# LONG ISLAND BIOLOGICAL ASSOCIATION

COLD SPRING HARBOR, LONG ISLAND

#### THE BIOLOGICAL LABORATORY

January 19, 1951

Drs. Leo Szilard and A. Novick Institute of Radiobiology and Biophysics University of Chicago Chicago 37, Illinois

# Dear Szilard and Novick:

The purpose of this letter is to invite you to participate in the Symposium on Quantitative Biology at Cold Spring Harbor this June. The title of the meeting is to be "Genes and Mutations."

It is now exactly ten years since the IXth Symposium was held, on the topic "Genes and Chromosomes--Structure and Organization." Since that time there have been many new discoveries, which have considerably modified the picture of the gene held in 1941. Therefore it seems appropriate to devote another session of the Symposia to the problem of the gene, and to offer all who are interested an opportunity of taking part in leisurely discussions of the many outstanding questions connected with this problem.

All papers and prepared discussions given at the symposium will be published as Volume XVI of the Cold Spring Harbor Symposia on Quantitative Biology. To facilitate the work of the symposium and to insure prompt publication of its results, all manuscripts should be submitted by June 1.

According to present plans, the meeting will begin on June 8 and continue through June 15. It is planned as one unit, with the expectation that all the participants will be present throughout the sessions. It has been our experience that this creates an atmosphere stimulating to informal discussion and favorable for the establishment of more durable forms of cooperation in research. All the participants on the program will be guests of the Laboratory during the symposium. The Laboratory is not in a position to pay transportation expenses, except for participants who come from a distance and who otherwise could not attend. In such cases arrangements are to be made in advance of the meetings, for coverage of a part or all of the expense of air or train fare.

The tentative program is enclosed. It is, naturally, subject to change, and your suggestions will be welcomed by all those concerned with the development of the plans. At present it is proposed to have three or four papers given by invited speakers on each of the eight days of the meeting, followed by discussions. The chairman of each day will preside at the sessions and will correlate the discussions for publication in the volume.

I hope that you will find it possible to take part in the symposium, and I will appreciate your filling out the enclosed sheet and returning it to me at your earliest convenience.

Sincerely yours, Moeneres

M. Demerec, Director

1155 East 57th Street Chicago 37, Illinois January 25, 1951

Dr. M. Demerec Long Island Biological Association Cold Spring Harbor Long Island, New York

### Dear Dr. Demerec:

Many thanks for your kind invitation of January 19 to the June Symposium. I shall be very glad to attend. Dr. Novick is out of town and will write you upon his return. I am fairly certain that he would be glad to attend also. We propose to present one joint paper, and one of us will present it. Naturally we don't expect you to pay transportation for both of us. I shall find out what arrangements I can make in Chicago and elsewhere, and if these arrangements don't fully cover transportation costs, I shall raise the issue with you later.

With best wishes---

## Sincerely yours,

Leo Szilard

WV

# LONG ISLAND BIOLOGICAL ASSOCIATION COLD SPRING HARBOR, LONG ISLAND

## THE BIOLOGICAL LABORATORY

January 30, 1951

Dr. Leo Szilard Institute of Radiobiology and Biophysics The University of Chicago Chicago 37, Illinois

Dear Szilard:

I am very glad to know that you and Novick will take part in this year's symposium. Thank you for the title of your paper.

Enclosed is a copy of the instructions about preparation of manuscripts. Past experience indicates that for the meetings it is advisable to plan for presentations lasting about 45 minutes, and not longer than 60 minutes at the most. There is considerable latitude about the length of the manuscripts for publication. The average length is 10 printed pages, and individual papers vary from 3 to 30 printed pages.

We would like to bring as many geneticists from Europe as possible with the limited funds at our disposal. Of course we are also anxious to give help to American participants who would not be able to attend the meeting otherwise. However, our experience has been in the past that the majority of American workers are able to get funds for travel from their universities or from grants they may have. I hope that you will succeed in arranging to have your and Novick's expenses paid by your institution. The Laboratory expects both of you to be our guests during the symposium.

Sincerely yours,

ueree

M. Demerec

MD:af Enclosure Instructions to Authors in the Cold Spring Harbor Symposia on Quantitative Biology

- 1. Copy: Manuscripts should be submitted ready for publication, typewritten double-spaced throughout (including References and legends), with one-inch margins. Corrections to the typescript should be typewritten or written legibly in ink; pages should be retyped if they contain extensive corrections. Tables should be typed on separate sheets. All manuscript pages should be numbered in order. Authors are requested to indicate in ink on the margin of the copy the approximate place where each table or figure should be inserted. In the text, tables and figures should always be referred to by number, not as "the following figure," etc., since it is obviously not always possible to insert them at the precise point requested.
- 2. Style: Manuscripts should be consistent in style; for example, a word should not be abbreviated on one page and written out on another, nor temperature given in Fahrenheit degrees in one place and Centigrade in another. Both figures and tables are referred to by arabic numerals (Figure 1, Table 1).
- 3. References: Literature citations should be listed, alphabetically by author, at the end of the article under the heading "References," and referred to in the text by name of author and year of publication, in parentheses. Each citation should give author(s), year, title, journal, volume number, and first and last page numbers--arranged and punctuated as in the examples below. Abbreviations of names of journals should follow the system used in the World List of Scientific Periodicals (Oxford University Press, 1934). No part of the citation should be underlined.
  - Examples: (articles) Danielli, J. F., 1949, Studies on the cytochemistry of proteins. Cold Spr. Harb. Symposium Quant. Biol. 14: 32-39.
    - (books) Sinnott, E. W., Dunn, L. C., and Dobzhansky, Th., 1950, Principles of Genetics. 4th ed. New York, McGraw-Hill.

