

Thesis Research Data

Preserve it in Summit!

SFU Library Data Services Team

Website: www.lib.sfu.ca/data

Email: data-services@sfu.ca

Q : Do I have research data?

Q : Do I have research data?

A : Most likely, yes.

Research Data

Tabular

Spatial

Lab notes

Picture

Audio

Video

Transcript



Data repositories: What and why?

- What?
 - Online collection of research
- Why?
 - Curation
 - Discoverability
 - Permanent identifiers
 - Adheres to standards
 - Preservation



Image by Flickr user [Clancy Ratliff](#)

Merits of publishing your research data

— — —

- Accelerate discovery

- Example: Zika Open Research Portal:
<https://www.labkey.com/resources/zika-open-research-portal/>

- Increase citation frequency

- Piwowar, H. A., Day, R. S., & Fridsma, D. B. (2007). Sharing detailed research data is associated with increased citation rate. *PLoS ONE*, 2(3), e308.
doi:10.1371/journal.pone.0000308

- Promote academic integrity

- Dimitrova, V. (2013, April 22). Reinhart-Rogoff Revisited: Why we need open data in economics. *Open Knowledge International Blog*. Retrieved from <http://bit.ly/2iUWPZ9>

- Avoid accidental loss of records

- Greenfieldboyce, N. (2009, July 16). Houston, We Erased The Apollo 11 Tapes. *NPR Special Series: Forty Years After Space Race, What's Next?* Radio program retrieved from <http://n.pr/2hXlHRx>

- Collaborate across disciplines

- Example: Gustafson, D., Hayes, M., Janssen, E., Lobell, D. B., Long, S., Nelson, G. C., ... & Wuebbles, D. (2016). Pharaoh's Dream Revisited: An Integrated US Midwest Field Research Network for Climate Adaptation. *BioScience*, 66(1), 80-85.
doi:10.1093/biosci/biv164

Tri-Agency Research Data Management Policy

“The agencies believe that research data collected through the use of public funds should be..., where ethical, legal and commercial obligations allow, available for reuse by others. ”





Limitations to making data open

- Intellectual property may be shared or belong to another party.
- Privacy of individuals may be compromised.
- Consent of participants may not have been attained.
- Research may cover a sensitive topic that may not be appropriate for public distribution of microdata.

How to open data

- **Openly accessible**
 - Well known data repository
 - Downloadable
 - Clean
- **Open format**
 - Non-proprietary
 - Usable
- **Open license**
 - Creative Commons



Image by
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How else to open data? Describe it!

- Codebook
- ReadMe.txt
- Data dictionary
- Repository metadata



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Documentation Levels

- Project level
- File or database level
 - A roadmap to all of your data files, typically in a readme.txt file
- Variable or item level
 - List of every variable name with full description

Project Level

File Level

Variable
Level

Variable
Level

File Level

Variable
Level

Variable
Level

Preserve your data!

(deposit it, even if you're not sharing it)

Cautionary tale: Apollo 11

A full-length photograph of an Apollo 11 astronaut standing on the lunar surface. The astronaut is wearing a white spacesuit with an American flag patch on the right shoulder and is holding a small object in their gloved hands. The background shows the dark, cratered surface of the moon under a black sky.

... NASA tried to locate the master magnetic tapes but they'd gone missing. Following an epic search through the organization's massive archives, officials concluded that the original moon landing footage was recorded over with satellite footage captured sometime in the 1980s, during a period when the agency was short on magnetic tape.

<https://mozillascience.github.io/open-data-primers/1.2-open-data-irl.html>

Summit

- SFU's open access research repository
- Contains the scholarly output of SFU students and researchers, including theses!
- [Formatting Supplemental Materials for Summit](#)
- Benefits:
 - You retain the rights
 - Preservation
 - Citations
 - Discoverability
 - Accessibility
 - Bundles your thesis and associated research data

Other repositories

- Federated Research Data Repository (FRDR)
 - SFU collection: <https://www.frdr-dfdr.ca/repo/collection/sfu>
- Registry of Research Data Repositories
 - <https://www.re3data.org/>

For further information...

FIND	HELP	BORROW	FACILITIES	ABOUT
RESEARCH ASSISTANCE	CITE + WRITE	WORKSHOPS + CONSULTATIONS	ACADEMIC INTEGRITY	PUBLISH
Find materials by subject + course	Citation + style guides	All workshops + classes	Copyright	Scholarly publishing + Open access
Find materials by format + type	Citation management software	Undergraduate workshops	Avoiding plagiarism	Summit Research Repository
Research tutorials	Undergraduate writing + learning (SLC)	Graduate workshops		Research data management
Frequently asked questions	Graduate writing, learning + research (RC)	Undergraduate consultations (SLC)		Digital Humanities Innovation Lab + DH
Services for you		Graduate consultations (RC)		Thesis submission
Ask a librarian				

Email: data-services@sfu.ca

Website: www.lib.sfu.ca/data