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Department of Medical Genetics

June 3, 1957

Dr. Peter Mitchell
Biochemistry Unit, Zoology Dept.
West Mains Road, Edinburgh 9, Scotland

Dear Peter:

I hope you can forgive me for the inordinate delay in replying to your letter of April 8, especially when I had promised in advance to comply with it. I can only plead some atypical distractions from the work that had piled up, and in connection with this new department.

I don't have the strains of the ML series, but I can give you the comparable mutants of E. coli strain K-12, according to table 7 of the paper in the Dec. '56 Ann. Pasteur Inst. Accordingly, I am sending you the following:

K-12 Wild type Lac⁺ * ML30] Please keep in mind that both the permease
W-2241 so-called cryptic Lac₁⁻ * ML3] and galactosidase of these strains, where
present, are inducible.
W-2441 received from Monod as 1301-1 and purportedly 'constitutive cryptic'
W-1317 ~~W-1317~~ Galactosidase-constitutive * ML-308
W-327 Lac₂⁻ Sum⁺ = maltose-positive, glucose negative (cf. Doudoroff, Hassid,
Putnam, Potter and Lederberg, 1949, JBC 171:921.)

I've not had much more to say about these strains since 1951 (CSH Symp. 16 and Genetics in the 20th Century. W-1317 was selected by means of neolactose). I will be interested to learn how far you concur with Monod's imputations.

You were most hospitable during our visit to Edinburgh, and especially generous in lending your shaver--which was one of the most comfortable I have ever used.

We have about 8 weeks now before leaving for Australia (for 3-4 mos.) and I don't expect we'll get any more done with protoplasts or L-forms, except to write up what we have done so far. We have succeeded in isolating some genetically blocked L-type mutants in E. coli K-12; these have so far proved to be DAP-auxotrophs. I should think you might be interested in these creatures: Elizabeth Work could furnish you with Davis' strain, if you were; this one is perhaps better worked over than our new ones.

With best regards

Yours sincerely,

Joshua Lederberg
Professor of Medical Genetics