



ELSEVIER

Global Trends Shaping the Future of Post- Pandemic Libraries

Elsevier-FPPTI SEA Librarians Summit

Gwen Evans, Vice President Global Library Relations

Elsevier

May 2023

Surabaya Indonesia



- Introduction
- New Report: Southeast Asia institutions and Biodiversity Research
- Perspectives from Librarians
 1. Skills and Staffing
 2. Research Data Management
 3. What does Open mean for my institution?
 4. Artificial Intelligence
- Q&A

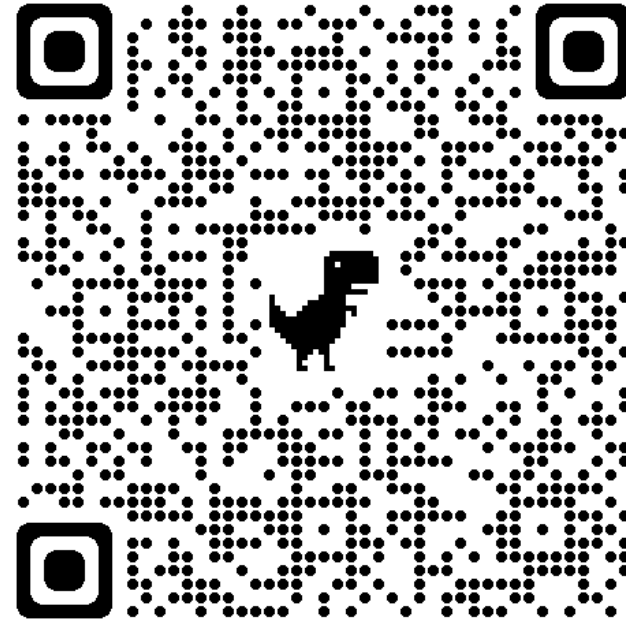


Gwen Evans

VP of Global Library Relations

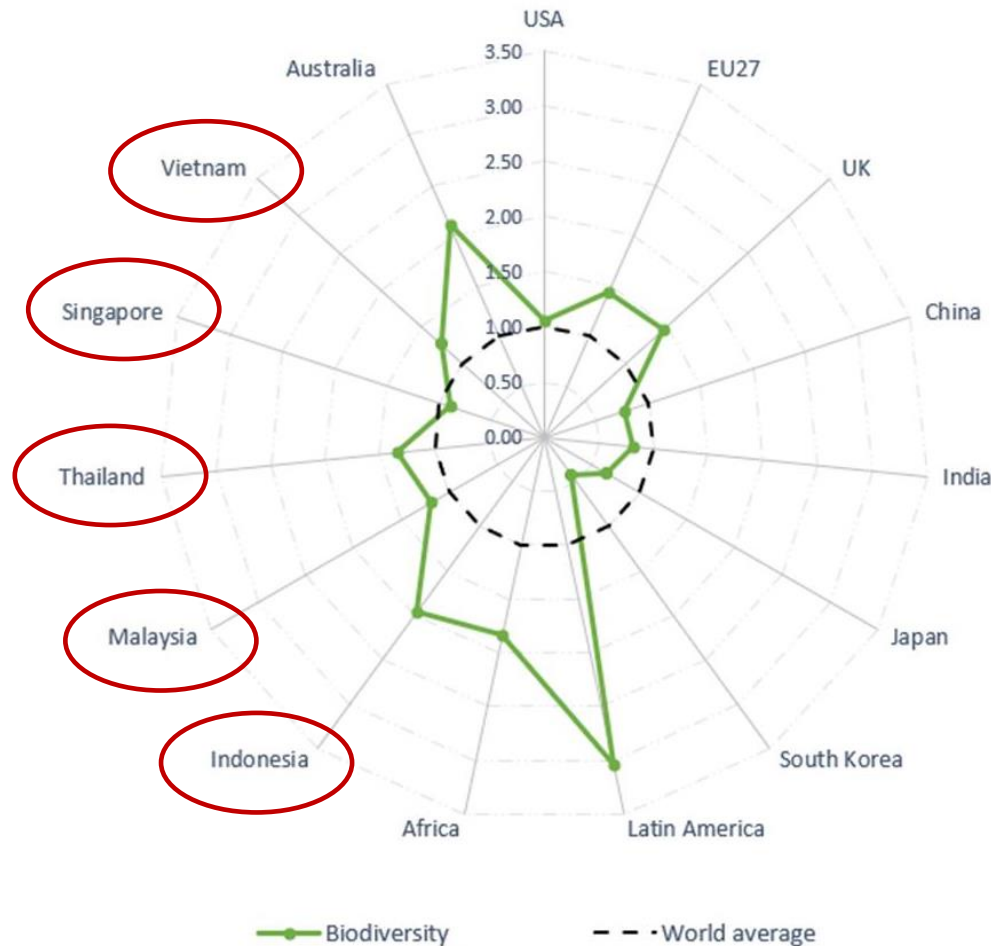


- MLIS, University of Illinois; MA (Cultural Anthropology, University of Chicago), MSLIS (University of Illinois). Fulbright Scholarship for two years of fieldwork in Indonesia on local and global perceptions of the history of Catholicism on Flores
- Executive Director of OhioLINK (state agency leading 117 academic libraries in 88 higher education institutions); annual shared e-content purchases of ~\$45 million USD (journals and e-books; E-journals & e-books. Funding is OhioLINK: 18% (capital funds); Member institutions: 82%)
- Associate Professor, Library Information and Emerging Technologies, Bowling Green State University, Ohio



<https://beta.elsevier.com/connect/biodiversity-report-shows-data-is-crucial-for-meeting-world-challenges>

Relative Activity Index



SciVal string: "biodiversity" OR "species richness" OR "species diversity" OR "ecosystem diversity" OR "phylogenetic diversity" OR "functional diversity" OR "conservation biology" OR "ecological diversity"

Scopus string: (TITLE-ABS-KEY("biodiversity" OR "species richness" OR "species diversity" OR "ecosystem diversity" OR "phylogenetic diversity" OR "functional diversity" OR "conservation biology" OR "ecological diversity"))

