PIDs at the University of British Columbia

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To Discuss

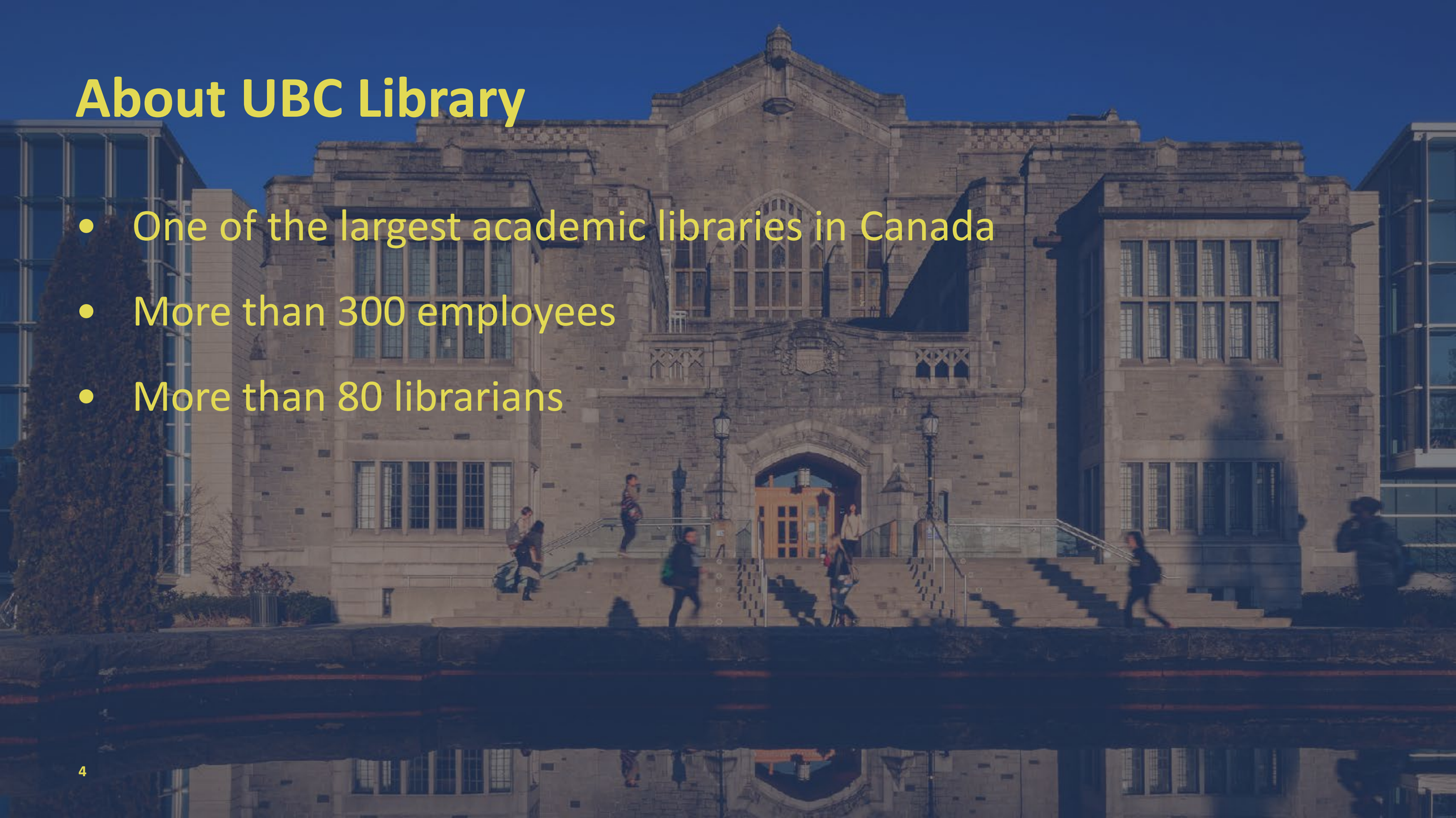
- Background about UBC/UBC Library
- UBC Library use of:
  - DOIs
  - ORCIDs
  - RORs
  - Other PIDs
- National PIDs Strategy in UBC Context

