Biosketch - Joseph F. Fraumeni, Jr.

Dr. Fraumeni received a B.A. from Harvard College, an M.D. from Duke University, and a M.Sc. in epidemiology from the Harvard School of Public Health.   He completed a medical residency at the Johns Hopkins Hospital and Memorial Sloan-Kettering Cancer Center.   He then joined the epidemiology unit at the National Cancer Institute (NCI), where he became founding chief of the Environmental Epidemiology Branch in 1975, Director of the Epidemiology and Biostatistics Program in 1979, and Director of a new Division of Cancer Epidemiology and Genetics in 1995.

Dr. Fraumeni's research interests have centered on population and family-based studies into the environmental and genetic determinants of cancer.   This work is covered in over 800 publications including several books.   Several projects resulted from the computer-generated mapping of U.S. cancer mortality rates at the county level, in a systematic effort to uncover and investigate populations with elevated rates for particular tumors.   These studies provided new insights into lifestyle and environmental risk factors, such as smokeless tobacco in oral cancer, and asbestos and arsenical exposures in lung cancer.   Another major focus of Dr. Fraumeni's research was the study of familial cancer, including the discovery of Li-Fraumeni syndrome of multiple cancers (with Frederick P. Li) as well as cancer-malformation syndromes, including the discovery of aniridia - Wilms' tumor syndrome (with Robert W. Miller), which helped to clarify the genetic mechanisms underpinning inherited forms of cancer.

More recently, Dr. Fraumeni has concentrated on the development of strategies that integrate epidemiologic and molecular approaches designed to identify common susceptibility genes and their interactions with environmental factors in the origins and progression of cancer.   In recognition of his research into the environmental and genetic determinants of cancer, Dr. Fraumeni has received numerous awards and honors, including the Charles S. Mott Prize from the General Motors Cancer Research Foundation, and his election to the National Academy of Sciences, the Institute of Medicine, and the Association of American Physicians.