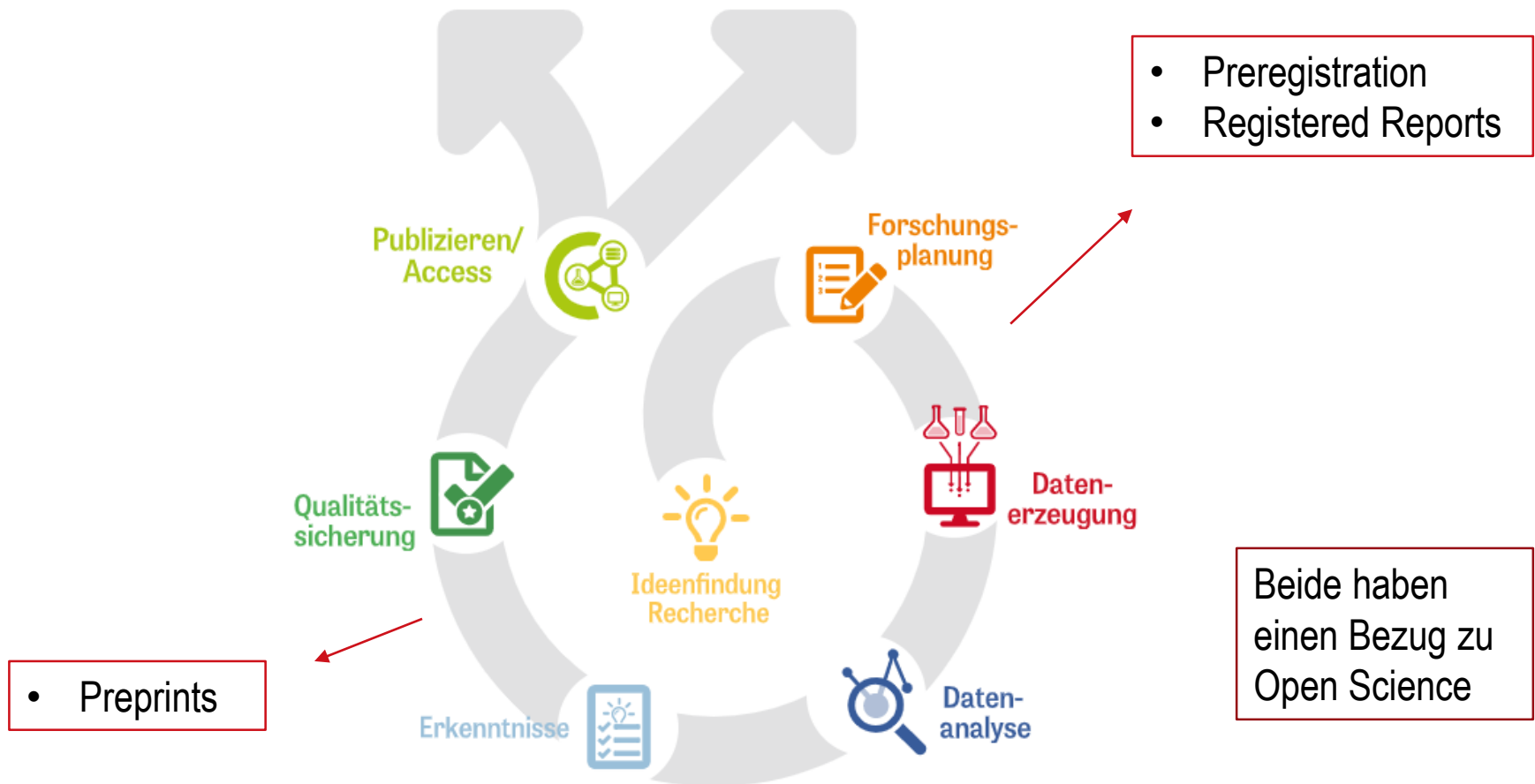




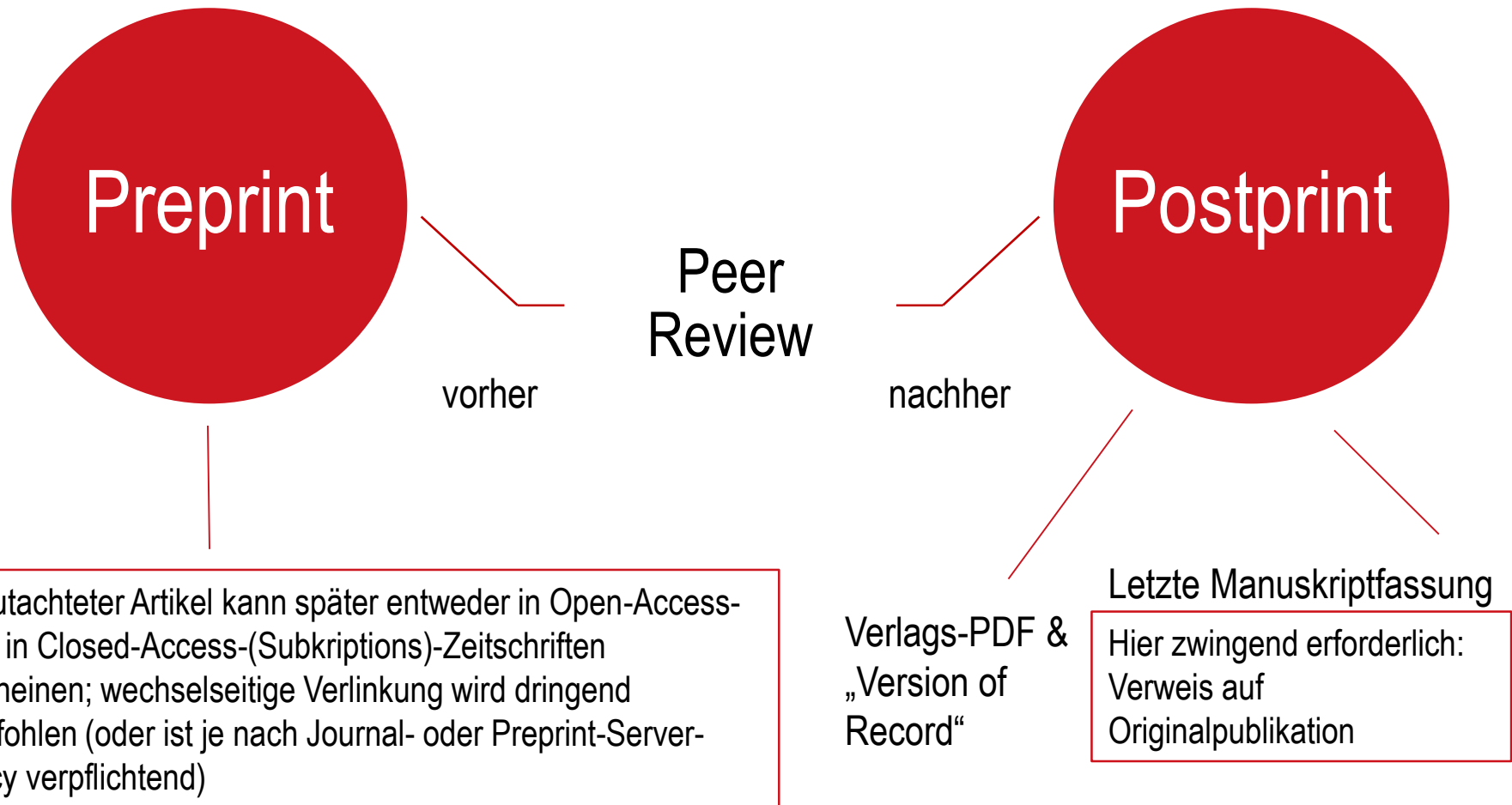
(Neue) Möglichkeiten für Dokumentation und Veröffentlichung von Forschung: Preprints, Pre-Registration, Registered Reports

Vortrag im Rahmen des 109. Bibliothekentags, 17. Juni 2021

Verortung im Forschungskreislauf



Status von Preprints



Status von Preprints

“Added to this scenario, preprints are still considered as gray or gray literature, that is, they are of sufficient quality to be collected and preserved