

Radical collaboration:
Joining forces to address user needs
around research data management

Open Repositories 2019

Radical Collaboration

...coming together
across disparate, but engaged, domains
in ways that are often unfamiliar
or possibly uncomfortable...
to achieve more together
than we could separately

RLI 296 – focus: research data management

<https://publications.arl.org/rli296/>

Panelists

Overview/facilitator: Nance McGovern – MIT

Contributors:

Elizabeth Hull - Dryad-CDL partnership

Cynthia Hudson-Vitale - Data Curation Network

Limor Peer - CURE

Amy Nurnberger - RDA

Nance McGovern (she/her/hers)

ORCID: [0000-0002-7733-1516](https://orcid.org/0000-0002-7733-1516)

Director, Digital Preservation - Massachusetts Institute of Technology

Director, Digital Preservation Management Workshops (dpworkshop.org)

Past President, Society of American Archivists

iPres – co-organizer 2018 and co-chair, iPres Working Group

Twitter: [@mcgovern60](https://twitter.com/mcgovern60)

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Using Working Definitions to Build Understanding

What Makes Collaboration Radical?

Coming Together

Sharing the Table

Emerging Distributed Digital Practice

Building (an Inclusive) Community

Some Guiding Principles for Radical Collaboration

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Encouraging Radical Collaboration

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Archives, History, and Technology: Prologue and Possibilities for SAA and the Archival Community

Roots and future of distributed digital practice

American Archivist: Spring/Summer 2018, Vol. 81, No. 1, pp. 9-22

<https://americanarchivist.org/doi/abs/10.17723/0360-9081-81.1.9>

Digital Practice Roundtable

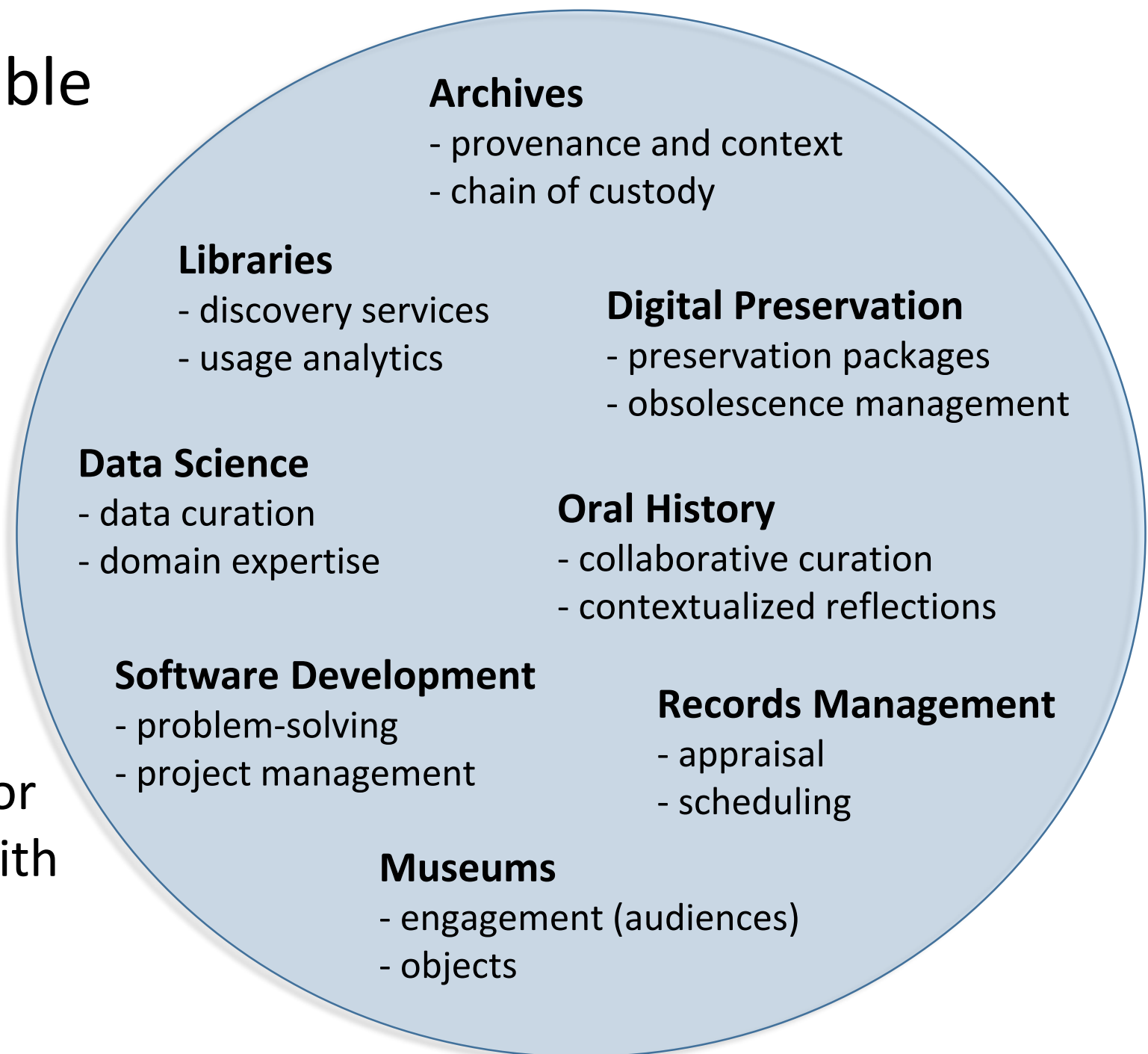
No head – determine together

Reset table for different needs

Add and change seats

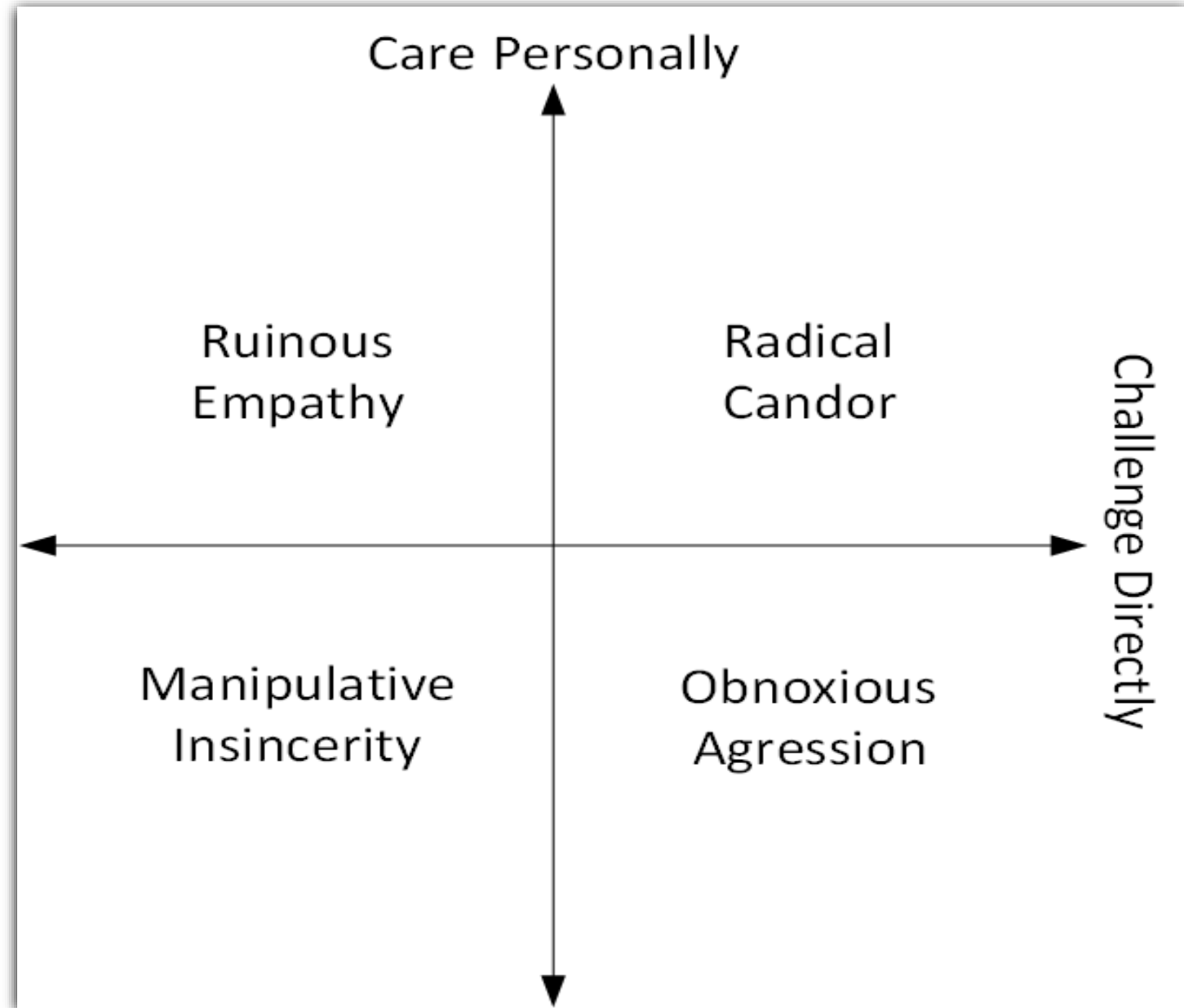
Leverage cumulative strengths

Radical collaboration allows for
greatest cumulative impact with
awareness of needs and
contributions of whole table



Adapt Radical Candor ...

