Bovine leukemia (BL) is an example of a cancer of the blood-forming tissues which occurs in many animal species and is caused by a C-type RNA virus belonging to the family Retroviridae.

The infectious nature of BL was recognized in Europe and in the United States from epidemiological studies, including the occurrence and distribution of the adult enzootic form of the disease and its associated condition, persistent lymphocytosis. Among investigators who made important contributions to the epidemiology of BL was Hans Jorgen Bendixen of Denmark. He was born in Copenhagen and qualified as a veterinary surgeon in 1951 and as a Doctor of Veterinary Medicine in 1964. He was veterinary officer of the Danish Veterinary Services from 1959 to 1973 and has been head of a division of the European Communities Commission (ECC) in Brussels since 1973. The map shows the occurrence and incidence of bovine leukemia in Denmark during 1952 to 1954 (Ann. N. Y. Acad. Sci., 108: 1241, 1963).

Janice Miller was born in Kansas, obtained her DVM in 1962 from the Kansas State University and a Ph.D. in veterinary science from the University of Wisconsin in 1969. She is a veterinary medical officer in the U. S. Department of Agriculture in Ames, IA. In 1969, she and coworkers found particles resembling mature type C virus in bovine lymphocyte short-term cultures. The picture of these C-type particles is from J. Natl. Cancer Inst., 43: 1297, 1964.

Jorge F. Ferrer was born in Argentina and graduated with an M.D. degree from the University of Buenos Aires in 1957. After research fellowships in Europe and in the United States, he joined the University of Pennsylvania School of Veterinary Medicine, where he has been a professor since 1969. Ferrer and his co-workers established that the C-type virus-like particles seen in short-term and long-term bovine lymphocyte cultures are truly viral in nature (J. Natl. Cancer Inst., 47: 613, 1971; 48: 985, 1972), are indigenous to cattle (Cancer Res., 32: 1871, 1972), and are closely associated with enzootic BL, and persistent lymphocytosis (Cancer Res., 34: 893, 1974). Dr. Ferrer's group also showed that all cattle infected with the bovine leukemia virus (BLV) develop antiviral antibodies, and they described the main properties (Cancer Res., 32: 1871, 1972; 36: 1056, 1976) and natural mode of transmission (Am. J. Vet. Res., 39: 1089, 1978; J. Am. Vet. Med. Assoc., 175: 1281, 1979) of BLV. Research in Dr. Ferrer's laboratory demonstrated that BLV is frequently present in an infectious form in the milk of infected cows (Science (Wash. D. C.), 213: 1014, 1981) and that the expression of the BLV genome is blocked by a specific protein present in the plasma of infected cattle (Science (Wash. D. C.), 215: 405, 1982). These workers also obtained conclusive evidence on the oncogenic potential of BLV (J. Natl. Cancer Inst., 67: 1157, 1981) which is now recognized universally as the etiological agent of enzootic BL.

We are indebted to Drs. Robert R. Marshak and Gordon H. Thelen for information and to Drs. Bendixen, Miller, and Ferrer for their portraits. Pictured (left to right) are Drs. Bendixen, Miller, and Ferrer.

M.B.S.