## **BIOLOGICAL PUBLICATION IN AMERICA**

A SURVEY of biological publication in America has recently been completed by the Committee on Research Publications of the Division of Biology and Agriculture of the National Research Council. Questionnaires were sent to managing editors of 65 biological journals; replies were received from 54. Information was sought concerning editorial management, editorial policy, promptness of publication of papers, number of words per page, cost per page, economic status, etc.

Editors of journals are selected in a variety of ways. Many are appointed by societies controlling journals, several by the Wistar Institute. Some editorial boards were originally self-constituted and are now self-perpetuating. Occasionally, ownership of a journal determines who should edit it. Tenure on an editorial board varies from 1 year to life.

In response to the question as to whether or not editorial boards in judging manuscripts sought advice from outside authorities, all but 3 or 4 of the managing editors agreed that they did ask such advice, although many stated that they did so only occasionally or even rarely. Twenty-five journals do not have any specified limit to the length of the papers, other journals have limits of from 4 to 50 pages. As a matter of fact, some of the journals which theoretically accept papers of any length actually publish only short papers. Some journals set no limit on the number of illustrations, some require that the illustrations do not exceed 20 to 25 per cent. of the total space and some allow 2 plates. Authors are not usually required to contribute to the cost of publication, but are often asked to pay for excess illustrations, for special illustration or for excess tabular material. Some journals do not provide authors with free reprints; some may give as many as 100. The average number of free reprints is approximately 32.

Some editors frankly do not print papers in order of receipt, others claim they follow priority "as a rule," "to some extent," "generally," etc. In some cases, if a paper is written by a member of the society sponsoring the journal, it receives priority. In other journals, if the publication of a paper is paid for, it receives precedence. Papers requiring revision are delayed in some journals and priority of publication may be determined by order of acceptance.

The number of words published per page by different journals varies from 250 to 800; the cost per page from a low of \$2.00 to a high of \$9-\$10. There is an increasing tendency to publish more words per page, and various members of the committee have helped to encourage editors to practice economy in this way.

Journals now appear to publish more promptly than they were able to do some years ago. Our survey showed only two journals in which the interval of time between receipt of an article and its publication was as much as 12 months. The average interval was 3.3 months.

One of the most important points brought out by the survey is the fact that many journals are now receiving more manuscripts than they can publish. Approximately 63 per cent. of the editors questioned stated that they were forced to reject manuscripts suitable for publication. This is a serious situation, for it imposes a severe limit on publication. If worthy papers are to remain unpublished, this undoubtedly will not only prevent the dissemination of knowledge, but will also discourage research activity on the part of those who are unable to publish the results of their investigations.

In facing this problem, the committee at its last meeting decided first that increased publication could be obtained if various journals practiced greater economy. In a number of instances, due in part to the effort of the committee, editors have been persuaded to change the form of their journals in such a way as to print many more words per unit of cost. Changes of this sort have undoubtedly speeded up publication and have cut down the percentage of rejections. The committee would like to print a handbook for editors in order to guide them on questions of type and arrangement, illustrations, specifications for printers, etc. Preparation of such a handbook would require funds, which at present are not available.

Even if the strictest economy were practiced, it is doubtful if our biological journals could publish the results of all the valuable research now in progress in this country. In the past, many American workers published papers in foreign journals. The war has largely put an end to this practice. Moreover, the war has also cut down subscriptions from abroad and has thus reduced the income of our journals. With much of the world at war, it is extremely important for America to serve as a haven for biological research. But this research is fruitless if it fails of publication. What is sorely needed is a subsidy fund for American biological journals. The Committee on Research Publications has asked its chairman to attempt to raise money in order to provide a handbook for editors and also to give support for those journals which, in spite of rigid economy, are unable to satisfy the publication needs in their respective fields.

Finally, there is another aspect of the problem concerning which the committee has very little data and no basis for discussion. Obviously, if editors reject many worthy papers submitted to them, it must be difficult to avoid discrimination. Clearly, it is important that a reasonable degree of impartiality be shown. Undue discrimination might cause genuine harm to the progress of biological science in America.

The Committee on Research Publications of the Division of Biology and Agriculture of the National

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Research Council is eager to improve the status of biological publication in America. Any suggestions which would help it in its work would be sincerely appreciated. These should be sent to the Chairman, L. V. Heilbrunn, Zoology Department, University of Pennsylvania, Philadelphia, Pa.