by libraries, but not controlled by publishers, due to their immediate publication and not previously peer-reviewed”.

<http://dx.doi.org/10.1590/0034-7167.201871supl601>

Preprints zählen zu Open Access
Grün: Ablage erfolgt vor, mit oder
nach Einreichung bei einer
Zeitschrift

Preprints zählen zur grauen Literatur

“Preprints are classified as grey literature
and green open access”.

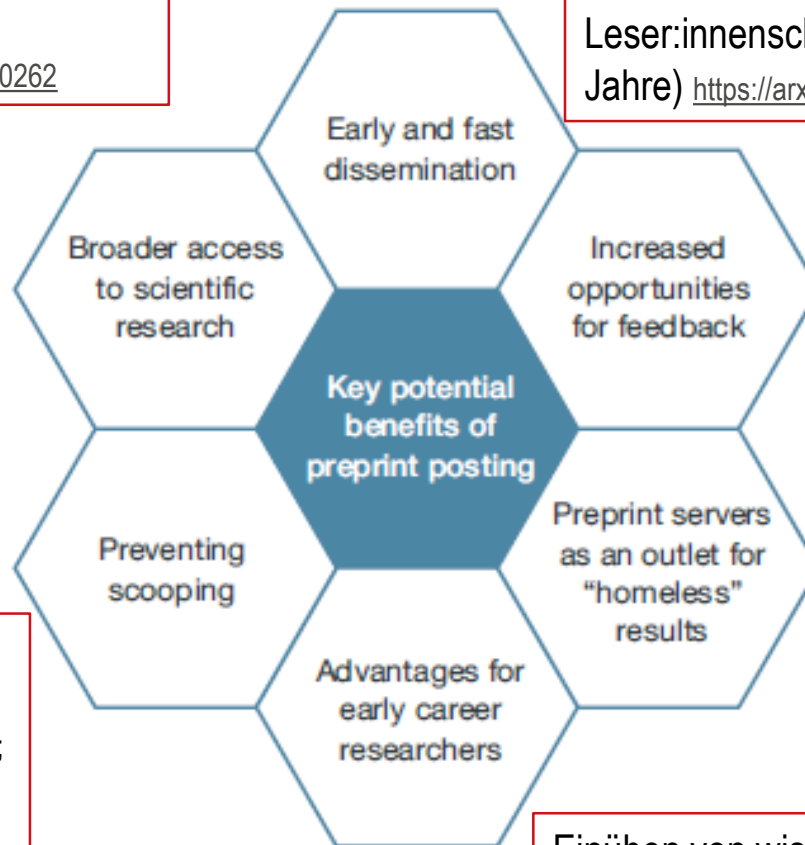
<https://crln.acrl.org/index.php/crlnews/article/view/23580/30897>

