

Editorial

Earlier this year, *The Journal of General Physiology* celebrated an important milestone when the complete online archive of all articles in *The Journal*, dating back to Vol. 1, issue 1, which appeared on September 20, 1918, became available on www.jgp.org. All articles are available as searchable PDFs, and the figures were scanned at a higher resolution than the text in order to maximize the quality of the final product. The abstracts also have been scanned and converted to text, so as to be compatible with standard bibliographic database and search software. The information is available by searching through *The Journal* website and the HighWire portal www.highwire.org; unfortunately, much of the material is not accessible through PubMed, which currently goes back only to the early 1950s.

Over the years, people have asked me about *The Journal's* origin and history. I knew the answers to some questions, but I knew little about a number of important issues. So, as the back issues became available online, I decided to explore those issues in more depth. The following article, entitled "A Brief History of *The Journal of General Physiology*," summarizes most of what I was able to learn about *The Journal*, its foundation and subsequent history.

In the course of these explorations, it became apparent that articles published in the 1920s appeared quite soon after their receipt. This was due, in no small part, to the fact that the standard practice among scientific journals, with outside review and (often extensive) revisions by the authors, evolved fairly late, in the case of *The Journal of General Physiology* in the 1950s. When examining the actual interval from initial receipt to publication over the years, we found that the median time varied as follows (information based on the first issue in the first volume in each decade): September 1920, when each volume was published from September to July, 73 days; September 1930, 74 days; September 1940, 104 days; September 1950, 109 days; September 1960, when outside reviews had become the norm, 208 days; January 1971, when two volumes were published from January to June and July to December, 204 days; January 1981, 255 days; January 1991, 447 days (there was significant month-to-month variation in 1991; 447 days is a high number); and January 2001, 124 days. The decrease from 1991 to 2001 reflects changes in *The Journal's* and The Rockefeller University Press' policies and practices, including the policy that the revised version of a manuscript must be received no later than 90 days after the receipt letter was sent out. Thanks to the combination of electronic submission

and communication with authors and reviewers, more stringent editorial policies and practices, and the electronic work flow at The Press, we are approaching the enviably short time from receipt to publication that were the norm when manuscripts were not subject to outside review!

Today, when the online version of *The Journal* has become the journal of record, and we have implemented an almost complete electronic work flow, the median time from receipt to publication is 120 days, with 50% of this time being the time from receipt to the first decision plus the time from acceptance to online publication. For most of the remaining time, the manuscripts are in the authors' hands. The interval from initial receipt to publication became an issue in the 1980s, as scientific journals began to emphasize how efficient they were, how fast they could publish the submitted articles. The time from receipt to publication increased when outside reviews became the norm; but journal editors also recognized that authors often took very long to revise their manuscripts. So, to make matters a bit more transparent, additional receipt and acceptance dates were provided. Beginning with Vol. 79, in 1982, the terms, "Received for publication [date] and in revised form [date]" were used; beginning with Vol. 84, issue 4, in 1984, the text was changed to "Original version received [date] and accepted version received [date]"; beginning with Vol. 114, in 1999, the relevant text was changed further, to "Submitted [date]; Revised [date]; Accepted [date]." The most recent change, with Vol. 122, issue 2, in 2003, was to list "Submitted [date]; Accepted [date]," where the accept date is when the complete manuscript with publication quality figures is ready for production.

The decision to make the online version of *The Journal* the journal of record marked a major transition, which is a logical consequence of decisions that were made when the online version of *The Journal* appeared in January 1997 (Vol. 109). At that time, we instituted the policy that all back issues should be made freely available after a given time; initially 18 months after publication, presently 12 months after publication (the 12 most recent issues). The Rockefeller University Press journals were among the first to institute such a policy. When the online archive became available, we maintained this practice, and we now provide free access to all articles published in *The Journal*, including the PDFs going back to Vol. 1, issue 1. In addition, all issues of *The Journal* are available for free to 142 developing countries. In this context, the HighWire Press, a division of the

Stanford University Library, acts as online host and service provider for *The Journal of General Physiology* and some 773+ other journals, many of which are not for profit. It provides a unique service because it provides access not only to the new information but also to previously published articles that the new discoveries are based on, with free interreference links among the various journals hosted by HighWire.

From its inception, the focus on mechanistic studies has put *The Journal* in a class by itself. I expand further on this in the following article. This emphasis on the mechanisms underlying biological function means that articles published in *The Journal* often are based on quantitative reasoning and are therefore frequently quite long; however, we always have published shorter articles that serve to open new areas of research. There is neither a lower nor an upper limit on the length of articles published in *The Journal*; but all articles should clearly explain the biological importance of the problem under study, so as to make the articles accessible to a wide readership.

We also recognize that increased mechanistic insight often is attained only after new methods are employed. This led to a recent change in our editorial policies,

<http://www.jgp.org/misc/policies.shtml#scope>, which now state that “Methodological articles will be published only if they provide a significant advance in areas where *The Journal* regularly publishes experimental studies,” similar to our policy for theoretical articles. Over the last year, we also have instituted policies pertaining to access to materials and data, <http://www.jgp.org/misc/policies.shtml#access>, which state that “As a condition of publication, authors must make unique materials (e.g., cloned DNAs; antibodies; bacterial, animal, or plant cells; viruses; and computer programs) published in *The Journal*, available upon request by academic researchers, who may use them in their own laboratory only. In addition, the source code for all computational methods, apart from commercial software packages, must be made freely available.” We believe these changes in policies will serve *The Journal* and its readers, and future authors, in their pursuit of increasingly sophisticated studies of the physiological mechanisms underlying biological function.

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For the Editors
The Journal of General Physiology