



Integrating Repositories for Research Data Sharing

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Why is data curation important?

- Accelerating scientific progress
- Enabling appropriate scrutiny and verification of results
- Promoting integrity and debate
- Facilitating new collaborations
- Avoiding needless duplication of effort
- Increasingly, complying with institutional policies, publication requirements, and funder mandates

Cf. White and Teds (2011), "Making the case for research data management" DCC briefing paper,
www.dcc.ac.uk/resources/briefing-papers/making-case-rdm



Merritt

- Curation repository available to the UC community and external partners

- ◆ *Preservation and access*
- ◆ *Content agnostic, model free*
- ◆ *Highly decentralized micro-services architecture*

Cf. Abrams, Cruse, Kunze, and Minor (2011), “Curation micro-services: A pipeline metaphor for repositories,” *Journal of Digital Information* 12(2), journals.tdl.org/jodi/article/view/1605

- ◆ 26 *curatorial units*
- ◆ 271 *collections*
- ◆ 325,000 *objects*
- ◆ 450,000 *versions*
- ◆ 4,500,000 *files*
- ◆ 13 *TB*

www.cdlib.org/uc3/merritt
merritt.cdlib.org

Merritt is a new cost-effective repository service from the University of California Curation Center (UC3) that lets the UC community manage, archive, and share its valuable digital content. Use Merritt to provide long-term preservation of digital assets, share your research with others or meet the data sharing and preservation requirements of a grant-funded project.

Merritt is built upon a Micro-Services approach to digital curation based on devolving curation function into a set of independent, but interoperable, services that embody curation values and strategies. Since each of the services is small and self-contained, they are collectively easier to develop, deploy, maintain, and enhance. This design approach is detailed in the UC3 Curation Foundations paper.

Learn more about Merritt:

- [Handout: Merritt Uses and FAQ](#)
- [Merritt User Guide](#)

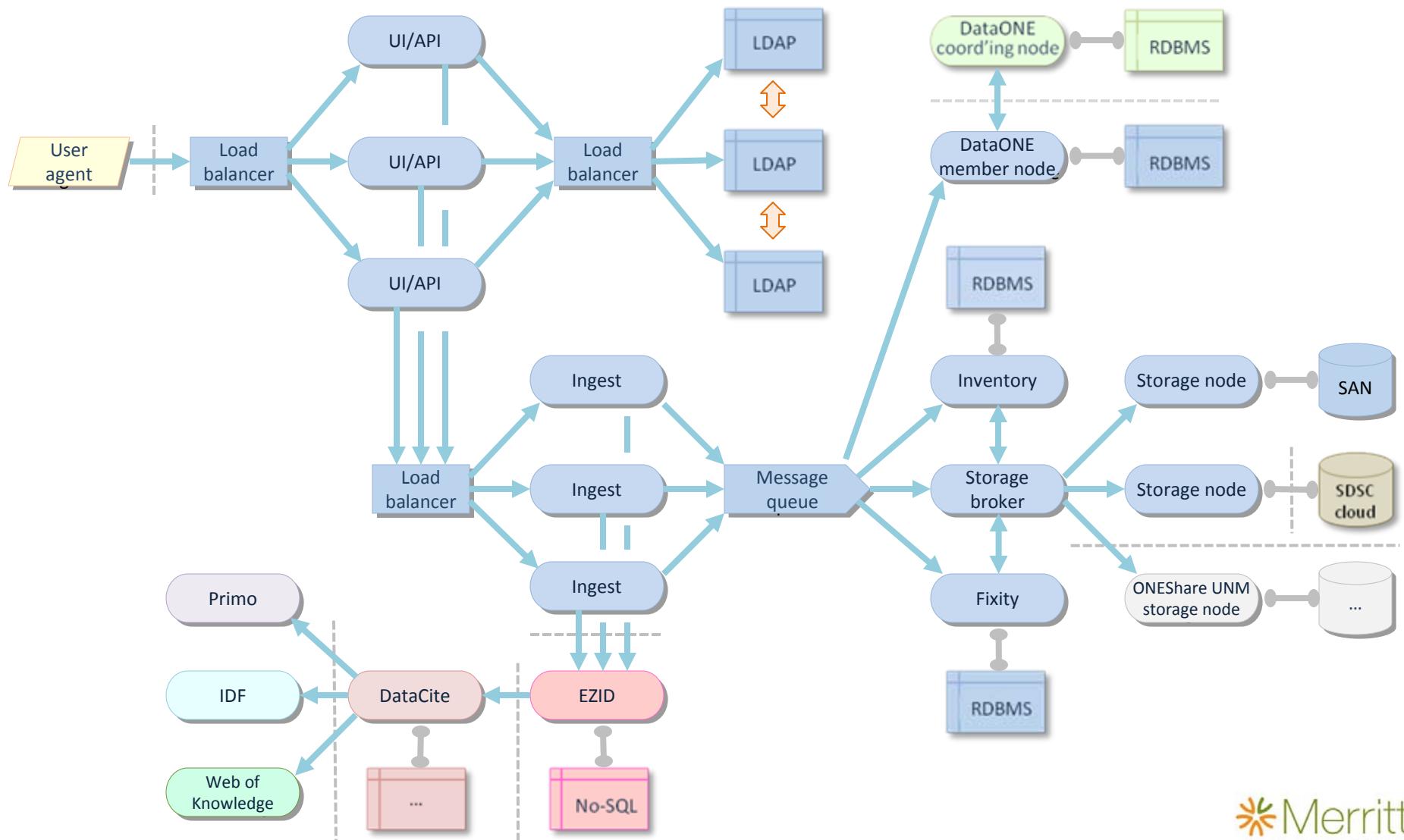
Need a Merritt Account?

Fill out the [Contact UC3](#) form or email uc3@ucop.edu.

