



COMMUNAUTE EUROPEENNE
DE L'ENERGIE ATOMIQUE

LA COMMISSION
DIRECTION G n rale
Recherche et Enseignement

Services de Biologie

Brussels, 10 march 1961
RA/an

3616

Professor SZILARD
University of Chicago

55246

CHICAGO

Dear Professor Szilard,

Apparently you mentioned to Mr. Gu ron recently in Paris some new ideas about mouse experiments on genetic or somatic effects of radiation, using somewhat reduced numbers of mice as compared to those usually discussed in this connection.

We are at the beginning of a round of discussions in Western Europe as to whether such work should be undertaken here and of what kind it should be. I would be very much interested to learn more of your ideas on the subject if you can spare the time to inform me about them.

Yours sincerely,

Ray Appleyard

R.K. APPLEYARD

March 15, 1961

Dr. R. K. Appleyard
La Commission
Direction G n rale Recherche et Enseignement
Services de Biologie
Communaute Europeenne de l'Energie Atomique
Brussels, Belgium

Dear Dr. Appleyard:

Your letter of March 10th was forwarded to me to Washington, D. C. You will find the description of the project in which you are interested enclosed. I am, at present, discussing with the A. E. C. in Washington whether it would be advisable to set up such a project and where. We have been tentatively thinking that it might be possible to set up such a project at the Argonne National Laboratory. If you are interested, I should be glad to keep you informed on the further outcome of these discussions.

Sincerely yours,

Leo Szilard



COMMUNAUTE EUROPEENNE
DE L'ENERGIE ATOMIQUE

LA COMMISSION

DIRECTION -

Directorate General
Research and Training Division

Division of Biology

Brussels, 28 March 1961
RA/an

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Dear Dr. Szilard,

Thank you for your kindness in sending me the mouse project which seems to be a very large one. Personally, I question the utility today of putting an enormous effort into a measurement of the total gene mutation rate of a large part of the genome in the mouse, although three or four years ago I would have felt differently. So, to me, the best justification for support of such a project by a nuclear energy authority such as ours or the U.S. A.E.C. would seem to be its bearing on Cavalli's three-generation sex-ratio survey in Italy. Certainly, if one could demonstrate in an animal that a small net sex ratio shift among grandchildren of an aged or irradiated group were in fact largely due to accumulated sex-linked lethals, it would strengthen the prospects and utility of the human surveys enormously.

I suppose that if one tries to make the study more efficient by marking the X-chromosome, one rapidly comes back to the kind of mouse experiment on which Haldane did extensive theoretical calculations and Carter some pilot experiments three or four years ago. I suppose also that, at least from my point of view of the purpose, it would be very important to try to eliminate sex-limited autosomal lethals, which means a good deal of extra

Prof. Leo Szilard
The University of Chicago
The Enrico Fermi Institute
for Nuclear Studies
Chicago 37, Illinois.

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work for every female giving an abnormal progeny ratio.

Certainly you must by now be discussing these and many other points with the A.E.C. authorities, and with the customary thoroughness on both sides. I would be most grateful to be kept informed about the discussions and their outcome.

With best wishes,

Yours sincerley,

Ray Appleyard

Raymond K. Appleyard.

cc: Monsieur Guéron