1. Preliminaries
   a. Welcome and introductions
   b. Review of meeting objectives

   MEETING OBJECTIVES:
   1. Review current issues in scholarly communication and initiatives that have been proposed to address them.
   2. Discuss steps that UC can take to address scholarly communication issues.

   Hume began by asking the attendees to introduce themselves, and asked Dan Greenstein, new University Librarian for the California Digital Library and Systemwide Planning for Libraries and Scholarly Information to make a few remarks. To set the stage for the meeting, Hume noted that the Standing Committee on Copyright (SCC) had a long-standing interest in copyright education for faculty, but was initially focused on issues of copyright ownership for course materials and could not embark on copyright education until that matter was settled. The objective for this meeting is to seek a clear vision of whether and how to meet with the UC scholarly community to educate faculty about the scholarly publishing issue.

2. Background: the "Library Crisis" and UC

   Background Material:
   The Crisis of Library Sustainability, the Opportunities of Digital Scholarly Communication, and the University of California Strategy (Systemwide Library Planning, 5/15/02)
French summarized the crisis that led to Library Planning and Action Initiative (LPAI) in 1996 and establishment of the California Digital Library (CDL) in 1997. The CDL’s initial strategy for a shared collection of journals was licensing of commercially published digital journals on a Universitywide basis with negotiated caps on annual price increases. Through this strategy, which now provides about 7,000 titles for Universitywide access, the CDL has: a) made available to campuses the equivalent of about 35,000 campus-level subscriptions to titles to which the campuses had not previously subscribed in print; b) substantially reduced the historic rate of growth in intercampus lending activity for photocopies of journal articles; c) observed use of digital journals that greatly exceeds print use of the same titles; d) achieved savings of about $700,000 through price caps; and e) helped lead a shift in publisher pricing models from “print plus a premium for digital” to “digital plus optional subscriptions for print.” Preliminary analyses also indicate the potential for substantial additional savings for campuses that choose to cancel their print subscriptions and rely exclusively on digital.

However, the LPAI recognized that Universitywide subscriptions to commercial digital content were, at best, a short-term strategy, and it seems evident that we are approaching the maximum savings that can be achieved through these means. During this same period, a wave of mergers and acquisitions has concentrated greater market power in a few large publishers, and while annual inflation rates have subsided to the 7-10 percent range, these price increases are still greater than the funding that the State can provide for this purpose. The CDL estimates that about $25 million of CDL and campus funds are now committed to these “big deals,” with some $20 million represented by about 12 large publishers. The bundling of journal titles into “big deals” means that it is difficult to walk away at renewal time, since failure to renew even one contract means denial of access to dozens or hundreds of titles, many of which are the leading journals in their fields. While this strategy may have temporarily arrested the rate of increase in journal costs, there are structural factors that will continue to push prices up. For example, few publishers are ready to abandon print, so subscribers are in effect paying to support the production of both print and digital formats, and as publishers jockey for market position by adding new proprietary services to their Web sites, the costs of the associated research and development efforts are undoubtedly includes in the prices that subscribers face. In addition, more information products are being published in serial form, as publishers recognize both the benefits of regular and convenient updating of content and the financial advantages of subscription-based income.

In response to these pressures, the CDL has supported initiatives like the Scholarly Publishing and Resources Coalition (SPARC, discussed further below) and the Berkeley Electronic Press (bepress), and has initiated its own support infrastructure for working papers and other digital publications, the eScholarship Repository (discussed further below). It is becoming evident that publishers feel threatened by developments like the arXive e-print server for physics and mathematics (formerly at Los Alamos National Laboratory, now hosted by Cornell University) and the eScholarship Repository, and by manifestations of the free online scholarship movement, such as PubMed Central. For example, several journals now consider the deposit of a preprint in a digital repository for public access to constitute prior publication, and will not accept such works for publication consideration; commercial enterprises have emerged to manage and disseminate working papers that charge both the depositors of the papers and the users of their
Web sites; and there are indications that large commercial publishers are experimenting with ways to enter the preprint/working paper “market.”

