

## EDITORIAL

### Submission of Sequences

The growing volume of nucleic acid and protein sequences appearing in the literature makes it imperative that authors submit their sequences directly to the data bases. All of us using sequences know that a printed sequence is not much use—it must be in the computer to be dealt with. Yet it is no longer practical for data base personnel to enter sequences from the journals into memory; this practice is too slow and too costly. Therefore, direct submission of sequences in machine-readable form must become the universal norm.

The PROCEEDINGS is a leading outlet for the publication of sequences and thus has a major responsibility to facilitate submission of sequences to the data base and to induce authors to comply. Toward this aim the following modified procedures have been adopted to take effect on March 1, 1989. All authors considering submission of papers with sequences to the PROCEEDINGS are urged to take immediate steps to comply with these procedures.

On receiving a paper containing a sequence(s) the PROCEEDINGS Office will send the authors a blank sequence submission form and instructions on submission as described by Burks and Tomlinson [Burks, C. & Tomlinson, L. J. (1989) *Proc. Natl. Acad. Sci. USA* **86**, 408]. Authors will be expected to submit the sequence to the GenBank data base within a week of receipt of the form (but see comments below). Provided that the submission is complete, GenBank will acknowledge receipt by assignment of an accession number within one week after receiving the submission. The authors will then provide the accession number to the PROCEEDINGS Office by entering the number on the page proof. By the proof stage the accession number must be entered to be included in the published paper. In cases where a sequence has not been submitted in time, the article will carry a footnote stating that no accession number is available; such an entry will indicate the authors' lack of cooperation. An author who submits a sequence as requested but does not receive a timely response from GenBank should contact GenBank and the PROCEEDINGS Office. We shall make every effort to prevent the occurrence of such cases.

Note that it is not necessary for authors submitting a sequencing paper to wait until they receive a form from the PROCEEDINGS Office upon receipt of their paper. Blank forms are available at any time from GenBank and other sources, as explained by Burks and Tomlinson. With this form and the instructions for sequence submission described by Burks and Tomlinson, authors can and should prepare their sequence submission while writing the manuscript. The sequence may be sent to GenBank at any time, for example, simultaneously with mailing of the manuscript to the PROCEEDINGS Office; authors can request that the sequence not be made public until a specified date coinciding with the estimated time of publication. This approach will leave plenty of time to obtain an accession number before proof stage.

Note also important changes from present policy. At present, authors of sequence papers receive from the PROCEEDINGS Office a form with a preassigned accession number and a request to submit their sequence. Unfortunately, not all authors comply. As a result the reader does not know for any paper carrying an accession number whether the sequence actually has been submitted. The new procedures will remedy this problem: A footnote with an accession number will assure the prospective user that the sequence has been received by GenBank and will be included in an upcoming release of the data base.

The PROCEEDINGS expects total compliance with these procedures. This should be achievable as scientists who generate sequences increase their awareness of the fact that they are also users of sequence information. Self-interest should therefore dictate compliance.

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Editorial Board