

Open Science and the value of documenting, notifying, and sharing

Tyler Walters, SHARE Director

Dean, University Libraries, Virginia Tech

CERN Workshop on Innovations (OAI9), June 18, 2015

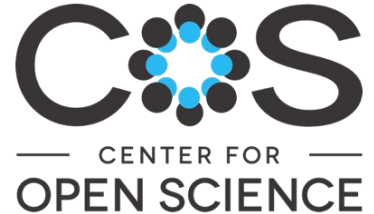
What is SHARE?

SHARE is creating an open data set about research activities across their life cycle. This comprehensive inventory of research will be widely accessible, discoverable, and reusable.



Alfred P. Sloan
FOUNDATION

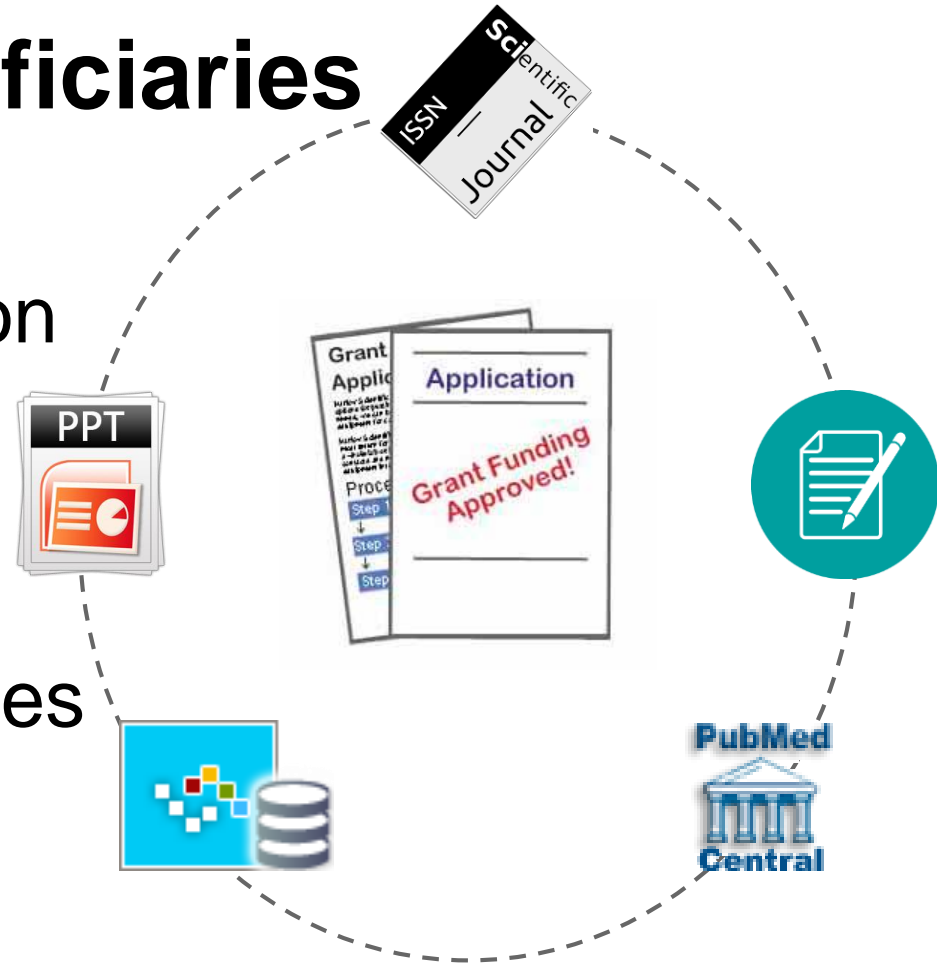
Founded by Academic Leaders, Built with Open Technology



