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IMPROVING ACCESS TO PUBLICLY FUNDED RESEARCH: WHAT'S IN IT FOR THE INSTITUTION? CAN WE MAKE THE CASE?

by David Shulenburger, Vice President for Academic Affairs, National Association of State Universities and Land-Grant Colleges

Editor's note: Dr. Shulenburger delivered the following remarks on October 20, 2006, at a forum in Washington, DC, cosponsored by ARL, the Association of American Universities (AAU), CNI, the National Association of State Universities and Land-Grant Colleges (NASULGC), and SPARC.

It would be disingenuous for me to pretend that I come to this forum with an open mind on public access; I have written and spoken for far too long and too widely for that to be a credible strategy. Instead, I acknowledge that I fully support the aims and the specifics of the Cornyn/Lieberman Federal Research Public Access Act as I begin my remarks and you may be certain that I will not talk myself out of that position by their end.

Now that the suspense has completely dissipated, the question I've been asked to address is, "What's in it for the institution? Can we make the case?"

I will be liberal about the definition of the word "institution" and interpret it as "The Academy" rather than US universities, as I think the case for free availability of published scholarly research findings is best made at that broad level, not a lower one.

In 1999 I served on a committee made up of AAU [Association of American Universities] provosts charged with examining how universities should handle intellectual property in the face of "new media."[1] It seems long ago and far away when Jonathan Cole convened the committee on which I served along with Jeff Stone, then of Chicago; John Wiley, then provost at Wisconsin; Peter Low, then of Virginia; Jim Maher of Pittsburgh; and John Vaughn of the AAU. The new media we focused on then, online journal articles, has over the intervening six years become the dominant form in which journal articles are distributed.

But what is important to me today about that committee and its report is not that we settled for all time the issue (as I believe we left a few loose ends), but the lens through which we chose to conduct the analysis. Our decision was that our "…discussion should focus on the bases for creation of works, the status of the contributors, the resources and facilities necessary for creating the work…" and not on whether electronic journal articles belonged to category "x" or category "y" and should therefore by analogy be treated like other objects in that category. The decision essentially was to examine the ecology necessary for the generation of research. That led us to tease out five properties that we identified as "the norms and values of scholarly and scientific work;" they are:

- open, free exchange of ideas;
- publication in scholarly and scientific journals;
- meritocracy, which rewards people on the basis of the quality of their work;
- organized skepticism, which enjoins faculty and researchers to withhold judgments about the validity of ideas until those ideas are tested and the weight of evidence dictates their acceptance; and
- common ownership of goods, which holds that research and scholarship are products of social collaborations and are assigned ultimately to the community.

To this listing we added an ultimate test of the desirability of any policy: therefore, the policies or rules used to govern the new technologies and their development "should not interfere in any way with the ability of faculty members to pursue their research and freely present their ideas to their colleagues, their students, and the world at large."

Now, roll forward in time until May 2, 2006, when S2695, the Federal Research Public Access Act, was introduced. That bill finds:

(1) the Federal Government funds basic and applied research with the expectation that new ideas and discoveries that result from the research, if shared and effectively disseminated, will advance science and improve the lives and welfare of people of the United States and around the world; and

(2) the Internet makes it possible for this information to be promptly available to every scientist, physician, educator, and citizen at home, in school, or in a library.

Note the complementarity with the norms and values list above. S2695 begins with findings about the ecology of research and follows with the observation that a specific technology, the Internet, makes it possible for that ecology to function almost perfectly. It then prescribes that the portion of scholarly work arising from federal grants that is subjected to scholarly scrutiny and survives to be published in scholarly journals would become "free online…not later than 6 months after publication."[2]

The only point of the research ecology the Cole committee identified that is not reinforced by S2695 is the "meritocracy plank" and that it simply does not address.

Thus the initial question of whether we, that is, the academy, can make the case for the bill is that it passes the Cole report test of furthering the ecology of research and that is a test that, if failed, would argue against support of the bill.

But there are those who object to the bill precisely because they believe it will damage one part of that ecology, the refereeing process, and therefore threatens publication of scholarship in scholarly and scientific journals. The damage is alleged to be done by the bill's reduction of the period that the journal of publication holds exclusive right to publish a scholarly manuscript from infinity, at present, to only six months. This truncation of the now exclusive publication window gives readers of journals the option of accessing the published manuscript without subscribing to the journal or being part of an entity that subscribes. The prospective reader need wait only six months until the article becomes available for free. The scenario that follows is that journal subscriptions fall as subscribers become patient waiters while financially weakened journals that are not able to support the cost of the refereeing process go out of business. What of the patient-waiter scenario?

Clearly, if the six-month limitation on exclusive publication destroys the economics of scholarly journals and refereeing perishes along with scholarly journals, the ecology of the academy is seriously damaged and the environment for research is worsened, not improved by passage of the Federal Research Public Access Act.

We now have significant experience with journals that voluntarily have permitted articles they published to be made available for free after delay periods ranging from zero delay to one year and that evidence is not consistent with an apocalyptic collapse of the subscriber base. Indeed, project Romeo finds that 70% of scholarly journals worldwide give authors blanket permission to post their papers immediately on publicly accessible Web sites. These journals would not have taken that step voluntarily had they been overly concerned about catastrophic loss of subscribers. There is much evidence that significant value arises from immediate access to published journal articles and that the overwhelming majority of subscribers or their agents, generally libraries, are willing to pay for immediate access rather than wait six months.

