CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA

DIVISION OF BIOLOGY

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Dear Rosalind

Leslie, Dan Caspar, and I have all read your MS which we think quite good. Thus the following criticisms are only of the degree of importance

1) I believe Schramm should be given more credit for the sub unit idea - especially his Zeit. Nature. 1947 article. I was most aware of his ideas when I reviewed work on TMV

I am also not convinced that Schramm is wrong with regard to the amino end group

Schramm also was the first person to show aggregation of RNA free sub units [in 1943!!]

Z. Naturf. 2b (1947) 112-121 & 249-257

2) I was not so emphatic about the location of the RNA - I believe I was quite cautious with "ifs" - only said "suggested"

3) Size of sub unit

$5\times10^7 \times 95\% = 4.5\times10^7 / 37 \times \frac{3000}{68} = 35{,}000$

[redacted]

So even better than 29,000 [I had taken MW = 4×10^7]

4) I wonder about the 55Å shell. Your statement about the 6th layer line makes me suspicious that low hydration is the sole answer but since I have not seen your F.T., my comment is possibly foolish.

5) The argument about the large available surface seems phony to me. Most non aggregated protein will have a far more accessible surface.

6) The Proline remark will probably confuse the non initiated. Needs a diagram to be clear. I would leave it out.

In spite of these criticisms, a very nice summary of TMV status.

with best regards

Jim