Rutgers University Senate
Research and Graduate & Professional Education Committee

Response to Charge S-1107: Examine the possibility of a Rutgers-specific, centrally-driven publication repository for published papers and books. Provide data about similar services at peer and aspirant universities.

Background

Advances in technology and the rise of the Internet have in many ways transformed dissemination of the scholarly research literature. Without changing peer review systems or traditional journals, innovation and flexibility have been introduced into the publication process. Many university faculties have an interest in retaining some rights to their collective work in order to ensure the greater global reach of institutional research. Individual researchers seek some control over their research articles and are able to deposit copies in digital repositories. Often, researchers may find that this **"Open Access"** increases research impact.

Simply put:

> **Open-access (OA) literature is digital, online, free of charge, and free of most copyright and licensing restrictions. What makes it possible is the Internet and the consent of the author or copyright-holder. In most fields, scholarly journals do not pay authors, who can therefore consent to OA without losing revenue. (Peter Suber at http://www.earlham.edu/~peters/fos/brief.htm)**

Publishers and digital repositories have evolved over recent years to make this expanded access and reuse a reality, and funders and universities seek to develop policies that promote online visibility and accessibility of the scholarly literature on the open web.

A few of these policies can be found below:

Harvard   http://osc.hul.harvard.edu/policies
Stanford   http://ed.stanford.edu/faculty-research/open-archive/oapolicy
U. Kansas   https://documents.ku.edu/policies/governance/OpenAccess.htm
Duke   http://library.duke.edu/openaccess/duke-openaccess-policy.html
MIT   http://libraries.mit.edu/sites/scholarly/mit-open-access/open-access-at-mit/mit-open-access-policy

Worldwide support for Open Access has grown, and many scholars and universities support this movement as can be seen in the graph below:
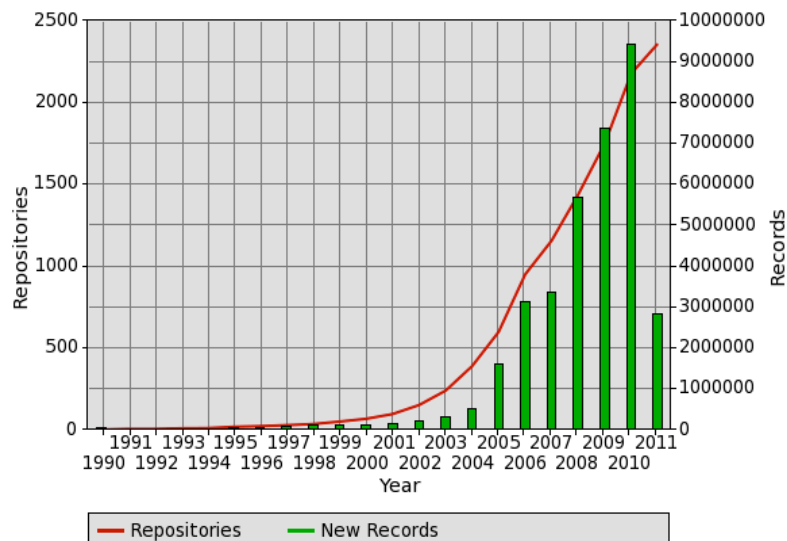
Registry of Open Access Repositories (ROAR): http://roar.eprints.org

Universities with Open Access Policies include:

Bucknell University	Rollins College
Case Western Reserve University*	Stanford University: School of Education*
Cornell University*	Temple University
Duke University*	Trinity University
Emory University*	University of California*
Harvard Business School*	University of Florida* (proposed)
Harvard Law School*	University of Hawaii-Manoa
Lafayette College	University of Kansas*
Massachusetts Institute of Technology (MIT)*	University of North Texas
Oberlin College	University of Virginia* (proposed)
Princeton University*	

Registry of Open Access Repositories Mandatory Archiving Policies (ROARMAP): http://roarmap.eprints.org/
* Member, Association of American Universities (AAU)

Many universities and authors have become signatories of international efforts such as that of the "Budapest Open Access Initiative (BOAI)"which reads (in part):

> **The literature that should be freely accessible online is that which scholars give to the world without expectation of payment.** Primarily, this category encompasses their peer-reviewed journal articles, but it also includes any unreviewed preprints that they might wish to put online for comment or to alert colleagues to important research findings. There are many degrees and kinds of wider and easier access to this literature. By "Open Access" to this literature, we mean its free availability on the public internet, **permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose**, without financial, legal, or technical barriers other than those inseparable from gaining access to the Internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited. (http://www.soros.org/openaccess/read)

An Open Access policy at Rutgers would build on the University's previous open access initiatives, including the Open Access requirement for dissertations and its support for the Federal Research Public Access Act. It would also align Rutgers with other AAU institutions, and bring the University into the growing Open Access movement.

