

REPORT

Office of Scholarly Communication Scope, Organizational Placement, and Planning in Ten Research Libraries

November 18, 2015

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LIBRARY





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Introduction

The phrase “scholarly communication” appears often in the description of library roles and responsibilities, but the function is still new enough that it takes different forms in different institutions. There is no common understanding of where it fits into the library’s organizational structure. This landscape review of offices of scholarly communication grows out of research originally conducted by Ithaka S+R for the Harvard Library.

Dr. Sarah Thomas, Vice President for the Harvard Library, University Librarian and Roy E. Larsen Librarian for the Faculty of Arts and Sciences, asked Ithaka S+R to undertake a review of how peer institutions support the scholarly communication function in their libraries. Dr. Thomas wanted to understand the scope of activities, staff size, and budget of similar units in peer institutions.

The project was designed to gather basic information about these issues at some of the largest research-intensive university libraries. It finds categorical differences in the vision for the scholarly communications unit and its organizational placement, as well as associated differences in staffing and budget.

Methodology

In collaboration with Dr. Thomas, Ithaka S+R researchers Deanna Marcum and Roger Schonfeld selected eleven institutions to be included in the study, in addition to Harvard:

- Columbia University
- Cornell University
- MIT
- Purdue University
- Stanford University
- University of California, Los Angeles
- University of California System
- University of Illinois, Urbana-Champaign
- University of Michigan
- University of Oxford
- Yale University

Ten of the eleven generously agreed to participate in the study.¹ Each of these institutions is among the most research-intensive universities, with some of the largest university libraries. Caution should therefore be applied in generalizing findings especially to other university and library types.

For each participating library, Ithaka S+R attempted to speak with both the library director or dean and with the head of the office of scholarly communication or another appropriate individual who has primary responsibility for scholarly communications functions. The research team developed two sets of interview protocols. From the library directors, they solicited information about the underlying vision or philosophy that explains the scope and organizational placement of scholarly communication functions. From the heads of offices of scholarly communication, they sought information about staffing, budget, responsibilities, and accomplishments. The actual questions and the list of interviewees are included in Appendix B.

All of the interviews were conducted in person or by telephone by Deanna Marcum, Roger Schonfeld, or both. Interviews typically lasted from 45 to 60 minutes per person.

Ithaka S+R and Harvard committed to making the results of the study available to the library community, as the topic is of wide professional interest.

Harvard Library's Office of Scholarly Communication

Harvard established its Office of Scholarly Communication as a way to implement open access after the College of Arts and Sciences unanimously adopted an OA policy in 2008. Eight other Harvard schools and two research centers soon followed. Robert Darnton, then Pforzheimer University Professor and Director of the University Library at Harvard, appointed Stuart Shieber, a professor of computer science who had spearheaded the OA campaign at Harvard, to head a new Office of Scholarly Communication to encourage universal acceptance of OA policies at Harvard and to provide advice and counsel to faculty members about how to comply with the policies that their schools had adopted. Faculty members were encouraged to deposit their scholarly works into the repository that would be freely accessible to all.

¹ Stanford declined because it does not have a separate office of scholarly communication and because the library is agnostic about open access, according to University Librarian Michael Keller.

Over the next seven years, the staff increased to 9.5 FTE (although the current staffing level is 8.5 FTE), with a budget of \$1.35 million. The functions for which the office is responsible include copyright advisory services, repository services and associated software development, project management, and overall OA leadership and advocacy.

Seventy-five percent of the first year of OSC operations (2009) was covered with funds from the provost's office at Harvard as a start-up measure. The plan was that the provost's subsidy would decrease by 50% in the second year, while the library's amount of support for the OSC would increase correspondingly. The OSC, in the meantime, would seek external funds to support operations. The Library was not successful in identifying permanent funding for the OSC, but since 2012 the Arcadia Foundation has generously supported the growth of OSC responsibilities and staffing, while Harvard University or the Library has provided base support averaging about \$350,000. When the Arcadia funding ends in FY2018, the library will have to assess how best to sustain the goals of the OSC.

