

UNIVERSITY OF MINNESOTA
THE MEDICAL SCHOOL
MINNEAPOLIS 14

DEPARTMENT OF BACTERIOLOGY
AND IMMUNOLOGY

SEPT 5 1956.

Dear Josh and Esther:

Esther, we greatly appreciated and enjoyed your letter from Woods Hole. The only bad thing is that Lois is anxious to go back again and such missives always bring up the subject. I saw your book review (Josh) in this week's SCIENCE and now have printed evidence: RIT, MIT, PFIT, MUTTON, ETC. Have extended our STREPTOMYCES EMPIRE a little - into the overflow lab. I think that the tissue culture boys are anticipating a mold outbreak any day, even though we are more careful than usual. I'm analyzing more S. coelicolor strains and still haven't any recombination. These things of Sermanti are strange. I had isolated several types before I left Madison:

out of Meth-Hist⁻ → Meth-Uracil-
arg-Meth-
isolencing Meth-
and Meth-

out of glut prot → arg-glut-
adenine-arg-
adenine glut-
glut-

and have got some new ones out which so far don't fit the above (although I started to group them out, I don't yet know the results). If these cultures are anything like the original Sermanti's, I don't see how anything can be understood. These are marked strains, I don't have so they are not my contaminants.

One thing which really messes up the works. I can isolate a "parental" out of a heterokaryon and then carry the "parental" for several

passages and then recover a prototroph which will then give both parents! I wouldn't believe it (and really don't expect anyone else to). About 1 in 20 behaves this way. I thought that they were mutants to prototrophy but. It seems that S. coelicolor carries that other nucleus for a long time - either inactive, or in such low population density as to be inactive.

We have started seriously screening for lysogenics ~~XXXXXXXXXXXX~~. We mean primarily a high school graduate Lilly Jones that starts to the Univ this fall. She will continue part time. Very serious girl - wants to be a Bact. or Chem. If she develops well Esther I would like to have you meet her to discuss problems & advantages she would encounter. Time will tell. Any way - we haven't confirmed any of the reported ones but we haven't given up on them yet. I have picked up one that gives spontaneous plaques and has high hopes but hopes can't transform cells.

Josh, I haven't forgotten the report of this is part II. Part I is the manuscript for J. Bact. I have been ultra cautious in Part II about heterokaryosis - Perhaps much too much so, but DN it, There is a way outside change that (A) PARASEXUALITY would behave that way. Any comments will be appreciated.

Write when you can - come to see us
Our very best wishes to you and yours

4320 7th ST NE
MINNEAPOLIS 21

Raylen Lois

P.S. The twins started kindergarten and the children yesterday. Don came home saying that "all we did was stand around" (it was only registration).