

Dr. Wolfram Heumann,  
Oberassistent am Botanischen Institut  
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B r a u n s c h w e i g  
Humboldtstr.1.

5. Dezember 1955.

Herrn  
Professor Dr. Joshua L e d e r b e r g,  
M a d i s o n  
University of Wisconsin, USA.

Dear Professor Lederberg,  
with great interest I watched your treatises about the recombination of hereditary factors of crossing Escherichia coli K-12 mutants. As genetics has to be regarded as the most exact of biological sciences the results of this way of research have an especially great power of evidence. Therefore the conclusions drawn by you upon the sexual modus of Escherichia coli on account of your genetic studies appear to me well founded.

In comparison with this, all researches upon the sexual modus of bacteria, using the morphological or cytological studies, are subject to a certain insecurity considering the limitations given these methods by the physical laws though these methods have the advantage to be more obvious.

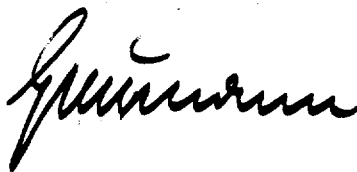
In the last years I profoundly analysed the sexual modus of star-forming bacteria by using morphological and cytological methods. The most important results are described in the study enclosed. As to this I should like to lay stress on the fact that any time the whole sexual cycle may easily be reproduced on blood-mediums with the selected strains of bacteria, and that the analogies to the sexual relations of

higher microorganisms are most apparent. I believe that the morphological-cytological study of the sexual mode of bacteria has reached a stage which seems to make it necessary and productive to join it with the genetics. As the installation of the institute where I am occupied, is not sufficient enough for the work of a genetic exploration of the subject, and as there is no special assistant-staff, I beg to ask you if these studies can be carried out in your institute. If you could make that possible I should regard it advisable to save time for me to come to your institute at Madison with the strains of bacteria to take part in the studies under your guidance. I would consider it a special honour for me to work, may it only be a short time, under your guidance.

First of all, I beg to ask you kindly, if you are interested in the subject, for a short opinion or judgement of my enclosed study that might help me to make a motion for financial support with our authorities.

Thanking you in anticipation for all your trouble I remain

Yours very sincerely,

A handwritten signature in cursive script, appearing to read "L. J. Guzman".