Supporting open science on a small budget: The role of the Mines Repository

Joseph R. Kraus - Reference & Digital Repository Librarian
November 3, 2023
CMU Open Science Symposium (OSS)
Who am I?

• Colorado School of Mines since June of 2019.
  • Reference Librarian from 2019 to 2021
  • Added repository responsibilities to help the library migrate from one host to another (on DSpace)

• Before Mines
  • University of Denver, 1998 to early 2016
  • Familiar with the back end of two other repository systems

• I have been an editor with two different OA journals in librarianship, *Collaborative Librarianship*, and the *Journal of Creative Library Practice*
Open Science vs Open Access

• Open access (the green version) through a repository is just one part of open science

• We also have OER programs, some OA publication fee support, scholarly communication support, open data resources

• Investigated, considered, and signed transformative agreements with publishers
Two recent developments

1) At the end of August 2022, “the White House Office of Science and Technology Policy (OSTP) updated U.S. policy guidance to make the results of taxpayer-supported research immediately available to the American public at no cost.”

“All agencies will fully implement updated policies... no later than December 31, 2025.”
Two recent developments

2) “In January 2021, the White House released a National Security Presidential Memorandum (NSPM-33) on United States (US) Government-Supported Research and Development National Security Policy. NSPM-33 directs Federal agencies conducting research and/or awarding research funds to establish policies related to the use of Digital Persistent Identifiers (DPIs, also known as Persistent Identifiers (PIDs)) for researchers’ disclosure of information during funding application and reporting workflows.”

From https://lyrasisnow.org/nspm-33-orcid-information-for-research-organizations/
What do I mean by small?

• One of the smallest public Carnegie R1 institutions by:
  • Student body (~7,000 students total)
  • Library budget
  • Number of librarians and staff (under 20)
  • Size of the repository – 18,645 titles (but growing)

• We have a small budget for the repository. We pay the commercial host less than what it would cost us to pay for full time technical staff and to pay for a multi-TB server.
Issues to address because we are small

- Limited to one repository system
- We can’t move to DSpace version 7.x when we want
- We can’t add in an ORCID API feature into the repository until we move to DSpace version 7.x
- Recently lost access to Google Analytics data
  - We could pay extra for the hosting company to implement a different statistics gathering module
Future Directions

• Include more content from more departments
• Increase the amount of research data
• Make the self-submission system easier to use
• Request grants and other sources of funding to expand projects
• Start discussions about having departmental and/or campus-wide “mandates”.
Welcome to the Mines Repository

Please read about the Repository for more information.
If you have a new article or item to add, view the new submission policies.

Communities in Mines Repository

Select a community to browse its collections.
Conferences, Meetings & Events
Departments & Interdisciplinary Programs
Library Collections
Mines Museum of Earth Science
Open Educational Resources
Student Research & Publications
Submissions from Faculty and Students
Theses & Dissertations
What kind of stuff is in there?
What kind of stuff is in there?

ThermoEquil: a secure protocol for committee-based permissionless blockchains

The Magic Rock of the Central Colorado Mineral Belt from Leadville to Aspen and Points Beyond

Aerial Photographs and Indexes

Recent Submissions

Index to aerial photographs of Sedgwick County, Colorado, and parts of Logan and Phillips County, Colorado, 1937: set YD

Aero Service Corporation, United States Agricultural Adjustment Administration
Index to aerial photographs of Sedgwick County, Colorado, and parts of Logan, and Phillips counties, Colorado in 1937. Shows photographs from YD set.
What kind of stuff is in there?
What kind of stuff is in there?
What kind of stuff is in there?

GIS for natural resources (mineral, energy, and water)

U-Pb geochronology of monazite from a carbonatite dike and hydrothermally altered pegmatite dike in the Wet Mountains, Colorado

MAP of Red Mountain mining district, Ouray County, Colo.
Questions?
Joseph Kraus
Reference & Digital Repository Librarian
jkraus@mines.edu
https://orcid.org/0000-0001-6227-8815