

June 21, 1965

Dr. Ruth Ben-Ishai
Brandeis University
Graduate Department of Biochemistry
Waltham 54, Massachusetts

Dear Ruth:

This is in reply to your very kind letter of June 3rd. First, let me thank you very much for your very kind thoughts in connection with my recent election to the Academy. Both I and your former colleagues missed you at the Spiegelman Reunion.

I must confess that I am at fault in not pushing to arrange for a visit for you here during your stay. I thought of it many times, but never got around to actually doing anything what with all the rush and hullabaloo that keeps on occurring around here.

I shall not be going to the Gordon Conference or, in fact, to any other meeting this summer. I promised myself a completely uninterrupted period in the laboratory, and I am enjoying my decision no end. I do intend to be coming to the East Coast sometime in August for a brief stay at Woods Hole. It seems unlikely, however, that I will get there before you will have been off for Israel. In that case, I suspect that our next meeting will occur in Israel.

Both Helen and I did have a wonderful time in Israel, and indeed did visit Haifa and were taken around very kindly by Avidor. I must confess that I was somewhat embarrassed to see my name on that famous board along with such an illustrious list going back two thousand years. When I was first approached through letter by Ginsberg, I assumed it was a sort of "Chemists of the Month" citation, but instead I find it is a "Chemists of the Centuries" that was being concocted. I suspect that you had something to do with this extremely high honor.

Now, with regard to the rumors about DNA polymerase. There is some substance to the rumor, however, I am sure that we are nowhere near as far along as the rumor suggests we are. We have found evidence for the existence for a polymerase which prefers double stranded material, has a different saturation plateau, and several other interesting differences from what appears to be authentic Kornberg enzyme. In this sort of a game, however, until

one synthesizes biologically active material, one cannot be certain that one has the right enzyme. At present, we are plagued with contamination with DNAase's of a variety of kinds, and until we get rid of them, we are in no position to try the crucial, and in fact, the only meaningful, type of experiment.

What is going much more rapidly in our laboratory is the RNA replicating mechanism. Here, indeed, we have purified two different replicases and have been comparing their properties. Our prediction that replicases would be specific for homologous RNA has been verified in this comparison. Also the product has the right size of about a million in molecular weight and the correct base composition. In any case, the work is progressing extremely well, and has kept us busy night and day for the last four months.

Please accept kindest regards from both Helen and myself to yourself and Dov. We both deeply regret that we weren't able to see you, and I take full blame for not having arranged it while you were here. I hope you will forgive me.

Sincerely yours,

S. Spiegelman
Professor of Microbiology

SS:md