

June 13, 1949.

Dear Francis:

Our letters must have crossed in the mails, as will our replies, no doubt, but to answer your questions:

1. Zinder has been doing a sporadic experiment to improve the efficacy of the penicillin method, but more from the point of view of getting it to work satisfactorily with the more intractable strains of *Salmonella*, than to perfect it as a quantitative assay. We will be very glad to exchange information on this, as on any subject of mutual interest. Lately, he did a run incorporating .02% azide. This seems to increase the rate of killing slightly (probably by preventing penicillinase formation), but he has no information on whether the efficacy of the method was improved. Norton will be East this summer, and will no doubt see you later this month.

2. Luria told me that the Delbruck distribution had been solved by Lea and Colson, and that it probably will be published. There is also a hint of a solution applicable to this case in a mathematical paper by Everett and Ulan, *PNAS*, 34, 403- (1948)..

Sincerely,