Preprints – Vorteile (Auswahl)

Für Lesende: Freie Verfügbarkeit, teilweise auch OA

<https://doi.org/10.5999/aps.2020.00262>

Frühe Zugänglichkeit: <https://doi.org/10.1001/jama.2020.20674>
Im Schnitt erreichen die Artikel 14 Monate früher ihre Leser:innenschaft (Spanne: 7 Monate bis 2,25 Jahre) <https://arxiv.org/abs/2102.09066>



Autor:innen bekommen deutlich breiteres Feedback: Kommentare auf der Plattform, über Social Media, per E-Mail o.a.

<https://doi.org/10.1371/journal.pgen.1008565>

Preprints als eine Art Zeitstempel

<https://doi.org/10.1136/bmj.k362> ;

<http://dx.doi.org/10.1590/0034-7167.201871supl601>

Entkopplung der Verbreitung von Wissen und der "Zertifizierung" übers Peer Review

<https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.2003995>

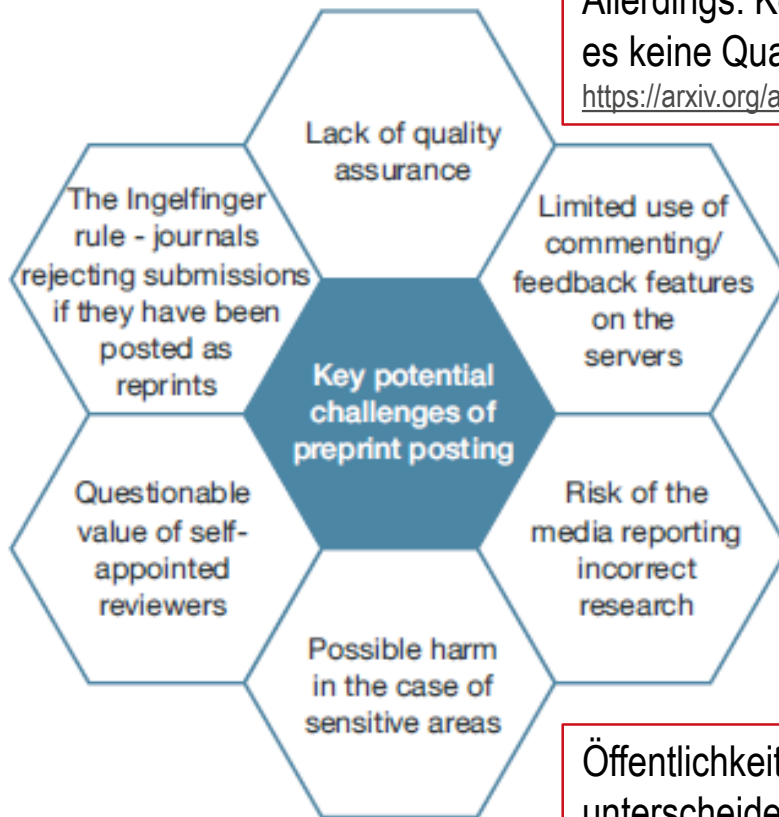
Einüben von wiss. Publikationspraktiken:

<https://doi.org/10.1371/journal.pbio.3000151>

Quelle Abb. <http://doi.org/10.5281/zenodo.3357727>, 17

Preprints – Nachteile (Auswahl)

Allerdings:
Zunehmende
Bereitschaft der
Zeitschriften
auch Preprints
zu berücksichtigen



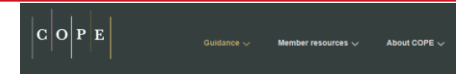
Allerdings: Kein Peer Review heißt nicht, dass es keine Qualitätssicherung gegeben hat
<https://arxiv.org/abs/2102.09066>

Nur 10% der Preprints werden kommentiert
<https://blogs.lse.ac.uk/impactofsocialsciences/2020/09/23/are-preprints-a-problem-5-ways-to-improve-the-quality-and-credibility-of-preprints/>

Allerdings: Nur 6% der Artikel insgesamt und 15% der Artikel mit COVID-19-Bezug ändern ihre „Conclusion“ in der „Version of Record“
<https://doi.org/10.1101/2021.02.20.432090>; 70% der Artikel bleiben nahezu unverändert:
<https://blogs.lse.ac.uk/impactofsocialsciences/2020/09/23/are-preprints-a-problem-5-ways-to-improve-the-quality-and-credibility-of-preprints/>

Öffentlichkeit kann Preprints von begutachteter Literatur nicht unterscheiden;
Es entstehen zwei Versionen, die sich vielleicht widersprechen und Schaden oder Konfusion verursachen:
<https://doi.org/10.1002/jor.24192> und <https://doi.org/10.1136/bmj.k3628>

Herausforderungen (1)



[Home](#) / [Resources](#) / [Discussion documents](#)