About UBC

- 70,000 students
- 17,000 faculty and staff
- $669 million in research funding
- Annual budget of more than $2 billion

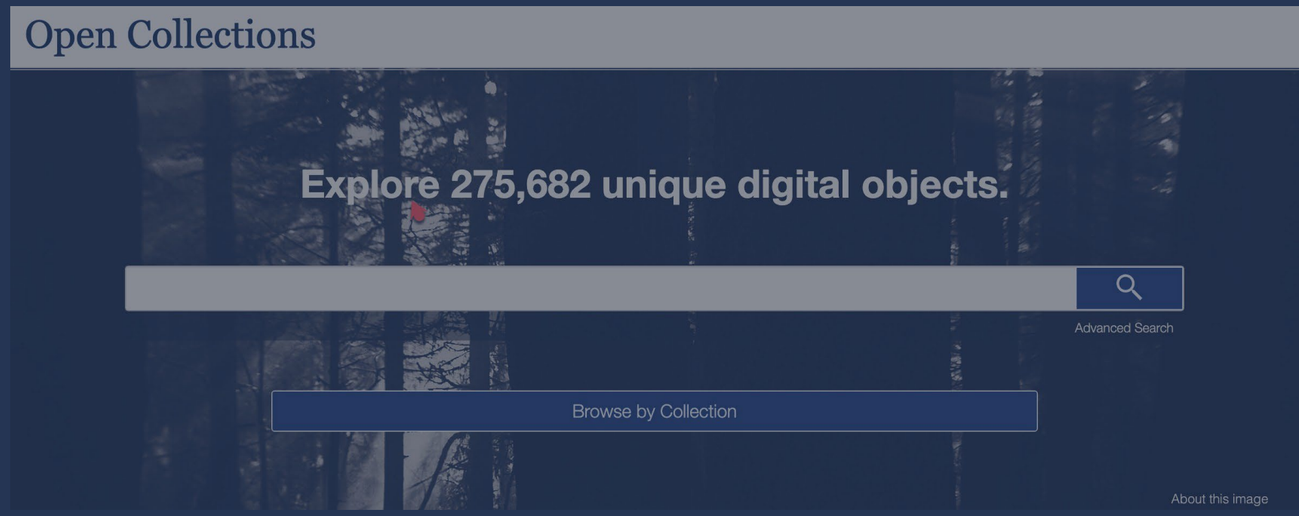
About UBC Library

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