The Global South leads in Relative % of Biodiversity Research

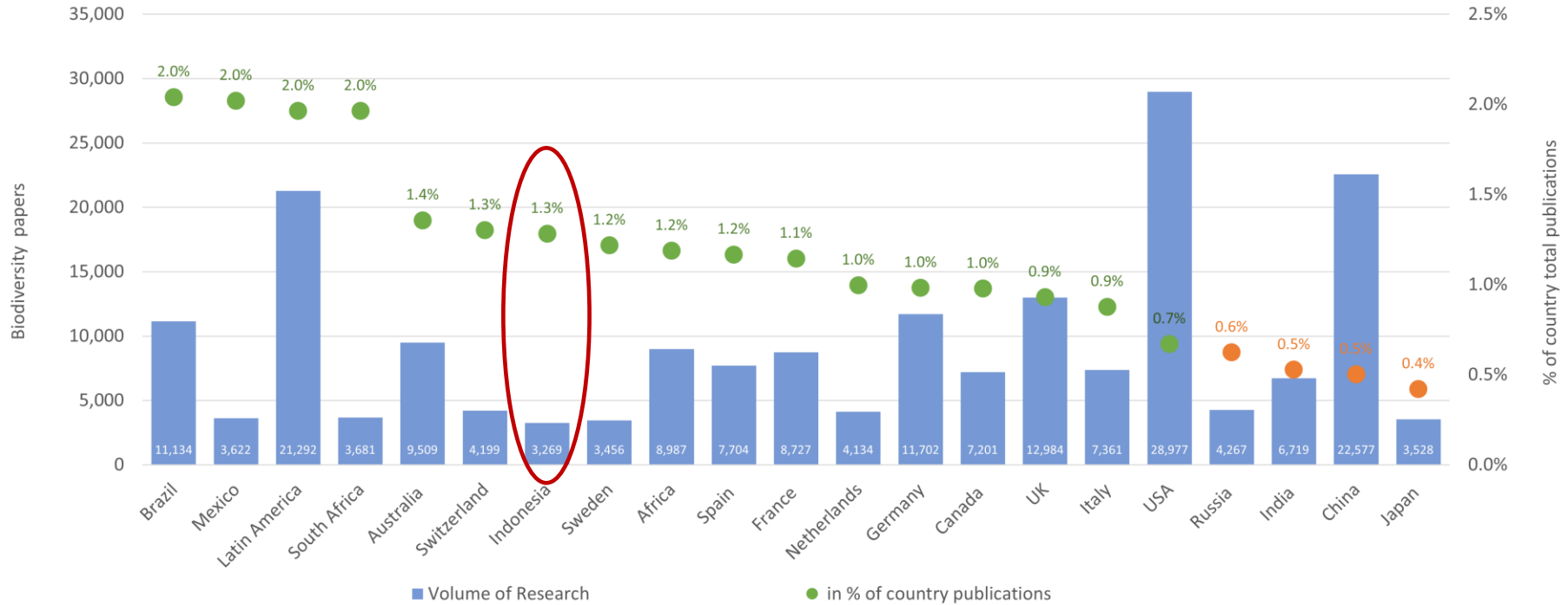
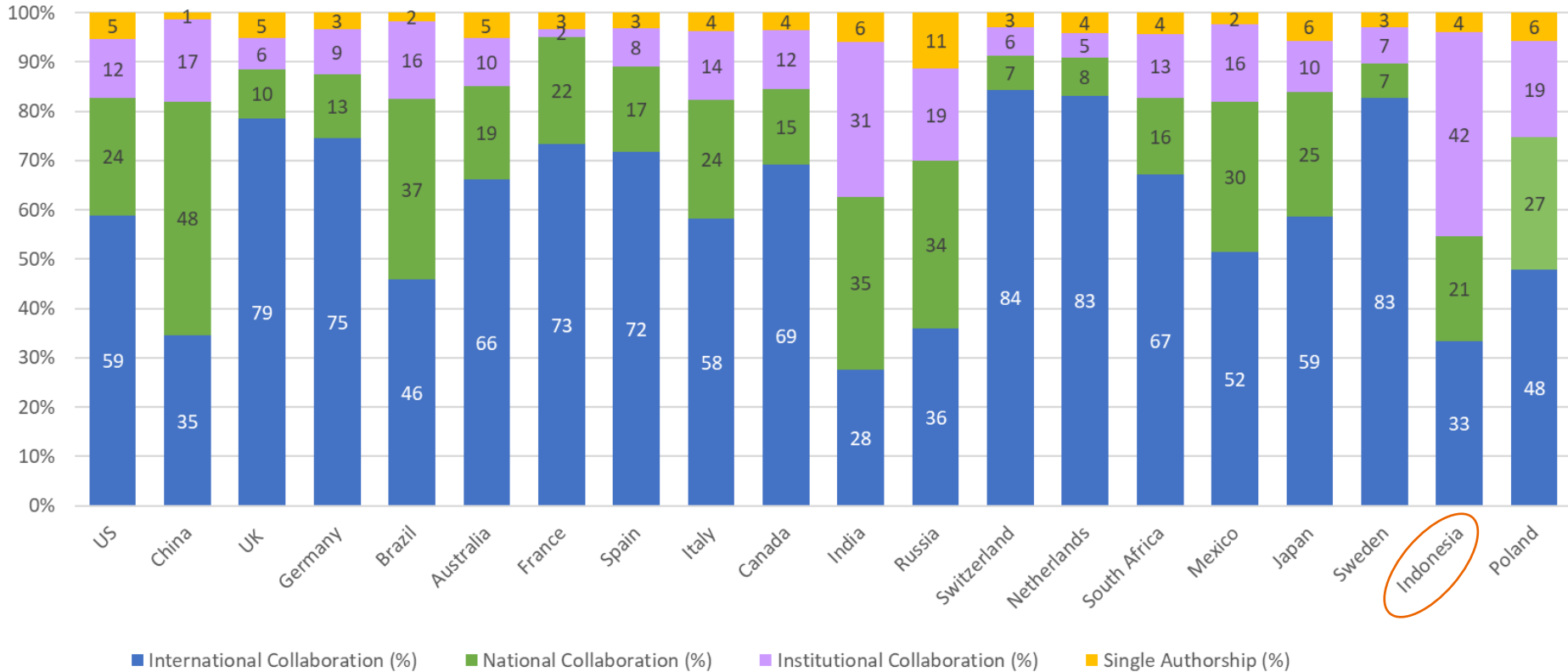


FIGURE 1-6 Scholarly output in biodiversity research by country (in blue), from 2017-2022, showing the relative share of biodiversity research publications as a percentage of total output where green dots denote more activity and red dots less activity than the global average.
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Collaborations comparison selected countries



Librarian Competencies and Staffing



Librarians in Western Europe, North America, and SE Asia

- iSchools/library schools are not providing graduates with “library ready” skills. iSchool graduates with more advanced skills are choosing the private sector over academia
- Retention and recruitment are an issue as the trade off between salary and benefits is less of a good deal for staff (higher education in general, not just librarians)
- Some libraries are hiring more specialists without library degrees; data scientists, artificial intelligence experts, data and visualization experts