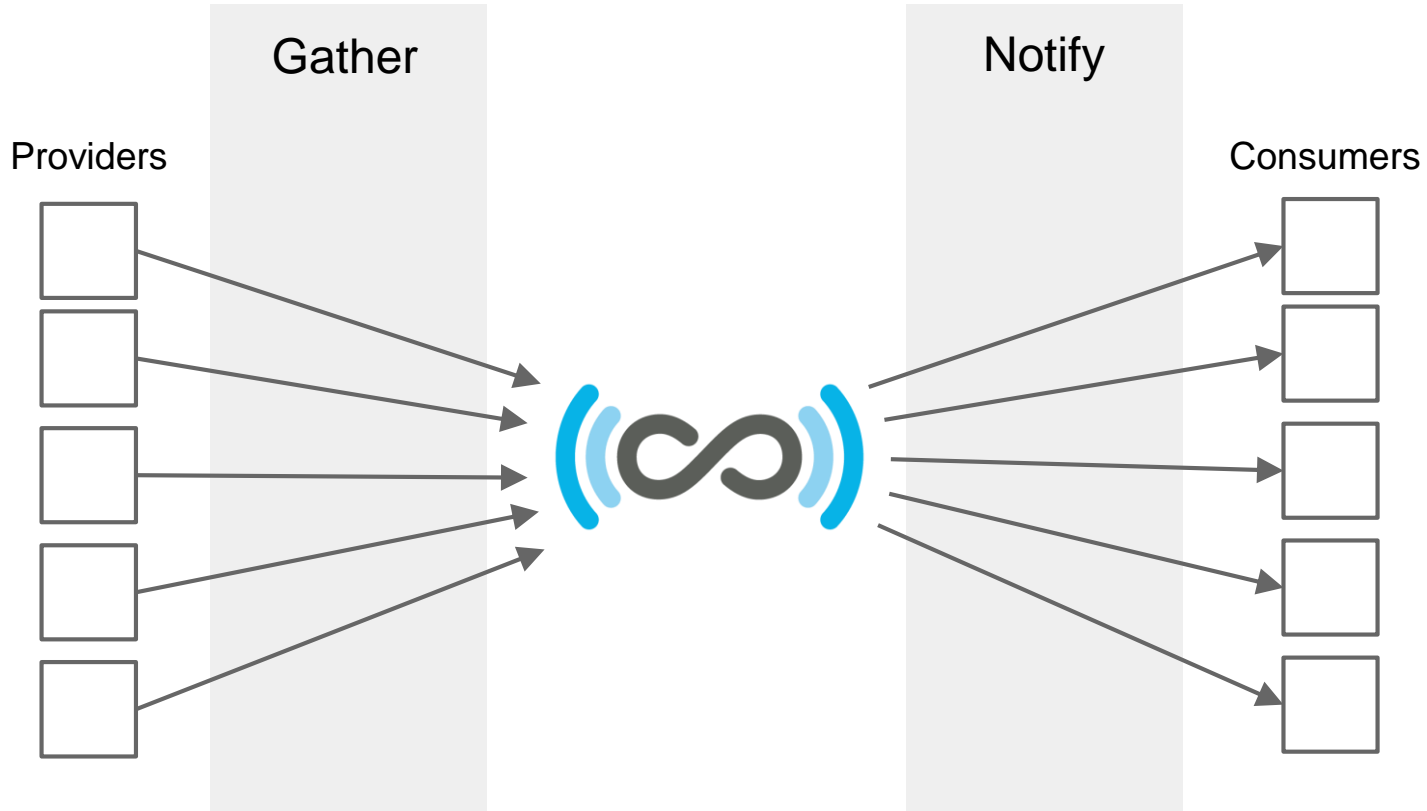
Research universities are long-lived and are mission-driven to generate, make accessible, and preserve over time new knowledge and understanding.

