UNIVERSITY OF COLORADO
MEDICAL CENTER
4200 EAST NINTH AVENUE
DENVER 20, COLORADO

COLORADO FOUNDATION FOR RESEARCH
IN TUBERCULOSIS
GERALD B. WEBB MEMORIAL BUILDING

November 3, 1955

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

Dear Joshua:

As you can imagine, I am delighted that Larry has decided to join us. Dr. Waring is still away and hasn't heard the good news, but I am sure he shares my enthusiasm.

The "proposal for a proposal" has been polished up and is in the process of being typed for distribution. Perhaps it will be done soon enough to be enclosed in this letter. I appreciate your help in preparing it.

Do try to make the St. Louis meeting. As I told you, I think we would all benefit from your unbiased approach to some of our pet problems.

I have heard, unofficially, that the grant request which we sent to the American Trudeau Society on the subject of the metabolism of isoniazid has been approved. Two of our people are working on techniques and are about ready to start working on animal and human sera.

I enjoyed your remarks in the letter to the editor. There is much too little dissemination of this kind of information amongst the profession, to say nothing of the public.

I have been laboring through Harris's book. I have scanned it completely once, but I am now reading it more thoroughly. I will have to admit there is a very great deal of new information on medical genetics that I had no inkling of prior to your arousing my interest in it.

I have corresponded with Herndon at Bowman Gray and Neel at Michigan to add to our file of information on Departments of Genetics in Medical Schools. They were not able to add anything illuminating, but their interest and enthusiasm in the subject should bear some weight.

I have just been reading Jensen's article, "Some Remarks Concerning Attenuated Isoniazid-Resistant Strains of Tubercle Bacilli," in the January, 1955, issue of Acta. Path. Micr. Scand. Jensen obviously is not aware of Gardner's work on the catalase activity of various strains

of mycobacteria. As you will remember, the sensitive wild strains were catalase positive. There were various types of isoniazid resistant mutants ranging from slightly reduced catalase activity to complete absence thereof. There appears to be a good correlation between catalase activity of these isoniazid resistant mutants and their pathogenesity, not only for experimental animals including the guinea pig, but also man. In other words, there are plenty of isoniazid resistant mutants capable of multiplying in guinea pigs at the normal rate, namely those that are catalase positive. Jensen, also, does not seem to be aware that the BCG organism is catalase positive, and interestingly enough can be made isoniazid resistant, and as I understand it, with comparable reduction in catalase activity. Unfortunately I have not checked the above with Gardner, since he is out of town at the moment.

With my very best to you and Esther, I am

Sincerely,

Roger S. Mitchell

RSM:wm