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OAK RIDGE NATIONAL LABORATORY

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NUCLEAR DIVISION



POST OFFICE BOX Y

OAK RIDGE, TENNESSEE 37830

July 26, 1968

Dr. Joshua Lederberg
Department of Genetics
Stanford University School of Medicine
Stanford Medical Center
Palo Alto, California 94304

Dear Dr. Lederberg:

I think we are over the hump. At least we have been able to add poly-A to the TMV RNA and get poly-lysine induction in the tobacco plant. The hard part turned out to be the isolation of the poly-lysine from other basic peptides in tobacco plants. We are now trying to find whether the new infective virus made in the plants also carries the poly-A. So far the results are suggestive but certainly by the second generation virus we are overgrown by wild type. To get out a virus line with the information, it looks like we will have to go back to Xanthi plants and breed up from local lesions. I think I never worked on a problem that is so much fun. We are now doing a silly experiment to find whether the Shope papilloma virus DNA or rabbit DNA will go in a tobacco plant if it is covered with TMV protein coat subunits. You know, even poly-lysine may be a perfectly satisfactory coat. Then after manipulating the nucleic acid we can protect it from nucleases until it gets in the cells.

Best regards.

Sincerely,

Stanfield Rogers
Biology Division

SR:mrl
Enclosure

DUMFIELD
ROGERS