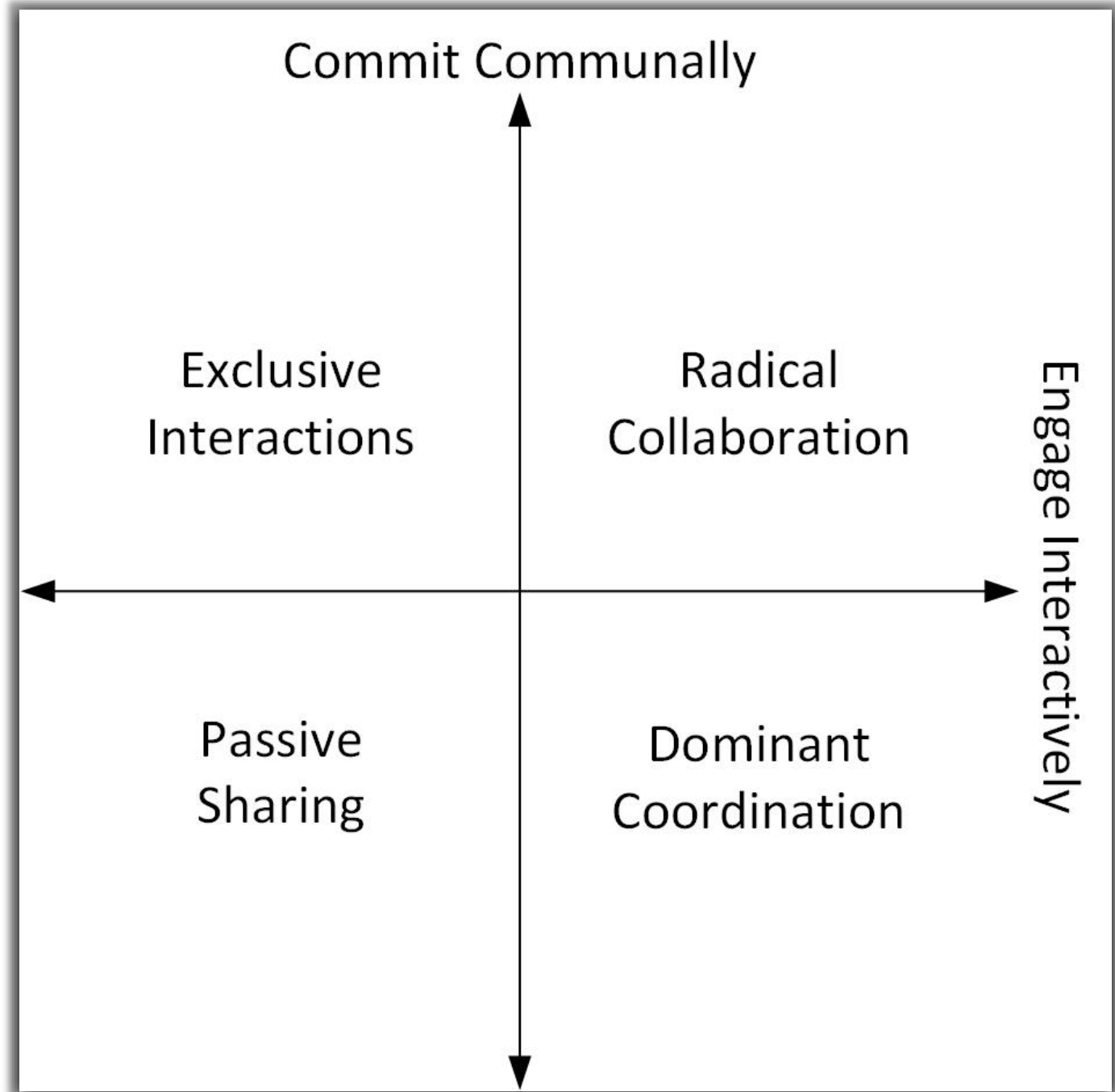
An approach for encouraging constructive feedback



To Radical Collaboration

An approach for encouraging
collaborative work across domains

“candid collaboration”



Working Definitions

To build and ensure shared understanding of core concepts

Collaboration: to rely on others to do agreed upon things for or in concert with you and to be relied upon to do agreed upon things for or in concert with others

Collaboration is **not**:

- letting someone know what you did after you did it;
- basic information sharing with no measurable impact; or
- simply allowing someone to be present or observe without means to inform and influence

Inclusion Framework

Social and demographic inclusion

i.e., not excluded based on race, ethnicity, gender, sexual orientation, religion, age, disability, or on any other characteristic or preference

Showstopper: first and foremost ensure that people are safe

Professional inclusion

People from all impacted or related professions and domains are included openly and equitably

Technical inclusion

Technical is not limited to technological

Technology (skills, tools, capabilities) should be available to all

Example: Archives – words are important ...

To an archivist:

Archives:

- an **organization** that collects the records of individuals or organizations;
- professional **discipline** of administering such archival collections and organizations – adhere to **archival principles and practice** (e.g., SAA [Code of Conduct and Ethics](#))
- **building** (or portion thereof) housing archival collections

IT use of “archives” and “archiving”: often refers to **aggregations** of content, storage of content – is typically not archival from an archivist’s perspective and does not equate to preservation (more robust and collaborative concept) e.g., Twitter archives

“digital archivist” may refer to work by anyone on digitized or other digital content of any kind not someone who manages digital records

Historians and other researchers may refer to archiving to mean (see also documentation strategies) **capture, document, or record** history and milestones

Question(s)/comment(s) about Radical Collaboration?

Before proceeding with the contributor presentations, one or two questions about the radical collaboration framework we are using?

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Elizabeth Hull (she/her/hers)

ORCID: [0000-0002-8661-6265](https://orcid.org/0000-0002-8661-6265)

Associate Director, Dryad – <https://datadryad.org>

Twitter: [@datadryad](https://twitter.com/datadryad)

"What does it mean to be a community, to operate as a community, to work together towards shared solutions? I would argue that it is much more than just attending a conference and exchanging ideas, that it's really rolling our sleeves up and working together side by side to produce value."



- Kristen Ratan, Coko, 2018 OASPA Conference in Vienna



University of California
CDL
California Digital Library

A tale of two data publishing efforts



University of California
CDL
California Digital Library



Submit data now

[How and why?](#)

Search for data

Enter keyword, author, title, DOI, etc

[Advanced search](#)

Browse for data

- Recently published
- Popular
- By Author
- By Journal

Recently Published Data

Phadke S, Zufall R, Paixao T, Pham S, Pham T (2013) Data from: Genetic background alters dominance relationships between mat alleles in the ciliate *Tetrahymena thermophila*. *Journal of Heredity* doi:10.5061/dryad.qv731


Chiu C, Jost L, Chao A (2013) Data from: Phylogenetic beta diversity, similarity, and differentiation measures based on Hill numbers. *Ecological Monographs* doi:10.5061/dryad.vr4k2

Salgado-Salazar C, Rossmann AY, Chaverri P (2013) Data from: Not as ubiquitous as we thought: taxonomic cryptsis, hidden diversity and cryptic speciation in the cosmopolitan fungus *Thelonectria discophora* (Nectriaceae, Hypocreales, Ascomycota). *PLoS ONE* doi:10.5061/dryad.q3s66

Morgan EMJ, Green BS, Murphy NP, Strugnell JM (2013) Data from: Investigation of genetic structure between deep and shallow populations of the southern rock lobster, *Jasus edwardsii* in Tasmania, Australia. *PLoS ONE* doi:10.5061/dryad.656qf


Robinson BW (2013) Data from: Evolution of growth by genetic accommodation in Icelandic freshwater stickleback. *Proceedings of the Royal Society B*

Be part of Dryad



Publishers, societies, universities, libraries, funders, and other stakeholder organizations are invited to become **members**. Tap into an active knowledge-sharing network, receive discounts on submission fees, and help shape Dryad's future.

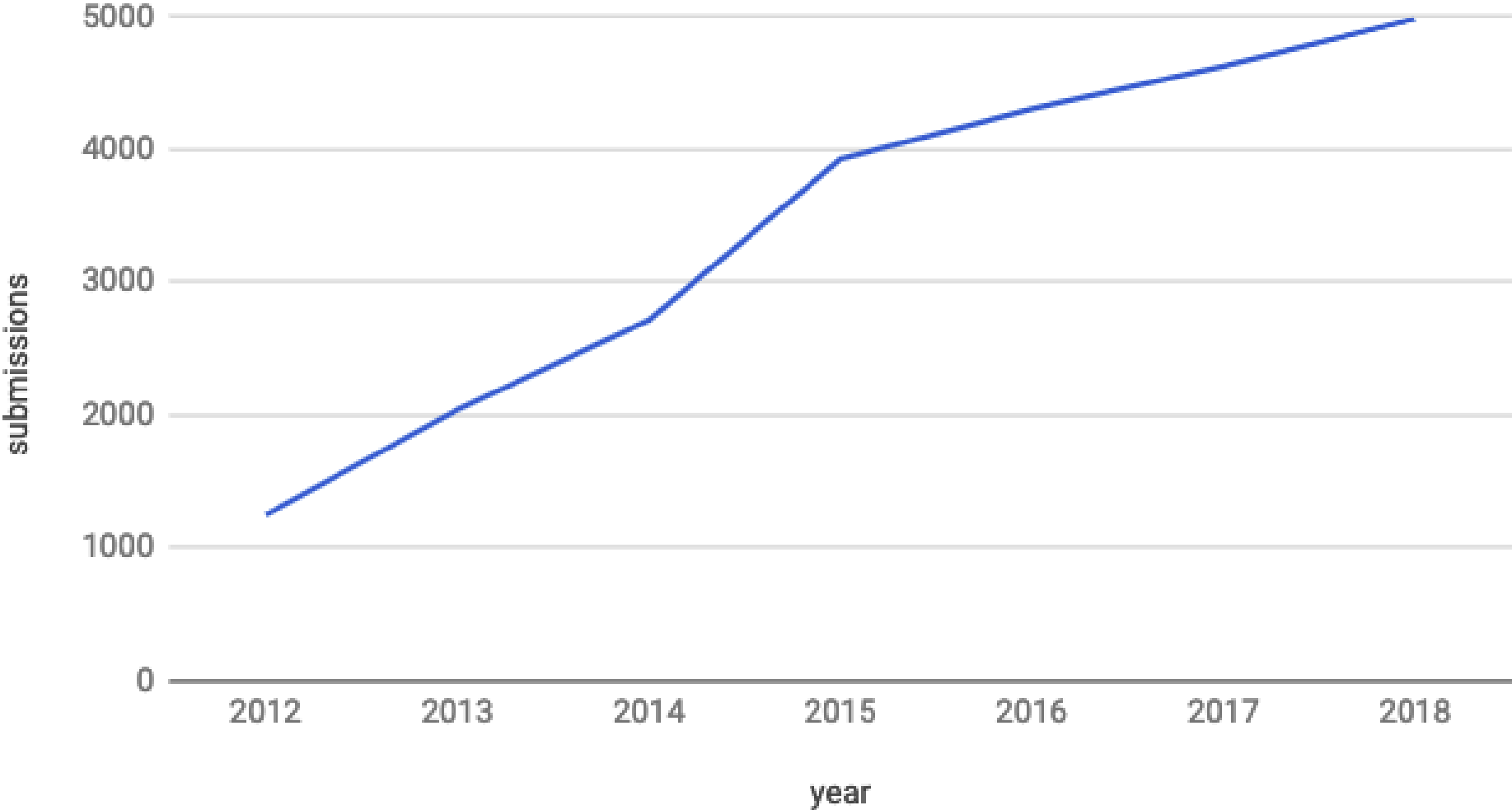
[Submission integration](#) is a free service that allows publishers to coordinate manuscript and data submissions. It makes submitting data easy for researchers; makes linking articles and data easy for journals; and enables confidential review of data prior to publication.