Growth of active OA journals and research articles published in them, 1993-2009
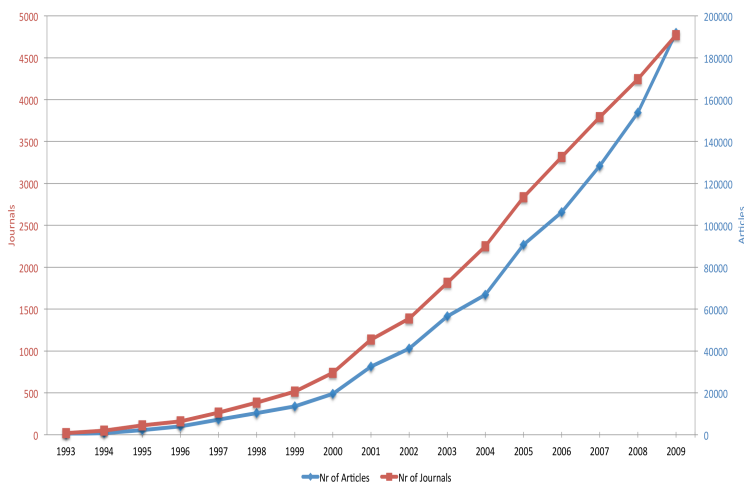
Laakso M, Welling P, Bukvova H, Nyman L, Björk B-C, et al. 2011 The Development of Open Access Journal Publishing from 1993 to 2009. PLoS ONE 6(6): e20961. doi:10.1371/journal.pone.0020961 Retrieved on 2012-01-09.

The policy would apply to all Rutgers faculty and scholars, including graduate students and post-doctoral researchers, and others. The scope of the policy is scholarly articles, i.e., those that describe the fruits of scholars' research given to the world for the sake of inquiry and knowledge without expectation of payment. Typically these are **peer-reviewed scholarly journal articles and conference proceedings**. Falling outside the scope are a variety of other scholarly writings such as: books and commissioned articles; artworks; popular writings including fiction and poetry; and pedagogical materials (lecture notes and videos, etc.). The policy would be prospectively applied, governing only publications authored after the adoption of the policy.

While the policy will require Open Access to all Rutgers scholarship, it is recognized that Open Access publication is not always an option. In these cases, the author would request a waiver or embargo for a particular article. An embargoed document is described in the repository (title, author, abstract, etc.), but the article itself is blocked from viewing until the embargo expires. If a waiver were granted, neither the article nor its description would be posted.

Benchmarking

Trends show continuing growth in establishment of Open Access policies and mandates by funders and institutions.

Growth Chart for Green OA Mandates by Funders and Institutions
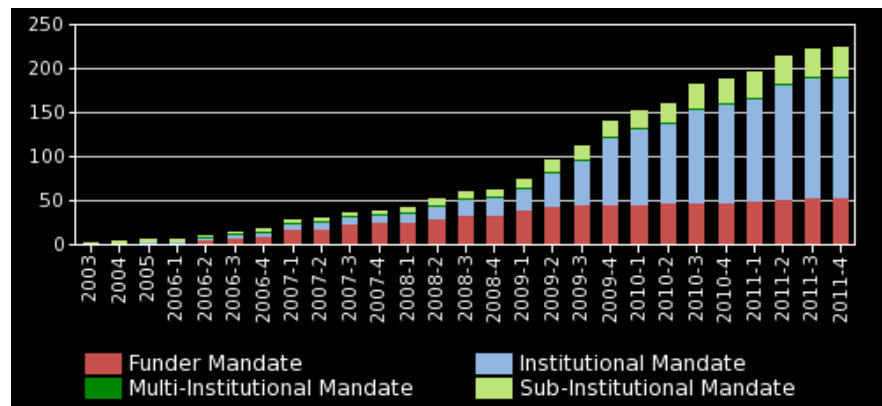
Registry of Open Access Repositories Mandatory Archiving Policies (ROARMAP): http://roarmap.eprints.org

