UNIVERSITY OF PITTSBURGH SCHOOL OF MEDICINE

PITTSBURGH 13, PENNSYLVANIA

DEPARTMENT OF PATHOLOGY

September 23, 1958

Dr. Joshua Lederberg
Professor of Medical Genetics
The University of Wisconsin
School of Medicine
Genetics Building
Madison 6, Wisconsin

Dear Dr. Lederberg:

Thank you for your letter of September 16 and the outline of your proposed model of antibody synthesis. I agree that your model or something very close to it is probably as close as we can come to the fundamental aspects of the immune response with the experimental observations at hand. As you may know Dr. Talmage, formerly of our Department, has had somewhat similar ideas. One of the difficulties we had with such a scheme was devising a means by which the administration of antigen would stimulate the appropriate cells to multiply and form antibody. Certainly the combination of antigen with globulins of proper configuration in the serum followed by elimination of these globulins does not seem to provide an adequate stimulus for antibody production. I would be much interested in your thoughts on this aspect of the problem.

I am enclosing the reprint on the "Specificity of the Secondary Response," which you requested plus a preceding paper on the "Immunochemical Characterization of the Cross Reactions Between the Antigens Employed," by Dr. Maurer. In addition I am including five reprints covering some of our work on cell transfer experiments in which we have attempted to characterize the cell types involved in antibody production and the morphologic transitions of these cells during the stages of antibody production. The first paper in this series also gives some idea of the amount of antibody which can be produced by an individual cell.

Sincerely yours,

Frank J. Dixon, M. D.

Chairman, Department of Pathology

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