CARNEGIE INSTITUTION OF WASHINGTON

DEPARTMENT OF GENETICS

COLD SPRING HARBOR, LONG ISLAND, N. Y.

April 11, 1950

Professor Joshua Lederberg Department of Genetics University of Wosconsin Madison, Wisconsin

Dear Joshua,

Thanks for your early bird contribution for the mext MGB. I will be glad to add the names you suggest to the mailing list. I have been putting graduate students on the list if they are recommended by a senior person as being seriously interested, so I guess Lively and Zinder qualify. I can see your point about Gowen's note -- however, he seems quite anxious to reestablish contact with the bacterial genetics group, and I thought we could afford to stretch a point so as not to put a damper on him. I am entirely open to suggested rules and standards, and have been thinking we ought to have some sort of advisory or editorial board. Perhaps we can get one organized for the next issue.

What I am really writing about is a point of information re the stability of polyauxotrophs. I have a strain of B/r that requires histidine and serine or glycine, the two requirements having been tagged on in two steps in the order given. first-step strain, requiring histidine alone, has a reversion rate of the order of 1 per 107, and I was rather surprised to find that the double-requirer has a reversion rate of the same order -- if anything, somewhat higher. This, of course, looks like a surpressor mutation. I wondered if you have come across this sort of thing in your experience. It's the first time \bar{I} have seen it in the course of handling about a dozen diauxotroph strains of B. If you have investigated this sort of behavior in K-12, I will not bother with it, as it is a long way from the current line of my work. If it has not been encountered previously, it might be worth looking into, if only as a concrete instance of the dangerous tendency to think of reversions as true backmutations without a shred of evidence. I'd appreciate your judgment as to whether there would be any point in pursuing this thing.

With best regards to Esther,

Sincerely, Cuelyn

Evelyn M. Witkin