



DEPARTMENT OF GENETICS

UNIVERSITY COLLEGE

LEICESTER

Reader J. R. S. Fincham, B.A., Ph.D.

Telephone 65211

10 March 1958

Dear Dr. Lederberg,

I believe we are both making contributions to the Symposium on Physiological Genetics at the Congress in Montreal. If you have thought about your paper yet I thought perhaps you could let me have some idea of the ground you intend to cover so that we can avoid too much of an overlap.

My provisional title is "The function of chromosome loci in enzyme formation", and I was thinking of including the following: (a) a brief review of cases where auxotrophic mutants can be shown to be defective in a single enzyme, particularly cases where the mutation seems to have caused a qualitative alteration in the enzyme molecule; (b) evidence for the generalization (which I think works fairly well on the whole) that all mutations affecting a specific enzyme fall within the same locus, complex locus or short chromosome segment; (c) relationships between different mutants affecting the same enzyme, including cases of separability by crossing-over, cases of "Morgan effect", and cases of partial or complete complementarity in heterocaryons (of which there are at least 3 now); (d) some discussion of different ways of defining chromosome segments, with the suggestion that perhaps the most important kind of segmentation within the chromosome is the segmentation into "one enzyme" regions and that these regions are not necessarily either regions or even cistrons. Where possible, of course, I shall be referring to my own work. Now I have written all this out I can see I may have to cut it down a bit. I think the most probable area of overlap

may be (d) above - no doubt Lins will be talking about this too -
so I would be glad to know what you intend to cover. The expression
of different points of view on the same thing may add to the interest,
but maybe we should avoid repetition if possible.

I have an idea you may not be at Wisconsin any more,
but I hope this reaches you eventually.

Yours sincerely,

John R. S. Fincham