Some open access proponents have concluded that making articles freely available six months after publication has no economic impact on journals. I simply do not agree with that judgment. I believe that public access will have at least the potential of some impact and I rather hope that it does. If there were no economic impact on publishers, I am convinced that science and technology journals would continue to escalate their subscription rates into the indefinite future, at least at the 7.6% annual overall inflation rate for journals libraries experienced over the last 20 years. This rate, more than double the 3.1% annual increase in the CPI and 1.5 times the 5% rate at which library budgets advanced over the period, has had significant impact on library collections, with most libraries being forced to cut both journal subscriptions and monograph purchases. (Although, of late, the bundling practices of some commercial journals have caused the total number of paid journal subscriptions to increase while libraries continued to selectively cut individual journals.)

What S2695 will do is to remove from some journal publishers part of their market power, that is, part of their ability to raise prices. The mechanism by which the effect will be worked out is the market. There are some university libraries that are not at all price sensitive to top journals in their fields while there are others that in a Cornyn/Lieberman world, when faced with a 20% subscription price increase or even a 7.6% price increase, would cancel a subscription and ask faculty to wait six months to obtain general access to the federally funded portion of its contents. It would not take a very large portion of a market's participants resisting price increases in this manner for publishers to change behavior as they got the message that above-inflation price increases are unacceptable and not in their long-term best interest. The availability of the bulk of a journal's content for free after six months will put some brake on journal price increases and perhaps will even cause some very high-priced journals to reduce prices.

It is true that STEM [science, technology, engineering, and medicine] journals often argue that declining subscriptions and cost increases for everything from postage to adding features like CrossRef have forced their

prices to go up. Those who make this argument seem to believe that producers who take on additional cost or are simply passive victims of cost increases, somehow are entitled to raise their prices without experiencing adverse sales consequences. The fact is that only economic entities with significant market power can raise prices unilaterally without significant loss of sales. Competitive markets exact a huge sales retribution on those who raise prices. Generally prices can be increased with minimum sales impact only when demand for a product is increasing or when the market for a specific product is characterized by price-inelasticity. Top journals in each field have market power, that is, they operated in price-inelastic markets. Their publishers have used that power to increase prices because journal subscriptions were falling or cost increases were mounting or because they simply had the opportunity to do so to increase their operating margins.

Neither the institution of the scholarly journal nor refereeing is about to die or even wane if the Cornyn/Lieberman bill becomes law.

As an aside, I note that had STEM journals found ways to avoid extraordinary price increases, the pressure to take away part of their market power would never have increased to the point that a Cornyn/Lieberman bill would have been proposed or would have generated much support. But they did not show restraint and STEM journal prices have now risen far too high for the pressure to abate even if price increases became quite modest.

It is time for top scholarly journals to begin increasing their prices less than library budgets increase or, preferably, to hold prices steady or to reduce them. If this happens STEM scholarly publishers will have to change the way they do business. Perhaps they will have to adopt electronic-only journal formats, reduce staff, or make hard decisions about whether to add new features that aid journal readers. I do not raise these possibilities lightly. I do so weighing whether permanently canceling subscriptions to five, $200 journals in the humanities, something an additional 5% or $1,000 increase in the cost of $20,000 science journal might necessitate, is a worthwhile trade-off. Is acquiring 20 fewer monographs this year and every year in the future an acceptable price to retain this one subscription? At $50 per monograph, that is what an additional $1,000 or 5% increase in an expensive STEM journal really costs. And of course this is just an illustration of the opportunity cost of a single expensive journal's inordinate price increase. Price restraint and cost cutting by STEM journals clearly is preferably to suffering these losses.

Universities have increased their allocations to libraries relative to other university functions over many years. Public universities have about the same quantity of real resources per student as they had in the early 1990s. That is, we are now educating each student at the same cost as we were at that time. We have raised tuition dramatically but just enough to offset state government budget cuts. Given universities collective fiscal situation, they cannot offset inordinate journal price increases; STEM journal prices increases must be slowed if additional harm to libraries is to be avoided.

And I do not regard as probable the prediction that passage of the Federal Research Public Access Act will threaten the survival of refereeing. When any living organism or organization's survival is threatened, it begins to shut down peripheral functions to support the core. Core functions are the last to be shut down, not the first. Refereeing is a core function. Its presence and its quality are what distinguish the top-quality journals from the also-rans. Support from journal revenues for non-publishing society functions, the addition of finding aids, and prime locations for journal offices, etc., would go long before refereeing was threatened.

And, in the unlikely event that existing STEM journals got to the point that they cannot or will not support refereeing, would refereeing die? I rather think not. Most colleagues say "yes" when asked to referee a paper and they do so without monetary compensation. To the young in the disciplines it is a great honor to be asked to serve as a referee. To the seasoned, refereeing is a duty they owe to their discipline, a duty that must be carried out if the discipline is to advance. Accordingly, reports that 80% of colleagues agree to serve as referees when asked to do so are not uncommon. Faculty members are willing to serve as referees.

Refereeing will continue, probably in existing journals, but if not in them, in new journals that, like hydra, will arise to take existing journals' places if they fall and may attempt to take their places while they remain strong. I note in this regard that the number of paid journal subscriptions at the average ARL library grew from about 16,000 in 1986 to 22,500 in 2004, with the latter figure being inflated by quasi-compulsory bundled purchase plans. During the same period, unpaid subscriptions grew from 3,300 to 10,400, with most of that growth occurring since 1999 when 6,500 such journals were received. Paid journal subscriptions grew at 2% per year over the 20 years while unpaid grew at a 6.3% annual rate. I do not equate every unpaid journal in quality to every paid journal but there are many high quality "free" journals. The point is that the rapid growth of "free" journals plus the continuing growth in paid journals, demonstrates the value that the community places on the scholarly journal as the venue of choice. Neither the institution of the scholarly journal nor refereeing is about to die or even wane if the Cornyn/Lieberman bill becomes law.

