

Cancer Research

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COVER LEGEND

An important pioneer program in experimental cancer chemotherapy was initiated by Cornelius Packard Rhoads (1898-1959) in New York during the 1940's.

Rhoads was born in Springfield, Massachusetts, completed his medical education at Harvard School of Medicine in 1924, and, following training in pathology, joined the research staff of the Rockefeller Institute for Medical Research in New York. In 1940 he succeeded James Ewing as Director of the Memorial Hospital for Cancer and Allied Diseases in New York City. During World War II he served in the United States Army Chemical Warfare Service. Under the cloak of wartime secrecy, nitrogen mustard was shown to have therapeutic effects in patients with leukemia and lymphoma. This led to the exploration for therapeutic effects of many analogs of nitrogen mustard and related chemicals developed for warfare and subsequent synthesis of many other alkylating chemicals.

Following the war, the Sloan-Kettering Institute for Cancer Research was organized, and the Memorial Hospital expanded to form the Memorial Center for Cancer and Allied Diseases (later Memorial-Sloan Kettering Cancer Center), of which Rhoads was the Director until his sudden death in 1959. Cancer chemotherapy was emphasized in the research program. Among the key personnel brought together by Rhoads were Dr. Joseph H. Burchenal, the late Dr. David A. Karnofsky, Dr. Frederick S. Philips, Dr. C. Chester Stock, and Dr. K. Sugiura.

The experimental cancer chemotherapy program was organized at

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the Sloan-Kettering Institute by Dr. C. Chester Stock (b. 1910) as Chief of the Division of Experimental Chemotherapy. In addition, he subsequently became the Director of the subsidiary Donald S. Walker Laboratory in Rye, New York, as well as a Vice-President of the Institute.

Dr. Kanematsu Sugiura (b. 1890) became head of the Tumor Spectrum Section of the chemotherapy program, with responsibility in the bioassay procedures. A native of Japan, Sugiura was brought to the United States in 1905, and his subsequent education and career developed in New York, in close association with many of the cancer research programs that evolved in the city. Sugiura's contributions to experimental cancer chemotherapy extend back to 1912 and are recorded in his many publications.

While he has been considered a "Jack of all trades" insofar as his talents and interests are concerned, his most important work has been focused on tumor transplantation, the effects of radiation in experimental tumor systems, frozen experimental tumors, and enzymes (particularly lipase) in tumors and normal tissue.

Dr. Sugiura has published a charming account of his reminiscences and experiences in the experimental chemotherapy of cancer (Med. Clin. N.Am., 55: 667-682, 1971). Dr. Rhoads' obituary, by C. Chester Stock, appears in Cancer Res., 20: 409-411, 1960.

Rhoads is pictured on the *left*, Stock on the *upper right*, and Sugiura on the *lower right*. We are indebted to Dr. C. Chester Stock and Dr. Dorris J. Hutchison of the Sloan-Kettering Institute for the illustrations and information, and Claire Yaffa, who photographed Dr. Sugiura.