

# MRC

Medical Research Council

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21st December, 1973

Professor Paul Berg,  
Stanford University Medical Center,  
Department of Biochemistry,  
STANFORD, California 94305,  
U. S. A.

Dear Paul,

Jack Griffith visited us yesterday and we had a thorough discussion about the SV40 mini-chromosomes. We learnt quite a bit from him about how he prepares them for the electron microscope and how he does the shadowing. Apart from the things I mentioned to you in one of my previous letters, we suggested that he had a try at selectively removing the two slightly lysine-rich histones, using Georgiev's method. This is done with transfer RNA. The hope is that what will be left, that is, the arginine-rich histones, will form a string of beads, rather like the picture you sent us that he got after a number of salt treatments. The thing we would like to know is, how many beads are there on the string when it is completely full of beads? We would hope the number was somewhere about 25. This might be quite an easy experiment to do and the result would be extremely useful in working out the numerology of chromatin.

Roger is working away like mad and has got an interesting X-ray pattern from the arginine-rich histones alone binding with DNA. Markus Noll now has an active preparation of the Hewish-Burgoyne enzyme, and a good assay for it, and is just about to start on the more interesting experiments.

Will you be over in the Summer? If you do come to Europe, we hope very much that you will drop in and see us.

Our best wishes to you all for the New Year.

*Yours ever,*

*Francis*

F. H. C. Crick