Alternative Models

We interviewed the other participants in this study to determine how Harvard's peer institutions conceive scholarly communication functions, where they are placed organizationally, and how they are staffed and financially supported. We found a wide range of approaches among the ten institutions we polled.

There is no single predominant organizational structure for scholarly communication functions. While a small number of institutions has adopted the Harvard model, i.e., a centralized office with scholarly communication as its sole emphasis, many other libraries have more diffuse organizational models, largely because they consider scholarly communication to be a widely shared responsibility. In the group of ten, we found that the organizational models fell generally into several fundamental categories:

- Collections-based: Scholarly communication functions are carried out to advance a strategic objective of transitioning the library's collecting activities away from licensing content and towards supporting open access to scholarship.
- Research-based: Scholarly communication functions are aimed primarily at supporting researchers on the campus, to ensure that they have access to the newest formats and channels for releasing their scholarship and helping it to have the widest distribution and greatest impact
- Collective Ownership: Scholarly communications functions are viewed as the responsibility of the entire library organization, with essentially every department and unit expected to integrate these issues and priorities into their work

- Not an institutional priority: The library has not identified scholarly communication functions, per se, as a high-level priority and has not assigned staff responsibility for them.

While we have attempted to categorize the primary approach each of the ten institutions has taken to structuring scholarly communications functions, in reality, nearly all of the libraries employ a blended approach, modifying it as needed to meet local interests.

Collections-based Models

Libraries adopting these models are situated on campuses with an open access policy. These models treat open access as another type of publishing that the library supports with its collections resources and one that it would thereby advance. For these libraries, bending traditional publishing towards open access is of primary importance, and they are organized to ensure that content licensing supports the overall scholarly communications agenda to the greatest extent possible. Typically, responsibility for the operation of an institutional repository is divided between the program owner inside the collections division and the technical operations that are housed in a library IT or similar division, with the result that staff and other costs are outside the office of scholarly communication.

University of California, Los Angeles

UCLA, as part of the University of California System, is part of the University of California's Office of Scholarly Communication and is covered by the UC-wide open access policy. UCLA faculty were early advocates of open access, and while it is a topic that receives considerable attention on campus, the University Librarian is concerned about the number of faculty who appear to be completely unaware of the policy. The UCLA Library has a separate Scholarly Communication Department, established in 2004, that reports to the Associate University Librarian for Collections and Scholarly Communication, and there is a UCLA Library Scholarly Communication Steering Committee that has responsibility for informing the campus community about developments in scholarly communication. The Scholarly Communication Department's functions include licensing of electronic resources, open access advocacy, open educational resources, copyright, and data management. Several years ago, UCLA made the decision that licensing should be handled by the Scholarly Communication Department, and not be treated as an acquisitions function.

The Scholarly Communication Department is made up of four FTE librarians and two FTE support staff. A lawyer/librarian in the department moved recently, but the library

expects to fill that vacancy shortly with someone with similar credentials. One of the librarians in the group focuses on education and outreach by conducting workshops and seminars for faculty. Liaison librarians, the IT staff, and the Digital Library program staff supplement the work of the department.

University of California's California Digital Library

An Office of Scholarly Communication (OSC) was created by the California Digital Library (CDL) for the purposes of copyright education, copyright policy analysis, and issues related to journal pricing. The office worked within the University of California's (UC) Academic Council to develop an open access policy, but when the 2007 resolution did not pass, the office was not continued.

The original OSC was clearly a collections-based initiative, but when an open access policy was finally passed in July 2013, CDL resurrected the OSC to manage the implementation of UC's OA policy. In its new instantiation, the OSC is more of a hybrid of collections and research focus, and includes program managers from CDL's Collections, Publishing, and Digital Curation units. CDL uses the new OSC as a clearinghouse for general information about scholarly communication issues. CDL assembled a statement of purpose to make a case for reconstitution and received approval shortly thereafter from the Systemwide Library and Scholarly Information Advisory Committee (SLASIAC).

