

Developments at *The JEM*

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What does *The Journal of Experimental Medicine* look for in a paper? As the new Executive Editor of the *Journal*, I expect to be asked this question repeatedly. The *Journal* is known for its strengths in specific arenas, including immunology and inflammation, microbial pathogenesis, oncology, stem cell biology, hematopoiesis, as well as connective tissue and vascular biology. However, we welcome the submission of any biomedical research paper that meets our essential criteria—that is, the findings must be of broad interest and provide important insight into the mechanisms of a pathological process or potential new approaches to the diagnosis, prevention, or treatment of disease. Biological and physiological significance has always been emphasized in *The JEM*, and as one of the *Journal*'s new advisors recently said, “*The JEM* has a history of publishing top quality science, even though it may not be fashionable. The papers set trends rather than follow them.”

Editorial board

The JEM is perhaps unusual in that its 10 academic editors are all located in three New York City research institutes: The Rockefeller University, Weill Cornell Medical College, and Memorial Sloan-Kettering Cancer Center. Not only are these institutes centers of excellence in diverse areas of experimental medicine, but also they are in close proximity, making possible weekly editorial meetings in which papers are discussed openly. I believe this discourse among editors has been pivotal to *The JEM*'s long-standing position as a leading biomedical journal. Despite its base in New York, *The JEM* is truly international in its perspective, and I look forward to interacting with the scientific community at meetings worldwide.

Given that infectious disease remains the single biggest cause of global morbidity and mortality, the cellular and molecular aspects of host-pathogen interactions are an obvious area of focus for *The JEM*. Remarkable progress is being made in the fields of microbial genomics and innate immunity, and we are seeing more and more groundbreaking work that may ultimately lead to the development of new vaccines and therapies targeting human pathogens. Thus, we are delighted to welcome Dr. Charles Rice of The Rockefeller University and Dr. Eric Pamer of Memorial Sloan-Kettering Cancer Center to our editorial board. Drs. Rice and Pamer are leading figures in the fields of molecular virology and antimicrobial immunity, respectively, and will help us continue *The JEM*'s strong tradition in microbial pathogenesis and immunity to infection.

On behalf of the Editors, I would also like to thank the new, current, and outgoing members of our advisory board who serve as the *Journal*'s primary referees.

Editorial procedures

The initial decision whether or not to send a paper for peer review is made by the Editors and myself. Many articles are declined at this stage, not because they lack scientific merit but simply because they are not assigned a high enough priority relative to other submissions. These manuscripts have been assessed by at least two Editors. However, because a judgement based on priority is inherently subjective, I regret that we are unable to provide detailed critiques. Papers not declined as this stage are sent to external referees who comment and advise whether the paper should be declined, accepted, or returned to the authors for revision.

Over the next few months, I will be working to ensure that this process is completed swiftly.

Opening up access

We want the content of *The JEM* to be accessible to as broad an audience as possible. This month, we are making online access free to articles 6 months after the publication date. In the experience of our publisher and others in the not-for-profit sector, making primary research papers available free of charge online 6 months after their date of publication does not have a significant impact on revenues from subscriptions. Beginning in January 2004, *The JEM* will also extend institutional online access to 142 developing nations at no charge (for a full list of countries, see <http://www.rupress.org/freeaccess.html>). In addition, we provide reduced subscription rates to several countries with intermediate levels of resources.

Why do we continue to charge some readers for access to the most current papers in *The JEM*? The alternative is completely open access, in which the costs of publishing are covered largely by authors or charitable donations. *The JEM* obtains revenue from a variety of sources: library and individual subscriptions, author submission and page charges, and advertising. By distributing the financial burden, we ensure that the cost is not prohibitive for the authors or the readers. Open access to scientific literature has, however, become a political issue (1). Although The Rockefeller University Press and *The JEM*'s Editors support the various initiatives and experiments aimed at extending open access, we maintain that these efforts should be tested and proven to be sustainable financially before journals are coerced into open access legislation.

We take this cautious approach because it is possible that a highly selective journal such as *The JEM* could not run under a system where authors pay all costs. Relatively nonselective journals accept, and therefore get money from, most papers that are submitted. However, more discriminating journals must process a large number of papers, at considerable cost, while publishing only a few. The author-pays model would thus yield a small revenue stream to maintain a more selective, high quality journal.

What are the potential consequences if subscription-based journals were forced into open access and then failed financially? Currently, the interests of many different organizations are represented in the scientific literature. If the diversity of journals was lost, we would be faced with the unsettling possibility that one group could control what scientific data is published and distributed. Journals are also more than simply venues for the publication of data. They act as filters, communicators, and interpreters, without which working scientists would be overwhelmed in a wash of data. Consider that in 2002 there were \sim 7,000 articles published in just one corner of biomedical research—the investigation of the biology and application of stem cells.* Stem cell researchers digest this information by first reading the findings in a few major journals. Such journals invest substantial sums of money to

weed through all of the submitted papers so that only those of the highest quality and novelty are printed. The referees in this process work for free, but the journals pay for the staff which directs the refereeing, coordinates the print and online production, and provides news and commentary.

Based on the commercial reality that, despite the enormous contributions of time from academic editors and referees money is still needed to run a nonprofit scientific journal, *The JEM* continues to charge scientists in certain countries for access to its most recent articles. We feel *The JEM*'s open access policy is fair, while maintaining enough financial support from subscriptions to ensure our continued existence.

On the horizon

Excess revenues generated by *The JEM* are reinvested in the *Journal* to improve services for our readers and authors. We are working currently to provide searchable full-text electronic access to all 198 volumes of *The JEM*, which date back to 1896. In addition, pre-1965 abstracts are being added to the PubMed database. We realize there are important hypotheses and conclusions in the older literature that have considerable relevance to research today. A striking example in immunology is the concept of regulatory T cells, which first emerged in the 1970s and was particularly well explored in

the context of tumor immunology in *The JEM* in the 1980s (see for example references 2, 3). Unfortunately, difficulty in researching pre-electronic era literature means that the origins of current fields of interest are often ignored. Recognizing this problem, *The JEM* recently added full-text PDFs of articles dating back to 1975 to its online archive. Through our website, you can locate a specific article or browse issue by issue. In addition, we will soon be adding a series of tools to our website that will enable more effective literature searches. The effort to archive back to volume 1 issue 1 is ongoing, and we anticipate that the full *JEM* archive will be available online in early 2004. We look forward to greeting the New Year both by looking back over *The JEM*'s venerable history and looking forward to its ever brighter future.

References

1. Held, M.J. 2003. Proposed legislation supports an untested publishing model. *J. Cell Biol.* 162:171–172.
2. Berendt, M.J., and R.J. North. 1980. T-cell-mediated suppression of anti-tumor immunity. An explanation for progressive growth of an immunogenic tumor. *J. Exp. Med.* 151:69–80.
3. Mills, C.D., and R.J. North. 1983. Expression of passively transferred immunity against an established tumor depends on generation of cytolytic T cells in recipient. Inhibition by suppressor T cells. *J. Exp. Med.* 157:1448–1460.

*Figure based on a PubMed (<http://www.ncbi.nlm.nih.gov/PubMed>) search for articles published in 2002 containing the term “stem cell,” discounting reviews and editorials.