EIFL DIGITAL RESEARCH LITERACY TRAINING PROGRAMME OUTLINE

‘Preprints’

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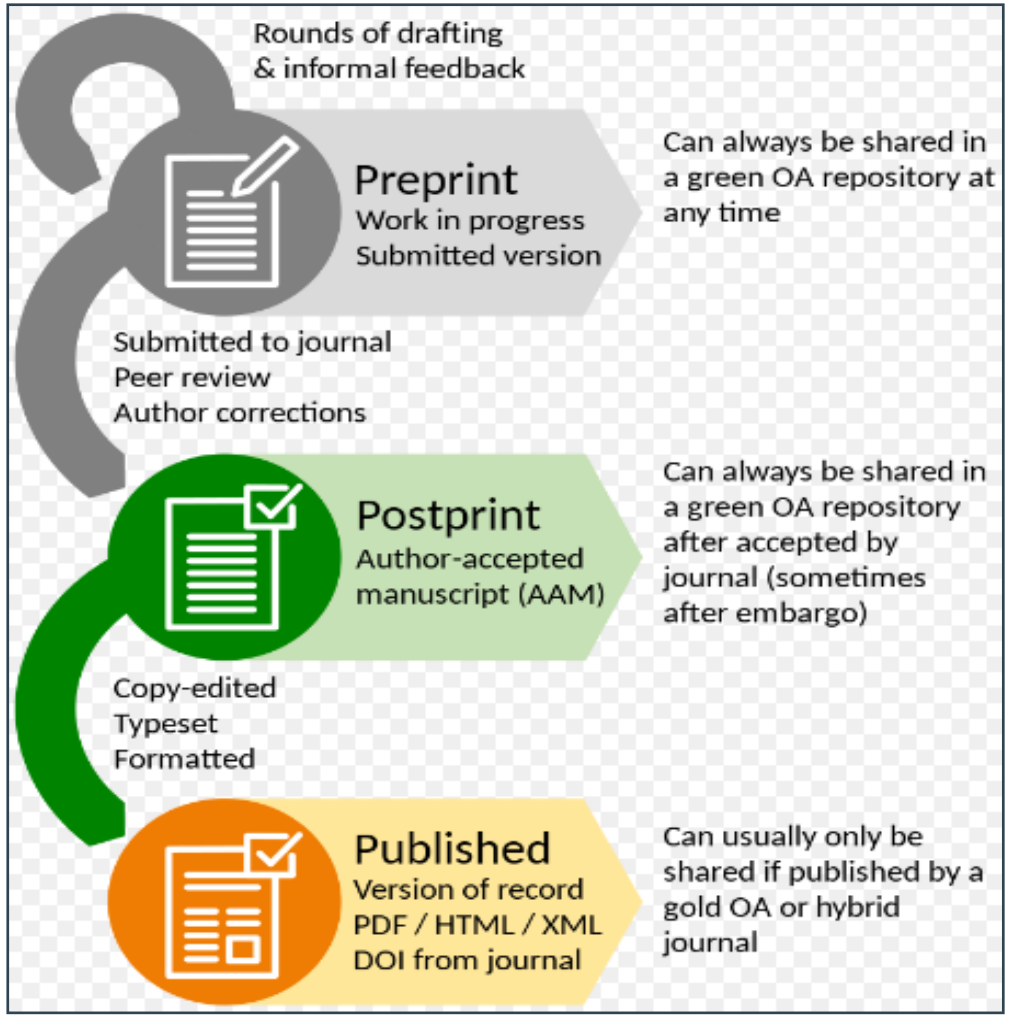
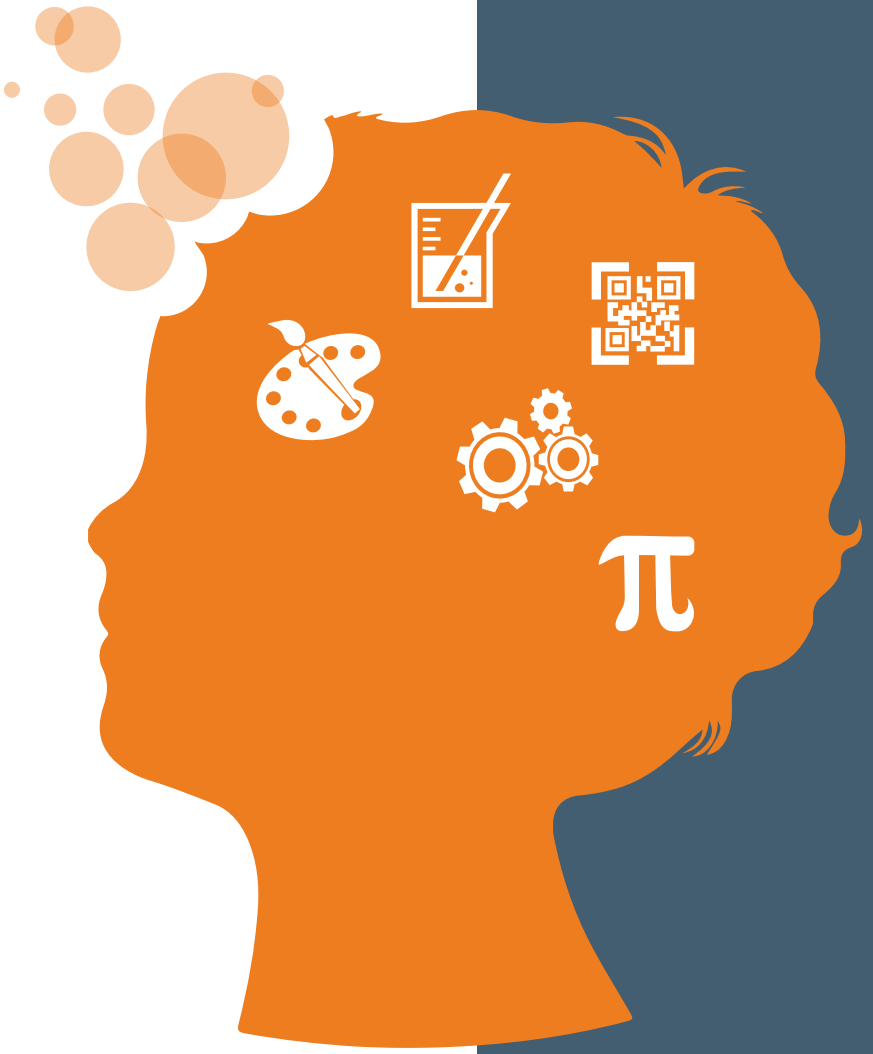


