

Open Access in Practice: The Adventures of NTU Library from Genesis to Present Time

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University Librarian

May 2024



Beautiful Campus

https://www.ntu.edu.sg/



1. Lee Wee Nam Library (LWNL)

2. Art, Design & Media Library (ADML)

3. Business Library (BUSL)

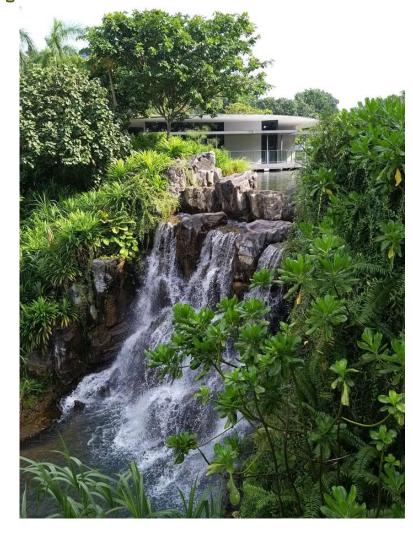
4. Humanities & Social Sciences Library (HSSL)

5. Chinese Library (CHNL)

6. Library Outpost (LOP)

7. Communication & Information Library

(CMIL)



Total Floor Area:

14,847 sqm

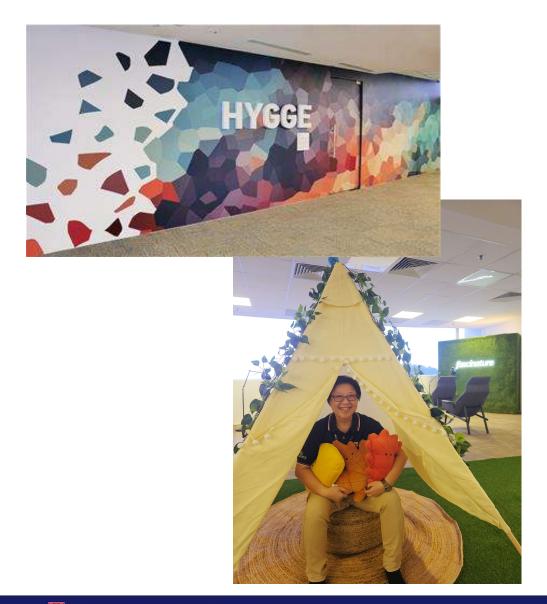
Spaces & Services Highlight

Hygge

 A dedicated wellbeing space at the Quiet Zone of Lee Wee Nam Library (Level 5) designed to encourage users to engage in reflection, contemplation and mental relaxation. HYGGE features the concept *Fascinature*, which combines elements of soft fascination and nature to facilitate mental rejuvenation.

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https://www.ntu.edu.sg/education/libraries/spaces-and-facilities

TEMI Robot



https://www.youtube.com/watch?v=QfurJhMUfe8

In the beginning..... INSTITUTIONAL REPOSITORIES

OPEN ACCESS MOVEMENT

•The term "open access" emerged in the 2000s through key statements:

- Budapest Open Access Initiative (2002): Advocated for self-archiving and open access journals.
- Bethesda Statement on Open Access Publishing (2003): Called for unrestricted online access to scholarly research.
- Berlin Declaration on Open Access to Knowledge (2003): Focused on scholarly articles²³.

Other links:

- 1) History of open access Wikipedia
- 2) Timeline of the open-access movement Wikipedia



NTU Open Access Policy

- Library took initiative to draft the NTU OA Policy and endorsement was given by the University Library Committee in 2008
- 2011 Announcement of NTU Open Access Mandate
- 2013 Local funder A*STAR announced its open access requirement
- 2016 Local funders National Research Foundation, Ministry Of Health, Ministry Of Education announced their open access requirements

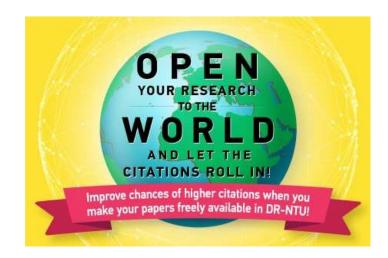
NTU's Institutional Repository for papers: DR-NTU

MISSION

To capture, store, showcase, and disseminate the scholarly outputs of the University for greater visibility and facilitates research collaboration