The OSC has no dedicated staff, but senior CDL staff responsible for publishing, copyright education, open access policy support, research data, and collection development all play a role. The OSC also includes UC faculty (including the chair of the Academic Senate's system-wide committee on library and scholarly communication), the press, and a research policy analyst from the Office of the President. CDL's director pointed out that while the configuration is unusual, it is an intentional attempt to include a range of viewpoints. Further, in tying its function to the regular organizational structure, the OSC ensures that the topic of scholarly communication is broadly represented throughout the CDL. The Office is sponsored and overseen by the Systemwide Library ad hoc Scholarly Information Committee (a provost-level committee).

The functions that are included in OSC include OA policy support, OA advocacy, general education for faculty and librarians about OA, copyright policy, and related scholarly communications issues, copyright policy, research policies and practices regarding data ownership and stewardship (with an emphasis on open data), and liaison with other units at the University responsible for legislative and policy oversight.

There is not a separate Scholarly Communication budget, as the responsibilities are widely dispersed among staff members. CDL's director of publishing has a line in her annual budget of \$5,000, to allow for a once-a-year-in-person meeting of the Office of Scholarly Communication.

MIT

MIT Libraries has a centralized office called the Office of Scholarly Publishing, Licensing, and Copyright (OSPLC). This centralized office draws heavily upon staff in other departments to fulfill its mission in implementing the MIT Faculty Open Access Policy and providing related services. MIT has a strong legacy and continuing interest in OA, and this office is focused on educating the faculty about ways in which OA policies can make MIT scholarship more widely accessible. The objectives of OSPLC is to raise awareness at MIT about authors' rights so that MIT's research can be made as widely available as possible, and to participate in shaping the future of the scholarly publishing system in directions that most fully advance MIT's mission—sharing research with the world in order to solve the world's greatest problems. Repository services and data management functions are housed in other organizational units of the library. The Office reports directly to the Director of Libraries. The OSPLC focuses on raising awareness among faculty at MIT so that use of MIT research is maximized. The OSPLC advocates for OA on the MIT campus.

The OSPLC has a staff of four, one of whom focuses almost entirely on license negotiation. The office does not have a specific budget other than the staff salaries. IT, repository services, and data management functions, located in other parts of the library organization, provide substantial contributions to scholarly communication responsibilities. In addition, metadata librarians contribute to OSPLC workflows by cataloging articles deposited to the repository under the MIT Faculty Open Access Policy.

All subject librarians also support the work of the OSPLC. They work regularly with faculty to communicate about the MIT Faculty Open Access Policy, and their position descriptions explicitly include responsibility for scholarly communication. The subject librarians work closely with faculty to help them identify open educational resources that they can use instead of requiring students to purchase textbooks.

Research Support Models

Libraries that adopt these models do not have campus open access policies in place, but there is nevertheless an objective to contribute to progress in scholarly communication. They provide services that help researchers and authors utilize new publishing formats and channels, typically including but not limited to a campus institutional repository. In

some cases, scholarly communications services are provided as one of several research support services of the library; in other cases, scholarly communications is integrated with a broader publishing function, sometimes including the university press when that is merged inside of the library. In these models, it is not uncommon for some if not all of the institutional repository technical operations to be housed inside of the research or publishing division, and sometimes inside the actual office of scholarly communication itself.

University of Illinois, Urbana-Champaign

The University of Illinois has not had a separate scholarly communication organizational structure until this year, when the Dean of Libraries appointed a head of Scholarly Communication and Publishing, who reports to the Associate University Librarian for Research and will be the supervisor of the copyright librarian, repository manager, and a new program in emergent forms of publishing, as well as providing a publishing platform for the library.

The University of Illinois considered developing an open access policy for a number of years. In 2001, the Governor of Illinois signed an open access directive for public universities' research articles. The University formed a task force on open access in 2014 and the group has filed a report in which the group affirmed an open access policy based on the University of California model, but it had not been implemented. The University of Illinois is a good example of how quickly changes are occurring in the scholarly communication arena. When we began this landscape review in September, UIUC had not adopted an OA policy. By the time our survey concluded in late October, UIUC's Faculty Senate had passed an Open Access to Research Articles policy.²

The Office of Scholarly Communication and Publishing includes a copyright specialist, an institutional repository manager, and a project manager. There is shared responsibility with IT for a developer/programmer and the operation of DSpace and the Research Data project.

