CHEMICAL CORPS BIOLOGICAL LABORATORIES

MM DIVISION

Camp Detrick, Frederick, Maryland

12 December 1951

Dr. Joshua Lederberg Department of Genetics University of Wisconsin Madison, Wisconsin

Dear Josh:

I have just returned from a very pleasant trip to Texas and had only a little time to check up on some of the points which we discussed but here is at least some of the information.

The critical vapor pressure equilibrium for lyophilization is supposed to be somewhere between 50 and 500 micros and closer to 50 than to 500. I understand that there is a paper by Greaves in the July issue of the Journal of Hygiene which contains some additional information. Dr. Bateman has promised me to try to write you directly about the new method for separating cells. As far as the molecular filters are concerned, I understand that they are not in the open market as yet but should be available within the near future. I have been told that the firm of Schleicher and Schuell Company, Keene, New Hampshire, Attn:
Mr. H. A. Holz, is importing the somewhat inferior German model of this filter and is selling it commercially. This filter, however, requires water extraction prior to use.

During my trip back to Maryland, it occurred to me that there may be a trick which North Zinder might use for the so far futile attempts in transforming rough Salmonella. I understand that the specific "O" antigen is necessary for the absorption of the filterable agent and I wonder whether this might not be accomplished by using the temporary production of S phenotypes in R forms of Salmonella claimed to be possible in the presence of soluble starch supplements (see Crossley, Ferguson and Brydson, "The use of soluble starch medium in the preparation of smooth "O" Salmonella antigens", J. Bact., 52, 367-371, 1946.

The contract proposal got here alright and is now in the mills.

I would like to take the opportunity to thank Esther and you once more for the kind hospitality afforded me during my recent trip to Madison.

With best regards--

Sincerely yours,
WERNER BRAUN