25 April 1951.

Dr. Ed Garber,
Dept. Bacteriology,
Naval Biological Laboratory,
Naval Supply Center,
Oakland 4, California.

Dear Ed:

First, I'd like to say that I would prefer not to discuss any uncleared information except in the course of anformal consultation. It get's to be too much of a mental burden to sort things out. However, I'll be happy to talk over (i.e. via letter) anything which has been cleared for public discussion.

The mutation rates you give are the lowest I've ever seen for any measurable rate; you must be working with incredible densities of bacteria; this makes me wonder whether there's any chance of an artefact coming in there. Do you get full recovery of small, known numbers of S^r cells added to S^s populations?

I hope you'll enjoy your summer at CSH. We'll be there for the symposium, but that will be over long before the course starts.

Sincerely yours,

Joshua Lederberg.

P.S. Why not use Lea and Coulson's methods for measuring mutation rate from the median number of mutants (J. Genetics 49:264- '49)? Also, evidence from E. coli heterozygotes shows that S^s is dominant to S^r. You should be able to verify the diploid nature of the gigas forms by measuring the mutation rate from S^s to S^r. We got absolutely nothing in E. coli with camphor. On the other hand, I have been surprised to find myself utterly convinced of the "L-forms" and their role as "filtrable" bacteria from work one of my students is doing on Salmonella.

JL