

5640 Ellis Avenue

September 25 1951

Dr. E. Klieneberger-Novak
The Lister Institute of Preventive Medicine
London, England

Dear Dr. Klieneberger:

I understand that you were able to obtain L forms of the B strain of E coli. You will see from the enclosed reprint the type of work which we are doing with this strain. We are anxious to extend this work to the study of L forms in the B strain of coli by means of the chemostat, and I wondered whether you could tell us the exact conditions under which you obtain these L forms and the conditions under which you were able to culture them. In particular, we would be anxious to know whether you can make colony counts of the L forms and what the precise composition of the media are that have to be used.

I know that it is rather bothersome to give such information in detail, but we are in the process of laying out our experimental program for the coming year and are quite anxious to extend if possible our study of the B strain of coli to the L forms.

Yours very sincerely,

Leo Szilard

5640 Ellis Avenue

September 27, 1951

Dr. E. Klieneberger-Nobel
The Lister Institute of Preventive Medicine
London, England

Dear Dr. Klieneberger:

Since I wrote you a few days ago I heard from Lederberg that you expect to be in this country around the middle of November. Lederberg told me that he is anxious to have you come out here to the Midwest for a visit, and we are anxious that you should come also and shall try to make arrangements to take care of your traveling expenses in case you should be willing to make the trip and give us a talk here in Chicago.

On the assumption that we shall see you in this country, I am writing to say please not to bother about writing us concerning the L forms, since it will be probably more convenient for you to give us this information when you are here.

Yours very sincerely,

Leo Szilard

Phone :
SLOane 2181.

Lister Institute,
Chelsea Bridge Road,
London, S.W.1.

1. 10. 51.

Dear Dr. Szilard,

Thank you for your interesting reprint and your letter of 25th Sept. I cultured *E. formosus* of Coli B. several times from "sterile" filtrates through candles after the action of $\sqrt{2}$ or $\sqrt{3}$ bacteriophages on the broth culture of the B strain. Yet I was not able to maintain the culture in the ϕ phase. It reverted quickly to the bacillary phase. I am not able to obtain consistent results, nor do I know the conditions under which this experiment

can be reproduced at will.
Of course, one could always
obtain Δ forms under the influence
of penicillin; but I doubt that
this is what you want, and I
doubt altogether that you could
work with the Δ forms in the
way you are working with
your bacilli. I think this
will not be possible until
we know much more about
the conditions they require
for growth.

Sorry I cannot be of
more help.

Yours sincerely,

E. Klieneberger-Nobel.

B AIR MAIL

AIR LETTER

IF ANYTHING IS EN-
CLOSED THIS LETTER
WILL BE SENT BY
ORDINARY MAIL.



*Dr. Leo Szilard,
Institute of Radiobiology and
Biophysics,
5640 Ellis Avenue,
Chicago 34,
U.S.A. Illinois*

First fold here

Second fold here

To open cut here

Sender's name and address:-

*E. Nobel,
Nobel Institute
Chelsea Bridge Road,
London, S.W.1.*

To open cut here

8th Oct. 1951.

Dear Dr. Szilard

Thank you very much for your kind letter of 24th Sept. I should have loved to come to Chicago and give you a talk and discuss work with you. Unfortunately, I have just heard from New York that the conference, in which I was going to take part, has been called off. Consequently, I am not coming to the U. S. A. just now.

Yet I am still hoping that I might have an opportunity to come

over next year. I should then inform you and I might then be able to visit Chicago.

By the way, have you ever investigated morphological changes under the conditions of the chemostat? Such an investigation might give some information.

Still hoping to meet you some time in the near future

yours sincerely,
Emmy Kienberger-Nobel.

5650 Ellis Avenue

October 19, 1951

Dr. Emmy Kleineberger-Nobel
Lister Institute
Chelsea Bridge Road
London, S.W.1, England

Dear Dr. Kleineberger-Nobel:

We just heard from the Rockefeller Foundation, to whom we applied for funds to meet your traveling expenses from New York to the Middle West, when your letter arrived stating that you are not now coming to America. We are very sorry about this.

I wish to thank you also for your letter of October 1st. From this I gather that L forms induced by bacteriophage do not yet behave with the desired regularity.

You also say, however, that one could always obtain L forms under the influence of penicillin. For us, this would be equally satisfactory, and I wondered if you could give me the literature reference describing the exact culture conditions of L forms of coli obtained by treatment with penicillin. If there is nothing in print yet, and if it is not too much trouble for you to give us the exact recipe, I should very much appreciate your letting us have it. If it is possible to have colonies from these L forms on suitable plates, we should probably want to have a crack at them in the near future.

Sincerely yours,

Leo Szilard

LS/sds