

# People as Infrastructure

Kim Martin, Sarah Roger, and Jordan Lum



### **LINCS Mission Statement**

LINCS enables researchers to create interlinked and contextualized online data about culture to benefit scholars and the public.

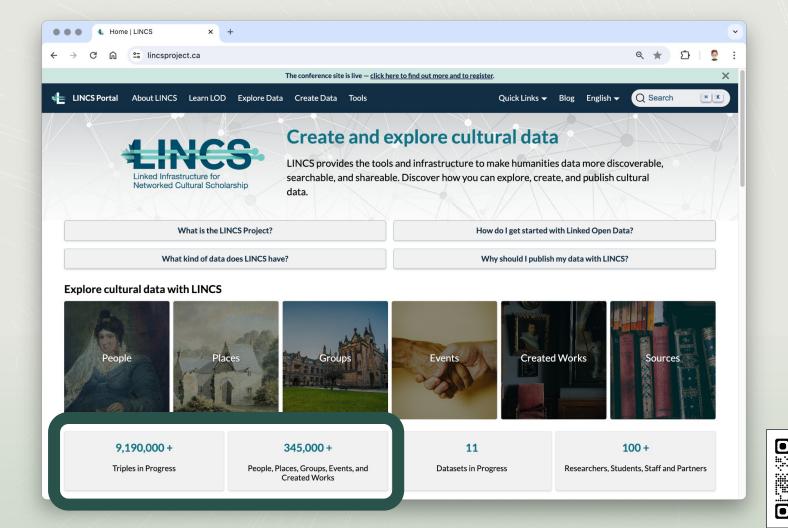
Our mission is to make cultural data more readily available, shareable, searchable, and reusable.

#### We are committed to:

- 1. Empowering researchers to link their data
- 2. Hosting linked datasets
- 3. Providing tools for creating, querying, filtering, visualizing, sharing, annotating, and refining Linked Data (LD)
- 4. Prioritizing voices and communities that are underrepresented on the Web with a view to promoting equity, diversity, inclusion, and Indigenous ways of knowing.







