

TYRC

THE UNIVERSITY OF WISCONSIN  
MADISON 6

DEPARTMENT OF ZOOLOGY  
BIRGE HALL

March 6, 1961

Dr. J. Lederberg  
Department of Genetics  
School of Medicine  
Stanford University  
Palo Alto, California

Dear Josh:

Thank you for your note r.e. the H<sup>3</sup>-C<sup>14</sup>-thymidine effect. Please forgive me for my laxity in not sending you reprints.

The data reported in NATURE have since been confirmed in an additional repeat experiment. Moreover, the enhancement effect cannot be obtained with tritiated water, suggesting that the internal presence of H<sup>3</sup>TDN in chromosomal DNA is the critical factor. It is my guess that the effect is more likely to be due to steric phenomena (as you suggest) than to radiation; however, this guess is based only on the fact that the actual number of H<sup>3</sup> decays involved in our experiments is fairly small. The combined effects of H<sup>3</sup>TDN and chloramphenicol (see enclosed B.B.A. reprint) are as easily reconciled with a structural scheme as with a radiation damage model at our present level of ignorance.

Your suggestion of trying D-thymidine is excellent and would lead to a technically simple experiment. Do you happen to know of a convenient source of deuterated thymidine? ←

*Plaut, W. ...  
Sorry, no  
Feed D<sub>2</sub>O to cell  
& isolate?  
Ask Rittenberg?*

I am sorry that I did not find the time to visit you at Stanford last month when I spent a few days on the West Coast. I hope the opportunity will arise again.

*"me too"*

With best regards to you and Esther,

Walter Plaut  
Assoc. Prof. of Zoology

WP:yvv