August 24, 1953

Dear Dr. Rowley:

I must apologize for this tardy reply to your letter of July 15. I was away on a trip to San Francisco during midsummer, and this is my first opportunity.

Your letter asked about crossable strains of E. coli for virulence studies. I agree strongly about the desirability of working with strains with which some genetic analysis will be possible. I think it would be equally important to deal with cultures whose serological properties are also easily classified. We are making slow progress in accumulating and organizing genetic and serological information on our large group of new strains. For many of them, we have only the reasonable assurance that they will undergo recombination, though some are much less fertile than others. We have also been collecting some information on the recombination of antigenic markers. At the moment, unfortunately, this work is in a rather disorganized condition. Auxotrophic mutants have been prepared in only a few lines for the furtherance of the crossing studies, and in many lines, colonial and serological variability has been noticed (and not yet adequately studied) which will have to be clarified before toxicity tests will be entirely meaningful. For these reasons, there are only a few cultures which would be appropriate for your studies. Perhaps I am misconstruing your requirements, and a clearer statement of them would facilitate the exchange.

Dr. T. C. Nelson mentions having heard recently from you of your plans to spend some time in Paris. If you find it convenient to do so upon your return to London, I will be glad to renew this discussion with you. Perhaps by that time, we will have shaped our collection into a more satisfactory form.

Would you be interested in a similar analysis with Salmonella (e.g. S. typhimurium)? There is no question here of providing strains, as they are innumerable and almost all are technically feasible for genetic transduction analysis, but if I can be of any assistance in describing methods and the like, I would be happy to do so. On the other hand you might find it equally convenient to consult with Bruce Stocker or Clive Spicer.

Yours sincerely,

Joshua Lederberg