



Leslie Foulds
1902–1974

OBITUARY

Leslie Foulds

"His intelligence is of a scientific order, of an investigating habit, and of that unappeasable curiosity which believes that there is a particle of truth in every mystery."

Joseph Conrad

The bare facts of Leslie Foulds' life do not reveal the great influence he had on cancer research. He was born in Morecambe, Lancashire, England, and he was educated at Kings College, Cambridge, where first he studied chemistry and then changed to medicine. After qualifying as a physician he worked for a brief period in the Department of Animal Pathology, Cambridge, before joining the staff of the Imperial Cancer Research Fund, London. Except for the interruption of World War II, when he put all cancer research aside, he worked continuously on the problem of cancer. In 1951 he transferred to the Chester Beatty Research Institute, Institute of Cancer Research, Royal Cancer Hospital. Following his retirement from that position in 1966, he spent two years at the Chicago Medical School and a brief period at the University of Otago in New Zealand. He returned to England in 1969 and lived quietly in the four-centuries-old Thetis House in the small village of Kelvedon, where he worked on the second volume of *Neoplastic Development* until his death from cancer in February 1974.

Leslie Foulds had a happy private life. His wife, Edna, was in complete sympathy with his aspirations and his work, and she assisted him in the preparation of his book. His daughter, Brenda, is a distinguished biologist, and his son, John, followed him and was qualified in medicine.

Foulds' literary output may appear meager. He did not rush into print. A few early papers on tumors in fowl, a memorable lecture on the course and regulation of tumor growth before the Royal College of Surgeons, and later studies on the mammary tumors of the mouse comprise most of his published experimental work. Yet every word he wrote was carefully weighed to convey a precise and clear meaning.

The culmination of his lifetime of effort was his book *Neoplastic Development* about which Dr. Clyde J. Dawe has written the following appreciation of Vol. 1:

"*Neoplastic Development* reflects Leslie's wit and wisdom on virtually every page. Sometimes the wit is caustic; he notes in the opening thoughts of his Preface: 'Now it (the Cancer Problem) has become (from an Intellectual Problem) a Biological Problem, which, as is sometimes implied, biologists might solve in their spare time, if they had any.' Barbs like this were thrown as much at himself as at others. In an informal symposium at NCI in March, 1964, he confided: . . . 'for a long, long time, almost from my student days, I've been interested in experimental biology. And also, not being merely British, but

English—this is a subtle distinction which I am not sure is appreciated by all—I am not one of those who believe there is any great virtue in hard work for its own sake; and if I can get anyone else to do the work for me, I'm extremely pleased. I've always hoped that embryologists would do our work for us; I'm a little less hopeful than I used to be . . .'

This last remark gives the key to Foulds' central theme, recurring in myriad variations throughout his book, as in his writings of earlier days: the concept of neoplasia as 'a *developmental process* akin to normal development in some respects but differing from it in important particulars that are not yet well-defined.'

If Foulds professed to laziness, it could only have been a laziness related to physical action. His receptor system was constantly scanning for new experimental information, which on the instant of detection was channeled into his higher centers to be tested for fit within his concepts of tumor development and tumor progression. He faithfully acknowledged the sources of his information, even the origin of the term "tumour progression," borrowed from Peyton Rous. In Chapter III of *Neoplastic Development* he traces the rudimentary beginnings of the tumor progression concept to thoughts expressed first by Haaland in 1911, and later by Rous and Beard (1935) and H. S. N. Greene (1940). But it was Leslie Foulds who first thought out and clearly verbalized the principles of tumor progression . . .

Leslie Foulds' mind was free to discard, free to absorb; free to be skeptical, free to be tolerant; and perhaps most of all, free to integrate and synthesize. *Neoplastic Development*, as a result, is a book that has a value beyond that of the many multi-authored mega-compendium on cancer today. It generates insight."

Leslie Foulds was a Visiting Scientist at the National Cancer Institute in 1956 to 1957 during which period he made many friends among the staff. He was always ready to discuss and philosophize on the problems of cancer. He stirred men's minds and thoughts and exerted an influence that cannot be measured by any ordinary yardstick. An appreciation of this, shared by all his many friends at the National Cancer Institute, has been expressed by Dr. Mearl F. Stanton:

"The science, the writings and the philosophy that Leslie Foulds developed regarding neoplastic disease will be a far more substantial memorial to him than any narrative of his life. From the early 1930's until the present he was an observer of cancer in all its many forms. The findings were not simply recorded and forgotten, but through many writings and revisions developed into an orderly theme concerning the natural history of neoplastic disease."

Harold L. Stewart and Thelma B. Dunn
Registry of Experimental Cancers
National Cancer Institute
National Institutes of Health
Bethesda, Maryland 20014

Received June 17, 1974; accepted July 5, 1974.