SYRACUSE 1, NEW YORK

November 1, 1957

Dr. Joshua Lederberg 507 Eugenia Avenue Madison 5, Wisconsin

Dear Joshua:

I was very much interested in your last communication. We have had a viral program of sorts going here primarily from a screening point of view. We did, in fact, screen antibiotic broths and a large variety of synthetics against PR8 in mice and also for their ability to inhibit hemagglutination by PR8 when given either before or concomitant with the virus. This work was done a few years ago and I asked George Hunt who was responsible for it to review his results. Apparently there were some synthetics that had the properties of preventing hemagglutination but when these were checked in vivo no effects were found. I am in the process of getting the details of the testing procedure and results.

I have been quite interested in this area since I read Gottschalk's review some time ago. I cannot but help feel that there are certain features in common with the properdin system. We have started a nominal amount of work using a properdin assay based on inactivation of T2 phage. Clinical studies by others indicate that during extensive bacteremia or tissue damage the properdin level is substantially lowered. Prolonged low levels indicate a very poor prognosis. Whether this is cause or effect cannot be determined as yet. I think it is very likely that the decrease in properdin is due to inactivation of one or more of its components by a high molecular weight inhibitor released during the trauma from either bacterial cells or tissue. I visualize a binding such as is obtained with zymosan. We may have here an analogy to the combination of PRS and receptor sites. We are in the process of checking whether the same types of structures are involved by determining if the properdin inactivation system is destroyed by RDE. I would very much like to talk over this general area and review our results with you.

We have been quite busy this summer working on a Japanese antibiotic to which we have exclusive rights. In order to evaluate it we had to get it out in substantial quantities and this tied up a lot of people. It's too early to say how good it is but we have our fingers crossed. It's mainly a question of thereapeutic ratio at this point. We are also interested in one that our program turned up which we call Telomycin. It will go into the clinic soon.

I had not realized that you and Esther were going around the world in your trip. I am certainly looking forward to your Kodachromes. I think I will be in a position to partially reciprocate for I will in all probability be making a trip to Japan in January.

Let me know when you get settled down again in Madison. If you will be making a trip East, then try to include us in for I would like some of my people in on the virus discussions. Also, have you given any thought to my suggestion concerning our support of a laboratory assistant?

Starting the next period we are planning to increase your stipend \$1000 per year. No further committments other than those previously agreed upon are implied.

Sincerely.

BRISTOL LABORATORIES INC.

Joseph Lein, Director Microbiology Research

JL: cb