



IN REPLYING, ADDRESS THE  
NATIONAL CANCER INSTITUTE  
Refer to: NC-RB-BS

FEDERAL SECURITY AGENCY  
U. S. PUBLIC HEALTH SERVICE  
NATIONAL INSTITUTE OF HEALTH  
BETHESDA 14, MARYLAND

July 10, 1952

Dr. Joshua Lederberg  
Department of Genetics  
University of Wisconsin  
Madison 6, Wisconsin

Dear Doctor Lederberg:

I am extremely sorry that it has been  
so long before I answered your note of June 6.

At that time we were in the throes of  
not only preparing our annual reports, but also  
preparing for a new fiscal year.

If the attached citation does not meet  
your needs, I should be glad to try again.

Cordially yours,

H. B. Andervont

Attachment.

Inbreeding of mice produced some strains in which many breeding females developed breast cancer and others in which the incidence of these tumors was very low. Hybridization of these strains and foster nursing revealed that mother's milk contained an agent of prime importance in the occurrence of breast cancer. Thus, the establishment of inbred strains of mice for use in cancer research was fully justified.

The mouse mammary tumor agent has many properties in common with known viruses but also possesses certain unique properties which can be used to explore the virus etiology of cancer. These properties are its long latent period, its presence in inbred animals and its transmission from generation to generation.

This agent is ingested during the first few hours of life but the resultant tumor does not arise until middle or late life. During this time the animal grows normally, reproduces and shows no symptom of carrying the agent. There is, in all probability, a <sup>(close association)</sup> ~~(symbiotic)~~ relationship between the agent and the mammary gland cells of certain inbred strains. Studies of this relationship may throw some light on the role of latent or masked viruses in the cancer problem. Indeed, the primary objective of investigations dealing with the virus etiology of cancer is to expose or unmask latent viruses.