

Editorial

— 30 —

This is the last volume of these *Proceedings* that I will edit. The Oklahoma Academy of Science started me off in this editing endeavor by sending me to the editors' school sponsored by the Council of Biology Editors and held in Orlando, FL with the CBE meeting in 1991. I am glad that I had the course and could learn from the legendary editors. Journal publication is a wholly different and specialized world. My task was made easier by Dr. Otis Dermer continuing as copy editor, applying his keen mind to every published manuscript. While at that CBE meeting I learned from several of the *Chemical Abstracts* staff members of Otis' skill in correcting their final copy. He has served these many years just for the joy of editing. Words and sentences are precious to him; he could forge a muddled series of words into a sharply dividing and explaining sentence. Our organization has been extremely fortunate to have this internationally recognized gigantic talent.

Also inherited from Glenn Todd, the previous editor, was Production Editor Dr. Robert Freeman. What an easy job I had. Bob would take a Dermer-marked typescript and convert it into a beautifully turned out series of pages that constitute an article. He would prepare the copy and deal with the printer. I realize that I learned very little about this aspect of publishing - Bob took care of all of it.

During my tenure as editor, the journal publication process made quantum-leap changes. Keeping up with these advances was one of the greatest challenges. The journal moved from using paper manuscripts to electronic final submission. This reduces production cost, decreases errors, and gives the author more control over the input of the article. For the six years of my editorship the cost per page has been held almost constant at 5.3¢/page. The previous five years the average cost per page was 7.7¢. These calculations do not include a correction for inflation. This is due in great part to Bob Freeman's efforts. I view this as one of our greatest accomplishments. The OSU library has produced a hit list of journal subscriptions that they are considering for elimination because of greatly increased costs. This list includes *Biochimica et Biophysica Acta*, the 15th most cited journal - saved for this year.

Both Bob Freeman and I contributed to the standardized look of the current volumes. We changed page sizes to take advantage of less expensive standardized paper. With respect to arrangement, details, and style, I enunciated a purpose and philosophy for the journal and provided a written code of ethics for authors and reviewers. Detailed instructions for authors have been provided. All these actions were taken to imprint the journal page and article with an unmistakable signature of the *Proceedings of the Oklahoma Academy of Science*. This outcome was to aid the reader in concentrating on the science within an article rather than be distracted by varying issues of form. The mold was uniform but the ingredients varied.

The interfacing of authors and reviewers is the most important task of the gatekeeper of the quality of science - the editor. Authors are the generators and recorders of new information. Because their minds are so saturated with relevant information and they have forged and reworked an intellectual framework for interpreting the observations, they sometimes neglect to explain fully and clearly to an uninitiated reader. The reviewers, who are chosen because of their technical competence in the particular area, are the test readers. With their acceptance of a reviewing assignment they agree to evaluate the scientific basis and adequacy of the experimental results reported. As a test audience they determine if the descriptions are adequate to convince a reader of the claim being made. The reviewer is asked to act as an independent judge of the merit of the manuscript based on well-defined scientific criteria. Further, the reviewer's aid is enlisted in improving the quality of communication. We all suffer from "given my background and mindset it is obvious that this is what I really implied by what I didn't say." My wife and coworkers routinely call me to account for this transgression. Everyone needs to have his

writing edited - self-edited, co-worker-edited, and colleague-edited before submitting it for publication. Your editor wears with pride the manuscript wounds that his material has received from Drs. Sharon Ford, Ulrich Melcher, and Otis Dermer. They are not shy about calling me to task and making the manuscript bleed red with corrections and questions.

The peer review process is essential to maintain the significance of a journal and the quality of science presented. I have heavily relied on the advice of the peer reviewers. When the subject matter of a journal is as broad as that of the *Proceedings of the Oklahoma Academy of Science*, there is no single individual who can be scientifically current and competent in all the areas. However, it remains the task of the editor to evaluate the evaluations of all reviewers. Just as authors differ, so do reviewers. They have different viewpoints, ways of expression, and scientific standards. The editor must accept responsibility for the scientific quality of the journal. This editor has been criticized for too much emphasis and reliance upon peer review and for eliciting the opinions of more than two peer reviewers. I am responsible for the decisions that I made; I accepted criticism of the quality of the journal and tried to improve the science; if there is anyone who believes that the quality has improved, I will share the accolades with the authors, reviewers, the copy editor, and the production editor who made it possible. Production of the journal is truly a team effort.

