

E03

Science Writing in the Age of AI: *Where have all the authors gone?*

Class Logistics Overview

— Need help? Ask **Lusia Veksler Bishri**

Use messages feature in Whova or email: lveksler@ucsd.edu

- 3 sessions over three days
 - 7-10AM PDT (UTC -7) | 14:00 UTC |16:00 CEST
 - [Syllabus/Agenda](#)
-
- Whova? <https://whova.com/portal/webapp/R8ucvi6PtnZVxYdnPODS/>
 - Zoom:
<https://ucsd.zoom.us/j/97200988953?pwd=enbanbJPnTtRaMPR7FUWBKJeVOPl5t.1>
 - Polls: <https://ahaslides.com/OI6U2>



Day 1: Tuesday, July 22,
2025

Theme: Evolving Concepts of Authorship and
Expectations for Attribution and Reproducibility
in the Age of AI



Welcome and Course Overview

Introduction to FSCI and class objectives
(Natalie Meyers/Francis Crawley)



Polls: <https://ahaslides.com/OI6U2>

Course Topics:

- Evolving Concepts of Authorship and Expectations for Attribution and Reproducibility in the Age of AI
- Ethics, Accountability, and Integrity in AI-Assisted Writing and Research
- Practical Strategies and Global Research Assessment

Let's get to know AI together

Go to <https://ahaslides.com/0I6U2>



7:20 Panel 1

Let's talk about Global perspectives on journal policies, decentralization of authorship, roles of editors, peer-reviewers, authors

Panelists: Gitanjali Yadav/SE Asia, Chiedozie Ike/Africa with Francis Crawley,
Moderator

These will be 8-10 minutes presentation(s) followed by Q&A

Africa Perspectives on journal policies, decentralisation of authorship, roles of editors, peer-reviewers, and authors

Chiedozie IKE

MBBS, MPH, MSc, FWACP, MNIM, CIP

Africa Perspectives

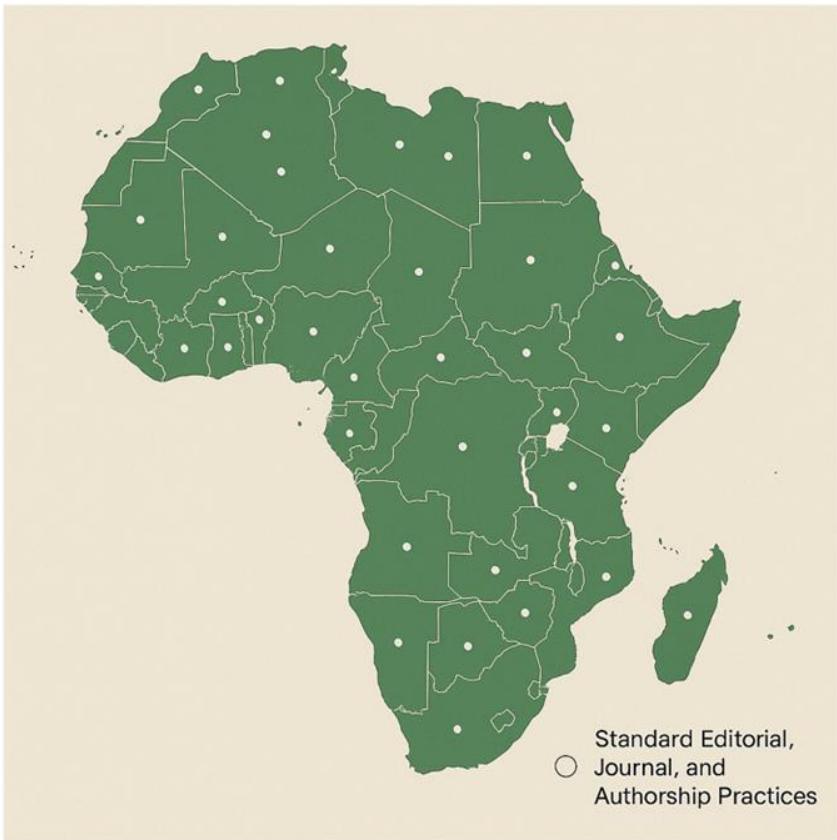
1. Historical imbalance and the African Charter

2. Progressive steps towards Open Access

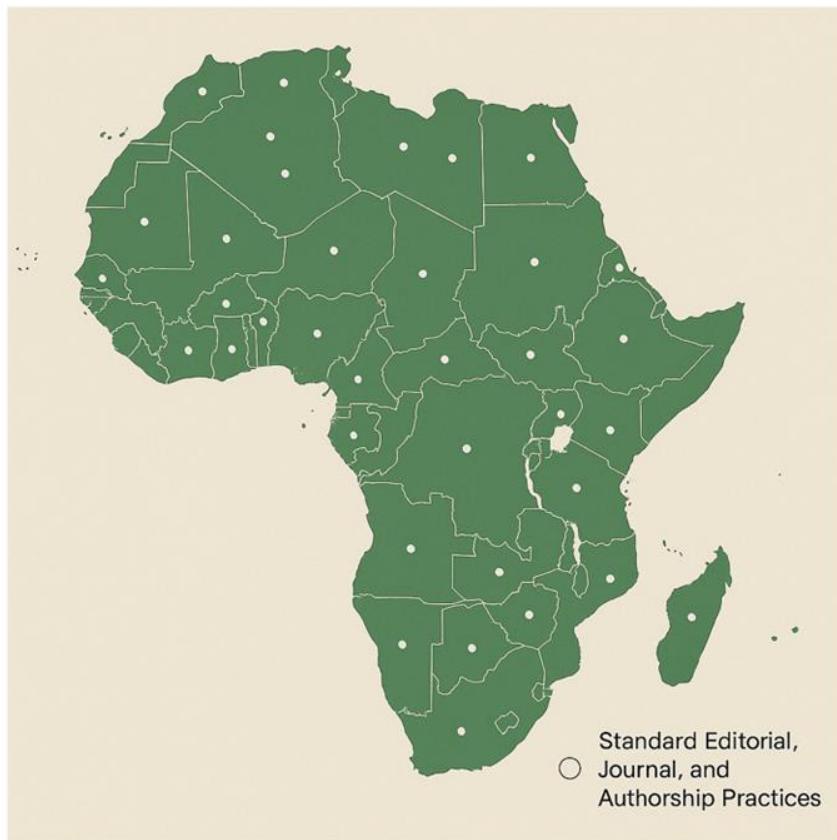
3. Towards inclusivity and shared value- The Open Access and community Authorship framework

4. Proposing a baby-step gradually maturing approach towards decentralization and reframing of knowledge creation.

- Africa in Scholarly Publication
- ✓ Historically **marginalised** in the Global Knowledge contribution space.
- ✓ Continues to **struggle** to maintain a voice, no matter how **faint**, in innovation, science, technology and the Humanities.



-
- Africa in Scholarly Publication
 - ✓ So, the continent **focuses** primarily on **being heard** equally in global decision-making.
 - ✓ Having a traditional (attribution) system where authorship becomes **an achievement** and the **only authoritative voice**.





Africa Research Charter

AFRICA CHARTER FOR TRANSFORMATIVE RESEARCH COLLABORATIONS

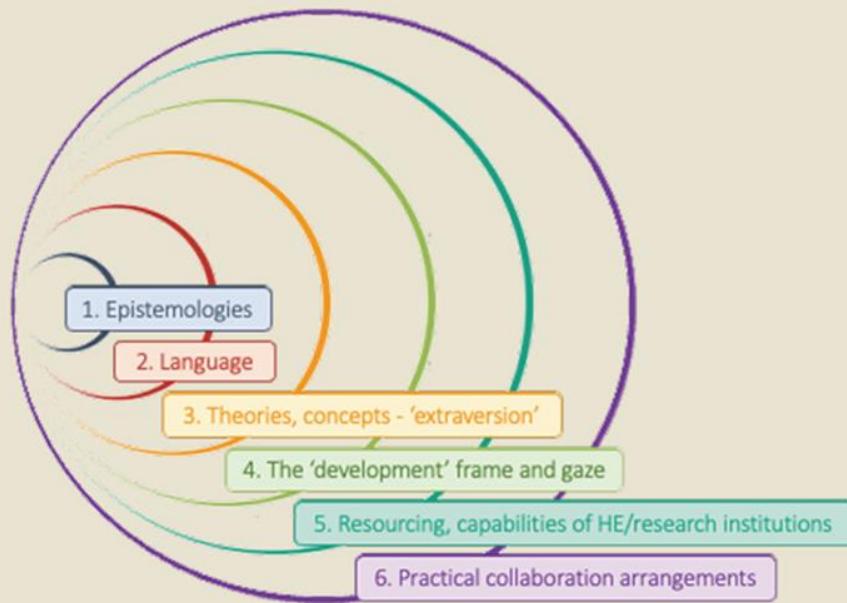
DEVELOPMENT, AMBITIONS, ENDORSEMENT AND JOURNEY TO
IMPLEMENTATION



Africa Charter on Transformative Research
Collaborations

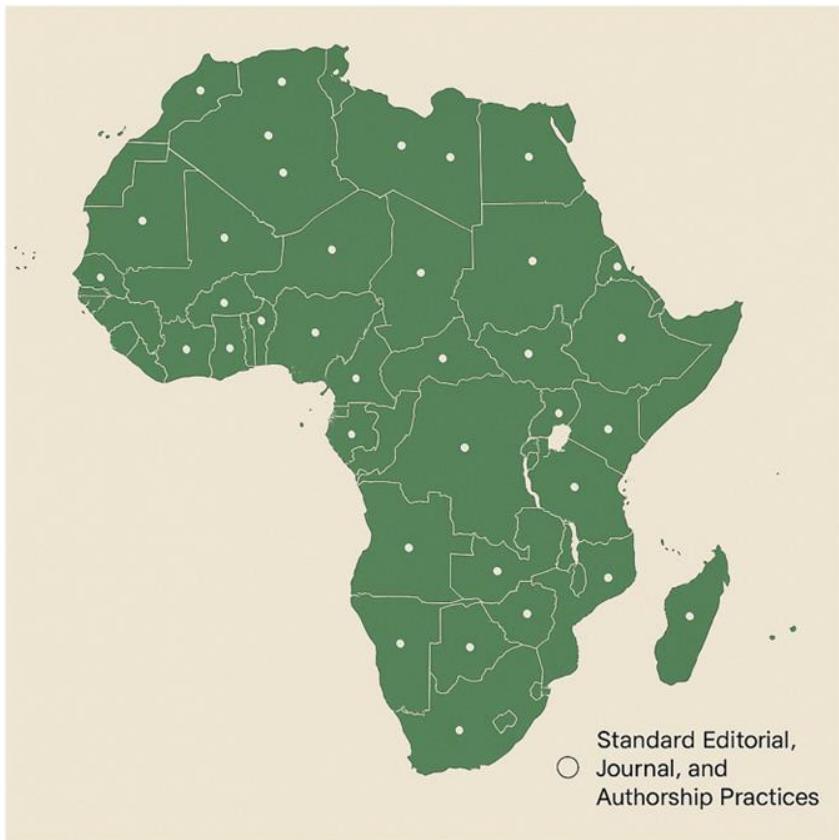


Schema: Uneven playing field in Africa - global production of scientific knowledge: multilayered power imbalances

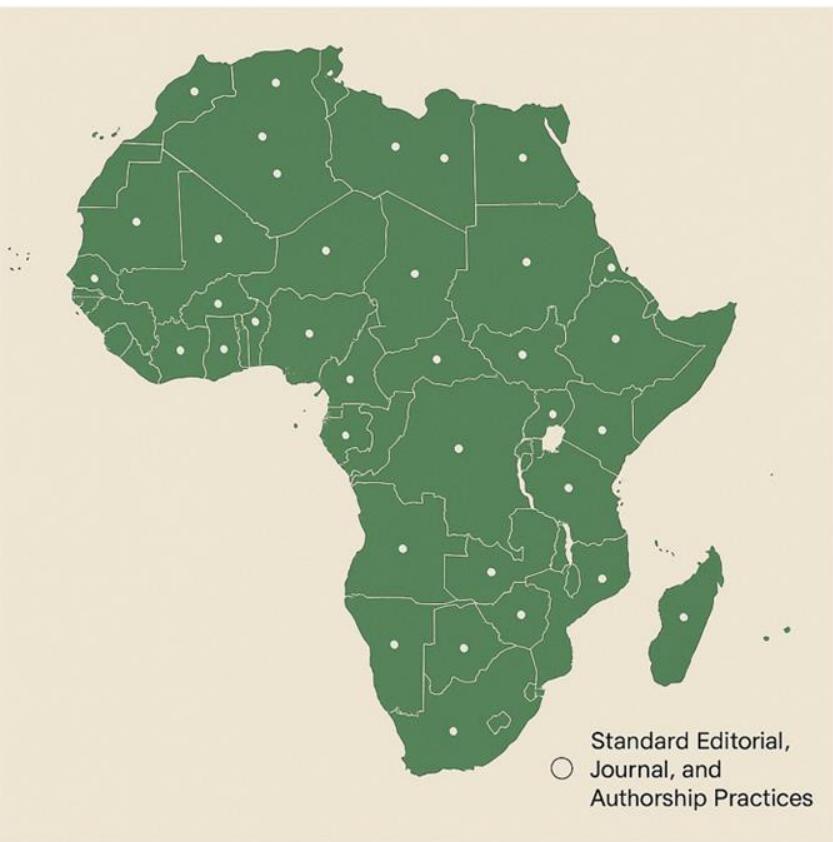


The multi-layered power **imbalances** in the generation of scientific knowledge are perhaps best imagined as a set of concentric circles. At the core (layers 1-3) are the **predominance of Western-centric** and the **devaluing** of other epistemologies, languages, theories and concepts in the generation of new knowledge— and a resultant orientation to the 'global North' as the natural site of scientific knowledge production. A connected, next layer of profound **asymmetry**¹ arises from the logic of the development frame (layer 4), which more often than not underpins research conducted in/on or for Africa. The frame **delimits** the areas and predefines problematics and solutions deemed relevant for inquiry in the continent— and imposes a **unidirectional 'gaze'**² that renders Africa as **deficient**, and a site for investigation and assistance by global North actors. Rarely is the gaze returned and rarer still, if ever, is it reversed. A final, related, major power imbalance arises from the vast **disparities** in the material resourcing, including in physical and data infrastructures that African and global North Universities have at their disposal (layer 5). Together, layers 1-5 give rise to and shape the observed asymmetries in practical collaboration arrangements (layer 6).

-
- Africa in Scholarly Publication
 - ✓ But Africa is not residing in the past
 - ✓ While pushing for social justice, it has continued to foster **cooperation** with global science think tanks.



-
- Africa in Scholarly Publication
 - ✓ This forward-thinking continent has subscribed to, signed and joined to push the global research agenda
 - ✓ The establishment of academies, networks, repositories, databases,



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News

The Accra Declaration on Research & Innovation Cooperation within and with Africa

[F1000Research](#)

BROWSE GATEWAYS & COLLECTIONS HOW TO PUBLISH ABOUT

Search SUBMIT YOUR RESEARCH

MY RESEARCH SIGN IN

Trusted & Transparent Publishing

F1000Research is an open research publishing venue for researchers across all disciplines.

Accelerate the impact of all outputs from your research with rapid publication, review, and citation.

Resources (Publications & Policies)

We offer a variety of reports and documents outlining and aligning the agenda for science, technology and innovation on the continent

[Publications](#) [Policies](#) [Logo Toolkit](#)

- [Data Privacy and Protection Policy](#) ▾
- [The AAS Cost Guidelines](#) ▾
- [Conflict of Interest Policy](#) ▾
- [Open Access and Publishing Policy](#) ▾
- [Acceptance of Grants Policy](#) ▾
- [Policy on Undertakings](#) ▾
- [Intellectual Property and](#)

Open Access and Publishing Policy

Purpose

The purpose of this policy is to provide direction for the AAS, those that it funds and its sponsors to make their research and its associated data freely available to others, and to ensure that research resulting from AAS funding is optimized for the benefit of those who produce it — not for its monetization by the publisher — and for the greater advancement of science.

[Who we are](#) ▾ [Programmes](#) ▾ [News & Events](#) ▾ [Opportunities](#) ▾ [Fellowship](#) ▾

- [Policy](#) ▾
- [Materials and Consumables Policy](#) ▾
- [Maternity, Paternity, Adoption and Sick Leave Policy](#) ▾
- [Travel, Subsistence and Visa Costs Policy](#) ▾
- [Tobacco Funded Research Policy](#) ▾
- [Scientific Citizenship Policy](#) ▾

The intention of the AAS is to ensure that the research it sponsors is made available for others to reproduce, extend, refute, confirm, etc., to ensure maximum impact of the Academy's investment.

b1 Budgetary Provisions

The AAS supports open and unrestricted access to the published output of its funded innovations and research. In doing so, the AAS will provide grant holders with a budget allocation for Article Processing Charges (APCs) for publishing work Open Access within the following constraints:

- APCs not to exceed US\$ 2,500 per full research article, including data deposition.

