# Introduction to Research Data Management

Legal and ethical considerations



#### Introduction

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

#### Discussion

Do you know who owns the data you collect and work with?

Is there a difference between data you create and existing data you use from another source?

#### 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)

### Determining ownership

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

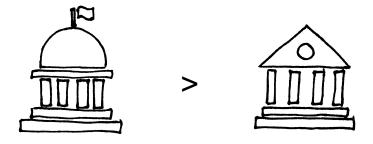
TAMU. "SAP15.99.03.M1.03: The Responsible Stewardship of Research Data" [PDF](<a href="http://rules-saps.tamu.edu/PDFs/15.99.03.M1.03.pdf">http://rules-saps.tamu.edu/PDFs/15.99.03.M1.03.pdf</a>)

#### 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.



# Example: Federally funded research grant

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



# Example: Federally funded research grant

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" [PDF](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

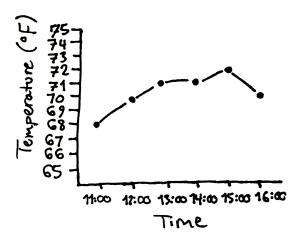
Copyright can be difficult to determine for data.

#### 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.

#### Sensitive data

- National security and classified information.
- Controlled unclassified information.
- Threatened and endangered species information.
- Indigenous peoples and lands information.
- Human subjects research (IRB).
- Personal health information (HIPAA).
- Student education records (FERPA).
- Financial data (FSMA).

### 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.

#### 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](<a href="https://doi.org/10.1371/journal.pbio.1002235">https://doi.org/10.1371/journal.pbio.1002235</a>)
- Cornell University. "Introduction to intellectual property rights in data management" [Website](<a href="https://data.research.cornell.edu/content/intellectual-property">https://data.research.cornell.edu/content/intellectual-property</a>)
- DataOne. "Legal and Policy Issues" [Website](<a href="https://www.dataone.org/education-modules">https://www.dataone.org/education-modules</a>)
- New England Collaborative Data Management Curriculum. "Module 5: Legal and Ethical Considerations for Research Data" [Website](<a href="http://library.umassmed.edu/necdmc/modules">http://library.umassmed.edu/necdmc/modules</a>)
- Simms, Nancy. "Making Decisions About Your Research Data" [Video](<a href="https://www.youtube.com/watch?v=ZuUGIGOMGjU">https://www.youtube.com/watch?v=ZuUGIGOMGjU</a>)
- TAMU. "SAP15.99.03.M1.03: The Responsible Stewardship of Research Data" [PDF](<a href="http://rules-saps.tamu.edu/PDFs/15.99.03.M1.03.pdf">http://rules-saps.tamu.edu/PDFs/15.99.03.M1.03.pdf</a>)
- U.S. Copyright Office. "Copyright Basics" [Website](<a href="https://www.copyright.gov/circs/">https://www.copyright.gov/circs/</a>)

# Workshops

- 1. Build an overview
- 2. Collect and document data
- 3. Store digital data
- 4. Work with data
- 5. Share and preserve data
- 6. Plan ahead