INDIANA UNIVERSITY

BLOOMINGTON, INDIANA

SPARTMENT OF ZOOLOGY

November 5, 1951

Dr. Joshua Lederberg Department of Genetics University of Wisconsin Madison 6, Wisconsin

Dear Joshua:

I expect to be in Chicago again either late in November, or early in December, or both. I'll let you know as soon as plans become definite so we can arrange to meet.

My course has been given only three times. The first time (1946) it was on Paramecium, Chlamydomonas and Yeast. The second time (1948), it dealt in greatest detail with Neurospora, but also included a number of other Fungi (Yeast, Bacteria, etc.) and Paramecium. The third time (1951), it dealt in greatest detail with sexuality in Algae and Protozoa. The only one of these three courses for which I have a syllabus is the second and I will send you a copy of it. Please remember that this is an uncorrected copy and that many corrections and additions were made orally. For the other two courses, I have no outlines or mimeographed material of any kind, only my lecture notes of which there is only one copy and a microfilm I had made for protection when I took the material to South America. I'll send you the microfilm.

Since I last wrote, I have been subjected to considerable pressure to give a course next semester on the genetics of viruses and bacteria. I hate to do this for I desperately need a free semester, but I may have to give in, for most of the students who want it will probably not be here in 1954 when I planned to give that course. But I haven't yet decided.

It is of course entirely possible that you will feel the points of view expressed in my outlines and lecture notes are so far from your views that we could not get together. I do not think so. If my views are wrong or unwise, you will not find it difficult to convince me. I am only interested in putting out the soundest and wisest treatise that can be achieved with the present state of knowledge. It is precisely because I have so profound a respect for your judgment that I think we could together do a far better job than I could do alone. I would by no means look upon you as a very junior co-author, but as a fully equal co-worker in an enterprise that would call for the best we both can put into the job at every point. Unless this book can be the best production possible at this time, I'm not interested in it at all.

For the book, I do not propose to follow any of my courses. As I believe I wrote you, I had thought of a plan somewhat along the following lines.

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Part I. The organisms: their general biology, life histories, reproduction, and cytogenetic processes, with the <u>special</u> genetics of each.

Part II. The general problems of genetics in microorganisms, such as: the 1:1 theory and biochemical genetics; the cytoplasm in heredity; the problem of self-duplication of genetic units; transformations and their bases; mapping, crossingover, and chromosome behavior; mutation and mutagenesis; selection and population genetics; etc.

Part III. An attempted brief synthesis of the status of the genetics of microorganisms, the lines along which further developments may be expected, etc.

This is a very rough and very tentative plan, subject to drastic revision if it seems desirable. I'd be grateful for any comments. And I hope—for the good of the end result—that you will join in.

With best wishes to you and Esther,

Cordially,

T. M. Sonneborn

TMS:jb