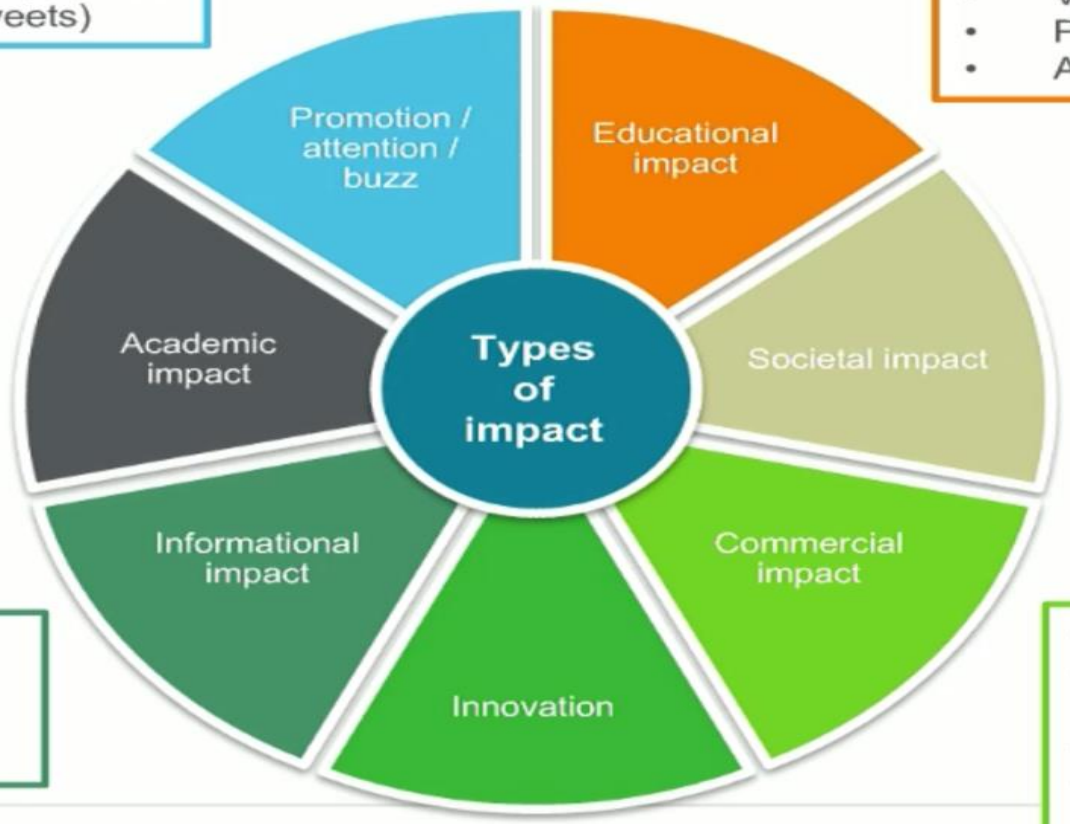
Different Types of Impacts

- Research impact
- Social impact
- Clinical impact
- Economic impact
- Environmental impact
- Impact on health and wellbeing
- Policy influence and change
- Technological developments

Different Types of Research Impacts & Metrics

- Social media metrics (Shares, likes, comments, Tweets)

- Number of Library holdings (WorldCat OCLC)
- Views on Slideshare
- Plays on YouTube
- Amazon book reviews



- Downloads from Github, RePEc, IRs
- Citations (field normalised, %iles, counts)
- Collaborators on Github
- Full text, pdf, html views on ScienceDirect, Figshare etc