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SERVICES OVERVIEW

Services Overview

- AI (Artificial Intelligence)
- Copyright & Fair Use
- Data Management
- Data Science
- Digital Humanities
- Publishing & Archiving
- Reproducibility
- Research Integrity
- Research Metrics and Impact
- Spatial Information Services
- Student HiPerGator Access
- Systematic Reviews
- Visualization


Services



AI (Artificial Intelligence)

Big Data, Machine Learning, High-Performance Computing, Natural Language Processing


[More on AI \(Artificial Intelligence\) →](#)



Copyright & Fair Use

Legal Sharing and Reuse, Publisher Policies, Authors' Rights


[More on Copyright and Fair Use →](#)



Data Management

Discovery, Management Plans, Storage


[More on Data Management →](#)



Data Science & Statistics

Informatics, Statistical & Data Analysis


[More on Data Science →](#)



Digital Humanities

Multilingual Digital Projects, International Digital Libraries, and Digital Games


[More on Digital Humanities →](#)



Publishing & Archiving

Open access publishing, Disseminating scholarship, public access mandates


[More on Publishing & Archiving →](#)



Reproducibility

Open Science, replication, pre-registration, computing workflows, sharing data/code/materials/protocols

[More on Reproducibility →](#)



Research Integrity

Responsible Conduct in Research, Avoiding Plagiarism

[More on Research Integrity →](#)

Carnegie Mellon University Libraries

Find

Find Funding & Collaborators

Uncover potential collaborators and the funding to support your project.

- Use resources like [Dimensions](#) or [SciVal](#) to discover relevant research, track funding in your field and see the impacts of your research and that of your peers.
- [Libraries faculty](#) are available to collaborate on projects and can be written into grants as expert personnel for systematic reviews, data management, or other information science skills.

Manage

Manage Information & Data

Work with our specialists to evaluate, select, and implement the tools to organize your data and keep your project on track.

- Manage data, work with collaborators, and share your research with the [Open Science Framework](#).
- Request guidance on how to [better manage your data](#) to enhance data reuse and preserve it for future research.
- Learn how to use [Zotero](#), [Mendeley](#) and other citation management tools.

Measure

Measure Impact & Manage Your Digital Identity

Identify when and where your research has been cited, as well as the scope of its reach.

- Track social media reach of individual publications with [Altmetric Explorer](#).
- Register for the major bibliometric databases to manage your [identity as an author](#). Learn more about Altmetric Explorer.
- Consult with a [librarian](#) to develop your faculty profile for publications in [Elements](#), a tool that tracks your research output for easier reporting.

How Academic Librarians Can Use University Strategic Planning to Align Library Services with University Goals

Discover how library directors are developing plans to improve their libraries' visibility on campus.

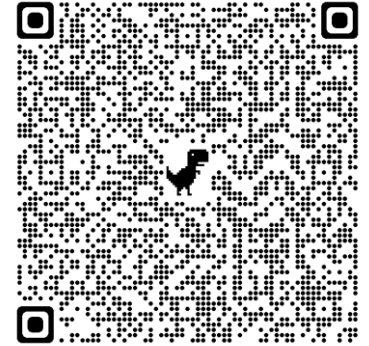
By Paula Milewska - May 10, 2023

9 mins



To support Polish library leaders in making academic libraries and their

Part 1



Part 2



Research Data Management



- US: NIH federal funder mandate about open data took effect January 2023
 - All researchers receiving grants must deposit their data in an open repository
 - Data handling is already causing concerns about the administrative burden on institutions and researchers as an unfunded mandate.
 - Staffing, compliance, sources of funding – green OA with no embargo is just as administratively burdensome on campus.
 - Library Dean about her Provost “He was really scared about the data, and he remains really scared about the handling costs of the data plus the impact on future research, students’ finishing dissertations, it's going to reduce the amount of money that's available to actually do the research.”

Tenopir, C., Talja, S., Horstmann, W., Late, E., Hughes, D., Pollock, D., Schmidt, B., Baird, L., Sandusky, R., & Allard, S. (2017). Research Data Services in European Academic Research Libraries. *LIBER Quarterly: The Journal of the Association of European Research Libraries*, 27(1), 23–44. <https://doi.org/10.18352/lq.10180>

Fig. 2: Consultative RDS (labels not shown for values of <5%).

