UBC RORs - the "Where" of persistent identifiers for linked digital assets

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- UBC Library, May 2025
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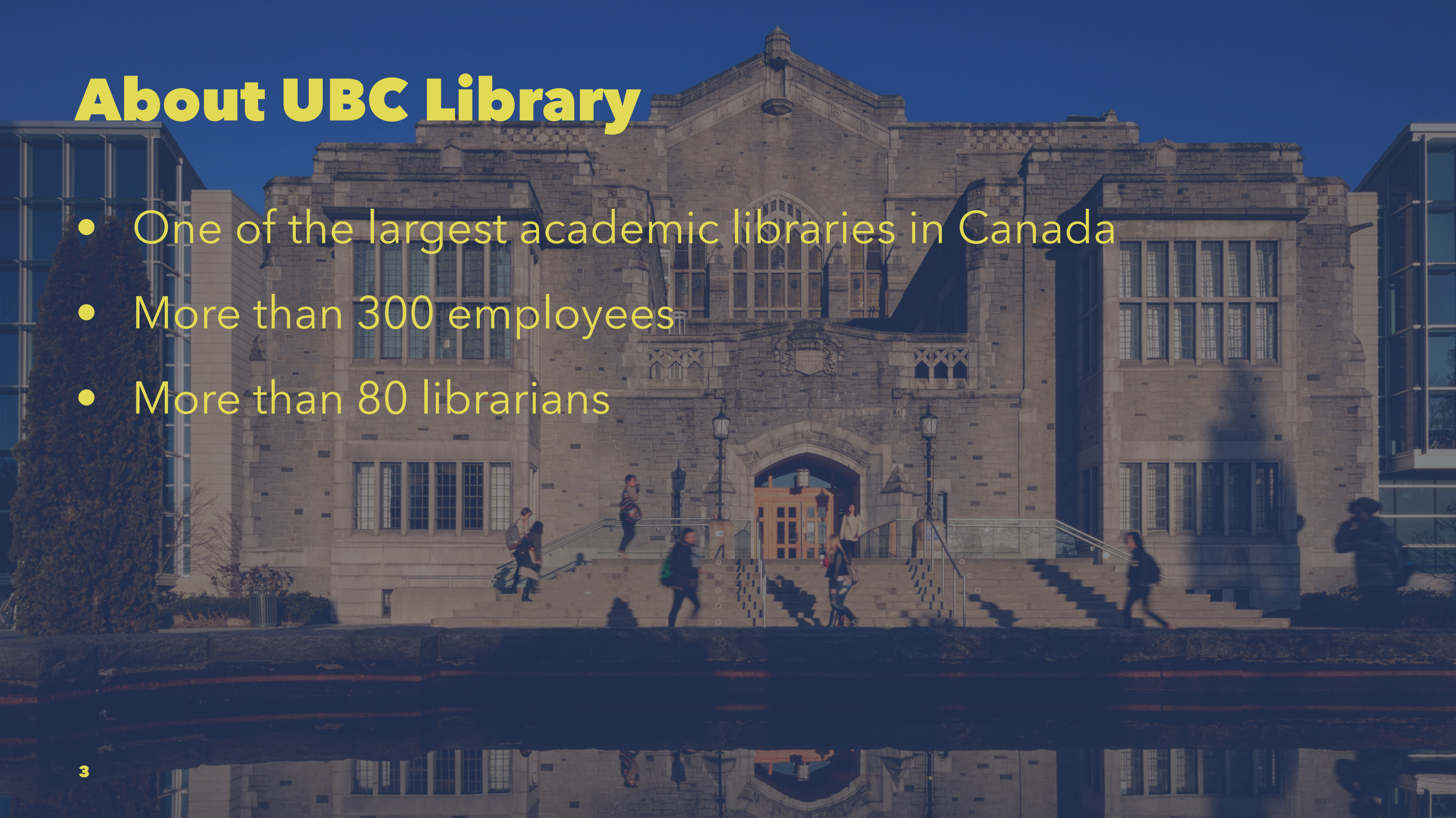
About UBC

- 72,000 students
- 20,000 faculty and staff
- Almost $900 million in research funding
- Annual budget of more than $4 billion