Preprints

<https://doi.org/10.24318/R4WByao2>

► Bedarf an klaren Policies

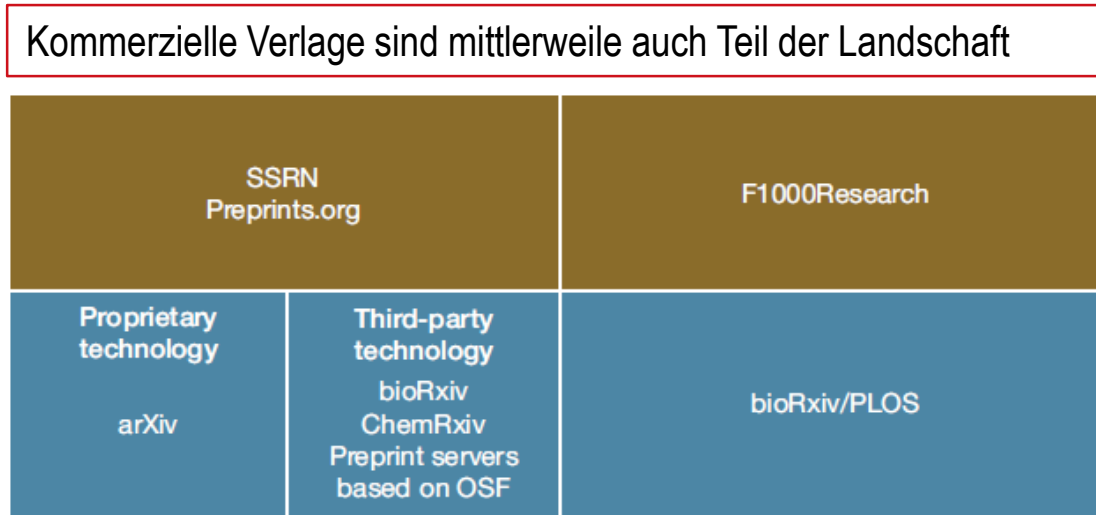
- seitens der Zeitschriften hinsichtlich, z.B. :
 - Zulassen von Preprints überhaupt, Zeitpunkt des Preprints, Umgang mit Medien, Zitierung von Preprints, Einbeziehung von Kommentaren bei Peer Review
- seitens der Verlage hinsichtlich, z.B. :
 - Verlinkung zwischen Preprints und finaler Version, Urheberrecht und Lizenzierung
- seitens der Preprint-Plattformen hinsichtlich, z.B. :
 - Ausweisung als Preprint (also fehlende Begutachtung)
 - Vorabchecks (eine Art „Desk-Review“)
 - Aufbereitung des Manuskripts: Güte der Ergebnisse, Einhaltung gute wiss. Praxis, Offenlegung von Interessenskonflikten, Ethikvoten, Urheberrecht, Lizenzierung, Möglichkeiten zur Veränderung
 - Kontinuität: Umgang mit Löschungen

Herausforderungen (2)

- ▶ Ausgestaltung der Metadaten für Preprints, die solche auch entsprechend ausweisen; Vorschlag siehe: <https://doi.org/10.31219/osf.io/8dn4w>
- ▶ Zuständigkeiten für Aktualisierungen (Autor:in?, Journal?, Preprint-Server? Metadatenpeicher?): <https://scholarlykitchen.sspnet.org/2020/09/18/guest-post-whats-wrong-with-preprint-citations/>; <https://doi.org/10.1371/journal.pgen.1008565>
- ▶ Preprint-Publication Link: Die Quote liegt bei Preprint-Servern bei rund 40%; Algorithmen zur Erkennung bei Metadatenpeicher wie CrossRef sowie Benachrichtigung der Preprint-Plattformen: <https://doi.org/10.1007/s11192-021-03900-7>
- ▶ Notwendigkeit einer Mandatierung, z.B. über Plan U: <https://doi.org/10.1371/journal.pbio.3000273>
- ▶ Umgang/Workflows mit/für Retractions: <https://doi.org/10.1108/OIR-08-2020-0371>; <https://doi.org/10.2188/jea.JE20200506>
- ▶ Suche nach Preprints: <https://doi.org/10.1371/journal.pgen.1008565>
- ▶ Nachhaltiger Betrieb und Finanzierung müssen gesichert sein <http://doi.org/10.5281/zenodo.3357727>, S. 30

Herausforderung (3): Infrastruktur für Preprints und angrenzende Publikationslandschaft ist sehr komplex

Figure 4 – Models for the sharing of research prior to peer review and examples of platforms and publishers⁴⁵



Author posting

Publisher posting

MedArxiv

Bekannt für Open Peer Review, d.h. hier sind Preprints und begutachtete Artikel zu finden = OA Publishing Plattform

Beide erheben APCs

OA-Mega-Journals wie PLOS ONE, eLife, PeerJ, BMJ Open, SAGE Open, Scientific Reports arbeiten teilweise mit Preprint-Servern zusammen

Quelle Abb.
<http://doi.org/10.5281/zenodo.3357727>

Was wiss. Bibliotheken tun können

- ▶ Wiss. Bibliotheken stellen mit institutionellen Repositorien Zugang zu wiss. Inhalten sicher
- ▶ Sicherstellung der Interoperabilität zw. institutionellen Services und Preprint-Servern
- ▶ Bewusstseinsbildung (z.B. über ethische Aspekte)
- ▶ Preprint-Server sind unter Beteiligung von wiss. Bibliotheken entstanden (e.g. EarthArxiv und California Digital Library)

Quelle: <https://doi.org/10.18665/sr.313288>,13-15

Tools: Finden eines geeigneten Preprint-Servers



Directory of preprint server policies and practices

Home / Directory of preprint server policies...