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We have had much experience with the public asking government to increase access to public goods. Over time our government has changed the practice of essentially giving away the right to freely discharge effluent into the air and the water, to making available at little or no cost to industry mineral rights, timber rights, and grazing rights to public lands, and to distributing to broadcasters for nominal fees the rights to place their transmissions into the spectrum. Every proposed change in sales, lease, and use or allocation practice for goods in this category has been met by industry protest and prediction of disaster for the industry and the public if the changes under discussion were put in place. The protests of the industries affected by such changes are inevitable.

Those in the scholarly journal publishing industry, whether in private corporations or not-for-profit scholarly societies, may find this set of analogies uncomfortable, but it is apt. An important portion of the public is asking for improved access to goods that have been obtained largely through public funding. Some publishers who now own significant rights to those public goods are predicting grave consequences for themselves and for the public if the terms under which they currently acquire manuscripts and are permitted to use them are restricted. Legislators will have to sort through the contrasting claims and decide which claims have the greatest merit. I clearly believe that scholars and the public are on the right side of this matter. Cornyn/Lieberman should become law.

In previous remarks on this topic I have observed that our failure to address the major problems of the scholarly communications system was due to the unknowability of the potential gain from making the scholarly literature widely available. With passage of this act the problem of the subjunctive, I believe, is about to be overcome. Scientists at our less wealthy institutions in the US and in the many impoverished universities throughout the world will have six-month-old scholarship at their fingertips. Relatives desperately wanting to know about the diseases their loves ones have and about the range of treatments available will have that knowledge. I suspect the additional lives saved or extended and the additional scientific advances made ultimately will cause us to question how we could have permitted knowledge to be locked away by high-cost access indefinitely from those who could and would use it so productively.

Novel idea making information more freely available, isn't it?

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[1] AAU Intellectual Property Task Force, "Intellectual Property and New Media Technologies: A Framework for Policy Development at AAU Institutions," 1999, http://www.aau.edu/reports/IPReport.html.

[2] Federal Research Public Access Act of 2006 (Introduced in Senate), 109th Congress, 2nd Session, S2695 May 2, 2006, http://thomas.loc.gov/cgi-bin/query/z?c109:S.2695:.

HIGHER EDUCATION AND LIBRARY LEADERS VOICE SUPPORT FOR FREE ACCESS TO FEDERAL RESEARCH

In remarks at a forum on "Improving Access to Publicly Funded Research," leaders of major higher education and library organizations voiced their support for the goals of recent measures to expand public access to research funded by the US Government. The forum was cosponsored by ARL, the Association of American Universities (AAU), CNI, the National Association of State Universities and Land-Grant Colleges (NASULGC), and SPARC.

The forum attracted 170 participants who were a representative mix of the different constituencies within the higher education, scholarly, and research library communities. As a result, the audience was well prepared to engage an impressive lineup of speakers on the many dimensions of the issues involved in expanding access to publicly funded research.

The access policies that garnered the most attention at the forum were the National Institutes of Health (NIH) Public Access Policy, which makes the results of NIH-funded research freely available, and the Federal Research Public Access Act (FRPAA). Introduced in May 2006, FRPAA (S2695) would require all US federal agencies that fund over $100 million on external research to ensure that the resulting peer-reviewed research articles are available free on the Internet within six months of publication. FRPAA is sometimes called the Cornyn-Lieberman bill, named after its bipartisan Senator sponsors.

The forum also showcased practical strategies for facilitating the new access policies. Librarians from the Massachusetts Institute of Technology and the University of California described local efforts to aid faculty in retaining rights to deposit their works in open online archives. Librarians from Cornell University, Pennsylvania State University, and the California Digital Library described D-Pubs and e-Scholarship as strategies being used to enhance institutional publishing.

The presentations at the forum by David Shulenburger, Vice President for Academic Affairs of NASULGC, and Clifford Lynch, CNI Executive Director, are included elsewhere in this issue of *ARL*. Papers and slides from other speakers at the forum are available at http://www.arl.org/forum06/.

IMPROVING ACCESS TO RESEARCH RESULTS: SIX POINTS

by Clifford A. Lynch, Executive Director, Coalition for Networked Information

I had the opportunity to offer closing comments at the recent forum on "Improving Access to Publicly Funded Research" sponsored by the Association of American Universities (AAU), ARL, CNI, the National Association of State Universities and Land-Grant Colleges (NASULGC), and SPARC and held in Washington, DC, on October 20, 2006. These comments combined synthesis and commentary on the earlier presentations at the symposium with my own thoughts on some of the issues. While my comments were extemporaneous, with the assistance of ARL's Jaia Barrett and Kaylyn Hipps (to whom I'm greatly indebted), I've provided a summary of my key points here.

1. Open Access Is Inevitable: How Best to Get There?

There seems to be a growing consensus that open access to the research journal literature is inevitable, and that open access has compelling advantages. Many of the key questions involve how we map a course from the present to an open access future. Naturally, many of the players in the current system are concerned about what this transition will mean to them.

I don't want to spend time here arguing about a precise definition of open access—suffice it to say that open access means an increased elimination of barriers to the use of the scholarly literature by anyone interested in making such use. These barriers can be lowered or removed in many ways: through public access upon publication, ever-shorter embargo periods, author self-archiving, or other approaches.

I do want to be clear that open access doesn't mean that publishing is free—rather it implies a shift from funding by end-users of the literature through subscriptions to one of a number of alternative economic models: submission, publication, or page charges; outright subventions; Public Broadcasting–style membership underwriting by individuals or institutions.