Thomas Shafee - Own work; adapted from diagram by Ginny Barbour (CC BY 4.0)

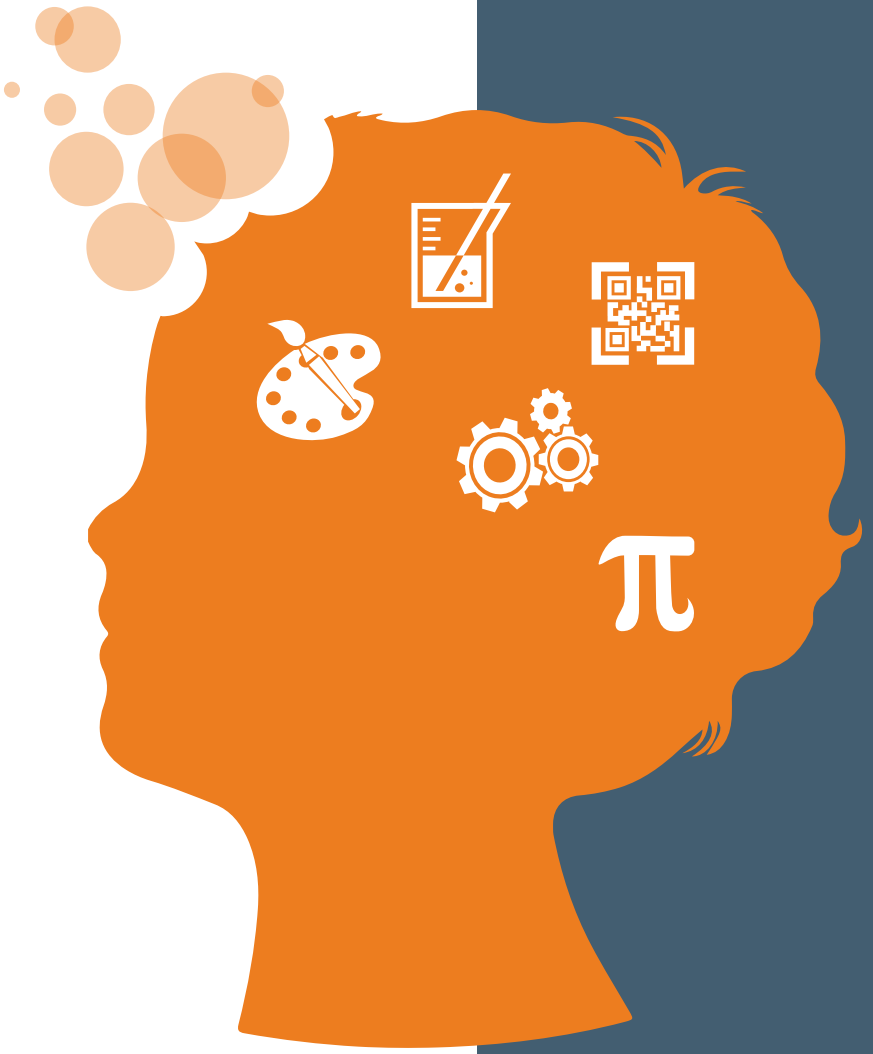
Characteristics of preprints

- preprints are preliminary scientific reports that are made publicly available online for anyone to read, comment , and discuss before they have been peer reviewed,
- preprints enable rapid release and discussion of data,
- working in progress with constant feedback,
-preprints are often not indexed in mainstream bibliographic services...



