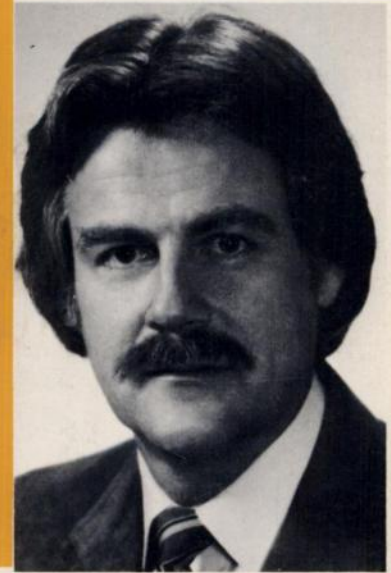
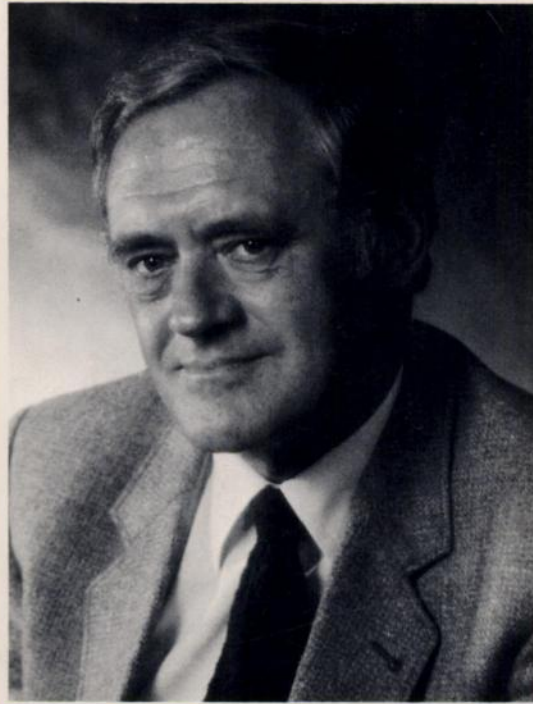


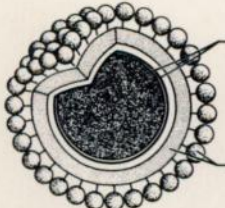


Cancer Research

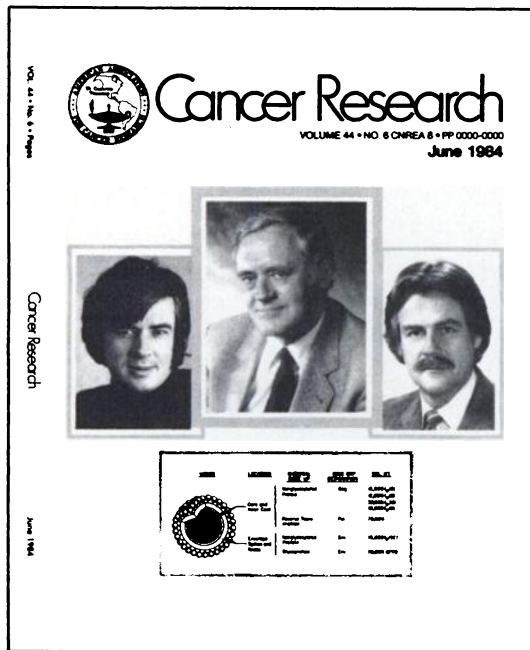
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<u>VIRION</u>	<u>LOCATION</u>	<u>CHEMICAL MAKE UP</u>	<u>GENE MAP DESIGNATION</u>	<u>MOL. WT.</u>
	Core and Inner Coat	Nonglycosylated Protein	Gag	15,000 (p15)
				12,000 (p12)
				30,000 (p30)
				10,000 (p10)
Envelope Spikes and Knobs	Reverse Transcriptase	Pol	70,000	
	Nonglycosylated Protein	Env	15,000 (p15E)	
	Glycoprotein	Env	70,000 GP70	

COVER LEGEND



Leukemia in cats, the most common neoplastic disease of the species, is caused by the feline leukemia virus (FeLV), a horizontally transmitted C-type retrovirus.

Among the workers who have made important contributions to research on feline leukemia are:

William F. H. Jarrett, who was born in Scotland, qualified as a veterinarian in 1949 and obtained a Ph.D. degree in 1953. He has been professor at the University of Glasgow since 1965 and head of the Department of Veterinary Pathology since 1968. In 1980, he was elected a Fellow of the Royal Society. Jarrett in 1964 published the first papers on the transmission of feline

leukemia and the isolation of FeLV (*Nature*, 202: 566, 1964).

William D. Hardy, Jr., received his VMD from the University of Pennsylvania in 1966. He is on the staff of the Sloan-Kettering Institute for Cancer Research in New York City. Hardy produced the first antiserum to FeLV in 1968, enabling him to develop a rapid, sensitive indirect immunofluorescent antibody (IFA) test for the virus [*Science (Wash. DC)*, 166: 1019, 1969]. This test has been used widely in studies on the natural history, epidemiology, and eradication of FeLV infection.

Myron Essex obtained his DVM from Michigan State University in 1967 and his Ph.D. from the University of California in 1970. He is professor of virology at the Harvard School of Public Health. With Hardy, he identified the feline oncornavirus-associated cell membrane antigen (FOCMA) and showed that this antigen is a tumor-specific antigen induced by transformation of cells by FeLV (*Int. J. Cancer*, 8: 384, 1971).

The work of these three investigators, and others, led to the clarification of the cause of cat leukemia and its horizontal transmission (*J. Natl. Cancer Inst.*, 51: 833, 1973). Vaccines against the disease are being developed (*Int. J. Cancer*, 16: 134, 1975).

Pictured are, *left to right*, Drs. Essex, Jarrett, and Hardy, and the feline leukemia virus particle (from Theilen, G. H. and Madewell, B. D. *Veterinary Cancer Medicine*, p. 220, Philadelphia: Lea and Febiger, 1979). We are indebted to the three investigators for their portraits; to Mrs. E. Paterson, Secretary of Professor Jarrett; and to Godfrey Argent for permission to reproduce Jarrett's portrait. Special acknowledgment is made for the help of Drs. Gordon Theilen and Robert R. Marshak in the preparation of the theme.

M.B.S.