

AIR MAIL

August 14, 1951

Dr. Martin Pollock
Medical Research Council
The Lister Institute
Chelsea Bridge Road
London, S. W. 1, England

Dear Pollock:

This is in answer to your letter of the 8th of August. I did not receive your previous letter although usually such mail is forwarded. It probably came at a time in St. Louis when the secretary was on vacation and I shall undoubtedly get it subsequently.

I am sending to you under separate cover the Proceeding's paper as well as several others which you may find of interest. Unfortunately I did not receive reprints of the review in the Summer and Myrback Book. The publishers do not send reprints until the book has been in print for about a year, presumably to stimulate purchases. When and if these reprints arrive, I shall certainly send you a copy.

I am also sending to you, under separate cover, by ordinary mail a manuscript of a paper which will appear in the proceedings of the National Academy of Science and which I think you will find of some interest. It deals with a single cell analysis of the reversion from the positive to the negative phenotype, and the results confirm rather completely our interpretation of the long term adaptation phenomenon. In addition the data are of a nature which permits one to estimate the number of particles in an adapted cell, the minimum number required for a cell to be positive, and the probability of any particle passing from the mother into the daughter cell. I shall greatly appreciate your reaction to this paper.

Our work here has proceeded amazingly well within the last year and a half and much of our recent success has stemmed from the analysis of stocks exhibiting the "long term" phenomenon. We have recently succeeded in completely verifying the original melibiose experiments with the galactose system by demonstrating that the presence of galactose during the segregation yields 4 spores of the positive phenotype. Putting these through a reversion

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experiment invariably yields 2 plus and 2 minus cultures. The same material is also enabling us to answer some rather subtle questions which we could not have hoped to have tackled experimentally with the aid of normally adapting stocks.

With kindest regards,

Sincerely yours,

S. Spiegelman

SS:ec