Library consortia are challenged to take on new roles as the scholarly communication landscape changes. What roles can library consortia play as various Open Access initiatives emerge? Should library consortia co-ordinate agreements and payments for institutional memberships to help promote publication in Open Access journals? Are consortium business models affected by the introduction of full Open Access and hybrid journals? Some early experiences from the BIBSAM consortium are discussed, using BioMed Central, Oxford University Press’s’ Nucleic Acids Research, and Springer’s Open Choice as examples.

Introduction
Library consortia were formed to meet challenges and embrace opportunities as new electronic information resources hit the market. A primary role for library consortia is to negotiate licenses which provide for access to desired content at the best possible price, with the best possible terms. In their role as one single access point to large segments of the market, consortia are attractive as negotiating partners for vendors. The number of library consortia existing worldwide has grown steadily since the pioneering days of the mid 1990’s. Today more than 170 organisations are listed on the International Coalition of Library Consortia’s Web site, representing national, regional, state-wide, as well as other initiatives [1]. While some consortia started from scratch, defined its goals, and built the necessary infrastructure solely for the purpose of licensing, other consortia initiatives were taken on by organisations which already had other co-ordination responsibilities for the member institutions. The BIBSAM consortium in Sweden is an example of the latter. These differences in organizational structure might become more visible as consortia are challenged to take on new roles as the scholarly communication landscape changes.

BIBSAM is the Swedish Royal Library’s department for national co-ordination and development. The main objective for BIBSAM is to enhance and increase the efficiency of information provision for higher education and research. Co-ordinating a licensing consortium is one of several activities undertaken to fulfil this objective. The BIBSAM consortium has 56 participating member institutions from the higher education and research sector. BIBSAM is the Swedish Royal Library’s Department for National Co-Ordination and Development.
stimulate a discussion about the conditions for scientific and scholarly publication.

The Open Access movement follows several different tracks. Two main areas of activity are the establishment and promotion of institutional repositories and of Open Access journals, respectively. These initiatives have an impact both on individuals and on institutions that have an interest in scholarly communication, including researchers, universities, libraries, and publishers. The impact of Open Access on these different groups has been described by Goodman [3].

This article describes some early experiences regarding impact of Open Access on library consortia and of library consortia on Open Access. What roles can library consortia play as various Open Access initiatives emerge? How are existing consortium businesses models affected by the introduction of Open Access journals, and so called hybrid journals? These new challenges and opportunities for consortia will be illustrated by three examples: BioMed Central, Oxford University Press’s Nucleic Acids Research experiment, and Springer’s Open Choice program.

**BioMed Central and institutional membership**

BioMed Central is a publisher with both subscription based and Open Access products in its portfolio. Since their Open Access journal program was launched in 2000 [4], the number of journals has increased to around 130 today. BioMed Central has been an active voice in the public debate about Open Access, and has played a significant role in the evolution of the Open Access movement.

Starting in January 2002, BioMed Central introduced institutional membership as a model for financing their Open Access journals and attracting manuscripts [4]. The model was tiered and based on number of Full Time Equivalent (FTE) staff and postgraduate students in life science and medicine. Institutional membership fees ranged from $1500 to $7500 and entitled researchers at member institutions to publish in BioMed Central journals without paying the $500 fee charged per paper published. By signing agreements with several large consortia, the institutional membership program gained momentum, see for example press releases announcing agreements with JISC (UK) in July 2003, FinELib (Finland) in May 2004, the Norwegian Knowledge Centre for the Health Services (Norway) in October 2004, and DEF (Denmark) in November 2004 [4].

In early 2004, a few Swedish universities had signed individual agreements with BioMed Central. In these cases, the libraries had taken on active roles to promote Open Access within their universities and had also paid the cost for the first year of the institutional membership. The goal was not necessarily to save money; these initiatives were rather signals of appreciation of entrepreneurship. Ideas and programs which could possibly offer alternatives to high priced STM journals from traditional publishers were welcome.

