February 23, 1954

Lt. Colonel Kenneth F. Burns, V.C.
Chief, Veterinary & Virology Sections
Brooke Army Medical Center
Fort Sam Houston, Texas

Dear Colonel Burns:

Because of the high personal regard that I have for you I regret, but nevertheless feel it my duty, to tell you that the two manuscripts which you sent me are not suitable for publication and that, if they are published, they will be no credit to you and will confuse instead of elucidate the issues with which you are dealing. Now please permit me to give you the reasons for these remarks.

As regards the first paper entitled, "Serologic Reaction of Horses Experimentally Infected with Japanese B Encephalitis Virus", the very title is misleading because it actually deals with "Antibody Response of Horses Recently Infected in Nature with Virus of Japanese B Encephalitis Following Intravenous Injection of Small Amounts of Live Virus". If you really wanted to study the antibody response to experimental infection in horses, why didn't you do your experiment on horses imported from the north of Japan in the wintertime? The high incidence of spontaneous infection in your horses during the summer in 1949 is of interest but such results have already been reported by yourself and others. As regards the experiment you actually did on the intravenous injection of small amounts of virus in horses that had been previously infected in nature, the real issue is whether this is merely a response to preformed antigen or whether the virus actually had to multiply in order to give rise to the complement-fixing titers which you report. The data you present, of course, do not provide answers for these questions. From a practical point of view the real issue is whether immune horses, after being bitten by infected mosquitoes, may exhibit a rise in complement-fixing antibody which would be interpreted as a new infection. The answer to this cannot come from the results that you report and could come only from observations in the field or from actual experiments in which large numbers of infected mosquitoes are allowed to bite immune horses. The observation that you made is of interest as a guide to further work but by itself would only confuse the situation.

Now as regards your second paper entitled, "Immunity to Challenge in Horses Vaccinated against the Virus of Japanese Equine Encephalomyelitis",
the objections to its publication are as follows:

a) The test should not have been carried out during the summer at a time when you and others have demonstrated the high incidence of spontaneous infection in horses. The fact that you say that they were kept under screened conditions during this experiment does not help matters very much.

b) It is unfortunate that virus from the same vials was not used for the control as well as for the challenge and it is still more unfortunate that only a single horse was used as a control.

c) As the case now stands, the conclusion that vaccination performed in the manner you indicated protects horses against intracerebral challenge is unwarranted by the data presented.

Since you are only human I can well understand that you will not like the comments that I have made, but please believe me that they are dispassionate and sincere and that it would be to your benefit to give them your earnest consideration.

With all good wishes and kindest personal regards,

Sincerely yours,

Albert B. Sabin, M.D.