

January 7, 1955

Dr. Joseph Lein
Director, Microbiological Research
Bristol Laboratories
Syracuse 1, N.Y.

Dear Joe:

I was interested and pleased to have your letter of December 28th. This is the situation on our current program on actinomycete genetics.

About three years ago, I did some preliminary experiments, making auxotrophic mutants of *S. griseus* and putting them together. I had been provoked by Klieneberger-Nobel's claims that the aerial mycelium was diploid, and presumably of heterogamous origin. I could find no support ~~for this~~ but did get some prototrophic combinations whose extreme instability suggested that they were heterokaryons. Other matters became more pressing, and I put the problem aside temporarily until we could accommodate a fellow to work full time on the problem. These observations were never published except as fleeting, incidental references.

Last September, Dr. S. G. Bradley won a postdoctoral fellowship and began his work here on that problem. He has reproduced the earlier findings with new material and is just getting to the point where he can begin to analyze them in more detail. There are beginning to be some hints of more stable combinations (recombinants?) as well as the unstable "heterokaryons", but more markers are being put in to try to verify this. As you see we are then already deeply involved in the academic aspects of just the problem you mentioned, and are doing our best to get the answers on the fundamentals of the life cycle.

Dr. Bradley's fellowship is from the National Research Council, and is designated as "Eli Lilly & Co." Of course, this has no bearing whatever on the research program that Bradley is working on, and we have had no contact whatever with Eli Lilly & Co. through this channel. As a university laboratory, we cannot maintain confidential channels of any kind, and our research results will be communicated exclusively through open vehicles of scientific publication. You know all this, of course. Dr. Bradley is now applying for renewal for next year; while it is hardly conceivable that he will be unsuccessful through the National Research Council, if this should happen (and fellowships are sometimes capricious) we probably would want to pursue your suggestion of comparable support from your company.

There are some potential problems connected with private consultantship, but I would be happy to consider it further. I am not connected with any of your competitors any more than I am already with yourself. If my value to you as a consultant would depend on a direct application of the not yet published results of our own research, I could not fairly enter into a confidential liaison with any single firm. I think I could consult for you on either of the following bases: 1) [rather unlikely] that the consultation was not confidential, but on the same basis as consultation between open laboratories so that it could be transmitted freely, or 2) that it did not rely upon our own research results prior to their publication. If 2) applied, its effect would be that I could not at present consult on a program of recombination analysis in actinomycetes that was related to our own, if that consultation were exclusive.

With best regards,

Joshua Lederberg

Professor of Genetics