Jean Weigle: California Institutebef Technology Pasadena 4, California

Dear Dr. Weigle:

We are corry to have delayed so long in reply to your letter of las Christmas week. In fact, we had already been working on the (likely) possibility that these lines do carry other phages, and vainly hoped we could clarify the situation in time to send you the information along with the cultures. This was too optimistic; but don't be surprised if new phages crop up.

Our interest in this point is only distantly related to yours: we have been crossing the lines to study "Mp" (see abstract enclosed) which may still prove to be the locus of another prophage, comparable to Lp/lambda. That host-modification and phenotypic mixing are related is already suggested in the typing phage system of Salmonella typhi, and we would not be astonished if, as you suggest, your "mutants" take their place in the same pattern.

Enclosed are %-1827 and %-2085. The former is from a series of isolates from human sources collected by Dr. R. S. Benham at the University of Chicago Hospitals; the latter from a similar collection from the Wisconsin State Public Health Laboratory. As obiginally isolated, the strains were not sensitive to lambda; the present isolates are cultural variants which are. As these subcultures are from an old stock, you may have to look them over carefully. We suspect that lambda and the T-phages are "rough specific" for E. coli, since very few if any of the freshly isolated, antigenically complete stocks that we have studied are sensitive to these phages, while rough variants more often are. If one purposely looked for rough variants, one would probably find a higher incidence of lambda-sensitives among new collections of strains.

We would be obliged to you for mutants of lambda and information on scoring them, as you offered. For our studies, on the lysogenic state rather than the lytic cycle, we would need lambda mutants that do not necessarily kill the hosts that they infect; mutants that can superinfect Lp would be ef some use, even if they were virulent for Lps. The lambda-2 that we sent you some time ago is inapplicable. We had contemplated, but never really went to work on, a search for such markers, and your material and advice would be appreciated.

We are very sorry never to have had the occasion of meeting you, and hope you will some time consider stopping over at Madison en route to or from Calteck.

Yours sincerely,

Esther M. Lederberg