

January 23, 1951.

Dr. Hs Demerec, Director,
Long Island Biological Laboratory,
Cold Spring Harbor. L.I., N.Y.

Dear Dr. Demerec:

Thank you for the invitation to participate in the forthcoming Symposium on Quantitative Biology on "Genes and Mutations". It is with great pleasure that I accept this invitation. Subject to revision after closer study, the title of my paper will probably be "Recombination analysis of bacterial heredity", and it will encompass the diverse lines of work based upon crossing experiments which have been developed since this phenomenon was first announced at the Symposium five years previously.

The content of my proposed paper will relate so closely to the different lines of work being pursued here that I feel it quite essential to propose a joint authorship, at least for the publication, and preferably for the announcements as well.

As to accommodations, I hope that a reservation for Mrs. Lederberg and myself will be possible for the duration of the Symposium. Your travel funds should be reserved primarily, of course, for the benefit of trans-Atlantic visitors, and I should not like to make any request which would embarrass these projects. However, a journey of a thousand miles (by auto) is not inconsiderable, and if a partial reimbursement of expenses were possible, it would be appreciated. May I ask now merely to be kept in mind for a place near the end of your priority list.

Your letter leaves room for suggestions on the program. It is perhaps too late for amendments, but there may still be time for some consideration of these comments.

Except that microorganisms are given a somewhat anomalous emphasis, I am very much pleased with the program in general. Having had the considerable pleasure of a visit with Ephrussi last autumn, I might have preferred to meet one of his colleagues - L'Heritier, for example, - if it were still possible. But this appears to be a readily acceptable exception to the rule that most of the visitors have not been recently accessible. The only other comment on the general program is the possible desirability of adding Dr. (&Mrs.) M. M. Green to section III (perhaps as a discussant).

I am rather divided on what to do with microorganisms. My first reaction is that they are given undue emphasis in a symposium of the given title, but this is followed by a listing of two or three other workers who should also be included. To put this first, I think that H. B. Newcombe and B. D. Davis would be welcome additions (at least as discussants) for the problem of phenotypic delay.

Bacterial cytology, in the English school, is unfortunately not in a very informative status for genetic interpretations. If there were any single worker who probably has made the most germane and critical contributions, I would nominate Klieneberger-Nobel, and I hope that it might still be possible to consider her as an alternative or supplement to Bisset. The latter's speculative remarks on subjects of genetic interest rest more on the unconfirmed statements made 20 years ago by other workers than upon his own observations, which are much more of morphological than cytogenetic interest. Klieneberger-Nobel has had a broad experience, cautiously interpreted, much of which is directly relevant to problems of nuclear and sexual cycles in bacteria. I would urge, in the strongest terms, that consideration be given to inviting her participation in the discussions of bacterial cytology.

On the other hand, it is possible that the emphasis given to microorganisms in this conference may prejudice the possibility of a broader discussion of their genetics, as such, at a later date. But I cannot suggest what practical measures could still be taken in this direction.

I hope that Atwood will be encouraged to emphasize his very intriguing work on radiation effects in *Neurospora* heterokaryons, which he might be discouraged from doing by the subtitle ("bacteria and bacterial viruses").

Sincerely yours,

Joshua Lederberg.

P.S. Re l'Heritier, local information has it that he is politically "safe", and not likely to encounter difficulties with passport.