I also want to take a moment to quarrel with the distinction between open access to published research results (the avowed focus of this meeting) and the access to underlying research data. As scholarly communication evolves under the influence of e-research practices in various disciplines, I think that analysis and underlying data will become increasingly intertwined and inseparable. Michael Kurtz's presentation at this forum on scholarly communications developments in astrophysics[1] highlighted this well; the work of many other scholars, such as Peter Murray-Rust in chemistry or Ed Ayers and Will Thomas in history, provide other compelling examples of how these developments are likely to unfold.

There's been a lot of discussion about the desirability and potential implications of federal government mandates about deposit and access to the reports of findings of federally funded research. We should not forget that, even in disciplines where federal agencies are generous funders, a substantial part of the literature reports on the results of research that isn't federally funded. In my view, when we think about the fundamental integrity of the scholarly record available for open access via the Internet, we would be much better served if we can make the shift to open access at the level of entire journals or entire publisher journal portfolios rather than article by article. We know from past experience that it's very difficult for many users of the scholarly record to understand what they are navigating and exploiting when there's only partial coverage. Think about our experience in making abstracting and indexing databases publicly available, or the implications of legal decisions such as *Tasini v. New York Times*.

Of course, if we can't persuade the journals and the publishers to support the move to open access, we'll have to go to less optimal approaches like author self-archiving and mandates by specific research funding agencies (both government and private).

Finally, in this connection, I'll observe that at least right now it may well be that the threat of legislation mandating deposit of research results may be doing more good, in terms of advancing progress and focusing discussion on the issues with a certain sense of urgency, than actual legislation would. And while I'm not opposed to legislative intervention here, I'd hope that any legislation that is enacted is transparent and invisible to authors who publish with journals that appropriately support open access.

2. Universities Have a Key Stake in the Future of the Scholarly Literature and Thus Should Support Faculty in Negotiations with Publishers

Universities need to recognize and take seriously the asymmetrical nature of negotiations when a faculty member faces a publisher on copyright transfer agreements. We heard earlier today about the way in which such agreements intimidate faculty when they suddenly emerge as a final hurdle before an article is accepted for publication in a prestigious journal. Universities will do well to follow the lead of the Massachusetts Institute of Technology and the University of California by providing institutional support for faculty negotiations—this shifts the balance of power in these discussions to a more symmetrical and typically better balanced negotiation between publishers and institutions of higher education as institutions.

But there's another, and perhaps even more important, point here. If universities negotiate on behalf of faculty, this also helps publishers by reducing the number of special agreements they enter into, and thus benefits the entire scholarly publishing system in the end. Ideally, we'll see convergence on a small number of standard copyright agreements that are very widely used. And these agreements will give *non-exclusive* rights to multiple parties—publishers, educational institutions, and authors—to make use of the material. My worst nightmare is that rights to the scholarly literature become so fragmented, and largely reserved exclusively to individual authors, that the availability and use of this literature cannot evolve in response to new technologies (be it large-scale retrospective digitization, implementation of archiving strategies for digital materials, or the introduction of broad-based text mining). Keep in mind that the reason that we were able to rapidly make most of the journal literature (including backfiles) available in digital form was that the publishers held sufficient rights (on a centralized basis) over this literature to enable such new uses. This does not mean that we want to return to, or perpetuate, a world of centralized *exclusive* rights held by publishers, but we do want sufficient concentration of rights to enable ongoing evolution in response to the needs of the scholarly community.

Again, this connects to the theme of the overall integrity of the scholarly record, and our need to be able to manage this record at scale.

3. We Need to Talk Directly about the Support of Scholarly Societies

Much of the opposition to open access has come from scholarly societies. Implicit in many of the discussions about open access, in fact, are questions and fears about the future fiscal viability of scholarly societies, and about the ongoing stability of their historic funding models.

Most scholarly societies (and I recognize that generalities are dangerous here) are supported by some mix of dues, conference revenue, and revenue from publication programs. Most societies do much more than just run publishing operations—they provide a range of other member benefits, and they do many worthy things on behalf of their disciplines that include public education, advocacy for disciplinary funding, outreach to students at all levels of the educational system, and international coordination and interchange among scholars. Increasingly, the revenue from the publication programs is coming from library budgets. This income stream is often used to support non-publishing activities; sometimes it helps to subsidize member benefits. Is this appropriate? Which societies and disciplines are entitled to what proportionate shares of library materials budgets to underwrite their

programs? If libraries are not going to fund the non-publishing programs of scholarly and professional societies, who should—individual members through dues, or academic departments through institutional memberships, for example? Should we just think about scholarly societies as little different from commercial publishers, except that they choose to allocate their "profits" to their other programs, rather than to their shareholder dividends?

We have got to talk openly and directly about the question of how much the academy cares about the survival of scholarly and professional societies, about the appropriate portfolio of activities for these societies, and about how these activities should be funded. The current situation, where the leadership of some of these societies (sometimes to the dismay of many members) are fighting a reactionary battle against developments in scholarly communications because they believe that they must do so to protect the society's financial interests, must cease. Everyone would be better served if we confront these admittedly difficult questions directly and honestly, rather than using the open access question as a proxy for this discussion.

And economic concerns alone don't convincingly explain the opposition to open access from the societies: their journals typically are viewed as offering high quality at reasonable cost, and there's no reason that they shouldn't continue to be highly competitive if one moves away from a reader-pays model. So we need to understand what other issues are lurking here.