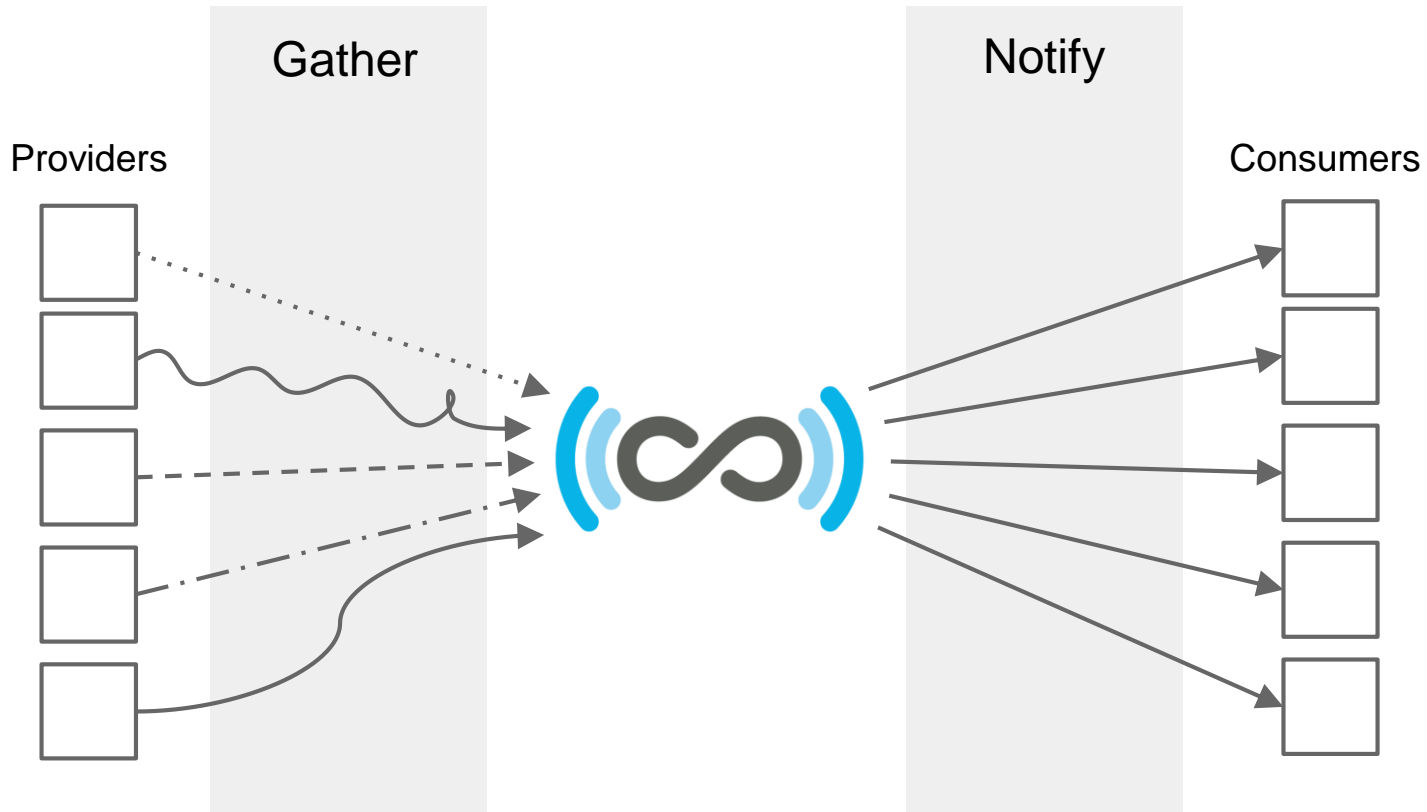
Stakeholders/beneficiaries

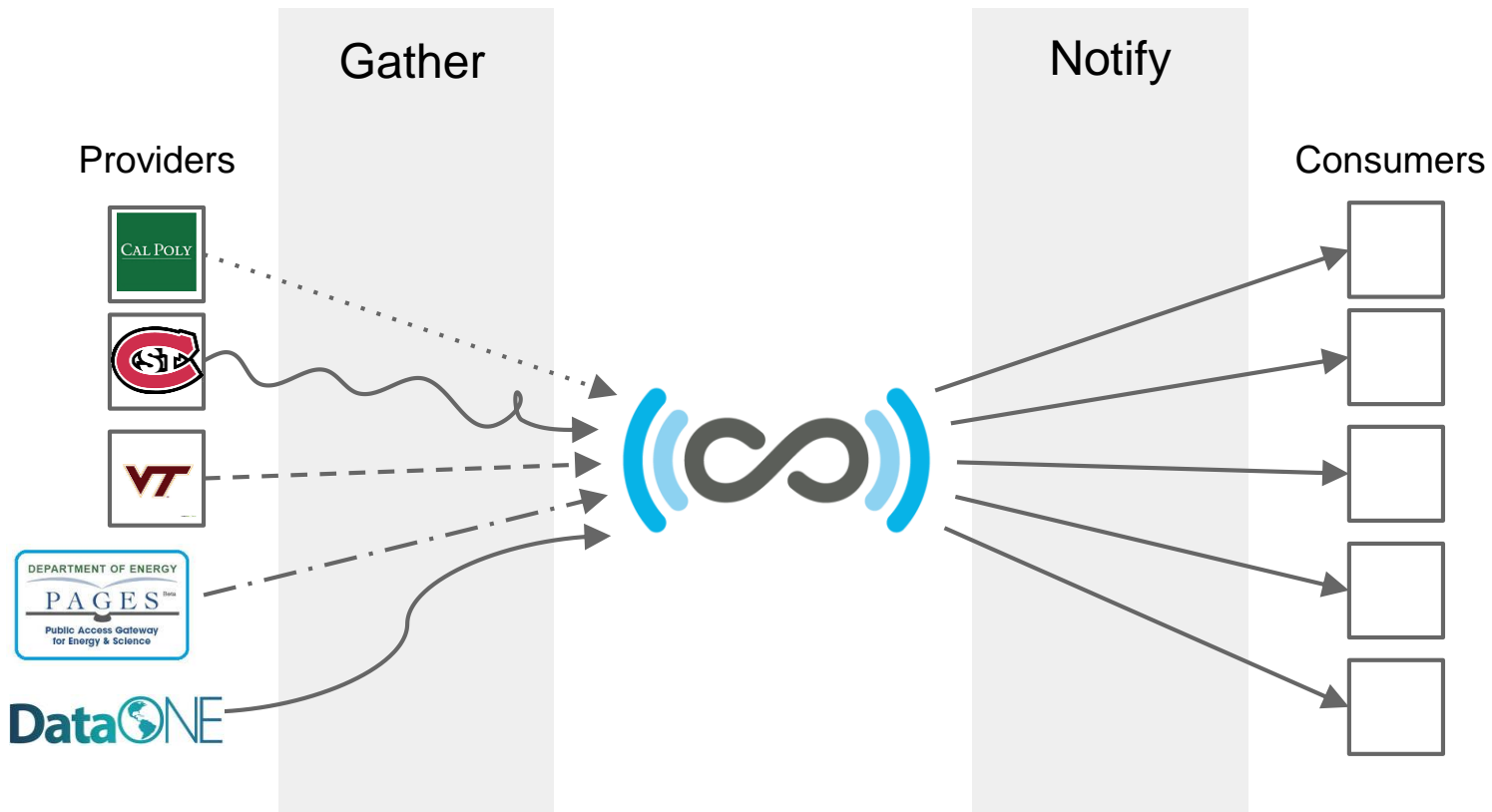
- Researchers
- Higher ed administration
- Libraries
- Repositories
- Research funders
- The Public / communities



Open data allows for innovation







Scholars Portal **Dataverse**
A Service of the Ontario Council of University Libraries



