

25th March, 1948.

Dr. S. Spiegelman,
Department of Bacteriology,
Washington University,
School of Medicine,
St. Louis,
Missouri,
U. S. A.

Dear Sol,

I received a long time ago a long letter from you which I have lost somewhere and I apologise for the delay in replying.

The question of the "adaptable" mutants is most interesting and I believe Ryan and Lederberg are emphasising, and following up, only cases in which the adaptation is obviously due to mutation and selection, instead of those in which the mechanism is cytoplasmic. As I told you last summer in Stockholm (but you probably have forgotten about it) one of our aerobacter mutants requiring nicotinic-acid was at first of the "adaptable" type. But by growing it rapidly on a medium containing nicotinic-acid, the mutant has become ~~one requiring a straightforward~~ nicotinic-acid. This prompted us to write the letter to Nature which you know. The interpretation of this situation is something along the lines of Sonneborn's "killers" becoming "non-killers" when cell division is fast enough.

I am now working with yeast in order to study the same problem on an organism in which Genetics can be done.

I still hope that you will be able to come over here next summer and, if possible, tell us fuller details of your most interesting story of the analogous situation in yeast.

With best wishes to you and family,

Yours sincerely,



Pontecorvo