DEPOSITS

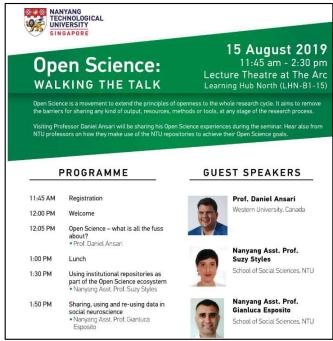
- Journal articles
- Conference papers
- Books
- Book chapters
- Commentaries
- Campus-based publications
- Working papers
- Research reports
- Theses
- Student reports
- Audio recordings
- Video recordings



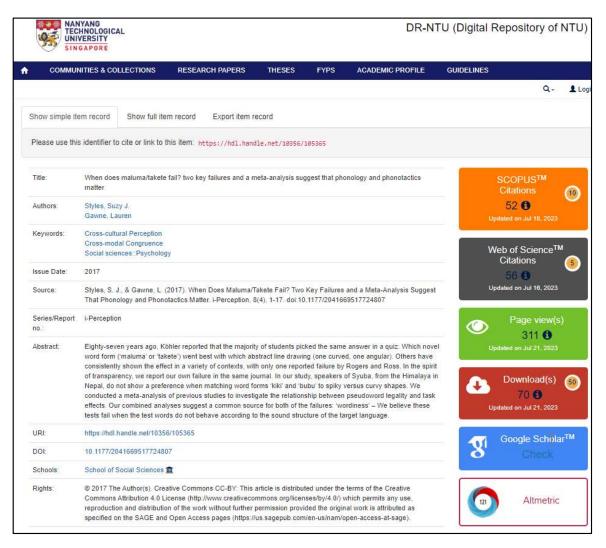
DR-NTU: https://dr.ntu.edu.sg/

Open Access Promotional Activities







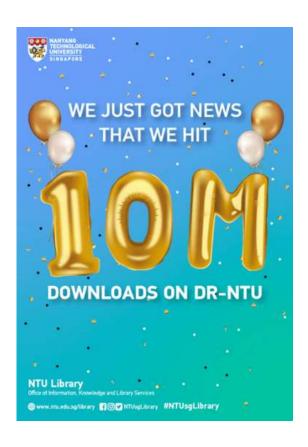


NTU's Institutional Repository for papers: DR-NTU

- Metadata records indexed in key academic research search engines e.g. Google Scholar
- Enriched records with impact metrics and indicators

DR-NTU: https://dr.ntu.edu.sg/

Milestones



June 2023: 10 million downloads



COAR Community Framework Self-Assessment badge granted in 2023

NEXT.....

OPEN DATA

NTU Research Data Policy Launched in 2016

- Library tasked by Research Integrity Committee to develop the first draft in 2014
- Library referred to the research data policies of several other universities.
- Inputs from research/integrity offices were incorporated
- Timely as Singapore National Medical Research Council's announced data sharing requirements in 2015.



Co-Chair of NTU Research Integrity Committee presenting the NTU Research Data Policy in 2016.



University Librarian presenting the NTU DMP template during the Data Policy Launch event.

DR-NTU (Data) Launched in 2017

- NTU's institutional repository for open access research data sharing by NTU research data producers
- Dataverse, an open-source software maintained by Harvard
- Local installation in NTU



Launched by NTU President in 2017

Library's Roles & Responsibilities for RDM



open data repository



data management plan template



training and advice

NTU Research Data Policy. www.ntu.edu.sg/research/ntu-research-data-policy

Library Providing Data Management Planning Support Services



- DMP LibGuide provides question-level guidance
- Librarians conduct workshops
- Librarians provide consultation services
- Library works with Research Support
 Office to have the DMP template
 integrated in NTU research grant
 management system
- DMP submission is a prerequisite for research project budget account creation
- Library exports the DMPs to identify areas for improvement in DMP training

Institutional repository for research data: DR-NTU (Data)

MISSION

To curate, store, preserve, make available and enable the download of digital data generated by the NTU research community in various disciplines



DEPOSITS

Final, empirical data (e.g. tabular files, text files, images, scripts) underlying the research carried out at NTU and related data documentation

Indexed by:





MILESTONES

- Inception (2017)
- NTU Research Data Policy (2016)
- NTU Data Management Plan (2016)
- CoreTrustSeal (2022)
- COAR Community Framework Badge (2023)





(as on 22 Jul 2023)

DR-NTU (Data): https://researchdata.ntu.edu.sg/

NTU Research Data Management Group

- Formed in 2017 after the University formed the new Research Integrity and Ethics Office
- Comprises:
 - Research Support Office
 - Research Integrity and Ethics Office
 - Library
- Fortnightly meetings to discuss
 RDM matters and initiatives



NTU Research Data Management Initiatives

(where NTU Library was an important driving force)