<https://asapbio.org/preprint-servers>

Tools: Metasuche

The screenshot shows the search.bioPreprint website. At the top, there is a navigation bar with the University of Pittsburgh logo and links for Health Sciences, Find People, and About HSL. Below this is a banner for the Health Sciences Library System with a clock icon indicating Monday 7am-8pm, a question mark icon for 'Ask A Librarian', a phone icon for '412-648-8866', and a remote access icon. A yellow attention banner states: 'Attention: HSL's Services and Resources Available Remotely During COVID-19 Closure'. The main content area includes a search bar with a 'Go' button, a 'Refine your preprints search via Topic Clusters' section, and a 'Search Examples' section. The search examples include: 'keyword (COVID-19); phrase (Coronavirus disease)', 'Results are sorted by date of publication (most recent on top; maximum of 1000; 25 per page). Resources include: AAS Open Res, bioRxiv, ChemRxiv, F1000Res, Gates Open Res, HRB Open Res, medRxiv, MNI Open Res, PeerJ Preprints, Preprints.org, Research Square, Wellcome Open Res', and 'Reference: Iwema, C. L., LaDue, J., Zack, A. & Chattopadhyay, A. search.bioPreprint: a discovery tool for cutting edge, preprint biomedical research articles. version 2: referees 2: approved. F1000Res 5, 1396 (2021). Link: https://f1000research.com/articles/5-1396/v2'. At the bottom, there is a link to 'Contact the administrator with comments or questions | About search.bioPreprint'.

<https://www.hsls.pitt.edu/preprint>



Rxivist combines biology preprints from bioRxiv and medRxiv with data from Twitter to help you find the papers being discussed in your field. Currently indexing 125,793 papers from 540,074 authors.

- Home
- Paper search
- Overall metrics
- The API
- The dataset
- Email newsletter
- About

The screenshot shows the Rxivist search interface. It features a search bar with the placeholder text 'Enter search terms here (optional)'. Below the search bar are two rows of dropdown menus. The first row has 'Twitter activity', 'all categories', and an empty dropdown. The second row has '20 results per page', 'all repos', and a 'Search' button. A green box highlights the search bar and the first dropdown menu.

Note: 27 Nov 2020 - medRxiv preprints are now indexed in the Rxivist database and should appear in all searches and API queries!

PanLingua

- Multi-lingual preprint search

Sign up for the Rxivist weekly newsletter! (Click here for more details.)

Enter email address here

<https://rxivist.org/>

The screenshot shows the SHARE search interface. At the top, there is a navigation bar with the SHARE logo, 'Discover', 'FAQ', and a 'Sign in with OSF' button. Below this is a blue banner with a blue arrow icon and the text 'This is a partial view'. Below the banner is a message: 'SHARE's open API tools and services help bring together scholarship distributed across research ecosystems for the purpose of greater discoverability. However, SHARE does not guarantee a complete aggregation of searched outputs. For this reason, SHARE results should not be used for methodological analyses, such as systematic reviews.' Below the message is a search bar with the placeholder text 'Search scholarly works'. Below the search bar is a status bar with the text '65,760,930 works as of Jan 5, 2021', 'Found 65,760,930 works in 2.22 seconds', and 'Aggregating 182 sources'. Below the status bar is a 'Clear filters' button and a 'View query body' link. At the bottom, there is a pagination bar with the text '1 2 3 ... 1,000' and '6,575,093 additional pages not shown'.

Repositorien und Preprint-Server: <https://share.osf.io/discover>

Problem: Preprints können sowohl auf Preprint-Servern als auch in Repositorien oder auf anderen Plattformen liegen

<https://crln.acrl.org/index.php/crlnews/article/view/23580/30897>

Tools: Transpose: TRANsparency in Scholarly Publishing for Open Scholarship Evolution [\(https://transpose-publishing.github.io/#/\)](https://transpose-publishing.github.io/#/)

The screenshot shows the Transpose website interface. At the top, there are navigation links: Home, More Information, User Stories, About, and Stats. The main header features the Transpose logo and a search bar with the text "Search journal title, ISSN, DOI, Publisher". Below the search bar, there is an "Add Filter" dropdown menu. The dropdown menu is open, showing a list of filter options: Peer review, Open peer review, Co-review, Preprint (highlighted), and OA. A secondary dropdown menu is also visible, listing various preprint-related policies: Preprint policy, Publication links to preprint version, Preprints allowed in citation list, Media coverage, Preprint licensing policy, Scoop protection, Community review, and Allowed preprint version. The main content area displays a list of search results for journals, including American J, JCO Clinical Cancer Informatics, JCO Global Oncology, JCO Oncology Practice, JCO Precision Oncology, and Journal of Clinical Oncology, all published by Wolters Kluwer. A "Verified" toggle switch is set to "Off".

