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Article Deposit Services in Support of Federal Agency Public Access Requirements

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INTRODUCTION Academic libraries have experimented with a variety of services to encourage article deposit to institutional repositories, with varying degrees of success. Universities now face the challenge of meeting federal agency public access requirements. Following the White House Office of Science Technology and Policy public access directive in 2013, Oregon State University (OSU) initiated an article deposit service to help faculty meet funding agency requirements and facilitate deposit of articles to both federal agency repositories and the institutional repository. This case study describes the article deposit form developed by the library to encourage article deposits to the institutional repository and federal agency repositories, the processes and people put in place to request and deposit the articles, and the impact of the service on the number of articles deposited to federal agency repositories. **DESCRIPTION OF PROJECT** In the two years since the article deposit service was initiated, a total of 102 articles have been deposited by the library to the PubMed Central or PAGES federal agency repositories. The inclusion of a request for faculty to indicate federal funding in the article deposit form has not resulted in increased article self deposits. Identifying and requesting National Institutes of Health and U.S. Department of Energy funded articles from faculty for deposit to the institutional repository and to the agency repositories has also not received substantial uptake. The majority of articles that have been deposited to federal agency repositories by the library were received after library staff reviewed bibliographies of grant funded research for compliance with public access policies. **NEXT STEPS** As a result, the library is now working with the university office of research to promote a service that asks faculty for a bibliography of their articles that result from NIH or DOE funding, identifies those that need to be deposited to the agency repositories, and provides a link to the library's article deposit form for them to initiate article deposits to the institutional repository and to agency repositories.

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INTRODUCTION

Recognizing the value of open access to scholarly information, academic libraries are seeking new ways to increase the number of faculty articles deposited to their respective institutional repositories. OSU has proactively worked to increase the rate at which faculty articles are deposited to the OSU institutional repository, ScholarsArchive@OSU, by initiating a variety of mediated deposit services. In March 2014, the library expanded article deposit services to include third party deposits of faculty articles into the PubMed Central (PMC) repository in order to meet National Institutes of Health public access requirements. In 2015, the service was extended to include deposit of Department of Energy (DOE) funded articles to the PAGES repository. This case study describes the reasons why OSU initiated this service, the tools, workflows, and people put in place to make it happen, the impact of the service, and future plans for the service.

The ScholarsArchive@OSU, OSU's institutional repository that runs on DSpace, has been in place since 2004, and, as of April 2016, contains over 58,000 total items including over 7,800 items classified as articles. An institution-wide, rights retention open access policy was passed by the university's faculty senate in June 2013, and the library was charged with its implementation. The policy ascribes non-exclusive rights to the university to distribute research articles, allowing the library, as the designated academic unit responsible for policy implementation, to distribute articles to other disciplinary repositories on an author's behalf. As part of the implementation of the open access policy, the library established an article deposit form as a self-deposit mechanism using a lightweight protocol called SWORD (Simple Web-service Offering Repository Deposit).

Prior to the OSU open access policy, the library already had a process in place to identify and request newly published articles from faculty for deposit to the institutional repository. The library identifies newly published OSU articles based on zip code using a Web of Science RSS feed and requests those articles from faculty for library deposit to the ScholarsArchive@OSU. Despite having this service in place, only 40% to 50% of newly published faculty articles were found to be entering the repository (Zhang, Boock, & Wirth, 2015). Although this is a relatively high rate of deposit, even among institutions with open access policies in place (Vincent-Lamarre et al., 2007), OSU remains committed to increasing this deposit rate in order to ensure the broadest possible dissemination of the university's scholarship.

LITERATURE REVIEW

A number of articles describe failed library efforts to increase deposit of faculty articles to institutional repositories. Mercer describes University of Kansas institutional repository marketing efforts and mediated article deposit services that resulted in minimal faculty uptake (Mercer, Rosenblum, & Emmett, 2007). Troll Covey (2011) conducted faculty focus groups to determine motivations and barriers to depositing research in their institutional repository and found that the “lack of value-added services [to faculty] presented a significant barrier to deposit.” Kim (2011) found that the time and effort required for faculty authors to self deposit articles to be a significant barrier. Kim noted other barriers including non-intuitive, poorly designed submission interfaces and the time required to create or extract content metadata.

