December 22, 1954

Dr. M. Demerec
Department of Genetics
Carnegie Institution
Cold Spring Harbor, L.I., N.Y.

Dear Dr. Demerec:

In order to complete our studies on the genetic determination of flagellar antigens in Salmonella, I am anxious to look for auxotrophic markers that might bemlinked to the H₁ and H₂ loci. The chances of finding any are, of course, very low, but it would be worth some effort.

It would be extremely helpful and advantageous to us if we could benefit from the work you and your assistants have already done in isolating and screening so many auxotrophs. As our interest lies exclusively in this application, it would suffice for us to have each mutant locus that we might test represented merely by its corresponding lysate. In fact, if it were convenient for you, we could do very well with a mixture of lysates of diverse mutants, since our screening method (based on selection of H₁ transductions, and tests for correlated auxotrophics) would automatically pick out what we wanted. In preparing such mixtures, it would be wisest to use approximately equal aliquots for each component, and to record what went in for later record.

I would be much obliged to you if you can comply with this request. The program will be under the immediate supervision of a new student from Japan (Tetsuo Iino). He is not due to arrive until February 1, but I would be pleased if the reagents were at hand at that time.

Unless we are unusually lucky, we will be spending some time at making more mutants ourselves, and will be happy to exchange anything we run into that would be of particular interest to your program.

With best wishes for the season,

Yours sincerely,

Joshua Lederberg Professor of Genetics