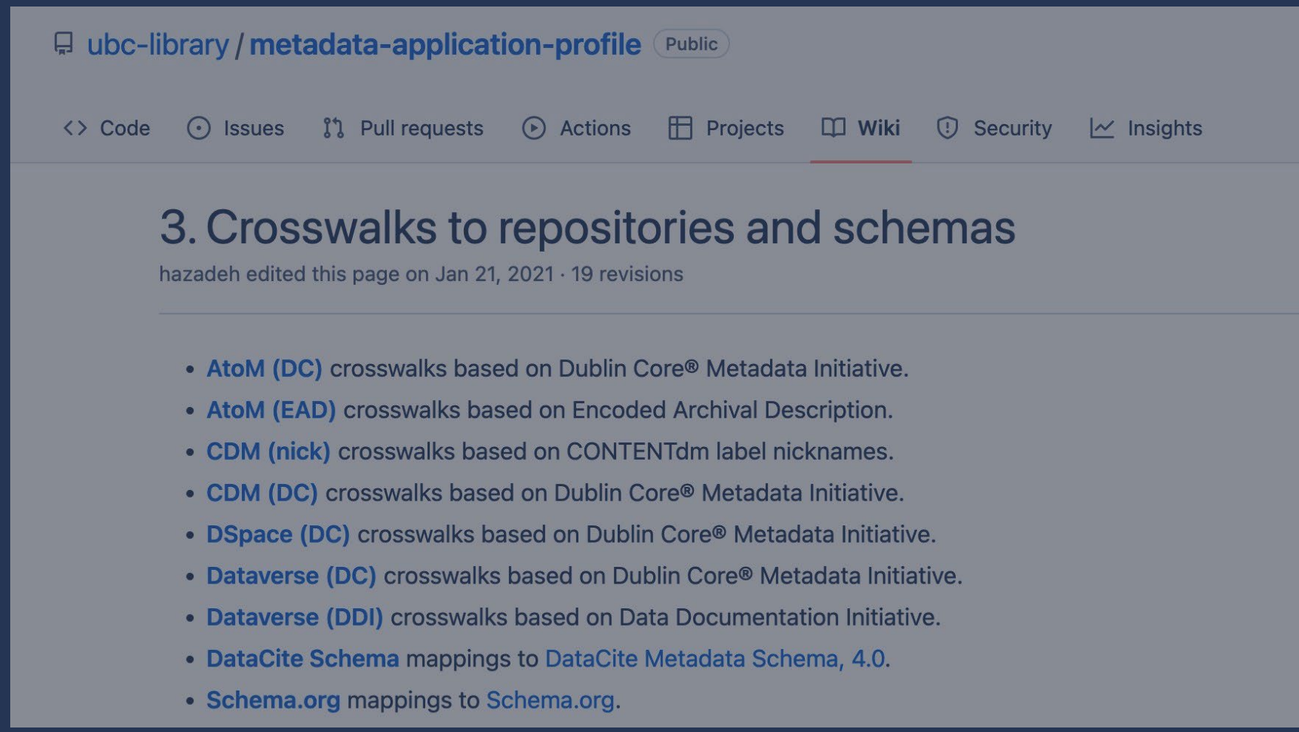
UBC Open Collections Discovery

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



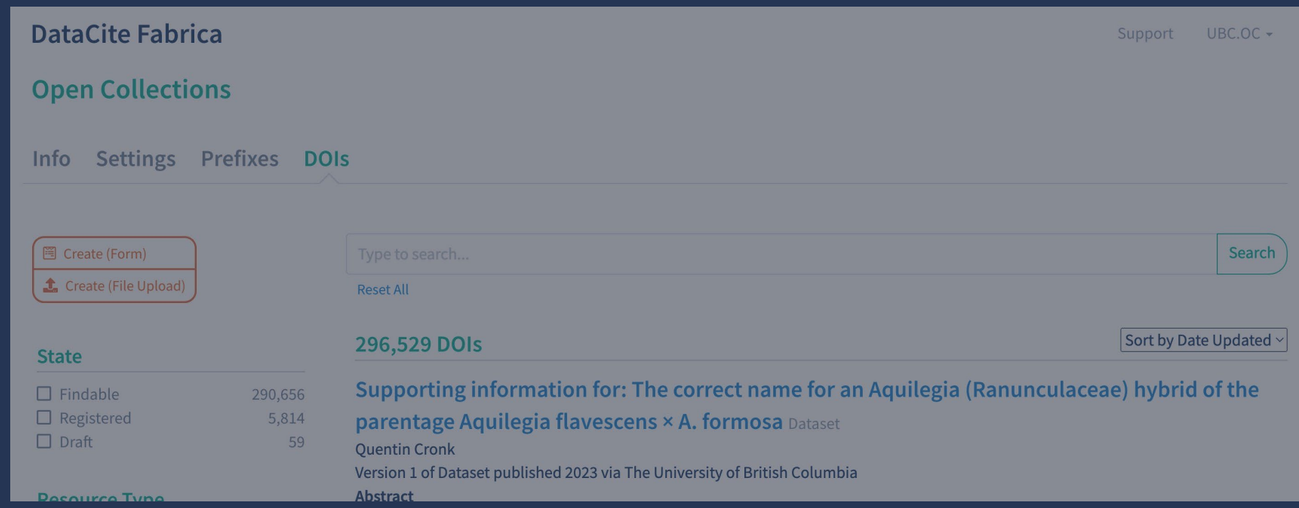
Discovery interface approach