Academic libraries and publishers have proposed solutions for supporting the White House Office of Science and Technology Policy (OSTP) public access mandate. Building on the success of the National Institutes of Health (NIH) Public Access Policy, on February 22, 2013 the OSTP released a memo titled, “Increasing Access to the Results of Federally Funded Scientific Research.” In short, the memo: “...directed Federal agencies with more than \$100M in R&D expenditures to develop plans to make the published results of federally funded research freely available to the public within one year of publication and requiring researchers to better account for and manage the digital data resulting from federally funded scientific research.”¹ Since 2008, the NIH has required that researchers who apply for grants must include a PMC reference number (PMCID) when citing their papers supported by NIH funds. In 2013, this was changed to require that “anyone submitting an application, proposal or report to the NIH must include the PMC reference number (PMCID) when citing applicable papers that they author or that arise from their NIH-funded research.”²

Harvard Medical School Library (HMS) provides seminars about NIH public access policy requirements, but also developed an online submission tool for faculty that enables library staff to relay article submissions to PubMed Central (Lapinski et al, 2014). The success of the HMS Library services depends on the close relationships between the library and institutions both internal and external to Harvard. However, the authors do not provide quantitative measures such as the number of articles deposited by the service or online tool, so it is hard to determine the impact of the services.

The SHARE initiative, inaugurated by the Association for Research Libraries with the

¹ Memorandum for the Heads of Executive Departments and Agencies (Feb. 22, 2013), available at https://www.whitehouse.gov/sites/default/files/microsites/ostp/ostp_public_access_memo_2013.pdf.

² <https://publicaccess.nih.gov/include-pmcid-citations.htm>

support of the Association of American Universities and the Association of Public and Land-grant Universities, began with a goal to help institutions of higher education and their faculty meet OSTP deposit requirements. As part of this effort, the Center for Open Science is now responsible for harvesting article and dataset metadata from participating repositories and making it available as a searchable database of publicly accessible research (Ruttenberg, 2016). Recently, SPARC, the NIH, and members of the Coalition for Open Access Policy Institutions (COAPI) developed specifications for a unified deposit tool that would allow authors to deposit an agency funded article simultaneously to a designated agency repository and to their institutional repository (P. Suber, personal communication, September 30, 2016). The Center for Open Science is in the process of implementing a prototype that will soon be available for public input (H. Joseph, personal communication, Oct. 5, 2016).

The Clearinghouse for the Open Research of the United States (CHORUS) is a publisher-driven initiative in response to OSTP's public access policy for federally funded research. CHORUS plans to build a web portal where the public can search and retrieve papers derived from federally funded research from publisher websites. The underlying infrastructure of the portal builds on existing platforms such as CrossRef, FundRef, and ORCID (Cochran, 2014). However, the CHORUS proposal has been challenged by authors and librarians because the solution "lacks find-ability, useability and interoperability (Smith, 2013, para. 6)." Heather Joseph, SPARC Executive Director, claims that CHORUS "doesn't offer a solution for a stable, sustainable long-term archive, or do much of anything to facilitate reuse of the full corpus of publicly funded research (text-mining, computational analysis, etc.)—items that are key to the success of the OSTP directive (Howard, 2013, para. 11)."

DESCRIPTION OF PROGRAM/SERVICE

Why Offer Third Party Article Deposit Services?

OSU faculty have expressed public support for open access in a variety of ways over the years: via a faculty senate open access resolution (2005) that promotes the principle of open access to the university's research, college and unit level open access policies (2009-2011), and a university-wide policy (2013). Still, at best only 50% of OSU-authored research articles are entering the repository, the majority of which are deposited by library staff on behalf of faculty rather than through faculty self deposit. This suggested to the library that something more could be done to achieve a higher article deposit rate.

In 2014, an interdisciplinary, multi-college research group at OSU sought a non-competitive

renewal of an NIH award. The group discovered that most of the articles resulting from their initial grant were indexed by PubMed but had not yet been deposited to PubMed Central as required. Many of the faculty assumed that either publishers took care of this or that it was sufficient to have a PubMed ID rather than the required PMCID that demonstrates the public accessibility of articles in PMC.