Benefits

- Credit
- Feedback
- Visibility



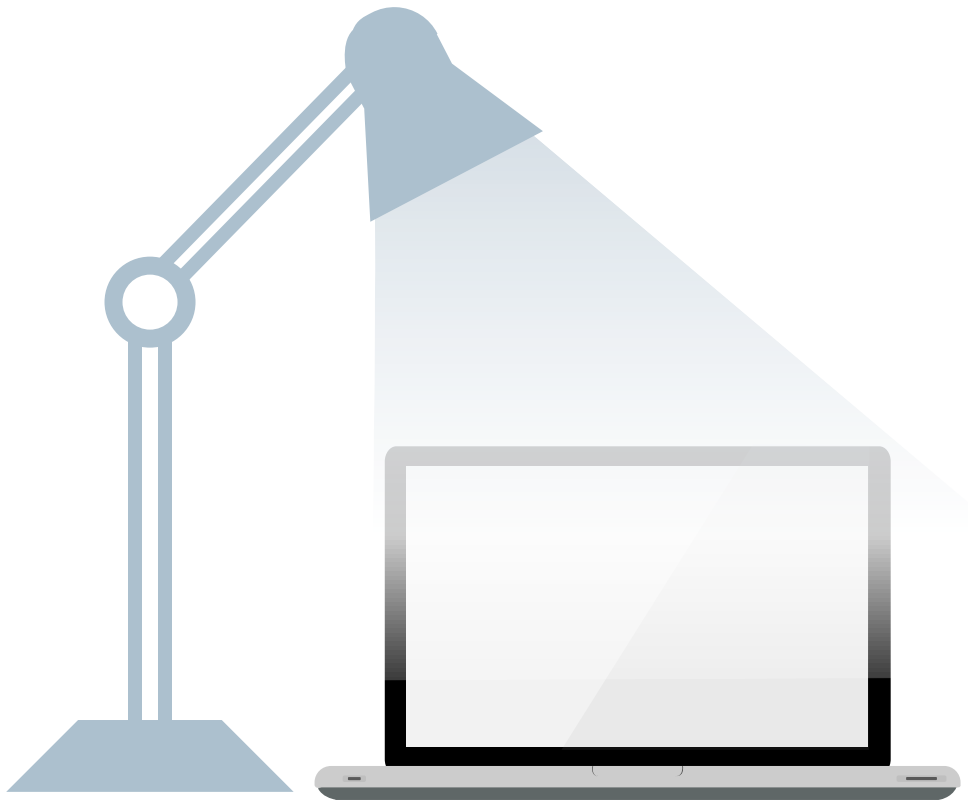
List of funder policies:
https://asapbio.org/funder-policies

Social Science, Natural Science & Humanities...

Rapidly adopted

- immediate availability to their peers and the public,
- avoiding lengthy peer-review processes prior to release,
- readers can leave comments…

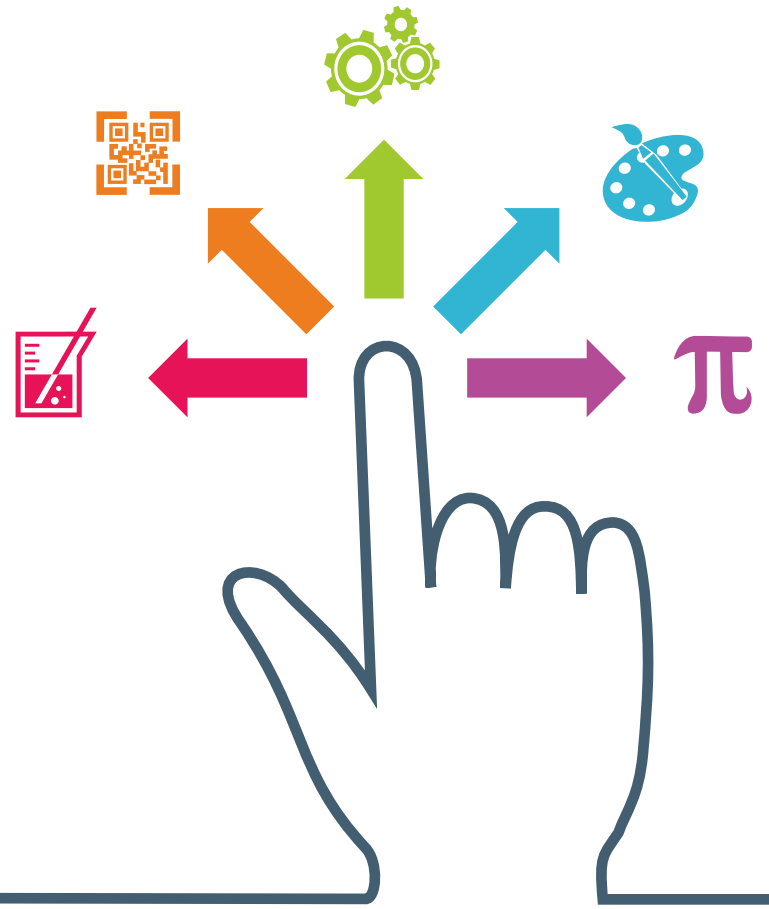
Issues with preprints



- **Pressure to publish quickly,**
- **Many preprints are never revised,**
- **Preliminary results could be reported by the media or posted and discussed on social media with little regard,**
- **Retrospective “tagging” won’t have much effect.**

Suggested solutions...

- **References should clearly disclose that the source is a preprint (DOI, preprint link…),**
- **Preprints should not be used as references in any medical publication,**
- **Watermarking the article,**
- **Highlighting that the findings have not been formally peer reviewed,**
- **Pre-publication checks by server hosts,**
- **Preprints marked and linked via DOI to the subsequently fully published article.**



Directory of preprint server policies and practices:
https://asapbio.org/preprint-servers

Preprints
HOW IT WORKS
INSTRUCTIONS FOR AUTHORS
SUBJECT AREAS
ADVISORY BOARD
SCREENING PREPRINTS
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The Multidisciplinary Preprint Platform

Keyword/Title | Author | Subject Categories | Subjects

Cornell University

arXiv.org

arXiv is a free distribution service and an open-access archive for 1,876,092 scholarly articles in the fields of physics, mathematics, computer science, quantitative biology, quantitative finance, statistics, electrical engineering and systems science, and economics. Materials on this site are not peer-reviewed by arXiv.