Seventy-five percent of the budget for the Office of Scholarly Communication and Publication, \$350,000 per year, is funded from the library budget, with the remainder coming from gifts, grants and fees.

² The Faculty Senate passed this resolution on October 19, 2015.

Columbia University

The Center for Digital Research and Scholarship (CDRS) is responsible for Columbia's scholarly communication program. Created in 2007 as part of the Columbia University Libraries organization, the CDRS works with faculty, students, and staff of Columbia University to increase the utility and impact of their research and scholarship. The functions of this Center range from managing the Academic Commons (Columbia's institutional repository) to the Scholarly Communication Program to a disparate group of support services. The Center reports to the Associate University Librarian for Digital Programs and Technology Services (AVP of DTS, an AUL-level position that reports to the Vice Provost and University Librarian).

Four units on the Columbia campus—Lamont-Doherty Earth Observatory, Columbia University Libraries/Information Services, the Mailman School of Public Health, and the School of Social Work—have adopted open access policies. The University Senate, composed of elected and appointed faculty, student, and staff representatives, endorsed an open access statement of principles in 2005.

CDRS staff advise on ownership and portability of data and provide services to faculty developing grant proposals that require data management plans or locating the final products in an institutional repository. CDRS also administers a fund to support article-processing charges for faculty willing to make their scholarship open access. The University Librarian expects that as federal and private funding agencies create more mandates for deposit, this will drive the approach of CDRS on campus.

Approximately six FTE in CDRS are assigned to programs related to scholarly communication, research support, and institutional repository services. The Director of the Copyright Advisory Office (CAO) is responsible for copyright-related services and support. The CAO, like CDRS, reports to the AVP of DPTS and works closely with the Libraries organization and the University in advancing scholarly communication services and support.

The 16,000+ objects in the Academic Commons include journal articles; research data sets, student scholarship, and conference slide decks.

Purdue University

In 2011, the Purdue University Senate unanimously passed a resolution in support of open access, however, since the University Senate cannot establish policy for the University beyond the curriculum, the responsibility to create an open access policy fell to the University administration. After an open access policy was drafted, it was

determined by the Libraries that the provisions and the language required as an administrative policy would be perceived by faculty as draconian, too “top down”. Additionally, the University administration decided it could not support the policy since there was no provision for enforcement or penalty for not complying. The University does not establish policies that it cannot enforce. Instead, Libraries established a plan to convince departments to adopt open access on their own. So far this has been minimally to moderately successful. As of October 2015, there are over 44,000 documents deposited in Purdue e-Pubs, with over 10.5 million downloads since it was created in 2012, with 2.6 million downloads in the last year.

Scholarly communication is a dispersed activity at Purdue, which supports three types of digital repositories: one for publications, Purdue e-Pubs; one for data, Purdue University Research Repository (PURR); and one for university archives, e-Archives. Each is managed in different areas of the library. The Library’s search system, Primo, has been designed to access information from all of the repositories when a topical search is executed.

Scholarly communication functions are widely distributed on the Purdue campus. Copyright expertise comes from the University Copyright Office whose director has both JD and MLS degrees and reports to the dean of libraries with a dotted line to the university’s office of legal counsel. Intellectual property and trademark expertise is housed with the Research Foundation of the university. Data experts report to the Associate Dean for Research and Assessment in the Libraries.

The Scholarly Publishing Division of the Libraries encompasses the Purdue University Press and Scholarly Publishing Services. The Dean of libraries views scholarly communication as a broad continuum, spanning from technical reports, white papers, and conference proceedings that are not peer reviewed through to the final published product that is rigorously reviewed by others in the field and published by the Purdue University Press. All of these are part of the scholarly record. In the Dean’s mind, undergraduate research is also part of this continuum. For five years Purdue Libraries has published the *Journal of Purdue Undergraduate Research* (JPUR).

Since scholarly communication responsibilities are so broadly dispersed, there is no single budget.