Aware that the library had instituted an article deposit service to meet the terms of the university's open access policy, the research team sought the library's help to ensure that all of the articles resulting from their award were deposited into both ScholarsArchive@OSU and PMC. Faculty could then cite PMCIDs in their grant renewal documents in order to ensure continued funding. The library was also interested in helping faculty meet funding agency requirements that emerged as a result of the OSTP memorandum and facilitate deposit of articles to both federal agency repositories and the institutional repository. The resulting deposit service offered by the library would not only be valuable for faculty seeking to comply with federal access policies and OSU's open access policy at the same time, but it would also encourage researchers who might not otherwise have done so to deposit their articles into the institutional repository. During the course of passing the open access policy, the team of faculty responsible for writing it promised that it would position faculty and the university to meet the terms of emerging agency public access requirements. Offering this federal agency article deposit service was an opportunity to fulfill that promise.

Open Access Self-Deposit Form

The library's development of a SWORD-based article deposit form links the library's article recruitment process with ScholarsArchive@OSU institutional repository deposit. When faculty receive an article recruitment email from library staff, they can initiate article deposit by clicking an embedded link in that email. Faculty are also free to deposit articles using the form on their own at any time. Compared to the default DSpace deposit interface, the article deposit form divides the deposit process into more intuitive, simple, and efficient sequences (Figure 1). The form also adds new features such as automated metadata creation, requests for federal agency grant metadata, and an open access policy waiver option (Figure 1).

Because DSpace provides an optional SWORD deposit module, it was logical to use this protocol as the basis for the article deposit form. The library selected the Easy Deposit³ open source SWORD toolkit in order to customize the form to meet the library's needs.