Filteroptionen für Preprints

The screenshot shows the "Preprints" section of the Transpose website. It includes a definition of a preprint: "A preprint is a version of a research manuscript that has not yet been published by a journal. Preprints are normally submitted to preprint servers before they are peer-reviewed and published as a way to help speed up the dissemination of scientific discoveries and enable the community to provide feedback that might improve the manuscript before publication." Below this definition, there are several sections with titles and descriptions: "Article links to preprint" (Some journals display on the published paper a hyperlink to the preprint version of the manuscript), "Preprint licensing policy" (Some journals have policies about which licenses authors can release their preprints under), "Preprint media policy" (Some journals have policies about how preprints can be discussed with the media or in blogs), "Scoop protection" (Scoop protection was first introduced to protect authors of manuscripts that were "scooped" during the peer review process. With scoop protection, the pending editorial decision for any submitted manuscript would not be affected if a competing paper was published after the submitted manuscript's submission date. Some journals have extended this protection from the date of preprint posting, sometimes conditional on submitting the preprinted work to the journal within a set period of time), and "Preprint community review" (Peer review of preprints by the scientific community. This can occur on dedicated reviewing sites or on the preprint server itself. Some journal editors consider these reviews to supplement the peer review process and further inform their editorial decisions).

<https://transpose-publishing.github.io/#/more-information>

Tools: Sherpa/Romeo

Sherpa Romeo

About Search Statistics Help Support Us Contact Admin

The Lancet

Publication Information

Title The Lancet [English]
Lancet [English]

ISSNs Print: 0140-6736
Electronic: 1474-547X

URL <http://www.thelancet.com/journals/lancet/issue/current>

Publishers Elsevier [Commercial Publisher]

Publisher Policy

Publisher Policy

Open Access pathways permitted by this journal's policy are listed below by article version. Click on a pathway for a more detailed view.

Published Version [pathway a]	£	📄	🕒 None	🔗 CC BY-NC-ND	☰	📁 PMC, Non-Commercial Repository, Research for Development Repository, +2	+		
Published Version [pathway b]	£	📄	🕒 None	🔗 CC BY	☰	📁 Institutional Repository, Subject Repository, PMC, Research for Development Repository, +2	+		
Published Version [pathway c]	📄	£	📄	🕒 None	🔗 CC BY	📁 PMC	☰	📁 Institutional Repository, Subject Repository, PMC, Research for Development Repository, +2	+
Accepted Version [pathway a]	🕒 None	🔗 CC BY-NC-ND	☰	📁 Institutional Website, Author's Homepage			+		
Accepted Version [pathway b]	📄	🕒 6m	🔗 CC BY-NC-ND	☰	📁 Non-Commercial Repository		+		
Accepted Version [pathway c]	📄	🕒 12m	☰	📁 Non-Commercial Repository			+		
Submitted Version	🕒 None	☰	📁 Preprint Repository, Author's Homepage				+		

<https://v2.sherpa.ac.uk/id/publication/23803> (Stand Ende Mai 2021)

Warum Studien vorab registrieren?

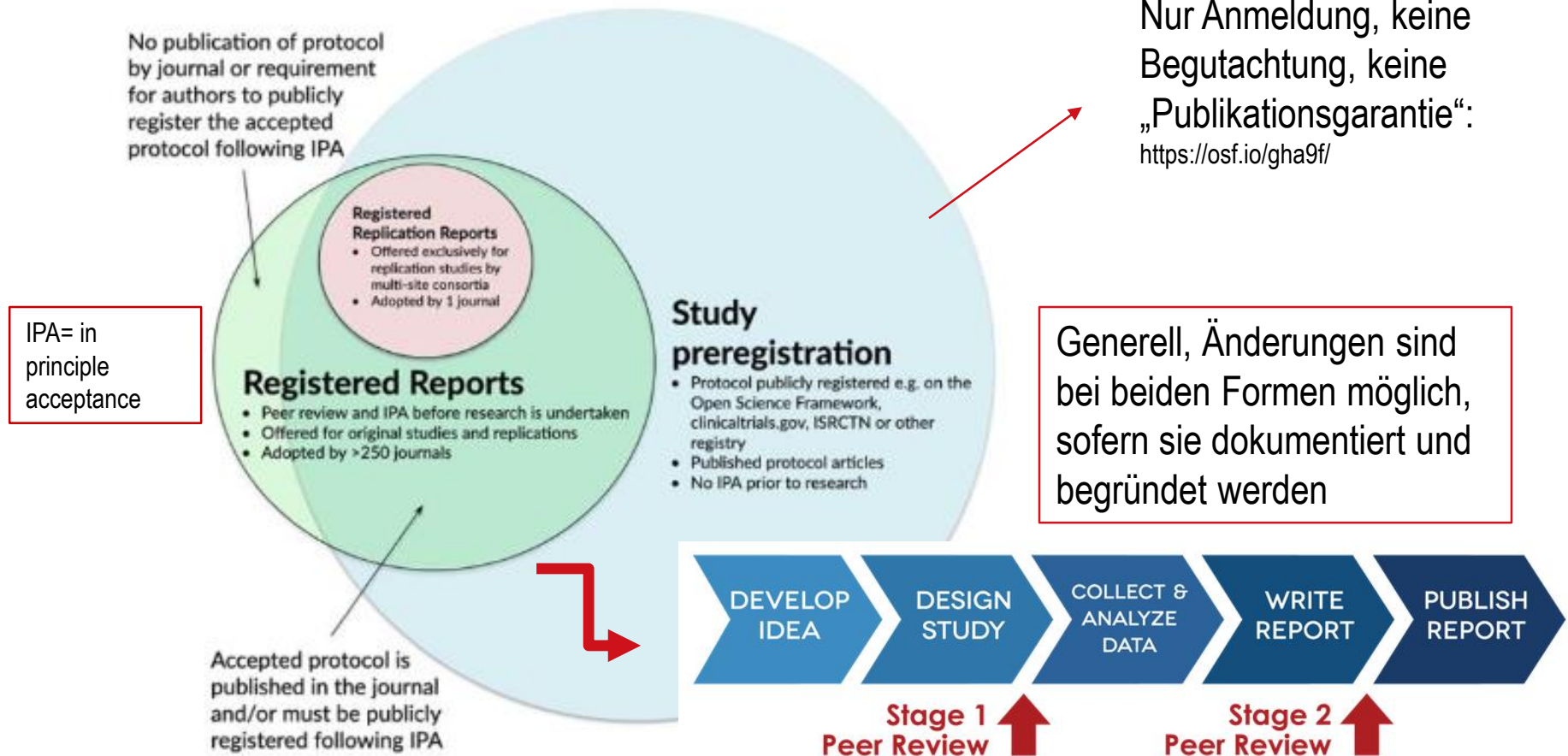
- ▶ **HARKing: Hypothesing After Results are Known:** Hypothese wird an die Daten angepasst (erste Erwähnung: doi: 10.1207/s15327957pspr0203_4).
- ▶ **P-Hacking:** Daten so analysieren, dass die Ergebnisse signifikant sind
- ▶ **File Drawer Effect:** Studien mit negativen (null) Ergebnissen verschwinden in der Schublade, weil Forschende davon ausgehen, dass die Manuskripte ohnehin nicht angenommen werden
- ▶ **Reproduzierbarkeit/Replizierbarkeit** ist beeinträchtigt

