

JAN 21 1963

## THE LILLY RESEARCH LABORATORIES

ELI LILLY AND COMPANY  
INDIANAPOLIS 6, IND., U. S. A.

January 14, 1963

Dr. Joshua Lederberg, Chairman  
Department of Genetics  
School of Medicine  
Stanford University  
Stanford, California

Dear Dr. Lederberg:

A promise is a promise and I can therefore now report to you our preliminary results using the E. coli mutants, 15T<sup>-</sup> and B3, requiring thymine which you sent to us early last fall.

At levels where there is little or no growth on thymidylic acid and good growth on thymine, we find no growth at all with the adamantyl amidate derivative of thymidylic acid. The same negative results were obtained with the corresponding adenine series with an E. coli mutant (X) requiring adenine. These observations parallel those at S.I.M.B. with the U-requiring mutant and one speculates whether this is typical for E. coli only or perhaps indicates a general difference between bacteria and mammalian cells.

I have saved a sample of the thymidylic phosphoramidate for you in case your interest in it for bacterial work has not vanished because of our negative findings.

I am very pleased with the further results Dr. Aronow has obtained with the adenylic acid derivatives, since they seem to complete the picture quite nicely.

My main problem at present is to bring the chemical problems to solution so that I can make enough of the 6-mercaptapurine derivative for animal testing and, if favorable, clinical testing. Being alone in the nucleotide work here renders me homesick for a good phosphate-inclined colleague who would be willing to be a partner and not be ashamed to do medicinal work - with a possible fundamental bonus.

Gerzon

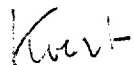
Dr. Joshua Lederberg

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My best but belated wishes go to you and Mrs. Lederberg for a good year in 1963.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Koert".

Koert Gerzon  
Organic Chemical Division

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