³<http://easydeposit.swordapp.org/>

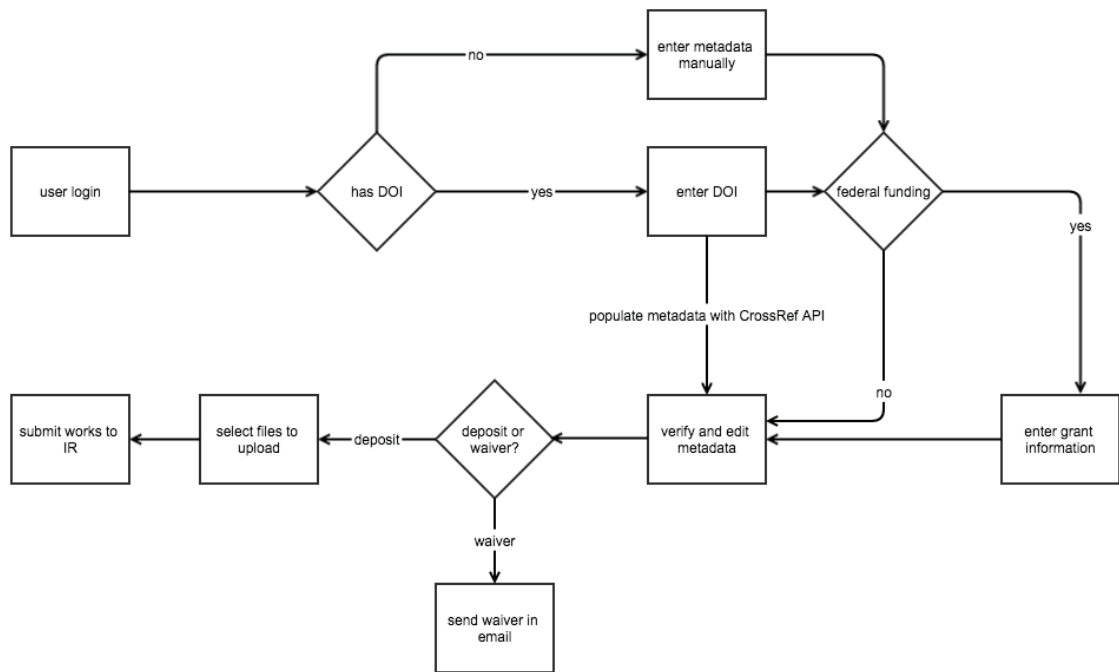


Figure 1. ScholarsArchive@OSU article deposit form steps

Depositors must have a valid OSU Network Identification and be currently affiliated with OSU. The form uses the CrossRef API⁴ to automatically retrieve and populate bibliographic metadata including author, publication year, journal, volume number, and issue number. Depositors who need to fulfill federal funding agency public access requirements can choose to enter information such as grant identifier, primary investigator (PI), and Co-PI in order to initiate library third party article deposit to federal agency repositories. Contents submitted to ScholarsArchive@OSU using the deposit form are reviewed by library staff. Library staff send a notification to the depositor’s email when the submission is approved and available in the institutional repository.

Federal Agency Article Deposit Workflow and Staffing

When an OSU author uses the article deposit form and includes a grant number and grant agency information, the article enters the ScholarsArchive@OSU institutional repository review workflow. A staff member within the Center for Digital Scholarship and

⁴ <http://search.crossref.org/help/api>

Services, the library unit responsible for the institutional repository and open access and public access policy implementation, processes all articles that contain NIH or DOE metadata. This work constitutes .05% of a position, or approximately 2 hours per week.

Staff also forward NIH and DOE funded article citations received through the Web of Science feed to the staff member responsible for requesting articles for deposit to agency repositories. The staff member checks to see if the article is already available in DOE PAGES or PMC with a PMCID or if the journal will deposit the article on the author's behalf. If the article is not in the NIH or DOE manuscript submission systems or scheduled to be deposited by the journal, the staff member sends an email to the OSU author requesting an author's accepted manuscript version of the article and any supplementary information such as figures and tables. Once the staff member receives the manuscript, the article is deposited to the institutional repository and to DOE PAGES or PMC. The staff member notifies the author that the deposit is in process and, for NIH funded articles, to expect an email that will ask for author approval of the final manuscript in PMC within 4-6 weeks (Figure 2).

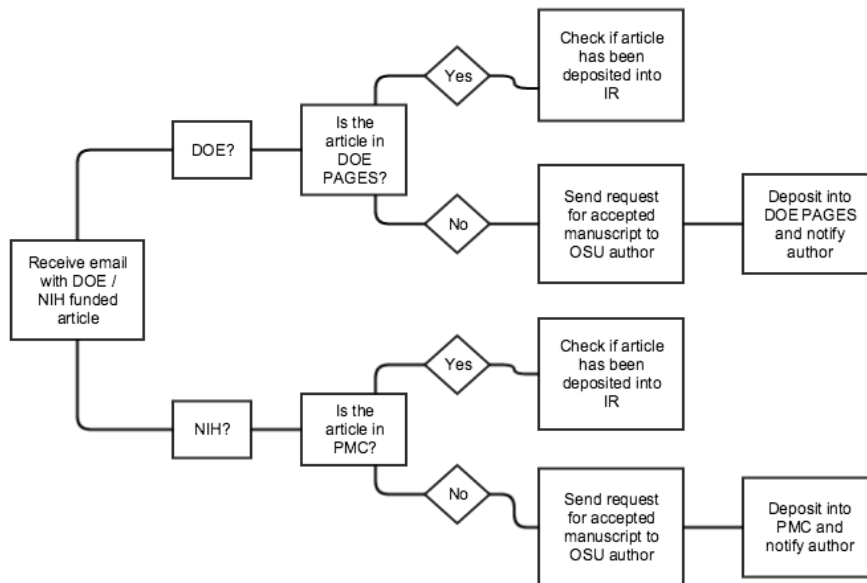


Figure 2. Federal Agency Article Deposit Service workflow

The NIH only allows authors to provide that final review and approval of manuscripts deposited to PMC. DOE PAGES deposits are similar except that they allow links back to the article available in the institutional repository in lieu of PDF deposit. Complete OSU article deposit procedures for both agencies are available in Appendices A and B. Both the NIH and the DOE check articles carefully to ensure that supporting figures and tables are included. If any tables or figures are missing from an article, the agencies will halt the processing of the article until they are supplied.