Subject search and browse:
Physics | Search | Form Interface | Catchup

News
Read about recent news and updates on arXiv's blog. (View the former "what's new" pages here). Read robots beware before attempting any automated download.

bioRxiv

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medRxiv

THE PREPRINT SERVER FOR HEALTH SCIENCES

Search

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archives-ouvertes.fr

Preprint server	Disciplinary scope	Ownership type	Screening processes	External content indexing	Permanence of content	Preservation of content	Commenting
arXiv	Multiple scientific fields, including quantitative biology*	Academic institution	Content within scope, Text overlap detection, Misconduct or integrity checks, Legal compliance, Ethical compliance	Google Scholar, PrePubmed (q-bio only), Europe PMC, SciLit, SHARE, INSPIRE-HEP, The NASA Astrophysics Data System (ADS), The arXiv Search Interface from the National Science Library, Chinese Academy of Sciences (also in Chinese), PubMed (NIH-supported COVID preprints only)	Permanent with no removal options (as long as archive exists)	Persistent access through mirror sites, no external preservation services used as yet	no

URL: https://arxiv.org/

Platform description: "Open access to...e-prints"

Launch date: 1991-08

Ownership: Cornell University

For-profit or not-for-profit: Non-profit

Sustainability of the service: External financial support (grants and membership program: libraries, research labs, philanthropy, government funding)

Platform technology, openness of source code: SWORD, open source

Advisory board (and researcher representation): Yes (includes researchers)

Content language(s) accepted: Any language - abstract must be in English

Content types accepted: Research manuscripts only

Permitted submission formats: PDF, LaTeX, HTML

Machine-readable full-text content: Require full-text to be submitted in machine-readable format

Unique identifier type and versioning approach: Platform-specific ID (e.g. arXiv ID), each version receives its own non-DOI citable identifier

Versioning policy: Accepts any new versions

Commitment to FAIR principles: None as yet

Clear statement that content is not peer-reviewed on article page: No

300,000 preprints
discoverable in Europe PMC

from arxiv, bioRxiv, medRxiv, ChemRxiv, PsyArXiv, BioHackrXiv, Authorea Preprints, Beilstein Archives, Research Square, SSRN, F1000Res and F1000-powered Open Research platforms

