### RESEARCH DATA MANAGEMENT (RDM)

### **AGENDA**

- What is RDM?
- Data Management Planning (DMP)
- Data Storage and Preservation
- Active Data Management
- Data Sharing and Discovery



### WHAT IS RDM?

RDM is organizing, storing, preserving, and sharing research data effectively throughout its lifecycle.

Promotes reproducibility, transparency, and efficiency.

## RESEARCH DATA LIFECYCLE



# DATA MANAGEMENT PLANNING (DMP)

- Plan how you will manage data from creation to completion.
  - Use tools like the DMP Assistant (dmp-pgd.ca).

### KEY SECTIONS OF A DMP

- Data Collection
- Metadata & Documentation
- Storage and Backup
- Preservation
- Ethics and Legal Compliance
- Sharing and Reuse

# FAIR PRINCIPLES

- Findable
- Accessible
- Interoperable
- Reusable

#### ETHICAL AND LEGAL CONSIDERATIONS

- Protect sensitive and personal data.
- Comply with privacy laws and Tri-Agency Policy.
- Apply appropriate licenses (e.g., Creative Commons).

### STORAGE AND PRESERVATION

- Use trusted repositories like:
  - FRDR (Federated Research Data Repository)
  - Borealis Data Repository

### **ACTIVE DATA MANAGEMENT**

- During research, manage data actively by:
  - Version control (Git)
  - Regular backups
  - Secure access and permissions

### DATA DISCOVERY AND SHARING

• Publish datasets with proper metadata and persistent identifiers (e.g., DOI) to maximize impact.

### CONCLUSION

- Good data management is an ethical and professional obligation.
  - It ensures long-term accessibility, credibility, and scientific advancement.



**THANK YOU!**