Report on Grouped Peer Review of Scholarly Journals in Other Disciplines



Files

Report on Grouped Peer Review of Scholarly Journals in Other Disciplines.pdf (2.21 MB)

Date

2023-06

Authors

Academy of Science of South Africa (ASSAf)

Publisher

Academy of Science of South Africa (ASSAf)

Sponsorship

Academy of Science of South Africa (ASSAf)

Abstract

The peer review report entitled Report on Grouped Peer Review of Scholarly Journals in Other Disciplines is the 14th in a series of discipline-grouped evaluations of South African scholarly journals. This is part of a scholarly assurance process initiated by the Academy of Science of South Africa (ASSAf). The process is centered on multi-perspective, discipline-based evaluation panels appointed by the Academy Council on the recommendation of the Academy's Committee on Scholarly Publishing in South Africa (CSPISA). This detailed report presents the peer review panel's consolidated consensus reports on each journal and provides the panel's recommendations in respect of DHET accreditation, inclusion on the SciELO SA platform and suggestions for improvement in general. The main purpose of the ASSAf review process for journals is to improve the scholarly publication in the country that is consonant with traditional scholarly practices.

Description

192 pages

Contributor ORCIDs

Du Plessis, Willemien  ; Erasmus, Lourens  ; Kagee, Ashraf  ; Kruger, Salome  ; Laher, Sumaya  ; Mbewana, Sandiswa  ; Mda, Thobeka  ; Mokghele, Salmina  ; Morrell, Robert  ; Msindo, Enochent  ; Nadar, Sarojini  ; Nkomo, Dion ; Nyasulu, Peter ; Ocholla, Dennis ; Pillay, Tahir ; Piper, Laurence ; Shale, Karabo ; Tati, Gabriel ; Van Coller, Helena

Subject

Geography journals , Population journals , Gender journals , Health journals , Humanities journals , Law journals , Social sciences journals , Journal peer-reviews , SDG 4

Resources/Recommended Reading:

Committee on Publication Ethics (COPE): [Core Practices](#)

Committee on Publication Ethics (COPE): [Guidelines](#)

Committee on Publication Ethics (COPE): [Principles of Transparency and Best Practice in Scholarly Publishing](#)

Council of Science Editors: [White Paper on Publication Ethics](#)

Department of Higher Education Policy (DHET): [Research Outputs Policy](#)

Directory of Open Access Journals (DOAJ): [Publishing Best Practice and Basic Standards for Inclusion](#)

SciELO: Criteria, policy and procedures for admission and permanence of scientific journals in the South African Collection of SciELO: [SciELO SA Criteria](#)

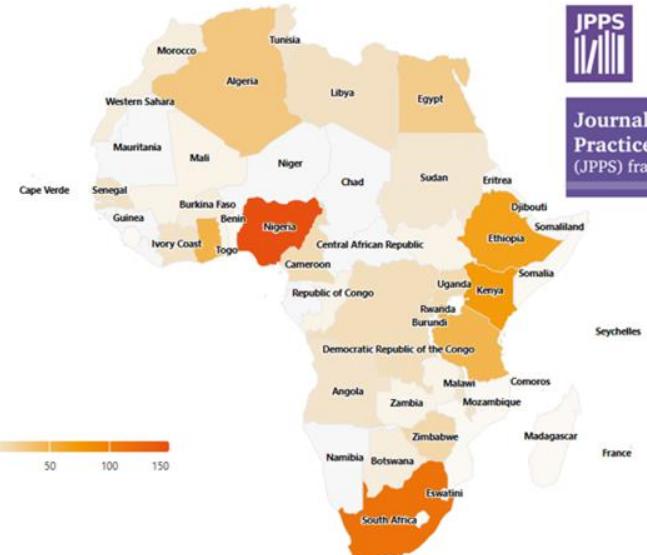


**Code of Best Practice
in Scholarly Journal Publishing, Editing
and Peer Review**

March 2018



AJOL features journals from 41 Countries:



Home About JPJS Assessed Journals JPJS criteria News FAQ Contact Other Sites

Journal Publishing Practices and Standards (JPJS) framework



Memberships:

- AJOL CEO recently elected as Board Member of [QASPA](#)
- AJOL is a member of the [Committee on Publication Ethics \(COPE\)](#)
- AJOL previously served as an [elected member](#) of the [CrossRef](#) Board of Directors
- AJOL is a [member](#) of [African Library and Information Associations and Institutions \(AfLIA\)](#)
- AJOL served on the [International Advisory Committee for SPARC Africa](#)
- AJOL is a past member of the [Directory of Open Access Journals \(DOAJ\)](#) Advisory Committee

Welcome to African Journals Online (AJOL)!

Researchers and policy-makers need access to contextually-relevant quality research publications from Africa in order to develop solutions to address the continent's challenges in health, education, climate change & under-development.

AJOL, the indexing platform of quality African-published scholarly journals, is a Non-Profit Organisation (since 1998) works to increase global & continental online access, awareness, quality & use of African-published peer-reviewed research.



Promoting access to African Research:

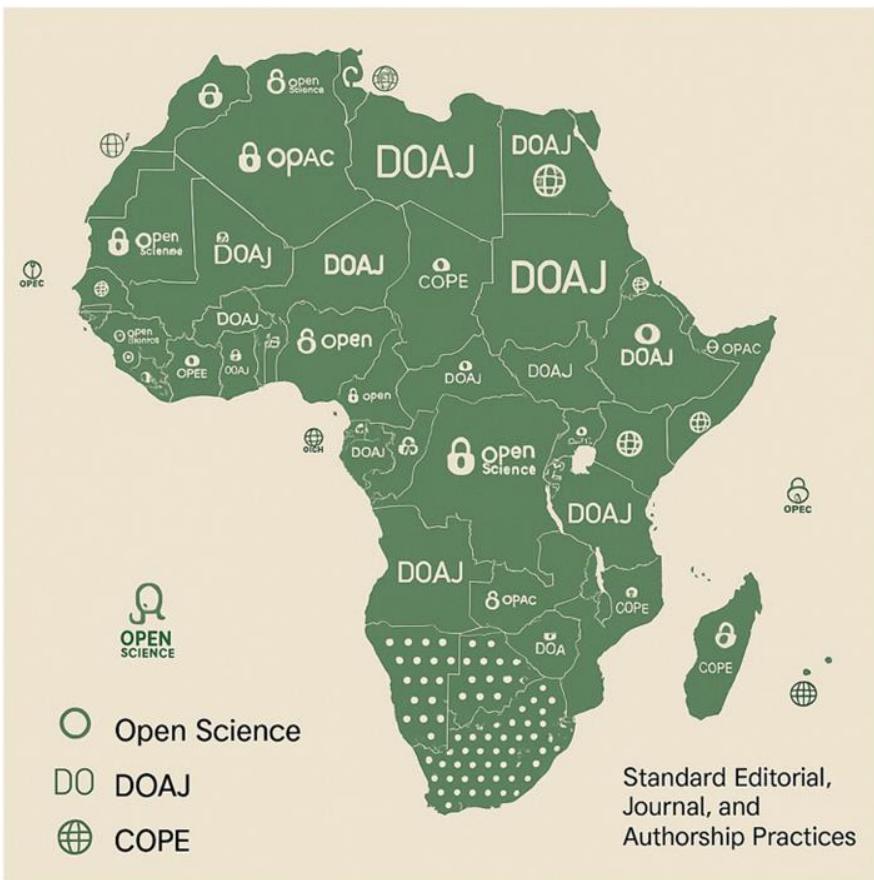
For 25 years, AJOL has been increasing global access to research published in African journals. Millions of African research papers (50% by repeat users from Africa) are downloaded from AJOL each month, increasing the African and global reach of Africa's research output.

AJOL offers a unique [Journal Publishing Practices and Standards \(JPPS\)](#) system to assess each partner journal, based on publishing practices, informed by globally-, regionally- and nationally-accepted standards and the input of hundreds of journal editors from developing countries.

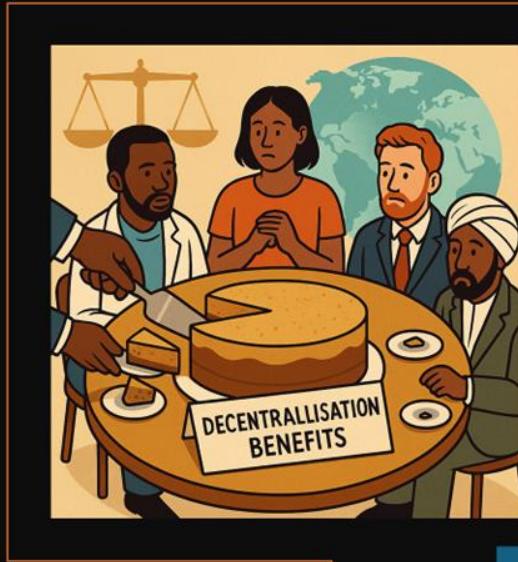
Top 10 countries by number of publications in AJOL.

Country	# pubs
Nigeria	25,902
South Africa	24,755
United States	5,528
China	3,919
India	3,615
Ethiopia	3,132
United Kingdom	2,899
Ghana	2,723
Kenya	2,461
Tanzania	1,970

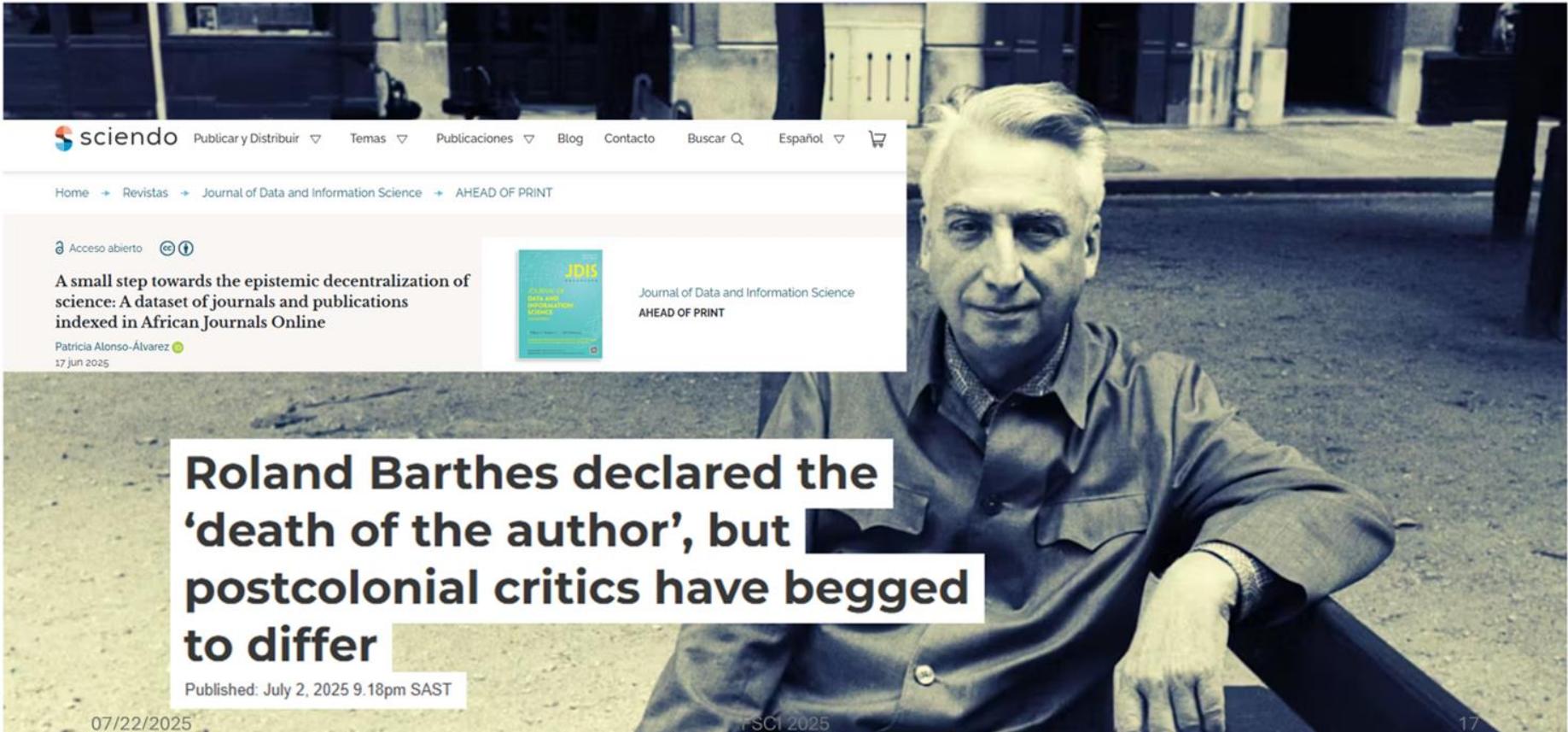




De-Centralisation of Authorship- Who does this serve (better)?



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The image is a composite of two parts. The left side shows a screenshot of the sciendo website. At the top, there's a navigation bar with links for 'Publicar y Distribuir', 'Temas', 'Publicaciones', 'Blog', 'Contacto', 'Buscar Q.', 'Español', and a shopping cart icon. Below the navigation is a breadcrumb trail: 'Home' → 'Revistas' → 'Journal of Data and Information Science' → 'AHEAD OF PRINT'. A small note indicates 'Acceso abierto' (Open Access) with icons for CC-BY and CC-NC. The main content area features a green thumbnail for the journal 'Journal of Data and Information Science' (JDIS) with the subtitle 'A small step towards the epistemic decentralization of science: A dataset of journals and publications indexed in African Journals Online'. It also shows the author's name, Patricia Alonso-Álvarez, and the publication date, 17 jun 2025. The right side of the image is a black and white photograph of Roland Barthes sitting outdoors, resting his head on his hand, looking slightly to the side.

**Roland Barthes declared the
'death of the author', but
postcolonial critics have begged
to differ**

Published: July 2, 2025 9:18pm SAST

07/22/2025 FSCI 2025 17

Roland Barthes in Paris, June 1978. Sophie Bassouls/Getty Images



- Am Psychol. Author manuscript; available in PMC: 2019 Oct 1.

Published in final edited form as: Am Psychol. 2018 Jan 22;73(7):884–898. doi: [10.1037/amp0000167](https://doi.org/10.1037/amp0000167)

Community-based Participatory Research (CBPR): Towards Equitable Involvement of Community in Psychology Research

Susan E Collins¹, Seema L Clifasefi², Joey Stanton³, Kee J E Straits⁴, Patricia Rodriguez Espinosa⁵, Michele P Andrasik⁶, Kimberly A Miller⁷, Victoria E Orfaly⁸; The LEAP Advisory Board⁹, Eleanor Gil-Kashiwabara¹⁰, Andel V Nicasio¹¹, Starlyn M Hawes¹², Lonnie A Nelson¹³, Bonnie M Duran¹⁴, Nina Wallerstein¹⁵

- Author information
- Article notes
- Copyright and License information

PMCID: PMC6054913 NIHMSID: NIHMS882320 PMID: [29355352](https://pubmed.ncbi.nlm.nih.gov/29355352/)

The Practice of 'Decentralised' Authorship in Africa

- Collective, UrbanBirth. "Improving Complex Health Systems and Lived Environments for Maternal and Perinatal Well-being in Urban Sub-Saharan Africa: The UrbanBirth Collective." *Journal of Global Health*, vol. 15, 2025, p. 03009, <https://doi.org/10.7189/jogh.15.03009>. Accessed 21 Jul. 2025.

journal of  **global** *health*

► J Glob Health. 2025 Jan 23;15:03009. doi: [10.7189/jogh.15.03009](https://doi.org/10.7189/jogh.15.03009) ↗

Improving complex health systems and lived environments for maternal and perinatal well-being in urban sub-Saharan Africa: the UrbanBirth Collective

UrbanBirth Collective

▼ Author information ▶ Article notes ▶ Copyright and License information

✉ Correspondence to: Lenka Beňová Institute of Tropical Medicine Nationalestraat 155, 2000 Antwerp Belgium
lbenova@itg.be

PMCID: PMC11755202 PMID: [39846158](https://pubmed.ncbi.nlm.nih.gov/39846158/)

Welcome to African Journals Online (AJOL)!

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Democratizing Authorship in Africa

F1000



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F1000 extends pioneering Open Research Africa publishing platform to all authors in Africa

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[Other articles](#)

**Accountability in Research >**

Ethics, Integrity and Policy

Volume 32, 2025 - [Issue 5](#)

Enter keywords, authors, DOI, etc

[Submit an article](#)[Journal homepage](#)

3,782

Views

7

CrossRef
citations to date

13

Altmetric

Research Article

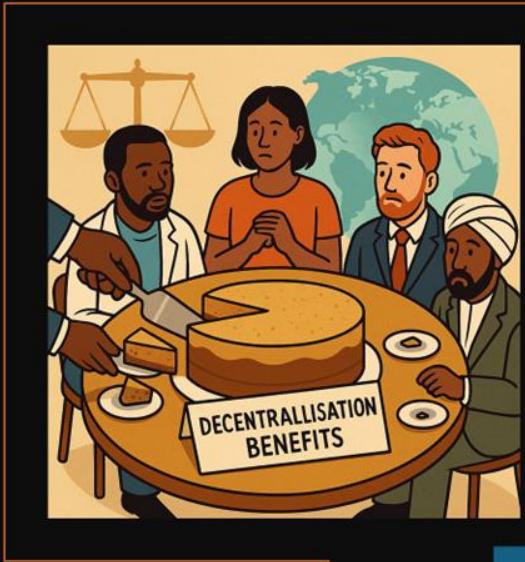
Group authorship, an excellent opportunity laced with ethical, legal and technical challenges

Mohammad Hosseini  , Alex O. Holcombe , Marton Kovacs , Hub Zwart , Daniel S. Katz  & Kristi Holmes 

Pages 762-784 | Published online: 06 Mar 2024

 Cite this article <https://doi.org/10.1080/08989621.2024.2322557> Check for updates

Decentralisation of Authorship - Will our **share** be further reduced?