Merritt is a service of the University of California Curation Center of the California Digital Library
Copyright © 2009-2013 The Regents of the University of California
[Privacy policy](#) | [Image rights](#)



Merritt





(Some) issues to address

■ Scale

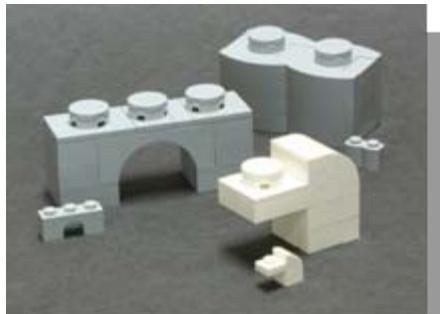
- ◆ Individual objects ranging from 0 to 47,000 files
- ◆ Individual files ranging from 0 to 14 GB

■ Maintaining control

- ◆ Concern over potential loss of control over dissemination and use of data

■ User experience

- ◆ Switch from organizational to individual interaction



www.flickr.com/photos/32195273@N05/51076852642



www.flickr.com/photos/traftyery/4319529821



www.flickr.com/photos/vixon/116447718



(Some) issues to address

■ Scale

- ◆ *Individual objects ranging from 0 to 47,000 files*
- ◆ *Individual files ranging from 0 to 14 GB*

■ Maintaining control

- ◆ *Concern over potential loss of control over dissemination and use of data*

■ User experience

- ◆ *Switch from organizational to individual interaction*
- Augment repository function by composition (*when possible*) and addition (*when necessary*)
- ◆ *Loosely-coupled integration with external community supported systems and services*



Scale

■ Avoiding client timeout

- ◆ ≤ 2 GB: *File-based* → *stream-based AIP-to-DIP processing*
- ◆ > 2 GB: *Asynchronous delivery*
 - ▶ *Email notification with personalized, time-limited URL*

■ Streamlined storage provisioning

- ◆ *SDSC cloud*
cloud.sdsc.edu



www.kevatron.co.uk/converting-8-24-bit-samples-in-coreaudio-on-ios



www.flickr.com/photos/paulbhartzog/680749585



Control

■ Data use agreements (DUAs)

- ◆ Explicit assertion of license requirements and terms of use
- ◆ Curatorial and consumer notification of acceptance

Cf. Brazhnik and Jones (2007), "Anatomy of data integration," *Journal of Biomedical Informatics* 40(3): 252-69,
[doi:10.1016/j.jbi.2006.09.001](https://doi.org/10.1016/j.jbi.2006.09.001)

The screenshot shows the Merritt DataShare interface. On the left, there's a detailed object page for an item with ID ark:/b7272/q6154f00. The page includes fields for permanent link, primary identifier, title (CSF Biomarker and PIB-PET Derived Beta-Amyloid Signature Predicts Metabolic, Gray Matter and Cognitive Changes in Non-Demented Subjects. (2012)), creator, date, local id, last modified, created, total size, and total versions. At the bottom, there's a 'Download object' button with a mouse cursor pointing at it.

The main area displays the 'Database Data Use Agreement'. It starts with a statement: 'As part of this agreement, Consumer submits to the following statements:' followed by a numbered list of 13 rules. Below this is another section: 'Terms of use: As part of this agreement, Consumer submits to the following statements:' with three numbered items. At the bottom of the DUA form, there are fields for Name, Affiliation, Email, and a 'Request' dropdown menu with options 'Accept' and 'Do Not Accept'. A large yellow callout box highlights the 'From' and 'Subject' fields of the DUA form, which read: 'From: no-reply-merritt@ucop.edu' and 'Subject: Merritt DUA acceptance'.

From: no-reply-merritt@ucop.edu
Subject: Merritt DUA acceptance

Name: Stephen Abrams
Affiliation: California Digital Library
Collection: UCSF DataShare
Object: Frontotemporal Lobar Degeneration (FTLD)
Date: 2013-05-31 09:50:34 PDT

Terms of use: As part of this agreement, Consumer submits to the following statements:

- (1) I will receive access to de-identified data and will not attempt to establish the identity of any of the study subjects.
- (2) I will share these data only with my immediate co-workers, and I will not transfer these data to other research groups. I understand that these data are available to other research groups through the process by which I obtain them.
- (3) I will require anyone in my group who utilizes these data, or anyone with whom I share the data, to comply with this data use agreement.
- (4) I will provide the requested information for persons who will use these data in analyses that are planned using these data.
- (5) I will comply with any rules and regulations imposed by my institution and its institutional board in requesting these data.
- (6) I understand that approved usage of these data does not entitle Consumer to any rights, interest in the original data.
- (7) I understand that Provost has the right to terminate this Agreement at any time for any reason.
- (8) I will ensure that investigator(s) who utilize these data will use appropriate administrative and technical safeguards to prevent use or disclosure of the data other than as provided in this Agreement.
- (9) I will report any use or disclosure of the data not provided for by this Agreement of which I am aware within 15 days of becoming aware of such use or disclosure.
- (10) I will, upon completion of my usage of these data, submit a brief usage report describing data were used and citing any abstracts, talks, or publications that resulted. This will be at one year of data usage completion, or within 6 months of acceptance of any resulting abstract, or publication. I understand that failure to abide by these guidelines will result in loss of my privileges to access any further data.

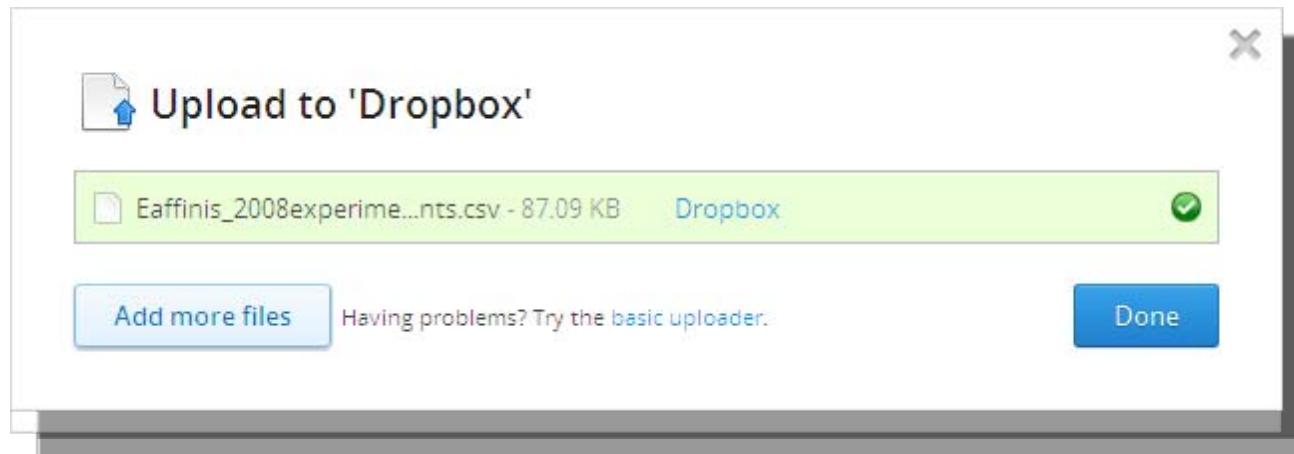
...