Submission fees support the cost of keeping Dryad's content free to use. Flexible [pricing plans](#) provide volume discounts.

<https://datadryad.org>

Dryad submissions by year



California Digital Library - <https://www.cdlib.org/>

CDL provides transformative digital library services, grounded in campus partnerships and extended through external collaborations, that amplify the impact of the libraries, scholarship, and resources of the University of California

Four active programs:

Access & Publishing

Discovery & Delivery

Collections & Licensing

UC Curation Center



University of California

CDL

California Digital Library

California Digital Library - <https://www.cdlib.org/>

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Four active programs:

Access & Publishing

Discovery & Delivery

Collections & Licensing

UC Curation Center

EZID *Identifiers
made easy*

**METADATA
2020**

ROR 

 **DMPTool**



University of California
CDL
California Digital Library



An easy-to-use data publication service

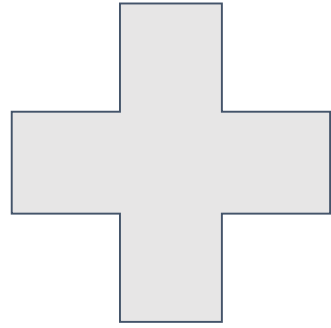
“hypotheses come and go, but
data remain”

Santiago Ramón y Cajal, 1897

Search 579 datasets

Search

<https://dash.ucop.edu>



University of California
CDL
California Digital Library



What the collaboration is NOT:

- No administrative merger. Dryad remains an independent non-profit
- No significant changes to the operations or mission of either organization

What the collaboration IS:

Two like-minded teams rolling up our sleeves and leveraging our strengths to:

- Drive adoption of curated data publishing
- Develop and sustain a community driven, open source, accessible alternative to commercial offerings



University of California
CDL
California Digital Library

Question(s)/comment(s)?

One or two questions or comments about the Dryad/CDL collaboration?

Panelists

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Cynthia Hudson-Vitale - Data Curation Network

Limor Peer - CURE

Amy Nurnberger - RDA

Cynthia Hudson-Vitale

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Head, Research Informatics & Publishing - Pennsylvania State University

Twitter: @cynhudson

cuv185@psu.edu

DATA CURATION NETWORK

leveraging expertise to curate data
at scale

Team

PI: Lisa Johnston, University of Minnesota

Co-PIs: Mara Blake, Johns Hopkins University; Jake Carlson, University of Michigan; Cynthia Hudson-Vitale, Penn State University; Joel Herndon, Duke University; Elizabeth Hull, Dryad; Heidi Imker, University of Illinois; Wendy Kozlowski, Cornell University; Hoa Luong, University of Illinois; Tim McGeary, Duke University, Jennifer Moore, Washington University; Claire Stewart, University of Minnesota

Project Coordinator: Elizabeth Coburn, University of Minnesota

With Thanks

The Data Curation Network is made possible with funding from the Sloan Foundation.



Alfred P. Sloan
FOUNDATION

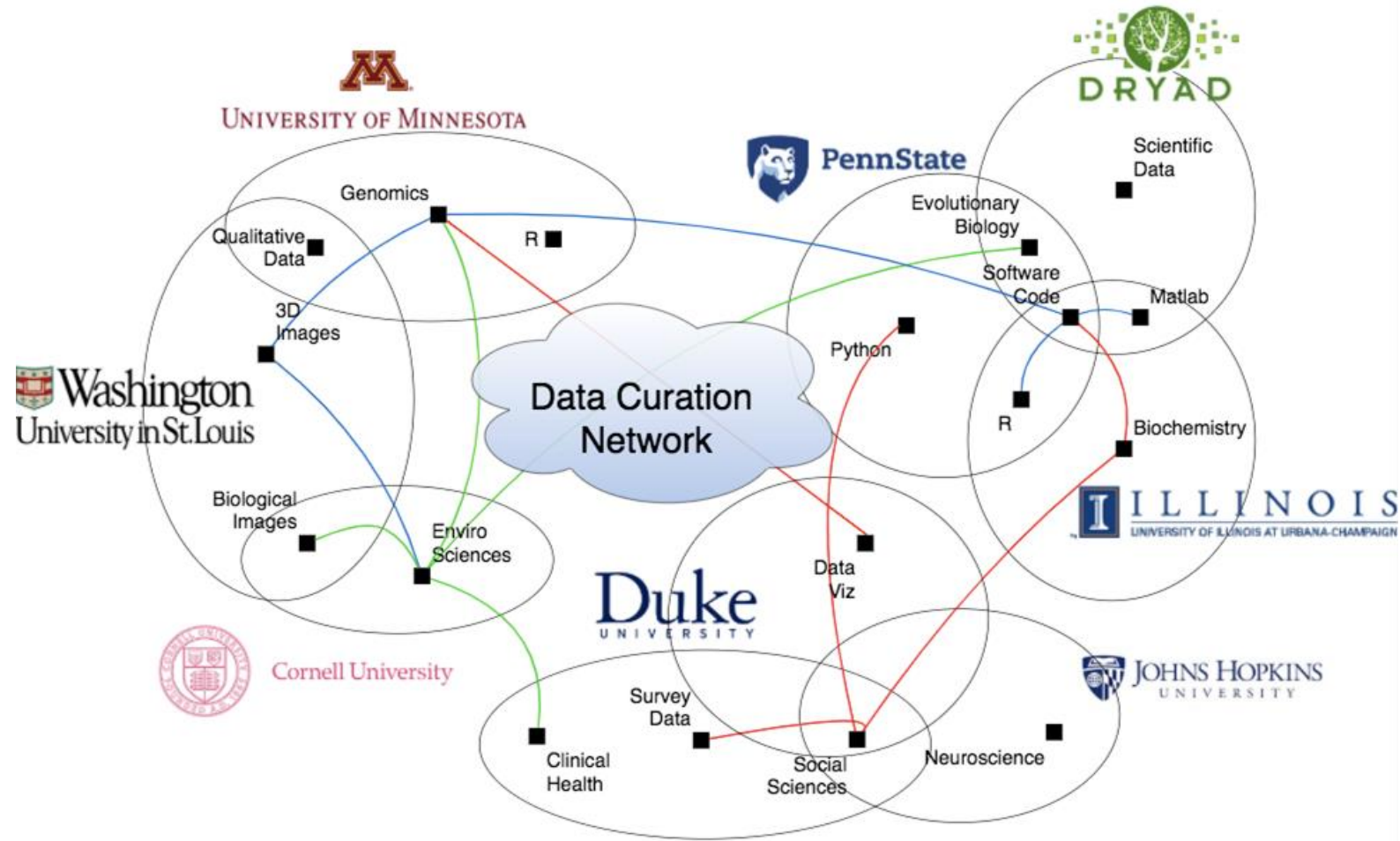
We are also grateful for funding from IMLS for the Data Curation Workshops.



Our Mission

“The Data Curation Network will enable data repositories to better support researchers that are faced with a growing number of requirements to ethically share their research data in ways that make it findable, accessible, interoperable and reusable (FAIR).”

Mission: Expert Curation



Mission: Create and Share Best Practices

DCN Curators will take **CURATE** steps for each data set, that includes:

C **Check** data files and read documentation

U **Understand** the data (try to), if not...

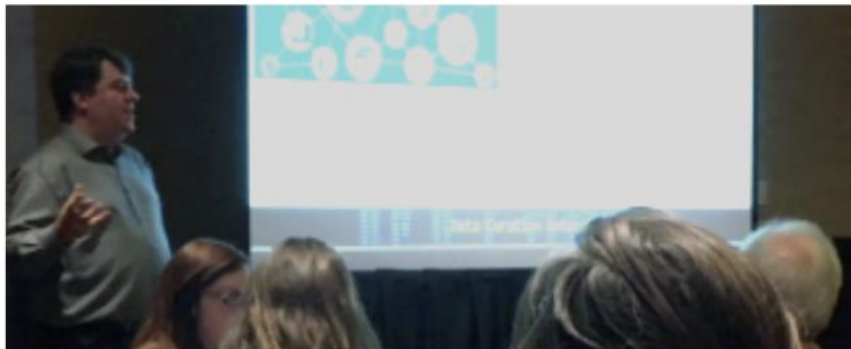
R **Request** missing information or changes

A **Augment** the submission with metadata for findability

T **Transform** file formats for reuse and long-term preservation

E **Evaluate** and rate the overall submission for FAIRness.