L. V. Heilbrunn

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## THE WISTAR INSTITUTE—AMERICAN FILM CENTER MOTION PICTURE SURVEY

In recent years the number of motion pictures in medicine and allied subjects has increased enormously. With this increase, however, has come a growing confusion throughout the whole field. Doctors wishing to arrange film programs have been at a loss where to go for information about pictures to fill their needs. The present-day catalogues are full of titles concerning the standard techniques in medicine and surgery, but generally there are no descriptions of the films. Each catalogue also fails in being a complete list on any one topic, because it attempts to include too many and random subjects. Thus the doctor has no means of discriminating between the various films listed.

It is a fact that scientific films are being used in teaching more each year, but that excellent ones are often buried in the mass of mediocre material that no advantage is derived from their existence. Appreciating this, The Wistar Institute of Anatomy and Biology, in collaboration with The American Film Center, made a survey of the pictures in its field. In addition, The Wistar Institute hoped to establish a library of the best productions and research films where they could be catalogued and made available for use. A questionnaire was sent accordingly in February, 1940, to members of The American Society of Zoologists and The American Society of Anatomists asking for information on motion pictures in colleges and medical schools.

The questionnaire was designed to cover three topics: the extent to which medical and biological films are now used, the sources of these films (or the details of their production where they were made on the spot), and whether copies would be made available for filing in The Wistar Institute Library. The results showed an overwhelming interest in the use of teaching pictures. Out of 638 replies, 432 men indicated that films were shown in their classes, and 25 others said there were plans for doing so once the facilities were available.

One hundred and sixteen out of the number using films had made their own, while the remainder had bought, borrowed or rented them, in about equal proportions. Where outside sources were called upon, there were listed the names of 57 different educational and non-commercial institutions, and 32 commercial groups, including drug-houses, insurance companies, etc. In considering production, the association's members had chosen 16mm film over 35mm by a ratio of 6:1, and one third of those undertaken were in color. While a small number of films were made for lay audiences, the majority were technical, and intended for students as well as other scientific groups. Quite naturally only a few were sound films.

With regard to submitting prints to a central library for filing and distribution there were varied and rather inconclusive answers, although 67 were favorable to such a plan. Distribution and financing problems must be solved before a general acceptance of the scheme will be possible.

The actual value of this survey lies, however, in the use which will be made of its findings. A file is now available, with copies in The Wistar Institute and The American Film Center, of the moving pictures actually used by anatomists and biologists throughout the country, with brief descriptions of the content in most cases. Likewise there is now a list of the sources of the greater number of these films. The Wistar Institute has already set up its reviewing service, whereby critiques of those films passed and reviewed by carefully chosen boards, representing the American Association of Anatomists, the American Society of Zoologists and the Wistar Institute, are printed in its journals. Slowly a library of the best research and teaching pictures is being collected, and distribution plans are to be worked out.

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## INDUSTRIAL SOLVENTS AS POSSIBLE ETIOLOGIC AGENTS IN MYELOID METAPLASIA<sup>1</sup>

THERE has recently been described under the name of agnogenic myeloid metaplasia a syndrome which both from a elinical and hematologic point of view has been frequently confused with myelogenous leukemia, hemolytic jaundice or anemia.<sup>2</sup>

The term agnogenic implies that the etiology of the condition was then unknown. A comparison of the histologic findings in this condition with those found in chronic benzol poisoning<sup>3</sup> together with certain

<sup>2</sup> Henry Jackson, Jr., Frederic Parker, Jr., and Henry M. Lemon, New England Jour. Med., 222: 985-994, 1940. <sup>3</sup> Tracy B. Mallory, Edward A. Gall and William J.

<sup>3</sup> Tracy B. Mallory, Edward A. Gall and William J. Brickley, Jour. Indust. Hyg. and Toxicol., 21: 355-392, 1939.

<sup>&</sup>lt;sup>1</sup> From the Collis P. Huntington Memorial Hospital, Mallory Institute of Pathology, Thorndike Memorial Laboratory, Second and Fourth Medical Services (Harvard), Boston City Hospital, and the Department of Medicine, Harvard Medical School, Boston.