4. We Need to Think about What We Can Afford in Scholarly Publishing

There's a troublesome calculation that is becoming commonplace in open access discussions. One takes the operating budget or historic revenue stream of a given journal and divides by the number of articles published or submitted, and announces the per-published-article cost (or submitted-article-cost, if one uses that model) for an open access journal. These costs are typically reported in the range of a few thousand dollars per article. This number is then simply presented as a given: this is what each author (or his or her institution) will have to pay the journal for each article published if it is to move to an open access economic model.

The number that comes out of this calculation is not a God-given, for-all-time entitlement for the publisher of the journal. We need to think about what we can afford, not just what the current system costs.

Perhaps the system needs to be redesigned to deliver a price point per article that we can afford. Suppose we redesigned journal publishing with the goal of $100 per article published? What would this look like? Or, if articles really must cost several thousand dollars each, and we are unwilling to deal with the

implications or results of massively reducing costs, we need to explore what can we do to reduce the number of articles going into this costly system. Can we, for example, redirect a substantial percentage of the articles into a much-lower-cost system?

While outside the scope of the discussions today, I want to note that similar questions can and should be asked about monograph publishing; we may have a monograph publishing system today that leads to first-copy costs that are simply unaffordable for many specialized manuscripts. Digital distribution alone will not solve this problem.

Also in the economic context, I want to underscore the very important point eloquently made by Professor Scott MacDonald of Cornell in his presentation on the fully open access journal *Medieval Philosophy and Theology* during this week's ARL Membership Meeting:[2] that an open access journal eliminates some very substantial expenses in terms of fulfillment, marketing, and access-management technology to keep non-subscribing readers out of the journal. These have to amount to some significant savings in terms of cost per article if a journal goes completely open access.

5. Open Access Is Not a Threat to Peer Review: In Fact, It Has Nothing to Do with Peer Review… but It Is Also Time to Talk about Peer Review

We've heard any number of silly, unsupported, and unsupportable canards about the ways in which open access will destroy peer review. This is so deeply misinformed and disingenuous that it's hard to know how to respond—one wants to characterize these comments simply as scare tactics.

The economic model underlying a journal has nothing to do with its peer review policy—or its quality. There are many online journals that practice rigorous peer review. Indeed, going beyond just peer review, there seems to be no correlation between journal cost and quality.

At the same time—and having just emphasized the complete disconnect between open access and peer review, I almost hate to mention this for fear of adding to the confusion—we are long overdue for a nuanced analysis and reevaluation of peer review practices in scholarly publishing *as an entirely separate issue from open access*. Peer review is the last largely unanalyzed cost component of our present scholarly publishing system, and it represents an enormous hidden tax on the time and the productivity of our scholars. We need to understand the extent of these costs and their implications. I fear that we are far too casual about the near-universal application of traditional peer review in today's scholarly publishing, and far too sanguine about its cost-benefit in terms of quality improvement; we also look to peer review as a panacea for many problems.

As new practices and channels of scholarly communication emerge, discipline by discipline, we need to carefully and analytically consider where to most effectively and appropriately allocate the very scarce resource in scholarly time and attention that is implicit in prepublication peer review.

6. Scholarly Publishing Is a Means to an End

Scholarly publishing practices are meant to facilitate scholarly communication, to advance and support scholarship itself. New scholarly communications practices are rapidly emerging; the move to the networked information environment presents a cornucopia of new possibilities and alternatives. Open access appears likely to better serve these new scholarly communication practices by facilitating text-mining; data and literature integration and interconnection; the construction of large-scale knowledge structures; the creation of co-laboratories that integrate the scholarly literature directly into knowledge creation and analysis environments; and the emergence of groups of scholars functioning as virtual organizations that casually cross institutional boundaries and thus are no longer served by the subscription-based access restrictions that are circumscribed by these organizational boundaries. Open access also honors our commitments to the democratization of teaching, learning, scholarship, and access to knowledge throughout our society and globally.

Just because the existing scholarly publishing system has served the academy fairly well in the past does not mean that it has an intrinsic right to continue to exist in perpetuity. It should not, and must not, become a barrier to our aspirations and our innovations. If the day has come when the scholarly publishing system impedes scholarship, teaching, and learning it should—indeed must—be replaced by a new and more responsive system. As Don Waters of The Andrew W. Mellon Foundation famously reminded us, "It's the scholarship stupid."[3]

We need to remember what's really important here, and what our ultimate goals are.

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[1] Michael J. Kurtz "Data, Literature, and the Price of Research," *Improving Access to Publicly Funded Research: Policy Issues and Practical Strategies: Proceedings* (Washington, DC: ARL, 2006), http://www.arl.org/forum06/presentations/kurtz.htm.

[2] Scott MacDonald, "Medieval Philosophy and Theology," *Proceedings of the 149th ARL Membership Meeting* (Washington, DC: ARL, 2006), http://www.arl.org/arl/proceedings/149/presentations/macdonald.htm.

[3] Donald J. Waters, "Managing Digital Assets in Higher Education: An Overview of Strategic Issues," *ARL: A Bimonthly Report on Research Library Issues and Actions from ARL, CNI, and SPARC*, no. 244 (February 2006): 1–10, http://www.arl.org/newsltr/244/assets.html.

SCHOLARLY COMMUNICATION— IT *IS* OUR PROBLEM! ARL/ACRL INSTITUTE ON SCHOLARLY COMMUNICATION CHALLENGES ASSUMPTIONS AND SHIFTS PERSPECTIVES

by Frances Maloy, Division Leader, Access Services, Emory University Libraries

The future of research libraries is inextricably tied to the issues imbedded in scholarly communication. If this statement is true, why isn't every research librarian an authority on scholarly communication issues? For many librarians, the answer to this question is: confusion over whose problem scholarly communication is.

