(Transcription of an Edison Voicewriter record from Dr. Lederberg)

Madison, Wisconsin
January 31, 1957

Dr. Joseph Lein
Bristol Laboratories Inc.
Syracuse, New York

Dear Joe:

This is just a routine letter, nothing much new or exciting to bring up. I had not heard further from you concerning that DAP sulfonic analog and wonder if you would like us to test it for growth factor activity or whether you would like us to send you the DAP-requiring mutant. I have to point out that this mutant is something of a problem to work with because of a fairly high revertibility.

Apropos DAP I wonder if you have seen the patent which Casida has taken out and assigned to the Pfizer Company. This is number 2,771,396 and concerns the preparation of DAP and of lysine. Briefly, a mutant of E. coli, probably one of Bernie Davis', which accumulates DAP owing to a genetic block is used for the production of this substance and DAP in turn is decarboxilated by a preparation from Aerobacter aerogenes. There is nothing original at all in the theory underlying this patent since both of these reactions have been done extensively by the initial workers. What Casida did, evidently, was to realize the commercial utility of this theoretical work and with a few minor flourishes put it into large-scale production. I have no idea at all how such a patent could be made to stand up considering the negligible additional input that he has made in it. However, this does bring up the point that there may be very many other very familiar compounds whose synthesis at the present time is rather troublesome and for which there should be a review of possible biochemical methods. Keep in mind how many different odd intermediates are now available from genetic blocks. Many of these intermediates would be expensive to synthesize and if any of them just had a use it would be worthwhile to develop an industrial method. It was quite striking to me that lysine fell in this category as a compound which was expensive enough to produce by other methods to warrant this kind of an approach. What Casida brought to bear in this situation more than anything else was the commercial realization.

That's it for the nonsense so I'll sign off.

Yours sincerely,

Joshua Lederberg