3. Framing the discussion: the Tempe Principles

Background Materials:
· Principles for Emerging Systems of Scholarly Publishing, 5/10/00 (<http://www.arl.org/scomm/tempe.html>)

Hume described the initial Tempe Conference sponsored by the Association of American Universities and the Association of Research Libraries, which led to publication of the Tempe Principles. He noted that the conferees did not embrace the concept of free online scholarship (cf. Principle 5), and that special attention was given to the concept of encouraging faculty to avoid assigning all rights to publishers (cf. Principle 6). In discussion, it became evident to the conferees that the issue that brought them together was not a “library problem,” but a “higher education problem,” leading them to call for a common effort by institutions, their faculty and libraries. In response to a question about outcomes from the Tempe meeting, Hume observed that the sponsoring organizations and a few institutions have been active, and that, in his view, many are “waiting for UC” to take action. Hume noted that many of the themes re-emerged at a Knight Roundtable session in which he participated at Princeton last summer; according to reports at that meeting, Hume feels that UC is well positioned to move forward. Greenstein expressed concern that libraries could use the Tempe Principles as an excuse to avoid confronting more immediate but contentious actions that might be taken to control costs, such as addressing redundancies in print holdings and pursuing more effective collaboration in collection development. He also noted the danger that discussion and action on the Tempe Principles could inadvertently entangle and confound the publication and intellectual property issues of scholarly communication with those of instructional presentations and materials, and expressed the view that faculty must have effective alternatives to conventional publication before their support can be gained. Zelmanowitz noted that few of the enumerated principles refer uniquely to digital publication, and speculated about what was truly different about digital scholarly communication in the context of this discussion. While scholars may have new capabilities and opportunities in the digital realm, so do publishers, and they are often better positioned to use these capabilities to advance their own interests.

4. The Economics of Scholarly Publishing
Bergstrom began by presenting data comparing the prices of journals from commercial and non-profit publishers, noting that by any measure commercial journals are substantially more expensive. He then presented the case that commercial publishers behave like monopolists, seeking opportunities to achieve monopoly profits. There is no other ready explanation for the difference in prices between commercial and non-profit publishers, when both face essentially the same costs for printing and distribution. The source of monopoly power in journal publishing arises in part from the fact that it takes time (and therefore working capital) for a new journal to establish a reputation and compete effectively with established publications, and in part because the atomized market of academic consumers has no means to respond collectively to the market power of the publisher (for example, by agreeing as a group to send their papers to equivalent journals from non-profit publishers); he illustrated with the parable of the Anarchists’ Annual Meeting (see “Free Labor for Costly Journals?” in background material). He then showed how, in the electronic publishing realm, monopolistic publishers can further leverage their monopoly position by bundling titles and by aggregating demand through site licensing to institutions or groups of institutions, demonstrating by examples that through these strategies publishers can achieve greater revenue than they could get through sales of single titles to individuals. However, it can be demonstrated that, if purchasers refuse to buy journals priced above average cost (i.e., purchase from non-profit publishers), site licenses could make both publishers and purchasers better off. Bergstrom ended by exhorting faculty to a) refuse to edit or referee for high-priced journals, b) encourage inexpensive journals, c) encourage societies to expand their roles as publishers, and d) retain their copyrights in their journal articles and post them to Web sites or repositories.

5. Copyright and Scholarly Publishing

Lawrence noted that a working document prepared within UC, "Copyright Legislation and Scholarly Communication: Basic Principles," sets out many of the basic issues at the intersection of copyright law and scholarly communication. In Lawrence’s view, scholars as authors want widespread dissemination of their ideas, works and findings to other scholars, guarantees of integrity and attribution for their works, and credible quality filtering, as provided by the journal peer review system and the editorial review systems of reputable book publishers. As users of scholarly publications, faculty want barrier-free access to the works of other scholars and to primary source materials that are the subject of research and scholarship, and the ability to make
use of these materials in their research and teaching with appropriate attribution. Conspicuously absent from this list is anything having to do with money. However, copyright law in the U.S. is, at its root, an economic concept. For most works, an important incentive to creation is the opportunity to make money from publication, display, or performance, by having the ability to control and charge for these, leading to the development of a publishing industry that relies for its existence on the protections afforded by copyright law. Ironically, the incentive for scholars to produce copyright-protected works, in most cases, is not direct financial incentive, but the incentive of having their works widely read, favorably evaluated, and incorporated in the work of others, an incentive that is markedly different from that which drives the publishing industry.

