December 3, 1974

Professor James C. Wang
Department of Chemistry
University of California
Berkeley, California 94720

Dear Professor Wang,

The enclosed manuscript is the best introduction to the purpose of this letter. The paper will be published as a communication in the Journal of Biological Chemistry late in December.

In short, we have concluded that the particular properties of the interaction between fl histone and SV40 DNA relate to the superhelicity of the DNA. The increased ability of the fl histone to complex the DNA, relative to the other histone fractions, disappears when the supercoil is destroyed by nicking.

We are interested in testing how quantitative the relation is. That is, is the curve of fl histone concentration against the percent of supercoiled DNA complexed, a function of the extent of the supercoiling? Thus, we would like to repeat the experiments on a series of molecules identical except for the extent of the supercoiling. We realize that this is analogous to experiments you have recently published.

Therefore, I am writing to investigate the possibility of obtaining from you small samples of such a series of molecules. Our work requires that the DNA be radioactive and I do not know if you have labeled material available. Your published work is all with unlabeled materials. We could probably do the basic experiments if about 2 µg of each DNA were available to us, depending on the specific radioactivity. We would be able to do a more thorough job if we had as much as ten µg. We would like, ideally, to look at several molecules with a spread of values of superhelix density.

We will be looking forward to hearing from you. We would of course be most grateful if you were able to help us out. We will also be grateful for any comments you have on the enclosed manuscript.

Sincerely yours,

Maxine Singer, Ph.D., Head
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