Ziel: Trennung von Analyseplan und Datenanalyse

Zusammenhang zwischen Preregistration und Registered Reports

Quelle Abb.: <https://osf.io/preprints/metaarxiv/43298/>

B. Registered Reports vs. Preregistration: How to spot the difference



Quelle Abb.: <https://www.cos.io/our-services/registered-reports>

Preregistration und Registered Reports – Ausgewählte Befunde

- ▶ Artikel, die aus Registered Reports hervorgegangen sind, haben deutlich mehr Null-Resultate: 60% vs. 4% bei „herkömmlichen“ Artikeln ohne Registrierungsverfahren: <https://osf.io/preprints/metaarxiv/43298/>
- ▶ in der Tendenz ähnliche Ergebnisse auch in anderen Studien: : positive Ergebnisse nur zu 50%; „null findings“ liegen bei über 60% für Registered Reports: <https://doi.org/10.1177/25152459211007467>
- ▶ ähnliches Verhältnis bei „Preregistrations“: 48% der vorab registrierten Studien haben signifikante Ergebnisse vs. 66% bei nicht vorab registrierten Analysen: <https://doi.org/10.1007/s10869-020-09695-3>

Preregistration und Registered Reports - Herausforderungen

- ▶ noch zu wenig Erfahrung, ob damit tatsächlich die Probleme gelöst werden
<https://doi.org/10.1080/00461520.2021.1900851>;
- ▶ hoher Mehraufwand bei Registered Reports (allerdings ist nach Einreichung 1/3 der Arbeit bereits getan): <https://doi.org/10.1080/00461520.2021.1900851>
- ▶ Übertragbarkeit auf andere Studientypen klappt nur bedingt bzw. macht Anpassungen erforderlich: z.B. Feldstudien, Qualitative Analysen, Design-Forschung: <https://doi.org/10.1080/00461520.2021.1900851> ; <https://osf.io/preprints/metaarxiv/43298>
- ▶ keine Standardisierung bei Preregistration <https://doi.org/10.1080/00461520.2021.1900851> ; Unsicherheit bei Forschenden, wie mit Abweichungen umgegangen werden soll:
<https://doi.org/10.1007/s10869-020-09695-3>; weiterhin Raum für Manipulationen:
<https://doi.org/10.1097/EDE.0000000000001162>
- ▶ Preregistration verhindert nicht, dass negative Ergebnisse abgelehnt werden oder in der Schublade verschwinden: <https://doi.org/10.1177/25152459211007467>

Was wiss. Bibliotheken tun können

- ▶ Bewusstseinsbildung bei Forschenden (insbesondere in den Fächern, die gerade Bedarf an Vorabregistrierungen jeglicher Art signalisieren, z.B. Psychologie und Sozialwissenschaften)
- ▶ Benennen von Infrastruktur, z.B. AsPredicted.org, Open Science Foundation, www.researchregistry.com
- ▶ Bereitstellung von Infrastruktur?
- ▶ Bibliotheken als Zeitschriftenbetreibende: Einwirken auf das Herausgebendengremium, sich mit Registered Reports auseinanderzusetzen bzw. dies als Option in Betracht zu ziehen

Empfehlungen mit Bezug zu Preregistration

Table 3 Recommendations for implementing study preregistration

From: [Study Preregistration: An Evaluation of a Method for Transparent Reporting](#)

