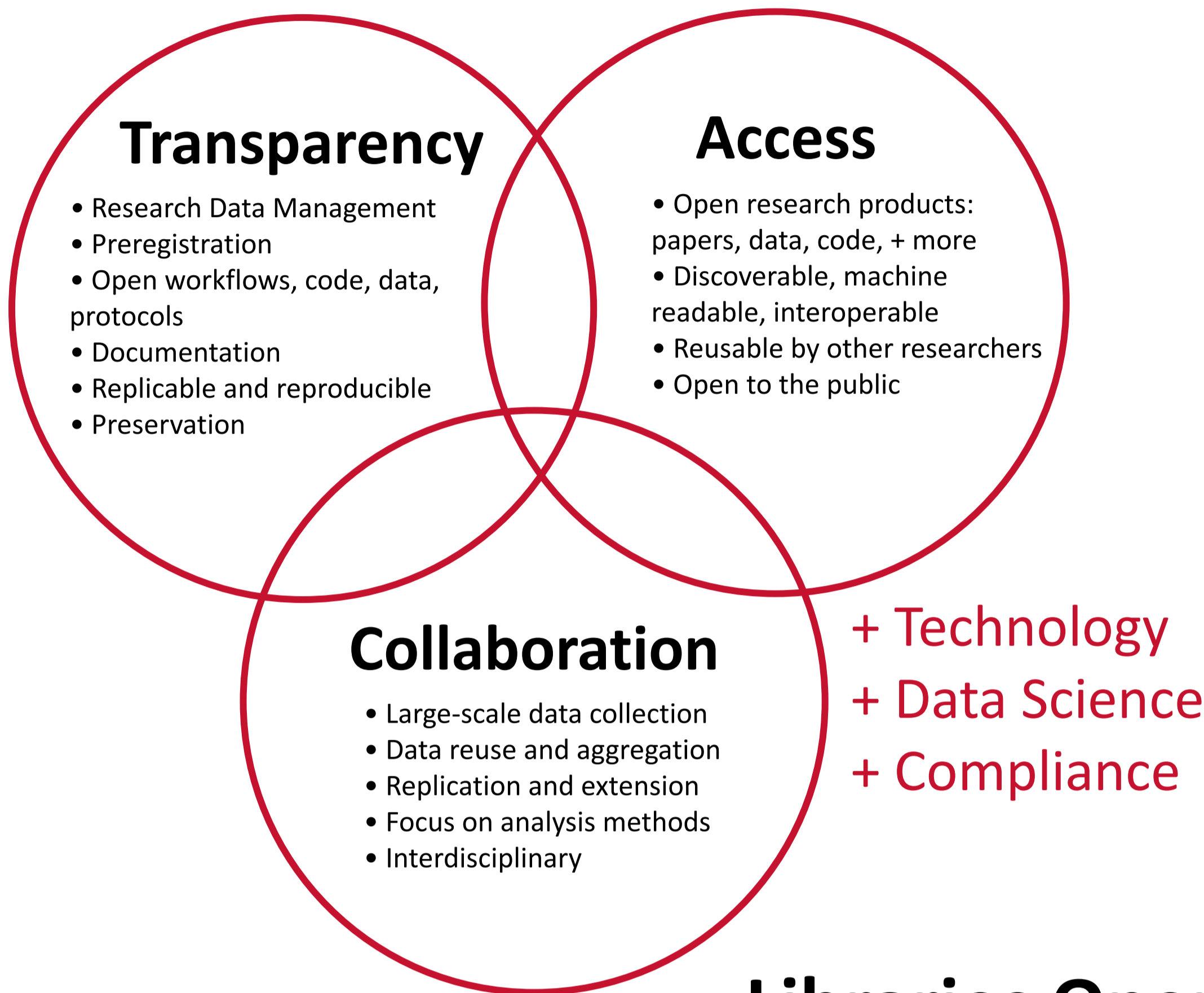# At the Intersection of Open Science and the Transforming Research Library

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Carnegie Mellon University Libraries

Elements of Open Science

Transparency
• Research Data Management
• Preregistration
• Open workflows, code, data, protocols
• Documentation
• Replicable and reproducible
• Preservation

Access
• Open research products: papers, data, code, + more
• Discoverable, machine readable, interoperable
• Reusable by other researchers
• Open to the public

Collaboration
• Large-scale data collection
• Data reuse and aggregation
• Replication and extension
• Focus on analysis methods
• Interdisciplinary

+ Technology
+ Data Science
+ Compliance

Transforming the Library

CMU Libraries Strategic Plan 2025: Create a 21st century library that serves as a cornerstone of world-class research and scholarship.