...



User experience

- Due to its open eligibility policy, Merritt will always provide a more generic UX than special-purpose or disciplinary systems
- Shifting user roles, shifting expectations
 - ◆ *Institutional* → *individual researcher*
 - ◆ *Behavioral expectations set by the commercial/mobile web*





User experience

- Due to its open eligibility policy, Merritt will always provide a more generic UX than special-purpose or disciplinary systems
- Shifting user roles, shifting expectations
 - ◆ *Institutional* → *individual researcher*
 - ◆ *Behavioral expectations set by the commercial web*
- Integration with extant services that better provide the desired UX
 - ◆ *DataShare*  DataShare
Open data for the global research community
 - ◆ *Research Hub*  ResearchHub



DataShare

- “*The goal of the DataShare project is to catalyze widespread sharing of scientific research data*”
datashare.ucsf.edu



- ◆ *UCSF Clinical and Translational Science Institute*
ctsi.ucsf.edu



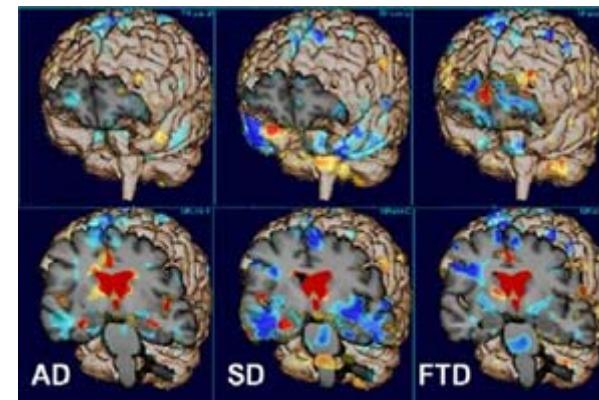
- ◆ *UCSF Library*
www.library.ucsf.edu



- ◆ *UCSF Center for Imaging of Neurodegenerative Disease*
www.radiology.ucsf.edu/cind

■ Architecture

- ◆ *DataShare submission client* (Ruby/Rails)
- ◆ *Merritt curation repository*
- ◆ *DataShare discovery portal* (XTF/Java)





DataShare

- Prepare
- Describe
- Upload
- Curate
- Discover
- Share

The screenshot shows the homepage of DataShare, a platform for sharing research data. The header features the DataShare logo and the tagline "Open data for the global research community". Below the header is a navigation bar with links for "About", "Search Data", "Publish Data", and "My Datasets". A banner image at the top right shows researchers in a lab setting with the text "Publish and Download Research Datasets". The main content area includes a search bar with a magnifying glass icon and a "Go" button, followed by a link to "Browse all data". To the right, there's a section titled "Publish Data" with a sub-section "Researcher Voice" containing a quote from Dr. Michael Weiner, UCSF.

DataShare
Open data for the global research community

About Search Data Publish Data My Datasets

Publish and Download
Research Datasets

Search for Data

Go

OR

* Browse all data

Featured Dataset

Progression of white matter degeneration in amyotrophic lateral sclerosis: A diffusion tensor imaging study. White matter damage in frontotemporal dementia and Alzheimer's disease measured by diffusion MRI. Patterns of age-related water diffusion changes in human brain by concordance and discordance analysis.

Publish Data

Make your data count
Get credit for your data
Ensure reproducibility
Promote reuse
Meet funder requirements

* Learn more

Researcher Voice

"Making data transparent and available is going to accelerate all of science. It's a relatively inexpensive way to get more value out of all of the work that we do."
-Dr. Michael Weiner, UCSF