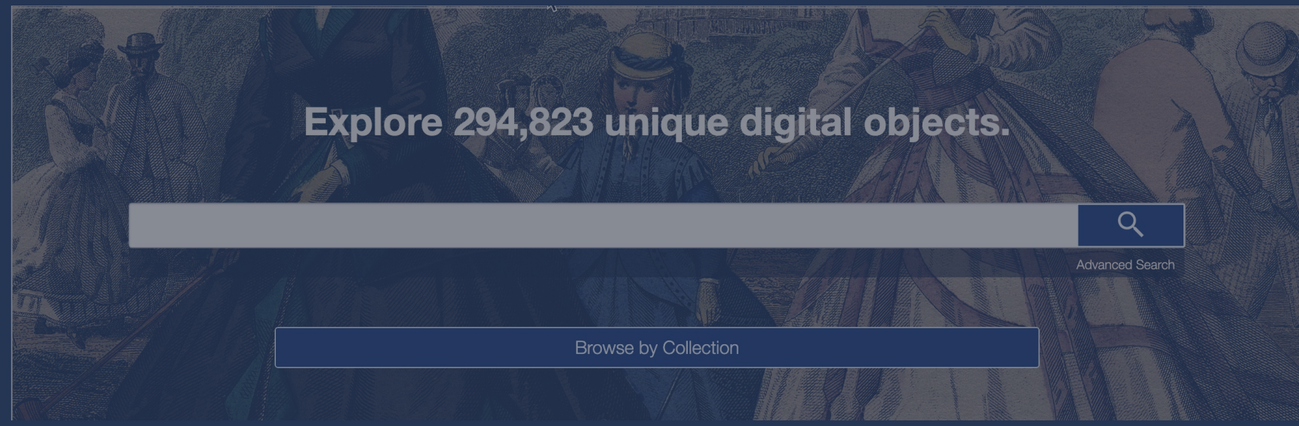
About UBC Library

- One of the largest academic libraries in Canada
- More than 300 employees
- More than 80 librarians



