# The Evolving Scholarly Record: Scope, Stakeholders, and Stewardship

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**OCLC** Research

University of Maryland Libraries College Park, MD November 16, 2015

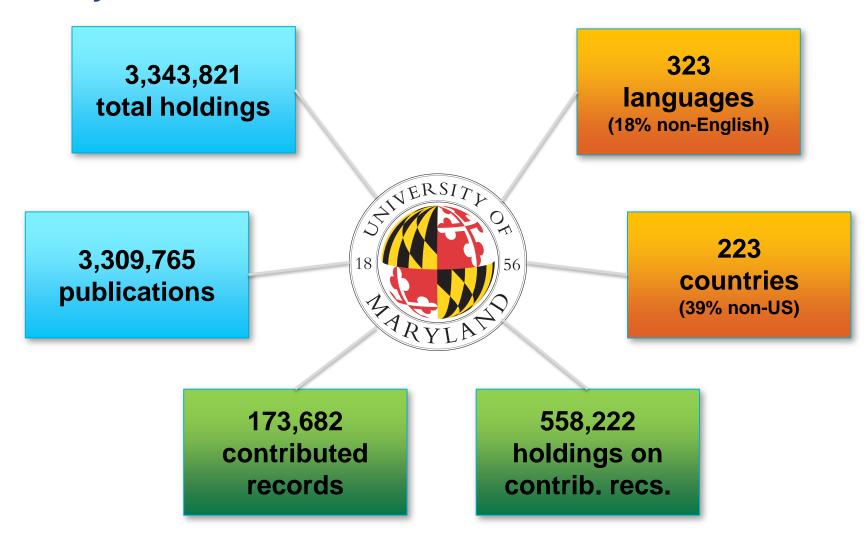


## **Prelude**





# **UMD presence in WorldCat** January 2015





#### Topics where UMD has more titles than any other library

# Historic buildings – Conservation and restoration



#### Rosenfeld, Azriel



#### **Biometric identification**



#### Sonatas (Piano)



# National Trust for Historic Preservation in the US



# **National Association of Broadcasters**







Topics from the NMC Horizon Report > 2015 Library Edition

#### CHALLENGES

#### SOLVABLE

- > Embedding Academic and Research Libraries in the Curriculum
- > Improving Digital Literacy

#### DIFFICULT



> Rethinking the Roles and Skills of Librarians

#### WICKED

- > Embracing the Need for Radical Change
- > Managing Knowledge Obsolescence

#### **TRENDS SHORT-TERM IMPACT** > Increasing Value of the User Experience > Prioritization of Mobile Conte MID-TERM IMPACT > Evolving Nature of the Scholarly Record Increasing Focus on Research D Management **LONG-TERM IMPACT** > Increasing Accessibility of Research Content > Rethinking Library Spaces 2016 2017 2018 2019 2020 **NEAR-TERM** MID-TERM **FAR-TERM** 2-3 years 1 year or less 4-5 years > Information Visualization > Location Intelligence > Makerspaces > Online Learning > Machine Learning > Semantic Web and **Linked Data DEVELOPMENTS IN TECHNOLOGY**







## Roadmap

- Background & trends
- The evolving scholarly record ...
  - Scope
  - Stakeholders
  - Stewardship
- Key issues for academic libraries
- Questions & discussion



# THE EVOLVING SCHOLARLY RECORD



# Welcome to create.ou.edu

Empowering Digital Scholarship, Expanding Digital Literacy & Creating Digital Citizens.



Get Started

Featured Sites

"... Create aims to empower all members of the OU community to craft and control their digital narrative through the use of blogs, portfolios, wikis, and more."

All / Blog / Course Site / Exhibit / Faculty / Learning Community / Misc / Portfolio / Wiki



A: OU Create is a project at the
University of Oklahoma managed
by the Center for Teaching
Excellence.