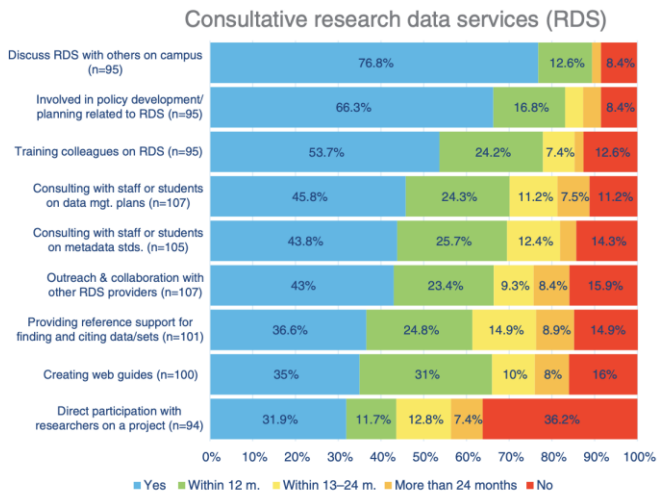


Fig. 3: Technical RDS.

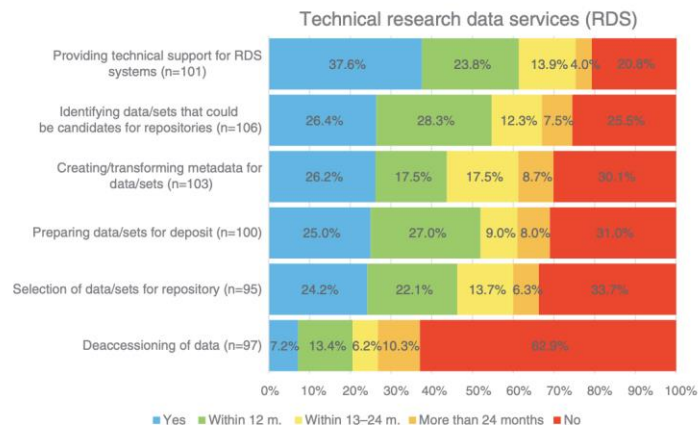
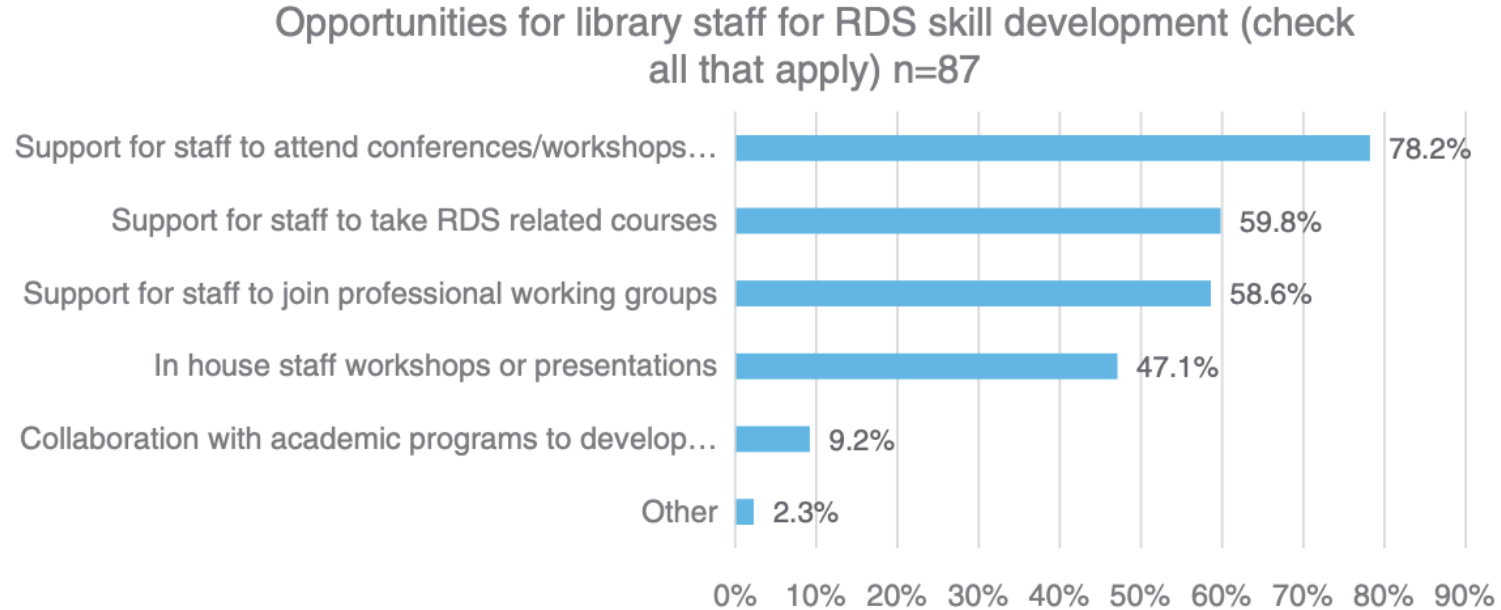


Fig. 4: Opportunities for library staff for RDS skill development.





