



FEDERAL SECURITY AGENCY
PUBLIC HEALTH SERVICE

IN REPLYING, ADDRESS THE

USPHS Tbc. Research Lab.
411 East 69th Street
New York 21, N. Y.

Dec. 29, 1952

Dr. Joshua Lederberg
Dept. of Genetics
University of Wisconsin
Madison 6, Wisconsin

Dear Joshua,

Thank you for your letter of Dec. 4th. After several rereadings I think I understand the problem a little better and I am very glad that you are willing to prepare the heterozygote while we prepare the stocks and do the scoring. I think this is a very satisfactory arrangement; the only modification I would suggest that if the experiments work out successfully it would be desirable for pedagogic purposes to have Yaniv repeat the isolation of the heterozygote according to your directions.

It will probably take some time before we can expect to be sending you strains since Yaniv has just started to prepare an extensive series of mutants with varying degrees and number of steps of resistance. He will then try to get an answer to the question of dominance, as well as the question whether multi-step resistant mutants yield intermediate recombinant progeny. In order to avoid complications that methionine adds to the scoring we are not using 58-161 but are rather using one of Gordon Allen's stocks that requires proline and histidine. This gives prototrophs very nicely with 677, so a linkage map for the proline and histidine should be available soon.

Norton presented a staff meeting at the Institute last week. The material, of course, is beautiful, but I'm afraid the presentation was rather too condensed for the audience. It got me to thinking that it might be a good thing for Norton and me to put out a brief note on the biochemical evidence that the addition of a tryptophan requirement to the ty⁻ ph⁻ salmonella did not involve the introduction of a block in another reaction. This evidence could only be presented briefly by referring to a paper on the accumulation of shikimic acid derivatives and since this paper has just been submitted to the J. Bact. I'll delay doing anything about a note until the fate of this paper is settled.

(for both mutants show the same pattern of these deriv.)

I don't know whether I mentioned to you that I have been invited to review microbial genetics for the Annual Review of Microbiology next year, and

have asked Norton to share the job with me. I don't really feel equipped to handle this topic if the title is taken seriously, even though the editors invite selective rather than comprehensive reviews. With this collaboration, however, it ought to be possible to handle the field better.

I finally got around to reading Plough's paper carefully, and have sent him the enclosed letter. As yet there has been no reply. I don't think you have to worry about the reference to my checking your strains as well as his; this was introduced purely for diplomatic purposes.

Best wishes to you and Esther for the new year,

Sincerely,

Bernie

Bernard D. Davis

BDD/em

Thanks for the reprints; mine are under way.