

# UNIVERSITY OF LONDON



## POSTGRADUATE MEDICAL SCHOOL OF LONDON

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Department of Bacteriology.

12 November, 1952.

Dear Luca,

This letter is really just to show you that I have been a good boy and worked hard and that my knowledge of genetics has increased infinitely - from zero! I hope you are impressed! Actually I have for some time been anxious to determine whether UV treatment of the F+ parent disturbs the segregation ratios of F+ X F- crosses, and thought that, in the process, I could experiment a bit with Jim's two-chromosome idea. I have therefore carried out an analysis of 102 prototrophs (as a preliminary run) from each of the crosses:

1. 58-161/F- X W-677/F+ on MA + B<sub>1</sub> = primarily "B" cross-overs;
2. 58-161/F+ X W-677/F- on MA + B<sub>1</sub> = primarily "A" cross-overs, and
3. 58-161/F+ X W-677/F- on MA alone = all B<sub>1</sub>+ (checked) and involving "A" & "B" c.o.s if B<sub>1</sub> is on "B", as seems likely.

Due to the fact that T<sub>1</sub> is technically tedious while W-677 is only Gal<sup>-</sup> and gives some growth on MA + Gal which makes things difficult, I have restricted the analysis to Lac & Az ("A") and SM, Mal & B<sub>1</sub> ("B"). I enclose the analysis, together with a comment on three anomalies which struck me as being against a simple AB theory. You will probably find these comments very naive but I am still only a "toddler" and thought you might like to see how the ratios provided quite independently fitted your own. I am putting up another 100 from crosses 1 & 2 this week, together with a UV series from an aliquot of the same F+ cultures.

Yours,

*Bill.*