Articles Deposited to Federal Agency Repositories

In the two years since the federal agency article deposit service was initiated, a total of 102 articles have been deposited by the library to the PMC or PAGES federal agency repositories. Ninety articles were deposited to PubMed Central and 12 articles to PAGES. The low number of deposits may be due to the increasingly active compliance of journals with agency public access policies. For example, thirty-nine of the 57 NIH-funded articles received from faculty after article requests were made from March 2015 to April 2016 already had a PMCID assigned.

The two main obstacles to the library being able to complete deposits to agency repositories on the authors' behalf are the low rate of response to author's accepted manuscript requests and missing or incorrect grant award IDs provided by faculty. Sixty-one requests for DOE-funded articles were sent from the library to faculty from May 2015 to April 2016 with only 12 of the requests resulting in a successful deposit. Forty-two of the incomplete deposits were due to no response to emails that requested the article from faculty, while 7 were due to issues with the grant award ID. Similar results have been found with NIH deposits. Twelve of the 18 accepted manuscript requests sent between March 2015 and April 2016 for NIH-funded articles received no response from the author. The staff member who works on deposits reports that even faculty members who provided manuscripts in the past no longer respond to emails.

The lack of faculty responsiveness to article requests, and the relative success of bibliography reviews in getting faculty articles has led the library to reconsider how the service is offered. Of the 102 articles successfully deposited to federal agency repositories by the library, 65 were received as a result of a staff member reviewing bibliographies sent to the library to determine article-deposit compliance. One example of this was a principal investigator who expressed interest in working with the library to identify gaps in compliance with the NIH public access policy and to make articles available in the ScholarsArchive@OSU. A bibliography was provided for articles associated with the NIH-funded research, and the library searched PubMed Central for articles. The PI provided manuscripts for all

noncompliant articles and the library deposited the articles to PMC and ScholarsArchive@OSU. This experience of working directly with a principal investigator was similar to the initial success of the library's PMC deposit service, which began as collaboration between the university's Environmental Health Sciences Center and the library to review bibliographies for article deposit compliance and to deposit non-compliant articles.

Use of the Article Deposit Form

In spite of adding federal agency deposit services via the article deposit form, the availability of the form has not resulted in a dramatic increase in use by faculty authors since its launch in Spring 2014 (table 1). Self-deposit numbers using the article deposit form remain lower than expected. Although the number of articles deposited via the article deposit form more than doubled between 2014 and 2015 (44 articles in 2015 to 20 articles in 2014), the percentage of articles deposited via that mechanism has remained relatively low (5% of the total number of article deposits in 2015) compared with the number of articles delivered to the library for deposit as email attachments (Table 1).

The inclusion by faculty of federal agency metadata in the article deposit form serves notice

Submission type	2014	2015
Articles submitted to the library via the article deposit form	20	44
Articles submitted to the library via an email attachment	948	955
Total	968	999

Table 1. Number of Articles Deposited to ScholarsArchive@OSU via the article deposit form and email attachments

to the library that an article could potentially be deposited to the respective federal agency repository in addition to the institutional repository, provides authorization to the library to make such deposits on the author's behalf, and provides the metadata necessary for deposit to agency repositories. Of the articles deposited by faculty using the article deposit form between January 1-December 31, 2015, only two included NIH or DOE federal agency metadata, so the article deposit form is clearly not a preferred means for faculty to deposit articles to federal agency repositories.

Lessons Learned

Prior to undertaking the federal agency article deposit service at OSU, there was some concern within the library about whether such a service could be sustainably supported with existing staff. There was also discussion about whether federal agency repository article

depositing was an appropriate role for the library to undertake. Shouldn't faculty PIs be responsible for meeting federal agency guidelines themselves? The library determined that if the deposit service resulted in an increase in the number of articles faculty deposited to the IR, then the library should be willing to do it, as the work involved would be relatively minimal and could be added to existing workflows. It is important to note that OSU is generally comfortable with offering new and untested value-added services even when there is the potential of failure.

The library was prepared for the service to be successful. Paraprofessional staffing of 1.5 to 2 FTE had already been reallocated from more traditional technical services functions in the library (cataloging and binding) to do faculty article ingest and repository related work. It was agreed that additional staffing could be allocated to article deposit efforts should that need arise. As it happens, it has not been found to be burdensome to meet the federal agency deposit requests that do come in, in part because of the lack of uptake.