Valparaiso
University

arXiv.org

ClinicalTrials.gov
A service of the U.S. National Institutes of Health

BioMed Central

ASU
ARIZONA STATE
UNIVERSITY

tDAR

IDEALS

UT DR
University of Texas
Digital Repository

figshare

Carnegie Mellon University

W UNIVERSITY LIBRARIES
UNIVERSITY OF WASHINGTON

DataONE

PLoS
PUBLIC LIBRARY
of SCIENCE

TEXAS STATE
UNIVERSITY
The rising STAR of Texas



Penn Libraries
UNIVERSITY OF PENNSYLVANIA

eScholarship
University of California

TRINITY UNIVERSITY

DSpace@MIT

DEPARTMENT OF ENERGY
PAGES Beta
Public Access Gateway
for Energy & Science

VT

SIU Southern Illinois
University
CARBONDALE

PubMed

DMPTool

WAYNE STATE

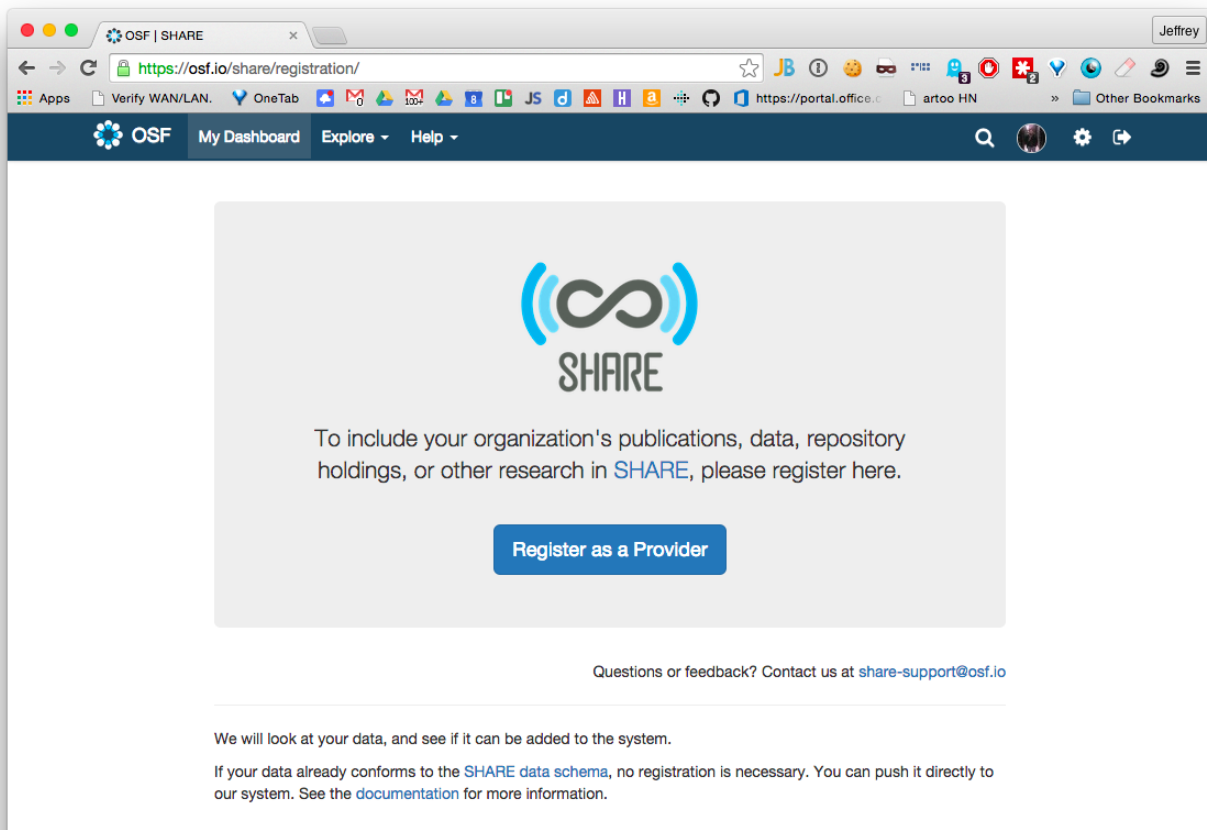
CAL POLY

SciTech Connect

crossref

COLUMBIA UNIVERSITY
ACADEMIC COMMONS

osf.io/share/registration




OSF | SHARE

Jeffrey

https://osf.io/share/registration/

OSF My Dashboard Explore Help



SHARE

To include your organization's publications, data, repository holdings, or other research in [SHARE](#), please register here.

[Register as a Provider](#)

Questions or feedback? Contact us at share-support@osf.io

We will look at your data, and see if it can be added to the system.

If your data already conforms to the [SHARE data schema](#), no registration is necessary. You can push it directly to our system. See the [documentation](#) for more information.

title: string

description: string

contributors: array

 anyOf: \$person, \$organization

...

otherProperties: array

shareProperties: object


otherProperties: object
 name
 description
 properties
 uri

osf.io/share/docs

SHARE API Documentation

https://osf.io/share/docs/

Apps Verify WAN/LAN. OneTab Gmail 100+ 8 JS d H a https://portal.office... artoo HN Other Bookmarks



Note: This is a beta release of the SHARE API and may change in the future. Please see the [SHARE Changelog](#) for details.

SHARE API Documentation

The SHARE API allows you to access all Research Release Events in the SHARE database and publish your organization's publications, data, repository holdings, or other research directly to SHARE. The API has three endpoints. "search," "data," and "stats." "search" allows you to access information in SHARE, "data" allows you to post to SHARE, and "stats" gives metrics on the different providers in SHARE.