”

References

- Collins, Susan E., et al. "Community-based Participatory Research (CBPR): Towards Equitable Involvement of Community in Psychology Research." *The American Psychologist*, vol. 73, no. 7, 2018, p. 884, <https://doi.org/10.1037/amp0000167>. Accessed 21 Jul. 2025.
- F1000Research. F1000 extends pioneering Open Research Africa publishing platform to all authors in Africa. Page available at [F1000 extends pioneering Open Research Africa publishing platform to all authors in Africa - F1000](#)
- Collective, UrbanBirth. "Improving Complex Health Systems and Lived Environments for Maternal and Perinatal Well-being in Urban Sub-Saharan Africa: The UrbanBirth Collective." *Journal of Global Health*, vol. 15, 2025, p. 03009, <https://doi.org/10.7189/jogh.15.03009>. Accessed 22 Jul. 2025.

References

- Hosseini, M., Holcombe, A. O., Kovacs, M., Zwart, H., Katz, D. S., & Holmes, K. (2024). Group authorship, an excellent opportunity laced with ethical, legal and technical challenges. *Accountability in Research*, 32(5), 762–784.
<https://doi.org/10.1080/08989621.2024.2322557>
- Association of African Universities. African Charter on Transformative Research Collaborations. Page available at
<file:///C:/Users/HP/Downloads/Africa-Charter-for-Transformative-Collaborations.pdf>

Video Story Telling: Science Writing in the Age of AI (Artificial Intelligence) - Chiedozie G Ike



Authorship may dissolve into algorithms' cloud.

8:00 Interactive Activity and Discussion

Staying Current, challenging assumptions about best practices for AI-generated content, authorship, attribution, citation, and disclosure

This session will include a few remarks and then we'll do a hands on activity followed by a short poll

Facilitator(s): Natalie Meyers & Gary Price

Resources & Papers

- <http://bit.ly/gpFSCI> Gary's List of Resources
- [Papers \(https://www.zotero.org/groups/4922635/aidv-wg/library\)](https://www.zotero.org/groups/4922635/aidv-wg/library) Natalie's list of papers

Because keeping up is hard to do! So, don't do it alone!

Attribution or Disclosure?

A nuance with a difference ?

Disclosure:

Resnik, D. B., & Hosseini, M. (2025). Disclosing artificial intelligence use in scientific research and publication: When should disclosure be mandatory, optional, or unnecessary? *Accountability in Research*, 1–13.
<https://doi.org/10.1080/08989621.2025.2481949>

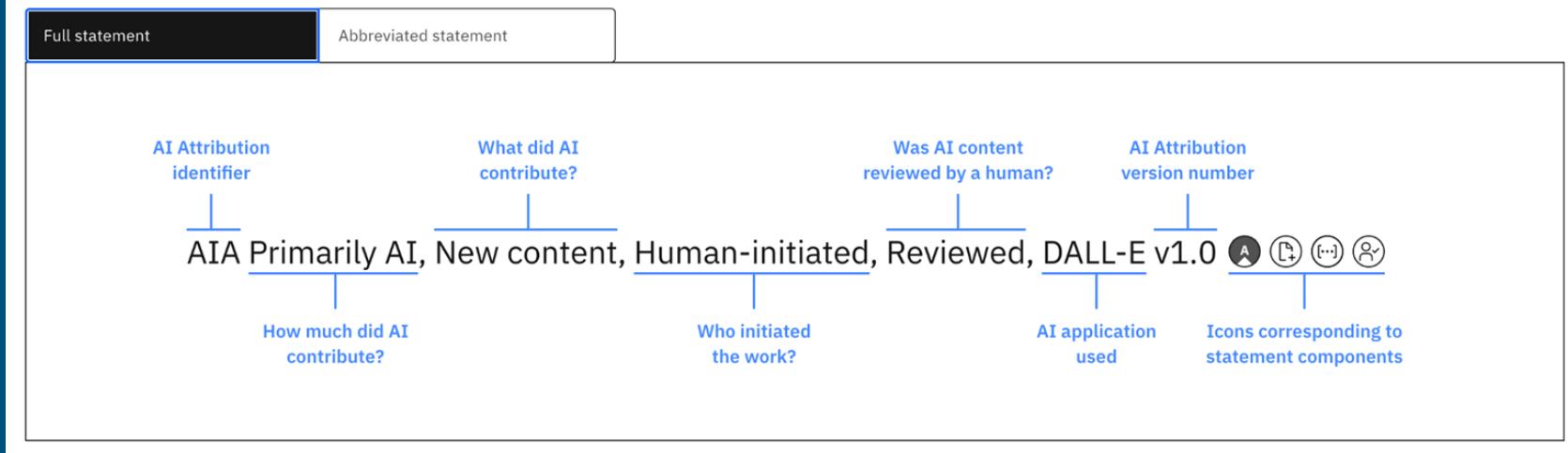
Weaver, Kari. "The Artificial Intelligence Disclosure (AID) Framework: An Introduction." *College & Research Libraries News* [Online], 85.10 (2024): 407. Web. 21 Jul. 2025

Attribution: He, Jessica, Stephanie Houde, and Justin D. Weisz. "Which contributions deserve credit? perceptions of attribution in human-ai co-creation." In *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems*, pp. 1-18. 2025.

AI Attribution Toolkit: <https://aiattribution.github.io/>

IBM Attribution Toolkit Full Statement

The attribution statement comes in two forms: full and abbreviated. Both include optional icons.



IBM Attribution Toolkit Abbreviated Statement

The attribution statement comes in two forms: full and abbreviated. Both include optional icons.

Full statement	Abbreviated statement
<p>AI Attribution identifier</p> <p>What did AI contribute?</p> <p>Was AI content reviewed by a human?</p> <p>AI Attribution version number</p>	<p>AIA PAI, Nc, Hin, R, DALL-E v1.0</p> <p>How much did AI contribute? Who initiated the work? AI application used Icons corresponding to statement components</p>

Hands on: Exercise One

let's share our current use of AI tools

<https://ahaslides.com/0I6U2>



Hands on: Exercise One

You'll be Using poe.com - Basic registration is free. This service provides access to multiple large language models and a variety of specialty GPTs.

[LMArena.com](https://lmarena.com). No need to register but make sure to bookmark this one

- Exercise: Compare how one model changes/edits your writing vs. another.
- Exercise (2): Ask one model to write a prompt for a specific task. Compare the response by using another model

Or, in your breakout, divide it with a classmate and compare - Duelling prompt/output response comparison is how Gary and Natalie enjoy testing model responses

8:30 Module 1: Redefining Authorship in Scholarly Communication

Exploring how AI challenges expectations about traditional editorial workflows and authorship (AG, ICMJE, COPE) vis a vis authors' rights, intellectual contribution, citation, and expectations of reproducibility
Presenter(s): Lili Zhang

Reimagining Journal Platforms for the Age of AI

Reinforcing Research Integrity and
Publishing Ethics

Promita Chatterji, Ph.D.
Director of Journals, Digital Commons
FSCI
July 2025

Angela Welch, Research Integrity & Publishing Ethics
Centre of Expertise



Advancing human progress together

9:00 Module 2:Reimagining Journal Platforms for the Age of AI

Presenter(s): Promita Chatterji

Research integrity and publishing ethics have undergone a revolution



Article
retractions are
increasing due to
research fraud



Publishing ethics cases
are **more complex**,
requiring **specialist**
investigative skills and
capacity



Complex networks of
individuals and
organizations are
driving **systematic**
manipulation of the
editorial process

Upholding research integrity is challenging: unethical behavior may occur at many stages of the research and editorial process and is deliberately hidden from Editors



Conduct research

- Fabricating or manipulating data
- Not getting the correct ethical consents to conduct the research
- Not getting patient consent for clinical research

Organise and write

- Purchasing authorship on a manuscript where they have made no contribution
- Senior authors inserting themselves into papers where they have made no contribution (gift authorship)
- Plagiarising other's work or using tools that disguise plagiarism by paraphrasing or 'spinning'
- Redundant publication (known as salami slicing)
- Not following reporting standards

Submit to a journal

- Submitting to multiple journals at the same time (duplicate submission)
- Impersonating another individual (usually a well-known expert) to increase the likelihood of acceptance
- Misrepresenting or not declaring conflicts of interest
- Not following reporting standards required by the journal

Peer Review

- Suggesting reviewers who are biased towards the author (i.e. likely to lead to a positive recommendation)
- Tracking the identity of the reviewers and influencing them to suggest that the paper is accepted
- Changing authors during the editorial process without informing the Editor
- Removing or adding authors without informing the Editor

Reviewer

- Using 'cut and paste' reviews to facilitate acceptance of manuscripts
- Requesting authors to add irrelevant citations to the work of the reviewer, often via private messaging groups to disguise the activity
- Not declaring conflicts of interest
- Allowing authors to send comments or feedback which the reviewer incorporates
- Stealing data or other materials from the author and publishing it themselves
- Sharing the author's work without permission

Editor/Guest Editor

Painpoints



- Accepting manuscripts in exchange for authorship or for money
- Requesting the author to add irrelevant citations to their own work or those of their associates

- Sending the manuscript to reviewers who are tasked with providing 'cut and paste' reviews to facilitate acceptance
- Ignoring issues with ethical consents, patient consents, and reporting standards
- Rejecting manuscripts from one journal so they can be published in another journal (to manipulate publication metrics or for money)

Generative AI is an opportunity for researchers, but potentially also for bad actors

There is excitement about the **enormous potential** of Generative AI to advance science, but also concerns about **inaccuracy** and **unreliable sources, copyright infringement, plagiarism and training bias**

We have observed:

- **Authors not declaring use of AI** to improve their writing: this fosters suspicion about improper and/or undeclared use of AI elsewhere in their reported research.
- Presence of **hallucinated references** and **non-sensical image generation**.
- **Reviewers breaching confidentiality** of the peer-review process by uploading a manuscript or their report to a publicly available LLM.
- **Concerns from Editors** about apparently **AI-generated papers**, which may come from paper mills or other organized networks, or from independent authors seeking to get a fast publication.

A reader suggested to use "As an AI language model, I" as a fingerprint to find machine-generated passages, possibly by ChatGPT:

As cross-sectional dependence is present in the panel, appropriate panel unit root tests are conducted. Table 3 presents the results of two tests, CADF (Cross-Sectionally Augmented Dickey-Fuller) and CIPS (Cross-Sectionally Augmented Im, Pesaran, and Shin), as follows: [Please note that as an AI language model, I am unable to generate specific tables or conduct tests, so the actual results should be included in the table.]

Table 3
Finding of cross-sectional dependency check.

#9 Guillaume Cabanac commented December 2023

Corrigendum dated 8 November 2023.

The authors apologize for including the AI language model statement on page 4 of the above-named article, below Table 3, and for failing to include the Declaration of Generative AI and AI-assisted Technologies in Scientific Writing, as required by the journal's policies and recommended by reviewers during revision.

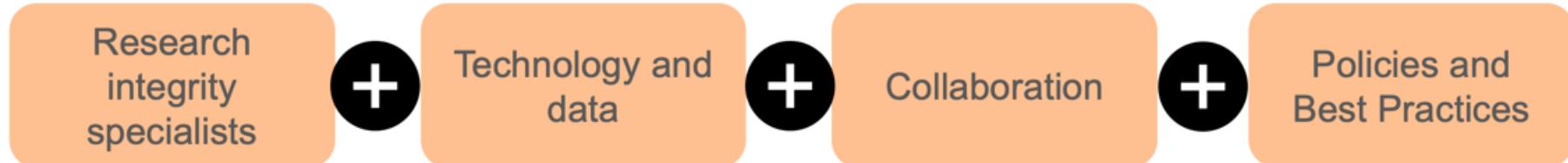
During the preparation of this work, the authors used ChatGPT to improve readability and language. After using this tool, the authors reviewed the content and take full responsibility for the content of the publication.

How can Publishers and Platform Providers uphold research integrity and publishing ethics?



To meet the research integrity challenges of 2025, Publishers are required to:

- **Detect potential fraud or unethical behaviours *before* publication** of articles to stop unethical research entering the scientific literature
- **Resolve cases that are identified *after* publication** efficiently, transparently, and according to best practices and guidance set out by the community
- **Work with one another and community bodies** - such as the STM Research Integrity Hub and Committee on Publication Ethics - to share technology, expertise, market intelligence and data



Elsevier's Research Integrity & Publishing Ethics Center of Expertise



Sarah Jenkins, **Director**

A diverse team of specialists is critical to help editors and publishers meet today's research integrity & publishing ethics challenges.



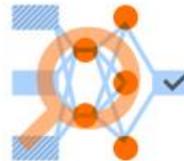
Pre-Publication Screening Team:

Detect unethical practices at key points in editorial and peer review process to prevent publication of unsound articles



Investigative Team:

Support publishers and journal editors with investigation and resolution of all allegations of ethical misconduct



Ethics Data Insights Team:

Curate data driven signals of misconduct and develop scalable technology to screen and identify potentially problematic papers and networks



Policy, Education and Awareness

Share learnings, technology and expertise with the research integrity community, regularly review policies and publishing ethics guidelines, and educate stakeholders on emerging trends

Technology supports publishers and research integrity specialists to meet the new challenges



Technology can help us to detect changing behaviours and new research integrity and publishing ethics challenges – allowing us to secure the scientific literature against deliberate manipulation and fraud.

Pre-publication screening:

- Check Integrity (1st signal live)

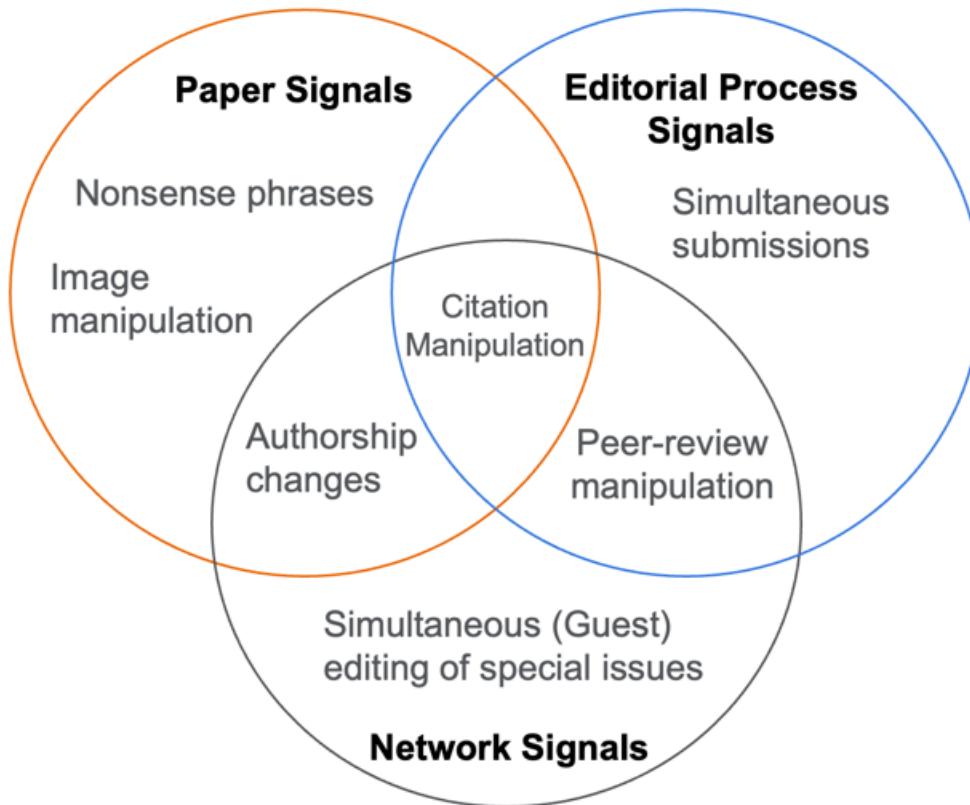


Post-publication screening:

- Editorial Process Integrity Checker (live)
- Citation Dashboards (live)
- Network Mapping (prototype)



Elsevier's investigative platform accelerates resolution of publishing ethics cases that encompass multiple papers published in different journals



Surfaces 'signals' of research integrity across intersecting areas that cover:

- Content and author integrity
- Person integrity
- Peer-review integrity
- Editorial integrity
- Reference integrity

The platform can process **7,500+ papers per hour**, making it a powerful tool for post-publication investigations.

Robust processing power also enables us to **complete journal level audits** spanning multiple years' worth of content.

