SCIENTIFIC PUBLISHING CENTENNIAL
1916-2016
American Association for Cancer Research
Early in his short career, Dr. Weil became an expert on hemolysis and on anaphylaxis, setting the stage for his interest in cancer immunology. He earned his MD from Columbia University College of Physicians and Surgeons in 1900 and conducted animal studies in Europe. He was chair of the Department of Experimental Medicine at Cornell University Medical College and president of the American Association of Immunologists. Commissioned into the Army Medical Corps in 1917, Dr. Weil was appointed chief of the medical staff at Camp Wheeler in Georgia, where he contracted pneumonia and died in 1917 at age 41. Given today's emphasis on immune therapy, it is fitting that 100 years ago the first AACR editor was an immunologist.
1917

AACR Secretary-Treasurer Selected as New Editor

WILLIAM H. WOGLOM, MD, EDITOR, 1917-1923

A pioneer in the study of tumor transplantation, Dr. Woglom was known for his many thoughtful, scholarly treatises such as the 1913 review, “The Study of Experimental Tumors.” Dr. Woglom received his MD from the College of Physicians and Surgeons of Columbia University in 1901 and worked in pathology and bacteriology at several New York hospitals before he joined Columbia’s cancer research institute, which became the George Crocker Special Research Fund. The Crocker Fund provided financial aid to two early AACR journals. Dr. Woglom was AACR Secretary-Treasurer from 1917 to 1935 and President in 1936. His sustaining vision throughout his career was that “effective interference with incessantly proliferating cells will become a reality.”

1918

Landmark Report of Coal Tar Inducing Carcinoma (findings first published in Japanese in 1915)

The authors used an irritant in the form of coal tar to induce carcinomas on the ears of rabbits, with continual application. Lymph node metastases were subsequently discovered in two animals. These studies ushered in the field of experimental chemical carcinogenesis and were also important in studies of occupational exposure to carcinogens.

1924

Director of Columbia’s Crocker Institute Named Editor

FRANCES C. WOOD, MD, EDITOR, 1924-1940

Renowned as an expert in pathology and the use of radiation in cancer, Dr. Wood founded both the Crocker Institute at Columbia and the pathology laboratory at St. Luke’s Hospital in New York. He raised funds to buy Marie Curie radium and made important discoveries about voltage and duration in radiotherapy. Dr. Wood received his MD degree in 1884 from Columbia College of Physicians and Surgeons and later studied in Europe. He served two terms as AACR President (1917 and 1931). He was a prolific writer of articles and books, and during his terms as editor, many claims for cancer cures were made. Dr. Wood remained a sceptic of such claims, noting “There are many cures for cancer; the problem is to keep the patient alive.”

First Presidential Address Published (Willy Meyer, President in 1922)
1925 Extensive Family Study Establishes the Inheritability of Some Cancers

An extensive study of a high degree of inheritability of cancer in a family, known as Family G (the finding was initially called cancer family syndrome, later Lynch syndrome). These studies led to establishing that colorectal cancer and endometrial cancer occurred in relatives. Family G continued to be studied for decades.

1928 Ovarian Secretions Linked to Breast Cancer

A key study that demonstrated the protective effect of ovariectomy in the development of mammary tumors in mice as well as the protective effect of not breeding. The study also showed that if carefully selected mouse strains are used, mammary carcinomas could be produced in castrated male mice implanted with ovaries.

1931 The American Journal of Cancer Replaces The Journal of Cancer Research

1932 Early Evidence Links Cancer to Smoking; Cited in 1964 Surgeon General’s Report

The isolation of chemical compounds from coal tar elicited numerous studies to find chemical structure analogues for carcinogenic activity. Such studies were largely reported piecemeal in the chemistry literature. The report by Kennaway and colleagues was the first in the cancer literature to report the use of hydrocarbons of the benzoanthracene group to produce connective tissue tumors in mice. Two reports later in 1932 further implicated tar in smoking-related cancer (McNally WD. The tar in cigarette smoke and its possible effects. Am J Cancer 1932;16:1502-14. Bogen E, Loomis RN. Tobacco tar: experimental investigation of its alleged carcinogenic action. Am J Cancer 1932;16:1515-21).
1933
The American Journal of Cancer Begins Monthly Publication

1934
Carcinomas in Frogs Linked to a Virus

Extensively documented cases showed virally induced renal tumors in frogs, with the author also doing a broad review of the literature. Support for the author’s conclusion of a viral origin came several years later. Such veterinary studies advanced the field of human tumor virology substantially.

1936
Studies of Chemical Carcinogenesis Trigger Chemotherapy Investigations

The first article of an extended series in AACR journals reported studies on chemical carcinogenesis. These seminal investigations reinforced the notion that if chemicals could produce cancer they might also eliminate it; subsequently Shear and other investigators began the study of chemotherapy at the National Cancer Institute.

Estrogen Plays a Key Role in Breast Cancer

In the first English-language reports of estrogen inducing mammary tumors in mice, Lacassagne hypothesized that an antagonist was needed to stop the action of estrogen in women with a hereditary disposition to breast cancer. His work caused a sensation when presented at the 1936 AACR Annual Meeting.
A landmark study evoked the principles of cancer stem cells by showing that a single leukemic cell could transmit and maintain systemic disease when transplanted into a mouse.

Radiation Produces Genetic Changes Leading to Cancer in Mice

In 1936, radiation caused the induction of leukemia and other cancers in strains of inbred mice. Although this was not the first report of radiation-induced cancer, previously the cancer was thought to be the result of the burns, not the x-rays causing a genetic change and a "malignant transformation."

Transplanting Even One Malignant Cell Can Produce Leukemia in Mice

A landmark study revealed the principles of cancer stem cells by showing that a single leukemic cell could transmit and maintain systemic disease when transplanted into a mouse.

Caloric Intake Affects Tumor Growth

Pioneering studies led to the first report linking caloric intake to the initiation and growth of tumors in mice. Caloric restriction of one third of an unrestricted diet led to a reduction in growth of spontaneous and induced tumors.

The American Journal of Cancer Ceases Publication; Launch of Cancer Research is Announced

The American Journal of Cancer Ceases Publication; Launch of Cancer Research is Announced