March 10, 1954

Dr. Joshua Lederberg,
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MADISON 6, Wis., U.S.A.

Dear Lederberg:

Many thanks for sending me a most interesting batch of reprints; they are appreciated.

I would be very interested to know how you are getting along with the cytological problem. We have been doing some more studies of nuclear structure of gram negatives; Sh. sonnei, Sh. dysenteriae and E. coli C in particular. These make an interesting series because the nuclear structures of each are recognizably different although the general plan is the same. In my opinion the major difference lies in the volume of the acromatic "core". In E. coli C this "core" is so big that the chromatin is almost entirely at the periphery of the cell. Shiga is intermediate and Sonne is the usual coliform. Jim Whitfield has been doing a detailed phase study and he concludes that the individual chromatin collections in a single organelle divide independently of each other!

I would appreciate hearing more of the reasons that prompted the change in buffer pH for staining with Giemsa. We have not had any difficulties that would force us to change, but maybe we are missing something.

I hear that you are joining the Editorial Board of the J. Bact. It is interesting, but, sometimes, demanding work; it is amazing how often it is necessary to re-examine one's own
convictions! I have acquired a further headache because we are starting up a Canadian Journal of Microbiology. Maybe you will consider sending us a paper; we have no wish to make it a purely Canadian affair!

With best regards,

Yours sincerely,

RGEM: mj

R. G. E. Murray, M.D.
Professor