Created by the Center for Open Science
See more at <http://osf.io/share>
[Contact the developer](#)

SHARE : API endpoints

Show/Hide | List Operations | Expand Operations

- GET /share/search
- POST /share/data
- GET /share/stats

[BASE URL: /api/v1 , API VERSION: 1.0.0]

http://osf.io/share

1,023,951
research
release
events

since
16 June 2015

42 content
providers

The screenshot shows the OSF SHARE website interface. At the top, the browser address bar displays 'https://osf.io/share/'. The website header includes the OSF SHARE logo and navigation links like 'My Dashboard', 'Explore', and 'Help'. A search bar contains the query 'motor development', which has returned 13,317 events from 26 content providers. Below the search results, there is a donut chart showing the distribution of 19 providers and a line graph showing the number of events over the last three months. The line graph shows a steady increase in the number of events over time, with the total number of events reaching approximately 13,317. Below the charts, there are two article snippets. The first is titled 'A preclinical mouse model of glioma with an alternative mechanism of telomere maintenance (ALT)' and is categorized under 'cancer cell biology'. The second is titled 'Conversation focused aphasia therapy: investigating the adoption of strategies by people with agrammatism'.

OSF | SHARE

https://osf.io/share/

Open Science Framework BETA My Dashboard Explore - Help - Jeffrey R. Spies

SHARE
What is SHARE? - Notice: this is a public alpha release

motor development

351,667 events as of 2014-11-23 07:00 PM Found 13,317 events in 0.02 seconds 26 content providers

19 Providers

6.3% 11.5% 12.4% 13.1% 14.2% 32.0%

Number of Events

Last Three Months

A preclinical mouse model of glioma with an alternative mechanism of telomere maintenance (ALT)
Glioblastoma multiforme is the most aggressive primary tumor of the central nervous system. Glioma stem cells (GSCs), a small population of tumor cells with stem-like properties, are supposedly responsible for glioblastoma multiforme relapse after current therapies. In approximately thirty percent of glioblastoma multiforme tumors, telomeres are no...