Many peer and aspirant institutions have moved to faculty adoption of Open Access policies. "Many recent policies were initiated by faculty votes. Unanimous faculty votes resulted in strong OA policies at the **Harvard Faculty of Arts and Sciences, Harvard law School, The University of Kansas, the Stanford School of Education, and MIT**." (SPARC communication) An Open Access policy, alongside a robust institutional repository, ensures that Open Access behavior becomes part of regular scholarship practices. Mechanisms and support networks would be in place to assist faculty and scholars.

Policies and mandates run the gamut from very stringent to mere encouragement of Open Access behavior. The most effective policies mandate Open Access, requiring immediate deposit of the author's final peer reviewed and revised version (postprint) upon publication. All policies include an "opt out" mechanism or waiver for specific articles that are unable to be made Open Access due to publisher policy or other factors. Often, universities create a dedicated fund that authors may draw upon when deciding to choose Open Access publication outlets which levy fees. The self-archiving route to Open Access does not carry fees, as most repositories allow free deposit.

Benefits of Open Access

Benefits of Open Access accrue to the institution, the author, and to researchers and readers worldwide. Open Access reduces price and permissions barriers, opening up more scholarly literature for reading and reuse. For an article made Open Access, there is often a demonstrated citation impact, increasing research impact (http://opcit.eprints.org/oacitation-biblio.html).

Percent increase in citations with Open Access. Range = 36%-200%
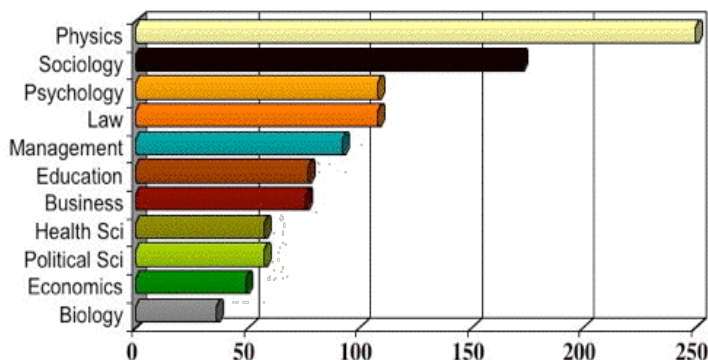

Brody & Harnad 2004; Hajjem et al. 2005; cited in Harnad, S. (2011) "What Is To Be Done About Public Access to Peer-Reviewed Scholarly Publications Resulting From Federally Funded Research? (Response to US OSTP RFI). http://eprints.ecs.soton.ac.uk/23080

Institutional scholarship is more easily disseminated, raising the profile and visibility of a university's research. Many funders now mandate deposit (such as NIH, Howard Hughes Medical Institute, Wellcome Trust, CERN, and organizations such as Autism Speaks), and now are moving to mandate deposit of research data generated with grant funding (NSF). Data could also be deposited at the time of publication of the associated article in an institutional repository. The research data on which the publication is based can be made openly available as well, if possible.

Roads to Open Access

There are two primary means that Open Access can be accomplished: the green road and the gold road. Authors can make their work Open Access by using the **green road (archiving articles in a digital repository)** or the **gold road (publishing in an Open Access journal)**. Most publishers now allow deposit of article versions in digital repositories.