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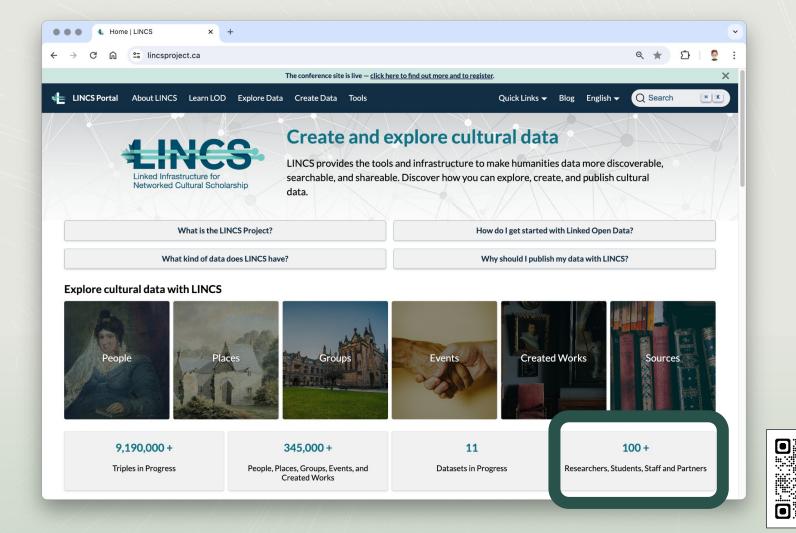
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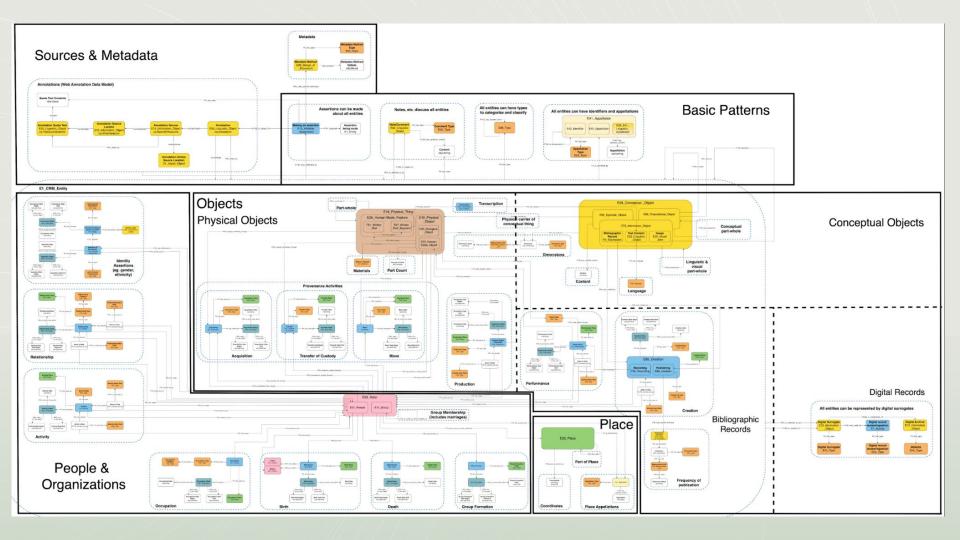
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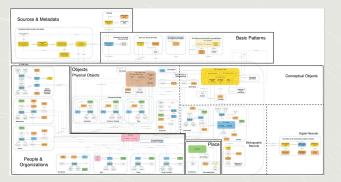
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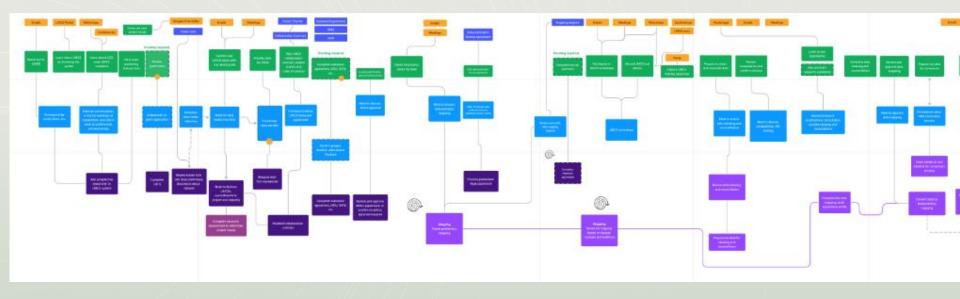






From the LINCS data model ...

... to the LINCS service blueprint



### LINCS Mission Statement: Our Commitment to Equity

LINCS is committed to diversity, inclusion, and decolonization in all areas of the project: from dataset selection to resource access and allocation; from community involvement to team composition. LINCS's ongoing work to enact reconciliation and anti-racism is more than just a policy: it is an ongoing commitment to listen, learn, engage, and take concrete action to dismantle discrimination.

**LINCS** is committed to representing difference and diversity, including non-hegemonic epistemologies and alternative knowledge representations. LINCS seeks to address systemic bias through its handling and presentation of data, by promoting situated and contextually embedded data, and via transparency about how LINCS datasets are culturally produced.

**LINCS** is committed to equity among its participants. The LINCS Project Charter outlines project-wide values and practices for preserving mutual respect and fostering goodwill.





## Why map?

- Gives us a bird's eye view of knowledge
- Uncovers new relationships that lead to new insights

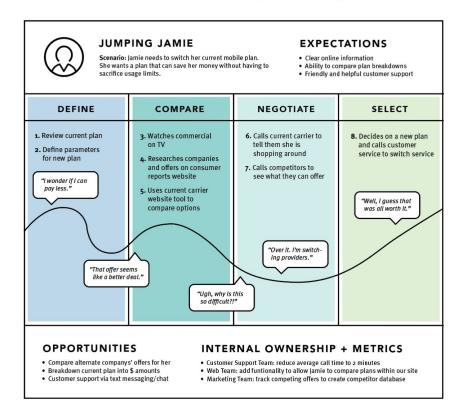


## User Experience Mapping

- We map & visualize in UX too!
- Revolves around perspective of someone's experience with a product, tool, or service
- Experiences are holistic, personal, and situational
- Maps come in various forms

