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-p
 ortal/

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/2hXIHRx

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



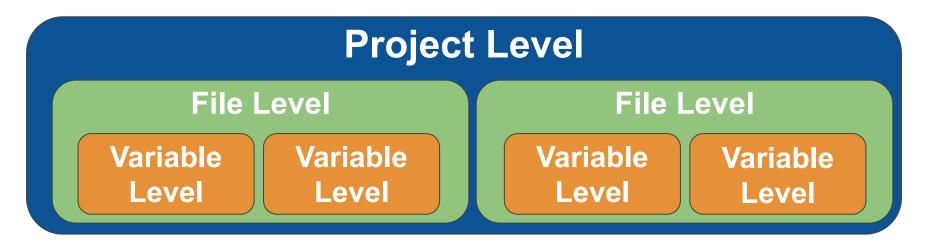
How else to open data? Describe it!

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



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



Preserve your data!

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



... 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-dataprimers/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...



Email: data-services@sfu.ca

Website: www.lib.sfu.ca/data