99,000 preprints were **published** in a journal

20,000 preprints have links to **data**

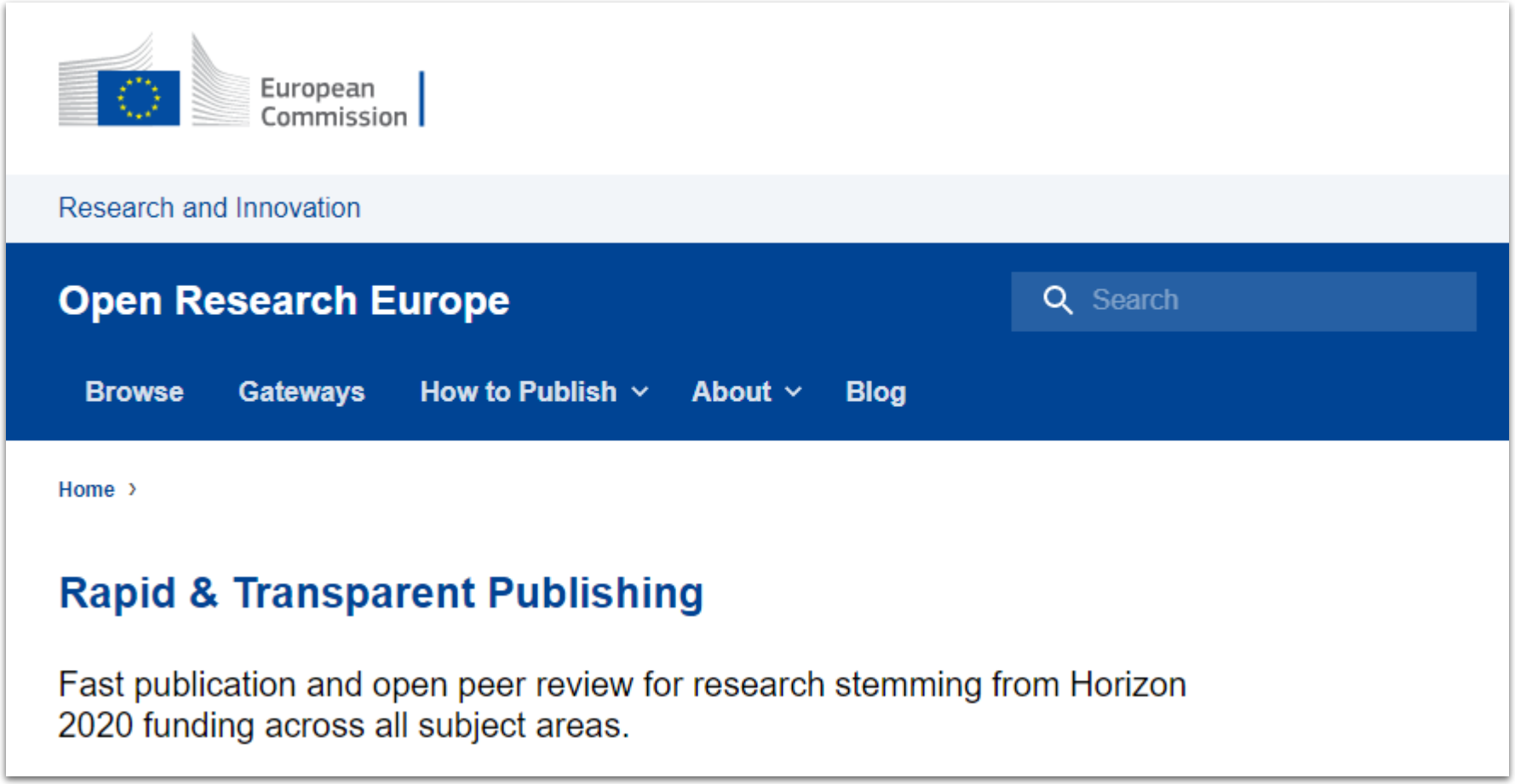
12,000 preprints have been **cited**

2900 preprints have a preprint **peer review**

