



ARMY MEDICAL SERVICE GRADUATE SCHOOL
WALTER REED ARMY MEDICAL CENTER
WASHINGTON 12, D. C.

IN REPLY REFER TO

April 27, 1953

Prof. Joshua Lederberg
Department of Genetics
University of Wisconsin
Madison 6, Wisconsin

Dear Dr. Lederberg,

Under separate cover, I am sending the only two strains of *S. abortus-equi* that we have available, one being #26 which was listed here as smooth at the time of lyophilization, while the other strain, 41-D has not been examined here to any extent.

Next, let me say that this is indeed the Army Medical School so your original assumption was quite correct. The department I am with (Bact. Physiology) is a part of the Immunology Division, while the Bacteriology Department is attached to the Communicable Diseases Division. Any of the cultures sent by Dr. Bruner, if preserved, would be in either of these two departments. Unfortunately, we have been unable to locate any other cultures of *S. napoli* or any somatic group B Salmonella which are non-motile (typhimurium or other species of this group). Many of the cultures sent to the Bacteriology Department for diagnosis were evidently discarded, and this has been, I fear, the fate of the cultures sent by Dr. Bruner. However, I will attempt to make some further inquiries particularly since all the records I have examined fail to even indicate the receipt of these cultures.

In regard to our experiments here, we have employed Vi phage preparations made by lysing Vi typhoid strains with their specific Vi typing phages. Using specific Vi phage E₁, a phage lysate was prepared from *S. typhosa* strain Ty2 (Xyl⁺, S^r). This lysate was used to treat *S. typhosa* strain 643 which absorbs phage E₁ but is not lysed by it (*S. typhosa* 643 is Xyl⁻, S^s and appears to be phage type 29). We have also used a Vi phage K preparation for the transduction of the Xylose factor in this strain. At present we are examining some auxotrophic typhoid strains for transduction to prototrophy with the typing phages. We are also interested in the transduction of flagellar factors from Vi strains of Typhoid (d) to non-typhoid Vi strains (*S. paratyphi* C (c, 1,5) by means of the typing phages. In addition, we have been giving some thought to the transduction of the Vi antigen itself, and are working with two typhoid cultures, one being a W form which is lysogenic for Vi phage E₂ and the other is a so-called degraded Vi culture which is carrying a phage or phages active on both 0901(non-Vi) and on Vi strains.

I have been wondering whether it would be possible for me to spend some time working in your laboratory (about 3 months) on these and associated problems; it is likely that such an arrangement would be approved as far as this institution is concerned.



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If for any reason this type of an arrangement should be inconvenient for you, I would then be most happy to visit you for a few days during the week of May 18, again ~~subject~~ subject to approval by this institution. I would, of course, prefer to substitute a stay of longer duration at your laboratory for a short trip. However, I feel that as far as approval here is concerned, I will be able to arrange for only one trip, the time and duration depending primarily on your convenience.

Sincerely yours,

L. S. Baron

L. S. Baron, Ph.D.
Department of Bacterial Physiology
Immunology Division