Similar to other consortia, BIBSAM considered negotiating an agreement for institutional BioMed Central membership. However, after discussions with the consortium advisory board during spring 2004, the plans to proceed with the consortium negotiations were put on hold. At this stage, BioMed Central had announced plans to change the business model from the tiered FTE model described above to a model where the cost for institutional membership would be based on the number of articles published by the institution during the previous year [4]. The library directors on the advisory board expressed concerns about the new model. More importantly, it was pointed out that the question of institutional membership is a policy issue
which should be discussed at the highest levels within the universities as well as within the research community. It should not be the role of the libraries to sponsor certain channels of publication. A consortium agreement would probably mean that the decision regarding institutional membership would be made at the library level and funds taken out of library acquisition budgets. Instead, it was suggested that these discussions should be continued in a more proper forum, for example the Association of Swedish Higher Education (SUHF). Soon after these discussions during spring 2004, BioMed Central reverted back to the FTE based model as a response to the massive negative feedback on their new pricing model [4], and SUHF made a commitment to sign the Berlin Declaration [5].

Why might the outcome of the discussions regarding consortium co-ordinated institutional membership to BioMed Central be different for BIBSAM than for other consortia, including the other Nordic countries? One factor is central funding. With central money comes the option of central decision-making. Three of the above mentioned BioMed Central agreements (UK, Denmark and Norway) were financed with central money, and the decisions were made centrally. This is different from the BIBSAM consortium, where there is no central money to pay for resources. Decisions regarding participation are always made by the members on a deal-by-deal basis, and they also pay the full cost of all the licensed resources. FinELib made the decision to co-ordinate the Finnish BioMed Central deal centrally, while the individual members paid their own fees.

**Oxford University Press and Nucleic Acids Research**

While most commercial and society publishers have been reluctant to embrace the Open Access movement, Oxford University Press (OUP) has initiated several experiments with new pricing models for their journals. OUP’s flexibility and willingness to try new concepts have been well received by the library community.

When OUP started experimenting with Open Access models, the BIBSAM consortium was half-way through a ‘big deal’ agreement for the period 2003-2005. The cost of the deal was based on the value of subscriptions to OUP journals held by the participating institutions at the start of the agreement. In the summer 2004, OUP announced that one of its top journals - Nucleic Acids Research (NAR) - would move to an Open Access publishing model starting 2005 [6]. BIBSAM accepted OUP’s suggestion to convert the value represented by NAR to institutional memberships, and saw this as a transitional solution during the last year of a 3-year agreement. Institutional memberships would entitle researchers from all participating BIBSAM institutions to a discount on the author charges applied when publishing articles in NAR.

The need for some general guidelines for the BIBSAM consortium as NAR and other traditional subscription products convert to OA was discussed with the consortium advisory board during spring 2005. The issues were now slightly different than in the BioMed Central case mentioned above. While a BioMed Central membership would allow researchers to publish in a large number of journals within the biomedical sciences without cost, a membership to NAR would allow them to publish in one single journal for a reduced fee. While BioMed Central journals were e-only from the start and had no subscription history, NAR was an established subscription based journal within a specific field. The difference between journals that users choose to read and journals that researchers choose to publish in was discussed. Would the main
purpose of an institutional membership be to save money, or would the purpose be to support an OA initiative? Again it was questioned whether it was the role of the libraries to sponsor specific publication channels. The advisory board also recognized that it would soon be difficult to support all Open Access initiatives, especially if the funds were to be found within the library organisation.

As a result of these discussions, the BIBSAM consortium will not continue with institutional membership to NAR as an integrated part of the OUP agreement. Instead, the cost for the OUP ‘big deal’ will, from 2006, be reduced with a sum proportional to the value of previous NAR subscriptions. BIBSAM member institutions that are interested in supporting NAR will sign up for institutional memberships separately.

**Springer Open Choice**

In July 2004, Springer announced a new Open Access initiative called Springer Open Choice. This program enables authors to make their article available Open Access in exchange for a $3000 fee. The option is available for all Springer journals, which continue to be published under a traditional subscription-based model. The initiative was a low-profile project at first, introduced as a response “to the demands of the small group of researchers and certain publicly funded research communities who are advocating even wider unlimited access to scientific content and who are in a position to pay for that service”, as Springer CEO Derk Haank expressed it [7]. A year later, Springer increased the profile of the Open Choice program by hiring Jan Velterop - Open Access advocate with a background from BioMed Central - in a newly created position as Director of Open Access [8].