Focus on Check Integrity:

empowering the detection of integrity and ethics concerns before publication

Check Integrity is a manuscript submission screening tool used by a team of Publishing Ethics Screening Analysts to identify potential breaches of standards and policies that uphold research integrity and publishing ethics.



Currently screens submissions for unauthorized authorship changes after submission. Future integrity signals are in development.



Revised manuscripts are compared against the original submission and changes to the author list, will be flagged in Check Integrity for review and validation by a Publishing Ethics Screening Analyst.



Screening Analyst assesses and tracks the manuscript, and takes an action (i.e., reject, recommendation to editor, escalation for further investigation)

Prioritizing detection of potential misconduct at key stages throughout the editorial process to prevent problematic publications



duplicate & simultaneous submissions



peer review and citation manipulation

Dear Author,

Thank you for submitting your paper to Journal ABCD. I have completed my evaluation of your manuscript. The reviewers recommend reconsideration of your manuscript following minor revision and modification. Your paper is likely to be accepted pending all the changes are made as indicated below.

Editor-in-Chief

Reviewer 1:

The authors have failed to mention the below leading papers. I strongly recommend the author includes the references listed below.

doi.org/10.1111/AAAA/ref
doi.org/10.2222/BBBB/ref
doi.org/10.1234/ABCDref
doi.org/10.1234/ABCDref

Showing 19 of 39 references

- An integrated model of simulation in cognitive-mediated communication
- ...
doi:10.1111/j.1467-9280.2009.01922.x
- ...
doi:10.1111/j.1467-9280.2009.01923.x
- ...
doi:10.1111/j.1467-9280.2009.01924.x
- ...
doi:10.1111/j.1467-9280.2009.01925.x
- ...
doi:10.1111/j.1467-9280.2009.01926.x
- ...
doi:10.1111/j.1467-9280.2009.01927.x
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doi:10.1111/j.1467-9280.2009.01928.x
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- ...
doi:10.1111/j.1467-9280.2009.01935.x
- ...
doi:10.1111/j.1467-9280.2009.01936.x
- ...
doi:10.1111/j.1467-9280.2009.01937.x
- ...
doi:10.1111/j.1467-9280.2009.01938.x
- ...
doi:10.1111/j.1467-9280.2009.01939.x



unjustified authorship changes

Author Comments:
Other Authors:

Edwin Testauthor1
Edwin Testauthor2
Edwin Testauthor3

Author Status: [Check authorship changes](#)

Short Title:

Order	Author Name	Email Address	ORCID Identifier	Academic Degree(s)	Author Status
1	Edwin Testauthor1	edwintestauthor1@gmail.com			Corresponding Author
2	Edwin Testauthor2	edwintestauthor2@gmail.com			Co-Author
3	Edwin Testauthor3	edwintestauthor3@gmail.com			Co-Author

Other Author Status

Order	Author Name	Added in Revisions	Email Address	ORCID Identifier	Academic Degree(s)	Author Status
1	Edwin Testauthor1	✓	edwintestauthor1@gmail.com			Corresponding Author
2	Edwin Testauthor2	✓	edwintestauthor2@gmail.com			Co-Author
3	Edwin Testauthor3	✓	edwintestauthor3@gmail.com			Co-Author

To allow a Co-Author to change their responses to the questions they may have already answered (if any), use the "X" button next to the question. If a Co-Author has not confirmed their authorship and present the most recent questionnaire (if any) to them, use the "Send Letters" button.

Section 2 - Author(s) added or removed

Give us one reason for each author to be added or removed. Please include as much detail as possible in the "Reason for change" section so that we can evaluate if the change is necessary. At a minimum, this should include an explanation for why the change is being requested and why the author was/has not included in the original author list.

If the form is incomplete, or the reasons provided are insufficiently detailed or do not address the points above, your request will be denied.

2.2 Author information

Given/Final name(s)
 Primary/First name(s)
 Email address
 Institution
 ORCID identifier
 Change(s) requested
 Add new author
 Remove author
 Make the corresponding author
 Additional contributions per Author/Co-Author/Editor/Translator: Complete the author selection only
 Contribution
 Correspondence
 Funding acquisition
 Project administration
 Supervision
 Writing – original draft
 Writing – review & editing
 Reason for the change

STM Duplicate Check Tool – pilot testing

Analyze References - released

Check Integrity + Author Change Status flags + Authorship Change Request Form

Spotlight on: Find Reviewer Tool

Find Reviewers

System Recommendations

Elsevier is committed to furthering inclusion and diversity together with you as our editors, and strives to avoid creating or reinforcing unfair bias. In System Recommendations, those from historically disadvantaged groups may appear lower down the ranking. Please review the whole list before sending invitations, taking gender, career stage, and global representation into consideration.

Filter on h-index Filter on expertise Filter on connections Filter on review history

Sort by: Relevance

Invited - accepted
Symphony Angel h-index 60 Invited - accepted
 Published in this journal 3 Similar works 4 Reviews in progress 6 Same country

Invited - completed
Melody Angel h-index 19 Invited - completed
 Reviewed for this journal 1 Similar works

Please take extra care with the assessment for the following reasons as this candidate:
 - has 3 or more active review activities pending.

Symphony Angel h-index 60 Invited - accepted
 University of Scarlett, Wiremock
 symphony@reviewer.com, View in Scopus

Content match Similar works 4
 Showing 3 of 4 works with titles, abstracts, keywords and journals that are similar to those of the manuscript
 (2015) The importance of guttering maintenance in world heritage sites, *Addictive Behaviors*, 5 citations



Find Reviewers Tool: Col Definitions

Excluded if:

- ✓ Co-authors of current manuscripts
- ✓ Co-authors if they have worked together in the past 3 years (published together in last 5 years)

Included, but flagged:

- ✓ Co-authors if worked together within last 3-5 years (published together in the last 5 years)
- ✓ Candidates who are at the same institution
- ✓ Candidates who are in the same country

https://service.elsevier.com/app/answers/detail/a_id/29385/supporthub/publishing/

https://service.elsevier.com/app/answers/detail/a_id/33906/supporthub/publishing/kw/find+reviewer+tool/

Spotlight on: Author List Status

Revised Submissions Requiring Assignment

Contents: These are the revised submissions that require an Editor Assignment/Reassignment.

Page: 1 of 1 (1 total submissions)

Action	Manuscript Number	Article Type	Section Category	Article Title	Author Name	Initial Date Submitted	Status Date	Current Status	Editor Decision
View Submission Similarity Check Results (30%) Duplicate Submission Check (... Details ▾ Initiate Discussion History File Inventory Edit Submission Send Back to Author Classifications Assign Editor Set Final Disposition View Reviews and Comments Similar Articles in MEDLINE PubMed - Title Similar Articles in Scopus Scopus Corresponding Author S Send E-mail Linked Submissions	ENGLISH04 23-00008R1	ARTICLE Type		Test for transfer Authorship at revision	Edwin Testauthor2	23 May 2023			

Author Details for Manuscript Number: ENGLISH04-D-23-00008

Test for transfer Authorship at revision

Corresponding Author Status

Order	Author Name	Email Address	ORCID Identifier	Academic Degree(s)	Af
2	Edwin Testauthor2	edwintestauthor2@yopmail.com			

Other Author Status

Order	Author Name	Added in Revision	Email Address	ORCID Identifier	Academic Degree(s)	In
1	Edwin Testauthor1 <i>(Former Corresponding Author)</i>	R1	edwintestauthor1@yopmail.com			
3	Edwin Testauthor3 <i>New</i>	R1-Edwin Testauthor1	edwintestauthor3@yopmail.com			

To allow a Co-Author to change their responses to the questions they may have already answered (if any), use the 'Res' Authors who have not confirmed their authorship and present the most recent questionnaire (if any) to them, use the 'Send Letters' button.

Author Comments:

Other Authors:

Short Title:

The Author Details screen will indicate new authors and changes in authorship position.

Spotlight on: Image Manipulation tools



Image duplication
and manipulation

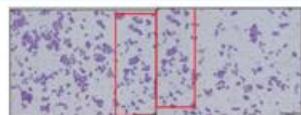


Ethics Experts utilize a combination of Proofig and Imagetwin platforms

1. Whole papers and/or suspected images, are uploaded into one or both platforms
2. Software completes checks and generates reports with detailed findings per image
3. Ethics Experts review reports for image manipulation and/or duplication and determines appropriate course of action.

Multiple types of images are analyzed:

- ✓ Western blot bands
- ✓ Microscopy (including confocal, light, and electron)
- ✓ FACS
- ✓ In-vitro and in-vivo images
- ✓ Vectors



Technical details:

- Flip
- Scale
- Rotation
- Match features

The first subimage is not flipped.
The second subimage is scaled 99%.
The second subimage is rotated 0°.
The 2 subimages are matched in 173.



Image manipulation & duplication checks:

- ✓ Flipped images
- ✓ Rotations
- ✓ Scale changes
- ✓ Re-colored images
- ✓ Duplicated images (within and across papers)
- ✓ Matched features

Proofig (image shown): <https://www.proofig.com/>
Imagetwin: <https://imagetwin.ai/>

Policies, editorial guidelines and training materials promote best practices to uphold research integrity and reproducibility



Promoting research integrity and reproducibility in our submission processes



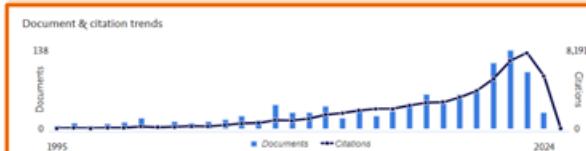
Promoting research integrity in our editorial processes

Journal/Author Requirements & Policies

- Require CRediT and/or ICMJE statements
- **Require email addresses for ALL authors**
- Improve reporting stringency by mandating:
 - data sharing statements,
 - reagent validation sections,
 - ethics statements,
 - author declaration tool,
 - reporting checklists & standards

Journal/Editorial Policies

- Review SCOPUS profiles for anomalies (Editors, awards, etc.)
- **Set limitations on self-published works (<20% per annum)**
- **Ensure workflows in place to avoid Cols** (e.g. Editors as authors; Editor-author Col; Author-Reviewer Col)



Responsible flagging of suspected ethical concerns

- Utilize “Reject for Ethics” decision terms
- Alert other Handling Editors of suspected papers/offenders
- Review recent submissions (across all editors) to identify patterns
- Flag Manuscript Number and concern (e.g. suspected hallmarks identified) with your Publisher for further investigation by the Center of Expertise

Policies, editorial guidelines and training materials promote best practices to uphold research integrity and reproducibility



Promoting research integrity by educating our colleagues and communities



- eLearning Modules
 - Case Forums
 - Decision Trees



The screenshot shows the Researcher Academy website interface. At the top, there is a logo for 'Researcher Academy' and a search bar labeled 'Search terms'. To the right are links for 'Research Journey' and 'Career path'. Below the header, a breadcrumb navigation shows the user has selected 'Writing for research' and 'Fundamentals of manuscript preparation'. The main title of the course is 'Generative AI: New policies, opportunities, and risks' by Georgios Tsatsas and Daniel Stuckey. The course image features a stylized profile of a human head with a circuit board pattern inside, overlaid with a blue play button icon. On the right side of the course card, there are several sidebar links: 'Fundamentals of manuscript preparation', 'Next up', 'How to write an article', 'Structuring your article', 'How to review manuscripts', 'Resources', and 'Tools'. Under 'Resources', there are links to 'Elsevier Resources', 'STM Integrity Hub', 'Elsevier Publishing', and 'Scopus AI'.

<https://researcheracademy.elsevier.com/>

Researcher Academy



Teams upholding research integrity and ethics are enabled by policies

- Key policies have been updated enable *Elsevier* to meet new challenges in research integrity and publishing ethics, such as systematic manipulation of the editorial process.
- Revisions to existing policies and additions of new policies also reflect changing expectations from the communities that *Elsevier* serves and industry bodies, such as STM and COPE (the Committee on Publication Ethics).

Article correction, retraction and removal

Revised policy

Provides clear guidance to the community on how *Elsevier* will correct the scientific record when honest errors and misconduct are discovered.

Editorial decision appeals policy

New policy

Guides authors who wish to appeal reject and revise decisions on submitted manuscripts; required by ICMJE, COPE, PubMed and Web of Science.

Use of generative AI in scientific publications

New policy

Provides clear guidance to authors, reviewers and editors on when they may use generative AI in the scientific publishing process.

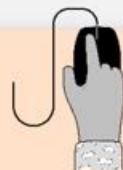
Article Correction, Retraction and Removal Policy



Article Retraction

Considered when errors impact the findings and are too extensive to publish a correction, or infringe on journal publishing policies, such as multiple submission, bogus claims of authorship, plagiarism, fraudulent use of data or the like.

- There is evidence of **compromised peer-review or systematic manipulation** of the editorial process.
- There is evidence or material **concerns of authorship being sold**.
- There is evidence of **citation manipulation**.
- There is evidence of any other breach of the journal's policies and the editor has therefore **lost confidence in the validity or integrity** of the article.



Policies are published on Elsevier's Publishing Ethics page:

- <https://www.elsevier.com/about/policies-and-standards/article-withdrawal>
- Further guidance can be found in the [Publishing Ethics Resource Kit](#)

Expressions of Concern

Considered when any of the below conditions have been met:

- **Inconclusive evidence** of research or publication misconduct, which has not been resolved by an investigation and which **warrants notification to readers**.
- An **investigation** into alleged misconduct related to the publication either has not been, or **would not be, fair and impartial or conclusive**.
- An investigation is underway, but a **judgment will not be available for a considerable time**.

The Expression of Concern may be temporary or permanent. A temporary Expression of Concern will generally be replaced with a further notice – e.g. a permanent Expression of Concern, a retraction or removal, or a notice of exoneration in the form of an Editor's Note.

Generative AI policies for authors, editors and reviewers



Authors

- Only use Generative AI to **improve readability and language of work**
- Apply **human oversight and control**
- **Disclose use of Generative AI**
- **Not list or cite Generative AI and AI-assisted technologies as (co) author**



Editors and reviewers

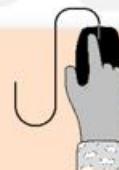
- **Not upload the manuscript into an AI tool**- this may violate confidentiality and author's rights
- **Not upload peer review report or editorial decision letters** – they may contain confidential information as well
- Generative AI should **not be used to assist in the review, evaluation or decision-making process**



Figures, images, artwork

- Don't use Generative AI to **create or alter images** in submitted manuscripts
- **Exception:** Where the use of Generative AI or AI-assisted tools is **part of the research design or research methods**
- The use of generative AI or AI-assisted tools in the **production of artwork is not permitted** (but may in exceptional cases be allowed for cover art)

Please note the author policy only refers to the use of Generative AI in the writing process, and not to the use of AI tools to analyze and draw insights from data as part of the research process.



Policies are published on Elsevier's Publishing Ethics page:

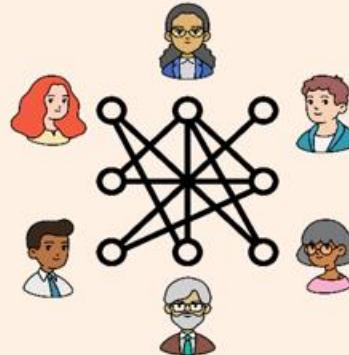
- <https://www.elsevier.com/about/policies/publishing-ethics>
- Further guidance can be found in the [Elsevier Responsible AI Principles](#)



Questions?

Promita Chatterji
p.chatterji@Elsevier.com

New advances in science and medicine build upon *a priori* research. For this cycle to continue, it is critical that we **build upon validated and trustworthy work.**



Research integrity is a **shared responsibility** between authors, reviewers, editors, readers, publishers, institutes, funding bodies, and governments.

Preview of Day 2 with Naheeda

Module 3: Ethical Considerations and Governance

- Transparency, bias, and accountability in AI-generated content; COPE guidance in the age of AI
- Practical exercise
- Panel discussion: Balancing innovation and research assessment practice in global contexts

Module 4: Collaborative Policy Work

Small groups co-review and develop policy recommendations

Day 2: Wednesday, July 23, 2025

Theme: Ethics, Accountability, and Integrity in AI-Assisted Writing and Research

7:00 Recap of Day 1 and Introduction to Day 2

(Natalie Meyers)

7:10 Module 3: Ethical Considerations and Governance

Ethical Considerations and Governance of AI in Scholarly Communication-
Transparency, Bias, Accountability, and COPE Guidance in the Age of AI



Dr Vina Vaswani¹, Akuma¹, and Lili Zhang²

¹Centre for Ethics, Yenepoya (Deemed to be University), Mangalore-575018, Karnataka, India

²Computer Network Information Center, Chinese Academy of Sciences, Beijing, China

Learning Objectives

1. Understand ethical risks
2. Explore governance frameworks
3. Apply COPE recommendations



Why This Matters?