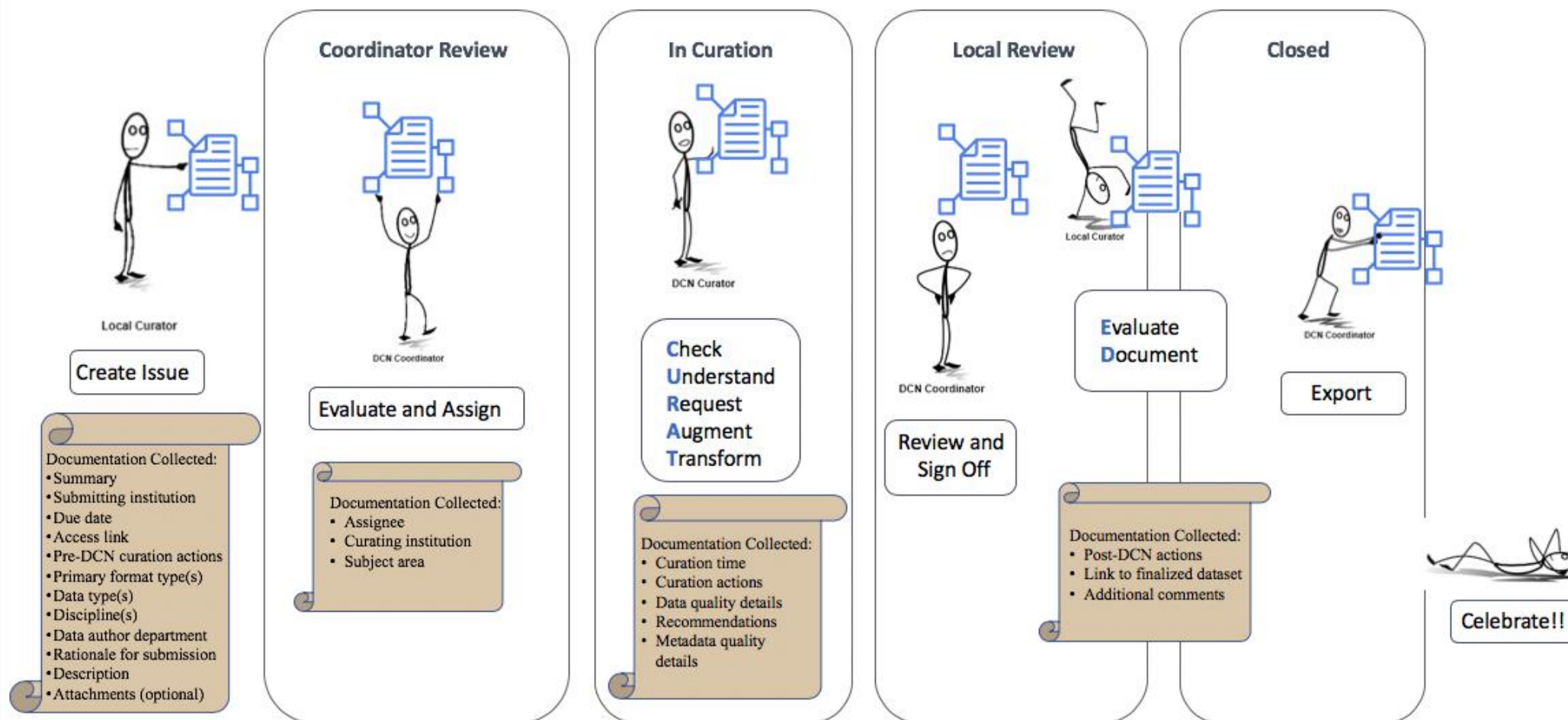
Mission: Build a curation community of practice



Launch of the DCN

DCN Kanban Board

Kanban is a framework for project management that allows visualization of the workflow process. Datasets can be “moved” between steps in the handling process, facilitating efficient flow and communication of datasets status throughout curation.



Stats to date

Data Type(s)
Total Issues: 23

Dataset Data Types



Data Type(s)
Total Issues: 23

tabular	12
code	9
image	5
3D_image	3
human_subjects	3
other	3
database	2
simulation	2
spectral	2
statistical	2
Other...	5

Challenges

- Institutional priorities and culture
- Unvoiced concerns
- Indeterminable or unknown value
- Complex and evolving ecosystem
- Network design
- Antiquated views of libraries
- No sustainability model
- Easier to go alone
- Transparency
- Unbalanced workloads

What's next

- Growing the network
 - Plans to add two institutions in Year 2 and another two in Year 3. Washington University joined this year.
 - Criteria for New Partners:
 - Have a data repository
 - Have data curation staff to fill DCN Representative and DCN Curator roles
 - Adhere to team's code of conduct
 - Preferred: Expand curation expertise and/or bring new diversity to the project
- IMLS Funded Education and training for data curation professionals
 - Data Curation Workshops
 - IASSIST Pilot
 - 3 IMLS workshops
 - Data Curation Primers
 - [netCDF primer](#)
 - Jupyter Notebooks
 - SPSS
 - Excel
 - Wordpress
 - Geodatabases
 - Microsoft Access

Resources

<https://datacurationnetwork.org/>

<https://sites.psu.edu/dcnworkshops/>

Question(s)/comment(s)?

One or two questions or comments for the Data Curation Network?

Panelists

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Amy Nurnberger - RDA

Radical collaboration: Joining forces to advance curating for reproducibility

Limor Peer, PhD

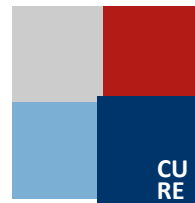
limor.peer@yale.edu

ORCID: 0000-0002-3234-1593



Associate Director for Research,
Institution for Social and Policy
Studies, Yale University

<https://isps.yale.edu/research/data>



Co-founder, Curating for
Reproducibility (CURE)
Consortium

<http://cure.web.unc.edu/>

Open Repositories | Hamburg, Germany | 12 June 2019 | 11:00 – 12:30



#OpenRepo2019 @l_peer

A challenge for data repositories: The reproducible scholarly record

Computational reproducibility involves “calculation of quantitative scientific results by independent scientists **using the original datasets and methods.**”

Stodden, V., Leisch, F., & Peng, R.D. (Eds.). (2014). *Implementing Reproducible Research*. New York: Chapman and Hall/CRC.

Data curation+

Perform Data
Quality
Review

Data Quality Review Framework

Peer, L., Green, A., & Stephenson, E. (2014). Committing to data quality review. *International Journal of Digital Curation*, 9(1). <https://doi.org/10.2218/ijdc.v9i1.317>



CURE Standards

Journal Data Policy
Enforcement

CURE Workflows

Results Reproduction
(R²) Service

CURE Management

Yale Application for
Research Data (YARD)



ODUM INSTITUTE
FOR RESEARCH IN
SOCIAL SCIENCE

CISER

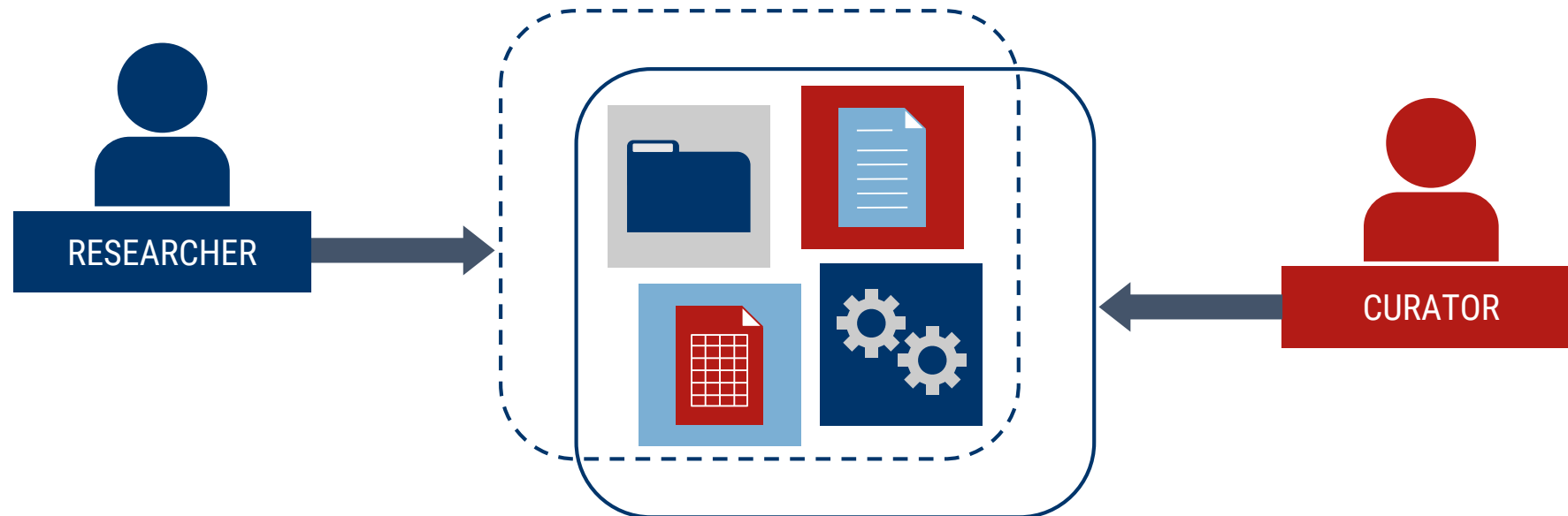
Yale 
ISPS

CURE workflows

Results Reproduction (R^2) Service •

<https://ciser.cornell.edu/research/results-reproduction-r-squared-service/>

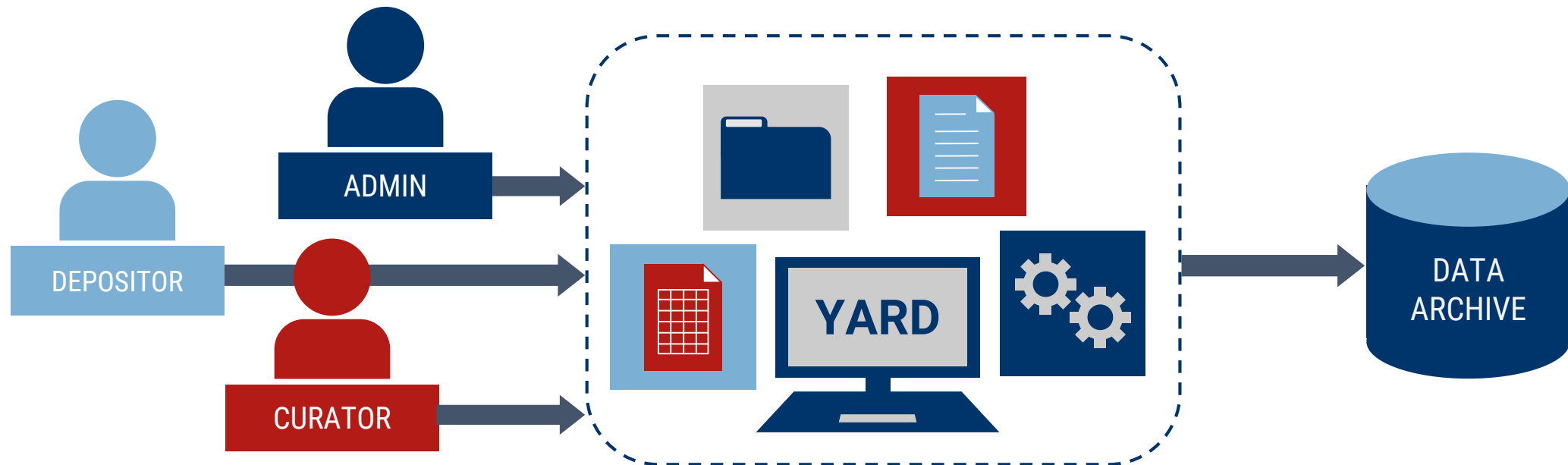
Researchers with papers ready to submit for publication can send their data and code to CISER prior to submission for appraisal, curation, and replication to **ensure that published results are reproducible.**



CURE management

YARD: Yale Application for Research Data • <https://yard.yale.edu/>

A new workflow tool that allows Depositors, Curators, and Administrators to **submit, review, process, and publish data within one system**, which structures and records data curation and code review workflow actions.

