THE ROCKEFELLER INSTITUTE FOR MEDICAL RESEARCH
DEPARTMENT OF ANIMAL AND PLANT PATHOLOGY
PRINCETON, NEW JERSEY

January 21, 1947.

Dr. Joshua Lederberg
Osborn Botanical Laboratory
Yale University
New Haven, Connecticut

Dear Dr. Lederberg:

In accord with your request I am sending you under separate cover a reprint of the article that Dr. Elrod and I recently published in the Journal of Bacteriology.

This work is being continued and, although progress has been slow, we feel that the problem has definite possibilities. It has not been possible thus far to ascertain whether the Feulgen positive material found at the center of the bacterial stars reenters the bacterial cells before the disintegration of star-shaped bodies, or whether the Feulgen positive granule is capable in itself of giving rise to a new organism. Our electron microscope studies have revealed minute forms which vary in size from 0.1 μ to 0.3 μ in diameter. It may be that these forms develop from the Feulgen positive material and represent early stages in the development of the hypothetical hybrid. If that is the case it would appear futile to attempt to find alterations in the genetic makeup of the bacteria that comprise the stars. Your suggestion of using mutant lines of the same strain of bacteria appears excellent and we have decided to try this method. I presume that the procedure used by Dr. Tatum and yourself for producing mutants in E. coli is similar to that described earlier by Tatum and by Tatum and Gray. We have had no experience with this technique and if there are any pitfalls to be avoided or "tricks" to be learned we would be happy to hear from you concerning them.

With best wishes, I am

Sincerely yours,

Armin C. Braun

Armin C. Braun.

ACB:JR