

CARNEGIE INSTITUTION OF WASHINGTON
DEPARTMENT OF GENETICS
COLD SPRING HARBOR, LONG ISLAND, N. Y.

April 18, 1950

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

Dear Joshua:

Thank you very much for your prompt and informative answer to my query.

I agree that it would be preferable to work out the suppressor story on K*12, if possible, and your suggested drug-resistance experiment would indeed be an elegant approach. I don't think it's altogether impossible to get somewhere with a nonsexual strain, however. The experiment I have in mind is to subject a histidine-serine/glycineless "reversion" to the penicillin procedure, screening for histidineless and serine-glycineless mutants separately. If a suppressor is involved, reverse mutation of the suppressor should release the two original requirements as a unit, and a fraction of the histidineless mutants obtained should also require serine/glycine, and vice versa. Wild type B/r would be used as a control. Negative results would prove nothing, of course, but it seems to me that positive results would establish the suppressor beyond reasonable doubt.

I would appreciate your sending me the K-12 mutant requiring histidine and serine/glycine. If it gives prototrophs on minimal, or if another K-12 diauxotroph turns up that does so, I think someone ought to do your drug-resistance experiment. If not, I will go ahead with B/r.

Thanks again, and best regards to Esther.

Yours sincerely,



Evelyn M. Witkin