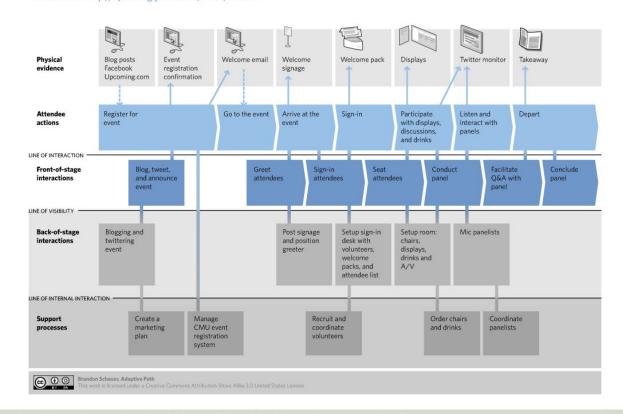


#### **CUSTOMER JOURNEY MAP** Example (Switching Mobile Plans)



#### Service Blueprint for Seeing Tomorrow's Services Panel

find out more: http://upcoming.yahoo.com/event/1768041



Jim Kalbach, Mapping Experiences: A Complete Guide to Customer Alignment Through Journeys, Blueprints, and Diagrams, 2nd ed. (Beijing: O'Reilly, 2021), 269, figure 10-4.

## Mapping LINCS

- Service blueprint reveals patterns inside organizations
- How an organization communicates and interacts directly mirrors what they design - Conway's Law
- In the context of LINCS, the resulting LOD is a reflection of the people involved and how they interact



## How is LINCS using the service blueprint?

- Using the service blueprint is different in the context of LINCS
- We're a collaboration, not a service
- Make our process transparent, show the work involved



## LINCS service blueprint - what we have now

- Intake
- Onboarding
- Reconciliation & Data Cleaning
- Conversion
- Ingestion
- Maintenance



## (some) Challenges to the People Side of Infrastructure

- Crediting those who do the work
- Emotional labour and carework
- Communication across teams
- Demonstrating the importance of soft skills



#### Recent posts

#### It's All About the People

Designing and Building Responsive Web Applications

Ice cream, Binaries, and Maybes

Piecing the Past Together With LOD

Development in Steps: Learning to Collaborate on a Technical Project

### It's All About the People

February 26, 2024 · 4 min read

#### Susan Brown

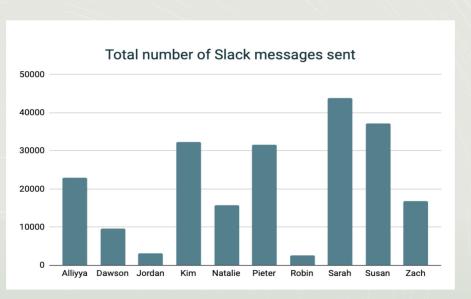


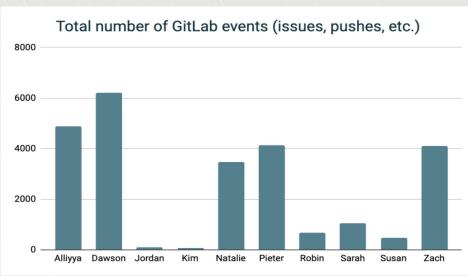
Image: Woman punch card operators working on Roberto Busa's Index Thomisticus. Back left: Rosetta Rossi Bertolli; bottom right: Livia Canestraro. CC-BY-NC. Thanks to Melissa Terras, "For Ada Lovelace Day," 2015.

I am surprised and thrilled that someone thought it worth nominating me for the Roberto Busa Prize, and overwhelmed to have been placed by ADHO in such illustrious company, fully aware that there is so much superb work in our community deserving of this recognition.

All knowledge is relational. It is fabulous to have recognition of scholarship that emerges from an intersectional perspective and is embedded in process: from making things that try to leverage technology in new ways, trying and failing, and yet continuing to try to make a difference to how we work and to enable us to create and share knowledge together, in better ways, in a changing world. For such work, collaboration is essential, which is to say it's all about people.