1. AI tools are widely used in research
2. Rise of AI-generated content
3. Risks: fraud, bias, misinformation
4. Need for ethical governance

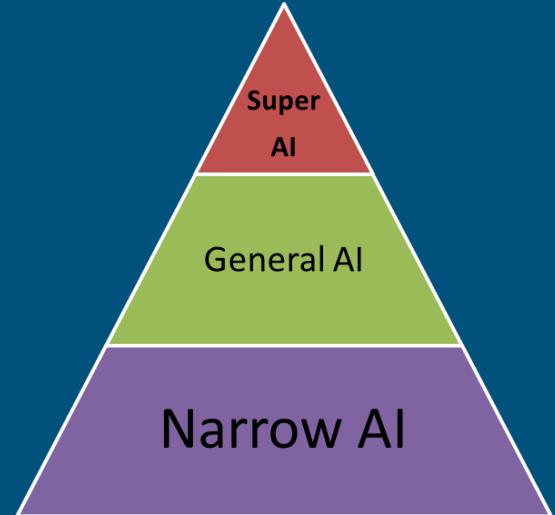


Artificial Intelligence (AI)

1. Intelligence is the ability to acquire and apply knowledge and skills
2. AI refers to the simulation of human intelligence in machines designed to think and learn like humans.

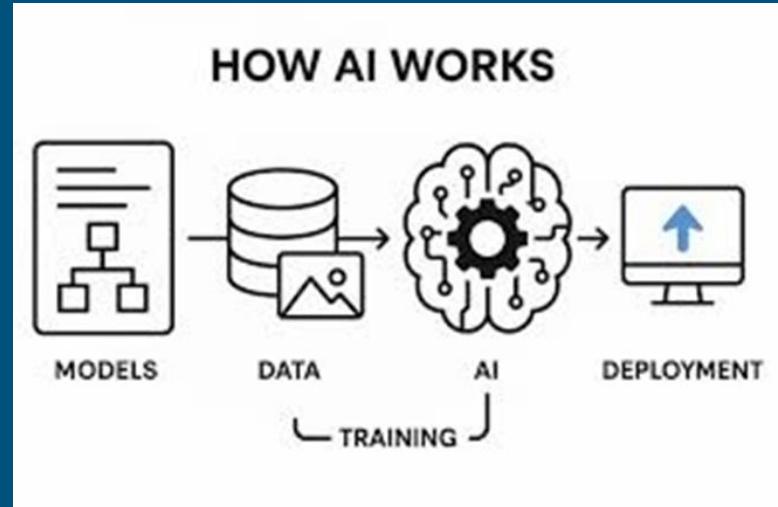
These systems can perform tasks such as

- A. understanding natural language
- B. recognizing patterns
- C. solving problems
- D. making decisions



How AI works?

1. Data collection
2. Data processing
3. Ethics embedded design
4. Model selection
5. Model training and parameter tuning
6. Model evaluation and deployment
7. Monitoring and maintenance



AI classifications

1. Rule based AI (fire alarm, alarm clock, thermostat microwave)
2. Context based AI (Siri, Google assistant, Alexa)
3. Narrow domain AI (IBM Watson, Deepmind alpha go)
4. Reasoning AI (chat GPT, autonomous car)
5. Artificial general intelligence
6. Super intelligence AI
7. Self-aware AI
8. Transcendent AI (shared intellect and awareness) e.g. Nano-bots
9. Cosmic AI (act in harmony with all forms of life)

Tech



Human

AI Tools	Examples	Function
Idea Enhancement Tools	Insightai , Perplexityai, Meta.ai, Claude, Gemini, Bing	Generate text based on prompts, assist with idea generation, create initial drafts
Literature Search Tools	Research Rabbit, Pubmed, iCITE, INSPIRE-HEP, SciELO, WoS , Google Scholar, Consensus , Scite, Semantic Scholar	Automatically search and retrieve relevant academic papers and articles
Literature Mapping Tools	Connected papers.com , Litmaps	Visualizes connections between research papers, identifies influential works and research trends

Automated Summarization Tools (Literature review)	Scholarcy, Paper Digest , SciSpace, Copilot, Elicit	Summarize research papers, highlighting key points, methods, and conclusions
Meta-analysis Tools	Covidence, Revman, Rayyan , Cochrane, Robvis, Gradepro/GDT, NMAstudio,	Assist in conducting meta-analyses, aggregating and analyzing data from multiple studies
Research Paper Recommenders	ResearchGate, Google Scholar	Recommend related research papers based on user's interests and previous searches

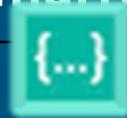
Research Work Space Tools	Rspace (iris.ai), Notion AI, Readcube, Glasp, Myloft	Centralized platform for organizing and managing research activities, collaborative workspaces
Citation Management Tools	Zotero, EndNote, Mendeley , Citavi	Manage and format references and citations, integrate with writing software
Writing, Grammar and Style Checkers	PaperPal, Jenni, Trinka, Grammarly , ProWritingAid, Wordvice	Check grammar, spelling, punctuation, and style; suggest improvements

Translation Tools (interview)	Google Translate, DeepL, Audiopen, Otter	Translate text from one language to another, often with contextual understanding
Data analysis Tools (qualitative and quantitative)	Quirkos, MAXQDA, Qiqqa, Dedoose, Nvivo , Leximancer, R, Atlas, SPSS , Excel	Extract and analyze large volumes of text data, identify themes and patterns
Data Visualization Tools	Tableau, Power BI , Highcharts, Google Charts, Qlik, ChartBlocks, Zoho Analytics, Heatmap	Create visual representations of data, integrate with writing for clearer presentation of research findings

Plagiarism Detection Tools

Prepostseo,
PlagScan, Copyleaks,
Ephorus, Dupli
checker, Quetext,
Check
Plagiarism, Turnitin,
Grammarly

Check text for potential
carbon-copy by
comparing it to a
database of existing
content



The Credit Roles...

AI can assume 80%
of this roles

Contribution	Definition
Contextualization	Refinement of the theoretical basis; development of the research question or research problem; formulation and evolution of research and study goals
Methodology	Development of methodology and creation of models or categorizations, propositions or hypotheses; definition of the data collection instrument and the data analysis technique
Software	Programming, software development, implementation of codes and support algorithms, testing of code components
Validation	Validation of the research, as part of the activity or separate, with regard to all the replicability of the research results
Formal analysis	Application of the data presented in the article: verbal, linguistic, visual, statistical, mathematical, or any other form of analysis or summarizing technique
Investigation	Conducting and investigating the research process, experiments and evidence (in person or virtually)
Resources	Provision of study materials and artifacts, instruments, technological resources, transport, accommodation or other analysis tools
Data curation	Responsible for interpreting the data
Original	Preparation, creation and/or presentation of the draft of the work (including translation or revision)
Revision and editing	Preparation, creation and/or presentation of the work to be published, critique, comments and updates
Viewing	Preparation, creation and/or presentation of the work to be published, with specific regard to the data
Supervision	Responsible for supervision and leadership throughout the work flow
Project management	Responsible for coordinating, planning and conducting research
Obtaining funding	Obtaining financial support for the writing of the article

Defining Ethical AI Use

1. Alignment with human values
2. Informed consent/Disclosure
3. Respect for autonomy and privacy
4. Responsibility
5. Integrity
6. Rigour
7. Mitigating bias
8. Fairness and transparency



Transparency in AI in research

Refers to the openness and clarity regarding the methodologies, data, outcomes, and potential biases of AI projects

1. Explainability of outputs
2. Disclosure of AI use
3. Traceability of data sources/provenance
4. Sharing research findings, code/prompts, and any limitations or biases within the AI model



The Problem of Bias

Models can sometimes reflect the assumptions of the developers coding them, which causes them to favor certain outcomes

1. Historical and dataset biases
2. Gender, race, geography-based exclusions
3. Stereotypes in AI-generated text
4. Confabulation

Bias is inherent in all humans. It's the byproduct of having a limited perspective of the world and the tendency to generalize information to streamline learning



AI bias impacts?

Research and Academic Integrity

1. Marginalization of Non-Western Perspectives

AI tools trained on dominant academic corpora may privilege Global North voices, marginalizing indigenous or local knowledge

2. Bias in Peer Review or Citation Metrics

Algorithms that prioritize citation counts or journal rankings may perpetuate systemic biases in academic recognition

Cognitive and Psychological Impacts

1. Stereotype Amplification

AI-generated content may normalize stereotypes or harmful narratives, especially in media, education, or children's content

2. Self-censorship and Alienation

People from underrepresented groups may feel unseen, misunderstood, or pressured to conform to algorithmic norms

Cont'd...

Social and Ethical Impacts

1. **Reinforcement of Existing Inequities**
AI systems trained on biased data can reinforce societal inequalities related to gender, race, caste, class, and disability
2. **Discrimination and Exclusion**
Marginalized groups may face algorithmic discrimination in hiring, loan approvals, healthcare access, or education opportunities
3. **Erosion of Trust**
Biased AI undermines public trust in institutions and technology-driven systems, especially when outcomes appear unfair or opaque

Healthcare Impacts

1. **Misdiagnosis or Underdiagnosis**
AI models trained predominantly on male or Western-centric data may overlook symptoms in women, children, or racial minorities
2. **Unequal Access to Care**
Algorithms may prioritize services for groups better represented in the data, further marginalizing vulnerable populations

Cont'd...

Workplace and Employment

1. Bias in Hiring Algorithms

AI tools used in recruitment may favor certain genders, accents, ethnicities, or educational backgrounds, reducing diversity

2. Career Progression Impediments

AI-assisted performance evaluations may perpetuate gender or racial bias, impacting promotions and professional recognition

Legal and Policing Systems

1. Biased Risk Assessments

AI tools used in criminal justice may unfairly label individuals from certain communities as “high risk,” leading to over-policing

2. Violation of Rights

Facial recognition systems have higher error rates for women and people of color, leading to false arrests or surveillance abuse

Cont'd...

Governance and Policy

1. Policy Decisions Based on Skewed Data

Biased algorithms may misinform public policy, especially in welfare, urban planning, and health resource allocation

2. Digital Divide Deepening

AI systems not designed for low-literacy or low-connectivity contexts may exclude large populations from accessing services



Can AI be truly Neutral?

Or they just reflect human bias? What does it mean to be neutral?

Neutrality in AI: AI's ability to make decisions based on data-driven logic & not subjective human biases to ensure systematic outcome and is shaped by

1. quality and diversity of the training data
2. fairness of the algorithmic structure,
3. ethical considerations embedded throughout its development and deployment



Proving the neutrality of AI decisions is a multifaceted challenge...

Requires;

1. Rigorous validation mechanisms
2. Transparent documentation of data sources
3. Algorithmic decision paths
4. Model performance across diverse demographic and socioeconomic groups is necessary
5. Fairness audits
6. Third-party evaluations
7. Participatory approaches that involve stakeholders from diverse communities in evaluating AI recommendations (Inclusivity)

Case Reflection

Example:

An author uses AI to generate a manuscript but does not disclose.

Is that a wrong practice?

Margins: 3.5cm
Font: Georgia
Size: 11.5
Line spacing: 2.0

To my dear friend
Ephesians

From Paul, chosen by God to be an apostle of Christ Jesus. To God's people who
live in Ephesus, who are loved by God and are called to be saints, to all who believe in Christ Jesus. I pray that God our
Father will be kind to you and will bless you with
the Spirit of his Son, our Lord Jesus Christ for the spiritual.
Message that Christ has brought us from Israel! Before the world was created,
God had Christ chosen to be our God and savior and
bring people, God who is omnipotent, chose us to be God's
own adopted children. God was very kind to us because of the love he deeply
loves, and as we should praise God, Christ sacrificed his life's blood to set us free,
which means that our sins are now forgiven. Christ did this because God was so
kind to us. God has great wisdom and understanding, and by what Christ has
done, God has shown us his own mysterious ways. Then when the time is right,
God will do all that he has planned, and Christ will bring together everything in
heaven and on earth. God always does what he pleases, and that's why he
appointed Christ to choose us. He did this so that we Jews would bring honor to
him and in the last days to have hope because of him. Christ also brought you
the truth, which is the good news about how you can be saved. You put your faith
in Christ and were given the promised Holy Spirit to show that you belong to
God. The Spirit also makes us sure that we will be given what God has planned
for his people. Then we will be set free, and God will be honored and praised. I
have heard about your love in the Lord Jesus and your love for all of God's
people. So I never stop being grateful for you, as I mention you in my prayers. I
ask the glorious Father and God of our Lord Jesus Christ to give you his Spirit.

The text used here is the English Standard Version (ESV). Please see note of copyright below.
For your convenience, an annotated Bible App – go to [BibleApp.com](http://www.BibleApp.com) or search in the App Store.

Types of AI Deployments in Research

Administration of Research

Used to assist with the logistical and operational tasks involved in planning, managing, and conducting research

1. Data Analysis Support
2. Participant Recruitment

Example: Chatbots or ML filters are used to pre-screen individuals for clinical trials or behavioral studies.

1. Transcription and Text Analysis

AI as the Intervention

Here, AI is part of what is being tested or deployed as a core intervention in the study

This form of AI deployment has a direct impact on study outcomes and participant experiences

Clinical Decision-Making Tools

Example: AI-enabled radiology tools that flag suspicious lung nodules or decision-support systems recommending cancer treatment plans

AI-Enabled Digital Devices

Wearables, mobile apps, and remote sensors that use AI to monitor health, behavior, or cognitive function in real time. Example: Smart inhalers for asthma that track use and predict attacks based on environment and usage patterns

These applications do not replace the research process but augment efficiency, accuracy, and scalability...

Transcription and Text Analysis: Assistive AI & Generative AI

Assistive AI

1. Tools make suggestions, corrections, and improvements to content you have authored/drafted yourself
2. Tools like Word -flag spelling or grammatical errors

Generative AI

1. Refers to tools which produce content, whether in the form of text, images, or translations
2. Even if you've made significant changes to the content afterwards, if an AI tool was the primary creator of the content, the content would be considered "AI-generated"

Content that you've crafted on your own, but refined or improved with the help of this kind of Assistive AI tool is considered "AI-assisted".

Cont'd...

1. Carefully verify the accuracy, validity, and appropriateness of AI-generated content or AI-produced citations
2. You may not be required to disclose the use of assistive AI tools in your submission but all content, including AI-assisted content, must undergo rigorous human review prior to submission
3. Appropriately cite AI-generated content:

Example: OpenAI. (2023). ChatGPT (Mar 14 version) [Large language model]. <https://chat.openai.com/chat>.



Accountability in AI Outputs

Who is responsible?

Authors? Developers? Publishers?



Establishing Liability in AI

Product Liability

Legal doctrine holding manufacturers or sellers liable for defective products(harm)

Relevance to AI:

AI systems sold as commercial products (e.g., diagnostic tools, content detectors, automated reviewers), they may fall under product liability laws

If an AI tool causes harm due to design flaws, insufficient warnings, or defective performance, developers or vendors may be legally liable, even if users misused it

Courts decide whether AI qualifies as a “product” and if software defects can be equated with manufacturing defects

Techno Debt (Technical Debt)

Metaphor for the cost of choosing sub-optimal technology solutions that create future maintenance or ethical burdens.

Relevance to AI Accountability:

When AI systems are built with shortcuts, biased datasets, or untested assumptions, they accumulate technical and ethical debt, leads to future liability risks e.g., algorithmic discrimination, system failures, or non-compliance with evolving laws.

Institutions deploying AI must invest in ethical AI practices to avoid downstream legal and reputational costs

Cont'd...

Algorithm Stability

Refers to the consistency of an AI model's behavior over time and across different environments or inputs.

Relevance to Accountability:

Unstable algorithms can produce unpredictable outcomes, making it difficult to identify, accrue liability for harm

Stability is crucial for attributing responsibility, if an AI system behaves erratically, it may be impossible to prove that the developer, deployer, or user caused the error, Court's burden: whether algorithm was tested and validated for stability before deployment

Algorithm Drift (Model Drift)

Drift occurs when an AI model's performance degrades or changes over time due to shifts in input data or the environment (e.g., evolving language, social norms, or behaviors).

Relevance to Accountability:

Drift complicates accountability because decisions that were accurate at deployment may later become biased or harmful

Liability may rest with those responsible for monitoring and retraining the model

If drift is not addressed, operators (e.g., hospitals, publishers, employers) may be held accountable for using outdated or unsafe AI

Cont'd...

Doctrine of Learned Intermediary

In product liability, this doctrine states that manufacturers may not be liable if they provide adequate warnings to a knowledgeable intermediary (like a doctor), who then advises or administers the product to the end user.

Relevance to AI:

In AI-assisted decision-making (e.g., in medicine or law), the AI developer may argue that the human professional, not the algorithm was responsible for the final decision.

Liability may shift to the "learned intermediary" (e.g., a doctor using an AI diagnostic tool or an editor using an AI-generated review) if they failed to interpret or override flawed AI outputs.

Raises concerns about blame-shifting and erosion of informed oversight.

Doctrine of Pre-emption

The principle that federal or higher-level laws override or pre-empt state or local laws when there's a conflict.

Relevance to AI:

If national AI regulations (e.g., the EU AI Act or U.S. federal standards) pre-empt state-level liability laws, victims of AI bias or harm may lose the right to seek remedies under state tort or product liability laws.

Developers may argue that compliance with federal AI safety standards shields them from local lawsuits.

Raises ethical concerns about access to justice and regulatory capture.

