

February 11, 1948.

Dear Sol-

Would you be kind enough to send me some yeast strains that I may need for my work? My requirements are of two types:

Firstly, I need some differential fermenters for a microbiological assay of enzyme-lactose mixtures, as a check on other methods. If you have strains with the following properties, I would appreciate transfers:

Gal      Lac      Mal

- 1.
- 2.
- 3.

Secondly, I am getting a very bewildering picture on the genetic control of lactose-enzymes in *E. coli*. There are several loci mutation of which leads, specifically, to lac-; on the otherhand, there are a number of mutations which block simultaneously the utilization of a few sugars, with no rhyme or reason apparent as yet. E.g. maltose-, lactose-, gluconate- (but glucose, galactose, pentose plus)! I would be interested to look sometime for a similar bewilderment in yeast. The genetic tests would be much easier, since one need examine only the diploid heterozygote to get a good line on allelism. You say that HMB works with yeast. Would you care to send two opposite mating type, dispersely growing haploids that I could use for mutation-production? I'll send you whatever comes out, of course. As for producing them, I've got that down to a T-- and have accumulated, for example, about 50 independent occurrences of Lac-mutations in coli.

Have you and Reiner formulated your next-year's plans yet?

Best regards,