DataShare

■ Prepare

- ◆ *Best practice advice*

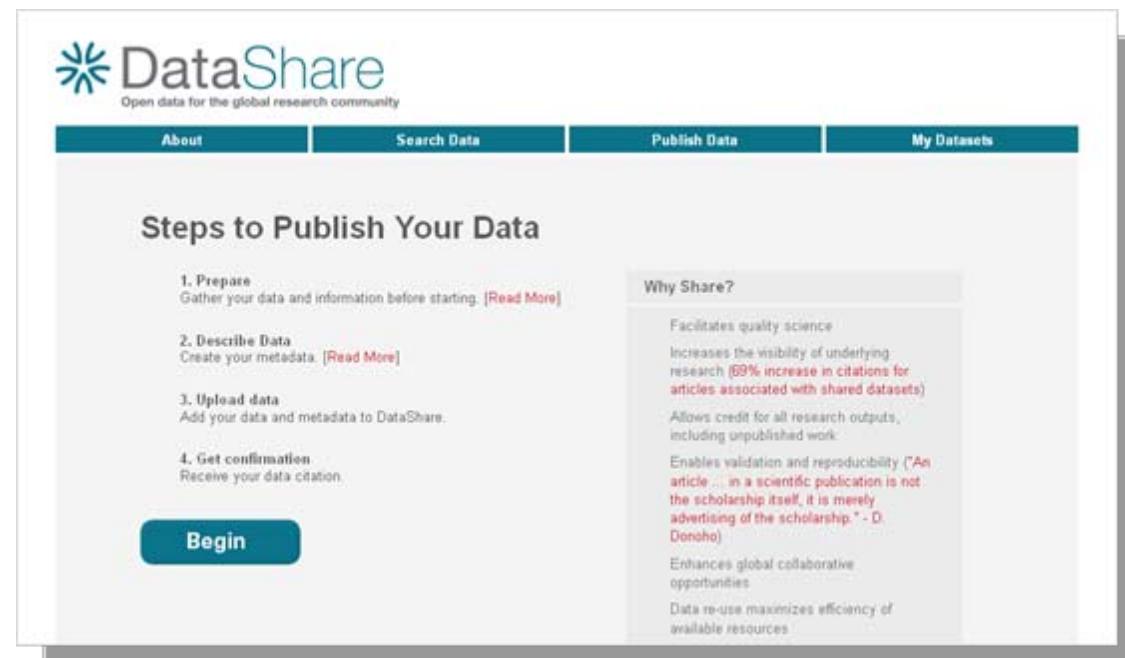
■ Describe

■ Upload

■ Curate

■ Discover

■ Share

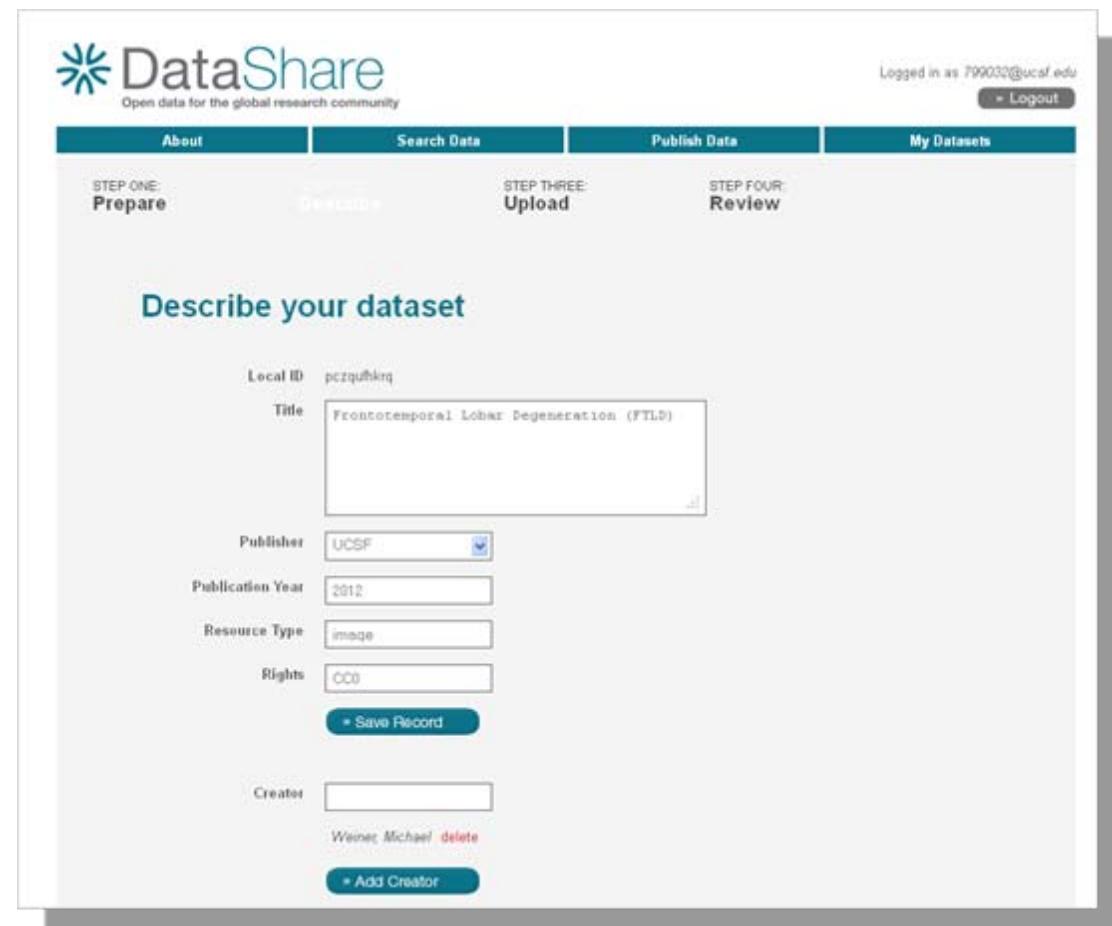


The screenshot shows the DataShare homepage. At the top, there's a navigation bar with links for "About", "Search Data", "Publish Data", and "My Datasets". Below the navigation, the main title "DataShare" is displayed with the subtitle "Open data for the global research community". A large section titled "Steps to Publish Your Data" lists four steps: 1. Prepare (Gather your data and information before starting), 2. Describe Data (Create your metadata), 3. Upload data (Add your data and metadata to DataShare), and 4. Get confirmation (Receive your data citation). A prominent blue "Begin" button is located below these steps. To the right, a sidebar titled "Why Share?" lists several benefits: Facilitates quality science, Increases the visibility of underlying research (69% increase in citations for articles associated with shared datasets), Allows credit for all research outputs, including unpublished work, Enables validation and reproducibility ("An article ... in a scientific publication is not the scholarship itself, it is merely advertising of the scholarship." - D. Donoho), Enhances global collaborative opportunities, and Data re-use maximizes efficiency of available resources.



DataShare

- Prepare
- Describe
 - ◆ *Schema-directed metadata editor*
 - ◆ *DataCite schema*
schema.datacite.org
- Upload
- Curate
- Discover
- Share



The screenshot shows the DataShare interface for describing a dataset. At the top, there's a navigation bar with links for About, Search Data, Publish Data, and My Datasets. Below that, a progress bar indicates the user is at Step One: Prepare, Step Three: Upload, and Step Four: Review. The main area is titled "Describe your dataset". It contains fields for Local ID (pczzquhkg), Title (Frontotemporal Lobar Degeneration (FTLD)), Publisher (UCSF), Publication Year (2012), Resource Type (image), and Rights (CC0). There's a "Save Record" button. Below these, a "Creator" field lists "Weiner, Michael" with a "delete" link, and a "+ Add Creator" button.