OU Create offers students,
faculty, and staff the opportunity
to register a domain (.com, .org,
.net) and create a digital presence
through various mediums such
as blogs, portfolios, and wikis.
Students can easy install popular
open source applications such as



## **Evolutionary trends ...**

#### Formats shifting:

Print-centric to digital, networked

#### Boundaries extending:

 Articles/monographs, but also data, computer models, lab notebooks, blogs, e-mail discussion, e-prints, interactives/executables, visualizations, etc

#### Characteristics changing:

- Traditionally: static, formal, outcome-focused
- Today: dynamic, blend of formal & informal, more focus on documenting full research cycle (replicability, "leveragability")

#### Stakeholders reconfiguring:

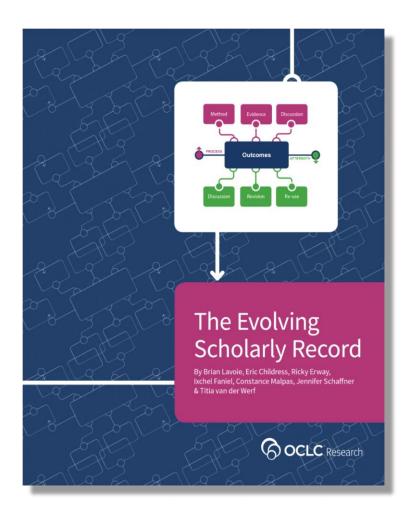
New paths for the scholarly communication "supply chain"



## The Evolving Scholarly Record

#### Develop framework to:

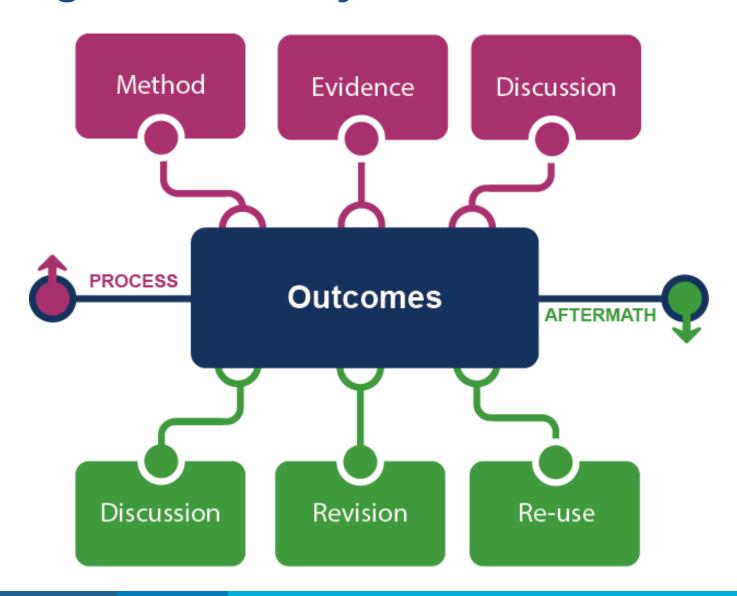
- Organize/support/drive discussions about ESR
- Big picture view of ESR
  - Categories of material
  - Stakeholder roles
- Common reference point for ESR within/across domains
- Support strategic planning by libraries, funders, publishers, scholarly societies ...



http://oc.lc/esr



## Framing the Scholarly Record ...





## In practice ...













"evolving manuscripts"











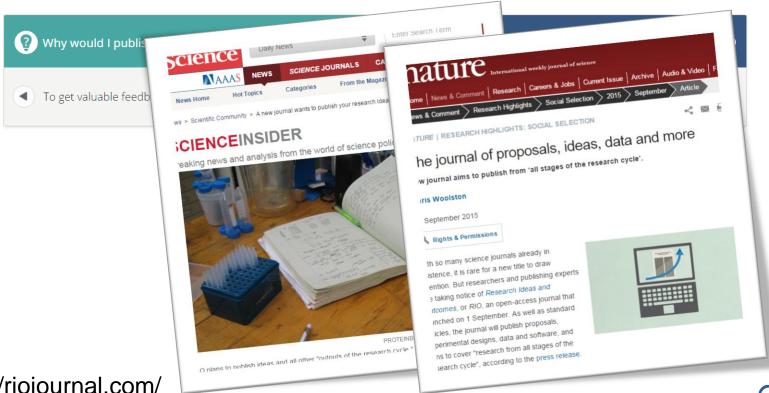


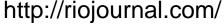


RIC

The Research Ideas and Outcomes (RIO) journal publishes all outputs of the research cycle, including: project proposals, data, methods, workflows, software, project reports and research articles together on a single collaborative platform, with the most transparent, open and public peer-review process. Our scope encompasses all areas of academic research, including science, technology, humanities and the social sciences.