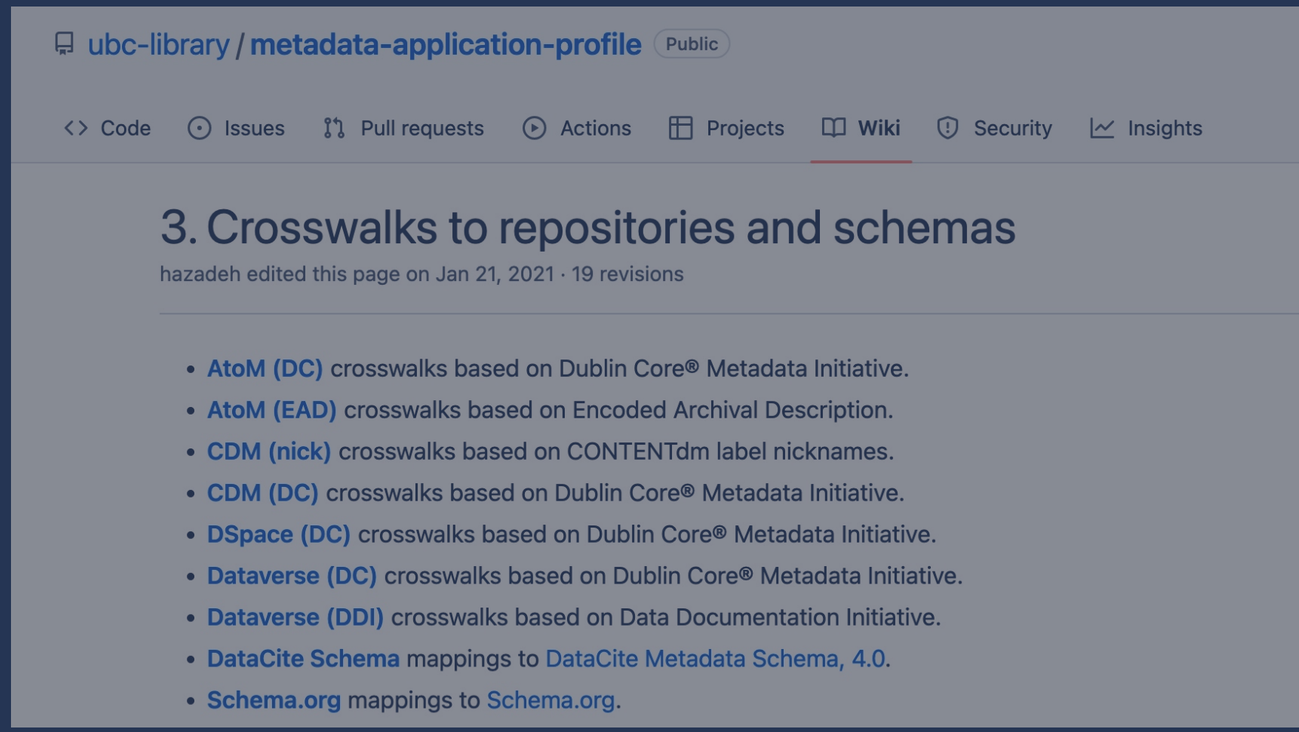
UBC Open Collections Discovery

- Open Collections brings together locally created and managed content from UBC Library's open access repositories:
  - Dataverse
  - DSpace
  - AtoM
  - ContentDM
- Released in 2016



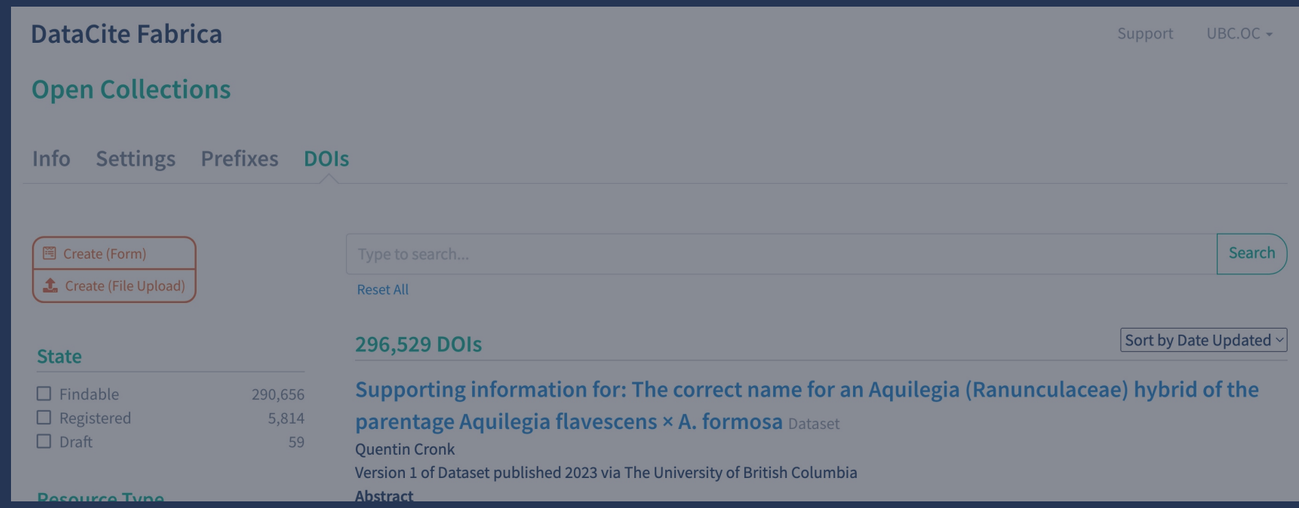
Discovery interface approach

- Metadata from source repositories is crosswalked to Open Collections schema
- Open Collections is crosswalked to Datacite and Schema.org for enhanced discovery
- DOIs are minted in the discovery layer - Open Collections, not in source repositories