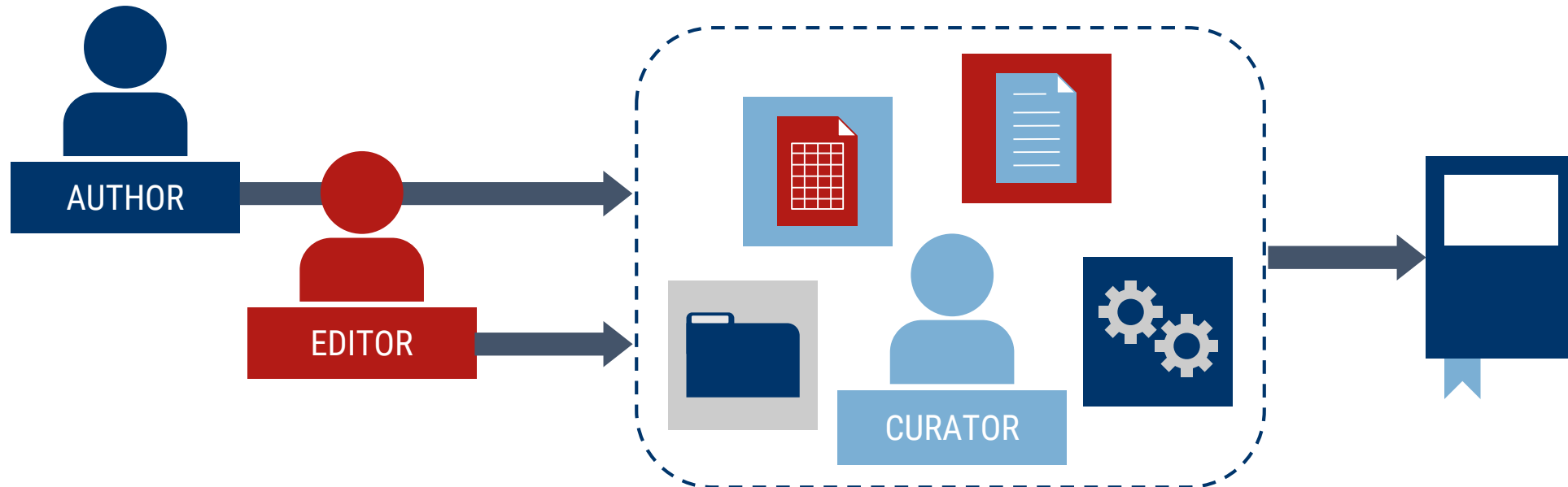


CURE standards

Journal Data Policy Enforcement •

<https://odum.unc.edu/archive/managementcuration/>

The Odum Institute Data Archive works with Odum Institute statisticians to perform data curation and code review tasks on behalf of journal editors to enforce **TOP Level III data policies**.

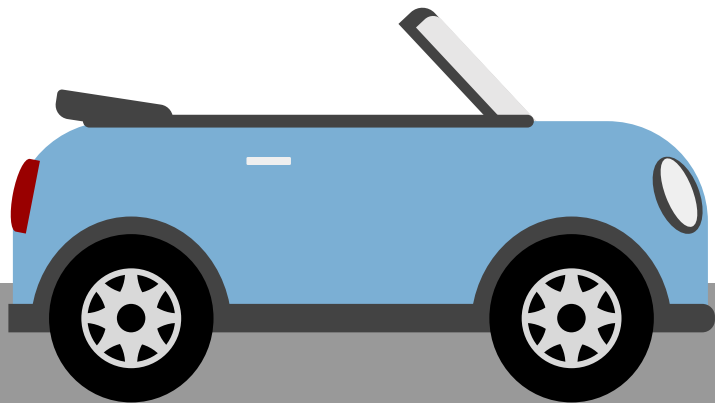
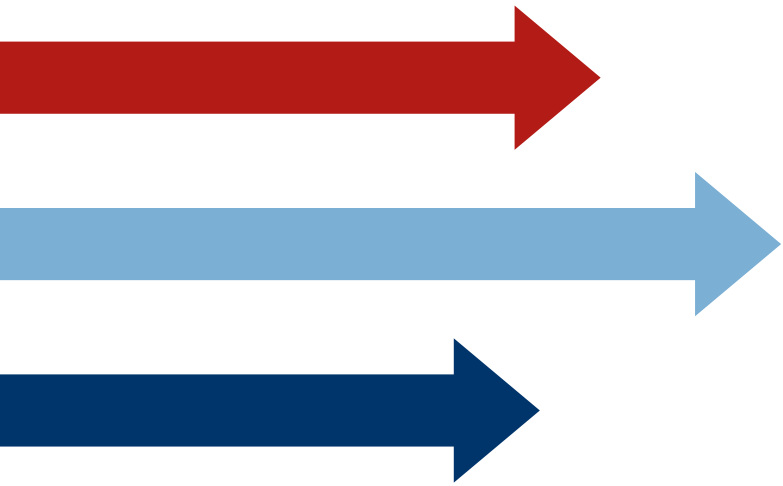
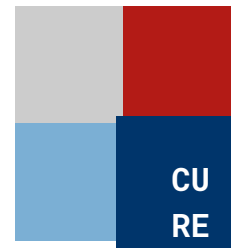


We support **curation of research data** and **review of code** and associated digital scholarly objects for the purpose of facilitating the digital preservation of the evidence base necessary for future understanding, evaluation, and reproducibility of scientific claims.

<http://cure.web.unc.edu/>
<https://osf.io/3wkex/>



CURE highlights



2016

- IASSIST pow-wow
- Articulation of founding principles, sharing practices
- Assemble Advisory group
- Buy-in from home institutions

2017

- Launch website
- IMLS Training Program Planning Grant RE-87-17-0074-14

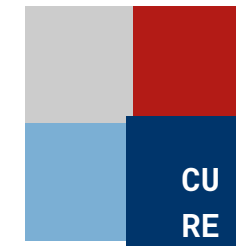
2018

- Workshops

2019

- Workshops
- Community building

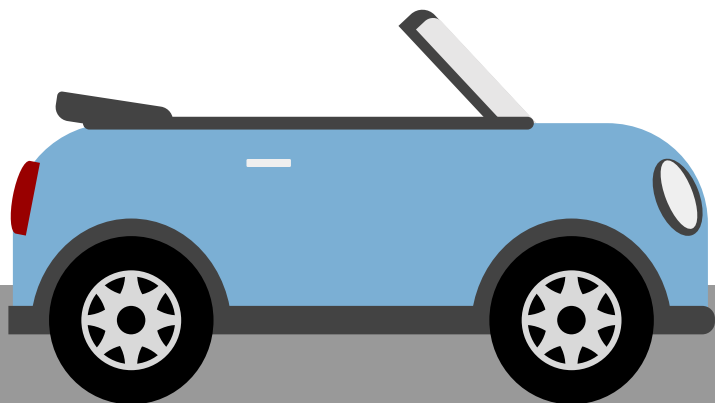
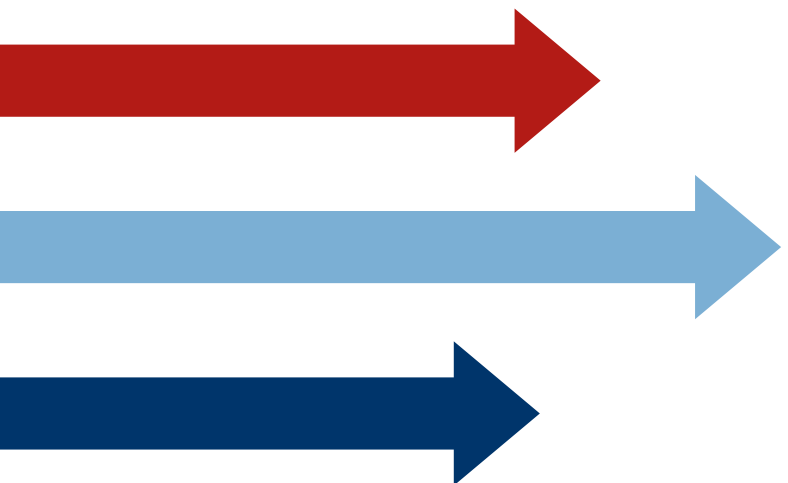
CURE radical collaboration



Collaborate to...

- Establish standards
- Share practices
- Promote Curating for Reproducibility

Lessons learned...



Question(s)/comment(s)?

One or two questions or comments about CURE?