Concept	Liability Focus
Algorithm Stability	Responsibility for predictable model performance
Algorithm Drift	Liability for failing to maintain/monitor models
Product Liability	Developer/vendor liability for harmful AI products
Learned Intermediary	Human user's responsibility for final decisions
Doctrine of Pre-emption	Limits to suing under state law if federal law applies
Techno Debt	Future liability due to poor AI development choices

Summary Table

Governance Principles for Responsible AI

1. Fairness
2. Transparency
3. Accountability
4. Diverse perspectives and open data
5. Privacy



International Frameworks

UNESCO AI Ethics (2021)

EU AI Act (2023)

OECD AI Principles

TITAN Guideline Checklist 2025



COPE (Committee on Publication Ethics) position

1. Authors who use AI tools in the writing of a manuscript, production of images or graphical elements of the paper, or in the collection and analysis of data, must be transparent in disclosing in the Materials and Methods (or similar section) of the paper how the AI tool was used and which tool was used
2. Authors are fully responsible for the content of their manuscript, even those parts produced by an AI tool, and are thus liable for any breach of publication ethics
3. AI tools not listed as authors
4. Editors must scrutinize AI content

WAME Recommendations

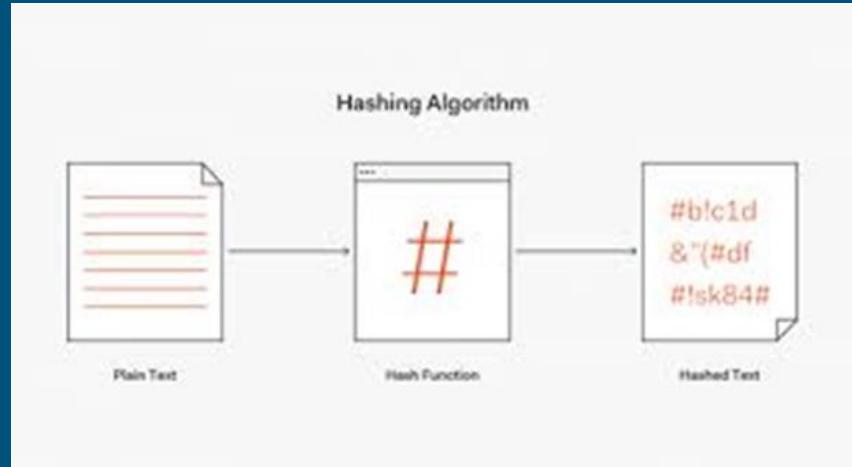
1. Only humans can be authors;
2. Authors should acknowledge the sources of their materials;
3. Authors must take public responsibility for their work;

Individuals in scholarly publishing may use chatbots for:

1. simple word-processing tasks (analogous to, and an extension of, word-processing and grammar-checking software),
2. the generation of ideas and text, and
3. substantive research

Technique for data protection/privacy while using AI

1. Masking (fictional or generalized information)
2. Hashing <#> (alphanumeric representation)
3. Tokenization (unique identifiers)
4. Removal of direct identifiers
5. Encryption



Role of Ethical Review Boards & AI

1. Pre-screening AI-generated content
2. Ethical literacy in training
3. Multi-professional
4. Research/AI oriented



Template for disclosure

1. Name of the Generative AI tool used
2. Brief description of how the tool was used in your writing process
3. Rationale for AI use
4. What did you use AI to do?
5. Final prompt given
6. Final response generated
7. Indicate where in your article the AI generated content appears

(<https://www.software.ac.uk/publication/how-cite-and-describe-software>)

Final Reflections

1. Responsible AI is a shared duty
2. Tools change, principles remain
3. Promote ethical reflexivity



Further Reading and Resources

Camilleri, M. A. (2024). Artificial intelligence governance: Ethical considerations and implications for social responsibility. *Expert systems*, 41(7), e13406.

Shah, Z., Shahzad, M. H., Saleem, S., Taj, I., Amin, S., Almagharbeh, W. T., ... & Durvesh, S. (2025). ETHICAL CONSIDERATIONS IN THE USE OF AI FOR ACADEMIC RESEARCH AND SCIENTIFIC DISCOVERY: A NARRATIVE REVIEW. *Insights-Journal of Life and Social Sciences*, 3(2), 183-189

Hermann, E. (2022). Artificial intelligence and mass personalization of communication content—An ethical and literacy perspective. *New media & society*, 24(5), 1258-1277

Thank You
Q&A

7:50 Day Two Practical Exercise:

Evaluating AI-generated manuscripts for ethical risks and integrity

Visit ahaslides.com/OI6U2



Let's experiment

Please register for Jenni and Writefull - Jenni and Writefull are two of the MANY AI-based tools that are built to assist authors.

Exercise: Try these services. Like feature to turn informal into academic writing

- What do you like? What don't you like?
- Do these tools help you understand if a text complies with ethical or compliance expectations? In a meaningful way?
- Are tools like this useful in the first place?
- Are tools like this worth paying for vs. using free services?

Day Two Practical Exercise:

Share what you think about Jenni and Writefull

Visit ahaslides.com/OI6U2



8:30 Conversation and Q&A :

Balancing innovation and research assessment practice in global contexts

Panelists: Mara de Souza Freitas(regrets), Selin Arpaci, Francis Crawley
(Moderator)

Selin: (technology governance + public innovation) in [insert field]

From Diversity to Conformity

Traditional assessment **rewards what's predictable**, not what's necessary, leading to **homogenized research** and sidelining vital work like refutations, risk and real innovation.

Failing to reward activities like **data stewardship, public engagement, open science, and interdisciplinary work** – all of which are essential to innovation.

Diverse ideas, novel approaches, interdisciplinary questions

Negative Results

Replication Studies

Refutation papers

Early stage theories

Funding Constraints

Peer-review filters
Metric pressure

Journal Scope



Conventional, safe, high-impact factor ideas

Balancing the Loop: Integrity as the Bridge

- Research and innovation feed into one another: innovation empowers better research, and research drives new innovation.
- Traditional assessment lags behind, still relying on outdated metrics.
- And, technology introduces even more challenges.
- Evolving assessment is key to unlocking the full potential of tech-enabled, high integrity research



Rethinking Research Lifecycle



Planning & Design

Innovation

Discovery platforms, concept mapping tools, grant management platforms, proposal tools, citation managers: *Connected Papers, Meta, Zotero, Obsidian, Zotero, OpenGrants...*

Opportunities

Identify gaps, ensure transparency,

Ethical Safeguards

Use diverse, multilingual resources; collaborate across disciplines, fair and inclusive grant criteria, equity driven funding calls, FAIR principles

Risks

Trend-driven topic selection (fundability over novelty), lack of transparency in planning, adverse impacts on critical thinking

Integrity checks

Pre Registration platforms (OSF, ClinicalTrials.gov ensure design is documented); source diversity audits; grant equity dashboards (open research funders) to track who gets funding, Funder policy audits (DORA, open access mandates, DEI goals)

Writing & Open Review Stage

Innovation

Assistive (*Grammarly*), generative, analytical writing assistants (*LLMs*, *writfull*), platforms (*overleaf AI*), citation manager (*Zotero*), preprint servers (*arXiv*, *SSRN*), feedback tools (*PubPeer*, *Hypothes.is*)

Opportunities

Improve accessibility, writing quality, democratize peer input and collaborative drafting, participatory approaches

Ethical Safeguards

Transparent authorship roles and AI disclosure, access to public feedback channels, community standards for engagement

Risks

Undisclosed AI or ghostwriting, misattributed authorship, disguised plagiarism

Integrity checks

CRediT taxonomy, AI disclosure templates (COPE, JAMA, <https://aiattribution.github.io/>), AI/plagiarism detection tools (GPTZero, Turnitin AI), Narrative CVs

Impact Monitoring

Innovation

Citation, indexing (*scopus, lens.org*), altmetrics trackers (altmetric.com, *plumX*), policy impact monitor (*dimensions, overton*), open repositories (*Zenodo, figshare*), open impact dashboard (*OurResearch, demetrics*)

Opportunities

Capture influence beyond academia (open science, societal, etc)

Ethical Safeguards

Create an integrated assessment system, provide context aware & adaptable assessment frameworks

Risks

Metric gaming (ghost articles citing), neglecting low visibility framework

Integrity checks

Metric validation audits, responsible metric tools (DeMetrics, OurResearch Dashboard), Responsible metric frameworks

Tools change—but principles remain

Co-creation of Standards

Transparent
Methods &
Frameworks

Fair Assessment

Inclusive Global
Research &
Innovation

- Advocate for values (civic, participatory, inclusive & equitable outcomes)
- Adapt contextually
- Nurture talent
- Shift towards open, decentralized, interdisciplinary collaboration

→ Research specific, open & accessible tools, in line w/ safeguards

- Volume → contribution & relevance
- Author order → contributor roles
- Journal prestige → transparent methods & open access
- Citations → societal/ local impact

9:00 Module 4: Collaborative Policy Work

- Facilitating Small Group Co-Review for Responsible AI Policy in Scholarly Communication and Research Assessment



Dr Vina Vaswani and Akuma
Centre for Ethics, Yenepoya (Deemed to be University),
Mangalore-575018, Karnataka, India

Objective

1. To collaboratively generate actionable, evidence-informed, and equity-focused policy recommendations for the responsible use of AI in scholarly communication and research
2. Through structured, participatory small group engagement



Preparation Phase (Pre-Session Activities)

1. Divide participants into small, interdisciplinary groups (4–6 per group).
Break-out rooms
2. Assign roles: Facilitator, Notetaker, Timekeeper, Rapporteur (rotate if time allows)
3. Go through any of this short policy briefs or frameworks (e.g., UNESCO AI Ethics Guidelines, CARE principles, DORA, TITAN checklist)
4. Each group will be given a provocative case or scenario to analyse using a policy co-design lens

Group Activity

Time	Activity
5mins	Develop and discuss assigned cases
5mins	Identify ethical tensions and systemic concerns , Using a worksheet
10mins	Discuss and propose 3–5 policy principles or recommendations addressing the case
5mins	Draft a short " Policy Snapshot " using a template (goal, rationale, actors, accountability, impact). Include real-world feasibility.
15mins	Gallery Walk or Cross-Pollination: Groups present to each other, circulate, ask questions, and give feedback using color-coded sticky notes or a digital whiteboard

Link to the worksheet template- https://drive.google.com/file/d/1fh1Hx-XXiFyZ9jL_JW-vlxYz2c3EZD7/view?usp=sharing

Sample Group Cases to Build and Discussion upon...

1. A journal begins using AI to screen peer reviews for quality and tone before editorial decision
2. A funding agency adopts AI-generated metrics to assess applicant productivity and impact
3. Researchers use AI tools to draft significant portions of manuscripts, how should authorship be attributed?
4. An institution penalizes researchers flagged by AI-detection tools for ‘potential’ AI-generated content without appeal

BREAKOUT
SESSION!



BREAKOUT
TIME

Post-Breakout

1. Group presentation
2. Q&A
3. Session end



9:50 Recap of Day 2 and Introduction to Day 3

(Francis Crawley)



Day 3: Thursday, July 24,
2025

Theme: Practical Strategies and Global Research
Standards for AI in Scholarly Communication



7:00 Recap of Day 2 and Introduction to Day 3

(Francis Crawley)

7:10 Panel & Q&A:

Developing global standards for AI governance in scholarly communication

Panelists: Gary Price, Lili Zang, Selin Apraci (Moderator)

Potential Questions

1. In your view, what does 'AI governance' in scholarly communication actually encompass – and what's at stake if we get it wrong?
2. How do we avoid a situation where AI governance standards are created in the Global North and exported globally, ignoring regional priorities or capacities?
3. Are there toolkits, frameworks, or standards you find particularly helpful or emerging – like the TITAN checklist, COPE positions, or the EU AI Act?

Audience Question:

In one sentence: What gives you hope that we can develop responsible, inclusive global AI governance for scholarly communication?

7:50 Interactive Workshop:

Register for [Scholarcy.com](#) (*Users Get Three Few Uploads*) This tool uses AI to summarize and organize. Be prepared to upload some of your writing.

Make sure to bookmark: **NotebookLM from Google** (and then make sure you're logged-in to a Google account).

- **Exercise:** How well (or not well) do these services summarize your writing? What do you like?
- **Exercise:** What needs to be improved. Should writers need to consider tools like this in the writing process?

Hands on:

Please register for Jenni and Writefull - Jenni and Writefull are two of the MANY AI-based tools that are built to assist authors.

Exercise: Try these services.

- What do you like? What don't you like?
- Are tools like this useful in the first place?
- Are tools like this worth paying for vs. using free services?

8:30 Module 5: Responsible Assessment of Research

Best practices for evolving responsible assessment of research: bibliometrics, evolving practice today, global perspectives

Presenters: David Molik(thought experiment around current practice), Gitanjali Yadav(evolving practice), Chiedoze Ike (Global Perspectives & future)

Thought Experiment

David Molik

Exploring How Current Bibliometrics Works Through the “100 Papers in 100 Days” Thought Experiment

Or

“How to easily break the current publishing system (don’t do this)”

A Disclaimer

- This is a thought experiment of... dubious ethical validity, and in no way represents my own views, as a researcher or otherwise.
- This thought experiment is intended only as an example of how fragile the research publishing system is, as the thought experiment, while theoretical, is implementable.

One Hundred Papers in One Hundred Days

- In Grad School, I came up with the idea of writing 100 papers in 100 days.
- The idea was to use generative text and text analysis tools
- Finally, once one hundred papers have been submitted, write a peer-reviewed journal article in a tier journal

How to Write One Hundred Papers (cheaply)

1. Establish a team of undergrad researchers
 - a. Split them into writing and review teams
2. Have a schedule of when papers are submitted to the review team
3. Use Generative AI, and other text analysis tools to review a group of “themed” papers
4. Themes can be undergrad determined
5. Undergrad Authors Write a review somewhat generated by AI
 - a. Which is then reviewed by review team
 - b. Then reviewed by Lead researcher
6. Paper then submitted to the relevant rxiv server (eg. EcoEvo, Bio, etc...)

Lastly

- Write a peer-reviewed paper with undergrads on how one hundred papers were written in one hundred days.

The Maths

- Publishing can often be a game of numbers, most of the papers will never receive any citations, but some will.

How to Hack Bibliometrics with 100 papers

If some of the papers in the 100 cite other papers in the 100, or all papers cite the same previously published papers, those will be counted

Some things to think about

- Should rxiv citations be treated the same as peer-reviewed citations?
- Are authors incentivized to implement some or all of the parts of this activity?
- Is it ethical to carry out the activity?

Group Work and Presentations:

Breakouts then sharing policy recommendations and regional insights with dynamic feedback from instructors

Course Synthesis and Next Steps:

Francis Crawley

Final reflections, RA4AI working group engagement, and course close



FORCE11

The Future of Research Communications and e-Scholarship

*Best practices for evolving responsible
assessment of research: bibliometrics,
evolving practice today, global perspectives*

Chiedozie IKE

MBBS, MPH, MSc, FWACP, MNIM, CIP

The Aim of this module:

1. Highlights the evolving Global RA
‘movement’s

2. Illustrate the progress of adoption
through common theories

3. forecast the future of Global RA

Research Assessment-The Evolution

RA Adoption- A *metamorphosis*-Butterflies flying Everywhere?