- 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



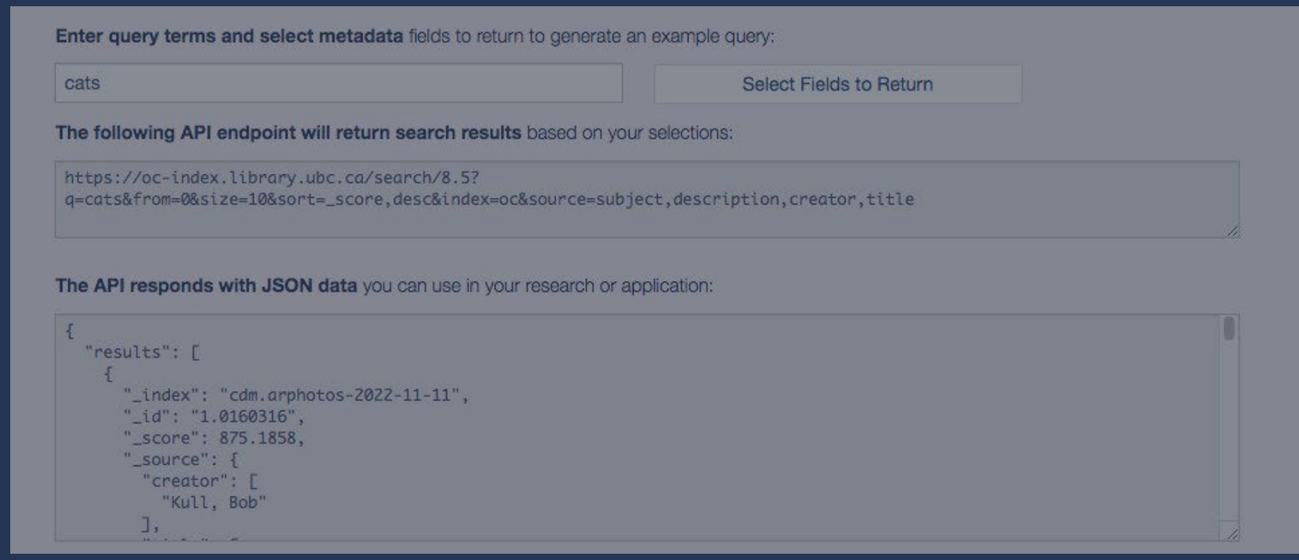
DOIs Scope and Scale

- Almost 300,000 DOIs minted and maintained
- Almost 15,000 DOIs in 2023 already
- Weekly maintenance for broken PIDs