### Who does what with their time?







## C is for Cookie(s)







Empower 2,c: To give (a person) the means, ability, or strength to do something; to enable.

Oxford English Dictionary, s.v. "empower (v.)," July 2023, https://doi.org/10.1093/OED/8805155234.

## Meaningful Recognition?

Empowered by



**Dawson MacPhee**: I developed frontend and backend components, extending the original code base, to support the exploration, search, and editing of the data that ResearchSpace holds.

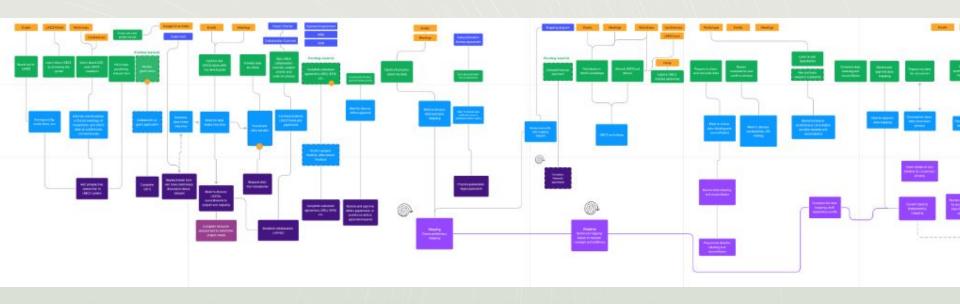
Natalie Hervieux: I worked with the data holders to get a sample of their data, reviewed that data, performed data cleaning, and raised data issues for the data holders to resolve. I helped create the modelling and implemented an automated data conversion workflow to translate their data into linked data. I reviewed the data in ResearchSpace to suggest improvements.

**Robin Bergart**: I introduced the data holders to Research Space features (Search, Save, Project Page, Knowledge Map, Semantic Narrative) and relayed their feedback to improving the interface design.

**Zach Schoenberger**: I Consulted with the data holders to vet their data in ResearchSpace, taught them how to explore and edit their data and metadata using ResearchSpace, configured ResearchSpace to meet their needs