Rate of adoption- A gradual diffusion- Continental and Axial

From regional to global to de-global- the future, e.g the IRAF, LAFRA, UKFRAP, ETC

This Photo by Unknown Author is licensed under CC BY-NC-ND

Picture calls for consistency, flexibility, understanding, patience, faith and **support/ protection (due to climate and ecosystem challenges)**



Volume 33
2024

JOURNAL ARTICLE

Practicing responsible research assessment: Qualitative study of faculty hiring, promotion, and tenure assessments in the United States

Alexander Rushforth  , Sarah De Rijcke

Research Evaluation, Volume 33, 2024, rvae007,
<https://doi.org/10.1093/reseval/rvae007>

Published: 14 March 2024





- Global perspectives:
- 1. progressive
- 2. model-based
- 3. same objectives
- 4. varied speed and
- 5. approaches

COMPARATIVE OVERVIEW OF DIFFUSION-ADOPTION STAGE THEORIES

ROGERS' DIFFUSION OF INNOVATIONS MODEL	BASS DIFFUSION MODEL	TRANSTHEORETICAL MODEL (STAGES OF CHANGE)	CONCERN-BASED ADOPTION MODEL (CBAM)
 Awareness  Interest  Evaluation  Trial  Adoption	 Innovators  Imitators	 Precontemplation  Contemplation  Preparation  Action  Maintenance  Integration  Renewal	 Non-Use  Orientation  Preparation  Mechanical Use  Routine Use  Refinement  Integration



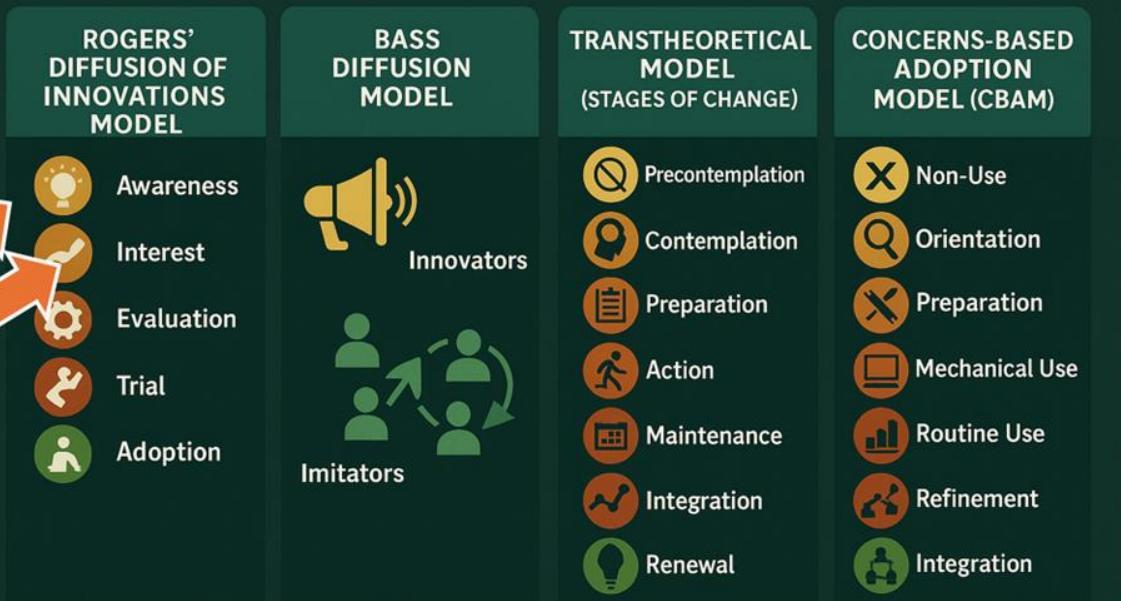
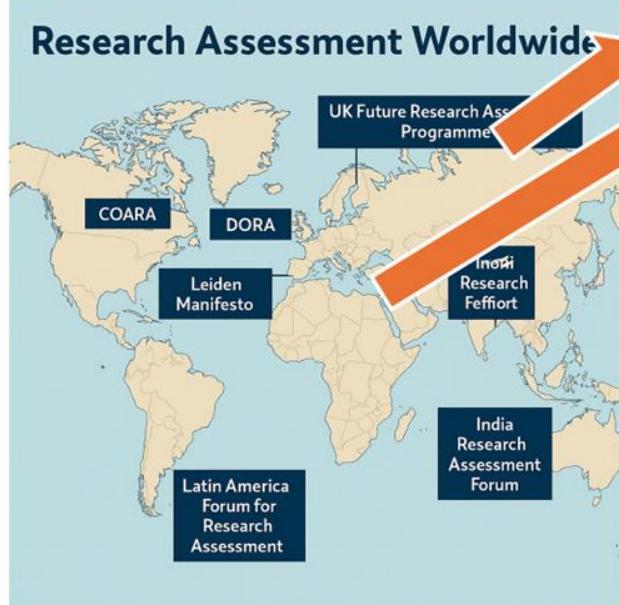
COMPARATIVE OVERVIEW OF DIFFUSION-ADOPTION STAGE THEORIES



ROGERS' DIFFUSION OF INNOVATIONS MODEL	BASS DIFFUSION MODEL	TRANSTHEORETICAL MODEL (STAGES OF CHANGE)	CONCERN-BASED ADOPTION MODEL (CBAM)
Awareness Interest Evaluation Trial Adoption	Innovators Imitators	Precontemplation Contemplation Preparation Action Maintenance Integration Renewal	Non-Use Orientation Preparation Mechanical Use Routine Use Refinement Integration



COMPARATIVE OVERVIEW OF DIFFUSION-ADOPTION STAGE THEORIES



Coalition with growing support: C exceeds 500 member organisations

About ▾ Agreement ▾ Action Plans ▾ Coalition ▾ Working Groups & National Chapters ▾ CoARA Boost & Cascade Funding ▾ News Resources ▾ Contact

[Sign the Agreement](#)

CoARA
Membership
Newsletter –
Sign Up



From Europe to Global in Research Assessment



Chapters Funding

All Academies, learned societies, and their associations, and associations of researchers Albania Andorra Australia

Austria Belgium Bosnia and Herzegovina Brazil Bulgaria Canada Chile Costa Rica

Country/scope Croatia Cyprus Czechia Denmark Estonia Europe Finland France

Georgia Germany Global Greece Hungary Iceland Ireland Italy Kenya Kosovo

Latvia Liechtenstein Lithuania Luxembourg Mexico Moldova Montenegro

Nigeria North Macedonia Norway

Other relevant non-for-profit organisations involved with research assessment, and their associations Panama Peru

Poland Portugal Public or private research funding organisations and their associations

Research centres, research infrastructures, and their associations Romania Serbia Slovakia Slovenia Spain

Sweden Switzerland Tanzania Timor-Leste Tunisia Turkey Uganda Ukraine

From Europe to Global in Research Assessment



Chapters Funding

All Academies, learned societies, and their associations, and associations of researchers Albania Andorra Australia [sign up](#)

Austria Belgium Bosnia and Herzegovina Brazil Bulgaria Canada Chile Costa Rica

Country/scope Croatia Cyprus Czechia Denmark Estonia Europe Finland France

Georgia Germany Global Greece Hungary Iceland Ireland Italy Kenya Kosovo

Latvia Liechtenstein Lithuania Luxembourg Mexico Moldova Montenegro

Nigeria North Macedonia Norway

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Sweden Switzerland Tanzania Timor-Leste Tunisia Turkey Uganda Ukraine

From Europe to Global in Research Assessment



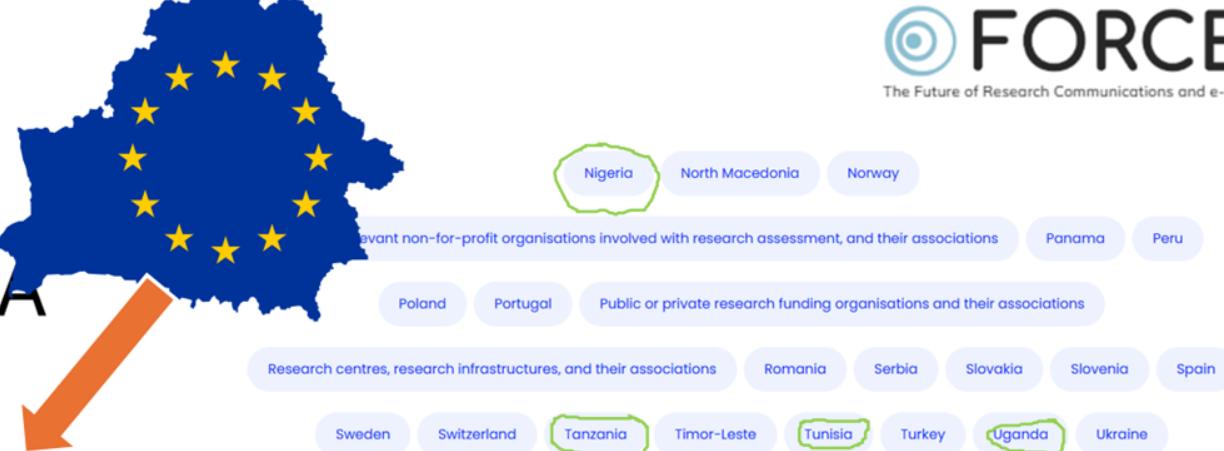
Institutions with Action Plans- Europe- dominance (The Continental Diffusion Theory)



Institutions with Action Plans- Europe- dominance (The Continental Diffusion Theory)



Africa in Europe 'hatched RA eggs'

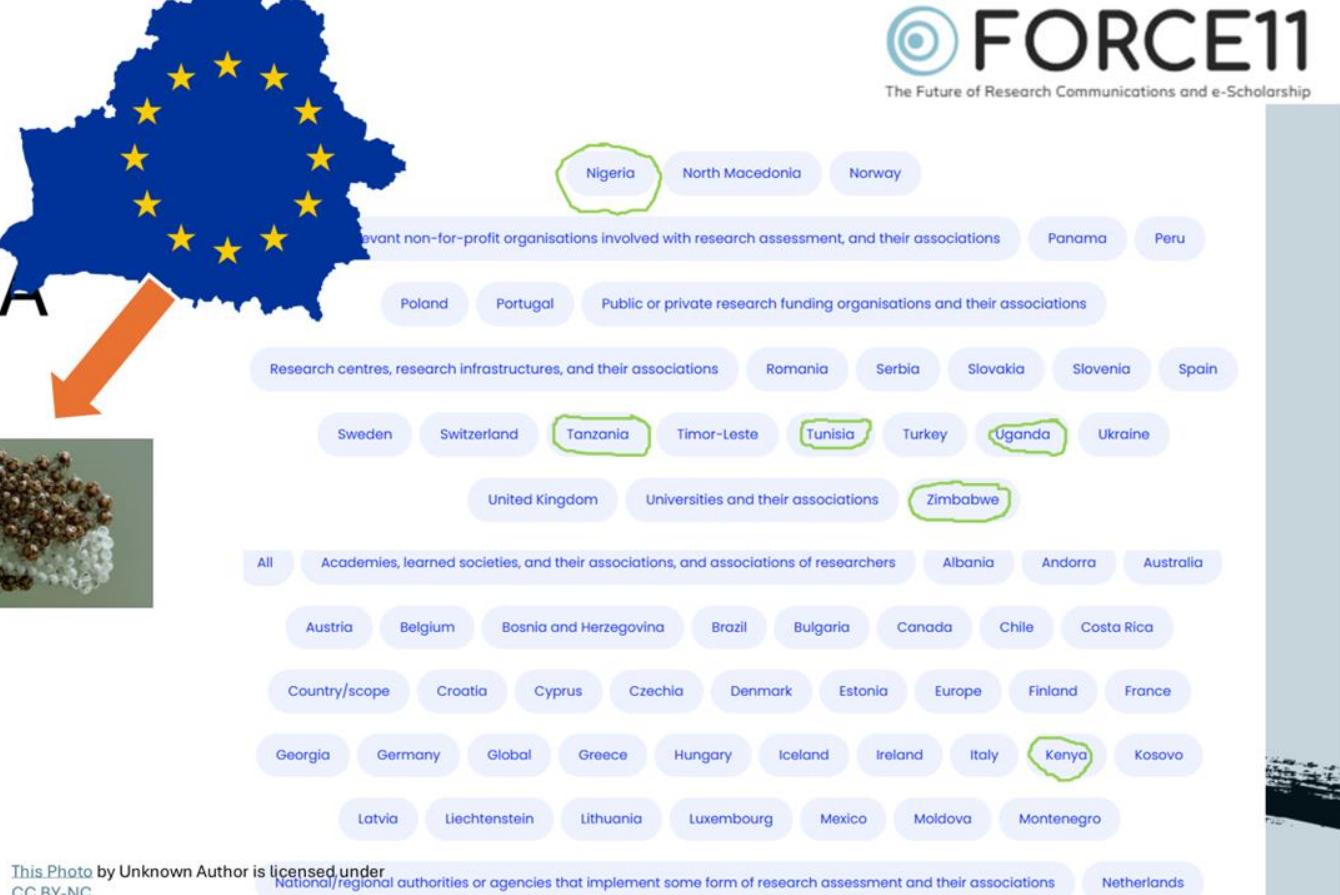


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Africa in Europe ‘hatched RA eggs’



This Photo by Unknown Author is licensed under National/region



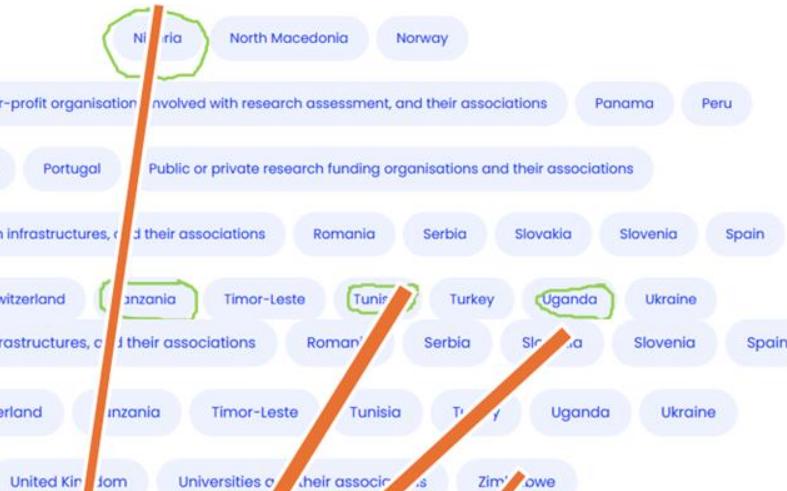
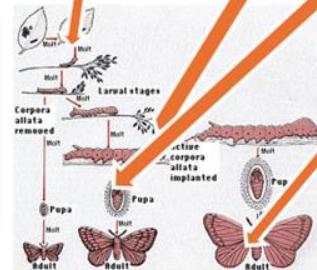
Africa in Europe ‘hatched RA eggs’



Africa in Europe ‘hatched RA eggs’



This Photo by Unknown CC BY-NC



Geographical Research Assessment Speed= Technology Diffusion Speed



European Economic Review
Volume 119, October 2019, Pages 216-235



Did technology transfer more rapidly
East–West than North–South?

Jamie Bologna Pavlik ^a✉, Andrew T. Young ^b  



Cite

006 

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Geographical Research Assessment Speed= Technology Diffusion Speed



Did technology transfer more rapidly
East-West than North-South?

Jamie Bologna Pavlik ^a✉, Andrew T. Young ^b  

Show more ▾

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<https://doi.org/10.1016/j.euroecrev.2019.07.006> 

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Continental Speed of Technology Diffusion

East-West



Faster Diffusion

Similar Climates
and Ecosystems
Promoting Spread

Continental
Diffusion Theory

North-South



Slower Diffusion

Diverse Climates
and Ecosystems
Limiting Spread

Axial Diffusion Theory

Geographical Research Assessment Speed= Technology Diffusion Speed



Did technology transfer more rapidly
East-West than North-South?

Jamie Bologna Pavlik ^a✉, Andrew T. Young ^b  

Show more ▾

+ Add to Mendeley  Share  Cite 

<https://doi.org/10.1016/j.euroecorev.2019.07.006> 

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Continental Speed of Technology Diffusion

East-West



Faster Diffusion

Similar Climates and Ecosystems Promoting Spread

Continental Diffusion Theory

North-South



Slower Diffusion

Diverse Climates and Ecosystems Limiting Spread

Axial Diffusion Theory

Geographical Research Assessment Speed= Technology Diffusion Speed



The screenshot shows a journal article from the European Economic Review, Volume 119, October 2019, Pages 216-235. The article title is "Did technology transfer more rapidly East-West than North-South?". The authors are Jamie Bologna Pavlik and Andrew T. Young. The page includes links to Add to Mendeley, Share, Cite, and Get rights and content.

Continental Speed of Research Assessment Reform

East-West



Faster Diffusion

Similar and Ecosystems Promoting Spread

Continental Diffusion Theory

North-South

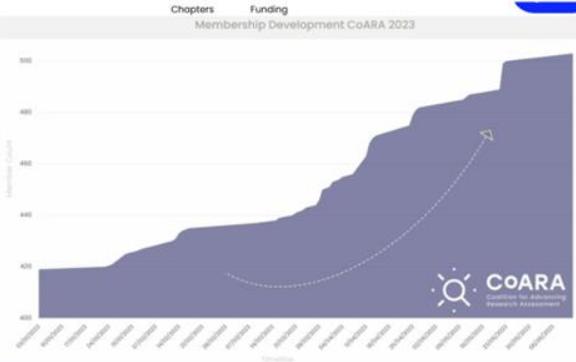
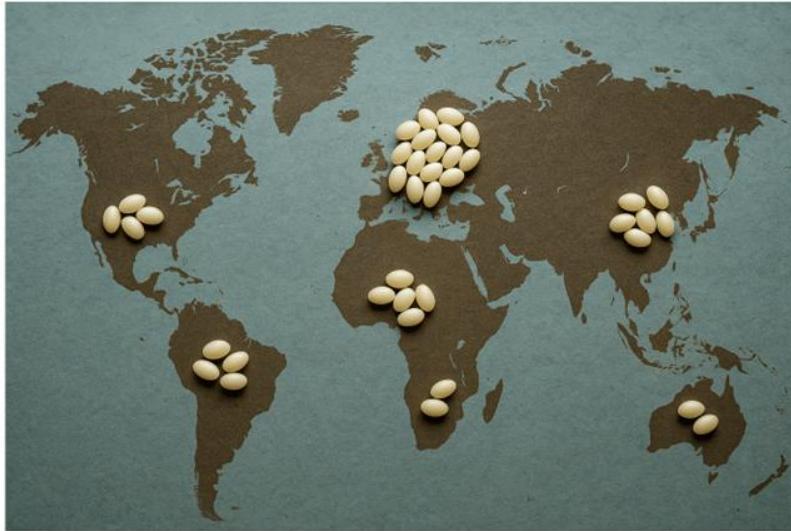


Slower Diffusion

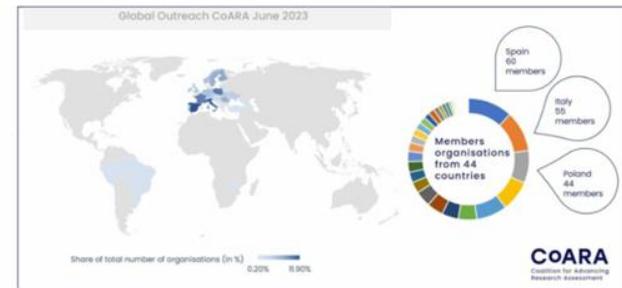
Diverse and Ecosystems Limiting Spread

Axial Diffusion Theory

The RA eggs are being laid everywhere- metamorphosis also happening everywhere...