	Recommendations
Researchers	<ul style="list-style-type: none"> • Solicit advice from colleagues prior to registration • Preregister a decision tree • Transparently report deviations from preregistration • Explore data; report confirmatory and exploratory analyses separately. Leverage holdout datasets if needed. • Interpret null results; explain their contribution to the field • Preregister contingency plans for data collection and study design (e.g., how will you collect data if an organizational partner pulls out of data collection?) • Make preregistrations public after publication to allow other researchers to learn from your design and issues encountered during the study • If conducting multilevel research, preregister cutoff statistics to justify aggregation and plans to handle missing data • If using an ESM design, preregister how many surveys given per week and plans for how to shorten measures • If using archival data, transparently report when hypotheses were created in relation to when data were viewed and decisions around how to combine particular variables, cut-off dates, and/or inclusion criteria related to characteristics of firms or institutions
Graduate training	<ul style="list-style-type: none"> • Train graduate students on how to go through a preregistration process • Teach graduate students to ask research questions that are interesting even if there are null results • Teach students how to write-up null results (something rarely seen in top management articles) • Preregister Master's theses and dissertations
Reviewers	<ul style="list-style-type: none"> • Participate in reviewer training (e.g., basic reviewer training by SIOP; advanced reviewer training by CARMA and Organizational Research Methods) • Read and review preregistrations • Record comments and scores on the Introduction and Method section prior to reading Abstracts, Results, and Discussion sections.
Practitioners	<ul style="list-style-type: none"> • Record a priori decisions to the extent possible and transparently report deviations that may influence the outcomes of a study
Editors	<ul style="list-style-type: none"> • State on the journal's website that the process of preregistration adds value • Publish preregistered reports • Encourage reviewer training • Evaluate journal policies against the TOP standards. Seek to improve journal's score from year to year (https://cos.io/about/news/new-measure-rates-quality-research-journals-policies-promote-transparency-and-reproducibility/)
Funding agencies	<ul style="list-style-type: none"> • Require study preregistration of funded grants to ensure that taxpayer dollars are used appropriately

Bibliotheken tauchen hier als Akteurinnen leider nicht auf! Trotzdem Ansatzpunkte?

Quelle Tabelle: <https://link.springer.com/article/10.1007/s10869-020-09695-3/tables/3>

Tools: Infos für Zeitschriftenbetreibende für Registered Reports

- ▶ Handreichungen für Herausgebende vom Centre for Open Science

Resources for Editors

- [Fact sheet for editors](#)
- [Template guide to authors and reviewers](#)
- [Templates of reviewer invitation letters and author decision letters](#)
- [Implementation checklist](#)
- [Webinars: for Editors](#) and for [Early Career Researchers](#)
- See the "FAQ" tab on the top tab for more answers.

Quelle Abb. <https://www.cos.io/initiatives/registered-reports>

Tools: Liste mit Zeitschriften, die Registered Reports anbieten

Registered Reports | Participating Journals | Details & Workflow | Resources for Editors | For Funders | FAQ | Allied Initiatives

Currently, **288** journals use the Registered Reports publishing format either as a **regular submission option** or as part of a single **special issue**. Other journals offer **some features** of the format. This list will be updated regularly as new journals join the initiative.

For an article type to qualify as a registered report, the journal policy must include at least these features:

- Peer review occurs prior to observing the outcomes of the research.
- Manuscripts that survive pre-study peer review receive an in-principle acceptance that will not be revoked based on the outcomes, but only on failings of quality assurance, following through on the registered protocol, or unresolvable problems in reporting clarity or style.

See also this [table](#) that compares the specific features of Registered Reports at different outlets or a summary of each journal [here](#).

If you are considering a Registered Reports submission but not sure how to get started, a good way to begin is to **(a)** read the specific author guidelines included in the list of participating journals below, **(b)** complete [this template protocol](#) and then **(c)** expand the template protocol into a full Stage 1 manuscript.

[Journals that have adopted Registered Reports](#) | [Special Issues](#) | [Some Features](#)

Stand Ende Mai
2021:
288 Zeitschriften
bieten
„Registered
Reports“ an

Journal	Notes
AAS Open Research	Author Guidelines
Academia Journal of Stroke	Details to follow
Acta Psychologica	Guidelines
Addiction Research & Theory	Guidelines

Quelle Abb.: <https://www.cos.io/initiatives/registered-reports>

Vielen Dank!

Dr. Jasmin Schmitz

PUBLISSO

Publikationsberatung

Gleueler Str. 60

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The screenshot shows the PUBLISSO website interface. At the top, there is a navigation bar with the PUBLISSO logo (ZB MED-Publikationsportal, Lebenswissenschaften) on the left, a 'PUBLISSO-Kontakt' dropdown menu, and 'Login' and 'DE EN' language options on the right. Below the navigation bar, there is a search bar labeled 'Seitensuche' and a main menu with items: PUBLIZIEREN, BERATEN, FORSCHUNGSDATENMANAGEMENT, DIGITALE LANGZEITARCHIVIERUNG, and WIR FÜR SIE. The main content area is titled 'Startseite > Beraten' and features a section 'Open Access beraten'. This section includes a paragraph: 'Die Publikationsberatung hilft Ihnen gerne bei allen Fragen zu den Themen Digitales Publizieren und Open Access in den Lebenswissenschaften weiter. Das Themenspektrum der Beratung umfasst:' followed by a bulleted list of services: 'Open-Access-Publikation von wissenschaftlichen Ergebnissen...', 'Veröffentlichung von Forschungsdaten...', and 'Gründung von Open-Access-Zeitschriften...'. To the right of this text is a 'Kontakt' section with a photo of Dr. Jasmin Schmitz and her title: 'Leitung Publikationsberatung / Open Access - Digitale Langzeitarchivierung - Forschungsdaten'.