》》》 Develop information specialists as partners in research, teaching and learning.

》》》 Collaborate with peer institutions to provide coordinated access to a global collection of information resources.

》》》 Steward the evolving scholarly record and champion new forms of scholarly communication.

》》》 Be recognized globally as a leader in the development of the scholarly information ecosystem.

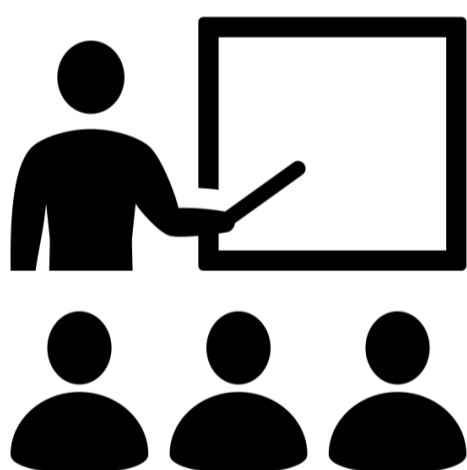*Transform the Library into the hub for research support across disciplines*

Libraries Open Science Program

A University Libraries program supporting collaborative, transparent, openly accessible, and reproducible research across all disciplines at Carnegie Mellon University. This program provides services and infrastructure for open research at CMU through digital tools, training opportunities for research tools and practices, special events and advocacy in support of open research, and a team of experts available as research consultants and collaborators.
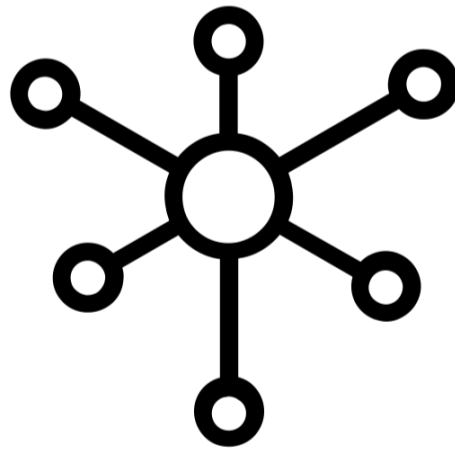
The team includes subject librarians with a research focus, methods specialists in data management and scholarly communication, and post-docs and faculty focused on specific research areas and techniques (e.g. GIS, digital humanities)
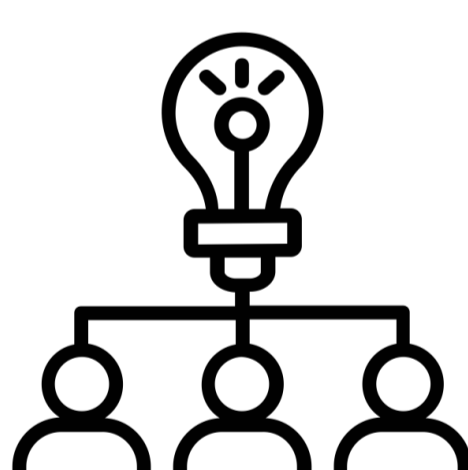
DIGITAL TOOLS + INFRASTRUCTURE
OSF
protocols.io
figshare
KiltHub
labarchives
Pittsburgh Supercomputing Center

TRAINING
THE CARPENTRIES
DATA CARPENTRY
software carpentry
• Workshops on methods & skills
• Tool Trainings
• Reproducible programming
• Hackathons
• Discipline-specific trainings

EVENTS + OUTREACH
OPEN SCIENCE SYMPOSIUM 2019 CARNEGIE MELLON UNIVERSITY
• Conference on AI for Data Discovery & Reuse
• Visits to departments
• Monthly newsletter
• Graduate student groups, education
• Office of Research

EXPERT PARTNERS
• Library faculty and staff as expert research partners
-Consultations
-Training
-Project roles
• Foster collaborations across disciplines
• Support access to research products
• Meet funder and publisher mandates