

THE UNIVERSITY OF CHICAGO
CHICAGO 37 · ILLINOIS
INSTITUTE OF RADIOBIOLOGY AND BIOPHYSICS

1155 East 57th Street
Chicago 37, Illinois
December 12, 1951

Dr. Joshua Lederberg
Department of Genetics
University of Wisconsin
Madison, Wisconsin

Dear Lederburg,

I am writing to say that both Novick and I were very much pleased with Zinder's visit. After we had talked to him for two days, we asked a few people to come over and listen to him giving a seminar. We wanted just a few people but apparently word gets around on the Campus and Zinder spoke before a distinguished audience which filled the seminar room. His talk was very good both in substance and in delivery, and the people were quite impressed with his maturity.

I looked through the draft of Zinder's manuscript which I understand he has not yet shown to you. It seems to me that it contains the nucleus of an historically very important paper, and because this is so, it might be worth while to give some thought to its organization and also to the place where it may be published. I believe that if the paper is properly organized and all extraneous matter left out of it, such as references to the possible connection of the phenomena with L-forms, for which I could not see any real evidence presented, the paper could be quite short and lucid, and if it were short and lucid you might consider having it submitted to the Proceedings of the National Academy of Sciences where it would have a much broader audience than in any of the more specialized journals.

As to organization of the paper, it seems to me that if the paper started out by telling the story of the discovery; i.e. by explaining what was attempted, and how the "contraceptive experiment" gave a startling result, and if this were then followed by clearly setting out what the subsequent experiments in the author's opinion have established, it would then be much easier to understand the individual experiments that are described and ~~the results~~ ^{all the results} (of which are consistent with the conclusions presented at the outset of the paper. The presentation of ~~the~~ ^a paper is, of course, entirely a matter of individual taste but I find that unless I know in advance what the author thinks he has proven or made plausible, I have to read the paper twice instead of only once, for until I know what the author thinks he has proven it is not possible to read with the proper critical attitude the individual experiments which are listed in support of the author's contention.

As to the substance of the matter, what I would be most eager to know is the following: Could it be that the transducing agent, which is of course of bacterial origin, is somehow incorporated in a phage particle which is *released* from the donor bacterium, and that this phage particle acts as a vehicle of transmission? This would of course mean that the phage released by the donor strain must in all cases be absorbed by the strain which is transduced even though this phage need not grow in the strain which is transduced. Zinder tells me that typhi which is transduced is not susceptible to the phage of the donor strain, but the question still remains whether it absorbs the donor strain.

One of the reasons why this question appears to me as having some urgency is the sad fact that if indeed the phage should act as a vehicle of transmission, then further investigation of FA will necessarily remain a much more restricted field than it would be otherwise. So for setting out a general plan for

December 12, 1951

the investigation of this field, the question which I am raising here is a rather crucial one. ^PI told Zinder that we would like to have him in Chicago and that we shall see what we can do about this, ^{but} ~~and~~ that he should in the meantime not neglect other opportunities which he may have, ^{and} ~~but~~ just keep us informed of how his plans develop and what opportunities he thinks he may have elsewhere.

I had a letter from Mr. Pomerat of the Rockefeller Foundation about the Klieneberger-Nobel plans for a visit to America. I assume that he wrote you also but if not I shall forward you his letter after it has been answered.

With kind regards,

Sincerely yours,



Leo Szilard