The Open Choice hybrid model introduces several new issues of interest to the library community, including library consortia. How will the subscription cost for Springer journals be adjusted to reflect the fact that part of the content is already paid for by Open Access fees? How may the cost for consortium deals be adjusted? The BIBSAM consortium has a “big deal” agreement with Springer, which gives access to the full portfolio of SpringerLink titles. Similar to the description of the OUP agreement above, the basis for the total cost is the consortium members’ subscriptions to Springer journals at the time of the first BIBSAM-Springer agreement. However, this connection between historical print holdings of individual titles and the current fee paid by the consortium no longer exists in the Springer deal. It is not obvious how the price for the consortium agreement should be adjusted to avoid double payment for SpringerLink content published by means of Open Access fees.

Interestingly, Springer’s current plan for adjusting journal prices does not focus on the amount of Open Access content published in the subscription-based journals. Instead, any changes in subscription prices will be based on the amount of traditional content published in the journals compared to the previous year [9]. This implies that if the number of articles published by the traditional model stays the same, the subscription price will remain unchanged, regardless of which portion of the articles in the journal that are published as Open Access.

**Roles of libraries, roles of consortia**

As illustrated in the BioMed Central and NAR examples above, the roles for libraries in relation to institutional publication policies are unclear, as are the roles for consortia in this context. If not through consortia, which channels can publishers use to reach those who can - and will - make decisions about an institutional membership? How to reach lar-
ge segments of the market, including previous subscribers, readers, and researchers who might want to publish in their Open Access journal with one letter or phone call? It is not obvious that the infrastructure of library consortia has an equivalent at other levels in the academic world.

The take-up of institutional memberships in NAR's first Open Access year was lower than OUP had predicted [10]. This possibly reflects the challenge of finding the appropriate addressee for an institutional membership offer.

The Springer Open Choice initiative appears to be an Open Access experiment designed to minimize risk for the publisher. One consequence for libraries will be annual fluctuations in journal subscription prices. Next year’s list price might be higher or lower than the previous year’s list price, depending both on the authors’ choice of publishing model for each individual article, and the number of non-Open Choice articles accepted for publication by Springer journal editors. Consortia have no obvious role in the Springer Open Choice program. There is no need for promoting and financing memberships as in the other two examples. However, the publisher will need to work with ‘big deal’ consortia to find sensible mechanisms for adjusting costs as the value of the subscription-based content on SpringerLink changes.

Advocacy is one area where librarians and consortia have played - and continue to play - an important role as new Open Access initiatives are introduced. Frustration within the academic library community with the traditional subscription-based model and high prices demanded by the commercial publishers was a major factor behind the onset and development of the Open Access movement [11]. IFLA (International Federation of Library Associations and Institutions) is one example of organisations representing the library community that have issued statements in support of Open Access [12]. Ideas on how university libraries can take on new roles to actively help promote Open Access have been suggested by Bjørnshauge [13]. He recognizes the need to limit administrative barriers for researchers in order to make them choose to publish their articles Open Access. A role for academic library consortia in helping Open Access journals through the transition from subscription-based to full Open Access while minimizing the risk for publishers has been suggested by Björk [14]. He describes a scenario where all academic consortia with ‘big deal’ agreements transform their subscription charges to institutional memberships as journals make the transition to Open Access. The expenses for the consortium as well as the income for the publishers would remain stable, while previously subscription-based content would be made available Open Access. This is in many respects similar to the NAR model which was tested by the BIBSAM consortium, as described above. Unfortunately, further discussions on liblicense-l on Björk’s suggestion never materialized in spite of encouragement from the listowner [15]. Prosser sees several possible roles for consortia during the transition from cost of access to cost of dissemination [16]. His suggestions include creating infrastructure and standards for repositories; negotiating article processing charges; developing digital publishing tools; supporting national and local journals turning to Open Access; retrospective digitisation of journals; and supporting development of Open Access dissemination of non-journal material.

Traditional subscription models and Open Access models continue to live side by side. Publishers, libraries and consortia continue to explore new models and new roles. Stay tuned.
References:


