



CABLE ADDRESS "RESEARCH"

IN YOUR REPLY PLEASE QUOTE

FILE NO.

NATIONAL RESEARCH COUNCIL
CANADA

ATOMIC ENERGY PROJECT

CHALK RIVER, ONT.

January 18th, 1950.

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

Dear Joshua,

Many thanks for the detailed comments which you have made on the manuscript. It will be all right for you to retain the copy which you have. I am at the moment debating whether to do any further work on the possible allelism of sr and sd or to leave it. Probably I shall compromise by doing an sr x sd cross in the absence of thiamin in the hope of reducing the amount of parental growth and thus perhaps eliminating any ss prototrophs which might arise from parental mutants.

The peculiar behaviour of the parent sd's (page 7) I attribute to their requiring some other substance (or substances) in addition to streptomycin.

The problem of "linkage" between streptomycin response and sugar fermentations is something about which I hope to write to you in a month or so when Miss Nyholm's data will be more nearly complete. If there is loss within a chromosome region one could think of it as involving: (a) a portion or portions of variable size and position, or (b) individual loci without reference to one another. In the case of (a) it should be possible to establish a linear sequence on loss data alone. Selection for a particular locus (in this case sr) when making the cross greatly increases the amount of data, and I am hoping that some information can be obtained from this approach.

The reprint of your 1949 review paper has just reached me and I am extremely glad to have it, particularly as delivery of the volume in which it is published seems to have been delayed.

Sincerely,

Howard Newcombe

HBN:bc