In the print world, copyright law offered several accommodations to scholarly needs, including the first sale doctrine (individuals and institutions can sell, lend, or give away lawfully acquired copies without permission of the copyright owner), the fair use provision (allowing certain uses of segments of copyrighted work, particularly for non-profit research and teaching, without permission of the copyright owner), and various provisions for use in classroom teaching and by libraries. However, the operation of copyright law in the pre-digital world was not entirely benign. For example, the common practice by academic journal publishers of having authors assign copyright to them both limits the dissemination of published articles to those with ability and willingness to pay the subscription fees, and also limits the ability of authors to re-use their own works, for example in course packs or published anthologies.

The advent of digital publishing introduced a technology that enabled widespread dissemination at very low marginal cost, making possible instant, nearly costless copying as a means of distribution of scholarly work. Copyright holders have responded in ways that protect their economic interests, for example through the prevailing practice of distribution by license rather than sale, which often results in further restrictions on access and use. Provisions of the recent Digital Millennium Copyright Act make it a criminal offense to circumvent software that controls access to copyright-protected digital works, even if the copy being accessed was lawfully acquired and the use to be made of it is legal.

At the same time that technology seems to be driving traditional publishers and producers to call for more restrictions on allowable uses of works, new forms of scholarly communication may run across new and unanticipated obstacles at the intersection of scholarship and copyright law. An example is the Electronic Cultural Atlas Initiative (<http://www.ecai.org/>), about which SLASIAC heard a very stimulating presentation about 18 months ago. The combination of a large dataset to which many researchers contribute collaboratively, and an innovative software interface to retrieve and combine results from the database, raise questions about ownership and control of the results displayed when using ECAI. In the face of all these challenges, it is important to gain a shared understanding of how we want scholarly communication to work in this new environment, and how copyright law and policy may need to be changed to enable us to achieve this vision.

6. Initiatives to change scholarly publishing
a. Initiatives to reduce costs and challenge commercial publishers
b."Free Online Scholarship" initiatives
Butter described several initiatives that are intended to challenge the prices and practices of traditional academic publishers by introducing competition in the marketplace and producing new lower-cost journals. The most notable of these are the Scholarly Publishing and Academic Resources Coalition (SPARC) sponsored by the Association of Research Libraries and Biomed Central (BMC). SPARC employs a variety of strategies to foster competition in the scholarly publishing market, including supporting the establishment of new journals and developing educational strategies to inform institutions and authors about scholarly publishing alternatives.

BMC is a commercial publisher that is dedicated to exploring an innovative business model for academic publishing in which publishing costs are financed “up front” by authors or their institutions, and the publications are available on the network without charge.

Michael Eisen, research scientist at Lawrence Berkeley National Laboratory and a co-organizer of the Public Library of Science (PLoS), began by observing that there is really no role for copyright protection in scholarly communication except to ensure integrity and attribution of works. Research is best facilitated when all relevant literature is freely available for access and use. In the current system of scholarly publishing, born of the characteristics of the print literature, a publisher has monopoly control of each article published, and can determine who may access the article and how its content is used. PLoS was conceived as a result of an innovative attempt to use the online literature in a new way: to systematically scan the corpus online to detect and make available information bearing on a particular investigation (in this case, related to genome research). The idea has been stymied by subscription-based access restrictions, restrictions on the harvesting and reuse of the discovered content resulting from copyright law, and the industry practice of posting content in PDF format, which is not easily searched and harvested. Eisen noted that the existence of a shared, freely-accessible database of genome information has been the key to stimulating progress in both basic research and commercialization of results, and he believes that similar results could be expected if the research literature were similarly freely available. The obvious solution is to incorporate the costs of publication and distribution into the costs of the research, rather than attempting to recover them through dissemination.