I had a vision for the *Proceedings of the Oklahoma Academy of Science*. Recognizing the essentiality of the raw material of a journal, manuscripts, I sought submission of manuscripts from all areas of science. In return for submission I would provide the authors with peer evaluation and suggestions for improvement of the manuscript. I made the decision to work with authors, to a greater extent than do many other journals, to transform a submitted manuscript into a scientifically accepted and publishable manuscript. The science had to be acceptable. My commitment to the readers required the presence of an accepted piece of science.

The process that a submitted manuscript undergoes is akin to a refiner's fire that allows the isolation of golden nuggets from the extraneous elements. Character and diamonds are built with just the right amount of pressure. We sought to bring out the best from manuscripts into crystal clear form.

My vision for the journal readers was to present diverse scientific studies in a fashion such that the take-home message would be understandable to any scientist and that would also contain sufficient detail to excite an expert in the area. I wanted the journal to have a look that invites the reader both to skim and dig deeply.

With respect to the society my vision was to improve the quality of the journal. To shorten the time between submission and publication, the submission deadline was changed from January 1 to April 15. Consumers want better quality, faster and cheaper.

My commitment to lifelong learning and continual renewal flavored with innovation led to the desire that the journal should take advantage of the fruits of the information age. We wanted to use the best of the new tools to improve our operation and product. However, the other side of my coin is that I respect the contributions and methods of the past and don't adopt changes just for change's sake. Rather, I wait until I see that real improvements will result and then move quickly to realize the greatest payoff. I have tried to employ the appropriate means of communication. Bob Freeman and I make extensive use of email. Where authors have provided e-mail addresses I have generally used those for items that could be handled in that fashion. Computer technology has made the job much easier. There are commercial program packages for the operation of an editor's office written for the IBM. Since I am a Macintosh person and did not see a marked benefit to these programs for the volume of manuscripts that we handle (around 30 per year), I did not request the purchase of such a program. In my laboratory we do have an IBM computer running Windows 95 that is connected to the internet and to our Appletalk LAN. I never had stationery printed for use by the editor, but just used the departmental variety.

The Oklahoma Academy of Science was the fourth affiliated academy to have a home page link from the American Association for the Advancement of Science home

page. The OAS home page is under the care of our Electronic Editor, Dr. Jerry Merz. The Academy purchased a hard drive; the rest of the required hardware, software, and labor have been provided by the Department of Biochemistry and Molecular Biology at OSU. Jerry has received e-mail from other state academies of science inquiring how he produced our page. The letter writers say that ours is one of the best.

Our home page contains information about the organization, its history, its officers, its mission statement and goals. Announcements about upcoming meetings are provided to sections who have established homepages. Experimental items have included abstracts and papers.

While Jimmie Pigg was director of the Junior Academy of Science, the editor provided the peer reviewing, editing and copy preparation for the transactions of the Oklahoma Junior Academy of Science. This provided a mechanism for introducing quality into this publication. Some of the students and high school instructors had difficulty in accepting peer reviewing and editing of their manuscripts. I stand by these pillars of scientific progress and believe that the instructors were sending an improper message to those students.

The ten year-index was changed. A permuted title index was prepared for the first time. Each distinctive word in the title can be found in an alphabetically ordered index. The typical author-based index was also prepared. Hopefully, next time there will be available a computer program that will allow automated preparation.

The new editor will take over a healthy journal. These musings record my memories of editing. They should help the new editor in setting the new vision. Also, they are meant to communicate to the membership about the operation of the academy's journal.

Thanks for the memories.

a rivederci, adios, adieu, aloha, auf wiedersehen, au revoir, ciao, doswidanya, fare thee well, farewell, God be with you, good-by, good-bye, hasta la vista, sayonara, salam, shalom, so long, ta, tchuss, till we meet again, vale

Franklin R. Leach

Editor, Volumes 70-76