NTU Data Management NTU Research Plan (DMP) template **Data Policy** Data Creation Data Data Processing Reuse DR-NTU (Data) Data Data **Analysis** Access Data Preservation

NTU RDM E-Learning Modules

> NTU Research Data Classification & Handling

NTU Research Data
Storage System (RDSS)

NTU Research Data Storage Finder

RDM Training Provided by NTU Library

DMP workshops

RDM E-Learning Modules DR-NTU & DR-NTU (Data)
Workshops

Budgeting for RDM Workshop Open
Research &
Research
Visibility

NIH to Launch Data Management and Sharing Plan to Help Promote Open Science



1/11/2023

On January 25, 2023, NIH's new Policy for Data Management and Sharing (DMS Policy) will go into effect for most competing funding applications and intramural research protocols, requiring researchers to submit a DMS Plan with their application for funding outlining how they will share and manage data, as well as complying with the approved plan. This Policy conforms to the 2022 OSTP public access guidance and is part of NIH's broader efforts to accelerate biomedical research by making the outputs of NIH-funded research available for validation of research results and reuse in future research. Additional information about the Policy is available at the agency URL below, including a template, examples, and guidance for writing a DMS Plan, information on repositories for sharing and accessing NIH-funded data, budgeting for data management and sharing, and more.

More information: https://sharing.nih.gov/

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Source: https://open.science.gov/

Finally.....

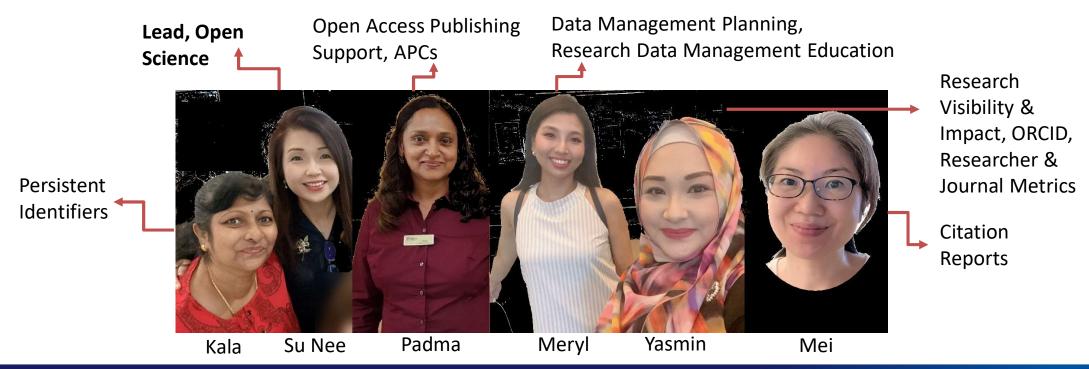
OPEN SCIENCE

Open Science & Research Services Team

(since Aug 2021)

Open Science Research Visibility & Impact

Research Data Management



Open Research Workshops





Discussion topics:

"As open as possible, as closed as necessary"

"Copyright and open research"

"Findable,
Accessible,
Interoperable &
Reusable data"



Workshop participants asked to vote for their open research checklist priorities.

https://blogs.ntu.edu.sg/ntulibrary/tag/open-science/



SINGAPORE OPEN RESEARCH CONFERENCE 2022

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With UNESCO, OECD, EC and US funders pushing for Open Science/Research, we can no longer afford to wait and see.

Open Research practices, coupled with accessible and verifiable scientific knowledge, help to improve quality, reproducibility and impact of science.

Join us in this inaugural Open Research Conference which will discuss perspectives from funders, research managers, and researchers on Open Research policies, governance, practice, and ethics.

Though some of the discussions could be based on the bioscience field, researchers from other subject fields are most welcome!



Organisers:

Date: 2 November 2022

Time: 9.00 am - 6.00 pm (Singapore)

Venue: NTU Novena Campus - HQ

Lecture Theatre

Format: In person

· NTU Research Integrity and Ethics Office

To register: https://bit.ly/NTUsgOR2022













Guest of Honour:



NTU Deputy President and Provost President's Chair in Mathematical Sciences

Speakers include:



Dr Lenny TEYTELMAN CEO and co-founder of protocols.io

Prof Ginny BARBOUR Director of Open Access Australasia. and Co-Lead, Office for Scholarly Communications, Queensland University of Technology, Australia





• Prof Ling San, NTU Deputy President and Provost

Organised by:

- NTU Research Integrity and Ethics Office
- NTU Library
- NTU Lee Kong Chian School of Medicine

Attended by:

Close to 150 representatives from local universities, research institutions, funders and publishers



· Lee Kong Chian School of Medicine



NTU OPEN RESEARCH AWARDS 2022

CALL FOR NOMINATIONS

The NTU Open Research Awards recognise and reward NTU researchers who have used open research to make their scientific contents, tools and processes more open, accessible, transparent and reproducible, or incorporated it in their teaching practices.