Maya Jeitany · Jose Pineda · Qingyuan Liu · Rosa Porreca · Françoise Hoffschir · Chantal Desmaze · David Silvestre
See All

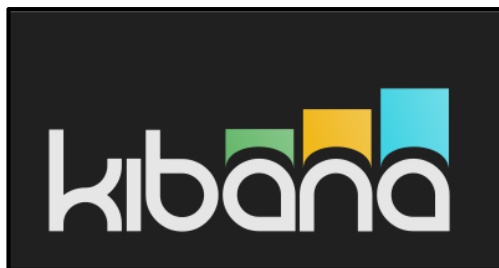
cancer cell biology

Released on 2015-04-02 08:00 PM PubMed Central

Conversation focused aphasia therapy: investigating the adoption of strategies by people with agrammatism
Background: A recent review of interaction (or conversation)-focused therapy highlighted the potential of programmes targeting the person with aphasia (PWA) directly. However, it noted the key limitations of current work in this field to be a reliance on single case analyses and qualitative evidence of change, a situation that is not unusual when...

Technology Focus

- Modularity
- Reliability
- Flexibility
- Scalability



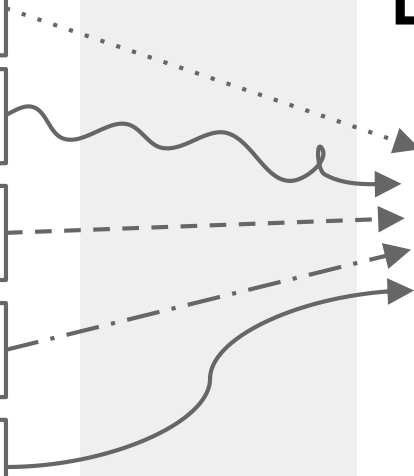
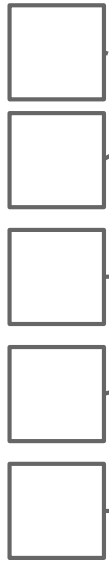
What we've learned

- Metadata is applied inconsistently across the research ecosystem (quality and consistency)
- Providers are unsure of their rights to share metadata (availability)
- Solutions will involve improvements to workflow, policy, and technical infrastructure

Where we're going

- Analyze stakeholders' current processes through which research passes from conception to completion
- Promote and reward policies that encourage data sharing
- Deploy multiple strategies to enhance metadata in the open data set

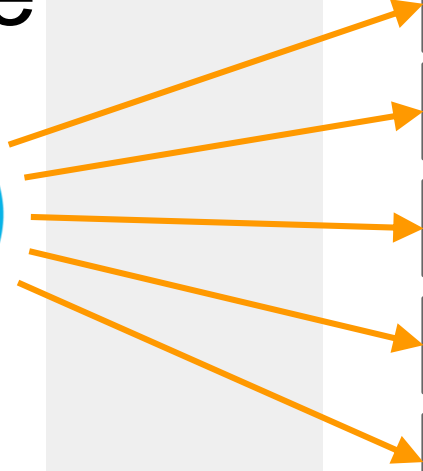
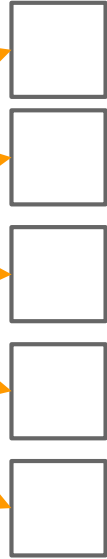
Providers



Enhance



Consumers



Enhancement – the challenge

Software Techniques for:

- Identifying conflicts and duplication
- Normalizing metadata
- Inferring metadata
- Improving metadata supplied to SHARE
- Professional curation of metadata
- Crowdsourcing abilities

SHARE is a Community Project

Opportunities for participation:

- **Infrastructure**

<https://github.com/centerforopenscience/share>

<https://osf.io/wur56/wiki/>

- **Policy/Workflow**

SHARE Working Group

Standards, identifiers, behaviors



<http://share-research.org>



www.facebook.com/SHARE.research



www.twitter.com/share_research



SHARE@ARL.org

tyler.walters@vt.edu