

WASHINGTON UNIVERSITY  
SAINT LOUIS

THE HENRY SHAW SCHOOL  
OF BOTANY

November 28, 1954

Dr. Rosalind Franklin  
Birkbeck College Crystallography Laboratory  
21 Torrington Square  
London, W.C.1., England

Dear Dr. Franklin:

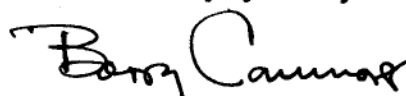
I was very glad to get your letter and to learn that you are ready to look at some of our proteins. We are going through our collection of nonvirus proteins to determine sedimentation constants at the moment and within a week or so I shall be able to set aside some B8 for you. I will write you air mail at the time the material is shipped so that you can be ready for it.

Your information on the high density shell in TMV is of great interest to us. I heard from Caspar the other day and he said that since his calculations show that the zone has a thickness of the order of 5A, it is possible that the shell does in fact represent the location of virus PNA. Any conclusive evidence concerning the location of PNA will be very important to us for it will serve as a useful guidepost in our thinking about the relation between TMV and the nonvirus proteins. I would welcome your observations on this problem.

In the last few weeks we have been studying the distribution of TMV in specific gravity gradient tubes in the ultracentrifuge in the hope of finding, in our bulk virus, fractions which differ in nucleic acid content. Thus far, it does appear that TMV which is homogeneous in the Tsel'xius apparatus can be separated into at least two and possibly more fractions with respect to specific gravity. Again this problem may bear on your finding of a high density shell in TMV. If we can prepare virus fractions which differ in specific gravity, I should very much like to send you some for examination.

In any event, I am delighted to know that you are ready to look at our material and shall do all I can to keep you well supplied with samples.

Sincerely yours,

  
Barry Commoner

BC:bl