The green road refers to the use of digital repositories to archive articles and make them available online. An author's final post-peer review versions of articles are easily and legally deposited in a repository during the usual publication process. Each article is preserved as a unique digital object, available free to researchers for reading and reuse, while requiring attribution as usual. Authors retain and control their copyrights while allowing their institutions limited license to make them available online. Journals and publishers are not harmed by the process of author self-archiving, but instead most permit authors to retain rights to final versions post-peer review. Universities with policies provide all of the services and support to facilitate the process of author self-archiving. Universities with mandates triple the percent of green Open Access.
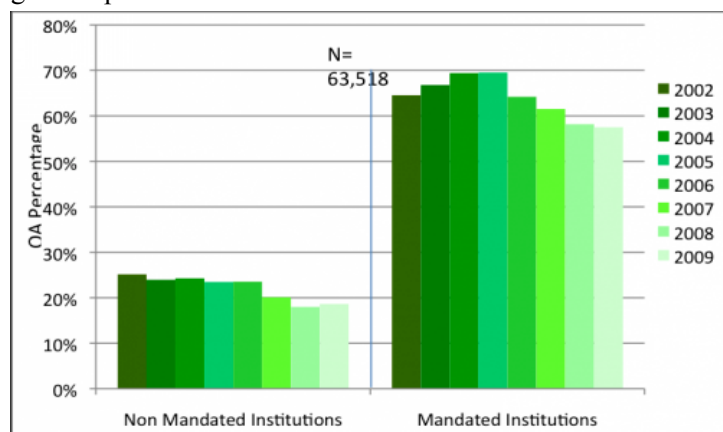

Percent green OA self-archiving averaged for the four institutions with the oldest self-archiving mandates, compared to the percentage for control articles from other institutions published in the same journals (for years 2002-2009, measured in 2011). Respective totals are derived from Thompson-Reuters-ISI index. Poynder, Richard (2011). Open Access By Numbers Open and Shut June 19 2011

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The second means to Open Access, the "gold road," is accomplished through the author's choice of publishing in an Open Access journal. Open Access journals from a variety of publishers produce articles that are free and openly available to readers on the Internet. Open Access journals often differ only in business model while retaining the same markers of quality such as level of peer review or impact factor. Current trends show greater numbers of Open Access journals becoming available from a variety of publishers. Some traditional journals offer Open Access options for individual articles. There are many options for those who seek this route to Open Access.

There are two main types of repositories: institutional or subject/disciplinary. Institutional repositories ensure visibility of the university's scholarly output, making sure deposited materials are organized, permanent and secure. Persistent identifiers are supplied to each article for citation and sharing. Rutgers institutional repository, RUcore, facilitates faculty and scholarly deposit.

Subject repositories are already an important element of some disciplinary cultures. Well known subject/ disciplinary-based repositories exist for physics and computer science (arXiv), economics (RePEc (http://repec.org/), biomedical fields (PubMed Central (http://www.ncbi.nlm.nih.gov/pmc/), and social sciences (SSRN: Social Science Research Network (http://www.ssrn.com), for example. Papers deposited in disciplinary archives can often also be archived in the institutional repository.

Availability of gold and green OA copies by scientific discipline
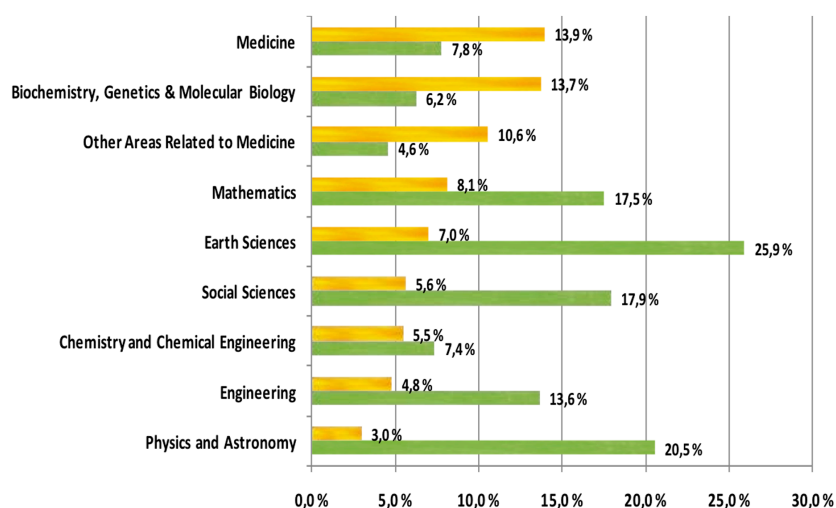
Björk B-C, Welling P, Laakso M, Majlender P, Hedlund T, et al. 2010 Open Access to the Scientific Journal Literature: Situation 2009. PLoS ONE 5(6): e11273. doi:10.1371/journal.pone.0011273

Recommendations

Rutgers University is committed to disseminating the fruits of its research and scholarship as widely as possible. In keeping with that commitment, we recommend the adoption of the following resolution and policy:

Whereas, the University advocates open scholarship for the purposes of study and dialogue;

Therefore, Be It Resolved, that the University:

1. Establish, in consultation with University Counsel, a University-wide Open Access policy wherein Rutgers faculty and scholars, including graduate students and post-doctoral researchers, shall provide Open Access to all works that are produced without expectation of payment, subject to waivers and embargoes upon request by an individual author for a specific work.