NEXT STEPS

The success of working directly with a PI to determine whether articles resulting from a specific grant had been deposited has inspired the library to collaborate with the OSU office of research to promote the service. Promotion of the bibliography review and article deposit service will coincide with due dates for grant reports and renewals. PIs will also receive information about the service when they receive a close out letter from the office of research, at which time PIs will be asked if they have met the terms of the federal agency public access requirements. PIs will be given an opportunity to provide the library with a bibliography of research resulting from a grant. The library will check to see if the articles have been deposited to PMC or PAGES and to ScholarsArchive@OSU. The author will be asked to deposit articles using the article deposit form. The library anticipates that adding a link to information about this bibliography review service and to the article deposit form from award notifications will be a more effective way to reach faculty, just in time and at the point of need.

Receiving articles from faculty remains the biggest challenge, but also getting the author's accepted manuscript version that federal agencies require rather than the copy-edited publisher version of record. Another challenge is getting all of an article's supplementary data (tables, figures, etc.) that agencies require from the faculty member. Both the NIH and DOE take great care to check that all figures and tables are included either within the text or as supplementary files.

CONCLUSION

The purpose of offering a third party article deposit service to federal agency repositories was to increase the number of articles deposited to the ScholarsArchive@OSU institutional repository. It was presumed that depositing articles on authors' behalf would be valued by the faculty responsible for meeting then emerging and poorly understood federal agency public access requirements. While the library has deposited over 100 articles to PubMed Central and PAGES repositories for faculty since the service was offered in Spring 2014, offering this service has neither resulted in a sizable increase in the number of faculty using the article deposit form nor in an increase in the number of articles deposited to the repository as a whole.

Because it requires relatively little added effort for the library to deposit articles to PubMed Central or PAGES, the library intends to continue the service, but with some variation. Previously, the library identified articles that resulted from NIH and DOE funding and requested those articles from faculty for deposit to ScholarsArchive@OSU and the agency repository. Because this has not had a positive effect on the number of articles deposited, the library no longer mentions the federal agency deposit service to faculty when requesting articles for deposit to the institutional repository. Instead, the library is working with the university's office of research to include a link to information about the article deposit service and the article deposit form in automatic notifications to PIs. The library will review bibliographies of articles resulting from agency funding, determine which articles have not yet been deposited to agency repositories, and point the PIs to the article deposit form.

REFERENCES

- Cochran, A. (2014, July 9). Implementing CHORUS: Big decisions loom for publishers [Web log post]. Retrieved from <https://scholarlykitchen.sspnet.org/2014/07/09/implementing-chorus-big-decisions-loom-for-publishers/>
- Covey, D. T. (2011). Recruiting content for the institutional repository: The barriers exceed the benefits. *Journal of Digital information*, 12(3).
- Howard, J. (2013, June 4). Publishers propose public-private partnership to support access to research. *The Chronicle of Higher Education*. Retrieved from <http://www.chronicle.com/blogs/wiredcampus/publishers-propose-public-private-partnership-to-support-access-to-research/44005>
- Kim, J. (2011). Motivations of faculty self-archiving in institutional repositories. *The Journal of Academic Librarianship*, 37(3), 246-254. <http://dx.doi.org/10.1016/j.acalib.2011.02.017>
- Lapinski, P. S., Osterbur, D., Parker, J., & McCray, A. T. (2014). Supporting public access to research results. *College & Research Libraries*, 75(1), 20-33. <http://dx.doi.org/10.5860/crl12-382>

Mercer, H., Rosenblum, B., & Emmett, A. (2007). A multifaceted approach to promote a university repository: The University of Kansas' experience. *OCLC Systems & Services: International digital library perspectives*, 23(2), 190-203. <http://dx.doi.org/10.1108/10650750710748496>

Price, G. (Interviewer) & Ruttenberg, J. (Interviewee). (2016). *Gary Price Interviews Judy Ruttenberg* [Interview transcript]. Retrieved from SHARE News web site: <http://www.share-research.org/2016/07/gary-price-interviews-judy-ruttenberg-about-share-for-open-access-in-action-series/>

