INDIANA UNIVERSITY
BLOOMINGTON, INDIANA

Bacteriology Department

May 23, 1949

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

Dear Joshua:

I forgot to tell you in Cincinnati that Kauffman has asked me to "lead the discussion" on genetic recombination in bacteria and phage at Shelter Island. If o.k. with you, I plan to start with a few remarks on comparative recombinology, then put you up for a summary of the essentials of your work, and then let people discuss it. Then I'll put Al up, then myself. They have projector and blackboard, if you want them.

Regarding your comments on our Genetics paper, the correction obviously consists in subtracting from the total number of bacteria those with one or more active particles, and calculate the bacteria with two or more phages among the remaining ones:

$$\left(1-(x+1)e^{-x}\right)e^{-xe^{r}}$$

In our experiments, this correction was always negligible, since one cannot obtain data for $r < 3$. For $r = 3$ the correction is of the order of 5%. Of course, this makes it impossible to use high multiplicities at low doses. This is also so in case of phages poorly reactivated, since the optimum zone to test reactivation is never below $r \sim 5$.

I'll see you in Long Island.

Best regards,

Luria

S. E. Luria

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