All NTU principal investigators, post-doc research staff, PhD students and research teams are invited to self-nominate or nominate their NTU colleagues for the inaugural NTU Open Research Awards 2022.



Nominations close on 19 September 2022.

https://bit.ly/nominateOR22

Prizes:

- S\$1.500 cash for each Team Award winner
- S\$500 cash for each Individual Award winner

Awardees will receive their prizes and share their open research use cases during the Singapore Open Research Conference on 2 November 2022.

Prize Sponsors:

- · Lee Kong Chian School of Medicine
- Research Support Office

Organised by:

NTU Library

Office of Information, Knowledge and Library Services



RECOGNISE and **REWARD** NTU researchers who have open research to make their scientific contents, tools and process more open, accessible, transparent and reproducible, or incorporated it in their teaching practices.

Cash prizes sponsored by:

- Lee Kong Chian School of Medicine
- **Research Support Office**

https://libguides.ntu.edu.sg/NTUopenresearchawards

NTU OPEN RESEARCH **AWARDS** 2022





NTU Open Research Awards 2022 **Team Winner**

Volcanic Hazards and Risk Group

Asian School of the Environment

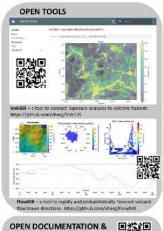
Assoc Prof Susanna Jenkins, Vanesa Burgos, Elinor Meredith, Elly Tennant, Dr Andrea Verolino, Dr Qingyuan Yang, Dr Sébastien Biass, Dr George Williams, Dr Josh Hayes, Dr Geoff Lerner, Imantha Gunasekera, Dr Magfira Syarifuddin

The Volcanic Hazards And Risk Group at the Asian School of the Environment/Earth Observatory of Singapore aims to reduce the risk that volcanic activity poses to society. We are particularly passionate about making sure that our research and research outputs are useful, usable and used. We publish all our research, data and documentation openly and provide all our code as open source. Many of the regions exposed to volcanic hazards, particularly in South-East Asia, are in areas that may not have access to paywalled publication, data or software. By publishing open access, we provide hazard and risk practitioners, scientists and communities with the data, documentation, software and research to support disaster risk reduction and save lives.

REPLICATION DATA FOR

JOURNAL PAPER







Follow our tweets at

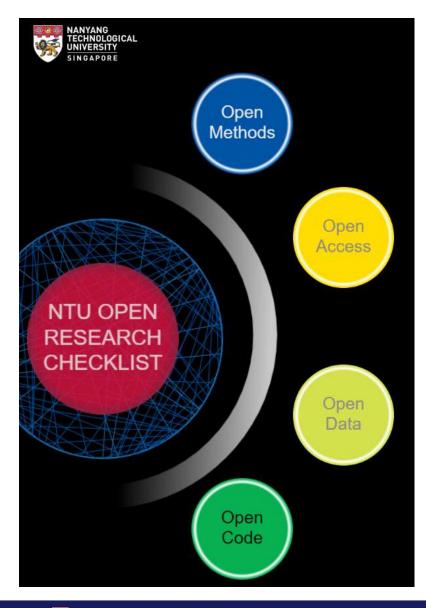






An initiative by: NTU Library

Office of Information, Knowledge and Library Services



The NTU Open Research Checklist

A **GUIDE** for NTU researchers who wish to make practical changes in order to make their scientific process and research outputs more transparent, inclusive and accessible.

Checklist consists of a series of questions and suggestions.