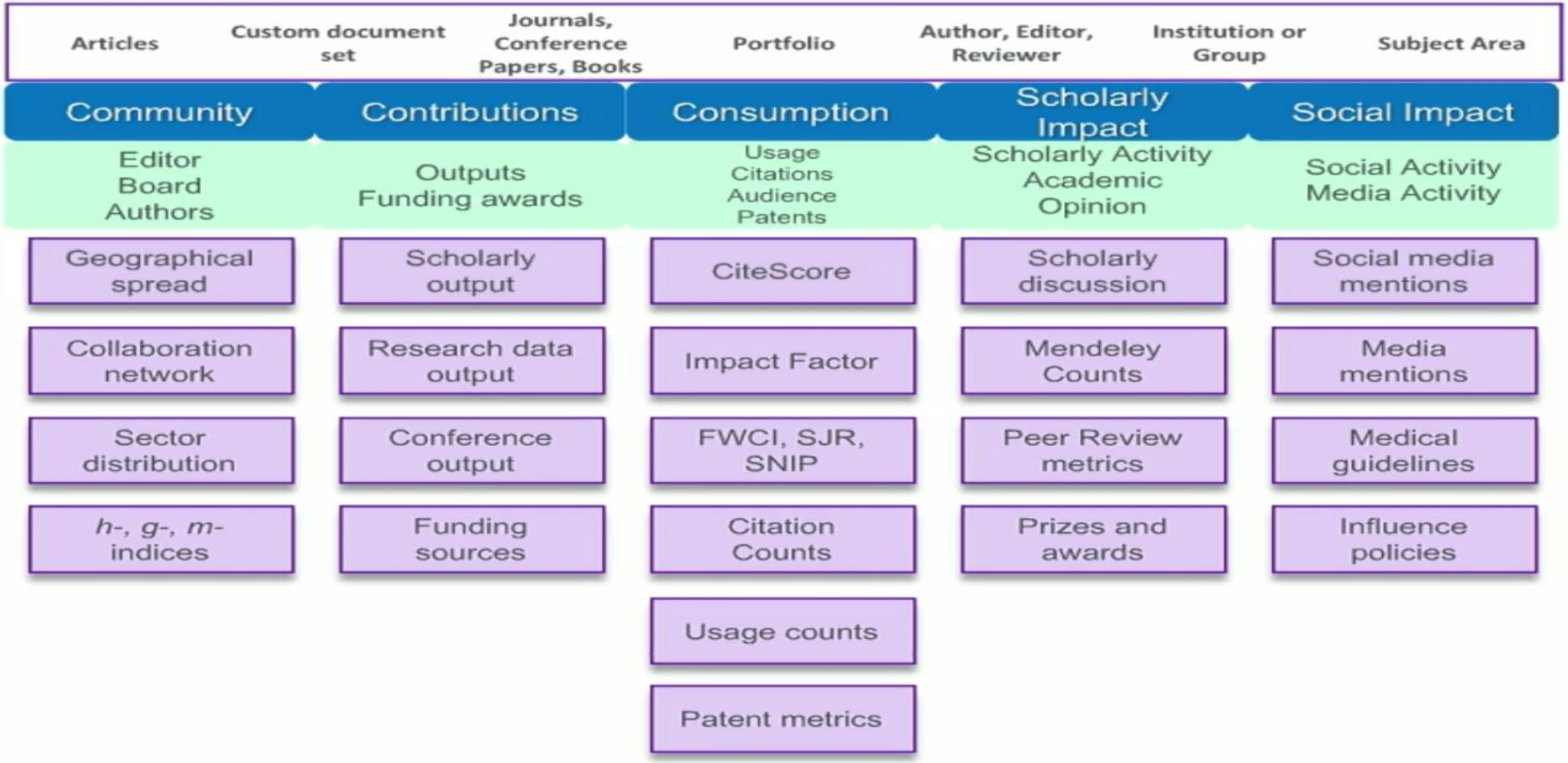
- Clinical citations or Health policy/guideline citations
- Government policy citations

- Wikipedia citations
- Blog mentions
- StackExchange Q&A links
- News mentions

- Patent citations
- Academic: Industry partnerships
- Licenses
- Business consultancy activities

- Number of patents or patent families filed and granted

Metrics That Help You



Key Characteristic of World Class University

Robust Planning

Abundance of resources

Flexible governance

Reputation

Excellence in research

Social Impact

Attract Talent

Quality Teaching

Performance management

Love Yourself
Make an Impact

با خود مهربان باشید

از خود نام و نشانی به یادگار گذارید

بماند سال‌ها این نظم و ترتیب
زما هر ذره خاک افتاده جایی

غرض نقشی است کز ما بازماند
که هستی را نمی‌بینم بقایی

زندگی صحنه یکتای هنرمندی ماست

هرکسی نغمه خود خواند و از صحنه رود

صحنه پیوسته به جاست ...

خرم آن نغمه که مردم بسپارند به یاد .....

ژاله اصفهانی

اگر میل داشتید Email بزنید !

kabiri@tums.ac.ir

Good Luck!