**Jordan Lum**: I designed various LINCS tools that hosts researchers' data, from user research to visual design.

## Service Blueprint → ???





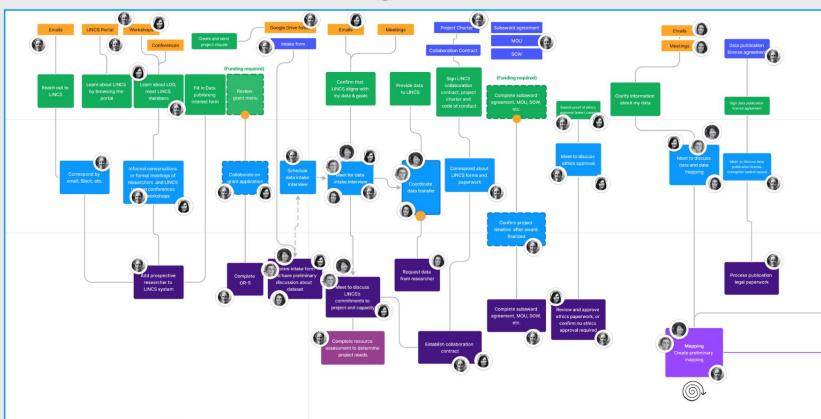


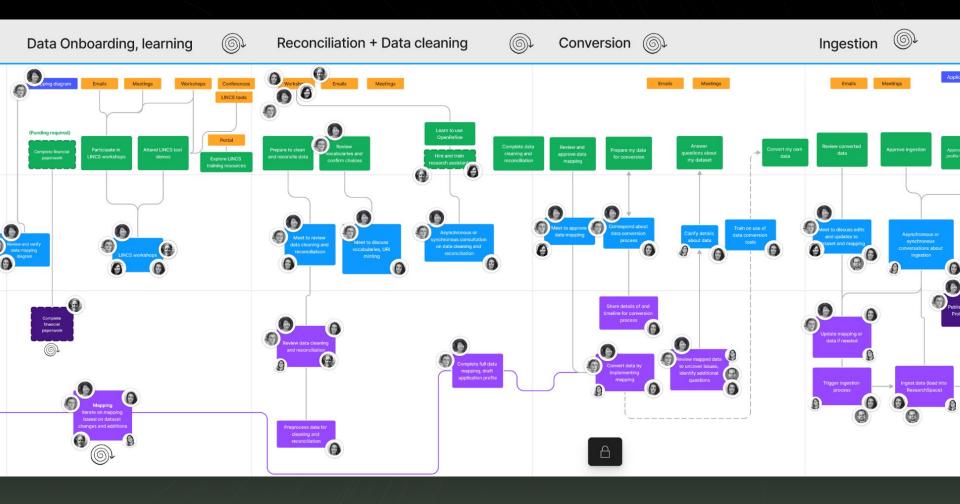
**Physical Evidence** 

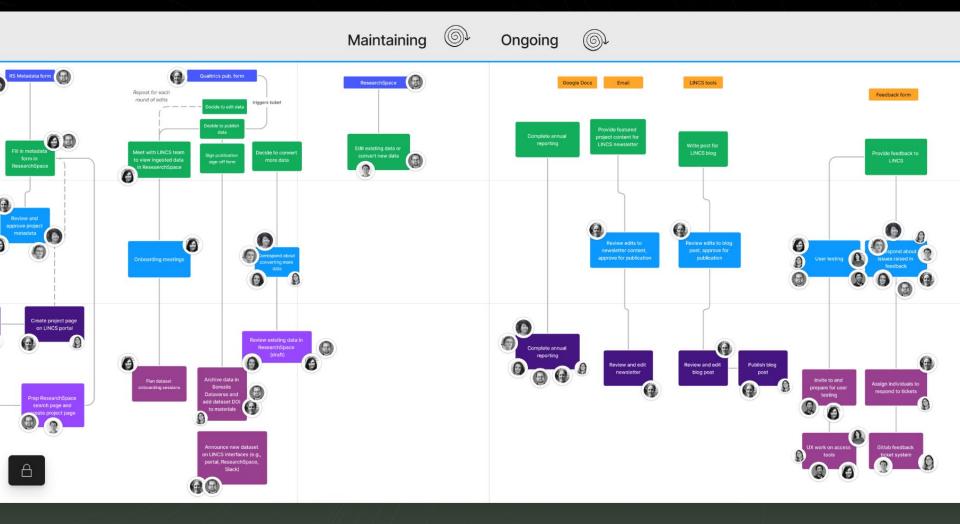
Researcher Actions

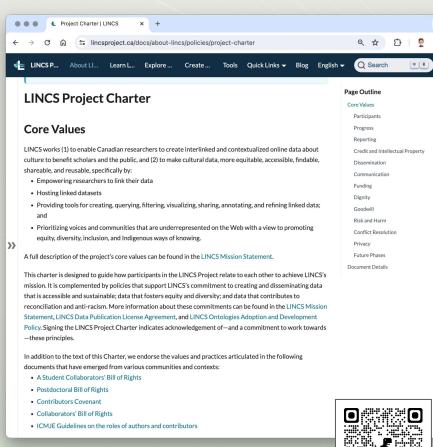
On stage

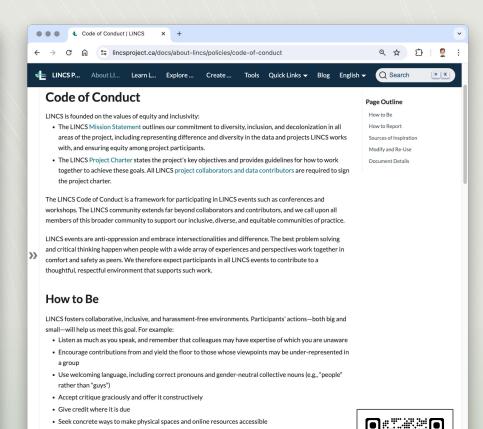
Management
Tech
Manage + Tech





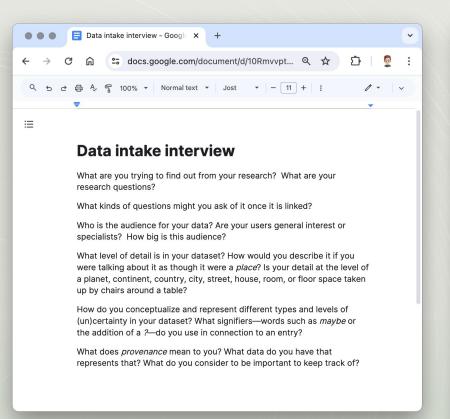


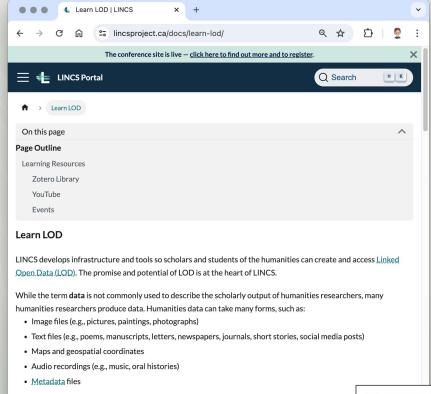




· Act as an active bystander to ensure the welfare of those around you

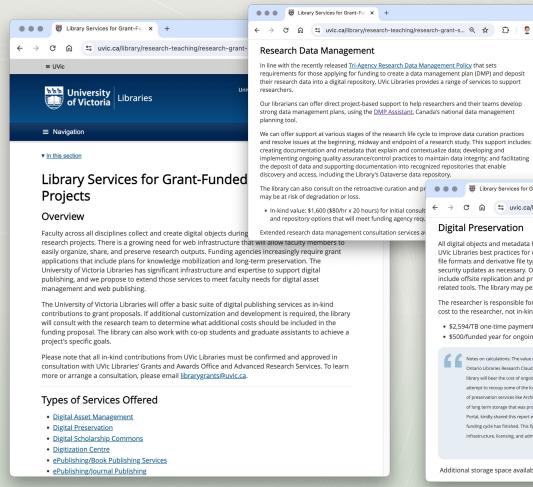






These items can all be transformed into standard formats that both humans and computers can read made openly available on the web, scholars—and everyone!—can discover data, link to data, and adv scholarship.





#### Metadata Consultation

₩ Library Services for Grant-Fu × +

UVic Libraries will build a metadata input form that is customized to the needs of a specific project. We will work with the project team to develop a data model for describing digital research objects. Building on the library's base data model our metadata consulting team will recommend standards to ensure that project metadata can be shared, indexed, and reused over time. We will work with you to identify controlled vocabularies, content standards, and syntax conventions that will help to standardize object descriptions for better search and discovery. Our underlying Fedora software will automatically create unique URL identifiers for each object, and will generate linked data triples for inclusion in an external triple store. All public collections hosted by UVic Libraries will be exposed for indexing in major web search engines.

25 uvic.ca/library/research-teaching/research-grant-s... Q &

The researcher is responsible for adding descriptive metadata to research objects, vetting accuracy, and for ensuring that the project team is familiar with the data model and chosen standards.

elling and metadata consultation.

ns is valued at \$80/hr. This figure is based on a median Canadian

f benefits (at 20%) and leaves (at six weeks per year). Thanks to

onsult with the project lead on metadata needs, map required

Hydra. This figure may be revised with experience.

aring information that helped us to arrive at this number, 25 hours is

elds to the UVic Libraries data model, and to create a metadata profile

#### **Digital Preservation**

All digital objects and metadata held in the Hydra digital asset management system will be subject to UVic Libraries best practices for digital preservation. UVic Libraries will provide advice on sustainable file formats and derivative file types. We will ensure regular back-ups and integrity checks, along with security updates as necessary. Objects will be part of the library's digital lifecycle planning which may include offsite replication and preservation processing using Archivematica, Archive-It, LOCKSS and related tools. The library may perform file integrity checks and format migrations over time.