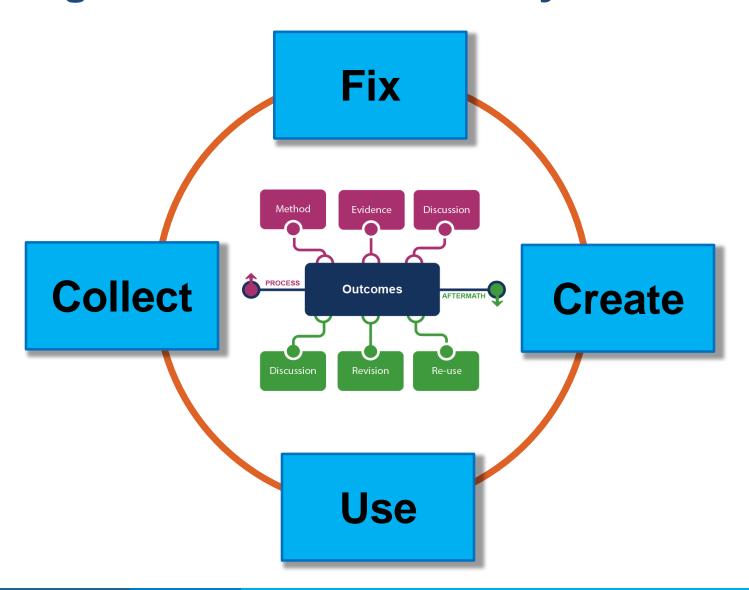
Read more about the journal on the RIO blog





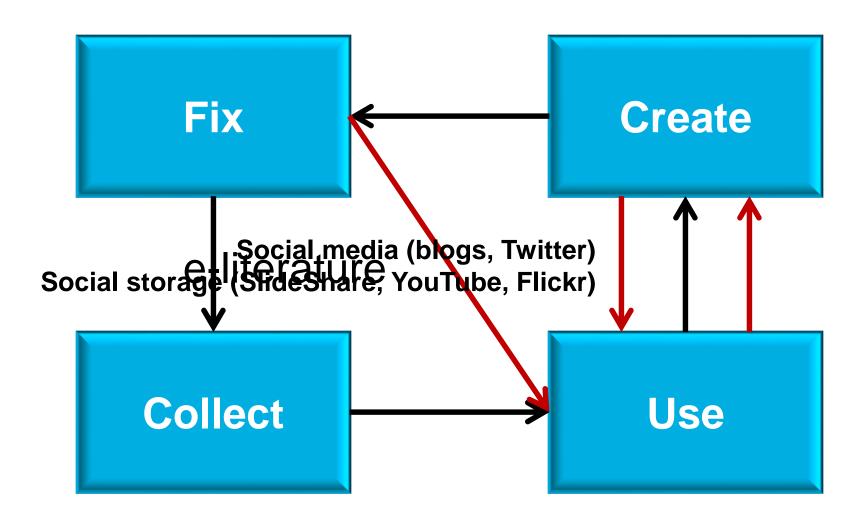


## Framing the stakeholder eco-system ...





## **Evolving configurations in the eco-system ...**



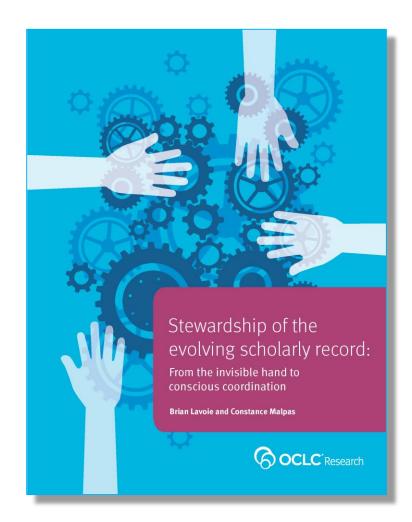


# **EVOLVING STEWARDSHIP MODELS**



### New Report: Stewardship of the Scholarly Record

- The scholarly record is evolving, so ...
- ... stewardship models for scholarly record are changing too
- "Conscious coordination" key to securing future of scholarly record



