

STANFORD UNIVERSITY SCHOOL OF MEDICINE

STANFORD MEDICAL CENTER
300 PASTEUR DRIVE, PALO ALTO, CALIFORNIA

DEPARTMENT OF GENETICS

10th May 1962.

Dear Josh and Esther,

The Polymerase work here is keeping me very busy. We have repeated some of the preliminary trials Ues. did with Ven using the T2 polymerase and heated DNA. With a very elaborate series of controls, there seems to be little doubt that the 3-5 fold increase in Biological activity must be due to replication of the DNA. We recover some 20-25% of the native activity with less than 50% net synthesis. There are indications from the relative increase in IIII versus all ind+ that the whole kinase group is not constituted with equal efficiency. Similar studies with heated DNA and the E. coli polymerase give similar results. So far nothing promising has come from Native DNA + E. coli polymerase. Charles Beckwith is investigating the possibility that 'endonuclease II' is really a monoesterase which frees phosphates from 3'-P ends to give 3'-OH ends which can then be used by polymerase. Our cells are growing happily in the heavy medium and we are now trying to incorporate H^3 -thymidine instead of P^{32} as this will be much more convenient because of the greater half life. Provided the H^3 -thymidine is added at the right time during log phase it seems to be possible to get quite good labelling without using a thymine mutant. I am writing to Dr Beermann to ask him how he would like his DNA.

Ron Seebroff is doing quite well, better in fact than I had expected. He has decided to go to graduate school with Carlson in U.C.A. Hugh Fuchenberg came yesterday to see asterin on pedigrees of some of the Y-globulin abnormalities.

FOLD SIDES OVER AND THEN FOLD BOTTOM UP
MOISTEN FLAP WELL AND APPLY PRESSURE TO SEAL.

Bodmer

He has some interesting ideas on the analogy between these and the 7 halosolunins.

I am somewhat disappointed at how little genetics even many of the third year students know. How they took to VII mapping in Biochemistry without apparently knowing what linkage is, I don't know!

We have moved house and are now in a bigger somewhat more convenient house just round the corner on Leeward Ave. We haven't yet managed to get rid of the lease on the other house.

FIRST FOLD

SECOND FOLD

It will be nice to see you back here again though I doubt if you will think so. Father's reports of the trip were it seemed very fascinating and as though you'd have many tales to tell on your return.

Best wishes,

Yours Walter