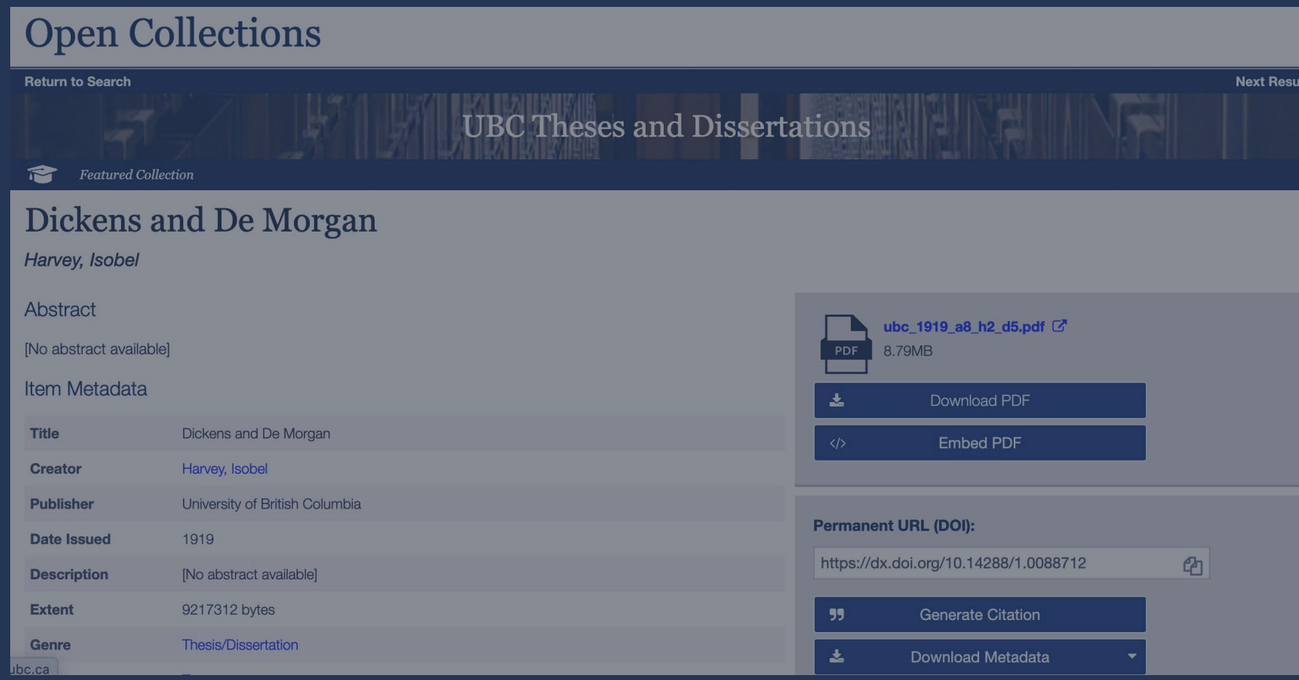
API Calls

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



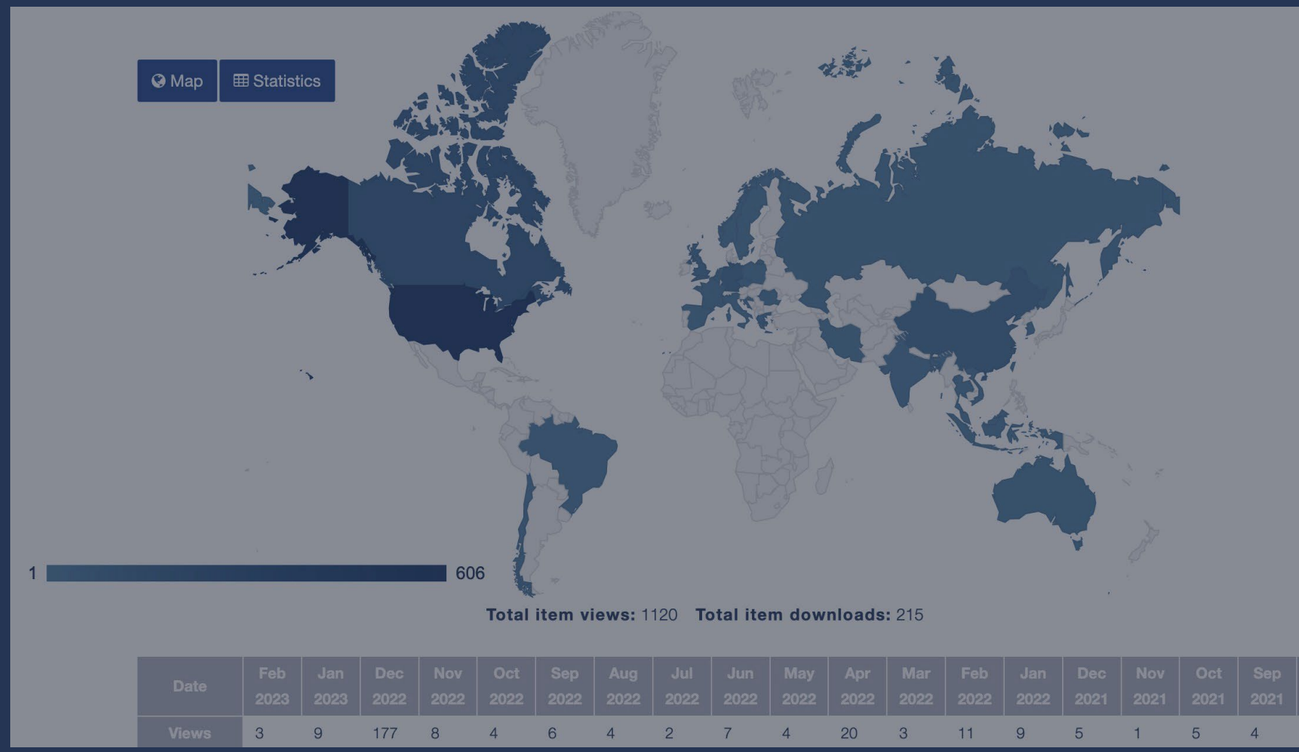
Landing page and Stats

- 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

DOIs campus services

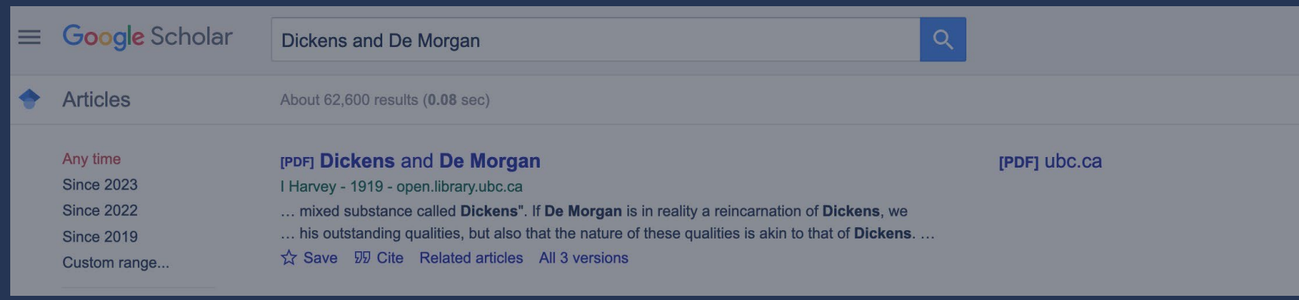
- Most campus partners do not have persistent IDs solutions
- Library is cautious to commit to solving these problems, as URLs change

DOIs campus services

- In some disciplines, like life sciences, DOIs are just too slow
  - There are >1 billion of objects on Global Biodiversity Information Facility (GBIF). A reasonable query might be which of 1 billion objects were collected in Indonesia.

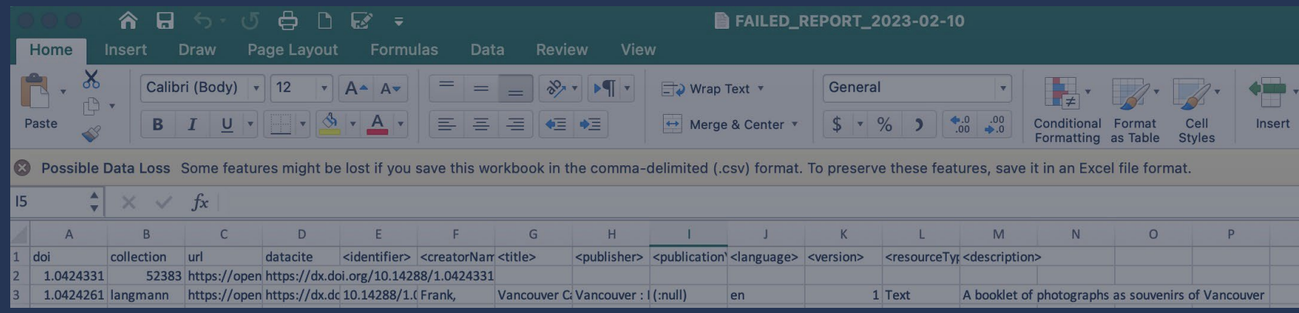
Advantages for minting DOIs

- Persistent URLs and citations
- Enhanced discovery with DataCite, Schema.org (ORCIDs, Summon, Primo, etc)
- Use of Datacite APIs and GraphQL



Challenges for minting DOIs

- Some costs for DataCite membership
- Cannot delete DOIs after minting (can edit)
- Weekly maintenance as needed
- Faculty requesting DOIs as one-offs

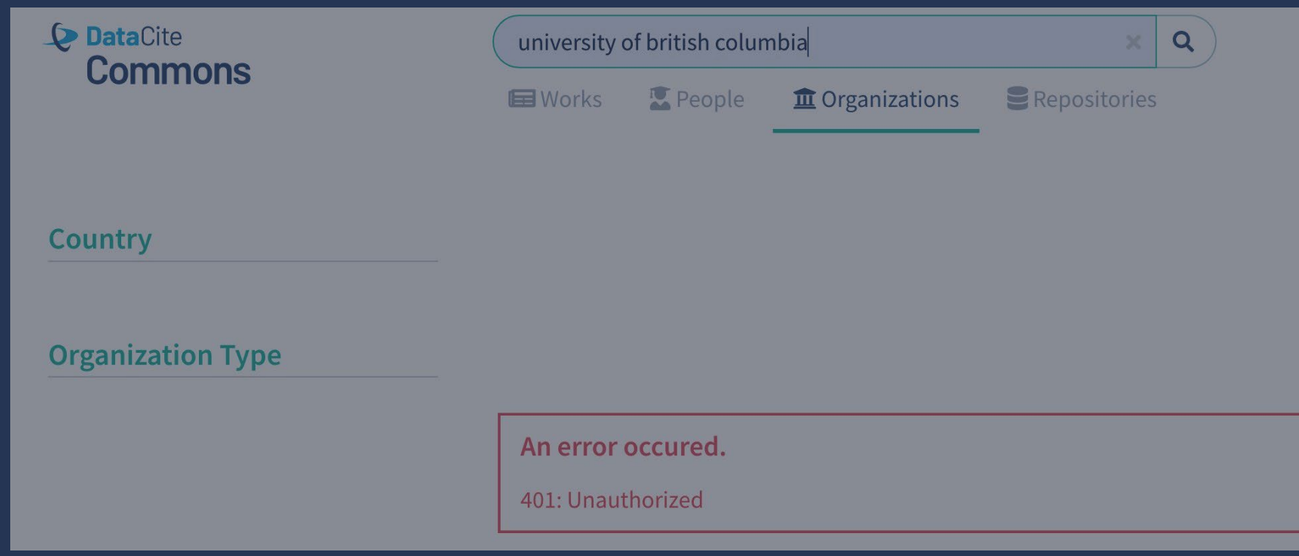


RORs at UBC

- 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

Embedding RORs in DataCite metadata

- Work in progress
- Include RORs in all UBC minted DOIs



Embedding RORs in Datacite metadata

- Allow 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.

Embedding RORs in DataCite metadata

- Code element 7 (Contributor) in DataCite Schema 4.4 (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.

ID	DataCite-Property	Occ	Definition	Requested metadata entry
7	Contributor	0-n	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. For software, if there is an alternate entity that "holds, archives, publishes, prints, distributes, releases, issues, or produces" the code, use the contributorType "hostingInstitution" for the code repository.	University of British Columbia
7.a	contributorType	1	The type of contributor of the resource	HostingInstitution
7.1	contributorName	1	The full name of the contributor	University of British Columbia
7.4	nameIdentifier	0-n	Uniquely identifies an individual or legal entity, according to various schemes	03rmrcq20
7.4.a	nameIdentifierScheme	1	The name of the name identifier scheme	ROR
7.4.b	schemeURI	0-1	The URI of the name identifier scheme	https://ror.org/

ORCIDs iDs at UBC

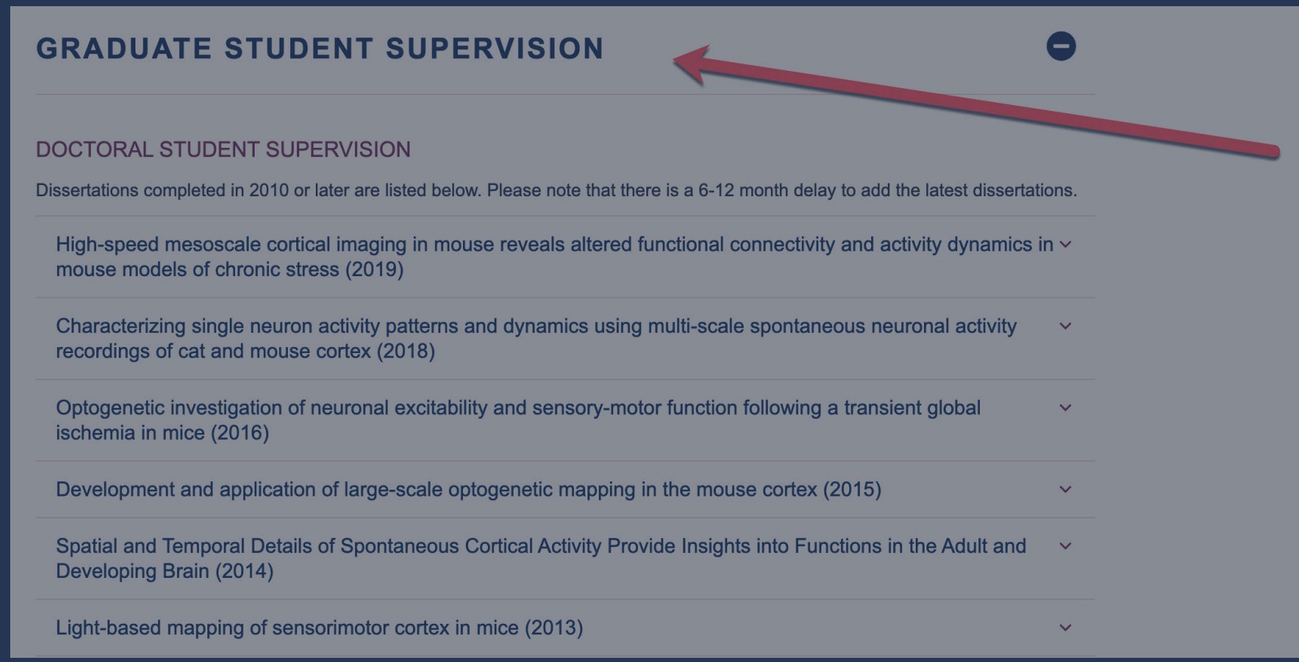
- Used in multiple library systems
  - UBC Dataverse Collection (Borealis)
  - OJS
  - cIRcle (DSpace)
- Rarely used to the full extent/integration

ORCID iDs at UBC

- Only one custom API use case in the university
- Graduate and Postdoctoral Studies' Researcher Supervisor Database

ORCID iDs at UBC

- ORCIDs are used to query our IR and extract dissertations by supervisor and feed into the Graduate and Postdoctoral Studies' site



ORCIDs at UBC

- Decent use case for ORCIDs in UBC OJS
- Almost 500 ORCIDs connected across time, and almost 200 ORCIDs updated with metadata upon successful article publication.

National PIDs Strategy

- Increase awareness and buy-in from administrators
- (Finally) allow integration into the university administration systems, e.g. Workday and RISe
- PIDs for grants, instruments, software
- But especially ways to integrate PIDs with one another, e.g. RORs/ DOIs/ORCIDs as we are trying to do in the UBC Library!
- And finally allows us to speak the same language between librarians, administrators and researchers

Questions?