Local ID: pczzquhkg

Title: Frontotemporal Lobar Degeneration (FTLD)

Publisher: UCSF

Publication Year: 2012

Resource Type: image

Rights: CC0

[+ Save Record](#)

Creator: Weiner, Michael [delete](#)

[+ Add Creator](#)



DataShare

- Prepare
- Describe
- Upload
 - ◆ *File browse or drag-n-drop*
- Curate
- Discover
- Share

The screenshot shows the DataShare interface at the 'Prepare' stage. The top navigation bar includes links for About, Search Data, Publish Data, and My Datasets. A user is logged in as 'J' and has the option to Logout. The main content area is titled 'Upload your dataset'. It features a 'Browse...' button with the message 'No files selected.' Below it is a 'Upload' button and a link to 'Javascript Version'. At the bottom of the main area are 'Go Back and edit metadata' and 'Review' buttons. To the right, there is a 'Upload FAQ' section with instructions about file formats and a 'DataShare accepts all file formats' note. The note specifies that if files are specialized or proprietary, they should include viewing and usage information in a separate 'Readme' document or technical description.

Logged in as J
Logout

DataShare
Open data for the global research community

About | Search Data | Publish Data | My Datasets

STEP ONE: Prepare | STEP TWO: Describe | STEP THREE: Upload | STEP FOUR: Review

Upload your dataset

Browse... No files selected.

+ Upload Javascript Version

Go Back and edit metadata

Review

Upload FAQ

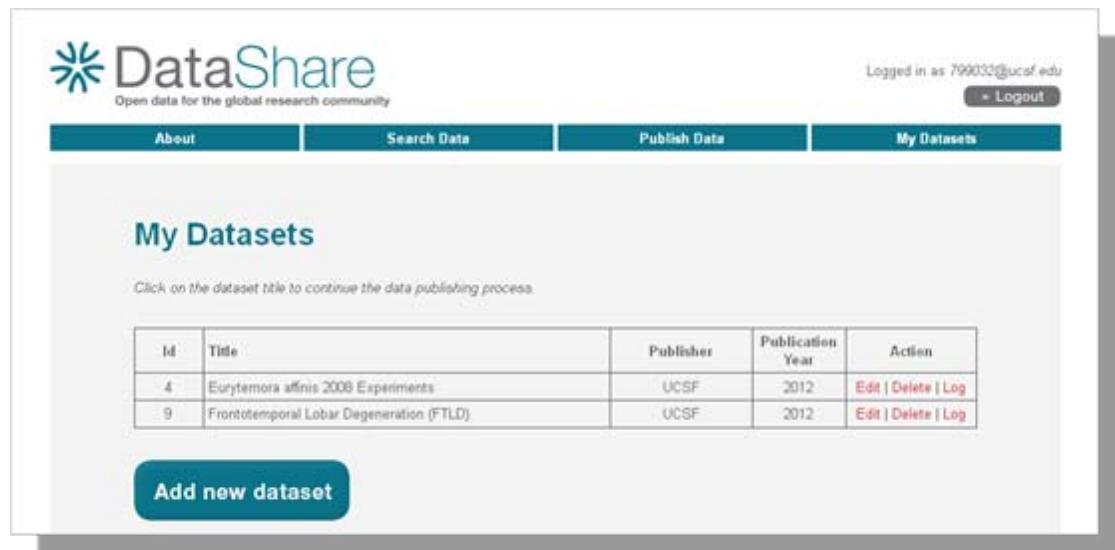
DataShare accepts all file formats

If the data files are of a specialized or proprietary nature, be sure to include any pertinent information that would allow the proper viewing and/or usage of the file(s) either as a separate 'Readme' document within the data set folder, or in the 'Technical Description'.



DataShare

- Prepare
- Describe
- Upload
- Curate
 - ◆ *Manage datasets*
- Discover
- Share



The screenshot shows the DataShare interface. At the top, there's a header with the DataShare logo and tagline "Open data for the global research community". On the right, it says "Logged in as 799033@ucsf.edu" and has a "Logout" button. Below the header is a navigation bar with links for "About", "Search Data", "Publish Data", and "My Datasets". The main content area is titled "My Datasets" and contains a sub-instruction "Click on the dataset title to continue the data publishing process.". A table lists two datasets:

ID	Title	Publisher	Publication Year	Action
4	Eurytemora affinis 2008 Experiments	UCSF	2012	Edit Delete Log
9	Frontotemporal Lobar Degeneration (FTLD)	UCSF	2012	Edit Delete Log

At the bottom left of the content area is a blue button labeled "Add new dataset".



DataShare

- Prepare
- Describe
- Upload
- Curate
- Discover
 - ◆ *Faceted search and browse*
- Share

The screenshot shows the DataShare interface. At the top, there's a navigation bar with links for 'About', 'Search Data', 'Publish Data', and 'My Datasets'. Below the navigation bar, a heading says 'Select a Dataset...'. On the left, there's a 'Contributor' facet with a tree view showing categories like 'UCSF' (12), 'Ibis Reproductive Health' (1), 'South African Medical Research Council HIV Prevention Research Unit' (1), 'UCSF Baby Center for Global Reproductive Health' (1), 'UZ-UCSF Collaborative Programme on Women's Health' (1), 'Author' (7), 'Schuff, Norbert' (7), 'Weiner, Michael W.' (5), 'Weiner, Michael' (5), 'Cardenas, Valerie' (3), and 'Zhang, Yu' (3). To the right of the facets, there's a search bar with 'relevance' selected and a 'Go!' button. Below the search bar, there are two dataset cards. The first card is for 'Associations between vascular risk factors, carotid atherosclerosis and cortical volume and thickness in older adults' by Cardenas, Valerie | Reed, Bruce | Chao, Linda | Chui, Helena | Sandonian, Nerses | DeCarli, Charles | Mack, Wendy | Kramer, Joel | Hodis, Howard | Yan, Mingzhu | Buonocore, Michael | Camichael, Owen | Jagust, William J. | Weiner, Michael W. at UCSF-CIND, University of California, San Francisco uploaded 2012. The second card is for 'CSF Biomarker and PIB-PET Derived Beta-Amyloid Signature Predicts Metabolic, Grey Matter and Cognitive Changes in Non-Demented Subjects.' by Ewers, Michael | Insel, Philip | Jagust, William J. | Shaw, Leslie | Trojanowski, John Q. | Aisen, Paul | Petersen, Ronald C. | Schuff, Norbert | Weiner, Michael W. at UCSF-CIND, University of California, San Francisco uploaded 2012. Both cards have a 'Show abstract' link.