Research Data Management Librarian Academy

<https://rdmla.github.io>

What is RDMLA?

CANVAS | NETWORK

Offer a Course | About Us | Take a Course | Login

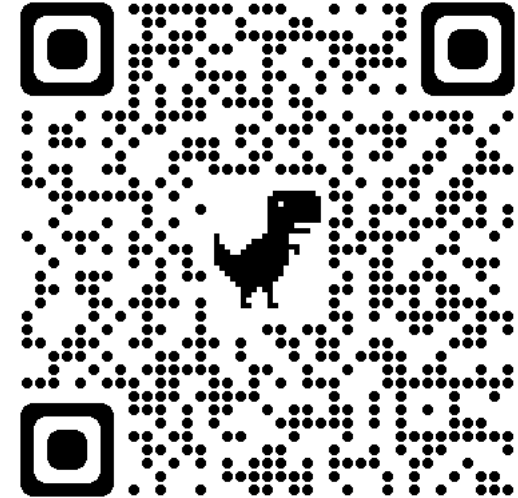
Rectangular Sign

RESEARCH DATA MANAGEMENT LIBRARIAN ACADEMY [RDMLA]

Self-paced

COURSE DATE: Open	DURATION: Ongoing	COMMITMENT: 1.5-2 hrs/unit
REQUIREMENT: None	COURSE TYPE: Self-paced	CREDENTIAL: Certificate, Cont Ed Credits (CEUs)

ENROLL



<https://www.canvas.net/browse/simmonsu/courses/research-data-management>

What is RDMLA?

- Online education program on about research data management
- Filling a gap in RDM training
- For the practicing librarian to enhance and retool their skill sets on RDM practices and projects
- For researchers wishing to learn more about RDM foundations and related software and tools
- Offers both foundational knowledge and trending/important topics

RDMLA Partners



NETWORK



RDMLA Partners



Financially funding
RDMLA



Continuing
Education (CE)
Certificates



Approved Basic Level
Course for Data
Services Specialization
(DSS)

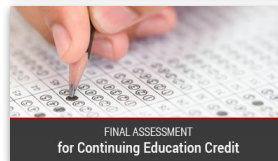


Traditional Chinese
language translation



RDMLA Units

Original **eight**
units launched
October 2019



Three new units
launched late
2020/early 2021

Mini-Modules & Special Topics

- Presenting relevant and important information in a timely fashion
- Provide key points and concerns
- Evolve as the subject matter changes/updates



MINI-MODULES
RDM Trending Topics

RDM TRENDING TOPIC MINI-MODULE
NIH Policy for Data Management & Sharing

RDM TRENDING TOPIC MINI-MODULE
Research Data Ethics in Health Sciences

Program Evolution: DSCPE



70-hour virtual field experience
with Capstone Partners



<https://dscpe.github.io>

Program Successes

Research Data Management Librarian Academy

- 15 partners and growing
- 7,466 Active Learners
- 273 registrants for the Chinese translation modules
- 648 Completion Badges
- 49 CE Certificates Awarded

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What does OA
mean for my
institution?

More Ambivalence about OA in Europe than expected! Increasing ambivalence in the US as a federal funder mandate approaches



Sources:

- Coalition of Networked Information (Denver, US) April
- IATUL (Dubai) March 2023
- UKSG Conference (Scotland) April 2023
- Fiesole Collection Development Retreat (Basel, Switzerland) May 2023
- Individual Conversations at Oxford University, Imperial College London, Elsevier North American Library Advisory Board

Major themes

- Concerns about cost burden on research intensive institutions under APC model
- Concerns that funders will end block grants to pay for APCs (UK/JISC)
- No indication in US that there will be extra funding from federal governments and researchers will have to sacrifice research funds for APCs

