Introduction to Research Data Management

Legal and ethical considerations



Introduction

Review legal and ethical issues to be aware of when working with data.

Who owns the data?

The individual or entity that has the legal rights to the data, and can retain the data after the completion of the project.

Stakeholders

- Funders
- Institutions (Texas A&M University)
- Research faculty (Principal Investigator)
- Data collectors (you)

Prof. Smith works at **The University** and is the Principal Investigator on a large research project that is funded by the **National Institutes of Health** (NIH). While Prof. Smith wrote the original grant proposal, he does very little day-to-day work on the project.

Instead, the Research Director, **Dr. Lang**, oversees all aspects of the project, including staff supervision and all data management activities. In addition, Dr. Lang has been lead author on several publications about the project's research findings.

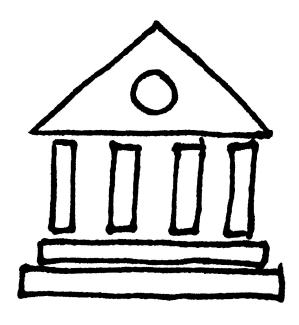
Who owns the project and its data?











Texas A&M University

"Unless precluded by a Texas A&M University contract agreeing to specific other terms, research data conducted on a Texas A&M University project belongs to Texas A&M University."

TAMU. "SAP15.99.03.M1.03: The Responsible Stewardship of Research Data" http://rules-saps.tamu.edu/PDFs/15.99.03.M1.03.pdf

Determining ownership

- Institutional policies
- Funder agreements (grants or contracts)
- Data use agreements
- Licenses attached to the data

Ownership and control

Rights of control, and access to data, can be given without legally changing ownership of the data.

Example: Federally funded research grant

The government gives the research institution the right to use data collected with public funds.



The research institution **owns** the data but allows the principal investigator (PI) on the grant to be the **steward** of the data.



Graduate students involved in performing research on a particular grant cannot assume that they own the data they are collecting and managing.

Intellectual Property

- Copyright
- Patents
- Trademarks
- Industrial Designs
- Trade Secrets

Copyright

A legal protection for "original works of authorship."

Exclusive legal right to:

- Reproduce
- Prepare derivative works
- Distribute copies
- Perform or display publicly
- Grant licenses or transfer copyrights to others

Legal protection

"It is illegal for anyone to violate any of the rights provided by the copyright law to the owner of copyright. These rights, however, are not unlimited in scope."

U.S. Copyright Office. "Copyright Basics" https://www.copyright.gov/circs/circ01.pdf

The problem with data

Copyright applies to work that includes a level of "creative expression."

Copyright does **not** apply to:

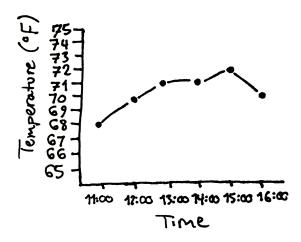
- Facts
- The labor of research

The problem with data

Copyright can be difficult to determine for data.



time	temp	unit
11:00	68	F
12:00	70	F
13:00	71	F
14:00	71	F
15:00	72	F
16:00	70	F



Play it safe

When reusing data that someone else shares:

- Follow the instructions of the data creators (licenses).
- Follow community norms and cite the original creators.

When sharing data:

Make it clear how others can use your data and how to cite you.

Video: Advice from a copyright specialist

Nancy Simms, Copyright Specialist at University of Minnesota Libraries.

https://youtu.be/ZuUGIGOMGjU

Sensitive data

Some data may contain information that needs to be kept secure.

Can you think of some data that may need to be kept secure and why?

Sensitive data

- National security and classified information.
- Controlled unclassified information (CUI).
- Personally Identifiable Information (PII).
- Protected Health Information (PHI).
- Student education records.
- Financial data.
- Threatened and endangered species information.
- Indigenous peoples and lands information.

Privacy and confidentiality

Privacy relates to the rights of an individual or subject.

Confidentiality relates to the actions of the researcher.

Tips to protect privacy

- Follow Responsible Conduct of Research training and the research review processes.
- If possible, collect data without using personally identifying information.
- Otherwise, de-identify your data upon collection or as soon as possible.
- Avoid transmitting unencrypted personal data electronically.
- Plan which data to keep and for how long in the context of your ability to maintain the confidentiality.

Conclusion

Questions to consider:

- Who owns the data?
- Do you expect to work with sensitive or restricted data?
- What limitations can these impose on how you store, access, share your data?

References and resources

- Carroll, Michael W. "Sharing Research Data and Intellectual Property Law: A Primer" [Article](https://doi.org/10.1371/journal.pbio.1002235)
- TAMU. "SAP15.99.03.M1.03: The Responsible Stewardship of Research Data" [PDF] (http://rules-saps.tamu.edu/PDFs/15.99.03.M1.03.pdf)
- U.S. Copyright Office. "Copyright Basics" [Website](https://www.copyright.gov/circs/)