113,000 preprints were claimed to **ORCID**

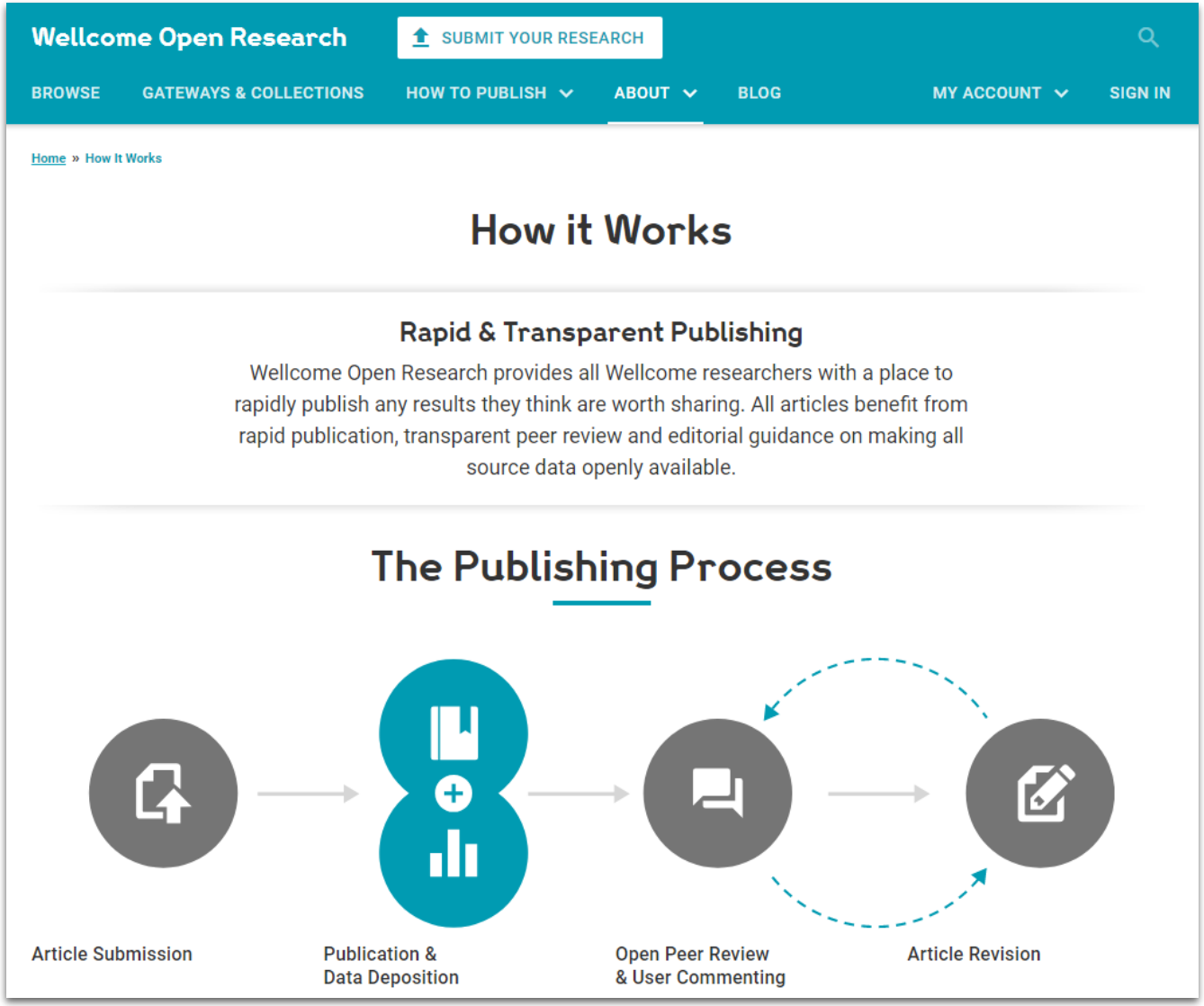
270 preprints have a **lay summary**

Open Research Europe



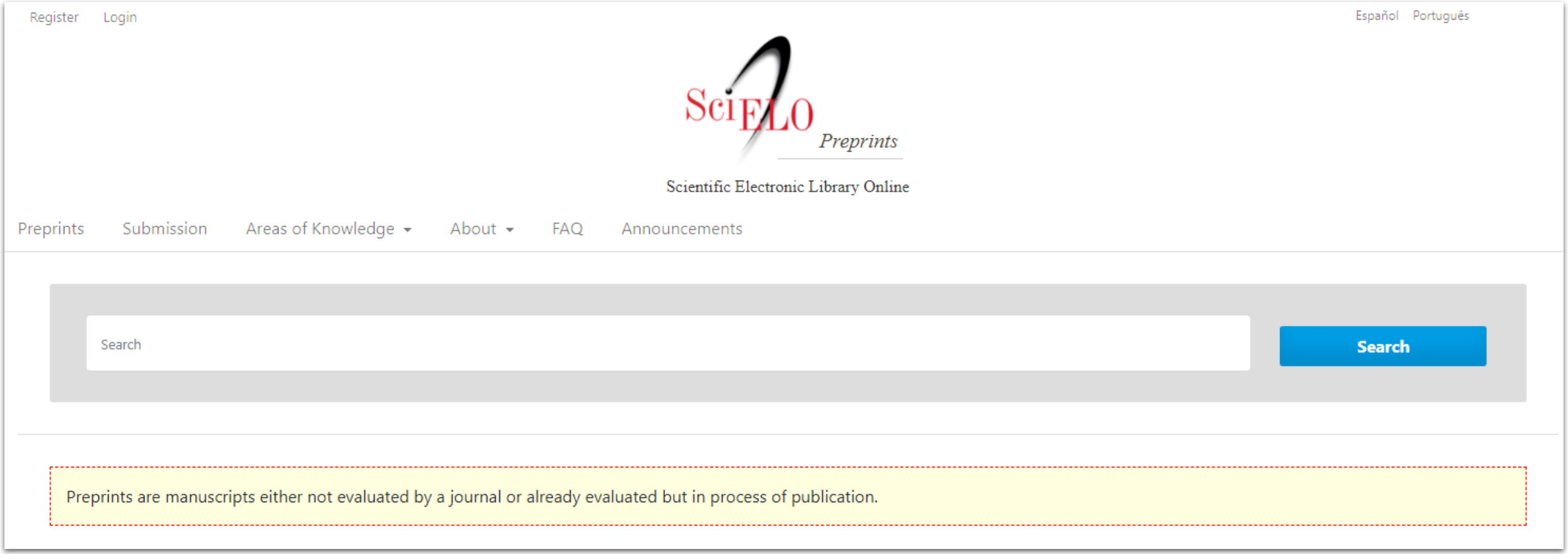
https://open-research-europe.ec.europa.eu/

