

Providing realistic access

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We are delighted to announce the online posting of the entire content of the *JCB* back to volume 1, issue 1, first published in 1955. This archive of abstracts and PDFs, which is full-text searchable and seamlessly linked to PubMed, is a free resource for the scientific community, and indeed to the world at large. It represents generations of the finest work in cell biology, and an unparalleled history of how our field grew from a curiosity to the most central body of knowledge in all of biology and biomedical science. It also demonstrates how the field progressed from being driven early on by a few pioneering investigators to the enormous efforts of an international community of scientists. The online archive is both a history of this evolution and perhaps even a guide to where this great field may find itself in the future.

We hope that younger scientists and established investigators alike will take the opportunity to become acquainted—or reacquainted as the case may be—with the actual papers responsible for the development of cell biology as a distinct discipline, papers that were largely published in the pages of the *JCB* over the past five decades. There is an amazing amount of information in the archive that is still as valid and fresh today as the first day we published it. In the coming years, we hope to commission a series of articles to highlight the relationship of many historical contributions in the *JCB* to current problems and understanding.

All of the older content is available free, based on our policy of making all of our content free 6 months after publication. This brief period of restricted access allows the *JCB* to charge



"First, they do an on-line search."

reasonable subscription fees and thus spread the unavoidable costs of publishing, reviewing, and editing between authors and readers so that no single group bears an undue burden. We have also recently expanded the list of countries eligible for completely free access to all *JCB* and other Rockefeller University Press content. This group of 142 countries (see <http://www.rockefeller.edu/rupress/freeaccess.html>) includes twice as many countries as are covered by similar initiatives at other journals. In addition, the *JCB* is available at a heavy discount to colleagues in an additional 13 countries (<http://www.rockefeller.edu/rupress/disconline.html>).

Charging subscriptions has enabled us to provide these and many other

services to the cell biology community. We continue to see this financial model as the only one that is sound and prudent for journals such as the *JCB*, which are published for and by active scientists as a service to the community, and not for profit.

The alternative is open access, in which authors pay all costs upfront. We believe that open access makes sense for archival journals because operating costs are low (based on cursory reviewing), and a high acceptance rate means that most papers yield revenue via page charges (aka the open access fee). In contrast, selective journals (such as the *JCB*) are of necessity high cost operations, producing a high quality product for which libraries

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should be and are willing to pay a subscription. Such journals draw more readers because of the time and money put into selecting papers, often improving the science based on high quality peer review and editing, and adding reviews and news. Applying an open access/page charge model to these journals does not yield much income, because few of the submitted papers are published.

It is difficult to see how the most prominent open access selective journal (Public Library of Science [PLoS]) will be financially viable in the long run without support from grants or other ventures. This may be an acceptable model for PLoS, but it clearly cannot sustain the entire field. At the *JCB*, which runs a comparatively modest operation (only two senior, in-house editors), it costs \sim \$8,000 per published paper given a 15–20% acceptance rate. (Please note that the \$8,000 figure includes only the cost of producing an article on-line, and excludes any costs associated with maintaining subscriptions or printing and mailing hard copy journals.) The per-article cost at journals such as *Nature*, which have even lower acceptance rates and more costly production values, appears to be considerably higher than \$8,000. The per-article amount charged for publication in PLoS, currently \$1,500 per article, would not appear even to begin to cover the actual costs of publication.

Should we simply do away with selective journals? We think not. Selective

journals prioritize and streamline information for busy readers, and provide a hierarchy—admittedly imperfect—for appointments, promotions, and grant review. Even as we love to hate them, the selective journals provide an invaluable service in communicating what is going on in science. This is made abundantly clear by our newly constructed archive, whose production was made possible by the efforts of Rob O'Donnell and his team at the *JCB* office.

As a non-profit publication, the *JCB* has tried to lead the way in responsible publishing that best serves the community. The decision to release our content for free after six months has not affected our revenues. We believe this model would also be perfectly viable for the for-profit, top tier journals that currently have little or no free content. To do so, however, commercial journals would have to accept the principle that the scientific archive belongs to those who produced and paid for it, and not to some multinational corporation. As we, the scientific community, provide them with their content, their quality control mechanism, and their customers, we have a right to expect this level of consideration.

In an ideal world, all archival journals would switch to open access, and researchers would send more of their best work only to the selective journals that make their content free after no longer than a brief delay. If the scientific community decided that they wanted to extend open access even to selective

journals, the first step would be for all funding agencies to commit significant amounts of money to pay for the actual publishing costs (at least \$8,000 per paper), with the condition that this money could not be spent on anything else. Although this may seem conceivable in the United States, it becomes much more difficult to imagine how to institute such an approach worldwide or with private foundations whose research funds are often limited. The approach is also inherently elitist, with only the well-funded being able to afford publication.

The scientific community must decide how it wants to spend its limited money and how to most efficiently and effectively validate and distribute the products of its research. But those decisions must be based not on wishful thinking, but on a realistic appraisal of the costs involved in producing journals of high quality and high value. For the moment, the middle ground occupied by the selective non-profit journals would appear to be the most reasonable: the free release of all back contact after a 6-month delay, and the maintenance of reasonable and flexible online license fees to universities, hospitals, and research institutions. Thus, the overwhelming majority of scientists and students who are positioned to engage in research, and who have the greatest need for immediate access, will get what they need. And everyone else will get it shortly thereafter.