OR

- Researchers will turn to library for funding and there is NO NEW MONEY

Selected Quotes and thoughts from librarians

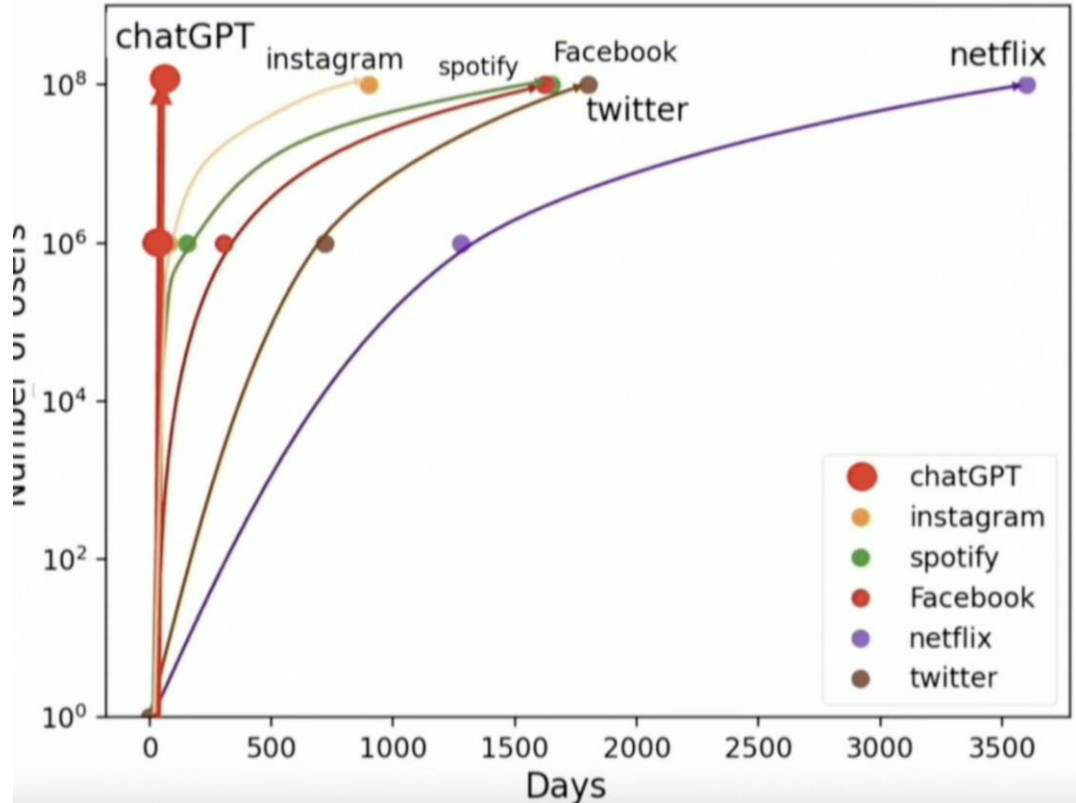


“The way the University of California is approaching Open Access by privileging financial support for our authors output has the very perverse effect of charging the state of California notionally or actually for the reading that gets done by everybody but the students at the University of California.” **Alison Scott, Associate University Librarian for collection Management and Scholarly communication at UCLA (retired in 2022)**

The current RAP model is completely unsustainable –Elsevier’s deal was the best from his point of view as it was more grounded in reality. Some deals with “publishers based in Europe” are ruinous and can’t be sustained. He doesn’t think that block grants from the government can continue at the current levels and fears what will happen when the money is cut off. **Senior Librarian at Oxford University (2022)**

Re: The Ivy league library directors objecting to the APC model in a letter to the Office of Science and Technology: “What is the alternative? They are rejecting APCs and I would join them in rejecting it but I don't have a good alternative. I think it's another place where we painted ourselves in the corner and I don't just mean the publishers I mean the libraries.” **Dean of Libraries, Research Intensive Public University 2023**

What does AI mean for my institution and profession?



Um yeah. A relentless pace, indeed!

Similar (though not the same).
In January but not in April.
New in April.

