YALE UNIVERSITY OSBORN BOTANICAL LABORATORY NEW HAVEN, CONNECTICUT

November 15, 1949

Dr. Josh Lederberg Department of Genetics University of Wisconsin Madison, Wisconsin

Dear Josh:

I trust that the weather of Wisconsin has been as pleasant and nice this fall as ours. It is still mildly like spring.

I am writing to see whether you would be willing to send me lac strains which are genetically distinct from Y-53. As you know, we are interested in the lac character in Neurospora, and last spring started some work on Y-53. We started on Y-53 since it seemed the easiest organism to investigate the mutagenic effect of specific enzyme antisera. We have, in the course of this serological work, run across some data that makes us anxious to try some other genetically distinct lac strains.

The substance of our observation is simply that there is a serological difference between K-12 grown on glucose and on lactose in terms of the antilactase activity of the antisera. Y-53 does not grow on lactose, yet when grown on glucose gives antisera having antilactase activity. We would like to know if this is true of other lac-strains, and would appreciate any culture you might send.

we find K-12 makes lactase on most carbohydrates, such as maltase, galactose or even glycerol. Indeed this is true of Neurospora as well. I wonder if you have any dope on this.

with best regards to you both,

As ever,

David M. Bonner Research Associate