University of Michigan

The University of Michigan has not had an office of scholarly communication since 2013. To some degree, the functions that constitute scholarly communication activities are dispersed among the portfolios of the eight Associate University Librarians.

The University Librarian admired his predecessor's advocacy for open access and his efforts to create an Office of Scholarly Communication by moving the university press into the library. In the Librarian's opinion, however, the funding model to support a pure open access publishing enterprise has yet to be achieved. Moving publishing to digital platforms removes some of the costs, but not all by any stretch of the imagination. He is equally convinced that print is a medium we will have to work with for the foreseeable future and thinks it is imperative for the library to find a way to work with both print and digital resources.

The University Librarian morphed the OSC into Michigan Publishing Services. It combines the university press, the library's digital publishing, and Deep Blue, the digital repository.

The provost's office provides a flat subsidy of \$600,000 a year for the university press. The library must manage the press within that financial framework.

Copyright services are organizationally placed with the library's office of budget and planning. This grew out of HathiTrust's work on clearing rights, but faculty continue to need advice about intellectual property rights and this office has remained.

The Librarian tends to see publishing and collections as indistinguishable. He thinks the library needs to be focused on data management, which includes a collections activity, publishing activity, and consultative services. As the library moves more into the services arena, it is not so important to isolate collections as a separate budget category. The Librarian has a strong personal interest in thinking of the Michigan library as a digital service, supported by a community of print repository services. He believes it will take time to achieve this vision. One of the barriers to this vision is the way collections have been treated as a separate budget category, and faculty and departments have a strong sense of ownership of those budget lines. He contrasted this with the chief information officer's centralized budget that is used to support infrastructures as needs change.

The University Librarian views scholarly communication responsibilities as an excellent example of how important it is for the library to move more aggressively into services for its users. He acknowledges, though, that the transition will take time, and in the meantime, he is responsible for managing print and digital collections and for providing useful services for both.

Collective Ownership Model

While several libraries in the sample have worked hard to distribute certain scholarly communication functions, all of the libraries covered above have some kind of office or position that focuses on scholarly communication functions for its own researchers and authors. One unusual case is Cornell, which has extensive scholarly communications functional work, much of which is focused on community resources like arXiv, while its own campus's needs are provided for in a highly decentralized fashion.

Cornell University

Cornell has a highly decentralized but coordinated office of scholarly communication. The distributed, entrepreneurial model is consistent with its organizational culture. Scholarly communication functions for Cornell include the creation, dissemination, and curation of scholarly and creative works.

Cornell does not have an open access policy despite several attempts to enact one. There was a recent Cornell Assembly resolution that Cornell should develop an OA policy. The OA Policy Group, after a long hiatus, has revitalized and is moving toward a strong OA position.

The University Librarian at Cornell believes that it is a mistake to have a separate OSC. She thinks the functions have to be integrated into the work that every staff member does; otherwise, the broad topic does not permeate the entire library organization. She described the AUL for Scholarly Resources and Preservation Services as having functional responsibility for digital scholarship and copyright. The Associate University Librarian for Research and Learning Services has responsibility for education and outreach training. There are digital scholarly communication boot camps for subject librarians. Scholarly Communication permeates the organization through working groups that come together to figure out a particular issue. Striving to be more agile, the organization is moving away from an over-abundance of standing committees.

Cornell has several well-established repositories: a general repository to which all faculty contribute, which has recorded over 15 million downloads; an Industrial Relations repository that just celebrated its 10 millionth download; and disciplinary-based repositories in law, hospitality and real estate, and agriculture and life sciences.

University of Oxford

Open access is a central preoccupation for British libraries, given the government and philanthropic mandates for open access to research publications. The 2020 Research

Excellence Framework (REF) calls for all research outputs with the exception of humanities monographs to be open access, and it is a government mandate that these research outputs be available in institutional repositories. These research outputs must be deposited within one month of acceptance for publication and every faculty member must be compliant in order for their research to be eligible for the REF and therefore for the university to avoid reduction in funding. As of May 1, 2015, there is a new requirement from some research councils that research data must also be openly available, and this is becoming a trend. As there are ever-greater pushes toward open access, the Bodleian Library expects humanities monographs to be included eventually in the policy. The Library is working hard to ensure that the university can comply with these various mandates and policies.

The Bodleian Library has no Office of Scholarly Communication. It has recently partnered with the university's Research Services office and with IT Services to create a leadership structure to ensure compliance with various research funding mandates for open access, as well as a university policy that encourages open access. Functionality responsibility for outreach, repository development and program management, and article processing charges (APCs) payments is assigned to the library's senior leadership portfolios.

Funding for this work is provided by a combination of external and internal sources. The Research Councils and other external funders provide the funding to cover APCs and for certain infrastructure developments (both human and technical), which in recent years has totaled more than £1 million annually, as well as a substantial contribution that has helped the library start up its repository and outreach work. In total, the library funds approximately one-third of these activities itself. There remains a good deal of funding uncertainty after this initial start-up period, especially as the funding models for UK higher education are in the process of radical change.

At this point, the repository includes open access materials, embargoed items, and metadata records for items held elsewhere. As more materials are incorporated into the repository as a result of the mandates, it is expected that usage will begin to grow. The library plans to conduct an ongoing assessment of operations, believing that there are process efficiencies that can be realized relative to the initial system design.

Not an Institutional Priority

Yale University

Yale does not have an open access policy. There is no office of scholarly communication in the library. There is a fledgling repository, but it contains a modest number of articles. The University Librarian described the Yale community as having little appetite for open access. Twice, different provosts have created a committee to draft an open access policy. The Librarian was appointed to each of the committees. Twice, the committee forwarded recommendations for such a policy to the provost, and twice faculty groups declined to support and carry forward the recommendations.

In terms of scholarly communications functions, the library is supporting a half-time copyright and licensing specialist who is an attorney. The role of this expert is to help faculty with their questions about copyright, most of which are questions about what can and cannot be used. There are also two lawyers in the University's Office of General Counsel who are expert in intellectual property law who can lend expertise when needed. The Library has prepared a Lib Guide on copyright to offer general guidance on the topic, but the Librarian noted that questions are coming to the library more frequently in the past several months.

The greatest scholarly communication concern surfaced when the National Institutes of Health issued an audit of university compliance with the mandate that medical research that had been partially or fully funded by NIH must be deposited into PubMedCentral. The medical librarians at Yale worked closely with faculty to ensure that they were complying with the mandate.

Two data librarians assist faculty with developing data management plans for their grants that require them. Their work includes helping faculty design databases and drawing up preservation plans for their data. The Office of Federal Grants refers researchers to the library for assistance with their research grants.

The library does not talk with faculty about where they should publish their research. Many Yale faculty are editors of scholarly journals, and there appears to be little interest in advancing an open access agenda.

Conclusion

There is no obvious “best practice” for organizationally locating scholarly communication functions. Directors and deans tend to view this issue through their belief

system about open access, or at least that of their campus. The categorization provided in this report can serve as a guide to library leaders about different approaches to positioning this function organizationally given fairly substantially varied objectives for it.

When advocacy of open access principles is the primary goal, it seems to work well to have a separate organization with sole responsibility for education and outreach related to open access. Some of the deans and directors were more focused on using the scholarly communication functions as a focal point for upgrading and redirecting staff skills that assist them in providing new services to students and faculty and in preparing the staff to work with new and ever-changing content formats. The advantage of this approach is that the staff development aspects are more widely dispersed throughout the organization.

The lack of uniformity in offices of scholarly communication is a reflection of how libraries are attempting to define their roles in this area. When an external review committee studied Harvard's Office of Scholarly Communication in 2013, the report emphasized the leadership role Harvard Library is playing in advancing open access. The committee also pointed out that OSC's mission is diffuse, including projects and policies that involve scholarly publishing, as well as innovative initiatives. The committee recommended that the OSC should focus on collecting and making accessible the products of Harvard scholarship. The committee could not reach agreement of the value of locating the innovation lab in OSC. Other libraries struggling with the same issue have either more narrowly described the focus of the OSC or they have distributed the functions broadly throughout the organization.

Going Forward

The deans and directors with whom we spoke identified several challenges related to providing scholarly communication services.

Making appropriate provisions for data is uppermost in administrators' minds. Several directors predicted that there will be much more integration of data management in most university librarians' roles. One dean expressed special concern about publishers gaining control of data, just as they have gained control of publications. While all of the libraries in the group we interviewed are mindful of the need to collect and manage research data, few structures are in place for doing this. Certainly, if data management is to be integrated with open access publishing, that raises questions about whether to think of these functions as collections-related or research-support-related.

Library directors have significant concerns about the sustainability and cost of the repository. One administrator noted that the materials in the libraries that were in the vanguard of repository development will soon be obsolete. Reformatting and refreshing the digital content will be quite expensive. Related to that is a concern about universities' ability to meet federal mandates for making funded research available. Faculty, in many cases, will not comply on their own, and directors worry about the library's capacity for taking on the task, not to mention the cost.

A few administrators have been thinking about scholarly communication services that may go beyond the library. One university librarian is inclined to think more about an office of scholarly communication in the context of the university press, for which the library is also responsible. The director's vision would be for an office to help scholars in the digital humanities put together panels of knowledgeable experts who can advise on their tenure cases. This is the greatest need for those working in the digital humanities, where there is not a critical mass of similar experts in the department, making it difficult for tenure decisions to be reached through traditional processes. This function of assembling appropriate external teams would have to reside in the Office of the Provost, not the library or the press.

Another director described a plan whereby the library is giving up some of its prime space for collaborative work by digital humanities scholars in exchange for their support of the library moving physical volumes to an off-site storage facility. The Librarian sees this as an important step toward keeping the library relevant and at the heart of the scholarly community.

All of these issues will be discussed within many libraries across the country as directors and their staffs consider how best to support scholars, researchers, and students in the coming years. At the center of all of these discussions is the fundamental question of how the scholarly record will be maintained in a digital environment.

Appendix A

Office of Scholarly Communication

University Name	Organizational structure	Staff (FTE)	Budget	Size of the university (# faculty)
Harvard University	Centralized - Office of Scholarly Communications	9.5, including 1 vacancy	\$1.35M	~2,400 Faculty FTE and 10,400 Academic appointments in teaching hospitals
Columbia University	Center for Digital Research and Scholarship (CDRS) reports to the AUL for Technology	6	\$1.6M - CDRS; \$200k - Columbia International Affairs Online (CIAO)	~5,700 Instruction and Research FTE
Cornell University	Distributed	Difficult to isolate	No separate budget	~1,600 Faculty FTE
MIT	Centralized - Office of Scholarly Publishing, Licensing, and Copyright	4	No separate budget	~1,000 Faculty FTE
Purdue University	Distributed	Difficult to isolate	No separate budget	~3,800 Faculty FTE
University of Illinois at U-C	Head of scholarly communication and publishing, who reports to the AUL for Research	4, including 3 vacancies	No separate budget	~2,700 Faculty FTE
University of Michigan	Michigan Publishing Services, reports to the AUL and director of the university press.	Difficult to isolate	No separate budget	~3,500 Faculty FTE and ~3,500 Medical FTE
Oxford University	Distributed	3 permanent staff	No separate budget	~1,800 Academic FTE and ~4,500 Research FTE
Stanford University	NA	NA	NA	~2,100 Faculty FTE and ~900 Medical FTE
University of California, Los Angeles	Scholarly Communication Department reports to AUL for Collections and Scholarly Communication	6	No separate budget	(Included in UC System)
University of California system	Co-chaired by CDL and a campus university librarian	Difficult to isolate	No separate budget	~12,100 Faculty FTE and ~8,300 Medical FTE
Yale University	NA	NA	NA	~1,900 Faculty FTE and ~2,500 Medical FTE