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Amy Nurnberger - RDA

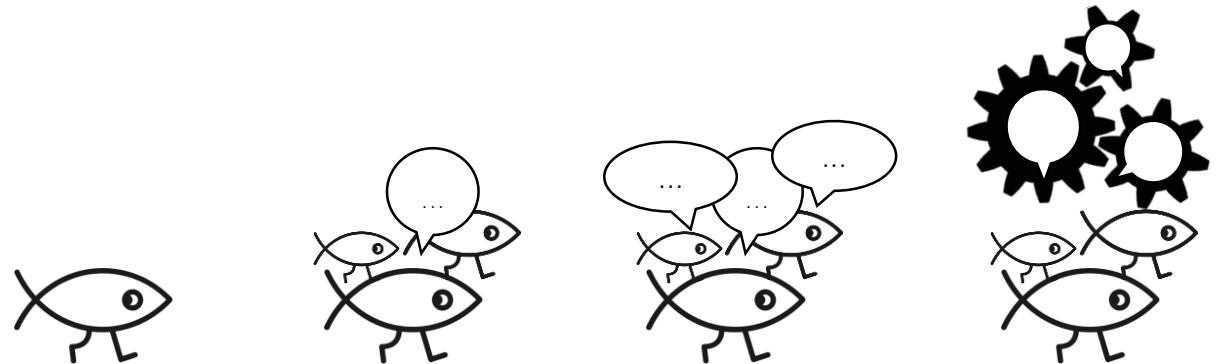
The Evolution of Collaboration in RDA and Institutions

Where we start, how we develop to $\sqrt{\text{collaboration}}$

OR 2019, Hamburg, DE 2019-06-12

P4B: Joining forces to address user needs
around research data management (panel)

Amy Nurnberger 



Introduction

Amy Nurnberger [*she/her(s)*],

ORCID: [0000-0002-5931-072X](https://orcid.org/0000-0002-5931-072X)

Program Head, Data Management Services - Massachusetts Institute of Technology

Adjunct Assistant Professor, Learning Analytics, Teachers College, Columbia University

Research Data Alliance

- Organisational Advisory Board, co-chair
- Education and Training on Handling Research Data, co-chair

Twitter: [@ANurnberger](https://twitter.com/ANurnberger)

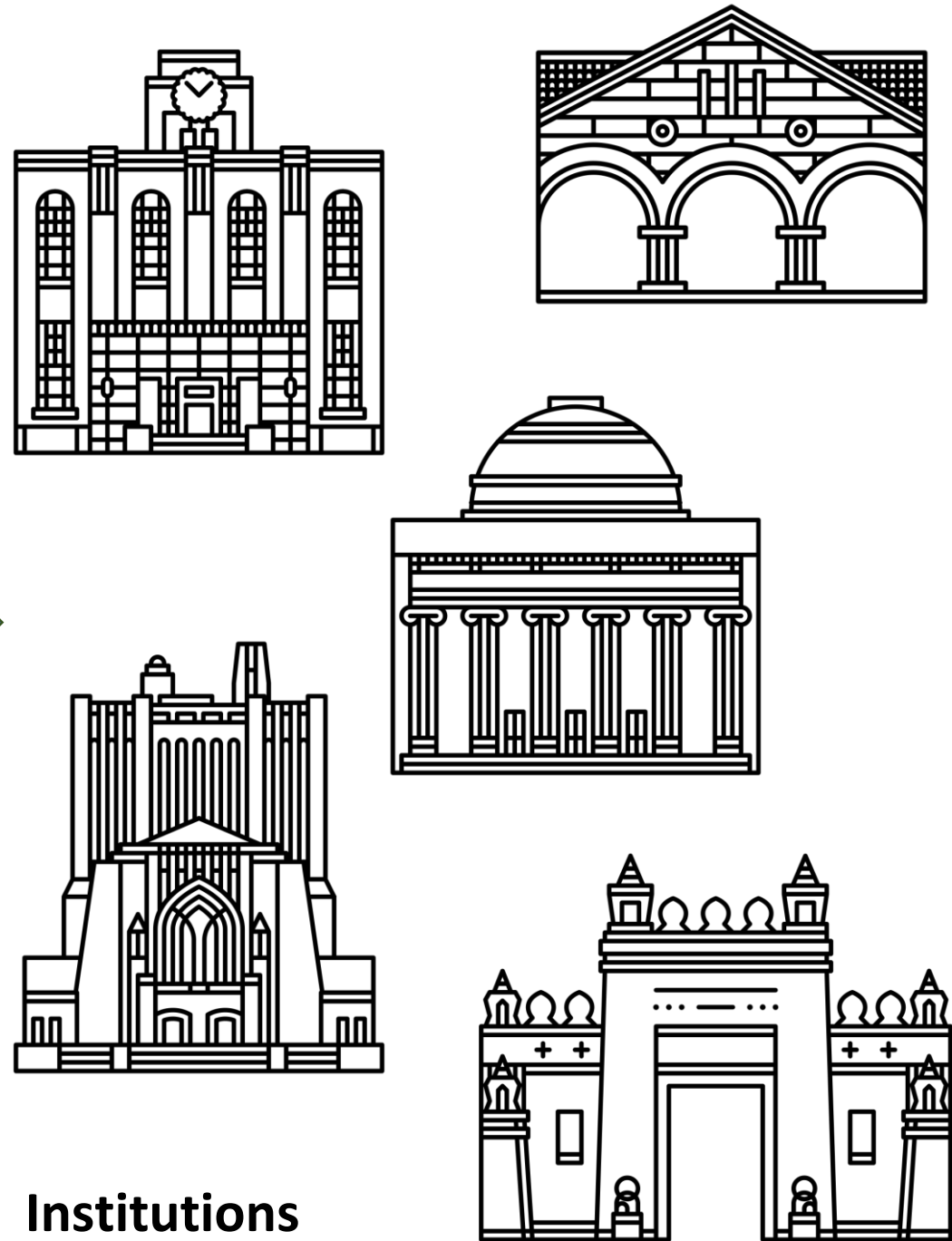
These slides based on the article:
Amy Nurnberger. “The Radical Collaboration of RDA and What It Means for Developing Institutional Data Management Services.” *Research Library Issues*, no. 296 (2018): 23–32.
<https://doi.org/10.29242/rli.296.3>.



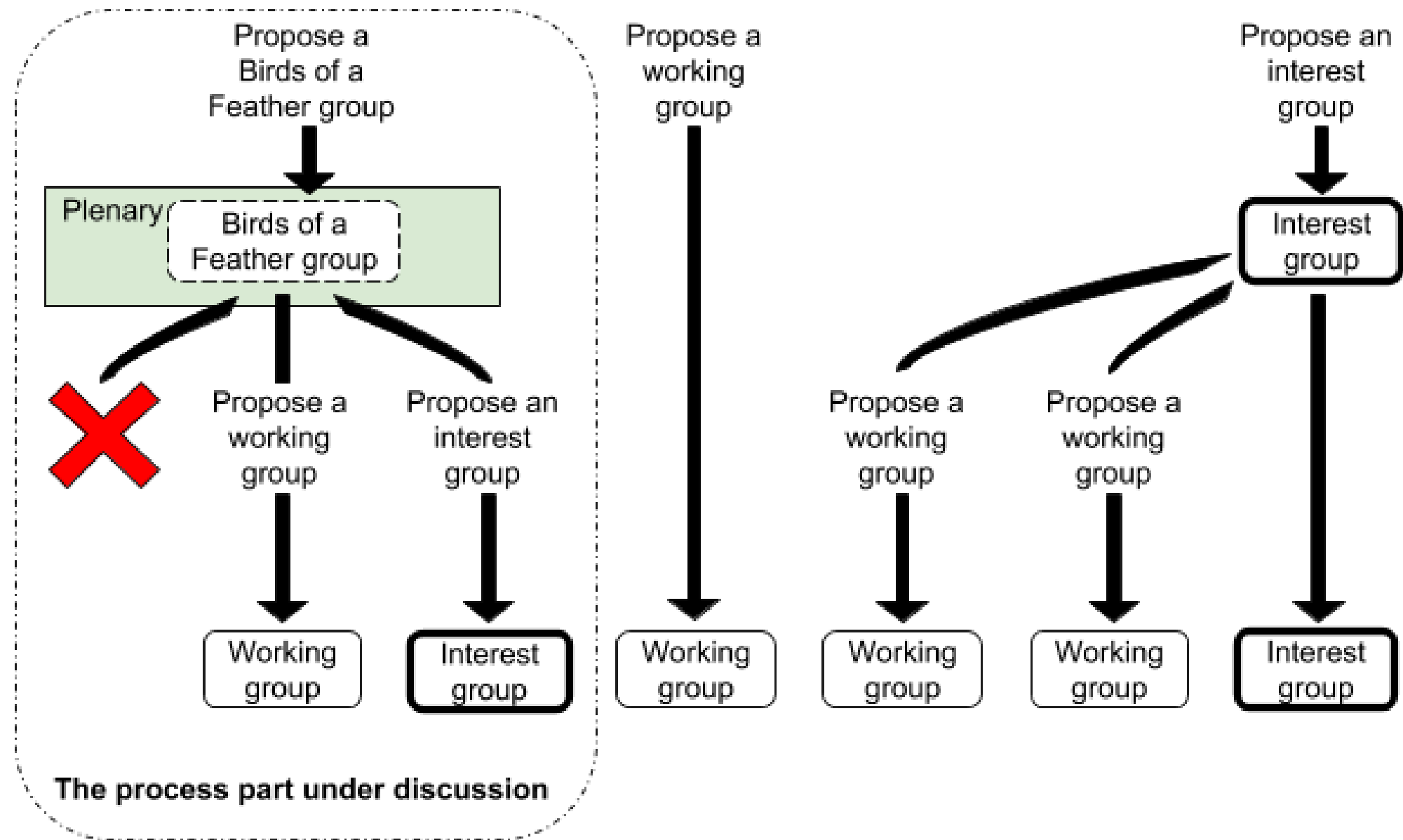
RESEARCH DATA ALLIANCE

Research Data Alliance (RDA)

Why?

A thick, blue, double-headed arrow pointing horizontally from the RDA logo on the left towards the 'Institutions' section on the right.

