

i.e. Mars ←

Dear Dr. Luria -

Thank you for your letter. It is actually one of the greatest kindnesses you have done for me. Enclosed is a letter which I wrote to you while flying to the west. It was not mailed because of the 'DeMars Disease'; but it was saved. It is one way of indicating what I think. The letter now seems to be an understatement.

One reason for the sparsity of letters has been the sparsity of things to write about. I have been mainly concerned with measuring in more detail SBP with and without proflavine, usually using the glycine lysis technique with cyanide and ammonium sulfate. Here are some findings.

1. Total intracellular SBP is about equal with and without proflavine except for an initial lag in the presence of the dye.
2. After high speed centrifugation all of the SBP remains in the supernatant of the proflavine lysates; an ever decreasing fraction remains in the ^{supernatant} proflavineless controls.

This result answers one of the questions posed in the thesis. Here there is an excess of ~~non~~ noninfectious, non-sedimentable SBP in proflavine almost from the start. The earlier measurements with ultrafiltrable SBP did not reveal this excess. Also reflected here is the finding that in ^{final} proflavine lysates only about 1/3 of the SBP (non-sedimentable) passed 120 m μ membranes, while with the non-sedimentable SBP of control lysates, most passed these membranes. The definitive comparison of UF-able vs. non-sedimentable SBP has not been made yet due to the absence of proper filtration apparatus. I have a few membranes and am now improvising the rest. The findings at present do indicate

two different size states of the SBP which comes in small pieces. In these experiments I am also trying to detect the presence of M. vallet + Symmonds-type particles as a sedimentable, non-infectious ^{SBP} fraction of appreciable size.

I have been attempting to make a demonstration of the precursor nature of non-infectious SBP. It involves allowing SBP to accumulate in proflavine up to about 30 minutes after infection, then resuspending the cells in proflavine-free medium and allowing active-phage production to ensue. The hope is for an actual decrease in the amount of non-sedimentable SBP. Instead, the level has remained ^{about} constant to a point where 30 T2 per cell have been produced. I am not yet satisfied that this demonstration can't be made, particularly since it is the only readily available demonstration that the small pieces with SBP actually do get built into phage. Otherwise, we will have to go into methods for labeling and physically isolating the SBP in order to demonstrate its turnover. Therefore, I was happy to hear that you may have gotten somewhere with this problem, and am anxious to know what you are finding out.

One other point is worrisome. This involves the quantitative relation between SBP and SBP-bearing materials i.e. does SBP increase when the tail is disintegrated and more antigenic surface is exposed? I am studying this problem with the SBP from ultrasonated T2 and from proflavine lysates. It is important for the interpretation of almost all our results.

This gives you an idea of what I am doing with SBP

and makes me a ~~bastard~~ liar, since I have not kept my oath!
I am working on a manuscript ~~and~~ which will be finished as soon as the experiments with vibrated phage are done. I may not wait to include the precursor demonstration since it may take some time yet.

I am procrastinating a study of the role of RNA in phage synthesis and am at present playing around with a uracil-requiring mutant of coli, seeing what it needs to grow phage. This will become, I think, a key problem.

Allow me to forego more shop talk for the present and take up two other things.

The first concerns the wonderful book, which we have all busily bought and read. I would like to give special thanks, since it has made it seem possible to try and teach a virus course next fall ~~to~~ which is a part of the second thing. But first, I

have added a list of a few errors I found which may be useful to you. I was sorry not to be there for the end of your task and the arrival of the first copies. It must have been a ^{happy day.}

Concerning the job there is not much to tell. Kamenberg has offered me an instructorship at \$5000 with a very light teaching load. The final appointment has not been made. From his letters, he is a kind and cooperative person. The entire set-up, in fact, seems very nice and I am looking forward to going there and trying to teach ~~and~~ and do a little work.

I owe thanks to you for this job, as well as for many of the good things that have happened ~~to~~ in the last few years. I can't forget I'm a bastard, since obviously - - - . But some people (here also!?) suspect I am human. Let us all make believe - and, I will try my best. Please remember me to Zella.

Bob

- 1) Pg. 40 TP 1. $0.1 / (1/10^6) = 10^5$
- 2) Pg. 45 footnote. Should ~~it be~~ \log_e be used to make things more explicit?
- 3) Pg. 76, line 10 up: measured.
- 4) Pg. 107, line 11 down: preparations.
- 5) Pg. 126 TP 2. ; reference should be to (III).
- 6) Pg. 280 should the references to (287) really be to (288). In the case of Schienenimmunisierung this is ~~to~~ probably so since it is mentioned on Pg. 773 in Doerr's article (Die Ausbreitung etc.) and Pg. 1213 of Hallauer's article (your 288).
- 7) Pg. 311, TP 2. must reach the salivary - -

Burlington

Dear Dr. Luria,

While we were standing there during the last minutes, and I was trying to think of an apt, pithy caption to three and a half years, I was reminded of a personal affliction which you had diagnosed about ten days ago. This had to do with my ready ability to create a sneering impression and my relative inability to say nice things to people face to face. This disease, coupled with my other affliction, the last-minute-rush, prevented me from saying what was in my mind. Please imagine that I am saying these words, in my own halting fashion, and that you are not interrupting! (It will not help!)

In the last years we have been able to meet many men and ~~places~~ who do this work and ^{to} see many places - each with its own particular 'cloud of glory'. These meetings can be summarized in retrospect by the absence of any real desire on my part to have been any place other than where I was. From the strictly utilitarian ~~view~~ view of getting an education and of being limited in work only by personal inability, we could not have done better than we did.

However, my remembrances are not unalloyed only with these matters, but as much with our personal relations in and out of the lab. The whole atmosphere which you created by your personal enthusiasm and by your great care to push the work is a thing I ~~to~~ really want to try and recreate in the future. This was made even more tangible by your tolerance of some of my antisocial habits (reprint stealing, etc.). Your kindnesses at those times were just what were needed. Furthermore, the 'boosts' you have given us by putting us forward and by improving our

positions in spite of nastiness positively had the effect that a revivalist has on a congregation of sinners. I know that ~~George~~ this applies to George as well as myself. I also know that being a good teacher and advisor means a great deal to you. We couldn't have done better.

This letter you may find self-important and even ~~condemning~~ mandlin. Forget these. It is just an expression of sincere liking and appreciation, and of a wish that we can get together in the future.

4

Bob

Kansas