Initial discussions of this concept encouraged Harold Varmus, then Director of the National Institutes of Health, to propose the concept for open access to the biomedical literature that became NIH’s PubMed Central service. While opposition to this concept was expected from
commercial publishers, its advocates did not expect the antagonism that was displayed by scholarly societies, some of whom approached Congress to oppose the idea. When PubMed Central proved unable to deliver on the goal of free access to the literature, PLoS was conceived. PLoS involved a pledge on the part of its signatories to support the concept of open access and to refrain from publishing in journals that did not make their articles freely available after a limited initial period. Very few publishers agreed to this model, leaving the PLoS organizers to conclude that the only solution was to create alternate journals. PLoS has the weight of some 30,000 scientists who support PLoS, as well as the support of Varmus; foundation funding is imminent.

In concluding, Eisen observed that the way to change the publication behavior of researchers and overcome the prestige factor of established journals is to provide scientists with real alternatives and to alleviate their fears (most notably in the area of tenure and promotion) about publishing in alternative journals.

7. Innovations in Scholarly Communication

Background Material:
· eScholarship Update -- April 2002 (CDL 4/2/02)
· California Digital Library Opens Online Repository for Working Papers (CDL Press Release, 4/3/02)

Candee provided an overview of the activities of the eScholarship program (<http://escholarship.cdlib.org/>), and described in some detail the recently-announced eScholarship Repository (<http://repositories.cdlib.org/>). The repository, which is built upon the bepress EdiKit system, is currently focusing on working papers in the social sciences and humanities, with an initial emphasis on a number of social science Organized Research Units with active publishing programs. The eScholarship staff have determined that the Repository technology appears to be able to scale up without difficulty, and clients so far have been delighted with the service. Therefore, the CDL is envisioning the Repository as an enabling infrastructure for a variety of types of content, University clients, and scholarly communication initiatives. Greenstein noted that most repository initiatives have their roots in disciplinary communities and societies; these are generally not scalable to other disciplinary groups. By contrast, the eScholarship Repository is a generalized infrastructure that is a) persistent, b) able to aggregate and search content across subjects and data formats, and c) neutral with respect to (and able to provide a testbed for) various business models.

8. Next Steps for the University of California

Hume summarized the morning discussion in the following points:

- Any strategy should recognize a range of business models
- UC should give serious consideration to Michael Eisen's vision
- An infrastructure exists within libraries, i.e., people who can help people
- It is important to take an initiative to educate the UC community. Faculty are not aware of the issues. The key messages are:
There are, or should be, resources to assist with copyright issues
Individual faculty members will not have to cope with copyright issues alone
UC can influence the world
To deliver the message, we need experts in copyright, and the message needs to be delivered in person

Eisen suggested that the University could be useful by:
1. Helping to establish the prestige of alternative journals (although Eisen acknowledged that this is not really within the institution's control)
2. Encouraging adoption of alternative strategies - link them to the mission of the University and the disciplines
3. Providing financial support, particularly institutional subsidy of cost of publication (e.g., page charges)
4. Addressing the concerns and fears, especially regarding promotion and tenure -- the "academic downside."
5. Considering institutional involvement in quality filtering, e.g. UC peer review

Zelmanowitz suggested the following strategy:
1. Inform the faculty
2. Pursue opportunities -- e.g., the eScholarship Repository, which lowers barriers to entry
3. Address the reward system (although it is not clear how best to do this)

Other key points raised in discussion:

- Work with the Senate; UCOL, UCTT, UCAP and UCORP are the key committees
- Peer engagement is critical -- find senior faculty leadership
- Plan now, for launch in the 2002-03 academic year
- Antitrust issues are probably not a concern, but OGC could be requested to review
- Consider reviewing author contracts with publishers -- are some better than others? could we provide a model?
- Consider advocating a revision of federal regulations to require that federally-sponsored research be made accessible in open-access systems
- Address the indexing of contributions to alternative publications; articles that are not indexed (or included in quality rankings like the ISI Impact Factors) will not be discovered and used. Can UC help to ensure this?
- Speed of publication is important, as are the prestige and exclusivity of the publication

Hume concluded by noting that two avenues for action seemed most promising:
1. Education
2. Legislation/regulation

Agreed:

- The Chair of SCC and SLASIAC will prepare a letter to the Chair of Academic Council proposing a partnership on education, and outlining a mechanism for its operation.
- SCC and SLASIAC will prepare a joint report to the Provost outlining their recommendations on these issues.