Welcome Open Research



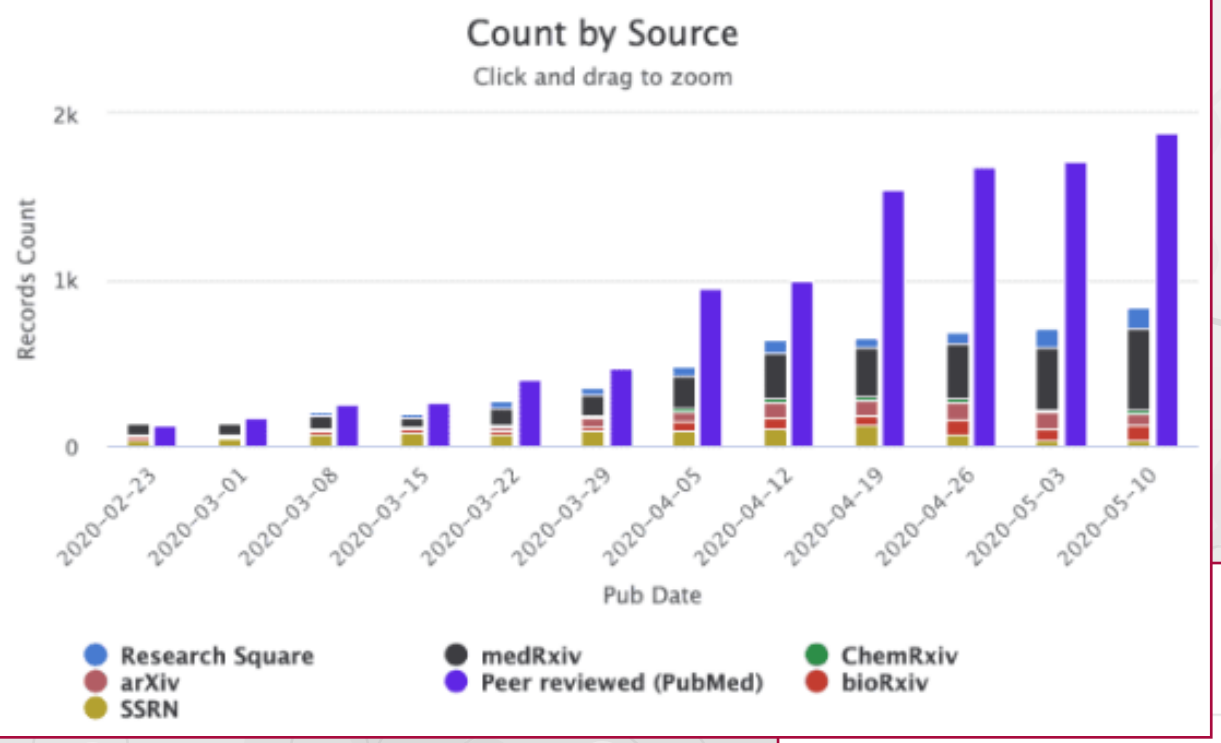
https://wellcomeopenresearch.org/

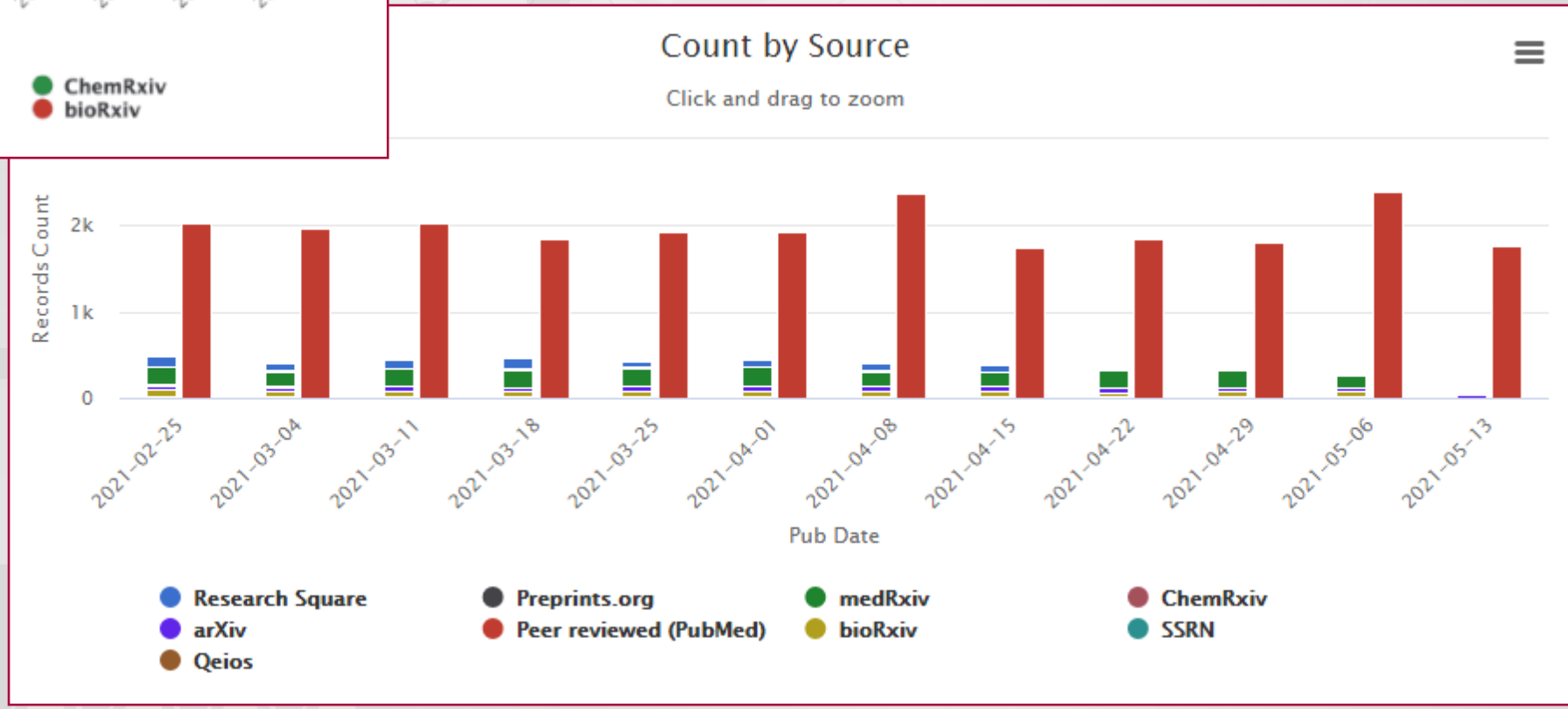
SciELO Preprints



https://preprints.scielo.org/

Preprints & COVID-19





COVID-19 preprints per week from https://icite.od.nih.gov/covid19/search/

Preprints & COVID-19

COVID-19 Quick Links

See COVID-19 SARS-CoV-2 preprints from

- arXiv → **4,075 results**
- medRxiv and bioRxiv → **15,742 articles (12,161 + 3,581)**

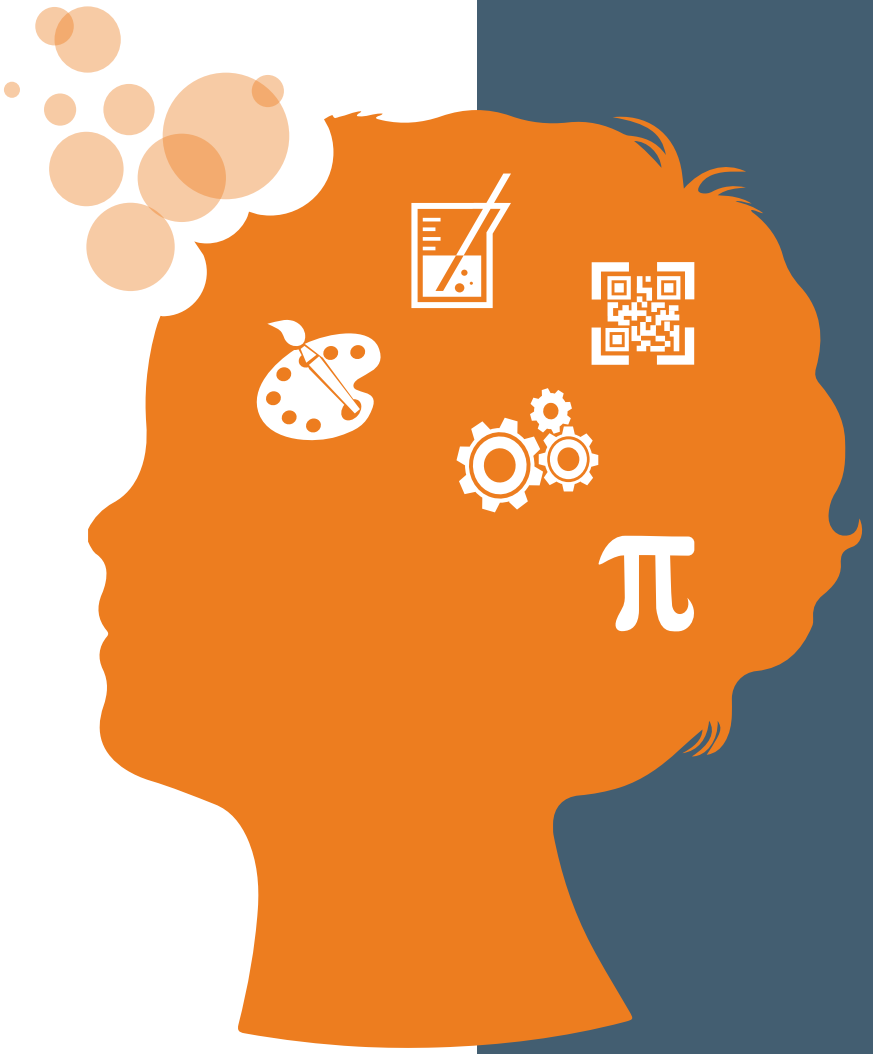
Important: e-prints posted on arXiv are not peer-reviewed by arXiv; they should not be relied upon without context to guide clinical practice or health-related behavior and should not be reported in news media as established information without consulting multiple experts in the field.