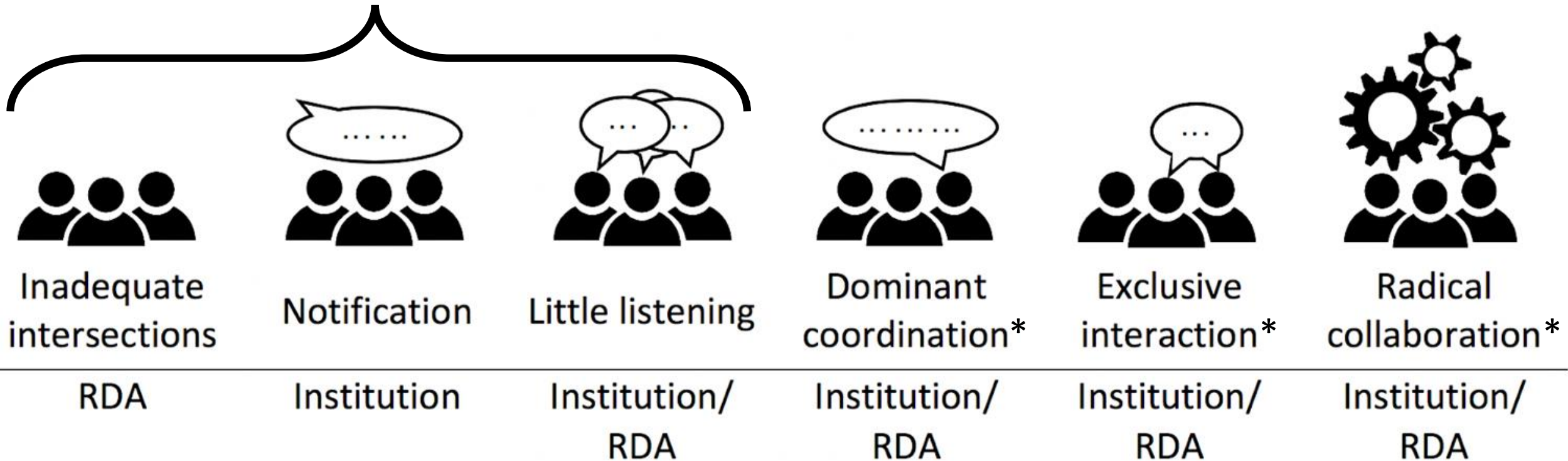
Institutions



Getting to groups in RDA

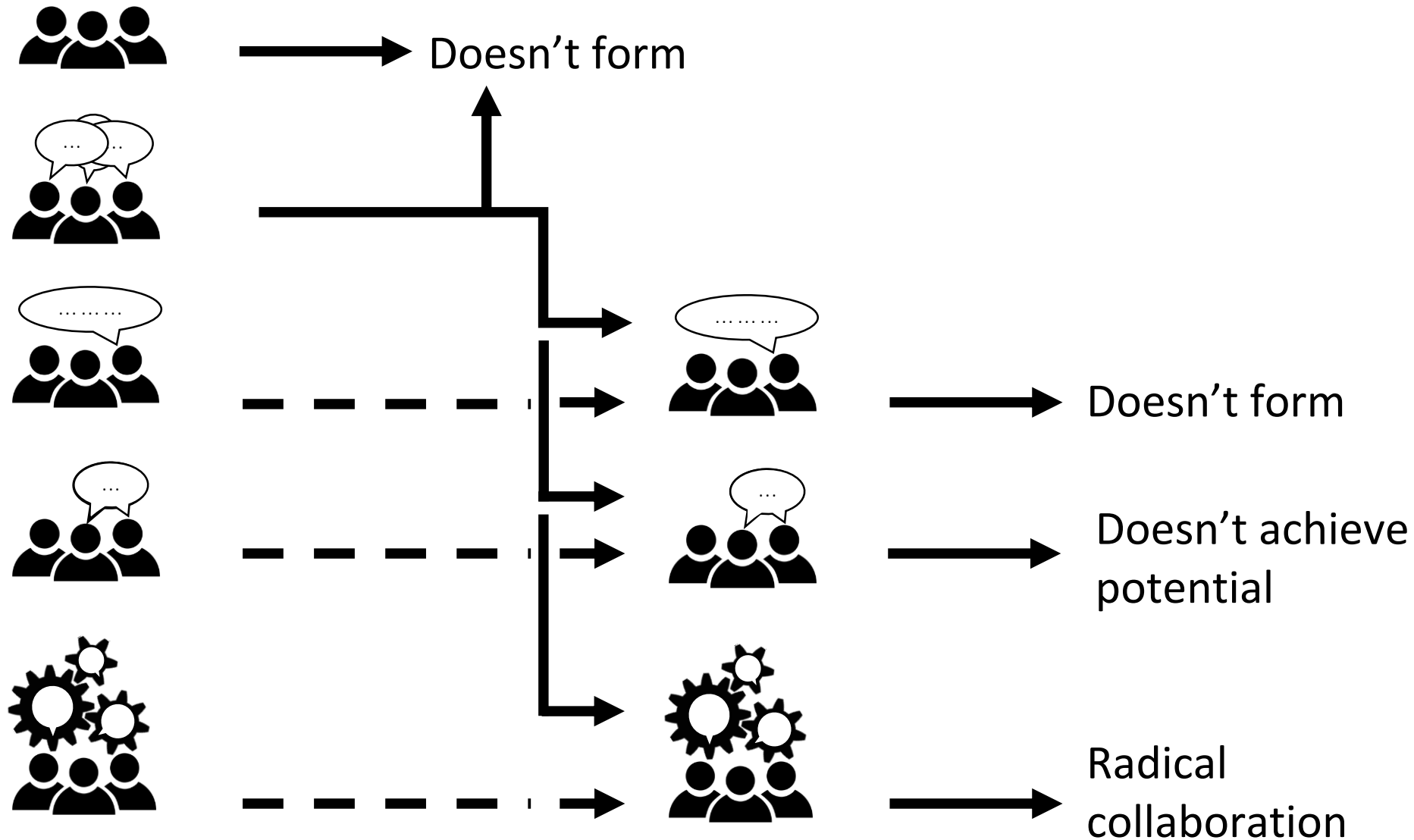
Starting points

Passive sharing*

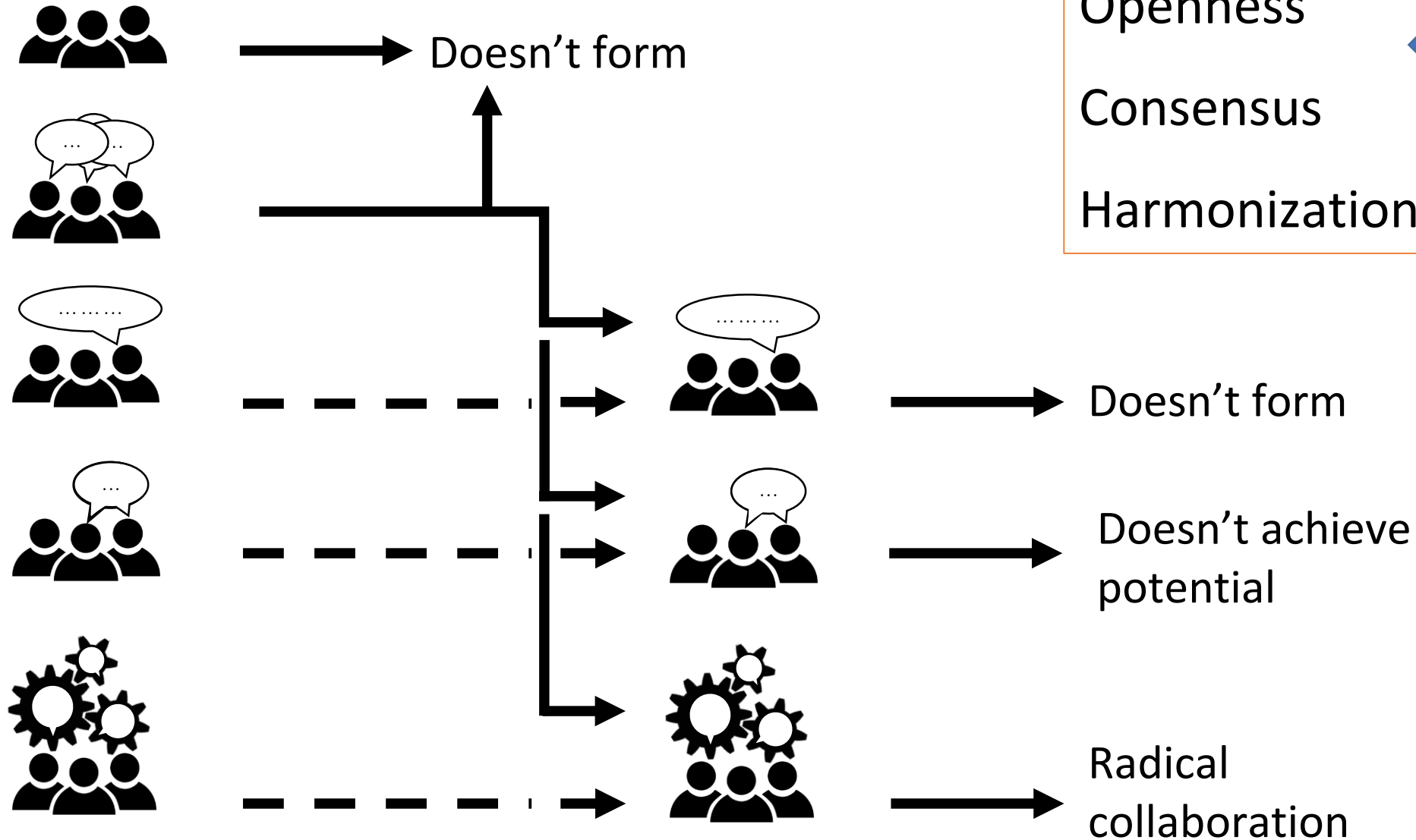


* Nancy Y. McGovern, "Radical Collaboration and Research Data Management: An Introduction," Research Library Issues, no. 296 (2018): X–Y, <https://doi.org/10.29242/rli.296.2>

From here to there in RDA



From here to there in RDA



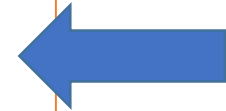
Balance

Openness

Consensus

Harmonization

Technical
Advisory
Board



Responsibility

for :

