Dr. A. Hershey Carnegie Institution of Washington Department of Genetics Cold Spring Harbor, Long Island, New York

Dear Al:

I have read your review with great pleasure and, unless you want it back, I should like to keep it. These are a few suggestions, as you asked for:

- Page 21, lines 7-9. The erotic induction for lambda should probably be mentioned here.
- Page 23, line 6. I think some original papers on toxin production should be quoted rather than Lederberg's mention.
- Page 25, line 10. The main findings of Garen and Zinder, quoted here and later, should be given since otherwise this paragraph is nonunderstandable.
- Page 25, line 5 up. This sentence is probably a little too deep to be understood.
- Page 26, line 5 up. It might be worth mentioning that in the case of lambda transduction is limited to phage from lysogenics.
- Page 28. In the section on genetics you may want to mention Cohen's discovery (?) of high glucose content in some T2r stocks.
- Page 39, lines 12 and following. You promise an exciting description of the experimental decision and then say nothing more of it. Is there a paragraph missing?
- Page 41, lines 3-6. This is much too mysterious to be given without explanation.

Dr. A. Hershey January 31, 1956 Page 2

- Page 46, lines 8-4 up. You should state here that this has been published only for the phages with HMC, but that you have confirmed it for T5, since the question is very important.
- Page 49, line 4. This is probably a misstatement. Gross DNA increase may stop but you have shown that DNA synthesis does not.
- Reference. The paper by French and Siminovitch has not been submitted to <u>Virology</u>.

Stahl's paper will appear in the April issue. The associate editors should begin receiving <u>Virology</u> starting with volume 2.

Finally, I hope you go ahead with the experiment on DNA synthesis with UV phage. I doubt whether I can do anything of the sort in the near future. I am not quite clear as to your experiment with UV in P32 phage. Do you mean to say that in mixed infection there is dead phage produced? We never found any appreciable amount of it, but of course we only had the killing ability to go on. If I understand correctly you get an excess of injectable label over the amount accountable for by live phage. This would mean that on a second transfer experiment you should find much less than the usual 50%. Is this the first evidence that a dead phage can mature? Are all of the labels so high that some particles may die after having been produced?

Hoping to hear more soon, and with best regards,

Sincerely yours,

S. E. Luria

sel/ram