



STATE OF CONNECTICUT
DEPARTMENT OF HEALTH
HARTFORD, 1

January 6, 1953.

Dr. Joshua Lederberg
Department of Genetics
University of Wisconsin
Madison, Wisconsin.

Dear Lederberg:

Thank you for continuing to furnish me with reprints of your research studies in the field of bacterial genetics. I have been following them with much interest because I think that such studies will eventually lead us to a better knowledge of some of the fundamental principles of bacteriology. I am naturally much interested in your work on transduction in Salmonella and would like to ask a few questions which are not specifically treated in your recent publications.

I would be interested to know whether or not you have attempted to induce flagellation in non-motile Salmonella (pullorum or gallinarum) by the use of FA from a motile source such as S. typhimurium. Better still, to transduce the d factor from typhoid to S. pullorum. As a matter of fact, it would appear possible that one might expect eventually to use properly selected FA with subsequent selection for certain characteristics to change S. pullorum into a complete typhoid organism. In such an eventuality, it would be interesting to determine whether or not the pathogenicity of the organism would remain the same for chicks.

Another question which interests me is connected with the fact that FA seems to be carried by phage particles. Inasmuch as phage action may be inhibited by the presence of another preferentially selective type of phage, I am wondering whether or not you have any evidence to show that the action of FA-bearing phage can be inhibited by the presence of another non-FA phage preferentially absorbed by the organism in which transduction is being attempted.

I realize that there are practical difficulties which would confront a person trying to answer the questions posed above. However, I will be most interested to hear from you when you have time, whether your comments are pure speculation or the result of experimental procedure.

With kindest regards and best wishes for the New Year

Sincerely yours,

Earle K. Borman
Assistant Director

EKB/MPA