http://oc.lc/esr-stewardship

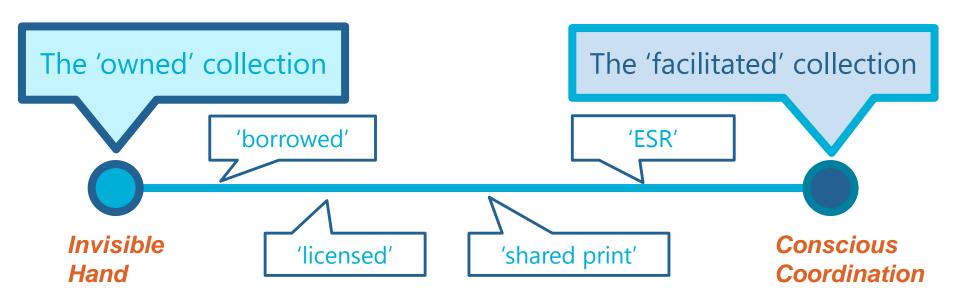


### **Stewardship** ... historically

- Stewardship of scholarly record was byproduct of uncoordinated, highly distributed, and duplicative process of managing local print collections.
- Sum of local stewardship efforts resulted in aggregate library resource that was relatively complete record of published (print) scholarly outputs
- "Invisible hand" metaphor: uncoordinated local efforts lead to socially desirable outcome



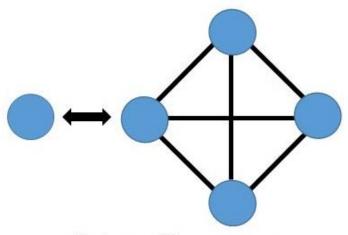
### Stewardship ... now



Scholarly record no longer approximated in academic library collections



#### Four elements of conscious coordination



System-wide awareness

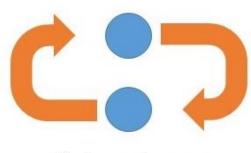
"Align local action with collective effort"



**Explicit commitments** 

"Move commitments above the institution"

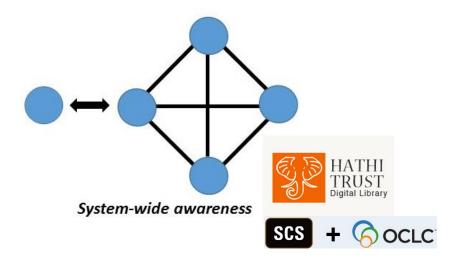




Reciprocal access

"Curate locally, share globally"

### **Examples**





Research Reserve





# IMPLICATIONS FOR ACADEMIC LIBRARIES



# Academic libraries: key issues



- Much of scholarly record not represented in local academic library collections
- Providing access to scholarly record involves shift from "owned collection" to "facilitated collection"
- Local collections/services increasingly embedded in networks of collective access/stewardship responsibility



