Postscripts to the History of the A.A.C.R.

Following the publication of the history of the American Association for Cancer Research from 1907 to 1940 (Cancer Research, 21:137, 1961), the authors received a number of comments from interested readers. Several corrections and other pertinent comments relevant to this history are summarized below:

The following Directors of the American Association for Cancer Research were omitted from Table 4 through a printing error:

Paul C. Zamecnik, Massachusetts General Hospital, Boston, Mass., 1954-57.

The numbers of the Annual Meetings as given in Table 3 of the history do not correspond to the numbers printed on the Programs of the Annual Meetings. For the table, the scientific meetings were numbered consecutively regardless of program number, since the early meetings had no official number. Inasmuch as the program numbers are widely recorded on recent printed programs, in announcements, and in the minutes of the meetings, these numbers constitute the basis on which future Association meetings will be numbered. For readers interested in converting the numbers given in Table 3 to the official program numbers, the following correction factor may be applied:

From 1912 to 1942, the number in Table 3 minus 2 = program number.
From 1943 to 1960, the number in Table 3 minus 1 = program number.

The following items should have been included in Table 6 and were kindly supplied to us from various sources:

1. Gann, the Japanese journal of cancer research, was founded in 1907 as a private undertaking by Katsusaburo Yamagiwa; in 1914 it was taken over by the Japanese Society of Cancer Research as its official organ.

2. The Japanese Society of Cancer Research, a precursor of the present Japanese Foundation for Cancer Research and the Japanese Cancer Association, was organized in 1908 through a call from the Zentral-Komitee für Krebsforschung for Japanese cooperation in cancer research.

3. In 1908 the International Association for Cancer Investigation (IACI) issued the Internationale Monatschrift (Berlin), the first international journal of cancer research, which published six volumes from 1908 to 1914. Publication of this journal was suspended upon dissolution of the IACI in 1914.

4. The first inbred strain of mice (DBA) was established by C. C. Little in 1909.

5. The Jackson Memorial Laboratory, where much of the work on mouse genetics was done, was founded in 1929.

Several more detailed comments concerning items reported in Table 6 were received which are of sufficient general interest to merit inclusion here. The contributor of the information on which the following material is based is given in parentheses at the end of each section.

Fujinami and Inamoto reported a transplantable (graft) chicken tumor in 1910 (Verhdl. d. Jap. Path. Ges., Jg. 114, 1911) without any reference to filtration experiments. Their third report (Gann, 6:1, 1912) cites Rous' paper (J. Exp. Med., 12:696, 1910) and contains a bare statement that their results with filtrates were "somewhat different" from those of Rous. In a fourth report (Gann, 7:100, 1913) we find positive transmission by means of cell-free filtrates first communicated by these investigators. These circumstances were clearly recognized by the contemporary Japanese workers, as evidenced by the statement of Ogata and Ishibashi: "Fujinami and Inamoto attempted transplantation with cell-free filtrates of their myxosarcoma with negative results, but encouraged by Rous' report they repeated experiments and found that their tumor also often yielded positive results" (translated from the Japanese, Gann, 9(2):21, 1915).

Fujinami and Inamoto were the first to report a transplantable chicken sarcoma, but filterability, and consequently the filterable causative agent (the Rous virus) of this group of avian tumors, was first demonstrated by Peyton Rous.

(Waro Nakahara, Japanese Foundation for Cancer Research, Tokyo).

A recent review by Shimkin (Cancer, 8:653, 1955) shows that priority for the first successful
transplantation of tumors belongs to Mstislav Aleksandrovich Novinsky, who published his results in an 1877 dissertation. Novinsky’s first series of experiments, started on December 19, 1875, resulted in passage through inoculation of a venereal sarcoma or an anaplastic epithelial tumor of dogs through two generations. A second series of experiments begun on September 20, 1876, by Novinsky led to successful transplantation of what is probably a canine venereal sarcoma through two generations.

In another communication (Cancer, 13:221, 1960) Shimkin establishes that Arthur Nathan Hanau, frequently credited with reporting the first successful tumor transplantation in 1889, acknowledged the previous claims of Novinsky and the German investigator, Wehr, who had successfully transplanted tumors in dogs in 1888. “Recognition of the importance of Hanau’s contribution and the submergence of the observations of Novinsky may be attributed to several factors. Perhaps the most important is that the rat tumor used by Hanau closely resembles carcinoma of man, whereas the venereal sarcoma of the dog has no human counterpart. Also, Hanau’s material was available for review, whereas the full account of Novinsky’s work was hidden in an obscure Russian thesis” (Cancer, 13:221, 1960).

(Michael B. Shimkin, National Cancer Institute, Bethesda.)

Following a communication by the staff of the Jackson Memorial Laboratory on the extrachromosomal influence in the etiology of breast tumors in mice (Science, 78:465, 1933) foster nursing studies were undertaken by Bittner in 1934 and published in a preliminary report in August, 1936 (Science, 84:162, 1936). Between 1936 and 1939 Bittner issued seven other papers on the influence of nursing.

Korteweg in a 1936 paper (Genetica, 18:350, 1936) reported that a “disposition to cancer of the mammary gland with the mouse is transmitted from mother to daughter along extrachromosomal ways.” This author suggested three possible modes of transmission: ovular plasm, during intrauterine life, and by means of the mother’s milk. On p. 359 of his article Korteweg writes, “For the present the influence of the ovular plasm seems here most probable,” and in the summary he says, “Probably this extrachromosomal factor will work through the ovular plasm.” A publication issued by Van Gulik and Korteweg in 1940 (Proc. Nederl. Akademie v. Wetenschappen, 43:891, 1940) adds the following comment: “In 1936 Bittner demonstrated that the extrachromosomal factor might be identical with the influence emanating from the milk on the young ones. . . Similar experiments on a larger scale were made by Bittner, Andervont, and Korteweg. This paper relates to these experiments. . . .” This appears to be the first experimental conclusion by Korteweg on the influence of nursing.

(John J. Bittner, University of Minnesota Medical School, Minneapolis.)

Dr. Robert Schrek of the Veterans Administration, Hines Hospital, Hines, Illinois, has pointed out that only two of the 40 items in Table 6 represent work done with human cancer. In his view, this table might be misleading to some individuals in that some men have the idea that research in human cancer is not basic but merely applied research and development. Several items for a supplementary table were suggested by Dr. Schrek to fill this gap.

It was not the intention of the authors to minimize the importance of research on human cancer. We recognized, when we prepared the material for Table 6, that it would not be complete and would at best represent a reasonable selection of the available material. Moreover, in a more or less arbitrary manner, after consulting various investigators in the field, we decided to limit the coverage to certain years—1889 to 1940—and all items prior or subsequent to this period were eliminated.

It would undoubtedly be of value to publish a comprehensive list of developments in research on human cancer. It is, however, difficult to find someone to prepare such a list, since many references would have to be consulted to make it representative of this phase of research. In the absence of such a compilation, the authors have decided against attempting to expand Table 6 to include additional references to investigations on human cancer.

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