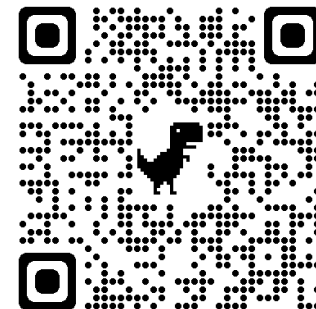


GPT3.5, 1/6/23

1. Discovery and Search: AI-powered search and discovery tools can help users find relevant resources quickly and efficiently, even among large collections,,,
2. Personalization: AI-powered personalization systems can be used to provide users with tailored recommendations of resources based on their research interests and browsing history,,
3. Content analysis and understanding: AI can be used to analyze large amounts of unstructured data, including text, images, and audio,,,
4. Digital Humanities: AI can also be used to support digital humanities research, such as text-mining, sentiment analysis and sentiment extraction,,
5. Automation: AI can help automate repetitive tasks such as data entry, classification, and metadata creation,,,
6. Metadata generation: With the help of machine learning, AI can help automate the process of metadata creation,,,
7. Preservation and Conservation: AI can help with the identification, preservation and conservation of digital heritage,,

GPT4, 4/28/23

1. Cataloging and metadata generation: AI can help automate cataloging processes and generate metadata for library resources. By using machine learning algorithms,,
2. Semantic analysis and text mining: AI-powered semantic analysis and text mining can help librarians better understand and organize vast collections of texts in the humanities...
3. Improved search and discovery: AI can enhance search functionality by understanding natural language queries, providing more accurate and relevant search results...
4. Personalized recommendations: AI can analyze user behavior, preferences, and search history to generate personalized reading recommendation...
5. Enhanced digital collections: AI can be used to transcribe, translate, or annotate digital resources, making them more accessible and engaging for users. ...
6. Virtual research assistants: AI-powered research assistants can help patrons with tasks like literature reviews, citation management, and data analysis....
7. Digital humanities projects: AI can be used in various digital humanities projects, such as text analysis, topic modeling, and sentiment analysis, to gain new insights into historical texts, cultural artifacts, and other humanities resources.
8. Predictive analytics: AI can help librarians identify trends and emerging research areas in the humanities, enabling them to make informed decisions about collection development and resource allocation.
9. Skill development and training: AI-driven tools can be used to create personalized learning experiences for librarians, helping them...

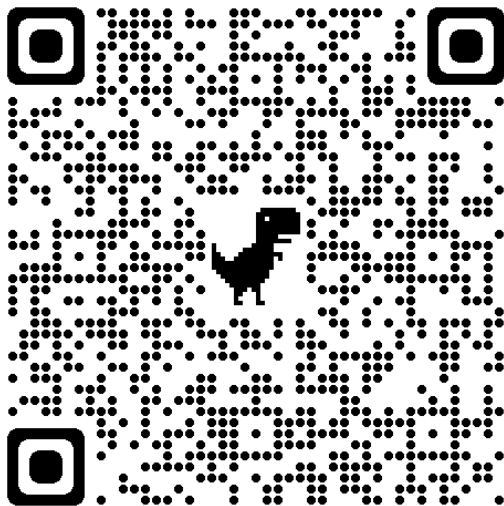


Anita DeWaard, Vice President Data Collaborations, Research Collaborations Unit, Elsevier of asked successive versions of ChatGPT ““How will AI influence the work of libraries and librarians, especially in the humanities?””

Ithaka S+R Common Scholarly Communication Infrastructure Landscape Review

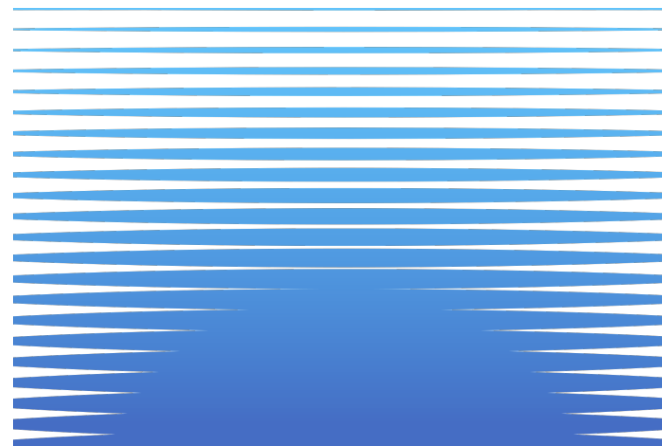
Oya Y. Rieger, Roger C. Schonfeld

DOI: <https://doi.org/10.18665/sr.318775>



Common Scholarly Communication Infrastructure Landscape Review

Oya Y. Rieger
Roger C. Schonfeld





Q&A

Thank you

[https://www.linkedin.com/in/gwenevans/
g.evans@elsevier.com](https://www.linkedin.com/in/gwenevans/g.evans@elsevier.com)