This article describes one of the initiatives taken by the academic library community, in conjunction with learned societies, to address the issue of increasing journal prices.

The system of scholarly communication, particularly scientific communication, is under severe stress. Over more than a decade the number of journals published has increased, the number of pages and articles within journals has increased, and the price of journals has increased by roughly ten percent per year, while library budgets have, by and large, remained static or even decreased. Even in the few cases where library budgets have increased annually, the increase has been at a significantly lower figure than the rate at which journal prices increase. The cost of some journals, especially in the sciences, has increased over 20 percent per year. The cost of maintaining research collections has become unsustainable for most institutions, even the large and supposedly wealthy.

Once upon a time, not such a long time ago, scientific journals were published predominantly by nonprofit scientific societies whose major goal was the dissemination of scientific information. But, increasingly, scientific journals are being published by commercial multinationals, to which academics sign over their copyrights. This is by no means the only, or necessarily the most significant, factor in journal price rises, but it remains a factor for consideration.

Universities are paying twice over for research results. They subsidise research undertaken by their academic staff, they pay the salaries of scholars who do virtually all the writing, reviewing and editing of the journals and sometimes they even provide free office space to journals. Academics in most cases sign over copyright of their publishable research results to publishers. University libraries then buy this material back at ever increasing prices (and, in the electronic environment, with restrictions on use).

Scholars aim to publish their work in the most highly prestigious journals as this is an important part of the competitive academic business of getting grants, promotion and tenure. And all too often, the most prestigious are the very ones which are produced by commercial publishers at high cost. University libraries are increasingly unable to afford the very journals to which their institutions are giving their research results.

Librarians have banded together in consortia to negotiate purchases and have expanded resource sharing agreements in efforts to stretch shrinking budgets as far as possible. But these efforts have not sufficed. Another way libraries have handled this problem is by cancelling journals each year to remain within budget constraints. This method of coping with increasing costs and reducing revenue not only reduces the scholarly material readily available to the university community, but exacerbates the problem, as publishers raise prices to make up for revenue lost by cancelled subscriptions. As each library retains the core journals, library collections are becoming increasingly homogeneous as the specialised titles are relinquished. The need for these journals has not gone away, but they are now beyond the reach of the scholarly community they were designed to serve.

To quote Ken Frazier, Director of the General Library System at the University of Wisconsin,

These prices have been a complete disaster...How can you repeatedly increase prices and not understand that you’re damaging scholarly communications?


A solution with more long term viability than on-going journal cancellations is to create competition by providing affordable alternative publishing outlets.

SPARC (Scholarly Publishing and Academic Resources Coalition, <http://www.arl.org/sparc/>) is an initiative of the US Association of Research Libraries which aims to do just this. In continued on page 24
the words of Ken Frazier.

SPARC intends to create a more competitive marketplace for information, substantially lowering the future cost of disseminating research information, preserve fair use and other appropriate educational uses of knowledge and apply new technology to improve the timeliness and accessibility of research.


One may agree that,

This is truly the decade of the journal and one should seek to limit their number rather than to increase them, since there can also be too many periodicals.

(This feeling quote comes from a correspondent in the Neues Medizinisches Wochenblatt für Ärzte — and the date is 1789!)

Nevertheless, SPARC has begun creating partnerships with the professional societies and other non-profit publishers to enter the journals market in areas where the prices are highest and there is greatest need for alternative models of research communication. These are primarily in the science, technical, and medical areas. SPARC intends to reduce the risks to publisher partners by providing a ready subscription base and marketing support. Libraries which join SPARC commit themselves to subscribing to the journals which are developed through this initiative. The US Association of College and Research Libraries (ACRL) and the Canadian Association of Research Libraries (CARL) are affiliates of SPARC. The first organisation outside North America to join has been SCONUL, the Standing Conference of National and University Libraries, which comprises 135 library and information services in the UK and Ireland. This was immediately followed by an affiliation with Denmark’s 12 major research libraries. CAUL, the Council of Australian University Librarians, has also joined. Each member of SPARC has made a financial commitment to the startup of the enterprise.

In order to be successful, the SPARC journals will need authors, editors, and advisory board members with the academic clout enjoyed by the existing high cost outfits. This recently happened, where the academic editor of Evolutionary Ecology was so annoyed by the journal’s constant increases in price that he finally brought himself and his entire editorial board over to establish a SPARC journal, Evolutionary Ecology Research. This quote from the editor expresses his frustration clearly:

"We wanted wider dissemination; we’re tired of publishing papers that our colleagues and libraries can’t afford. (Science, 30 October 1998, p. 854)

The new title costs roughly a third of the price of Evolutionary Ecology, and has two issues already available for 1999 and more in the pipeline, as a collection of high-quality manuscripts has been attracted through the prestige of the editor and his team. This means the title has excellent academic credentials from day one, allaying some of the fears expressed by the academic community over the viability of the SPARC venture. The Web address for the journal, where details may be found, is <http://www.evolutionary-ecology.com/>.

Two major publishers which have joined this new endeavour are the American Chemical Society (ACS) and the Royal Society of Chemistry (RSC). Chemistry is the discipline with the highest journal costs. SPARC’s alliance with these non-profit scientific society publishers of peer-reviewed research journals also provides unquestionable validity to the SPARC initiative, especially from the point of view of prospective contributors and purchasers. The new titles can hardly fail to attract high quality submissions. They are expected to be priced at roughly a third of the prices of existing commercial offerings in the same disciplines.

ACS will launch at least one new scientific journal each year for the next three years. The first journal will publish letters in organic chemistry and will be called, appropriately enough, Organic Letters <http://pubs.acs.org/journals/orlef7/about.html>. This will be available mid-1999.

SPARC and the RSC have agreed to collaborate on a series of new, high-quality peer-reviewed electronic journals. PhysChemComm <http://www.rsc.org/is/journals/current/physchemcomm/pcccon.htm>, the first title, provides rapid communication of articles in physical chemistry.

"High journal prices are a serious threat to the entire global system of scientific communication," said Mike Hannant, the RSC’s electronic journals publisher. "The RSC sees itself reclaiming the moral high ground of the society by creating moderately priced e-journals such as PhysChemComm in key areas with SPARC. Our relationship with the research community and our technical capabilities allow us to offer top-quality products that challenge the growing influence of commercial publishers, who are siphoning money out of the field.”


Universities cannot undertake a new set of journal cancellations every year and remain viable research and teaching institutions. The SPARC initiative is a promising new venture which aims to bring competition into scholarly journal publishing in order to reduce prices and bring titles back within the financial reach of academic institutions.

Shirley Sullivan is the University Library’s Electronic Information Coordinator.