Some librarians recognize that scholarly communication issues aren't solely library issues, but we've taken them on because we see and feel the effects of these issues acutely and often more immediately than most other stakeholders. We have been willing to commit resources and take risks to create change in the system of scholarly communication. It's frustrating when we attempt to convince the faculty to join with us or "do their part" to change the system and they tell us it isn't their problem—it's a library problem.

A good way to gain clarity, or to develop a new perspective on working with faculty around scholarly communication issues, is to attend the ARL/ACRL Institute on Scholarly Communication. The institute is an artful blend of active and reflective learning in a collaborative context, clear learning outcomes, and a product—an action plan for your campus community. The institute's three-pronged approach—which emphasizes program planning, advocacy, and new communication models—provides effective tools to "get to the next level" in the change process, as Karla Hahn of ARL stated during the opening of the institute held in July.

From Emory University Libraries, a team of three librarians with diverse backgrounds and perspectives attended the institute: Liz Cooper, Anthropology Librarian, who brought the perspective of a librarian helping scholars with their research needs; Katherine Skinner, Digital Programs Team Leader, who provided the perspective of a recent PhD graduate and project coordinator on many digital projects, including the peer-reviewed Internet journal *Southern Spaces*; and myself, as the senior leader with broad-based knowledge and understanding of how to establish projects and move them forward in a coordinated way. Once the institute was underway, we worked with several other institutional teams, some including faculty members and administrators. The presence of non-librarian participants greatly benefited the success of the institute.

Preparing for the Institute

In April, we were notified that we had been accepted for the July institute and had extensive pre-work to do to lay the foundation for our campus planning effort. Our preparation included conducting an environmental scan of our institution's awareness of scholarly communication issues, evaluating the preparedness of the library to work with faculty on the issues, observing the effectiveness of outreach efforts underway, compiling an inventory of activities the library is engaged in to promote new models of scholarly communication, and defining initial priorities for our plan.

The pre-work accomplished a critical goal—it brought together three people from disparate parts of the organization to develop collective awareness around the broad issue of scholarly communication. With clear tasks to accomplish in a specified time frame, we quickly learned how to work well together as a team.

The pre-institute work also informed our focus for the institute and afterwards. After compiling the pre-work data for Emory University, we had an impressive list of accomplishments and ongoing activities. However, as observed by Linda Mathews, then Vice Provost and Director of Libraries, these activities were uncoordinated, project-based, often unknown by others outside the activity, and involved a small group of largely grant-funded staff.

Outcomes from the Institute for Emory

Our learning during the institute really challenged our assumptions and led us to significantly redevelop our initial plans. During the community review that began the final day of the institute, I shared that, based upon our experiences during the past day and a half, our team had completely rethought the plan we developed during our pre-institute work. For instance, we originally identified the development of an institutional repository (IR) and the establishment of a campus advisory committee as two key implementation steps. After our experiences at the institute we questioned whether the investment in an IR should be an immediate priority for Emory, given the long adoption curve others reported. Other approaches to supporting faculty with new publishing modes seem to fit better with the electronic publishing program already in development at Emory.

We also wondered who would do all of the work we realized was needed. Our team of three had been sent to the institute without a commitment that we would address the issues outside of the regular focus of our jobs. We didn't feel that we had the time to take on anything extra. Further, the discussion about data gathering led by Julia Blixrud of ARL really struck a chord with us—we wanted a database listing grants received, editorial boards Emory faculty served on, where the faculty published, how often they published.

Didn't we need to do more research before we recommended any action steps?

Within a few weeks after the institute, we had regrouped and developed a comprehensive planning approach bringing many areas in the library to work together on facets of scholarly communication issues. With the encouragement of Emory's new Vice Provost and Director of Libraries, Rick Luce, we are planning a series of presentations to the library staff to generate enthusiasm for the challenges and opportunities present in scholarly communication to encourage more librarians to think differently about how we work with faculty n support of their research. Our goal is to make these presentations a showcase for what is already being done by Emory in its disparate arenas and raise collective awareness in a broader group of librarians, much as the institute raised awareness in our team of three.

My goal for Emory is to share the answer to "whose problem is it?" Librarians have been engaging faculty with the wrong set of issues. Increasing journal prices, "big deals," and rights management are library problems. How we solve these problems will affect faculty but they are not problems in their sphere of interest, knowledge, and work. Librarians need to engage faculty in transforming scholarly communication at the beginning of the process. We need to develop tools, databases, and services that make it easier for scholars to do their work. As scholars use and incorporate these new tools, databases, and services, they will transform scholarly communication. Helping scholars discover, access, organize, and preserve knowledge are activities central to the mission of the library. We know that scholars need help with interdisciplinary research, for example. We know that scholars need tools that enable collaboration, management, and archiving of large data sets. We can develop easy-to-use tools that enable scholars to do their work while changing the scholarly communication model.

Highlights of the Institute
The first three hours of the institute were powerful and shifted my and my team's thinking and perspectives. After a brief introduction to the process of creating a program plan for our local campuses, Lee Van Orsdel, Dean of University Libraries, Grand Valley State University, introduced a lively exploration of advocacy. After Van Orsdel offered several strategies for working with faculty on their own turf addressing their issues, she moved us into an active learning mode. Each team created a sound bite or "elevator speech" tailored to faculty addressing a scholarly communication issue on our campus. Then we shared our sound bites with the group and asked the faculty present if the sound bites resonated with them.

This was the first of the most compelling moments in the entire institute. The faculty present spoke openly and candidly about scholarly communication and its impact on their professional careers and ways of conducting their work. While not always agreeing with one another, our faculty participants offered their own perceptions. We heard views such as the following: Faculty will share their own work—despite any copyright agreement they signed with the publisher. They understand that open access material is freely available, but it is not free of costs. Where their work is published and who sees it is of primary importance. They don't care whether or not large numbers of people have access to it but they do want to insure that key scholars in their field have access to it. Local repositories do not enable other scholars in their field to gain access to their work as well as a discipline-specific national repository could. The importance of publishing in the top five journals in their field could not be overstated—it matters throughout their careers, even post-tenure, because the prestige gained affects their ability to obtain grant funding, subsequent publishing and future job opportunities, and even defines who their colleagues are.

What emerged from the exercise and the discussion is that faculty look to the library for advice regarding copyright, for help using discovery tools that work across disciplines, and to work with learned societies to preserve the quality of their peer-reviewed journals.

When John Ober of the California Digital Libraries introduced an exercise relating to the Federal Research Public Access Act, it challenged us to step outside of our comfort zone. Although national advocacy is not an activity all academic librarians are eager to engage in, I had the direct experience of doing so when I served as President of ACRL and saw positive results from it. As Eric Lease Morgan noted in his Travel Log, "This workshop was a lot about advocacy. Advocacy is a form of communication, and it is also a form of marketing."[1]

When the focus of the institute shifted to explore new modes of scholarly communication, presentations by Lynne Withey from the University of California Press, Karla Hahn of ARL, and Karen Williams of the University of Minnesota launched a series of discussions and planning exercises.

In a lunchtime keynote, Withey acknowledged that the future of publishing is digital but explored why most e-book publishing has been largely unsuccessful. Importantly, she noted that digital publishing ventures like Atlas of Global Inequity are successful because they have scholars' involvement, collaboration with the library for technical support, and are grant-funded.

Withey touched on the three economies of scholarly communication—prestige, subsidy, and market. To put it another way, faculty want the prestige that comes from being published, the library uses a university-subsidized budget to purchase their published works, and the publishers make money. It is the collision of these three

economies that inhibit collaboration, and the challenge is how to integrate the three economies. The conclusion I came away with is that there is no monolithic solution, that sustainable change will be specific to the discipline, format, and use of the content.

Emory University is working on a few grant projects to develop tools and methods to reduce the costs of sustaining digital projects. I knew that any plan our team proposed would be evaluated based upon sustainability.

Our team's thinking about what Emory needed to be doing really started to shift when the institute began exploring issues around the development of institutional repositories. After hearing four participants' reflections on their IR experiences, the three of us concluded that Emory's plan needed to build upon the successes and lessons learned by these early adopters. We decided that since all of the presenters reported significant difficulty convincing faculty to deposit pre- or post-prints of their work into the campus IR, we weren't ready to follow down that path. Instead, we wanted to offer services scholars have identified as needing, such as help with archiving data sets, gray literature, and collaborative workspaces.

We were inspired by the presentation by Karen Williams of the University of Minnesota, who discussed research findings by a team from the University of Rochester that found that scholars want to be able to work with co-authors; track versions of the same document; work from different locations; make their work available to others; have easy access to others' work; help them keep up in their fields; organize items using their own schemes; control ownership, security, and access; know items are persistently usable; not have responsibility for servers and digital tools; not violate copyright; and not be any busier.[2] Williams went on to share research findings from a University of Minnesota study that aligned with the University of Rochester findings. Nearly 70% of the faculty surveyed said their research is interdisciplinary and collaborative. Faculty reported being very comfortable with electronic content; wanting tools, such as finding aids, but being slower to adopt them; needing help managing research content; working from multiple places; and needing help to do this and disseminate their research in traditional ways.

The need for tools—to conduct research, to manipulate data, to discover information—hit home for us. Emory is the site of the MetaScholar Initiative, which is a series of projects addressing new scholarly communication models, archiving and preservation of digital content, and the development of search and discovery tools. We knew we would need to focus on how to transition these grant-funded projects to practical applications in the library. We also knew the three of us alone were not in a position to effect much change due to lack of time and competing priorities. During our table

discussions with other teams, we found that these issues were common challenges.

By the end of the institute, we were feeling a bit overwhelmed by our task of developing a comprehensive program for addressing scholarly communication at Emory University. We also needed a sense of how comprehensive a plan the library would support and what resources could be committed. Leadership of the Emory University Libraries was in transition as a new Vice Provost and Director of Libraries, Rick Luce, started in September.

Next Steps at Emory

At Emory, we are now poised to take a step to the next level of a collaborative and coordinated approach to scholarly communication. We will emphasize connecting with the graduate students and pre-tenure professors who may be more willing partners in experimenting with new dissemination modes; we will create tools for collaboration and discovery; and we will build a stronger base of awareness and understanding within the library. Our planning will be guided by the primary lesson learned at the institute—focus on initiatives that solve problems scholars have concerning scholarly communication and not problems the library has concerning scholarly communication.

An IR for theses and dissertations is underway at Emory and one of our strategies will be to build upon this IR to include other works like gray literature, data sets, and graduate student work. As a member of the vice provost's strategic planning group, I am able to incorporate the need for tools into this group's vision and goals for digital scholarship and an e-science initiative. Emory has many groups that are interested in these issues and that are doing good work. Our challenge will be to coordinate work, align priorities, and build a program out of these disparate activities. I am hopeful that the strategic plan will set priorities and directions in a unified way.