25 uvic.ca/library/research-teaching/research-grant-s... Q ☆

In-kind value

The researcher is responsible for ensuring the quality of digital objects. Cost (note that this is a real cost to the researcher, not in-kind):

• \$2,594/TB one-time payment for long term storage costs

⊞ Library Services for Grant-Full × +

\$500/funded year for ongoing preservation services

Notes on calculations: The value of \$2,594/TB is cribbed from a report on the costs of long term storage that was produced by the Ontario Libraries Research Cloud Advisory Team, Alan Darnell, Director of Scholar's Portal, kindly shared this report with UVic, The library will bear the cost of ongoing preservation services long after the project funding cycle has finished. This figure is an attempt to recoup some of the long term costs of ongoing back-ups, as well as infrastructure, licensing, and administrative costs of preservation services like Archivematica, Archive, It, and LOCKSS. The value of \$2.594/TR is criphed from a report on the costs of long term storage that was produced by the Ontario Libraries Research Cloud Advisory Team. Alan Darnell, Director of Scholar's Portal, kindly shared this report with UVic. The library will bear the cost of ongoing preservation services long after the project funding cycle has finished. This figure is an attempt to recoup some of the long term costs of ongoing back-ups, as well as infrastructure, licensing, and administrative costs of preservation services like Archivematica, Archive- It, and LOCKSS.

Additional storage space available at cost.



# Thank you to our team of 200+ researchers, students, staff, advisors, board members, UX testers, partners, and more ...

Abeer Waheed | Akseli Pálen | Alice Defours | Alison Hedley | Aliza Ferrone Alliyya Mo | Amardeep Singh | Amaz Taufique | Amelia Flynn | Amia Khosla Amy Buckland | Ananya Rao | Andrew MacDonald | Angela Joosse | Antonio Munoz Gomez | Arianna Ciula Aviva Weizman | Awais Mehmood Khalid | Basil Yusuf | Bob Gibbs | Brent Nelson | Bri Watson | Bryan Tarpley Camille Callison | Camille Delattre | Carlos McGregor | Caroline Winter | Carolyn Black | Carrie Breton | Carrie Heitman Cecily Raynor | Célian Ringwald | Chad Gaffield | Chiara Cremona | Chris Lee | Clare Appavoo Constance Crompton | Cristina Pattuelli | Dan Scott | Daniel O'Donnell | Dawson MacPhee | Dean Seeman | Deanna Reder | Deb Stacey | Denilson Barbosa | Devon Hayley Farrell | Diane Jakacki | Eason Liang | Elena Spadini Els Thant | Emily McKibbon | Emily Murphy | Emmanuel Château-Dutier | Erin Canning | Esther Solé i Martí Evan Rees | Farhad Omarzad | Felicity Tayler | Faye Hammill | Filomena Lopedoto | Francisco Berrizbeita | Gabriela Sanchez Geoffrey Rockwell | Grace Campagna | Grace Fong | Gracy Go | Hannah Stewart | Helmut Reichenbacher | Huma Zafar Ibrahim Rather | Ichiro Fujinaga | Iman El Gamal | Isabel Meirelles | Jaehoon Pyon | Jacquey Taucar | Jada Watson Jakob McLellan | James Chartrand | James Cummings | James MacGregor | Jan Hadlaw | Jana Smith Elford | Janelle Jenstad Jasmin Macerios | Jasmine Drudge-Willson | Jason Boyd | Jason Camlot | Jason Friedman | Jeffery Antoniuk | Jennifer Blair Jenny Marvin Jennifer Wemigwans | Jessica Ye | Jim Clifford | Jingyi Long | John Aspler | John Brosz | John Simpson Jon Bath | Jordan Lum | Juan Luis Suárez | Julia Polyck-O'Neill | Juliene McLaughlin | Justin Francis | Kailey Fallis Kate Davis | Kate LeBere | Kathleen McCulloch-Cop | Kelly Hughes | Kim Martin | Laura Mandell Lauren Liebe | Lena Krause | Lisa Goddard | Lorraine Janzen Kooistra | Luciano Frizzera | Magdalena Turska | Majdi Jelalli Marcello Vitali-Rosati | Marco Lian Bantolino | Marion Tempest Grant | Matej Kosmajac | Mathilde Verstraete

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