DataShare

- Prepare
- Describe
- Upload
- Curate
- Discover
- Share
 - ◆ *DataONE*
 - ◆ *DataCite*
 - ◆ (soon) *Primo*
 - Web of Knowledge*
 - ◆ *SEO*

The screenshot shows the DataShare interface. At the top, there's a navigation bar with links for 'About', 'Search Data', 'Publish Data', and 'My Datasets'. Below the navigation, the title 'Frontotemporal Lobar Degeneration (FTLD)' is displayed. To the right of the title are two buttons: 'Download 4.0 Gb Dataset' and 'Cite this dataset'. On the left side of the main content area, there are sections for 'Title', 'By', 'At', 'Papers', 'Description', 'Methods', 'Keywords', and 'Identifier'. The 'Title' section shows 'Frontotemporal Lobar Degeneration (FTLD)'. The 'By' section lists 'Weiner, Michael'. The 'At' section lists 'UCSF-CIND/UCSF'. The 'Papers' section has a link to 'Show publications associated with data'. The 'Description' section contains a detailed paragraph about the dataset, mentioning structural and chemical changes in the brain. The 'Methods' section has a link to 'Show Methods'. The 'Keywords' section lists various terms like 'Adult', 'Human', 'Magnetic Resonance Imaging', 'Cognition', 'Neuropsychological Test', 'Aged', 'Middle Aged', 'Atrophy', 'Pathology', 'Psychopathology', 'Brain', 'Dementia', 'Mental Disorders', 'Frontotemporal Dementia', and 'Alzheimer's Disease'. The 'Identifier' section shows the DOI: 'doi:10.7272/q62z13fs'. At the bottom of the page, there are links for 'Terms of Use', 'FAQ', and 'Contact Us'. A note at the bottom states: 'DataShare was made possible through a partnership between the California Digital Library, UCSF Clinical & Translational Science Institute, and UCSF Library. © 2013 The Regents of the University of California'. Below this note are logos for CDL, UCSF LIBRARIES, and the Clinical and Translational Science Institute (CTSI).



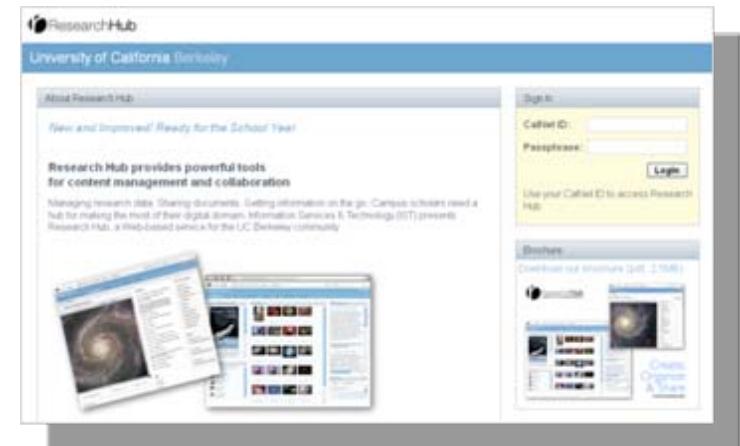
Merritt + DataShare





Research Hub

- “Research Hub provides powerful tools for content management and collaboration”
hub.berkeley.edu



- ◆ Alfresco CMS
www.alfresco.com
- ◆ 770 projects, 3,900 users
 - ▶ Personal file management
 - ▶ Project collaboration
 - ▶ Departmental resource pooling
 - ▶ Research data management
- ◆ Desktop sync, mobile app, Adobe Creative Suite
- ◆ UC Berkeley Information Services and Technology
ist.berkeley.edu



Research Hub

■ Prepare

◆ *Acquire and arrange*

■ Describe

■ Upload

■ Curate

■ Discover

■ Share

The screenshot shows the ResearchHub platform interface for a "Demonstration Site". The top navigation bar includes links for "My Dashboard", "User Home", "Sites", "People", and "More...". A search bar is also present. The main content area is divided into several sections:

- 20th Century Artists:** Displays a portrait painting of a woman.
- Main Gallery:** Displays a grid of nine images, including paintings of figures and landscapes.
- Site Members:** Shows a list of members, including "Patrick MCGRATH" (Collaborator) and "Patrick Schmitz" (Consumer), with an "Invite" button.
- Recently Modified Documents:** Shows a document titled ".DS_Store" modified 3 days ago by Noah Wittman.
- Site Calendar:** Shows "No upcoming events".
- Site Links:** Lists external links such as "BIBLIOTECA NACIONAL DE ESPAÑA", "Brooklyn Museum", "Dorothea Lange", "Gertie Siny - Google Images", "Georgia O'Keeffe", "Ghada Amer - Google Images", and "Ghada Amer @ Brooklyn Museum - podcast".
- Site Activities:** Shows activity logs for the last 7 days, including updates from "Rick Jaffe" and "Veronica Ruiz de Velasco".

At the bottom, there are links for "Research Hub | University of California, Berkeley | Terms of Service | Privacy".



Research Hub

Prepare

Describe

◆ *Schema-directed metadata editors*

Upload

Curate

Discover

Share

The screenshot shows the ResearchHub interface for the Bamboo Demo Site. A document titled "Perseus_text_1999.01.0125.xml" is open in the main content area, displaying its XML code. To the right, a sidebar contains "Document Actions" and a "Metadata" section. The "Metadata" section is highlighted with a red box and lists various fields with their values. Below the "Metadata" section is a "Tags" field.

Field	Value
Name	Perseus_text_1999.01.0125.xml
Title	(None)
Description	(None)
Mimetype	XML
Author	(None)
Size	2 MB
Creator	wittman
Created Date	Wed 07 Dec 2011 11:35:15
Modifier	wittman
Modified Date	Wed 07 Dec 2011 11:35:15
Publisher	(None)
Contributor	(None)
Type	(None)
Identifier	(None)
Source	(None)
Coverage	(None)
Rights	(None)
Subject	(None)

Document Actions

- Download
- View In Browser
- Edit Metadata
- Upload New Version
- Inline Edit
- Edit Offline
- Copy to...
- Move to...
- Delete Document
- Start Workflow
- Manage Permissions
- Manage Aspects
- Change Type
- Send to Merritt

Share

Download File URL: <https://bamboo-dev.berkeley.edu>

Document URL: <https://bamboo-dev.berkeley.edu>



Research Hub

- Prepare
- Describe
- Upload
 - ◆ *Direct action*
- Curate
- Discover
- Share

The screenshot shows a web-based digital preservation system interface. At the top, there's a header bar with the ResearchHub logo, user profile (Noah Witman), and search bar. Below the header is a navigation menu with links like My Dashboard, Repository, User Home, Sites, People, More..., Invite, and More. The main content area has a blue header bar for the 'Bamboo Demo Site' with links for Site Dashboard, Wiki, Blog, Document Library, Calendar, Links, Discussions, Data Lists, and Members.