Training focus

· Breaking fears,

· Explain why traditional journals do not meet the needs of modern scientific communication,

· Explain Open Research Europe and new trends at the international level.

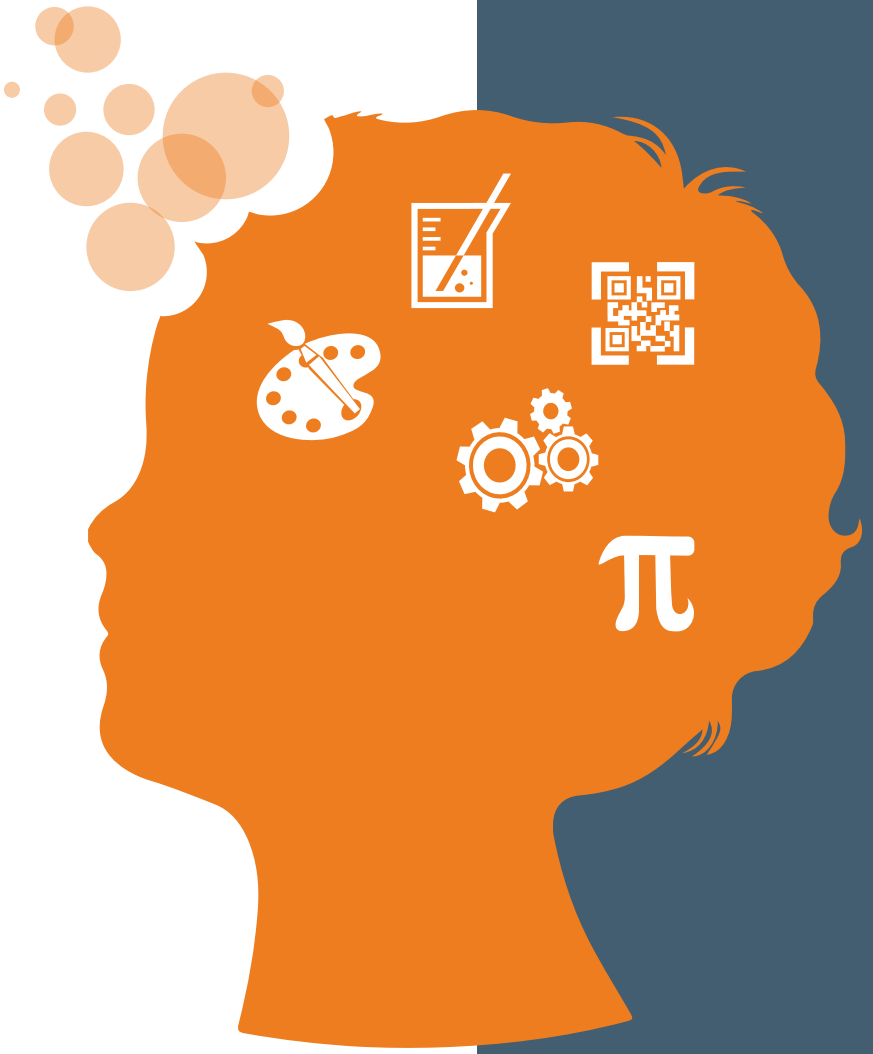


Approaches

· Education should include lively discussion,

· Not everyone should be expected to accept immediately,

· It is useful to invite a researcher who has published preprints to share their experience.



Formats

Format	Methods	Technical requirements	Topics
Lecture + demo for researchers (90 min)	• Verbal presentation • Preprints features: demonstration • Registration and depositing: demonstration • Participants are free to ask any questions they may have during the presentation	• Computer + video beam • Online	Full range
In person (~45 min)	• Introduction to preprints • Preprint servers and searching literature • Participant is free to ask any questions	• Live – in library • Online	Depends on researchers' or librarians' prior knowledge

Practical

Researchers should be reminded that they have to take into account journal policies.

In Serbia

· Local physicists, mathematicians and engineers have been using arXiv for a long time and they know benefits of preprints,

· This practice is sporadically present among local psychologists: https://osf.io/3fjqk/, https://psyarxiv.com/discover?q=serbia,

· Chemists are quite conservative, they publish in traditional journals and with major commercials publishers,

· Researchers who work more intensively with colleagues from abroad are more likely to publish a preprint,

· **A major problem** is the research evaluation system which relies on the Impact Factor,

· The most suitable target group for education are researchers who are involved in EU projects.

Tricky issues: Traditional model of publishing vs. Preprints

Traditional way	Preprints
• Small number of reviewers, • The review process is not transparent (a paper might have been accepted despite a negative review, but the readers don't have access to this information), • Is slow, • Paywalls (one can't have an opinion on a paper they can't read), • Too many papers are published, some of which are never read	• Open access to a large number of researchers around the world, • Commenting, discussing and providing feedback (which may not be relevant, but it's at least transparent), • Even more preprints are published, some of which are never read,
• The common opinion is that the published results are certainly good (while publishers are still reluctant when it comes to publishing replication studies which demonstrate that some results are not so good)	• The common opinion is that preprints are not verified and that anyone can write them
• The part of the evaluation system which relies on the impact factor,	• Preprints are not recognized in many countries and officially accepted in the research evaluation system,
• Publishers constantly encourage publishing through the traditional model (personal gain).	• Publishers often do not allow the publication of a preprint in their journals, which may discourage authors from setting up a preprint first and then publishing the paper.

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Questions?

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