

June 19, 1952

Dear Dr. Klieneberger-Nobel:

I am indeed sorry to hear of the negative conclusion of your painstaking work with E. coli K-12, but must admit that my own experiences have been very similar, and that I have not been able to find any morphological peculiarity associated with recombination. I am still interested in the problem of L-forms, regardless of their connection with genetic exchange, which appears now to be very remote. One of my students, as I have mentioned played a bit with E. coli B + phage T3, but like yourself was unable to verify the regeneration of bacteria from "sterile" filtrates. Perhaps the material for this is going to be found in *Haemophilus pertussis*, judging from some recent publications. And we still have some lingering suspicions on the filtrability of phage-treated *Salmonella*, although this seems to be unrelated to genetic transfer.

Have you reinterpreted the possible fusion figures, as diagrammed with your letter of Dec. 20th? I have seen a few associations of this general sort, and wondered whether any meaning could be attributed to them.

Perhaps an opportunity will develop, in the future, for a closer discussion of these problems. I hope you will not hesitate to reopen the question of a visit to this laboratory whenever it seems appropriate to you.

Professor Tatum and I are writing up a general account of genetic studies with K-12 of the last six years. Unless some unforeseen findings develop very soon, we shall have very little to say about the morphology of the mating. Would you care to have any of your observations quoted, regardless of the negative conclusions, or the negative result of your work itself? I am not sure whether it will fit in or not, but I should want your explicit permission before making any comment whatever based on your work.

Yours sincerely,

Joshua Lederberg