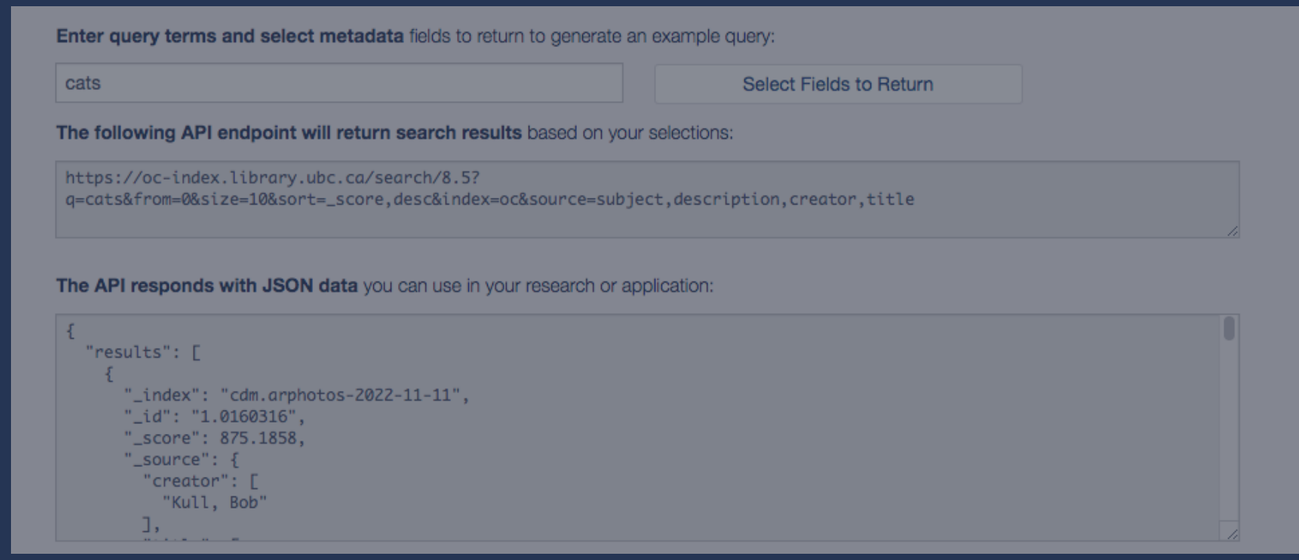
Scope and Scale

- Almost 310,000 DOIs minted and maintained
- Around 10,000 DOIs a year
- Weekly maintenance for broken PIDs