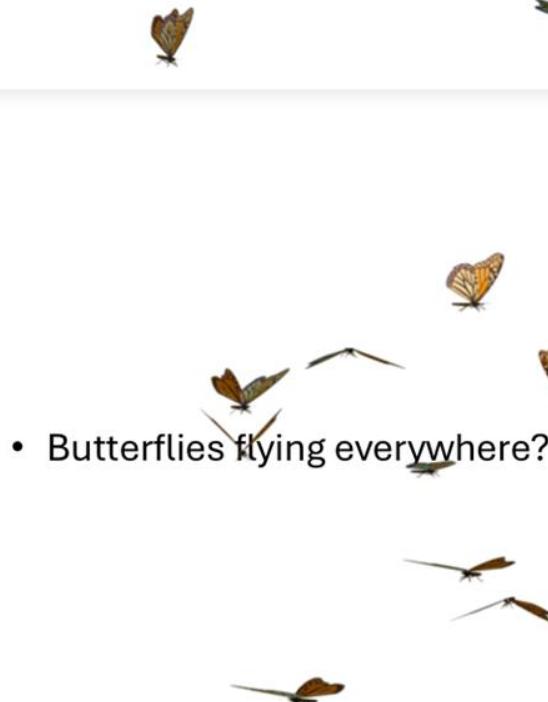
Source: Coalition for Advancing Research Assessment 13/06/2023



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<https://coara.eu/news/coalition-with-growing-support-coara-exceeds-500-member-organisations/>

The Future Outcome- What we will see-Broad

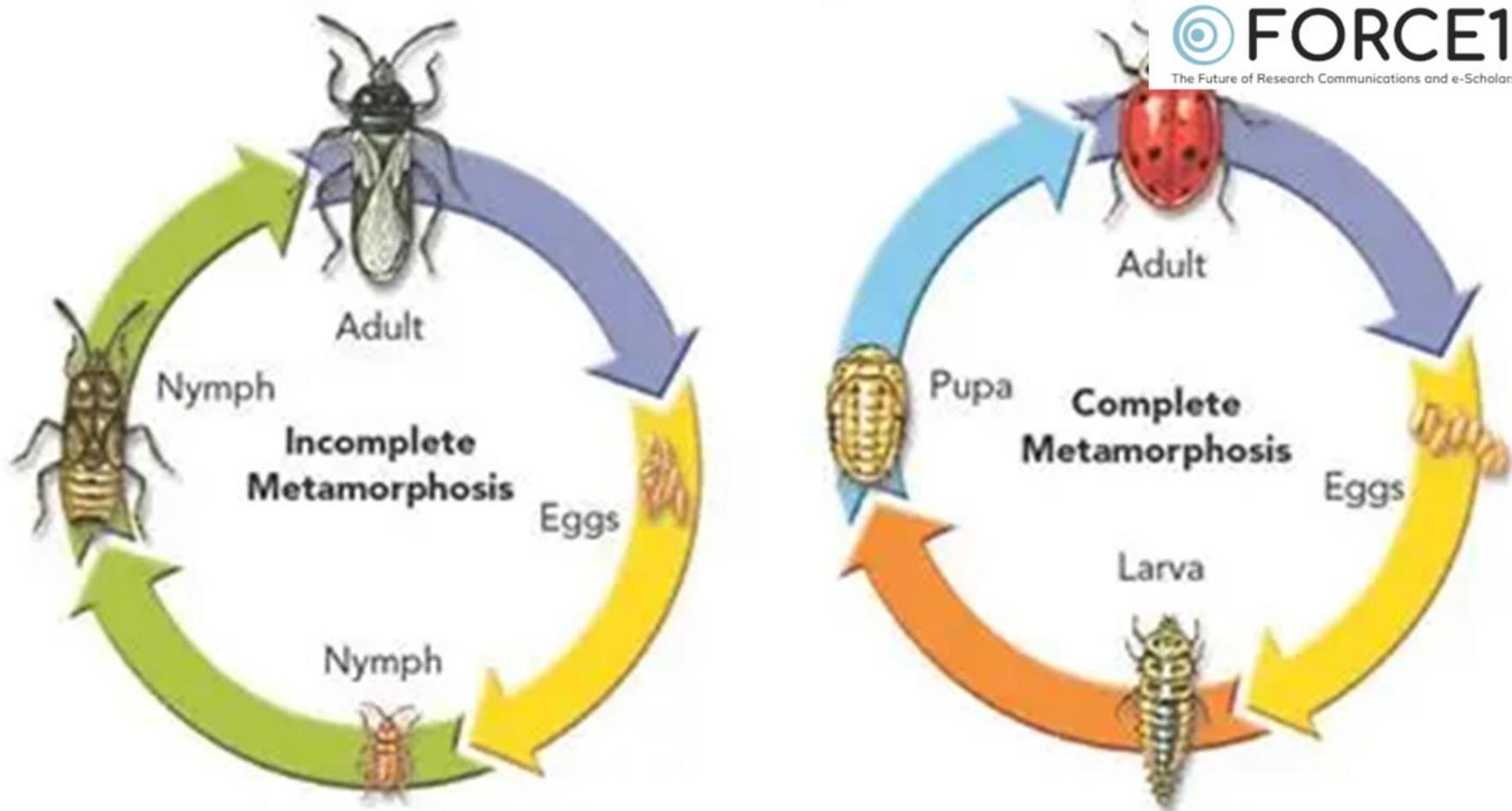


- Butterflies flying everywhere?



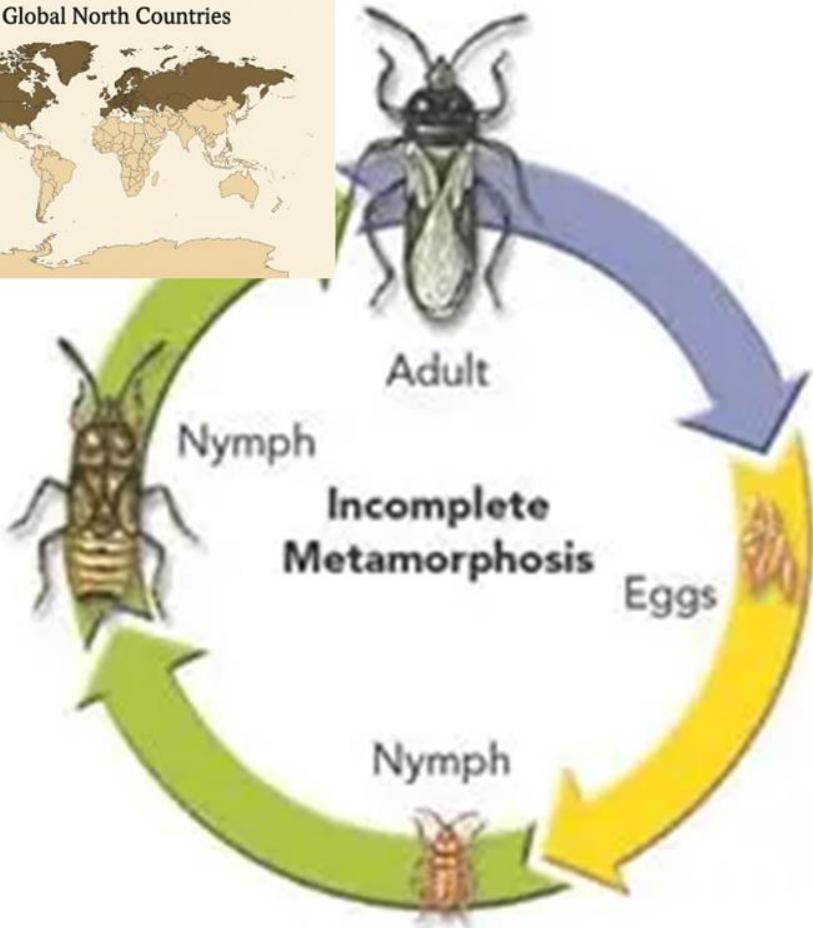


Different flying insects everywhere- A closer look (Europe, N-S America, SE Asia, Africa, Australia, Antarctica)

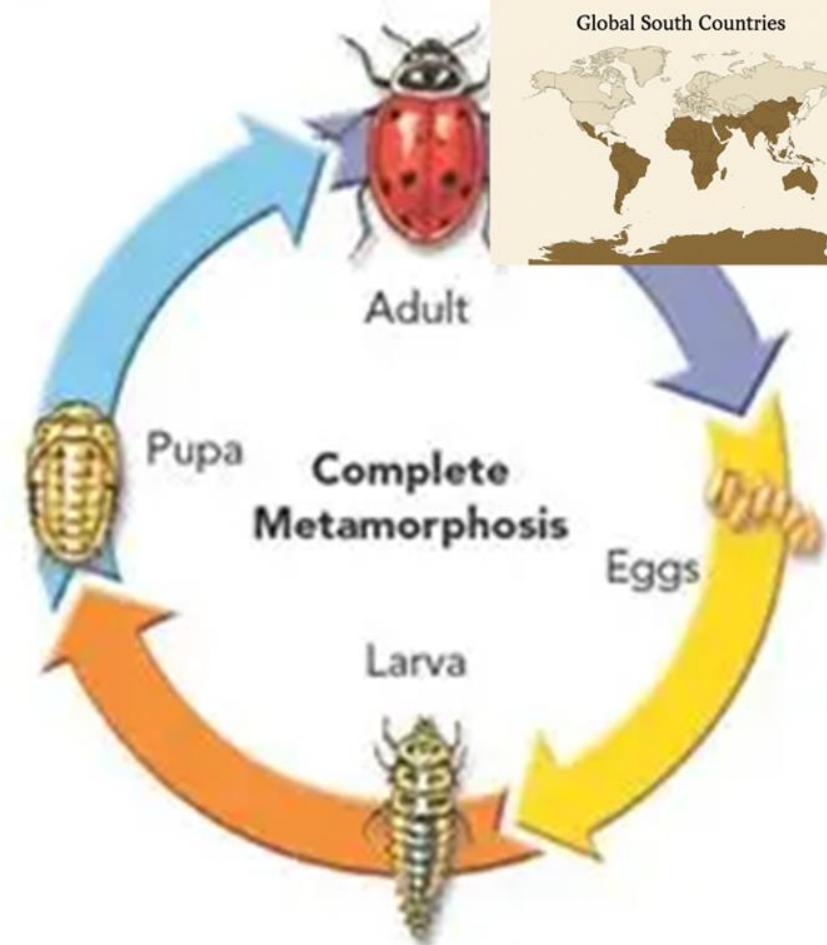


<https://animaldifferences.com/differences-between-complete-and-incomplete-metamorphosis/>

Global North Countries

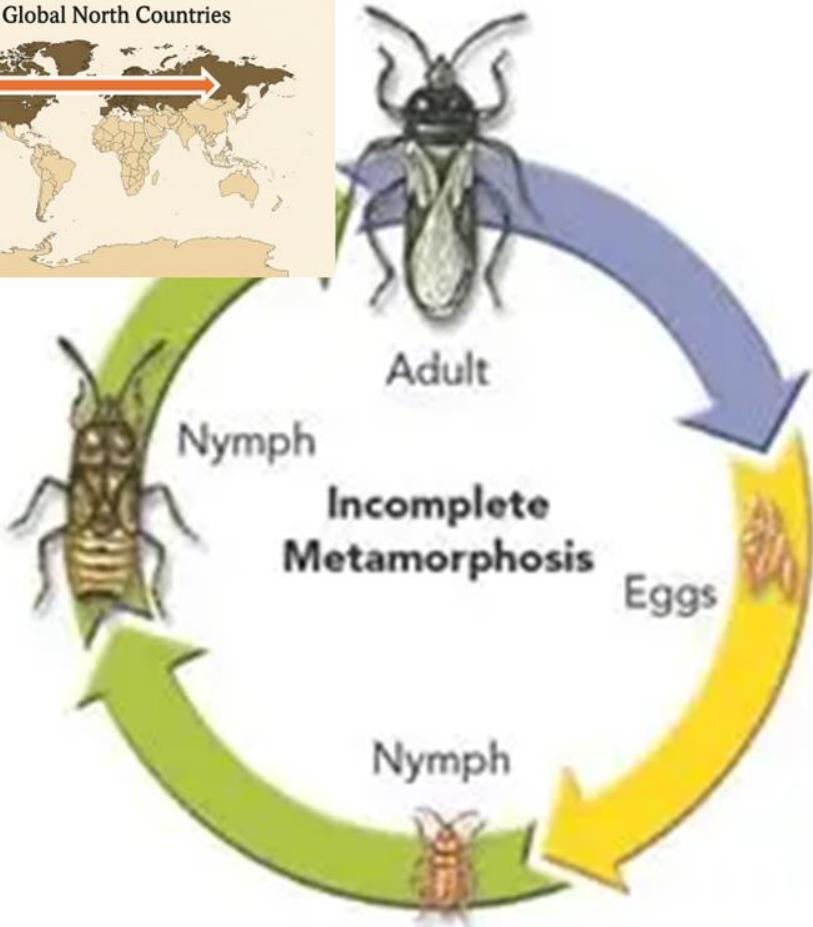
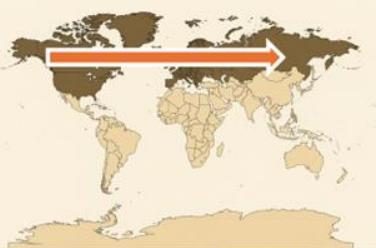


Global South Countries

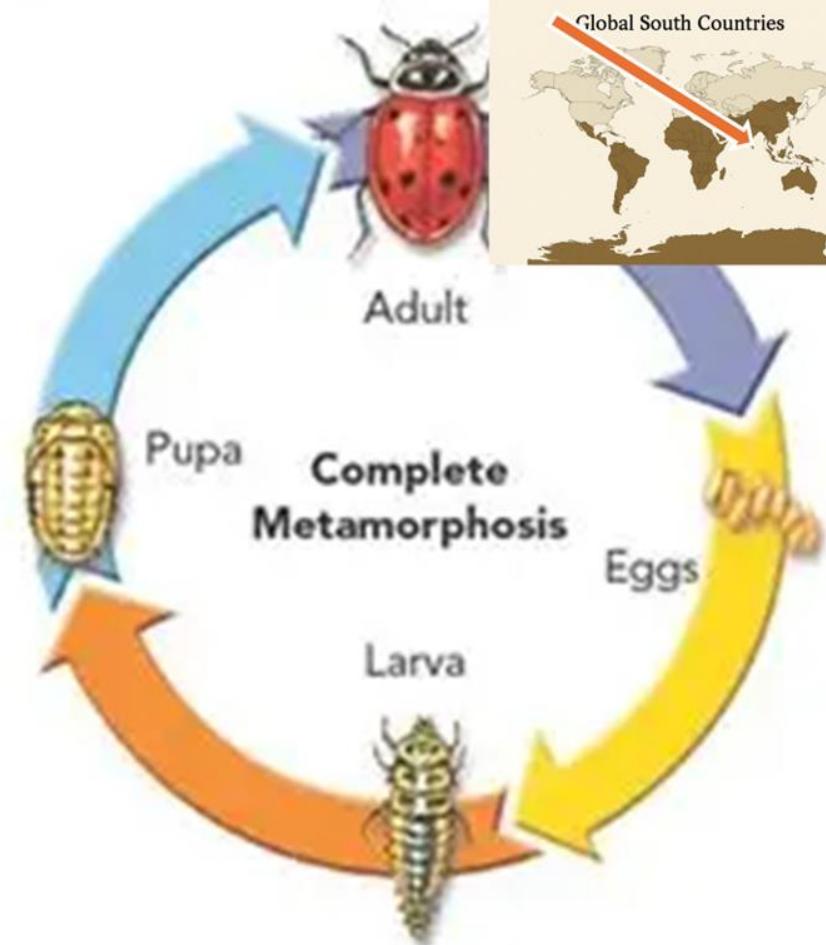


<https://animaldifferences.com/differences-between-complete-and-incomplete-metamorphosis/>

Global North Countries



Global South Countries



<https://animaldifferences.com/differences-between-complete-and-incomplete-metamorphosis/>



The Approach to grow the Future (of RA)

- Understanding the complexities of innovation adoption across different climates and ecosystems.
- Apply RA tools, approaches, and evaluations flexibly, contextually, patiently, but consistently.
- Expect more group/ region/ movement dynamics as climate and ecosystems change (see models)
- Expect flying (progressive) insects (small but active and visible changes) everywhere that are not of



Conclusion

- RA movement is progressive from Europe/ NA to global.
- RA adoption style is moving towards de-globalization of RA.
- Approaches (styles) and rate of adoption will be based on geographical climates (socio-political) and academic-R&D ecosystem.
- However, the objectives will remain the same.
- The variations in global RA calls for sustained efforts, contextualization of approaches, patience, faith, understanding, flexibility and support