https://bit.ly/NTUORcheck

U. S. White House Office of Science and Technology Policy (OSTP) launches Year of Open Science in 2023*

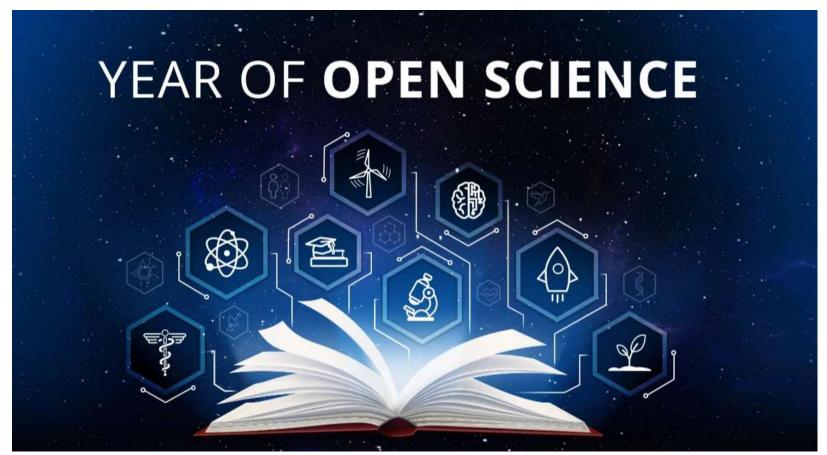


Image credit: U.S. National Science Foundation

*https://www.whitehouse.gov/ostp/news-updates/2023/01/11/fact-sheet-biden-harris-administration-announces-new-actions-to-advance-open-and-equitable-research/

Singapore Open Research Conference 11-12 Nov 2024

























https://bit.ly/SORC2024

Some food for thought.....

THE FUTURE

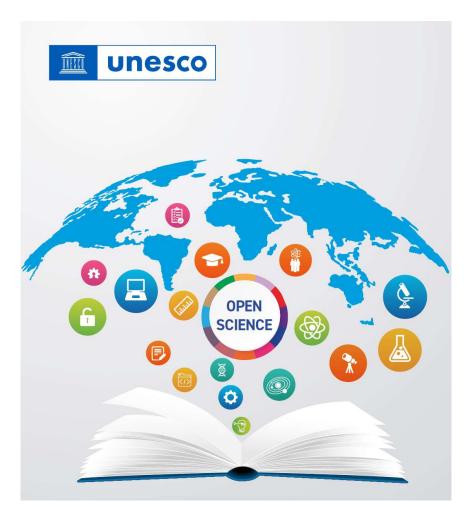
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6 Principles of Open Science

- Open Data
- Open Source
- Open Access
- Open Methodology
- Open Peer Review
- Open Educational Resources



The Replication Crisis in Psychology | Noba (nobaproject.com)



OPEN SCIENTIFIC KNOWLEDGE

- 1. Scientific PUBLICATIONS
- 2. Open research DATA
- 3. Open **EDUCATIONAL RESOURCES**
- Open-source SOFTWARE and source CODE
- 5. Open HARDWARE

Reference: https://unesdoc.unesco.org/ark:/48223/pf0000379949.locale=en

Open does not mean 'uncontrolled'

Access to scientific knowledge should be as open as possible. Open licensing systems allow users to give credit and use knowledge according to guidelines.

There are certain conditions where the release of data or knowledge would threaten, *inter alia*, human rights, security, personal privacy, sacred and secret indigenous knowledge, rare or threatened species. In such cases, it may still be possible to share the existence of such information or share it among certain users who meet defined access criteria.

Open does not mean 'cost-free'

There are real costs involved in creating, using and sharing scientific knowledge. The Recommendation calls for countries to create supportive frameworks for open science and to invest in the people, processes and values that form the systems of open science.

Creating equitable and fair open science also means reducing the digital, technological and knowledge gaps that exist between and within countries and regions.

What keeps Caroline awake at night...

- Do we really need institutional repositories? What functions do they serve now?
- Transformative agreements/open access publishing agreements/Read & Publish agreements are business models that we need to understand. APCs are free for our users but there are real costs. Understanding the business model is essential for financial sustainability.
- What are the drivers of research visibility and impact? Are the most visible form of this university rankings? Does the library have a role to play?

OA, AI, and DEI-Triple Advantage or Triple Threat? | Periodicals Price Survey 2024

by Siôn Romaine, Barbara Albee, Cynthia M. Elliott, and Stephen Bosch







Apr 22, 2024 | Filed in News



Where will the OA, AI, and DEI trifecta take us next?

Since the Great Recession, librarians have learned as best they can to manage an annual serials subscription model that inevitably outpaced flat or declining collection budgets. Many

librarians lauded the development of Open Access (OA) publishing models, which offered, at least initially, to help solve the problem of an unsustainable and inequitable scholarly

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OA, AI, and DEI—Triple Advantage or Triple Threat? | Periodicals Price Survey 2024 | Library Journal

other price bands. Although there were increases in the metrics for impact factor and Eigenfactor, the increases were not comparable to the increase in price. The average price (\$10,177) for the most expensive journals was 34 times higher than the average price for the least expensive journals (\$287), while the impact factor only increased 56 percent. The chart accompanying Table 9 shows how the rise in average price (represented by the blue line) is not accompanied by a corresponding rise in impact factor (represented by the burgundy line). We

THANK YOU

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