## INDIANA UNIVERSITY

BLOOMINGTON, INDIANA

DEPARTMENT OF ZOOLOGY

August 17, 1946

Dr. S. Spiegelman Carnegie Institution Cold Spring Harbor Long Island, N.Y.

Dear Sol:

Your discussion excited me a good deal and I immediately called a conference of our whole laboratory group to read it to them in full. Before I got to the end of it, however, Michael White walked in on us for a visit and stayed for several days. Of course, we were delighted to have him and enjoyed his visit thoroughly, but it did mean that I had to put aside your discussion until yesterday. I presume White will see you before this letter reaches you. That is why I sent messages to you through him.

Needless to say, I liked your discussion very much indeed and can well understand the time and effort you must have put into it. It seemed to me that there was very little that needed to be written in reply to it and that little bit I am sending along to Miss Fisher. Since I am sure you will be able to get a look at it I am not sending a separate copy to you.

The main point that I raised in my reply was in regard to your predictions. As you know, under our conditions of culture, we have no indication of any substrate limitation for the development of the killer character. Whenever we have the KK plus kappa composition (providing kappa is present in adequate concentration) the clones are invariably killers. I think you will agree now, as we did more than a year ago, that this implies that whatever substrate is required for the development of killing is universally present in adequate amounts under our conditions of culture. In view of this situation, it is difficult for me to see why the killer character is not always maintained when Kk plus kappa become kk, if your prediction were applicable. I presume you had in mind some of the exceptional cases that I have been writing you about, but it is not clear to me how substrate could be the limiting factor in such rare exceptional cases when there is no indication of the deficiency of substrate under our standard conditions of culture. If you have any comments on this, please send them along as I should value your comments very highly.

With best wishes as always,

Cordially yours,

Tracy