May 22, 1951.

Dear Kim-

You can probably best answer this in person at CSH; if I had finished my ms., I'd be happier about the trip— I'll bet you're in the same boat.

Have you considered this possibility?-

Accept that the initial h- and h+ arising from it are selectively equivalent in your medium, and that the initial rise of h+ is checked by non-specific PS. Suppose, however, that there were adaptations which were only or more effective in h- than h+ ~~[illegible]~~; and the converse. The result would be that predominantly h- populations would fix modifiers that select against h+, and vice versa. The ultimate equilibrium would, then, be one of mutation as against selection, although your initial cultures do not necessarily start out that way. This can be checked, of course, by comparing h+ from terminal h-, against that h-, with the initial pairs. It would account for the continuation of an equilibrium. Do your fully adapted cultures on synthetic medium grow as rapidly as their counterparts on complete?- that would seem to fix some sort of limit on the potentiality for adaptation.

Thanks for the information on Woods Hole. Right now it looks as if we may get up there for a few days, but don't want to be tied down to a definite commitment.

We'll see all of you soon-

Sincerely,

Joshua Lederberg