



STANFORD UNIVERSITY MEDICAL CENTER

STANFORD, CALIFORNIA 94305

August 24, 1976

STANFORD UNIVERSITY SCHOOL OF MEDICINE
Department of Genetics
(415) 497-5052

Sir Gordon Wolstenholme
The Ciba Foundation
41 Portland Place
London W1N 4BN, England

Dear Gordon,

Thank you for your letter of 12 August. I would certainly be delighted to have the opportunity to participate in an event to do you the honor so justly deserved, and I hasten to respond to your letter of 12 August.

I realize that I had written to you some time ago about looking for a way to commemorate the 50th anniversary of Griffith's paper on Pneumococcus transformation and also that I have not followed up particularly diligently on your response to that suggestion. However, I think there may be some even more important issues that deserve to be focused upon at so special an occasion as the projected symposium in June 1978. In thinking about the advances in medicine and in basic biological research, I can find no issue more pressing, no more vexing, than how to improve the ways in which this extraordinary advance of scientific insight can be put to practical advantage for the real problems that beset us in world health at the present time. "Bridging the gap" must of course give the greatest attention to the problems of the peoples who have the lowest standard of health, and the small basic research component of WHO's new program in tropical diseases exemplifies that concern. Perhaps less urgently but more vocally we can find similar anxieties at home, too, and I do not have to tell you about the kind of pressure that academic research is facing on these accounts.

So, what I have in mind, in general terms, is a reconciliation of needs and opportunities: at two levels.

1. In some tangible problem areas like tropical diseases to exhibit in more detail what the problems are from a biological but also a social perspective, and what might be done and perhaps is beginning to be done by way of sharpening advanced scientific tools to deal with these issues and

2. The procedural and institutional changes that have to be debated in order to improve the efficiency with which such important applications can be developed.

These are matters that have been of deep interest to me during my service on the Advisory Committee for Medical Research of WHO, and it has been indeed gratifying to see the tropical diseases program begin to take shape. However, that is moving very slowly in the recruitment of scientific interest in this area and I think the Foundation could play a signal role in helping to improve that. Gus Nossal is even more deeply committed to these kinds of

LT. J. P. KENNEDY, JR. LABORATORIES FOR MOLECULAR MEDICINE, DEDICATED TO RESEARCH IN MENTAL RETARDATION

efforts and I am sure he would be more than eager to cooperate in a symposium of this kind.

The other principal areas that I have been able to identify that could exploit this interdisciplinary perspective are in the area of waste disposal and, of course, as is now well recognized in population control and nutrition. I will not add to the obvious in the latter two fields. I wonder how many people realize how poorly we understand the mechanisms by which our existing procedures of human waste management in fact remove sources of infection and further how imperfect these can be with respect to agents like hepatitis and other viruses, even in an advanced country context. In countries with primitive sanitation it is held that the mere application of latrines and other primitive methods would go so far that to talk about more sophistication is unnecessary. But there are still real dilemmas about the need for investment in the transportation of sewage from urban centers and so on, even in developing country contexts.

Some of my own research in small part has touched upon problems of this kind: for example in questioning what might be the long-term side-effect of the reliance upon chlorination as a disinfective device.

There are many ways in which such a program could be developed in more detail, not necessarily including the specific suggestions I just summarized, and I would be more than happy to continue this discussion.

Sincerely yours,

Joshua Lederberg
Professor of Genetics

JL/rr