My understanding of the problems of scholarly communication has been fundamentally changed as a result of the ARL/ACRL Institute on Scholarly Communication. I now see the connections between the system of scholarly communication and the future of the digital library that I didn't quite understand before—they are completely intertwined. Libraries need to pave the way for scholars with the development of new tools to conduct research and to share it. Scholarly communication—it *is* our problem!

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1 Eric Lease Morgan, "Institute on Scholarly Communication: A Travel Log," August 21, 2006, http://dewey.library.nd.edu/morgan/workshop.html.

2 Nancy Fried Foster and Susan Gibbons, "Understanding Faculty to Improve Content Recruitment for Institutional Repositories," *D-Lib Magazine* 11, no.1 (January 2005), http://www.dlib.org/dlib/january05/foster/01foster.html.

DO I HAVE TO NEGOTIATE A LICENSE FOR EVERY E-RESOURCE I BUY? DEVELOPING A BEST PRACTICE OPTION

by Karla Hahn, Director, Office of Scholarly Communication, ARL

Many librarians and publishers believe that a license agreement must be signed as part of the sale of every electronic resource. While license agreements are helpful for consortia or expensive products, they can be impractical for the long tail of scholarly publishing where the growing number of transactions is burdensome for libraries and prohibitively expensive for smaller publishers.

Model licenses have been helpful in many ways, but both libraries and publishers report that by and large they do not eliminate handling costs for librarians and publishers because some negotiations typically remain. At the same time, publishers and libraries have learned a lot in the 10 years we have been signing licenses. For the most part it appears that we have sorted out balanced positions on many topics (authorized users, interlibrary loan, issues of unauthorized use). But the question remains, at least for situations where the risk of problems beyond clearly illegal acts is low, is there some other way to arrange for e-resource sales to libraries?

One indicator that an alternative to licenses might be possible is the observation that some publishers have simply been transacting sales of e-resources to libraries without requiring licenses. Clearly some publishers are already willing to rely on their trust of their customers and the protections of existing law. This suggests that perhaps there is a way to build on this trust to create a recognized no-license alternative that publishers can chose for selling their products.

The Solution?

ARL, the Association of Learned and Professional Society Publishers, SPARC, and the Society for Scholarly Publishing agreed that finding an alternative to licenses was an important issue that librarians and publishers should work together to address; therefore the four organizations cosponsored an exploratory meeting at ARL in October 2006. This meeting built upon a series of presentations made by Judy Luther, Informed Solutions, and Selden Lamoureux, University of North Carolina, at library meetings and publisher conferences.

A small planning group organized a full-day invitational meeting that brought together a representative group of librarians, publishers, lawyers, and a subscription agent to discuss the licensing situation and explore possible courses of action. After looking at the risks perceived by librarians and publishers that initially prompted the creation of license agreements, the group became convinced that it is possible to develop a new way to address the exposure that each party felt in dealing with electronic resources. The meeting participants then considered potential approaches that would enable acquiring electronic content without a license agreement.

Despite the range of perspectives on the problem, there was consensus that a best practice approach was possible and could be useful in many cases. The best practice approach would rely on existing law and create a document describing a brief list of expectations that could be shared by librarians and publishers. If a publisher felt that the best practices and existing law were sufficient to manage their perceived risk, they could market their product indicating their reliance on the expectations described in the best practices and forgo use of a formal license agreement.

After considering several options, the National Information Standards Organization (NISO) was identified as the best trusted third party to support development of a best practice statement and provide a mechanism for adoption within the library and publishing communities. The meeting participants generated a list of key topics (such as users and reasonable uses) that they believed could be addressed with language defining common expectations.

Next Steps

The next steps will be working with NISO to begin the process of developing the best practice statement with a formal working group. Participants in the group that met in October became so committed to this project that they all agreed to continue working with the project as it moved to NISO.

Once developed, publisher associations could review the best practices for endorsement as a reasonable option available to publishers selling electronic resources. It is hard to guess what proportion of the e-resource market would choose to adopt an option like this. If the use of the best practices becomes broadly understood and seen as successful, interest in using this approach for larger sales could grow over time.

The best practice approach offers benefits to many participants in the scholarly publishing marketplace. This option could greatly simplify library handling costs for many electronic products. While probably inappropriate for consortia agreements or expensive deals, the best practice approach has the potential, particularly for small publishers and others selling access to inexpensive resources, to largely eliminate licensing costs. Common use of the best practices approach would make it easier and cheaper for serial vendors to provide their services to both publishers and libraries. If successful, the approach would allow a growing number of smaller players to continue to succeed in the scholarly publishing marketplace and eliminate the need to pass licensing costs on to customers.

ARL

ARL CALENDAR 2007

http://www.arl.org/arl/cal.html

January 18	Mapping License Language for Electronic Resource Management *Seattle, Washington*
January 19	Building on Success: Sharing What We're Learning *Seattle, Washington*
January 20–21	Third Annual Leadership Institute to Promote Careers in Research Libraries *Seattle, Washington*
January 22	LibQUAL+® 2007: An Introduction *Seattle, Washington*
January 22	Your LibQUAL+® Community: A Results Meeting *Seattle, Washington*
February 8–9	**ARL Board Meeting** *Washington, DC*
March 12–16	Service Quality Evaluation Academy *New Orleans, Louisiana*
April 16–17	CNI Spring Task Force Meeting *Phoenix, Arizona*
May 22–25	**ARL Board & Membership Meeting** *St. Louis, Missouri*
July 23–24	**ARL Board Meeting** *Washington, DC*
October 9–12	**ARL Board & Membership Meeting**

ARL MEMBERSHIP MEETINGS 2008

May 21–23, 2008, Coral Gables, Florida

October 15–17, 2008, Washington, DC
Tentative Dates

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