# Library coverage: increasingly partial

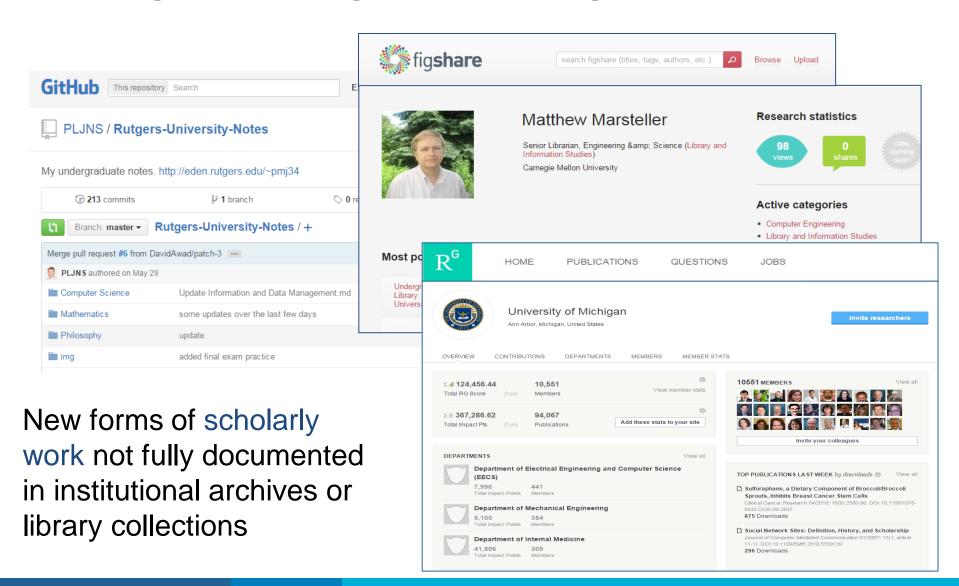
 Growing number and diversity of outputs published in venues outside traditional library supply chain: GitHub, Figshare, ResearchGate, Zenodo etc.

#### Questions to consider:

- Is your institution systematically collecting artifacts of research process and aftermath, as well as traditional outcomes?
- How can library expertise in appraisal and selection be applied to curation of materials managed outside the library?



## **Example: New publication platforms**





# **Curating "facilitated collections"**

- Demand-driven acquisition
- Open access resources included in local discovery environment, but not local collection
- Institutional repository (content) vs. institutional bibliography (metadata)

#### Questions to consider:

- Does the library track student/faculty use of 'extrainstitutional' repositories?
- Does the library coordinate with other campus units collecting or monitoring research/learning outputs?



# **Example: Open access content**



OCLC catalog records are available for 97 percent of the journals in our sample, representing 91 percent of the articles. The median number of holding libraries is 230, a number that does not vary

systematicall—by subject. These findings suggest that

Collins, Cheryl S., and William H. Walters. 2010. "Open Access Journals in College Library Collections". *The Serials Librarian*. 59 (2): 194-214.

Many libraries point to OA journals without participating in preservation schemes

Discoverability and stewardship are decoupled



Labs



Genomics and evolutionary biology Research article

Figures & data

#### Homo naledi, a new species of the genus Homo from the Dinaledi Chamber, South Africa

Lee R Berger ™, John Hawks, Darryl J de Ruiter, Steven E Churchill, Peter Schmid, Lucas K Delezene, Tracy L Kivell, Heather M Garvin, Scott A Williams, Jeremy M DeSilva, Matthew M Skinner, Charles M Musiba, Noel Cameron, Trenton W Holliday, William Harcourt-Smith, Rebecca R Ackermann, Markus Bastir, Barry Bogin, Debra Bolter, Juliet Brophy, Zachary D Cofran, Kimberly A Congdon, Andrew S Deane, Mana Dembo, Michelle Drapeau, Marina C Elliott, Elen M Feuerriegel, Daniel Garcia-Martinez, David J Green, Alia Gurtov, Joel D Irish, Ashley Kruger, Myra F Laird, Damiano Marchi, Marc R Meyer, Shahed Nalla, Enguye W Negash, Caley M Orr, Davorka Radovcic, Lauren Schroeder, Jill E Scott, Zachary Throckmorton, Matthew W Tocheri, Caroline VanSickle, Christopher S Walker, Pianpian Wei, Bernhard Zipfel

University of the Witwatersrand, South Africa: University of Wisconsin-Madison, United States; Texas A&M University, United States; Duke University, United States; University of Zurich, Switzerland; University of Arkansas, United States; University of Kent, United Kingdom; Max Planck Institute for Evolutionary Anthropology, Germany; Mercyhurst University, United States; New York University, United States; New York Consortium in Evolutionary y of Colorado Denver, United States;