2. Adopt the Rutgers Open Access Policy: [text has been adapted from Harvard's Model Open-Access Policy: http://osc.hul.harvard.edu/modelpolicy]

Rutgers Open Access Policy:

Each scholar grants Rutgers permission to make available his or her scholarly articles and to exercise the copyright in those articles. More specifically, each scholar grants to Rutgers a nonexclusive, irrevocable, worldwide license to exercise any and all rights under copyright relating to each of his or her scholarly articles, in any medium, provided that the articles are not sold for a profit, and to authorize others to do the same. The Rutgers author remains the copyright owner unless that author chooses to transfer the copyright to a publisher.

The policy applies to all scholarly articles authored or co-authored while the person is affiliated with Rutgers, except for any articles completed before the adoption of this policy, and any articles for which the scholar entered into an incompatible licensing or assignment agreement before the adoption of this policy. The Executive Vice President for Academic Affairs (EVPAA-or his or her designate) will waive application of the license for a particular article or delay access for a specified period of time upon express direction by a scholar. The University also commits to incorporating mechanisms at the graduate level to educate students in the Open Access process.

Each scholar will provide, at no charge, an electronic copy of the author's final version of each article, no later than the date of its publication, to the Office of the EVPAA, in a format specified by the EVPAA.

3. Charge the EVPAA with establishing an Open Access Policy Implementation Working Group, representing all campuses and constituencies, chaired by the Vice President for Research and Economic Development and the Vice President for Information Services and University Librarian, to develop an implementation plan to:
    a. Address administrative governance
    b. Establish means to ensure compliance
    c. Ensure infrastructure and resources of RUcore, the Rutgers institutional repository, are sufficient to support increased deposits of research output
    d. Foster further development of the repository
    e. Create a network of research support office staff to answer faculty and scholars' questions on Open Access
    f. Investigate options for establishing author funds to facilitate Open Access journal publication [e.g., HOPE Fund (http://osc.hul.harvard.edu/hope) and COPE (http://www.oacompact.org/compact)]
    g. Register the policy in the Registry of Open Access Repositories Mandatory Archiving Policies (ROARMAP) http://roarmap.eprints.org
    h. Formally join institutional peers in the Open Access movement through affiliation with COAPI (Coalition of Open Access Policy Institutions), BOAI (Budapest Open Access Initiative), and others
    i. Develop programs to educate the Rutgers community in the broader issues of open access and scholarly communication

Additional Resources

Open Access Overview
http://www.earlham.edu/~peters/fos/overview.htm

ROARMAP (Registry of Open Access Repositories
Mandatory Archiving Policies) http://roarmap.eprints.org

Budapest Open Access Initiative
www.soros.org/openaccess

Effect of Open Access on citation impact
http://opcit.eprints.org/oacitation-biblio.html

SPARC (Scholarly Publishing & Academic
Resources Coalition) on Open Access
http://www.arl.org/sparc/openaccess/index.shtml

RUcore, the Rutgers institutional repository
http://rucore.libraries.rutgers.edu

RUresearch Data Portal in RUcore
http://rucore.libraries.rutgers.edu/research

Frequently Asked Questions (*adapted from SPARC)*

How does Open Access affect peer review? OA policies are concerned with what happens to an article *after* it has been published, and have no impact on the peer review system. The goal of OA policies is simply to remove access barriers to research. Peer review is an important part of the culture of scholarly research, and will continue as long as scholars believe it is of value. The value, rigor, or integrity of peer review does not depend on the medium of the journal, who is granted access to it, or at what price.