Smith, K. (2013, June 10). Better than joining the CHORUS [Web log post]. Retrieved from <http://blogs.library.duke.edu/scholcomm/2013/06/10/better-than-joining-the-chorus/>

Vincent-Lamarre, P., Boivin, J., Gargouri, Y., Larivière, V., & Harnad, S. (2016). Estimating open access mandate effectiveness: The MELIBEA score. *Journal of the Association for Information Science and Technology*. <http://dx.doi.org/10.1002/asi.23601>

Zhang, H., Boock, M., & Wirth, A. A. (2015). It takes more than a mandate: Factors that contribute to increased rates of article deposit to an Institutional Repository. *Journal of Librarianship and Scholarly Communication*, 3(1), 3. <http://dx.doi.org/10.7710/2162-3309.1208>

APPENDIX A

Library PubMed Central Deposit Procedures

1. Search PubMed Central (PMC) Advanced Search by DOI to see if article is already available in PMC with a PMCID.
 - a. If Yes, note the PMCID and proceed to ScholarsArchive@OSU deposit steps.
 - b. If No, proceed to 2.
2. Check NIHMS Publisher List to see if publisher automatically deposits articles on author's behalf. If Yes, skip the NIHMS deposit and proceed to ScholarsArchive@OSU deposit steps.
3. Search Sherpa RoMEO by journal title to determine whether accepted manuscript or version of record can be deposited to PMC.
4. The following information should have been supplied by author, either in the text of the email or within the attached article(s), in order for us to make 3rd party deposit to PMC on author's behalf:

Author names:

Primary author email and PI(s):

This is the author that the NIH will contact to approve the article proof in PubMed Central.

Grant information:

The National Institutes of Health Manuscript Submission System only accepts complete grant numbers with suffixes. Find your grant number(s) here. Please report all grants and contracts that support the work associated with this paper. Enter as many grant numbers as are applicable.

Article title:

Journal title:

DOI:

Author's accepted manuscript (post-refereed, pre-copy edited version).

Any additional files that contain figures, tables, or supplementary information that have been submitted to the accepting journal in support of the manuscript **must be submitted**. No further formatting of the manuscript is necessary beyond that required by the journal that has accepted the article.

5. Use best judgment to determine whether the manuscript contains all figures, tables and supplemental material referred to in the manuscript. One may do a cursory check of the

manuscript for the following keywords: fig, att, tab, sup, and possibly other root words that would imply that there is additional information needed. If necessary, one may refer to the version of record to see if there are figures/tables/etc that are missing in the manuscript.

6. Login to NIH Manuscript Submission system (NIHMS). Select “My NCBI” as your login choice.

7. Complete article deposit to PMC.

8. Search ScholarsArchive@OSU by article title to see if article is already available in ScholarsArchive@OSU.

- a. If Yes, check to be sure the grant agency field and grant numbers are filled out. If not, add them to the metadata.
- b. If No, proceed to deposit to ScholarsArchive@OSU.

9. If article published ***before June 13, 2013***, search Sherpa RoMEO by journal title and adhere to publisher embargo and self-archiving policies during SCHOLARSARCHIVE@OSU deposit.

- a. Deposit article to appropriate department or college SCHOLARSACHIVE@OSU collection if eligible (publisher allows). Include the article’s DOI, PMCID (if one already exists), grant agency, and grant IDs to appropriate metadata fields if that metadata is not already present.

- b. Respond to author with this text:

Hello Dr. _____,

Thank you for requesting deposit of your article to PubMed Central and ScholarsArchive@OSU. We have completed our steps of the deposit processes. Your article is currently being reviewed by NIH staff for inclusion in PubMed Central. NIH Manuscript Submission staff will contact you to approve the deposit. It will take them 4-6 weeks to complete the deposit of the article in PubMed-Central.

We also deposited your article to the ScholarsArchive@OSU institutional repository. (The publisher requires that your article not be available until ? months after publication, so it will be available open access in the repository on (*date*.) The URL for this article is: <http://handle.net/?>.