#### New scholarly publication venues maximize visibility and impact

Montréal, Canada; Australian Nation University, Australia; Biology Department, Universidad Autònoma de Madrid, Spain; Midwestern University, States; Liverpool John Moores University, United Kingdom; University of Pisa, Italy; Chaffey College, United University of Johannesburg, South Africa; George Washington University, United States; University of Colora School of Medicine, United States; Croatian Natural History Museum, Croatia; University of Iowa, United States Lincoln Memorial University, United States; Smithsonian Institution, United States; Institute of Vertebrate

ISSN: 2050-084X Established 2012

Held in >125 libraries

















Reference tools:

DOWNLOAD OPEN

#### Related content

Geological and taphonomic context for the new hominin species Homo naledi from the Dinaledi Chamber, South Africa

PH Dirks, LR Berger, EM Roberts, JD Kramers, J Hawks, PS Randolph-Quinney, M Elliott, CM Musiba, SE Churchill, DJ de Ruiter, P Schmid, LR Backwell, GA Belyanin, P Boshoff, KL Hunter, EM Feuerriegel, A Gurtov, JDG

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- Mendeley
- Paperity
- PubMed Central





# **Networks of collective responsibility**

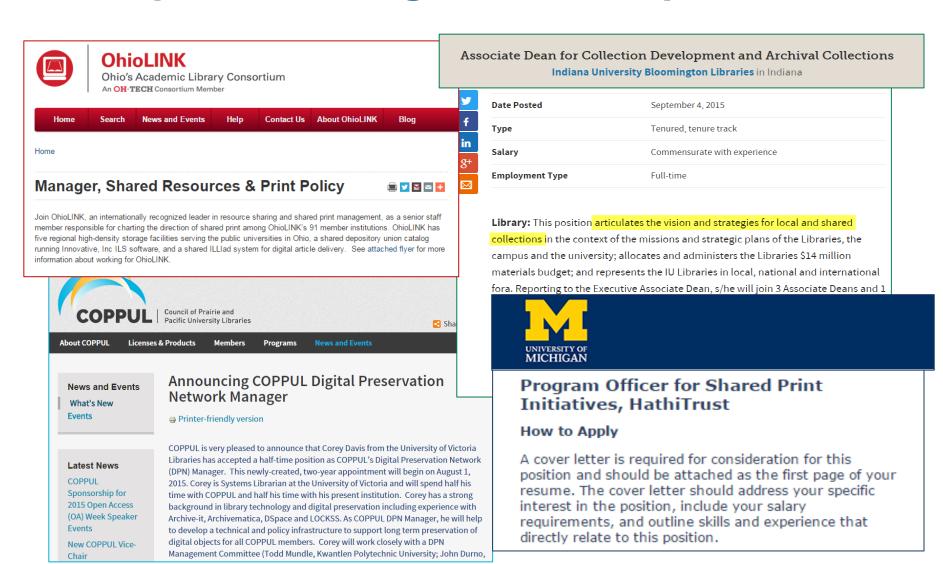
- Growing attention to governance of 'above institution' stewardship -- HathiTrust, UKRR, WEST, EAST etc.
- Governance/business models must incorporate sufficient incentives to elicit sustainable participation rates, contributions, and commitments.

#### **Questions to consider:**

- What is the primary motivation for your library to participate in cooperative stewardship arrangements?
- How do you evaluate the robustness of current partnerships? Are you confident they will last?



## Examples: Seeking stewardship at scale





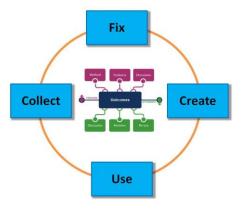
## What is the scholarly record?

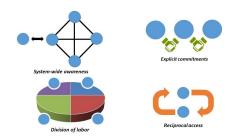
A selection of scholarly content ...

... supported by stable configurations of stakeholder roles ...

... sustained through conscious coordination











# **Thank You!**

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