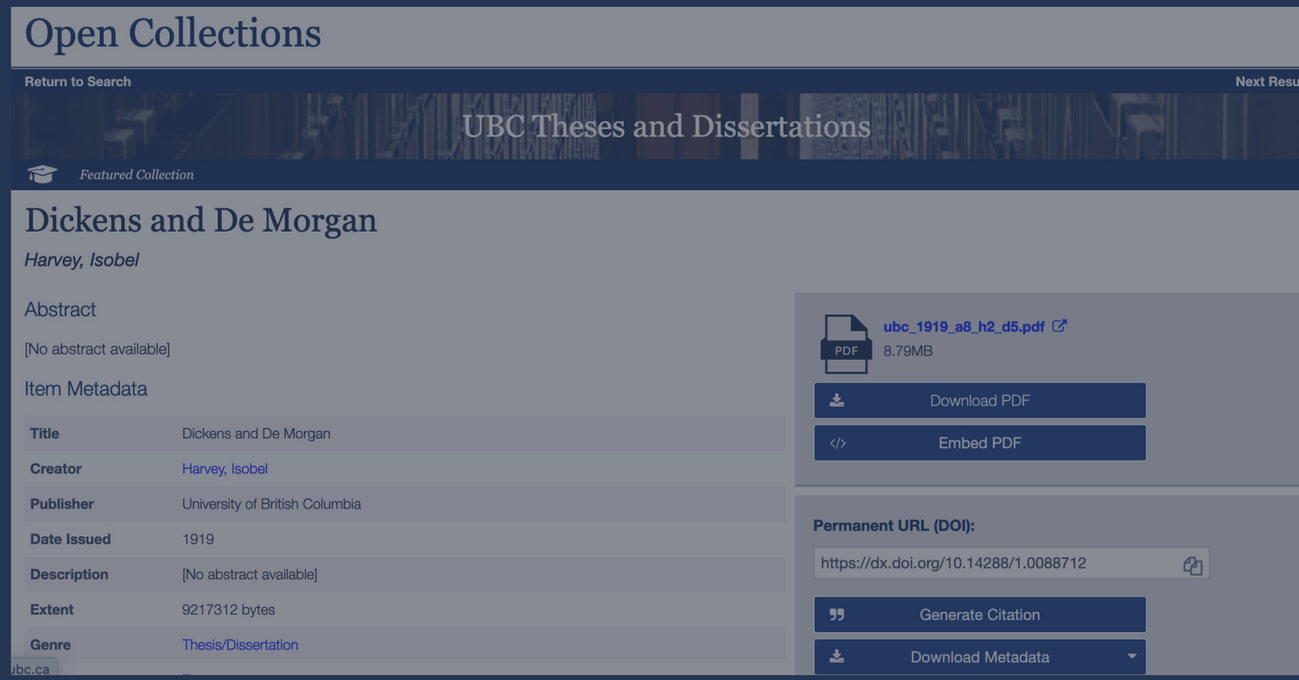
API Calls

- APIs for data re-use
- Community integrations are welcome



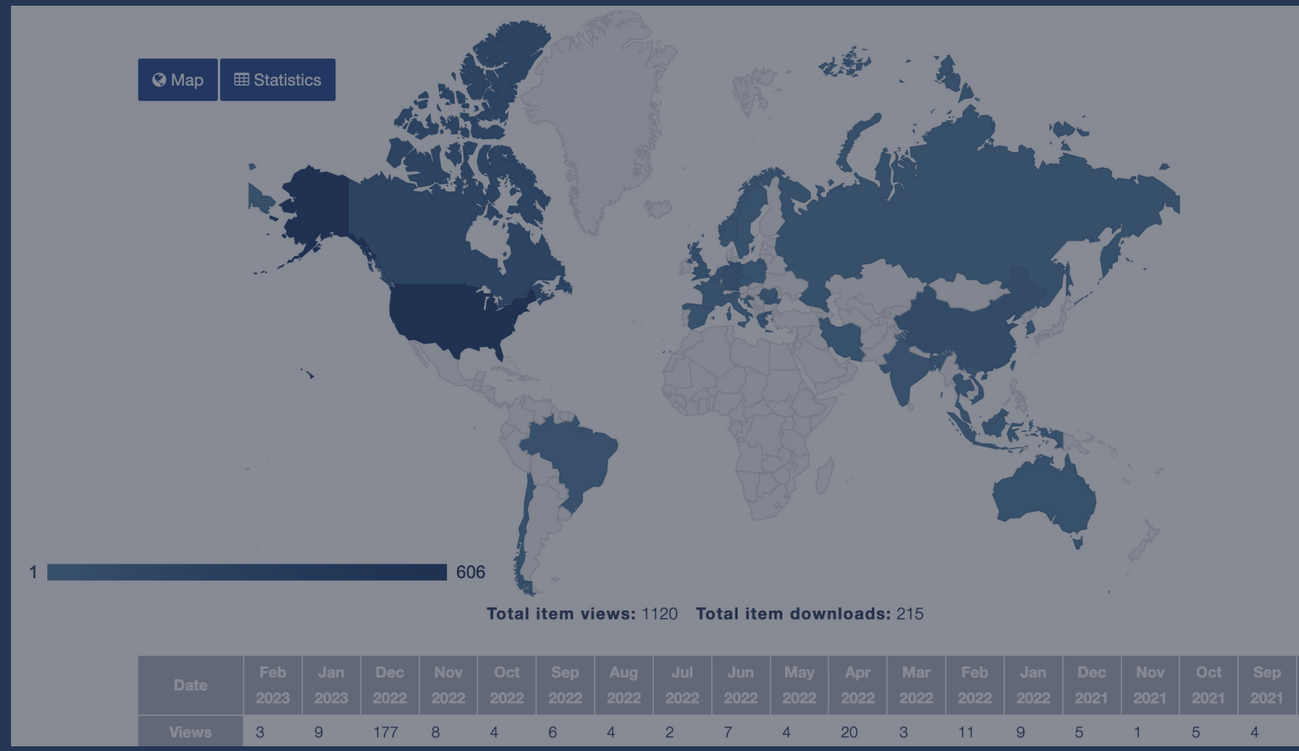
Landing page and Stats

- Each landing page has metadata (required for Google Scholar for harvesting)
- Downloadable in multiple formats
- Metadata available in multiple formats (various json, various rdf)