Does an Open Access policy limit where I can publish? No. There is currently no campus OA policy which requires authors to publish in an OA journal. Authors publish in any journal they choose, and exercise their rights as authors to deposit a copy of the article in an open-access repository. Under a Rutgers OA policy, faculty and scholars remain in control of what to publish, when to publish, where to publish, and how audiences can gain access to their published research. Faculty and scholars granting Rutgers a copyright license under an OA policy simply enable Rutgers to expand the audience for their published works.

What are Open Access Journals and how do publishers feel about Open Access?
There are different types of Open Access journals. Some require author fees and others do not charge any fees. Journals published via Open Access models may be published by commercial, society, or library publishers, for instance. Open Access journals differ from traditional subscriptions by business model but otherwise may be very similar. Web of Science, for instance assigns impact factors to Open Access journals, and Open Access does not have anything to do with the quality of type of peer review. Some popular Open Access publishers would be Public Library of Science or BioMedCentral, but many publishers have Open Access options within their suites of products.

Most commercial publishers, such as Elsevier allow self-archiving of article postprints in repositories. Publishers have become accustomed to accommodating Open Access to individual articles, although many do not permit self archiving of the publisher branded PDF version. Some commercial publishers produce Open Access journals. Examples would be titles from Wiley, Sage, Springer, and many others. These titles often charge author fees to publish articles on the web.

Some libraries publish Open Access journals (Rutgers University Libraries publishes five Open Access journals). Organizations and societies also publish Open Access journals. Often, these titles do not charge fees. There are also nonprofit publishers of Open Access journals, such as PLoS (Public Library of Science) The 'Directory of Open Access Journals" (http://www.doaj.org/) is a good source of available titles and publishers. Authors can search this directory by subject for information about available Open Access journals.

Most Open Access journals use a "Creative Commons" license (http://creativecommons.org/licenses/). From the site: "All Creative Commons licenses have many important features in common. Every license helps creators — we call them licensors if they use our tools — retain copyright while allowing others to copy, distribute, and make some uses of their work — at least non-commercially."

What if my chosen publisher doesn't allow Open Access? A Rutgers OA policy would offer a broad opt-out provision allowing faculty and scholars to obtain a waiver from the requirement to make an article openly available. On the rare occasion when the chosen publisher will not accept the terms of the Rutgers OA policy, the author may direct that a waiver or embargo be granted, and the work is published. Furthermore, more and more publishers are accommodating Open Access when there is an institutional mandate. In fact, the majority of publishers, as a matter of policy, permit authors to self-archive their articles so they may easily comply with a campus OA policy (see http://www.sherpa.ac.uk/romeo). In some cases, authors can negotiate for their rights with the help of an addendum to the publication agreement. Several such addenda are freely available online; for example, see http://www.arl.org/sparc/author/addendum.shtml.

What will Open Access mean for journal publishing? OA policies focus on ensuring global access to the results of scholarly research, not on imposing any specific business model on journal publishers. Widespread OA can coexist with continued journal subscriptions. After more than a decade of OA practices in some disciplines, no data suggests Open Access to content also available through a journal is a significant factor in journal subscription cancellations. In contrast, high subscription prices *have* been a significant factor in cancellations.

How does Open Access work with copyright law? Authors own the copyright over their work from the moment they put pen to paper, and retain that copyright until they transfer it others, such as publishers. Under a Rutgers OA policy, authors would grant the University permission to make their articles available on the Internet through the institutional repository, RUcore. Authors retain ownership and copyright, and may then exercise that copyright in any way they choose, including transferring rights to a journal publisher that has accepted the article for publication.

Does the importance of an Open Access policy vary by discipline? While all disciplines have unique characteristics, there is no condition that precludes an OA policy from being effective and desirable in any discipline. Campus OA policies have been adopted with faculty support in schools of law, education, arts and sciences, and foreign language, at both public and private institutions, inside the U.S. and worldwide. (See http://www.eprints.org/openaccess/policysignup).

Will compliance with an Open Access policy mean more work for me? Campus OA policies are designed to facilitate compliance. They require faculty to deposit their manuscripts in Open Access repositories, and the Rutgers repository, RUcore, allows self-deposit to make it as easy as possible. Institutions with experience in implementing OA policies have noted that it takes authors only about 10 minutes per paper to deposit an article (http://publicaccess.nih.gov/submit_process.htm). This is consistent with our experience at Rutgers. This number may be further reduced with experience and support from librarians, administrative staff, co-authors, or others.

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