Open Scholarship

Building a 21st Century library to support the evolving, digital scholarly ecosystem

Ana Van Gulick
Scholarly Ecosystem
Growing Area: Research Data Management

Why?
• Funders, Office of Science and Technology Policy Memo
• Public interest
• Changing nature of research and scholarship
  • More collaborative
  • More interdisciplinary
  • Born digital
How do we build the CMU toolbox for Open Scholarship?
Many Tools!

400+!

101 Innovations in Scholarly Communication
http://innoscholcomm.silk.co/
What is “Open”?

- Open doesn’t mean that every part of research is public

- Entire Research Lifecycle is:
  - Documented
  - Supported
  - Interoperable
  - Reusable or Reproducible
  - *Parts* of it are Public
Open workflows rely on tools that work well together

[Diagram showing various tools and their connections]

http://innoscholcomm.silk.co/page/Workflows
Best Tools for CMU?

- **Discovery** → **Analysis** → **Writing** → **Publication** → **Outreach** → **Assessment**
  - CMU → TBD → TBD → G Suite → ORCiD → TBD

Logos of various tools and services, including:
- F1000 Workspace
- COS Center for Open Science
- Overleaf
- Authorea
- protocols.io
- labguru
- GitHub
- BRIDGES
- Carnegie Mellon University
Digital Repository: The home for all research products
What is the mission of a digital repository?

• ALL research and scholarship products
  • Data, gray literature, reports, conference proceedings, posters, course materials, talks, images, videos, code, theses, dissertations…
• Collect and add value to these products through curation
• Provide: Storage, documentation, discoverability, access, citation, metrics
• + Machine readable, visualization and exploration
• For art as well as science!
• Who is the audience? The world? Other researchers?
Looking around at our peers…

- Data Repositories are new
- <100 dedicated institutional repositories for data
- Growing area to support CMU’s mission
  - Fits researchers’ needs to comply with funders and publishers and support open access initiatives
  - Promotes CMU research
- No one way to support digital repository needs
  - Variety of platforms
  - Multiple repositories for different types of research output
<table>
<thead>
<tr>
<th>School</th>
<th>Repository?</th>
<th>Platform</th>
<th>Papers</th>
<th>ETDs</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Western</td>
<td>Digital Case</td>
<td>Sufia/Hydra, D-space</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>University of Chicago</td>
<td>Knowledge@UChicago</td>
<td>D-space</td>
<td>✔</td>
<td>✔*</td>
<td>✔</td>
</tr>
<tr>
<td>Dartmouth</td>
<td>Dartmouth Academic Commons</td>
<td>D-space</td>
<td>✔</td>
<td>✔*</td>
<td>✔*</td>
</tr>
<tr>
<td>Duke</td>
<td>Duke Digital Repository</td>
<td>Blacklight, D-Space</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Emory</td>
<td>OpenEmory,</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Dataverse@Emory</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Georgia Tech</td>
<td>SMARTech</td>
<td>D-space</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Johns Hopkins</td>
<td>Jscholarship</td>
<td>D-space</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>MIT</td>
<td>Dspace@MIT</td>
<td>D-space</td>
<td>✔</td>
<td>✔</td>
<td>✔*</td>
</tr>
<tr>
<td>Northwestern</td>
<td>Arch</td>
<td>Fedora/Hydra</td>
<td>✔</td>
<td>✔</td>
<td>✔*</td>
</tr>
<tr>
<td>Stanford</td>
<td>Stanford Digital Repository, ETD center</td>
<td>Blacklight, Searchworks,</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Washington University STL</td>
<td>Open Scholarship</td>
<td>Digital Commons</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Vanderbilt University</td>
<td>Discover Archive (Vanderbilt ETD Archive)</td>
<td>D-space, ETD-db</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>University of Rochester</td>
<td>UR Research</td>
<td>IR+</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>
Welcome to the Duke Digital Repository

Curation and preservation for Duke's digital commons

Our Mission

The Duke Digital Repository (DDR) is a service of Duke University Libraries that supports the activities of the University's faculty, researchers, students, and library staff by preserving, securing, and providing access to digital resources.
1,338 collections
216 million files
296 terabytes

articles, data sets, theses, photos, media, maps, manuscripts, books, and more...

SDR stats as of January 2017
Stanford Digital Repository – Online Deposit

The SDR is a service supporting long-term management of scholarly information resources at Stanford. Faculty, students, and researchers use the SDR to promote and protect the products of their work. The benefits of this service distinguish the SDR from other content storage or management options on campus: deposited scholarly content is preserved in a robust, reliable, and secure environment and is available from persistent URLs (PURLs) with optional access controls.

You → Stanford Libraries → Web Users

..deposit items → ..provides long-term preservation → ..access your deposits via PURLs

..discover your deposits via SearchWorks

The growing body of content deposited in the SDR includes:

- scientific research data like this data set
- digital humanities research data like this corpus
Visualizing History in Rio de Janeiro

August 5, 2016

Amy E. Hodge

AUTHOR

Emerging tech  Geospatial
Open source
Stanford Digital Repository

RECENT POSTS

A better home for your scholarly work: the Stanford Digital Repository
SDR Deposit of the Week: Data on Exhibit

Posted in Digital Library Blog
The Archive of Recorded Sound is pleased to announce the acquisition and recently completed processing of the Art Vincent Jazz Collection. The collection features over 800 hours of interviews, broadcasts, and call-in segments primarily created for the radio program Art of Jazz, produced and presented by Art Vincent.
A Powerful New Quantitative Genetics Platform, Combining Caenorhabditis elegans High-Throughput Fitness Assays with a Large Collection of Recombinant Strains

Description: The genetic variants underlying complex traits are often elusive even in powerful model organisms such as Caenorhabditis elegans with controlled genetic
**About DSpace@MIT: Home**

**Quick Links**
- Home
- Deposit Your Work
- Services
- Policies
- FAQ
- Ask Us

**About DSpace@MIT**

**DSpace@MIT** is a service of the MIT Libraries to provide MIT faculty, researchers and their supporting communities stable, long-term storage for their digital research and teaching output and to maximize exposure of their content to a world audience.

**DSpace@MIT content includes** conference papers, images, peer-reviewed scholarly articles, preprints, technical reports, theses, working papers, research datasets and more. This collection of more than 90,000 high-quality works is recognized as among the world's premier scholarly repositories and receives, on average, more than 1 million downloads per month.

**Benefits for MIT Faculty and Researchers**

The MIT Libraries maintain and preserve your work in DSpace@MIT, so you can...
Benefits:

- Research Data with Institutional Branding and Discovery
- Publisher Integrations
- Repository for all Research Products – Data, papers, and more
- Trusted platform, User Friendly and available on demand
- Connected to other Digital Science Products: Symplectic Elements, Altmetric, and Dimensions
The GlueX Experiment

27.04.2017, 18:14 by Curtis Meyer

This talk was presented at the MESON 2016 conference in Krakow Poland. It presents the status of the GlueX experiment shortly after the end of spring 2016 engineering run.
Vida, Nestor, Plaut, and Behrmann, 2017, PNAS
doi:10.1073/pnas.1614763114

https://figshare.com/articles/FST_raw_data/4233107
The Future: figshare Collections
The Future: Repository Migration