Personal and confidential

Central Enteric Reference Laboratory & Bureau

6th February, 1953.

Dear Professor Dinger,

Thank you for your letter of the 31st January and for the reprint of the paper "On the induction of Vi-antigen formation in a strain of Salmonella typhi free of Vi-antigen" by Hans L. Body and Hendrik L. Wolff.

I remember very well the pleasant correspondence we had during 1949 on the work Dr. Lie Kian Joe did in your Institute and I would like very much to send you the phage preparations you have asked for. Unfortunately, I do not feel justified in doing so for two reasons.

Firstly, you may remember that the standardised phage preparations for the typing of typhoid and paratyphoid-B bacilli have been prepared for the specific purposes of the International Scheme based on the suggestions for the standardisation of this procedure which I published jointly with J. Craigie in the Lencet, 1947, 1, 823. This Scheme is now operating in 28 countries and the demand for these reagents is very considerable. The standard phage preparations were made in quantities calculated to satisfy the requirements of the National Reference Laboratories throughout the world for many years, and it is necessary therefore to exercise the utmost economy in their use. I see from my files that I wrote to you on the 12th January, 1949, as follows: "However, you will see from the attached copy of the Recommendations of the Committee for Enteric Phage Typing adopted at Copenhagen in 1947, that it was agreed that, when necessary, the National Reference Laboratory in each country should act as the distributing centre for the standard phage preparations and reference type strains. I am sure you will appreciate that I am bound by this agreement and I would be departing from it if I were to supply typing material direct to a laboratory situated in a country where a Mational Reference Leboratory is functioning."

Nevertheless, I would perhaps have made an exception and asked Lr. Scholtens to let you have the phages, if I were convinced of the real necessity for using these reagents in "greater quantity", as you have stated in your letter. Having read the paper by Body and Wolff very carefully I am sorry to say that these valuable reagents, which are not easy to make, would not be put to the best use if they were employed on a large scale for the testing of variants of Salm.typhi of the kind described in that paper. Anyone acquainted with the past history of the variations that have been observed in Salm.typhi, particularly in strain H 901, (see for example Journal of Hygiene, 1951, 49 on pages 94-95), will refuse to accept the experiments by Body and

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Holff as evidence of genetic transduction of Vi antigen.

A few criticisms of the paper are as follows:

On page 186 Body and Wolff state that the agglutination tests were carried out by slide agglutination; the pitfalls of this crude technique are well known. In Tables 1 and 2 there is no evidence to show that the authors did in fact demonstrate the typhoid Vi antigen in the variants A and B. It is not stated how the sera or the suspensions were prepared; there is no indication of the H, O and Vi antibody content of the sera that were absorbed; there are no controls to show the relative sensitivity of the suspensions to O-agglutinins, or to solutions of NaCl, or to normal serum proteins. It is evident from the two tables that the authors are not familiar with the method of antigenic analysis.

I very much regret I have to be so critical, but the paper calls for criticism, if only for the reason that it may lead astray other workers who have little experience of the essential techniques required in sound entigenic analysis of bacteria.

In these circumstances you will appreciate why I do not feel justified in sending the set of bacteriophage preparations. If your assistants succeed in isolating a number of variants that satisfy all serological tests and, at the final stage, require testing by means of the standardized bacteriophage preparations, I am sure Dr. Scholtens will be willing to test such strains. Even if the number of such strains were a dozen or two Dr. Scholtens would certainly not refuse to "type" them. In the worst case, the typing could be done in my department here.

With kind regards,

Yours sincerely.

(sgd.) A. Felix

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