

May 25, 1953

Dr. Boris Rotman  
1003 Grove Street  
Evanston, Illinois

Dear Boris:

I have your letter of May 21, and have discussed it with Dr. Lardy.

We are both very pleased indeed, on your behalf, at your offered professorship at Santiago, and wish you every success in it.

I have to tell you that this curtailment of your free time will make some difference in our own plans, but only that we could not encourage you to continue to work on your yeast problems. In view of the limitation of time, we feel that it would be imperative for you to begin at once on a problem of mutual interest (Lardy, you and myself), rather than to wait for this to develop. The problem must also be sufficiently circumscribed that you could attack it at once, and have some hope of significant progress in the few months. I have discussed one such problem with Lardy, namely the question of the nature of the difference in kinetics and activity of galactosidase in intact cells of *E. coli* K-12, and in extracts. As you know, disruption of the bacteria causes not only about 25-fold increase in activity, but also "exposes" the enzyme so that its activity can be influenced by changes in pH and ion concentration. It is not certain whether this is, as it appears superficially to be, a permeability effect, and if so whether it is the substrate or the activating cations that are principally involved. If it is a permeability mechanism, this is exceptionally favorable material for studying this mooted question in relation to enzymatic activity of intact cells.

In continuing this discussion, I am assuming that you will be able to postpone your acceptance of the position in Chile until April. The only obstacle to our formally offering a fellowship here is that we have to wait for Congress to act on the appropriation. I understand that our chances are excellent (or I would not be able to write you). As to this summer, the appointment could begin July 1 (if the money is available). Things will be rather cramped in my lab, but I think we can accommodate you until space is made at the Enzyme Institute, especially for the preliminary experiments along the above lines, which would not be very demanding. The stipend would be the same as for the PHS Fellowships (\$3000 or more if a dependent is shown). Does this arrangement suit you? If you have any alternative suggestions, please let me know.

I happen to know of a room very close to campus that will be vacant this summer. You can ask E.S. Anderson about it if you see him at GSH. If you would like me to try to reserve it for you, either for the summer or for longer please let me know, along with any other plans that may be relevant.

With best wishes,

Joshua Lederberg