The central part of the screen displays a document titled 'Perseus_text_1999.01.0125.xml'. On the left is a preview window showing XML code. To the right are three columns: 'Metadata', 'Document Actions', and 'Tags'.

Metadata:

- Name: Perseus_text_1999.01.0125.xml
- Title: (None)
- Description: (None)
- Mimetype: XML
- Author: (None)
- Size: 2 MB
- Creator: witman
- Created Date: Wed 07 Dec 2011 11:35:15
- Modifier: witman
- Modified Date: Wed 07 Dec 2011 11:35:15
- Publisher: (None)
- Contributor: (None)
- Type: (None)
- Identifier: (None)
- Source: (None)
- Coverage: (None)
- Rights: (None)
- Subject: (None)

Document Actions:

- Download
- View In Browser
- Edit Metadata
- Upload New Version
- Inline Edit
- Edit Offline
- Copy to...
- Move to...
- Delete Document
- Start Workflow
- Manage Permissions
- Manage Aspects
- Send to Merit (this option is highlighted with a red border)

Share:

Download File URL: <https://bamboo-dev.berkeley.edu/>

Document URL: <https://bamboo-dev.berkeley.edu/>



Research Hub

- Prepare
- Describe
- Upload
 - ◆ *Policy-based workflow rules*
- Curate
- Discover
- Share

The screenshot shows the ResearchHub interface with a 'New Rule' dialog open. The dialog is divided into three main sections: 'General', 'Define Rule', and 'Perform Action'. A red box highlights the 'Define Rule' section, which contains a 'When:' clause ('Items are created or enter this folder') and a 'If all criteria are met:' section with four dropdown rules: 'Author Contains Einstein', 'Has tag Equals Rubin', 'Has aspect Equals DataCite', and 'Mimetype in cim:content Is Microsoft Word'. Below this is an 'Unless all criteria are met:' section. The 'Perform Action:' section at the bottom includes options like 'Add simple workflow', 'Transform and copy content', and 'Send to CDL Merritt'. It also features a 'Mimetype' dropdown set to 'Adobe PDF Document' and a 'to' field containing 'Documents in Image Upload Test1' with a 'Select...' button.



Research Hub

- Prepare
- Describe
- Upload
 - ◆ *Drag-and-drop*
- Curate
- Discover
- Share

The screenshot shows the ResearchHub interface for a 'Big Project Site'. The left sidebar includes sections for 'Documents' (with options like 'Create Content...', 'New Folder', and 'Upload'), 'Library' (with 'Documents', 'fieldwork', and 'notes' folders), 'Categories' (with 'Category Root'), and 'Tags' (listing 'tag1, tag2, tag3 (3)', 'hubble (3)', 'tagalicious (2)', and 'taggy mcgagerton (1)'). The main area displays a 'Drag and drop to upload files!' section with instructions and icons. A modal window titled 'Upload File(s)' lists five files: 'Picture 48.png (2 MB)', 'Picture 65.png (1 MB)', 'Picture 40.png (2 MB)', 'Picture 64.png (1 MB)', and 'Picture 52.png (971 KB)'. Each file has a 'Remove' button next to it. At the bottom of the modal, the status is shown as 'Status: 19/32 uploaded (0 failed)'.



Research Hub

- Prepare
- Describe
- Upload
- Curate
 - ◆ *Manage datasets*
- Discover
- Share

The screenshot shows the 'ResearchHub' application interface, specifically the 'Document Library' section of the 'Demonstration Site' site. The left sidebar includes links for Site Dashboard, Wiki, Blog, Document Library (which is selected), Calendar, Links, Discussions, Data Lists, and Members. The main content area displays a list of documents:

File Name	Description	Modified On	Modified By	Version
2006IMG_wallchart.xls	International Migration Data 2006	Tue 30 Nov 2010 15:13:12	Noah Wittman	1.1
aPovertyReport_30032010-3.doc	(Millennium Development Goals Report)	Fri 19 Nov 2010 15:55:19	Noah Wittman	1.1
atext-test.rtf		Mon 22 Nov 2010 14:30:32	Noah Wittman	1.0
Broxup_William-Saint_Peters_path_to_the_joyes-STC-3921-638_01-p2.tif		Tue 25 Jan 2011 15:39:48	Bamboo Demo1	1.0
MDGReport2006.pdf		Wed 31 Aug 2011 10:49:35	Noah Wittman	1.1

Each document entry includes a preview thumbnail, file size, and a 'More...' button for additional actions.



Research Hub

- Prepare
- Describe
- Upload
- Curate
- Discover
 - ◆ *Search / browse*
- Share

The screenshot shows the ResearchHub interface. At the top, there's a navigation bar with links for My Dashboard, My Profile, Sites, People, Help, Logout, and Search This Site. Below the navigation is a header for "Research Demo Site" with links for Site Dashboard, Wiki, Blog, Document Library, Calendar, Links, Discussions, and Members.

The main content area includes:

- Wiki - Hubble Space Telescope**: A section featuring an image of the Hubble Space Telescope and text about its history and discoveries.
- Image Preview**: A grid of 16 thumbnail images related to space and astronomy, each with a "View Details" link.
- Media Vault Program**: A sidebar listing news items and events, such as "Spotlight - February 2010" and "Spotlight - January 2010".
- Site Colleagues**: A list of users associated with the site, including Michael Ashley (Collaborator), Noah Wittman (Manager), Rick Jaffe (Manager), and Rick Jaffe, Jr. (Consumer).
- Site Activities**: A log of recent activity on the site, dated March 1, 2010, showing comments from Michael Ashley.