Best,

10. If article was published **on or after June 13, 2013:**

- a. Deposit article to ScholarsArchive@OSU. Include the article’s DOI, PMCID

(if one already exists), grant agency, and grant IDs to appropriate metadata fields if that metadata is not already present.

b. Respond to author's email with this text:

Hello Dr. _____,

Thank you for your email requesting deposit of your article to PubMed Central and ScholarsArchive@OSU. We have completed our steps of the deposit processes. Your article is currently being reviewed by NIH staff for inclusion in PubMed Central. NIH Manuscript Submission staff will contact you to approve the deposit. It will take them 4-6 weeks to complete the deposit of the article in PubMed Central.

We also deposited your article to the ScholarsArchive@OSU institutional repository in accordance with the OSU Open Access Policy. The URL for this article is: [http://handle.net/?.](http://handle.net/)

Best,

APPENDIX B

Library department of energy PAGES deposit procedures

1. Search DOE PAGES by title to see if the article is already available in the repository.
2. Upload article to ScholarsArchive@OSU before submitting to DOE PAGES. If the article was published *before June 13, 2013*, search Sherpa RoMEO by journal title and adhere to publisher embargo and self-archiving policies during SCHOLARSARCHIVE@OSU deposit. If the article was published **on or after June 13, 2013**, search Sherpa RoMEO and deposit into the Open Access Articles collection.
3. The following information should have been supplied by author, either in the text of the email or within the attached article(s), in order for us to make 3rd party deposit to DOE PAGES on the author's behalf:

Author names:

Grant information: Complete grant numbers are required to complete the submission

Article title:

Journal title:

DOI:

Author's accepted manuscript (post-refereed, pre-copy edited version):

Only accepted manuscripts can be submitted to DOE PAGES. If the Version of Record is already present in ScholarsArchive@OSU, add the accepted manuscript to the record.

Any additional files that contain figures, tables, or supplementary information that have been submitted to the accepting journal in support of the manuscript **must be submitted**. No further formatting of the manuscript is necessary beyond that required by the journal that has accepted the article.

4. Use best judgment to determine whether the manuscript contains all figures, tables and supplemental material referred to in the manuscript. One may do a cursory check of the manuscript for the following keywords: fig, att, tab, sup, and possibly other root words that would imply that there is additional information needed. If necessary, one may refer to the version of record to see if there are figures/tables/etc that are missing in the manuscript.

5. To complete submission, go to: <https://www.osti.gov/elink/forms.jsp> and select Final

technical report, journal article-accepted manuscript, or other STI product (AN 241.3)

6. Enter the DOE Award/Contract Number and OSU as the Recipient/Contractor (Organization)

7. Select Journal Article-Accepted Manuscript as the STI Product Type

8. Enter DOI and press Auto Populate Metadata button

9. Review metadata

10. If the specific DOE Program Office is not designated in article, select USDOE

11. Enter abstract

12. For contact information, list name, position, email, phone number, and organization

13. Select the following certifications:

Certification(s):

I certify that the Accepted Manuscript is suitable for public release and does NOT contain any of the following: limited rights data (proprietary data), classified information, protected PII, information subject to export control classification, or other information not subject to release.

I certify that this is not the published version of the article. I understand that DOE Policy calls for the manuscript to be submitted after peer-review and acceptance but before final formatting by the publisher.

I certify that, in any agreements that I have made with the journal, I have retained the right to deposit this version of the manuscript with DOE, so that it may be appropriately tagged and made available to the public; or, I otherwise am legally authorized to deposit this manuscript for the purposes described.

14. DOE automatically applies a 12-month embargo

-If the embargo in ScholarsArchive@OSU is 12-months or less, select STI Product is available electronically at and insert SCHOLARSARCHIVE@OSU handle. Select Searchable PDF as the File Format of Offsite Document.

-If the embargo in ScholarsArchive@OSU is longer than 12-months: select the STI Product being transmitted electronically via E-link, select PDF as the for-

mat, and upload file.

15. While NIHMS has a page for the submitter to review metadata before completing the deposit, DOE does not give the submitter a chance to review the submission before completing the deposit. Review metadata and push Submit.

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