Appendix B

Institutional Repository

University Name	Open Access Policy?	Name of Institutional repository	URL	# of items	As of October 2015		
					Date estab.	# of Downloads since established	Downloads in the past year
Columbia University	Partial	Academic Commons	http://academiccommons.columbia.edu/	16,236	2006	Not publically available	
Cornell University	No	<i>arXiv.org</i>	http://arxiv.org/	1,157,977	2002		
		<i>eCommons @ Cornell</i>	https://ecommons.cornell.edu/	33,794		14,131,381	2,131,857
		<i>DigitalCommons @ ILR</i>	http://digitalcommons.ilr.cornell.edu/	22,094		10,690,170	1,827,604
		<i>Scholarship @ Cornell Law</i>	http://scholarship.law.cornell.edu/	6,428		1,472,572	501,884
		<i>Scholarly Commons @ SHA</i>	http://scholarship.sha.cornell.edu/	1,235		438,877	367,553
MIT	Yes	DSpace@MIT	http://dspace.mit.edu/	84,310	2002	Not publically available	
Purdue University	No	Purdue e-Pubs	http://docs.lib.purdue.edu/	44,259	2006	10,453,356	2,465,447
University of Illinois at U-C	Not yet implemented	IDEALS	http://ideals.illinois.edu	83,940	2006	15,524,169	3,023,895
University of Michigan	No	Deep Blue	deepblue.lib.umich.edu	91,635	2006	39,200,000	791,000
Oxford University	Yes, with a campus "advisory" policy	Oxford University Research Archive (ORA)	http://www.bodleian.ox.ac.uk/ora	179,379	2007	Not publically available	
Stanford University ³	No	Stanford Digital Repository	https://sdr.stanford.edu/	~550,000	2005	Not publically available	
University of California (UCLA and system)	Yes	eScholarship	https://escholarship.org/	92,679	2013	27,640,919	5,400,000
Yale University	No	EliScholar	http://elischolar.library.yale.edu/	1,439	NA	56,749	31,992

³ The Stanford Digital Repository takes a holistic, integrated approach that includes materials digitized for preservation, GIS content, ingested web archives, and collections.

Appendix C

Interview questions

For library directors

1. Tell us about the organizational placement of the Office of Scholarly Communication in your institution.
2. At a high level, what is the vision for this office and what are your goals for it? Has the vision been constant since its establishment or has it been reprinted over time?
3. What are the broad categories of activities included in the OSC?
4. How do you imagine the roles and responsibilities changing in the next couple of years?
5. Beyond staff directly part of the OSC team, are there others in the library who contribute expertise or support? What roles do they play, and how much time do you estimate they contribute (5 of FTE)?

For directors of scholarly communications

1. What is the mission of your Office of Scholarly Communication?
2. Do you have a formal Open Access Policy on your campus? If so, does that policy include rights retention by the institution? Is the policy campus wide, or is it on a school-by-school basis? How many policies has your institution implemented?
3. Does your OSC have articulated strategic goals and specific objectives? If so, how do you measure your success against the goals?
4. How many staff are in the OSC? Titles?
5. What is your OSC's budget?
6. What percentage of the OSC's funding comes from the library budget? What percentage from other sources? What are those sources?
7. How many publications are in the repository?
8. What is the level of usage, measured by the number of downloads? Have you calculated the cost per download? What is that figure?
9. Can you describe the users by rough categories? Domestic scholars, International scholars, etc.?
10. Have you conducted an assessment of the OSC? Internal study? External study?
11. What plans do you have for changes, expansion, or reduction in the next couple of years?

Interviewees

Aaron McCullough, University of Illinois, Urbana-Champaign

Ann Thornton, Columbia University

Anne Kenney, Cornell University

Catherine Mitchell, California Digital Library

Chris Bourg, MIT

Ellen Finnie Duranceau, MIT

James Hilton, University of Michigan

James Mullins, Purdue University

John Wilkin, University of Illinois, Urbana-Champaign

Laine Farley, University of California System

Lucie Burgess, Oxford University

Mark Newton, Columbia University

Oya Rieger, Cornell University

Richard Ovendon, Oxford University

Sally Rumsey, Oxford University

Susan Gibbons, Yale University

Virginia Steele, University of California, Los Angeles