



Department of HEALTH, EDUCATION, AND WELFARE • Public Health Service  
National Institutes of Health • Bethesda 14, Md.

NATIONAL INSTITUTE OF ARTHRITIS AND METABOLIC DISEASES  
NATIONAL CANCER INSTITUTE  
NATIONAL INSTITUTE OF DENTAL RESEARCH  
NATIONAL HEART INSTITUTE  
NATIONAL INSTITUTE OF MENTAL HEALTH  
NATIONAL MICROBIOLOGICAL INSTITUTE  
NATIONAL INSTITUTE OF NEUROLOGICAL DISEASES AND BLINDNESS  
THE CLINICAL CENTER  
DIVISION OF RESEARCH GRANTS

March 2, 1955

Dear Josh—

Glad to hear from you and to know that you got some results with the filter and these seem to make sense. The intimacy of cellular association which seems to be required for the transmission of "F" is intriguing. It seems to be at least one step closer than what is involved in kidney tubule induction, and thereby raises another little notch my doubts about infective transmission as a mechanism of embryonic induction.

I would be interested in knowing whether you found any difference in the frequency of "break through" with the thin H + A filters. I am now convinced that there are real differences between these two both as to visual penetrability by stainable and phase-positive materials, and passage of inductive effects. On the other hand, the two appear to be equally susceptible to "spotting", which I tentatively assume to be the result of penetration by what is almost certainly protein and may represent glycoprotein. I would expect that if cellular breakthrough is a function of porosity it would be distinctly more frequent with A type filters.

We have plenty of the thin filter materials on hand, so my all means keep what you have. Kinchell tells me they have somewhat improved their procedures, and I may ask him to make another batch of thin stuff sometime soon. If so you could certainly get in on it, thus avoiding the special fee they charge for setting up.

Best,  
*Chick*