Research Hub

- Prepare
- Describe
- Upload
- Curate
- Discover
- Share
 - ◆ *Curatorial invitation*

Manage Permissions for Astronaut Works on Hubble [1680x1050] x

Groups and Privileges

Contributors have **Contributor privileges** ▾

Consumers have **Consumer privileges** ▾

Collaborators have **Collaborator privileges** ▾

All Other Users have **No privileges** ▾

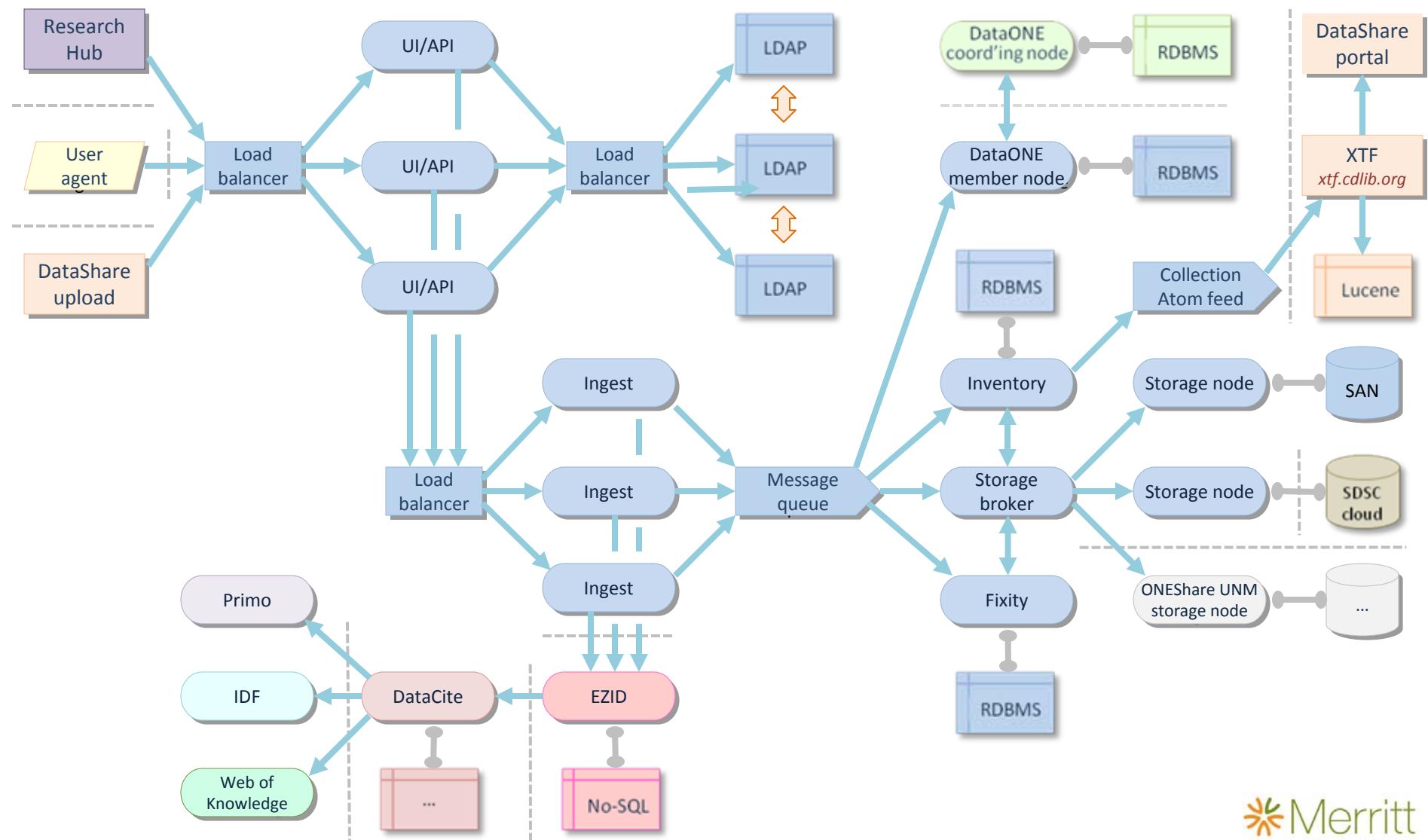
2 **Invite Users**

Set All Roles to ▾

Patrick McGoo patrickmcgoo@berkeley.edu	Contributor ▾ (X)
Susan Star sstar@berkeley.edu	Consumer ▾ (X)



Merritt + DataShare + Research Hub





Future integrations

■ UCTrust/InCommon federation

Incommon.org



■ Open Context archaeological portal

opencontext.org



■ Nuxeo

www.nuxeo.com



- ◆ UC system-wide DAMS

■ Islandora

islandora.ca



- ◆ Fedora → Merritt

■ DPN

www.dpn.org





Sharing research through repositories

- Conform to institutional policy, publication requirements, and funder mandates
- Pro-active curation of valuable research outputs
- Stable citation and access
- High visibility publication and discovery
- Use metrics





Sharing research through repositories

- Conform to institutional policy, publication requirements, and funder mandates
- Pro-active curation of valuable research outputs
- Stable citation and access
- High visibility publication and discovery
- Use metrics
- Repository layering as an appropriate division of labor
 - ◆ *Exploiting existing capabilities already in local use*

Screenshot of the DataShare interface, showing a search bar, a "Publish and Download" section, and a "My Research" sidebar.

Screenshot of the UC3Merritt interface, showing a search bar, a "Search for Data" section, and a "My Research" sidebar.

Screenshot of the ResearchHub interface, showing a search bar, a "Search for Data" section, and a "My Research" sidebar.



For more information

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Research Hub

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Noah Wittman

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The screenshot shows the University of California Curation Center website with a sidebar and several service sections:

- Merritt**: A repository service for managing, archiving, and sharing digital assets.
- EZID**: A tool for creating and managing unique, persistent identifiers.
- Web Archiving Service**: Allows capturing, analyzing, archiving, and publishing websites and documents.
- DMPTool**: Helps researchers create and manage data management plans.
- DATAUP**: An open-source tool for documenting, managing, and archiving tabular data.

The sidebar includes links to Staff Directory, Contact CDL, Report a Problem, System Status, About CDL, Services and Projects, Information Gateways, Committees and Groups, News and Media, and a News section with recent updates.