6 December 1967

Albert B. Sabin, M. D.
The Children's Hospital Research Foundation
Elland Avenue and Bethesda
Cincinnati, Ohio

Dear Albert:

Thank you for your support on our recent grant application. We have received word of its approval pending clarification of the financial situation the NIH finds itself in. I sincerely hope that things in Washington clear up within the next six weeks or I, too, will be in a critical situation.

I cannot agree with you more regarding the use of older material, but as yet we have not gotten anything from Wisseman, Buescher, or Hanson. There is a move afoot to collect acute phase sera in Southeast Asia this spring by the WRAIR group, but whether we will get any of the material is doubtful. I plan to check out that material we can obtain by both the interference-challenge in tissue culture and by the suckling mouse-challenge test.

Of the materials you suggested, the records show the following: When last tested the Smith strain lyophilized on 9/13/54 had an LD$_{50}$ titer in suckling mice of $10^{-4.9}$/ml and an ID$_{50}$ titer of $10^{-5.5}$/ml. The material was also in the same potency range. I know nothing concerning the Poet material, but it was processed the same time the Faber material was prepared (which was fairly potent). I think it would be worthwhile testing since there is no other material available.

According to my notes there also was the following materials stored under CO$_2$ conditions:

- Allendorf and Smith in A-6-6, A-2-1L, A-2-8
- Faber - A-2-1R.

Unless I am able to get fresher material from other individuals, we'll have to start work with these. The question has been raised in my mind regarding the pooling of these sera should they prove to be potent enough. There is a feeling that acute phase human sera derived from various sources (all of which are type 1 by neutralization test) may nevertheless be antigenically different. Have you any marked feeling in this matter? Furthermore, should we not be able to obtain sufficient acute phase sera, do you see any objection in carrying out the study with first or second passaged virus of sufficiently high titer.
Apropos of our conversation regarding the future of dengue vaccines and your suggestion that other routes of immunization be sought, it has been recently reported by Nathanson (J. Inf. Dis.) that Langat virus will multiply in the oral pharynx (but not intestinal) and give rise to antibody responses. It may be worthwhile to take some of the lyophilized type 1 and 2 tissue culture vaccines we prepared and see if the same holds true for dengue.

To reiterate, we would very much like to test the Allendorf, Smith, and Foyt strains with the hope that additional Allendorf and Smith material can be obtained from Wiseman. We should be ready to do this work within the next two months. We have already begun our mouse colony, and we are in the process of testing outside sources for susceptibility to high passaged type 1 virus.

Sincerely yours,

Ben

B. H. Sweet, Ph. D., Director
Department of Medical Microbiology

Please let me know when you want it. Because you will not use it if fresh material should become available by about 26.

Period in Vietnam for dengue is April-Sept.