INSTITUTIONEN FÖR CELLFORSKNING MEDICINSKA NOBELINSTITUTET KAROLINSKA INSTITUTET STOCKHOLM 60 Telefon 23 54 80

Stockholm, October 7. 1965.

INSTITUTE FOR CELL RESEARCH KAROLINSKA INSTITUTET STOCKHOLM 60

> Professor Joshua Lederberg Department of Genetics Stanford University Medical Center Palo Alto, California

Dear Joshua:

Many thanks for your letter of August 4.

I agree with you, indeed, that your optical curve reading program is working to considerable satisfaction and obviously this approach on the chromosome structural problems has very great potentialities. We had in fact been playing with thoughts in that general direction and it is thus an extra satisfaction to see how well your system functions.

My feeling is that, provided suitable routine procedures could be developed to obtain pro-metaphasic chromosome in suitable stages from several different objects, the field would be most worth while getting further in too. As yet our technical experience is limited to a few mammalian objects. I feel, however, that we now know reasonably well what is technically feasible as regards the measurements proper as well in ultraviolet as in visible. With some additional work on the preparation procedures one could approach more general problems. One should also consider more in detail the possibilities to apply certain microscopical techniques for special questions.

We have quite a good little group now working on chromosome measurements and it might be of interest to go deeper into this field too even if a considerable investment in working time and means will be needed.

It would be very nice indeed to have an opportunity to look into these problems together with you and have a good discussion of the field. Have you any plans to come over to Europe within the reasonable future? We will be happy to take care of your transportation from any place in Europe to Stockholm at any time or eventually, after more planning, we could find a way to cover the whole of the trip. I guess namely that the best place for such a discussion would be Stockholm where you could see more precisely what can be done and - still more important - what cannot be reached with the available methods.

With kind regards from house to house, I am,

Sincerely yours,

Torbjörn Caspersson