

Editorial

The State of the Journal

The guard changes at the *Biophysical Journal* on July 1, 1997. After five momentous years, Victor Bloomfield steps down as Editor, and I take his place. Vic leaves the Journal in excellent condition. Under his leadership, the number of manuscripts submitted has doubled, as has the number of pages printed. As measured by Institute for Scientific Information's impact criterion, the *Biophysical Journal* is in the top 20% of the journals with which it competes. In addition, a permanent editorial office has been established in Bethesda to handle manuscripts and production. This may not seem important to the reader, but speaking as the new Editor, I can assure you that it is a huge development from which the Journal is certain to derive great benefit. In the past, the Journal's support operation was relocated every time the editorship changed hands. Thus not only was the Editor supposed to edit, he or she was also expected to organize and supervise an editorial office! It is a tribute to the energy and perseverance of its past Editors that the Journal survived for so many years, running so informally. For this, and for much else, the Biophysical Society owes Vic a huge debt of gratitude.

New Directions

There is great wisdom in the adage about not fixing that which is not broken. No major new initiatives are under consideration at this point. That said, I should make it clear that growth, which was an appropriate priority under Vic's editorship, is no longer to be a priority. A good balance exists today between the scale of the Journal and its modus operandi. If the number of pages printed each year were to continue to grow as it has in the recent past, not only would the cost of printing and distributing the Journal rise, but ultimately the size of the Bethesda office would have to increase also. Were this to happen, the cost of subscriptions would have to go up, which I believe would be counterproductive. For the next few years, the emphasis will be on quality, not quantity.

There never was a time when the quality of what is printed in the *Biophysical Journal* was not a paramount concern for its Editorial Board, but in my estimation, the Journal's future depends on it now more than ever. For years, journal subscription costs have been rising faster than the periodical budgets of libraries, and the number of journals competing for a share of that pot of money has grown relentlessly. All over the world, libraries have responded by canceling subscriptions, and no one should be surprised that the number of library subscriptions for the *Biophysical*

Journal is declining. This is a concern because library subscriptions are an important source of income.

The only way this journal, or any other scientific periodical, can compete successfully in the scientific information market is to publish high quality material. The better the science the Journal contains, the stronger the case in its favor when hard-pressed library budget committees make decisions. Thus it is essential that the *Biophysical Journal* be where the best biophysical research is reported. I would like to see its Institute for Scientific Information impact coefficient increase, and my ambition is to see it publishing articles that get noticed in *Nature* and *Science*. If this happens, the Journal will earn the support it needs, and everything else will fall into place. And it will happen if you send the Journal your best manuscripts. I urge you to do so.

A biophysicist is someone who uses physical-chemical theory to explain biological phenomena, uses the experimental tools of physics and chemistry to explore the properties of biological systems, or both. Unfortunately, only a minority of those doing this kind of research call themselves "biophysicists." The physics relevant to biology is a subset of physical chemistry, and for that reason many of them call themselves "biochemists." Still others think of themselves as physiologists. The name you apply to yourself depends as much on how you were brought up as on what you do. It is important that as many of these people as possible be persuaded to read the Journal and to contribute manuscripts. For this reason, in addition to welcoming manuscripts from members of the Biophysical Society, as it always has, the Journal will try to treat contributions made by non-members with special care, in hopes of broadening the community it serves.

Content and Format

In recent years, the articles published in the Journal have increasingly focused on the search for molecular and/or atomic explanations of cellular and biomolecular phenomena. The emphasis on this aspect of biophysics, which is called "biophysical chemistry" by some, will deepen in the immediate future.

Original scientific articles, short reviews and commentaries, articles on educational issues, and occasional book reviews will continue to be the Journal's stock in trade. It will also be the forum for news about the activities of the Biophysical Society. While no radical change in format is contemplated, the reader will shortly discover that the Journal has begun publishing advertisements. Negotiations are underway to "sell" the back cover of the Journal, and if that initiative succeeds, the table of contents will be moved to the front of the Journal (with some regret). The motivation

is obvious: the more revenue generated through advertisements, the lower the cost of the Journal for its readers.

Electronic Publishing

The biggest technical problems confronting the *Biophysical Journal* today are those posed by the electronic revolution. No simple solution exists at this point because the Journal has two classes of subscribers, individual scientists and libraries. Our scientific subscribers might be satisfied if they had access to several years of past issues of the Journal via a website. After all, how many of us store more than five years of any printed journal in our laboratories? Who has the shelf space? If the Journal were published this way, individual subscribers might get a password for the Journal's website, enabling them to access everything on the site for a year, or perhaps permitting them to access a specific volume of the Journal for as many years as it was on the site. This would save a great deal in printing and postage costs, and at least some of the financial benefit could be returned to subscribers.

Libraries need something different: the Journal in a form that can be accessed for a century. Given the volatility of electromagnetic media and the speed with which today's technology is being reduced to tomorrow's quaint curiosity, it is not clear whether an electronic answer to the archiving problem exists at this time. Paper may still be the best answer for libraries, and if so, we must respond. They are the field's memory; if you cannot find something in the library, it never happened.

Radical solutions to the archiving problem are under consideration. For example, a small number of centers may

be set up around the world to archive the entire literature in electronic form and to undertake the gigantic responsibility of guaranteeing its availability indefinitely. If that happens, the flow of paper journals into your library will drop to zero, and it will be converted from a repository for paper into an information retrieval center. If that were to happen, the distinction between library subscribers and individual subscribers would disappear.

It is not clear how the costs of publication and archiving will be met if things start moving in this direction, but it is clear that organizations that publish high quality science will thrive. Again, there can be no question as to how the *Biophysical Journal* should position itself: quality counts. In the meantime, during the messy transition period we find ourselves in today, can we satisfy everyone without publishing the Journal simultaneously in two or three different formats, at great expense? We will keep you posted as options are explored. In any event, we are likely to offer the Journal on a website in the coming year as an experiment to determine how far down the "information highway" our readers are ready to travel today.

On a less cosmic level, the Journal will continue streamlining the front end of its operation so that full advantage is taken of the electronic tools available to make the publication process as fast and economical as possible.

We live in exciting times. With your help, I am certain the *Biophysical Journal* will not only survive, but thrive.

Peter B. Moore
Editor