

Borealis serves as the dedicated repository for research data within the Libraries, powered by the versatile platform of Dataverse and supported by the robust infrastructure of Scholars Portal. Designed to be universally applicable across all academic fields, Dataverse accepts a broad spectrum of data types and formats. Securely housed on Canadian servers, the repository ensures the safekeeping of all deposited files within a protected digital space. Depositors are granted the agency to share their content with the public, select individuals, or maintain its confidentiality, according to their discretion

Advanced Research Services

Data Curation Librarian

Digital Preservation Librarian

Science and Data Literacy Librarian

<https://borealisdata.ca/dataverse/uvic>

Research data generated by UVic researchers and curated by the Libraries

Monitoring the evolving needs of the designated community within the context of preserving research data at UVic Libraries, according to the OAIS (Open Archival Information System) model, involves several key practices:

- Regular communication, engagement, and feedback: The Data Curation Librarian ensures ongoing communication with designated stakeholders, including research project leads and computing personnel

- Collaboration with researchers: As part of their duties, the Data Curation Librarian regularly collaborates on research projects. This is facilitated by the UVic Libraries' Grants and Awards Librarian position, which maintains the [Library Services for Grant-Funded Research Projects service](#), enabling researchers to include RDM and digital preservation as part of their funding proposals. The Data Curation Librarian and Science and Data Literacy Librarian also provide regular workshops on data management planning, data analysis, visualization, and mapping via the [UVic Libraries' Digital Scholarship Commons](#), enabling them stay informed about participants' evolving research interests, methodologies, and data requirements.
- Attend workshops and conferences and participate in professional associations: The Data Curation Librarian and Digital Preservation Librarian participate in workshops and conferences attended by members of the designated community. These events provide opportunities to learn about emerging technologies, methodologies, and challenges faced by researchers and educators. These positions also participate in several national organizations that connect them with researchers and technology specialists, including via the Canadian Association of Research Libraries (CARL), the Canadian Research Knowledge Network (CRKN), and the Digital Research Alliance of Canada (The Alliance).
- Adaptation and Flexibility: Preservation strategies, metadata standards, access policies, and other aspects of data management are reviewed on an annual basis based on feedback and the evolving requirements as articulate by members of the Dataverse Advisory Group.

On an annual basis, the Digital Preservation Librarian meets with the Data Curation Librarian to review preservation planning configurations for our [Archivematica](#) preservation system. This includes:

1. Evaluate all open and proprietary data formats within UVic's Borealis datasets using the Borealis Metrics Dashboard, which catalogs file types across collections and their respective dataset locations, each with a unique DOI.
2. Upon completion of the above assessment, refine and update the file normalization procedures for preservation within Archivematica, ensuring compatibility and longevity of archived materials.
3. If identified file formats pose a high risk of obsolescence, the Digital Preservation Librarian will initiate the re-ingestion of associated Archival Information Packages (AIPs) based on the revised normalization procedures established in step 2.
4. Leveraging data from Borealis usage reports, which detail file types and their dataset affiliations, AIPs corresponding to specific Borealis datasets can be readily accessed via their assigned DOIs for reprocessing under the updated normalization guidelines.

Level 2 (normalization) on ingest with Level 3 (migration) available as needed (see Preservation Planning section above)

Data curation policies encourage deposit of open formats where possible. Normalization for our data management guidelines recommend using open, widely recognized file formats when submitting data, to ensure that it remains accessible over time. To preserve the longevity of the files we receive, our system, Archivematica, automatically converts certain types of files into standard formats known for their durability. For instance, various unique image files, like those from Adobe or Canon, are converted to a standard TIFF format. We keep both the original and the standardized

Last updated: 9 April June 2024, Corey Davis, Digital Preservation Librarian