

such symposium took place at the annual meeting of the American Association for the Advancement of Science in February of this year. In a paper delivered to this meeting, Robert Day, Managing Editor of the publications of the American Society for Microbiology made this statement. I quote, "But will the current trend of rising costs continue? If they do, the scientific journal as we know it today, that is a package of research papers which is distributed each month directly into the hands of many of the individuals who are peers of the authors and into virtually all of the departments and laboratories involved with similar research will no longer be endangered, it will be extinct." Mr. Day is not alone in his concern. Virtually every Peer Review Journal has seen its number of scientific pages dwindling to half their former number.

Most societies have increased membership fees to the point where fewer and fewer scientists can afford them. Mr. Day says that the subscription price for the Journal of Bacteriology has tripled since 1968 and by 1985 will triple again, if present trends continue. Most society officials agree that they have reached the point where no further reduction in scientific pages, and increases in membership dues and subscriptions can be made.

Let me dwell a moment here on the current state of scientific research. Each year this country spends almost 18 billion dollars on scientific research. A substantial portion of those research funds are supplied by the federal government. The National Institutes of Health alone spends almost 2 billion dollars in grants and intramural research. This colossal investment in research activity has in recent years produced an avalanche of new important scientific and medical information. Dr. Donald S. Fredrickson, Director of the National Institutes of Health, said in a speech at the recent meeting of the American Association for the Advancement of Science (see appendix 2). Biomedical knowledge like all scientific knowledge, has been accumulating at an exponential rate, as reflected in the output of scientific literature. One sampling of biomedical publications suggests an average annual increase in scientific papers of between 4 and 5% each year from 1965 to 1973. Not all papers which are delivered before a society are published in Peer Review Journals. Some authorities estimate that less than 60% of significant scientific papers ever appear in established scientific or medical journals. It is tragic to think that much of the productive research generated by this enormous expenditure in research dollars is never seen by the scientists and doctors who could best utilize it. What then has led to this sorry state of affairs in scientific publishing?

Four factors have been at work during recent history, which have created this dilemma.

The first of these is the tremendous increase in the number of scientific papers competing for the available pages in scientific journals. The second is the rapidly spiraling costs of journal production. The cost for printing a page of scientific material in the average journal has increased 80% in the last two years. Postage too has increased substantially. Increases in labor and salaries due to inflation are well known facts. Most societies have sought to fight these spiraling costs by increasing membership dues. This in turn has led to a downturn in association members which keeps the net increase in society revenue small. Reduction in pages published is also an unsatisfactory solution. All things considered, however, attempts at cost reduction and increases in subscriptions and dues will not solve the problem.

The third factor and by far the most volatile, is the decreased or lack of increase in advertising revenue. Societies have traditionally subsidized a good portion of their publication costs with paid advertising from firms selling the products used in the conduct of scientific research. In the case of Medical Journals, this advertising support has come largely from drug manufacturers. In Peer Review Journals, advertisers are never allowed to influence the editorial content. This is because the control of editorial content is in the hands of reviewers who do not participate in the revenue from advertising. Peer Review journals have steadfastly refused to let advertisers influence either their editorial content, graphic presentation or advertising positioning. This policy has led advertisers to seek other means of communicating with their customers which would cater to their demands of editorial and format involvement. The business press community was waiting and willing to provide such a service.

Thus was born, the Controlled Circulation or Throw Away Magazine. Controlled Circulation magazines as a group, constitute a serious financial threat to