- Balance
- Openness
- Consensus
- Harmonization



Technical Advisory Board



Often Unclear



Inadequate intersections

RDA



Notification

Institution



Little listening

Institution/
RDA



Dominant coordination *

Institution/
RDA



Exclusive interaction *

Institution/
RDA



Radical collaboration *

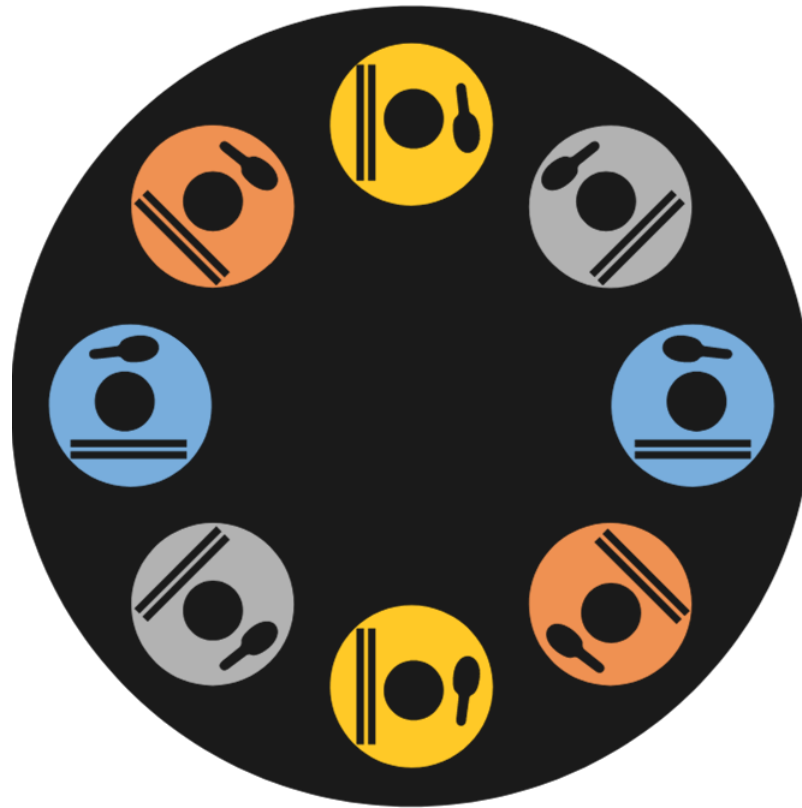
Institution/
RDA

* Nancy Y. McGovern, "Radical Collaboration and Research Data Management: An Introduction," Research Library Issues, no. 296 (2018): X–Y, <https://doi.org/10.29242/rli.296.2>

From here to there in Institutions

Leaders – Set the table for...

- Balance & inclusion
- Representation
- Inquiry
- Openness
- Consensus
- Harmonization
- Equity



Participants – Claim your place in...

- Involving others
- Setting group expectations
- Co-building...
 - Definitions
 - Mental models
 - Goals

From here to there in Institutions

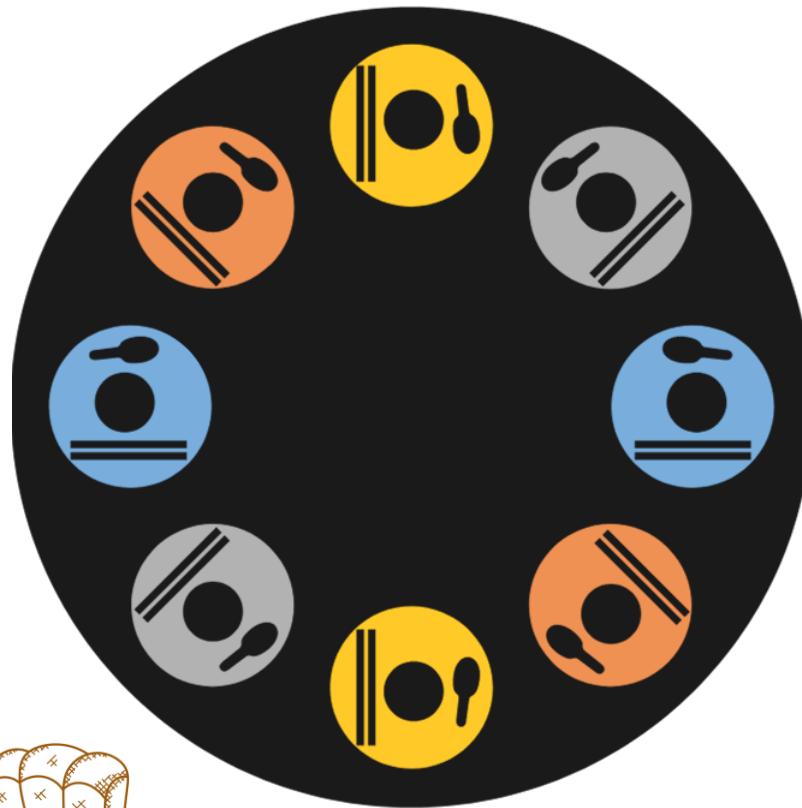
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- Consensus
- Harmonization
- Equity

(= BRIOCHE!) 

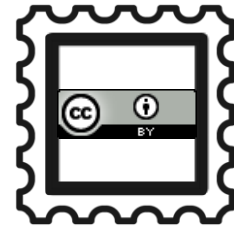
Participants – Claim your place in...

- Involving others
- Setting group expectations
- Co-building...
 - Definitions
 - Mental models
 - Goals



Thank you!

Amy Nurnberger
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@ANurnberger



Open Repositories, 2019
P4B
Hamburg, DE

Question(s)/comment(s)?

One or two questions or comments about RDA?

Topical discussion

Possible Discussion Topics

Communication

Opportunities

Incentives and Inhibitors

Lessons Learned

Q&A

Questions for you ...

- Questions for the panelists?
- Examples of radical collaboration or possibilities from you to share?
- Professions that you think should be (and might not be) included in:
 - Research data management?
 - Digital practice generally?
 - Project you've worked on?
 - ...
- Collaboration challenges you've encountered?

Next Steps Discussion

I am ...



in a
library

Forward Together: collaborating across communities

Be sure everyone who should be or wants to be at the table is there

Welcome unanticipated guests

If you are in the majority, consider what inclusion looks like

Ensure holistic communication for those not at the table

Come to the table with questions not answers – balance inquiry and advocacy

If you haven't learned something at the table, sit longer, ask more questions, and continue to listen...

Forward Together: collaborating across communities

Reset the table as needed to include different perspectives and evolving issues

Never assume you're chairing even if you sent out the invite

Value your knowledge and that of others; bring your whole self and be courageous

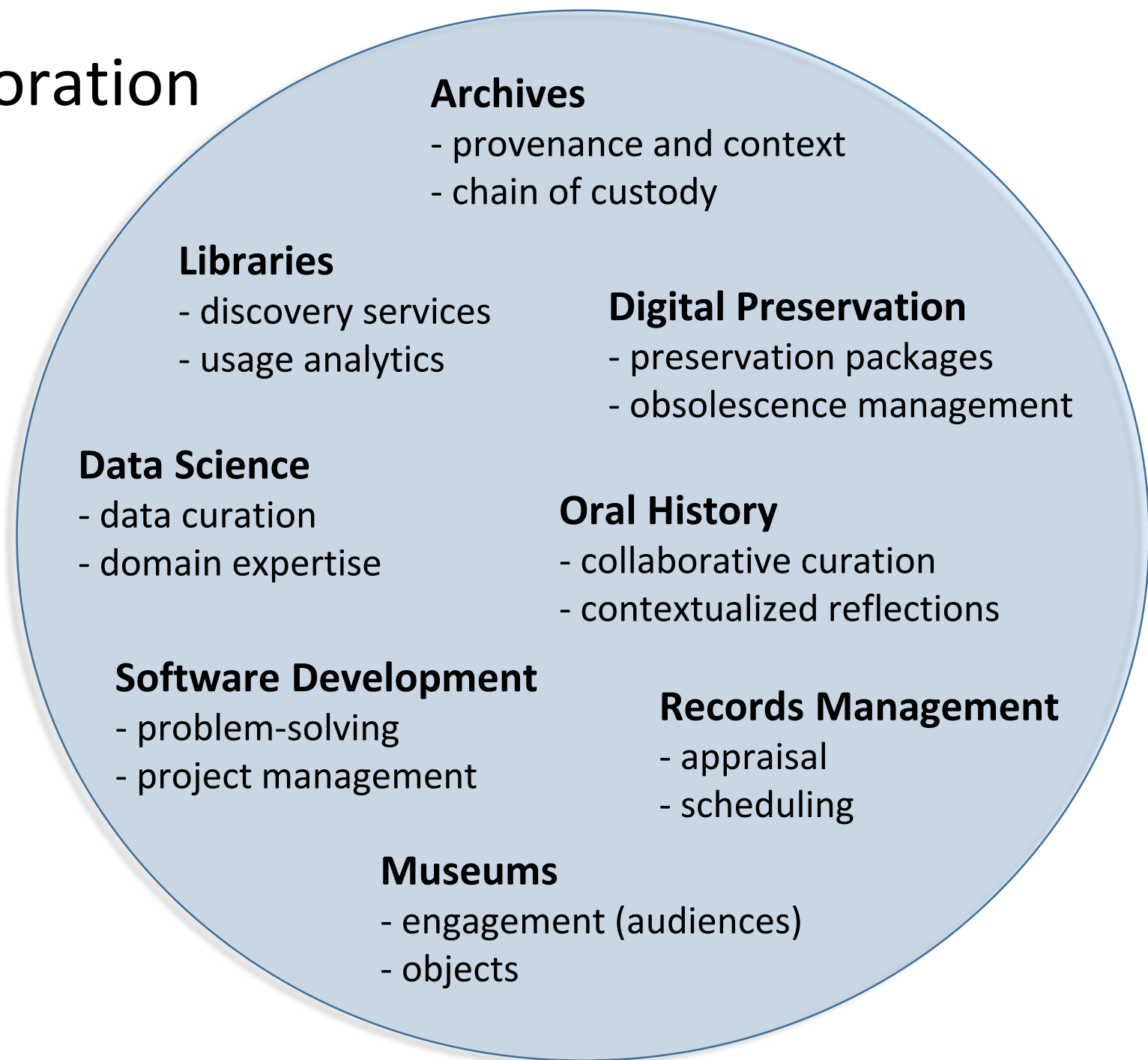
Prioritize the common goal over any single "right" approach

Digital Practice + Collaboration

Who would you bring to the table?

- examples of domain strengths
- round table (with no head)
- stronger together
- professional inclusion
- common interests
- overlapping members
- overlapping objectives

Who's not at the table and why?



Thank you!

Please give RLI 296 a look and share your thoughts with us:

<https://publications.arl.org/rli296/>