Landing page and Stats

- Each landing page has stats and locations enabled



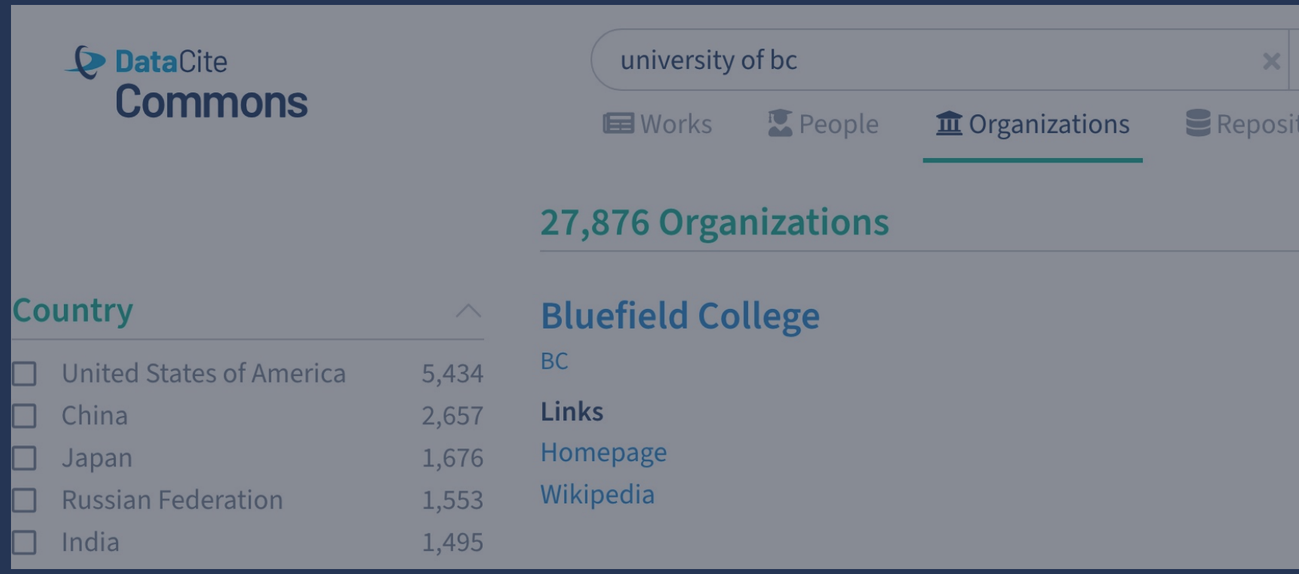
Date	Feb 2023	Jan 2023	Dec 2022	Nov 2022	Oct 2022	Sep 2022	Aug 2022	Jul 2022	Jun 2022	May 2022	Apr 2022	Mar 2022	Feb 2022	Jan 2022	Dec 2021	Nov 2021	Oct 2021	Sep 2021
Views	3	9	177	8	4	6	4	2	7	4	20	3	11	9	5	1	5	4

RORs at UBC

- Research Organization Registry (ROR) is a global, community-led registry of open persistent identifiers for research organizations.
- RORs are open and non-proprietary
- Play well with ORCIDs and DOIs
- Replaced GRID IDs

Problem with institutional names

- Is it UBC, University of British Columbia, University of BC, U.B.C or anything in between?
- Programatically it is hard to distinguish
- Not good for linked data world



Solution - Embed RORs in Datacite metadata

- Include RORs in all *UBC-minted DOIs*
- Each UBC DOI has element #7 (Contributor in the Datacite Schema) enabled with controlled ROR entry for UBC

7. Contributor

Obligation: Recommended

Occurrences: 0-n

Definition: The institution or person responsible for collecting, managing, distributing, or otherwise contributing to the development of the resource. To supply multiple contributors, repeat this property.

Embedding RORs in Datacite metadata

- Code element 7 (Contributor) in Datacite Schema 4.X (and all sub elements for 7) for all DOIs submitted to Datacite for UBC Library (retrospectively and prospectively), using 7, 7.a, 7.1, 7.1.a, 7.4, 7.4.a, 7.4.b.


```
"contributors": [
  {
    "name": "University Of British Columbia",
    "affiliation": [],
    "contributorType": "HostingInstitution",
    "nameIdentifiers": [
      {
        "schemeUri": "https://ror.org",
        "nameIdentifier": "https://ror.org/03rmrcq20",
        "nameIdentifierScheme": "ROR"
      }
    ]
```

Embedding RORs in Datacite metadata

- Allows the scholarly community to gain insight into research outputs at the institutional level by exposing affiliation information in DOI metadata submitted to Crossref or DataCite.
- Now, anyone willing to discover and harvest thousands of the UBC Library digital assets has an easy way to do so with a clear ROR query!

Questions?