Verification of references: Since references are useless unless correct, authors are urged to verify every citation against the source after it has been transcribed, so that it may be complete and correct in each detail--spelling (especially of foreign titles and proper names), journal, date, volume number, page numbers, punctuation, and accent marks.

4. Illustrations: All illustrations, especially photographs, should be sharp, clear, and submitted ready for reproduction--that is, with professional lettering, mounting, and arrangements of figures completed. Author's name and figure number should be written on the back of each. Whenever possible, drawings should be made with pen and undiluted India ink; and photographs should be glossy prints with strong contrasts. Line drawings are reproduced on text pages; make the size and proportions of these figures suitable for reduction to the width of a single column (3 inches) or the full width of the type page (6 1/4 inches). Indicate the amount of reduction desired. Plates are used for photographs that require inserts of special paper, or for collections of small illustrations arranged as plates should be trimmed and mounted close together on heavy white cardboard. Unless the edges are straight and fitted perfectly together, the cost of reproduction is greatly increased. All illustrations, whether graphs, drawings, or photographs, are referred to as figures, and

.

should be numbered consecutively from 1, regardless of whether they are to be text figures, plates, or parts of plates. Figure numbers should not appear as part of the figure in drawings; but in plates that consist of a collection of figures, each figure should be clearly numbered (arabic numerals). In plates that represent one figure with several parts, the parts should be lettered a, b, c, etc. (lower-case letters). Illustrations should be reduced as much as possible without sacrificing necessary details. If an illustration is taken from a paper already published, the source should be given in full: as in some cases the publisher will have to ask permission for reproduction. Legends for figures should be typed on a separate sheet. (Captions of tables, however, should be typed on the same sheet as the table.)

- 5. Footnotes should be avoided whenever possible. Usually the material can be enclosed in parentheses and inserted after the sentences to which it applies. If footnotes are used, they should be numbered consecutively in a single series, designated by arabic superscript numerals, and typed on a separate sheet.
- 6. Reprints are supplied at cost, and should be ordered when proof is returned.
- 7. Proof: One set of proofs will be sent to authors. Since the volume is reproduced by the offset process, this first proof is equivalent to the usual page proof. Therefore changes in proof are very expensive, and should be limited to correction of actual mistakes. No change can be made that is not compensated for within the same paragraph or in an adjacent paragraph on the same page. Authors should leave forwarding directions for proof when they are to be away from the address sent with the manuscript.

December 4, 1952

Dr. M. Demerec Long Island Biological Association Cold Spring Harbor, Long Island

Dear Dr. Demerec,

I enclose a copy of a paper which will appear in NATURE and which will perhaps interest you and some of your co-workers.

We would like to extend this study to other mutations and have been trying to use mutations to resistance to T6 but this mutation rate is so low that we are not able to obtain conclusive results. The purpose of this letter is to inquire whether you have any streptonycin dependent B or B/r strains of E coli that mutate to streptomycin independence at a rate as great or greater than that of mutations to T5 resistance.

Since we would use this strain in the Chemostat and would have to maintain in the Chemostat as high a streptomycin level as your strain requires, we would get into trouble if the streptomycin independent mutant were sensitive to this streptomycin concentration. We would therefore need a streptomycin dependent strain that mutates with a high rate to a streptomycin independent strain which is not sensitive to streptomycin.

Novick and I would very much appreciate if you could airmail us a slant of such a streptomycin dependent strain, and tell us what streptomycin concentrations are required for optimum growth of the strain.

Kind regards to all,

Sincerely,

Enclosure

Leo Szilard

LS/11t

CARNEGIE INSTITUTION OF WASHINGTON DEPARTMENT OF GENETICS COLD SPRING HARBOR, LONG ISLAND, N. Y.

December 8, 1952

Dr. Leo Szilard Institute of Radiobiology and Biophysics The University of Chicago Chicago 37, Illinois

Dear Szilard:

We have over 150 different streptomycin-dependent strains, but none of them has been studied in detail to be certain that it fulfills your requirements. From the information available, Sd-138 may suit your purpose. As far as we can tell, it reverts to a streptomycin-resistant type. Among 41 reversions tested, none was sensitive to streptomycin. The estimated frequency of reversions is about 1 per 10<sup>8</sup> or slightly less. However, nothing is known about the growth rate of reversions in competition with the parent-strain bacteria.

I am very glad to know that you have evidence for delayed appearance of induced mutants. Dr. Labrum is studying this problem here, using the chemostat, and he finds the delayed appearance of induced mutants is a function of divisions rather than of time.

A fresh culture of Sd-138 is being made today and will be sent to you within the next two days.

With best regards,

Sincerely yours,

M. Demerec

MD:af