Dr. Michael J. Hogan  
University of California Medical School  
The Medical Center  
San Francisco 22, California  

Dear Dr. Hogan:

In reply to your letter of November 26, which has only just reached me, I may say that a preliminary report of our new, in vitro dye test for toxoplasma antibodies should appear in SCIENCE in about a week or so, because the galleys have recently been returned. We have found this test to yield the most reliable quantitative data for the estimation of the approximate interval since infection with toxoplasma. Thus, we find titers of 1:256 to 1:6000 in individuals in whom it is possible to say that the infection occurred within a year or two, although in certain individuals these high titers may persist for as long as five years. On the other hand, in the vast majority of the population who have antibodies for toxoplasma without any definite history of infection and in patients with congenital toxoplasmosis beyond six years of age, the titers have been in the range of 1:16 to 1:64. In a comparative study with an improved complement fixation test, which I hope to write up for publication shortly, we have found that the dye test gives the most definitive information, because the complement fixation test can occasionally be negative, or positive in very low titer, in individuals with proved active infection. We have recently completed an extensive skin test survey with the same chorio-allantoic membrane antigen that we use for complement fixation and found that the incidence of positive tests (which can always be correlated with antibody by the dye test) rises so sharply after twenty years of age in the normal population that it is of very little or no use in diagnosis -- particularly so since we now have on record a number of instances in which the skin test was negative and the dye test and complement fixation test positive in high titer. For this reason, we believe that the skin test is useful only for population survey purposes. I may also say that in a study that we have recently completed, in which we used both the dye test and the complement fixation test, we have found that chorioretinitis either in infancy (when it is unassociated with cerebral calcification) or later in life is only very rarely attributable to toxoplasma infection.

Sincerely yours,

Albert B. Sabin, M. D.

ABS:mjc